

(No Model.)

R. F. PAINTER.
CANOPY ROD CLAMP.

No. 463,165.

Patented Nov. 17, 1891.

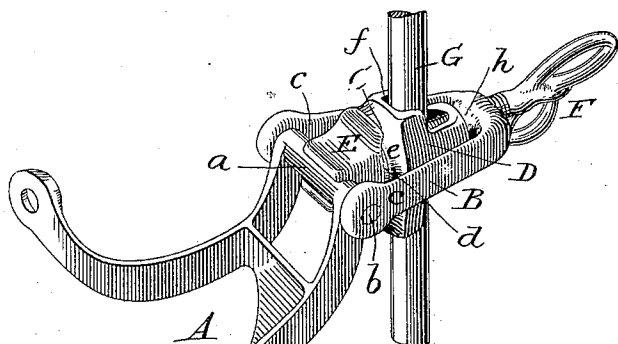


Fig. 1

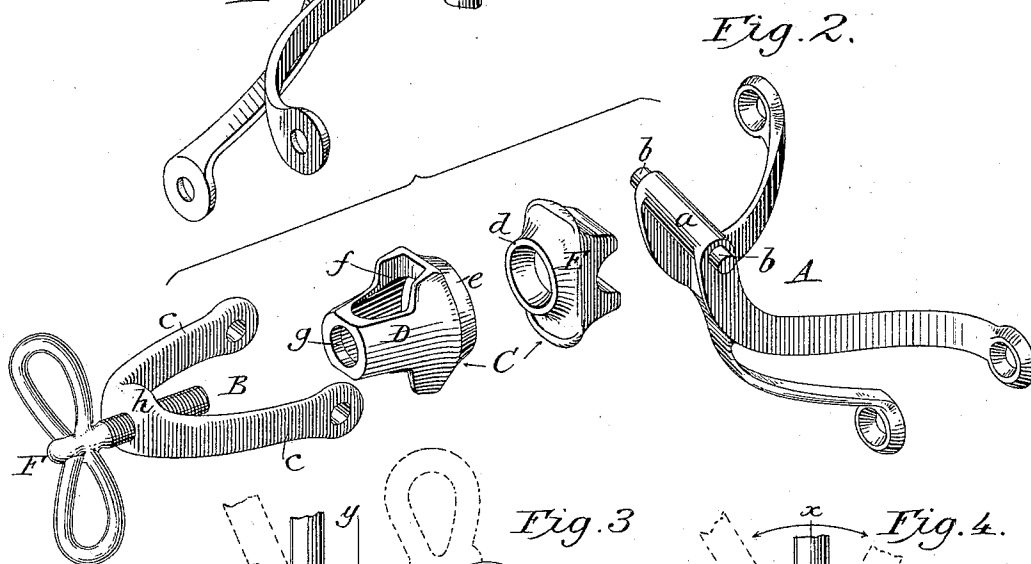


Fig. 2.

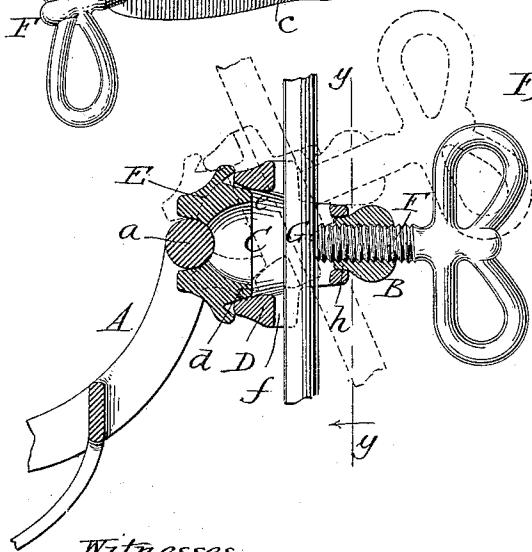


Fig. 3

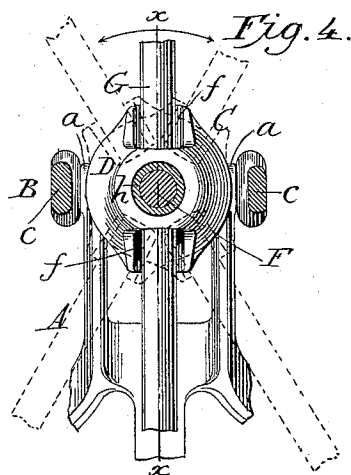


Fig. 4.

Witnesses,

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UNITED STATES PATENT OFFICE.

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CANOPY-ROD CLAMP.

SPECIFICATION forming part of Letters Patent No. 463,165, dated November 17, 1891.

Application filed June 3, 1891. Serial No. 394,979. (No model.)

To all whom it may concern:

Be it known that I, ROBERT F. PAINTER, a citizen of the United States, residing at Greenfield, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Canopy-Rod Clamps, of which the following is a specification.

My invention relates to canopy-rod holders; and it consists in various features, details, and combinations hereinafter set forth.

In the drawings, Figure 1 is a perspective view of my improved holder or clamp; Fig. 2, a perspective view of the parts separated; Fig. 3, a vertical sectional view on the line *x* *x* of Fig. 4; and Fig. 4 a vertical transverse sectional view on the line *y y*, Fig. 3.

A represents the supporting bracket or frame adapted to be secured to the back of the carriage, and which in this instance is provided at its outer end with a cross-bar *a*, having a rounded face, and with pintles *b b*, which extend laterally from the ends or from continuations of the cross-bar *a*. Pivoted to the pintles of the bracket is a yoke or bail B, made preferably of malleable cast-iron, so that the arms *c c* may be bent down to engage with the pintles *b b*. Before this is done, however, the two-part swivel-block C must be placed in position. This block is composed of two parts D and E, the front face of the latter being made concave, so as to conform to the bearing-surface of the cross-bar *a*, while on its rear face is formed a circular rim or projection *d*, which takes into a corresponding opening *e* in the front face of part D. Part D is further provided with the vertical opening *f*, the side walls of which preferably incline toward each other, and through this opening the canopy-rod G passes and is clamped. In the rear face of block D is formed an opening *g*, which opening is adapted to receive a hub or sleeve *h*, which projects forwardly from the inner face of yoke B. This hub is threaded internally to receive a set-screw F, the inner end of which projects into the block D, in line with the opening *f*, to bear against the rod G, seated in said opening.

In assembling the parts, swivel-block C is placed within the yoke B, the hub *h* entering

opening *g*, and the parts are then placed so that the concave face of the swivel-block C rests upon the cross-bar *a*, when the arms *c c* of the yoke are bent down, so as to engage the pintles *b b*, thus securely holding the parts together in their proper relative positions, but leaving the yoke with the swivel-block free to swing vertically on the pintles *b b*, and the swivel-block D free to oscillate laterally with reference to the yoke.

As seen in Figs. 3 and 4, great latitude of movement is possible on account of the swinging of the whole clamp and the lateral movement of swivel-block, and it will also be noticed that even though the set-screw be withdrawn the swivel-block will remain in its position and not become detached and lost. Furthermore, by my construction a very slight movement of the set-screw will enable the rod to be changed in its position, while cramping of the different parts is avoided.

Having thus described my invention, what I claim is—

1. In a canopy-rod holder, the combination of a frame or bracket, a yoke pivoted thereto, a swivel-block secured within said yoke and adapted to receive the rod, and means for clamping the rod and block, all substantially as shown and described.

2. In a canopy-rod holder, the combination of a frame or bracket, a yoke pivoted thereto, a screw carried by said yoke, and a two-part swivel-block adapted to receive the rod, all substantially as described.

3. In combination with a bracket having a cross-bar, a bail pivoted to the bracket, a two-part block mounted in the bail and bearing at opposite ends against the bail and cross-bar, and a set-screw carried by the bail and adapted, substantially as described and shown, to clamp the rod in the block and the latter against the cross-bar.

4. In combination with a bracket having a cross-bar, a bail pivoted to the bracket, a two-part block mounted in the bail, the front portion of the block adapted to bear against the cross-bar and the rear portion swiveled and adapted to receive the rod, and a set-screw carried by the bail and adapted to clamp the

rod and block in position, substantially as shown and described.

5 5. In combination with bracket A, having cross-bar *a* and pintles *b b*, bail B, pivoted to the bracket and carrying set-screw F, block C, composed of two parts D E, the latter of which has a concave front face and a rim *d* on its face, part D being provided with openings *e, f*, and *g*, and a hub *h*, formed on the

bail and adapted to fit the opening *g*, all substantially as shown and described.

In witness whereof I hereunto set my hand in the presence of two witnesses.

ROBERT F. PAINTER.

Witnesses:

J. E. GRANT,

L. H. WILCOX.