

No. 608,314.

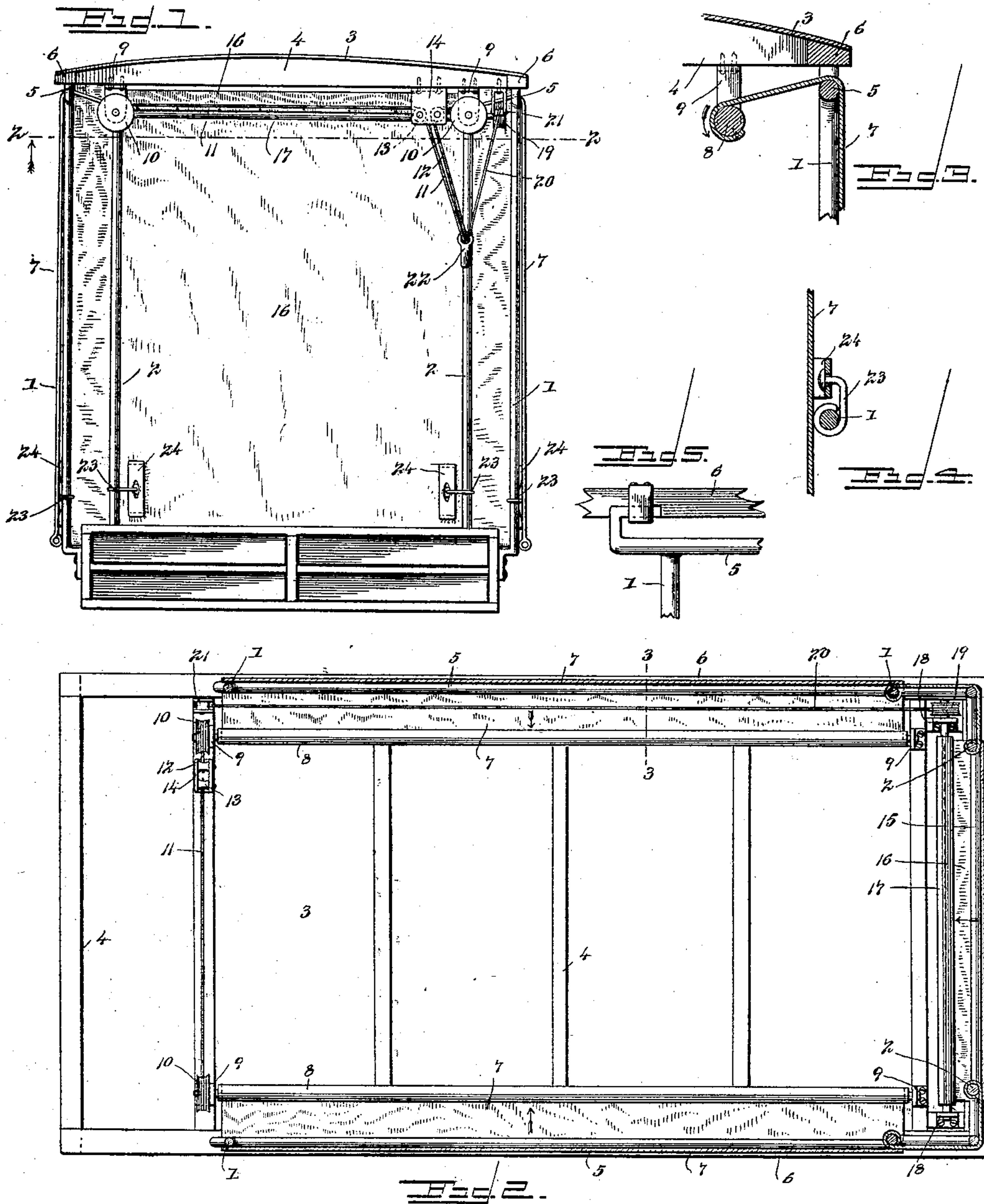
Patented Aug. 2, 1898.

E. E. ATKINSON.

DEVICE FOR RAISING OR LOWERING VEHICLE CURTAINS.

(Application filed Nov. 26, 1897.)

(No Model.)



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD E. ATKINSON, OF ADA, OHIO, ASSIGNOR OF ONE-THIRD TO
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DEVICE FOR RAISING OR LOWERING VEHICLE-CURTAINS.

SPECIFICATION forming part of Letters Patent No. 608,314, dated August 2, 1898.

Application filed November 26, 1897. Serial No. 659,841. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. ATKINSON, a citizen of the United States, residing at Ada, in the county of Hardin and State of Ohio, have invented a new and useful Device for Raising or Lowering Vehicle-Curtains, of which the following is a specification.

The invention relates to improvements in devices for raising and lowering vehicle-curtains.

The object of the present invention is to improve the construction for raising and lowering side and back curtains of vehicles and to enable the same to be simultaneously raised and lowered by the driver of a vehicle without necessitating his leaving his seat at the front of the latter.

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

In the drawings, Figure 1 is a front elevation of a vehicle-top provided with a device for raising and lowering curtains constructed in accordance with this invention. Fig. 2 is a horizontal sectional view on line 2 2 of Fig. 1, the top of the vehicle being shown in reverse plan view. Fig. 3 is a detail sectional view on line 3 3 of Fig. 2. Fig. 4 is a detail horizontal sectional view illustrating the manner of fastening the curtains when lowered. Fig. 5 is a detail view illustrating the arrangement of the rods for supporting the side curtains.

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

1 1 and 2 2 designate vertical posts located at opposite sides of a vehicle and at the back thereof and supporting a canopy top 3, which is provided with a rectangular frame composed of side bars and transverse bars which are bowed or provided with convex upper edges to arch the canopy top slightly. The vertical posts 1 at each side of the vehicle are connected at their upper ends by a horizontal rod 5, which is arranged at the lower edge of and spaced from the side bar 6 of the frame 4 of the top 3 to provide a guide-opening for

a side curtain 7, which is mounted upon a longitudinal roller 8. The front end of the horizontal rod which supports and guides the side curtain is upturned and suitably secured to the side bars 6.

The longitudinal roller 8, which is journaled in suitable bearing-brackets 9, is provided at its front end with a pulley or drum 10, and transversely-disposed operating-cords 11 and 12 are wound around the pulleys or drums 10 of the roller and extend inward therefrom, passing over guide-pulleys 13, which are mounted in a suitable bracket or casing 14. The bracket or casing 14 is secured to the frame of the top 3, near one side thereof, and the operating-cords depend from them, so as to be within easy reach of the driver and in convenient position for attachment to the adjacent front post, whereby the curtains are maintained in their raised position.

The rear posts 2 are connected at their upper ends by a horizontal rod 15, which is spaced from the frame 4, forming a guide-opening and supporting the rear curtain 16, mounted upon a transverse roller 17. The transverse roller 17, which is journaled in suitable bearing-brackets 18, is provided at one end with a pulley or drum 19, around which is wound one end of an operating-cord 20, which extends longitudinally of the vehicle-top to a front guide-pulley 21, located at the front end of the adjacent longitudinal curtain-roller. The operating-cord 20 depends from the top of the frame adjacent to the depending portions of the operating-cords 11 and 12, and all three may be attached to a ring 22, adapted to engage a projection or stud to maintain the curtains in their raised position.

The horizontal rods which support the curtains may be constructed of a continuous piece of metal and extend around the sides and back of the frame 4.

The curtains are secured to the posts when lowered by means of horizontal L-shaped arms 23, provided with heads and adapted to engage eyelets 24 of strips or pieces secured to the inner faces of the curtains near the lower edges thereof, and this arrangement of

arms enables the curtains to slide freely on the posts without becoming caught on the fastening devices.

The curtains are provided at their lower edges with rods of sufficient weight to cause them to unroll and descend as soon as the operating-cords are released.

The invention has the following advantages: The device for raising and lowering side and back curtains may be readily applied to any ordinary vehicle having a canopy top, and it will permit the back and side curtains to be manipulated by a driver without necessitating his leaving his seat. The curtains are guided at the top, and the fastening devices for buttoning them at the bottom are so arranged that they will not interfere with the raising and lowering of the curtains. The spaces at the sides and back of the vehicle between the adjacent edges of the curtains are covered by stationary strips of oil-cloth secured to and supported by the adjacent vertical posts.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a device of the class described, the combination of a vehicle-top provided with side bars, horizontal rods located beneath and spaced from the side bars of the top to form guide-openings and having their front ends bent upward and secured to the said side bars, posts secured to the horizontal rods, curtains passing through the guide-openings and supported by the horizontal rods, and rollers mounted in hangers or brackets carried by the vehicle-top, substantially as described.

2. In a device of the class described, the combination of a vehicle-top having side bars, posts supporting the vehicle-top, horizontal rods located beneath and spaced from the side bars of the vehicle-top to form guide-openings, the side curtains passing through the guide-openings and provided with longitudinal rollers located at the inner sides of the said rods, drums mounted on the front ends of the rollers, a pair of guide-pulleys 13 arranged at the

front of the vehicle-top and located between the said drums, and transverse operating-cords wound around the drums and passing over and between the guide-pulleys, substantially as described.

3. In a device of the class described, the combination of a vehicle-top provided at opposite sides with guide-openings, curtains passing through the guide-openings and provided with longitudinal rollers and arranged at the front ends thereof, a pair of guide-pulleys located between the drums, and transverse operating-cords wound around the drums and passing over and between the guide-pulleys, substantially as specified.

4. In a device of the class described, the combination of a vehicle-top, posts supporting the same, horizontal rods spaced from the vehicle-top and arranged at the front and back of the same to form guide-openings, side curtains passing through the said guide-openings and having longitudinal rollers, a back curtain passing through the rear guide-opening and having a transverse roller, a pair of guide-pulleys 13 arranged between the front ends of the longitudinal rollers, transverse operating-cords connected with the longitudinal rollers and passing over and between the guide-pulleys, a guide-pulley 19 arranged at the front of the vehicle-top, and a longitudinal operating-cord passing over the guide-pulley 19 and connected with the transverse roller of the rear curtain, substantially as described.

5. In a device of the class described, the combination of a post or support, a vertically-movable curtain provided with an eyelet or opening, and a substantially L-shaped horizontal arm permanently mounted on the post or support and arranged out of the path of the curtain, said arm being provided with a head adapted to engage the eyelet or opening of the curtain, 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.

EDWARD E. ATKINSON.

Witnesses:

FRANK L. BAUMAN,
BENJAMIN RUTLEDGE.