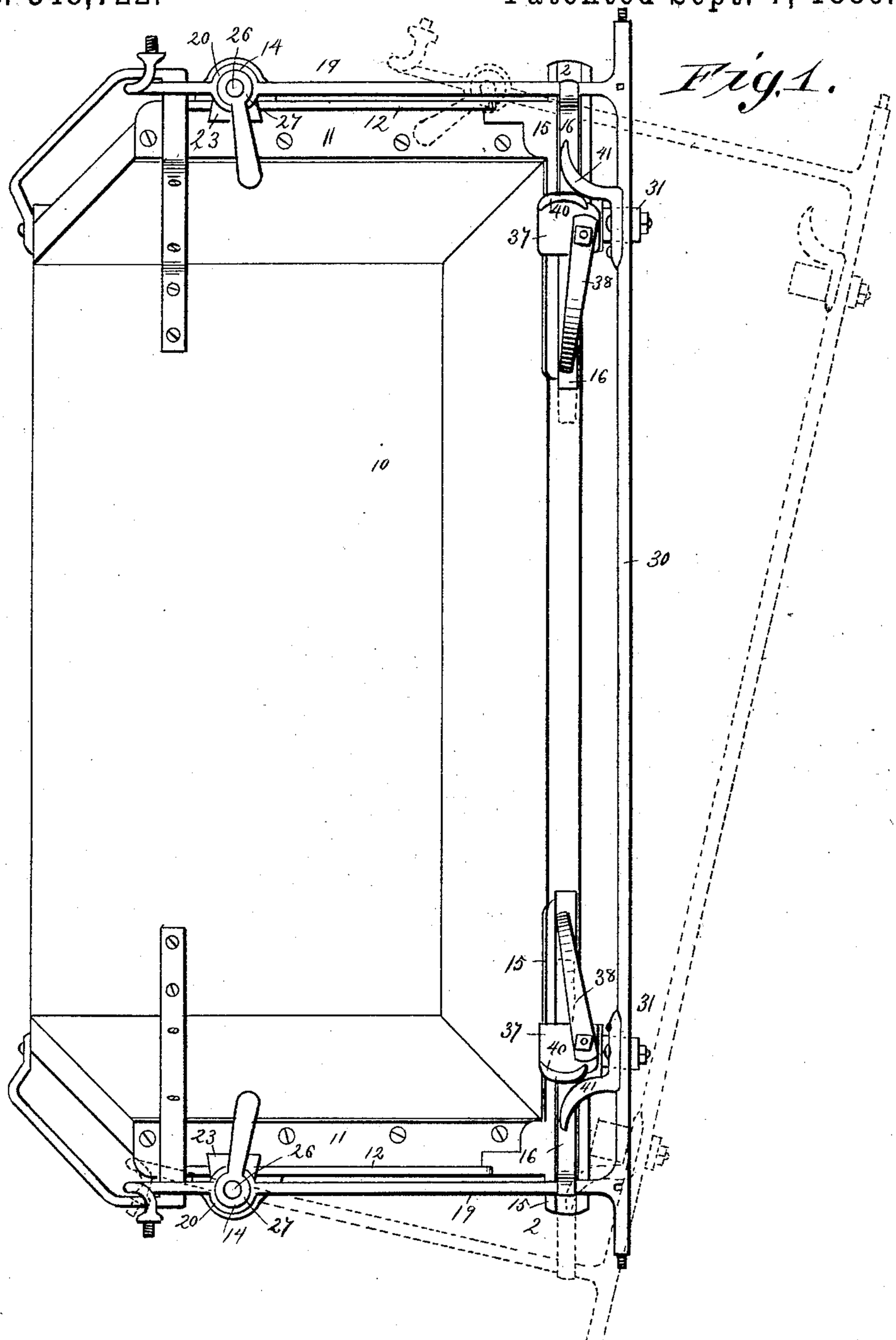
(No Model.) 2 Sheets—Sheet 1.

E. CARROLL & P. RYAN.

SUPPORTING FRAME FOR CARRIAGE TOPS.

No. 348,722. Patented Sept. 7, 1886.

Fig. 1.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

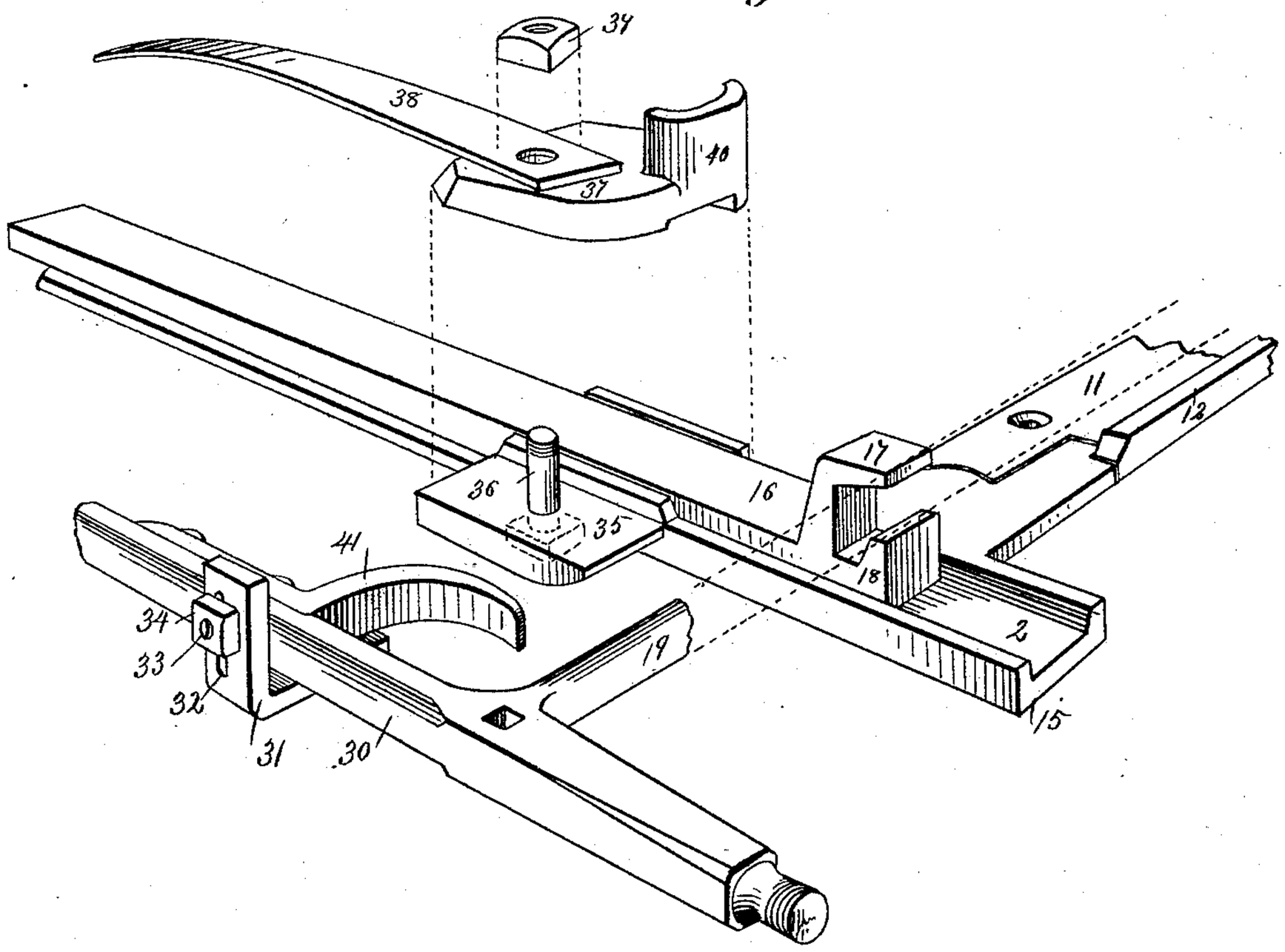
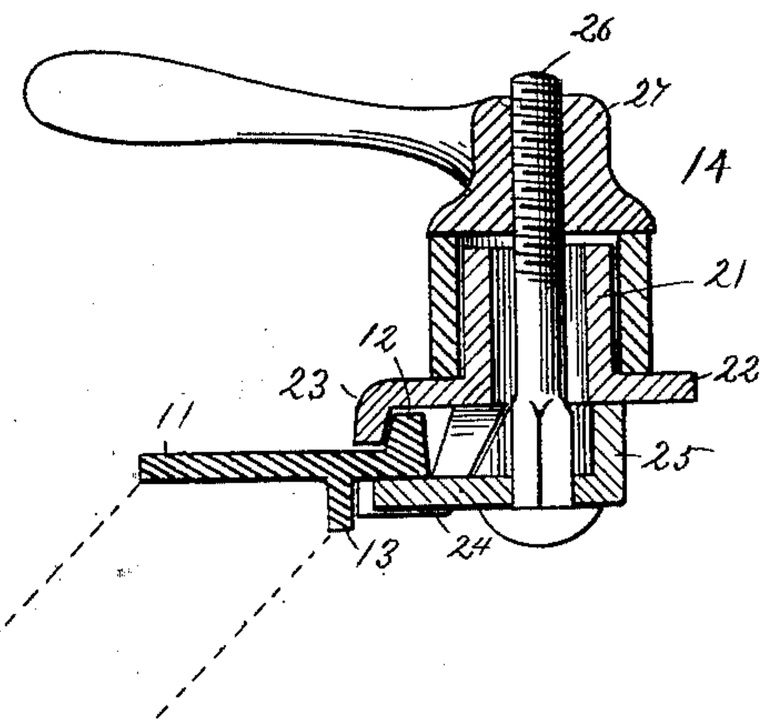


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWARD CARROLL AND PATRICK RYAN, OF GUELPH, ONTARIO, CANADA

SUPPORTING-FRAME FOR CARRIAGE-TOPS.

SPECIFICATION forming part of Letters Patent No. 348,722, dated September 7, 1886.

Application filed July 28, 1886. Serial No. 209,305. (No model.)

To all whom it may concern:

Be it known that we, EDWARD CARROLL and PATRICK RYAN, both of Guelph, in the Province of Ontario, Canada, have invented a new and Improved Supporting-Frame for Carriage-Tops, of which the following is a full, clear, and exact description.

Our present invention relates to the construction of a frame of the class illustrated, described and claimed in the Letters Patent No. 332,878, granted to us on the 22d day of December, 1885, the object of the present invention being to simplify and improve the construction illustrated in the patent referred to.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of our improved top-supporting frame, the frame being shown in its closed position in full lines, while the position to which it may be moved is indicated by dotted lines. Fig. 2 is a perspective view illustrating the construction of one of the rear corners of the frame and its connections, the parts being shown as detached; and Fig. 3 is a central cross-sectional view of the forward clamps employed in connection with the frame.

In the drawings, 10 represents the box or seat of the carriage or vehicle in connection with which our shifting or swinging frame is employed, and to the upper face of each of the side pieces of this box there is secured a wear-plate, 11, formed with an upper outer flange, 12, and a lower flange, 13, the flange 13 bearing against the upper outer edge of the side of the seat, while the flange 12 serves as a guide for the forward clamp, 14, which will be hereinafter more specifically described.

To the upper edge of the back of the box 10 there are secured two channel-irons, 15, the said irons being arranged in the positions best shown in Fig. 1—that is, at either rear upper corner of the box.

Within the grooves 2 of the channel-irons 15 there are mounted sliding irons 16, formed with jaws 17 and 18, and within these jaws the side arms, 19, of the shifting-frame rest, the forward ends of these arms being formed with enlarged portions 20, through which the hollow post 21 of a slide, 22, passes, the slide being provided with an arm, 23, which overlaps the flange 12 of the wear-plate 11, and with downwardly-projecting arms 24, which pass beneath the wear-plate. The slide 22 is arranged so that it may be clamped to the wear-plate, and for this purpose we provide the clamp 25, which abuts against the under side of the slide and the under side of the wear-plate and is held in place by a bolt, 26, which passes through an appropriate aperture formed in the clamp, and through the hollow post 21 of the slide 22, the parts being bound together by a handled nut, 27, this construction being best illustrated in Fig. 3. The side arms, 19, of the swinging frame are connected by a longitudinal rod or bar, 30, to which there are adjustably connected clamps 31, said clamps being formed with elongated slots 32, through which there are passed bolts 33, the extending end of each bolt being engaged by a nut, 34. Each clamp 31 bears against the under side of a lug or projection, 35, that extends to the rear from the channel-irons 15, so that all rattling of the parts at this point is prevented. A bolt, 36, passes upward through the projection or lug 35 and through a clamp-plate, 37, which is held to place against the projection 35, and serves to prevent the accidental displacement of the sliding irons 16, all rattling between the irons 16 and the channel-irons 15 being prevented by a spring, 38, which is held to place by a nut, 39, which engages with the bolt 36, and serves as the medium by which the parts named are held together. The clamp 37 is provided with an upwardly-extending flange, 40, which is arranged so as to be borne upon by a curved-faced prong, 41, that is secured to the longitudinal bar 30, the parts being arranged so that when the frame is moved to the position in which it is shown in full lines in Fig. 1 all lateral movement will be prevented, owing to the fact that the two curved-faced prongs 41 will bear hard against the outer faces of the curved-faced flanges 40.

In operation one of the handled nuts 27 is loosened, and the frame is swung to the position indicated in dotted lines, and, being so swung, the bows and all other top-supporting appliances will be carried to the rear and out of the way of those desiring to enter the vehicle.

The object of forming the sliding irons 16 so that their jaws 17 and 18 do not meet, is to allow for the attachment of buttons to the side bars, 19, said buttons being used for the purpose of holding the curtains of the top of the vehicle, and the object of forming the clamps 31 with the elongated grooves 32 is to provide a means whereby the clamps may be adjusted so as to fit closely against the under side of the lugs or projections 35, but it is to be understood that the clamps 31 may be otherwise arranged.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with a vehicle-seat, of wear-plates formed with flanges 12, channel-irons 15, secured to the upper rear corners of the seat-box, and a swinging frame supported by sliding irons arranged within the channel-irons, and slides that are arranged to be clamped to the wear-plates 11, substantially as described.

2. The combination, with a vehicle-seat, of channel-irons 15, sliding irons 16, arranged within the grooves 2 of said channel-irons, a sliding frame supported by the sliding irons, clamping-plates 37, springs 38, connecting plates and nuts, and forward pivotal connections, as 14, substantially as described.

3. The forward pivotal connection for swinging vehicle-top frames, consisting of a wear-plate formed with a flange, 12, a slide, 22, formed with arms 23 and 24, and provided with a hollow post or standard, 21, and clamp 25, a plate, 26, and a handled nut, 27, substantially as shown and described.

4. The combination, with a vehicle-seat, to which there are secured flanged wear-plates 11 and channel-irons 15, said irons being provided with lugs or projections 35, of a swinging frame, sliding irons 15, by which the rear portion of the frame is supported, forward pivotal and clamping connections, 14, clamping-plates 37, formed with curved-faced flanges 40 and curved-faced prongs 41, connected to the rear bar of the frame, substantially as described.

5. The combination, with a shifting or swinging frame carrying an adjustable clamp, 31, of channel-irons 15, formed with projections 35, sliding irons 16, between the jaws of which the arm of the frame is held, clamping-plates 37, formed with flanges 40, springs 38, and curved-faced prongs 41, substantially as described.

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Witnesses:
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