(No Model.)

B. B. NOYES.

CLAMP FOR CARRIAGE TOPS.

No. 258,798. Patented May 30, 1882.

FIG. 2.

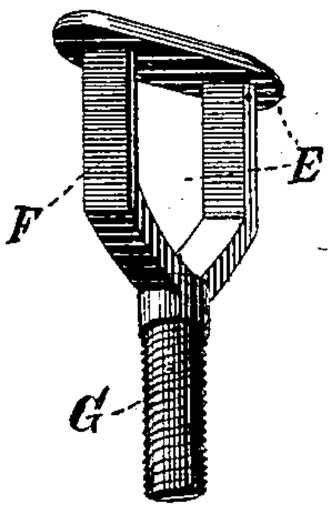


FIG. 1

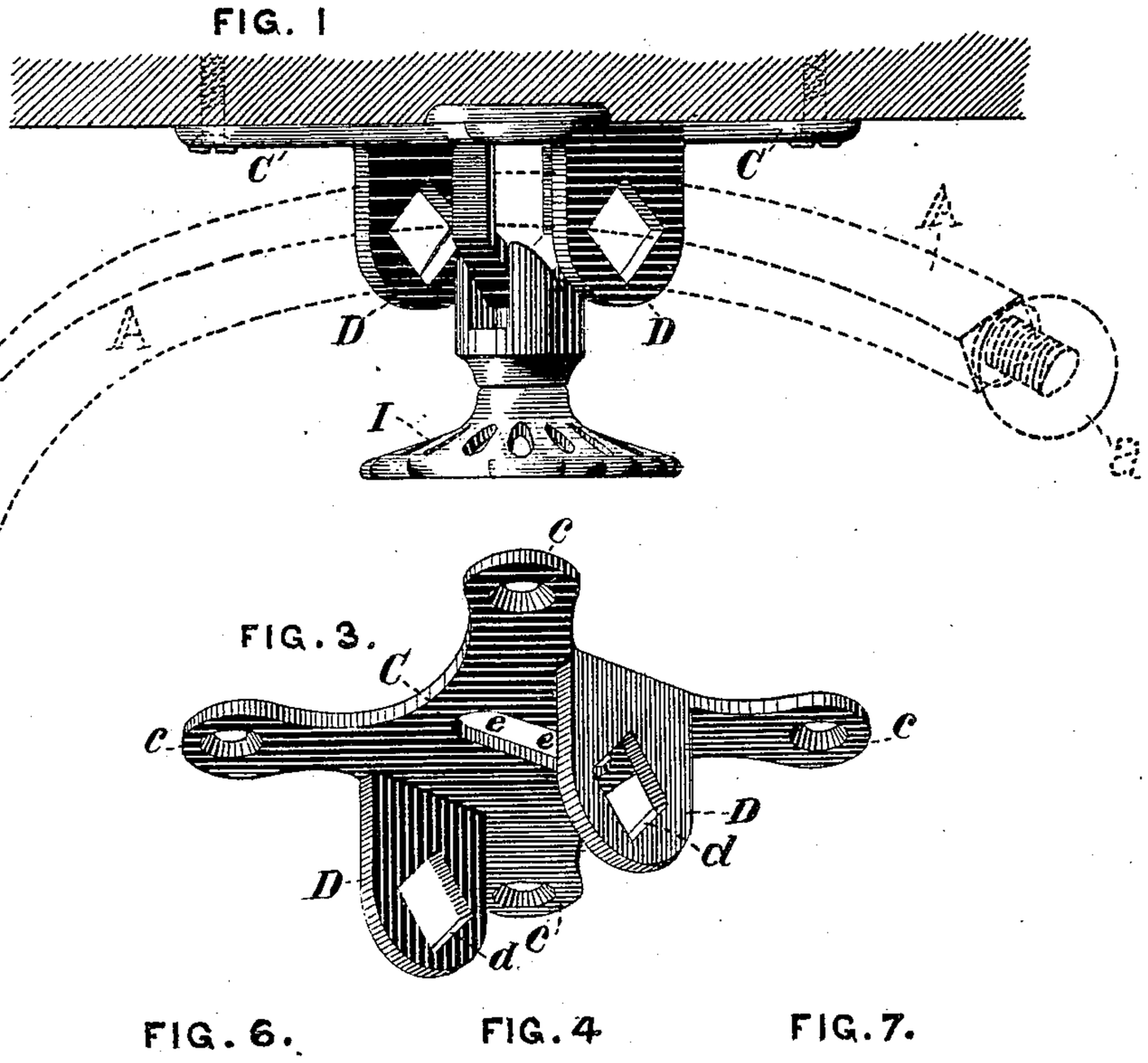


FIG. 3.

FIG. 6.

FIG. 4

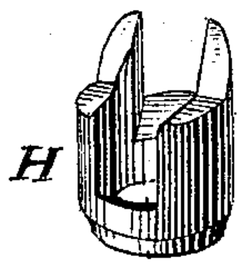
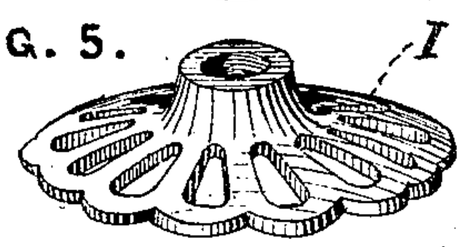


FIG. 7.

FIG. 5.



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BAXTER B. NOYES, OF GREENFIELD, MASSACHUSETTS, ASSIGNOR TO SANFORD A. SMITH, OF GUILFORD, VERMONT.

CLAMP FOR CARRIAGE-TOPS.

SPECIFICATION forming part of Letters Patent No. 258,798, dated May 30, 1882.

Application filed February 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, BAXTER B. NOYES, of Greenfield, Massachusetts, have invented certain new and useful Improvements in Sliding-Clamp Attachments for Adjusting the Canopies of Carriages, of which improvements the following is a specification.

My invention relates to that class of attachments by which the canopy of a carriage is supported above the body of the vehicle, so as to shield the occupant from the sun or rain, and is moved back and forth to adjust it at different angles of inclination in line with the carriage as may be desired; and my invention consists in a clamping device which can be applied to the canopy with great facility, and not only be readily adjusted, but steadily sustained in its adjusted position. It is an improvement upon the device for a like purpose shown in Letters Patent No. 214,281, issued under date of April 15, 1879, to John M. Crosby, assignor to Sanford A. Smith, of Guilford, Vermont.

In the accompanying drawings, which form a part of this specification, Figure 1 is a view in perspective of my improved sliding clamp attached to the under side of a canopy top, and mounted upon the curved forward end of a supporting-bar, (shown in dotted lines,) the lower end of which bar is to be attached to the body of the carriage at the back, so that the bar extends forward in line with the center of the carriage. The attachment at the lower end of the bar may be any of the well-known devices for that purpose which afford means for adjusting the bar laterally, while my sliding clamp affords the means of adjusting it longitudinally, as hereinafter described. Figs. 2, 3, 4, 5, 6, and 7 are views in perspective of the several parts which make up my improved sliding clamp, Fig. 2 showing the collar which affords central support, Fig. 3 showing the top and side supports, Fig. 4 showing the thimble, of which Figs. 6 and 7 are vertical central sections at right angles to each other, and Fig. 5 showing the clamping-nut.

The top and side supports, Figs. 1, 3, consist of a metallic base-plate, C, having suitable points, *c c c c*, at which it may be provided with holes for the screws or bolts by which it is firmly secured to the under side of the canopy. Projecting from opposite sides of the plate C are two lugs, D D, in which bearings *d d* are provided of shape conformable to that of the bar. This plate C is further provided with a longitudinal slot, *e e*, through which I pass the flanged clamping-collar E, Figs. 2, 3, so that its flange will rest upon and be supported by the base-plate C, while its yoke F and threaded shank G project through the plate C. The collar is formed so as to permit the bar to pass freely through it, and is free to play slightly in the slot of the base-plate when not clamped up. The sides and bottom of this collar are to conform to the shape of the bar A, and thus afford bearings to the bar. The collar being in place, and the base-plate being secured to the canopy, I now slip the thimble over the threaded shank of the collar G. This thimble, Figs. 4, 6, 7, has a rectangular slot through it of such width that it will fit closely in the lower end of the yoke and hold the collar firmly in place between the lugs D D, while the sides of the thimble are recessed, so as to fit upon the adjacent surfaces of the supporting-bar, and thus afford an additional bearing to the bar on each side of the yoke. Having adjusted the thimble, as described, and as shown in the drawings, Fig. 1, it only remains to screw the nut I, Fig. 5, upon the threaded end of the collar G, which end protrudes through the thimble a proper distance for this purpose, and the canopy is ready to be mounted upon the supporting-bar A. This bar A has its free end threaded, and at this end is fitted with a stop-nut, which can be screwed on and off. This nut being removed, the clamp is slipped over the free end of the bar A, which passes through the lugs D D and the collar G, the thimble being loose and the collar having some play, as already mentioned. The stop-nut *a* is then replaced on the end of the bar A. When the canopy is at the proper point the nut I is screwed up on the shank of the collar G and carries up with it the thimble H, at the same time drawing down the yoke of the collar G into the slot in the thimble, and bringing up all the bearings in the upper half of the lugs D D and in the collar G and in the thimble H snugly in place upon the adjacent surfaces

of the bar A. It is only necessary to then tighten the nut I, and the adjustment is complete.

To change the position of the canopy it is only necessary to loosen the nut I and slide the clamp along the bar to its desired position, and then again tighten it up, as before. The free end of the bar being curved downward, the canopy may be adjusted at an inclination to the horizon, and any desired lateral adjustment may be obtained by suitable provision in that behalf at the lower end of the bar, as already mentioned.

I have shown my improvements applied to the under side of the canopy and supporting the canopy above the bar A, as this is found to be the most desirable arrangement; but I contemplate using it on the upper side of the canopy whenever it is preferred to have the canopy below the bar, and it is obvious that no change is necessary for such use except simply to reverse the plate C and put the parts together, as already described. It will also be manifest that when the lower end of the bar A is to be adjusted vertically this clamp may be used for that purpose.

I have also shown the supporting-bar as lozenge-shaped in cross-section, and the bearings for this bar in the several parts of my clamping device as conforming in shape to this shape of the bar; but it is obvious that the bar may be of other shapes in cross-section, and that the bearings should always conform to the shape of the bar, so that I do not confine myself to any particular form of bar or of bearings, having described that which I consider best and most simple and secure. Furthermore, it will be seen that by means of the thimble, and by thus conforming the bearings to the top edge and the two upper sides of the bar, which has a lozenge shape in cross-section, I am enabled to clamp the attachment so firmly on such a bar that the two lower sides and the bottom of the bearings in the plate C need not be nicely or closely fitted to the adjacent parts of the bar, but may be large enough to allow some play at those points, and thus facilitate the movements of the clamp along the bar in locating the canopy; or these three lower bearings in the plate C may be dispensed with entirely, and the three upper bearings, with the thimble below, will firmly and steadily support the canopy in its adjusted position.

I have shown and described the collar G as a separate piece; but it may be cast with the base-plate, though I prefer to have it separate, so as to admit of its having a slight freedom of motion, as described.

Having thus described the nature and object of my improvements, what I claim herein as new, and desire to secure by Letters Patent, is—

1. The combination of the base-plate C, the collar G, the thimble H, and the nut I, these parts being combined and operating in combination substantially as and for the purposes described.

2. The combination, with the supporting-bar, of the base-plate, the collar, the thimble, and the clamping-nut, substantially as and for the purposes described.

BAXTER B. NOYES.

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