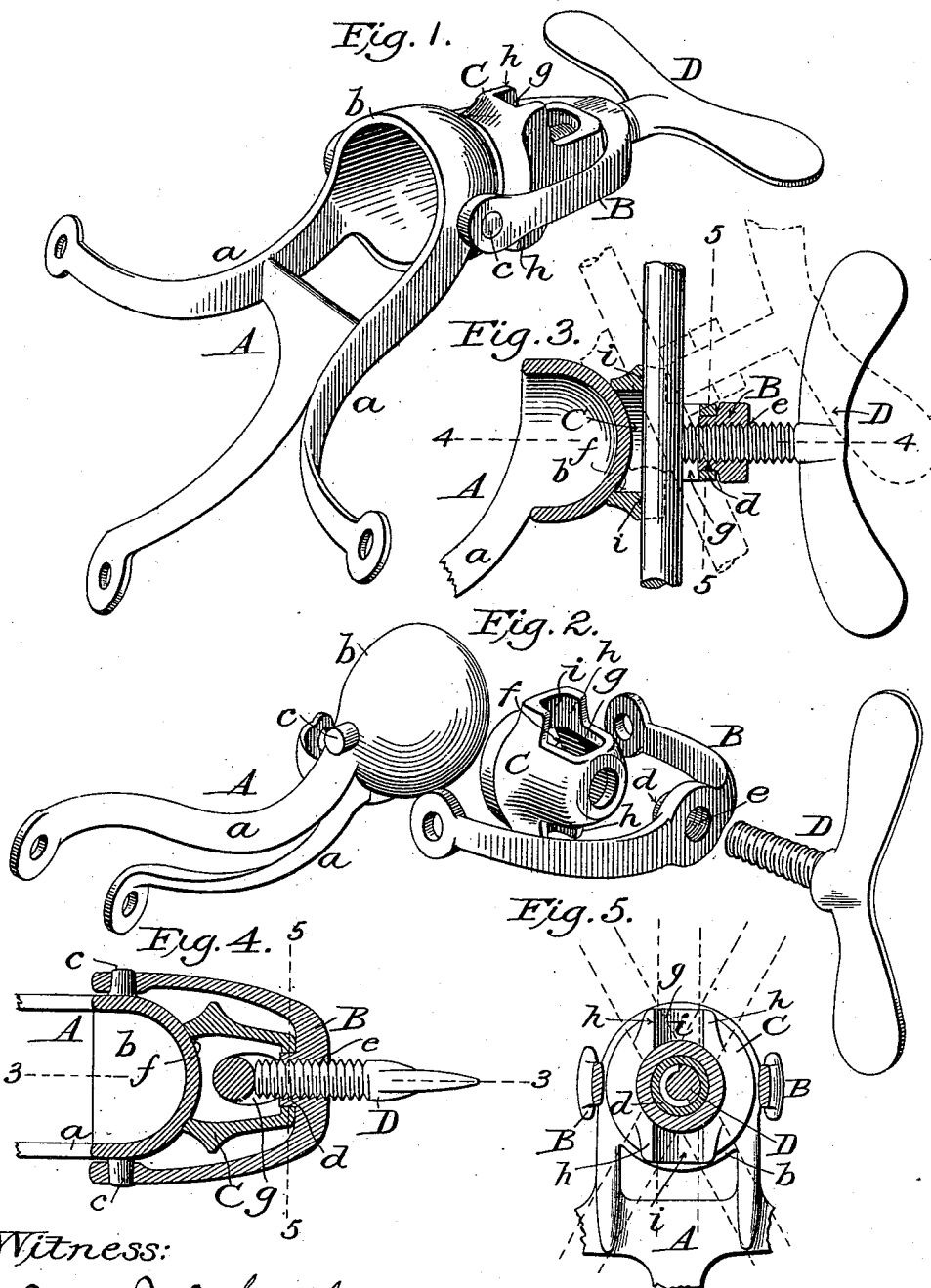


(No Model.)

R. F. PAINTER.
CANOPY ROD HOLDER.

No. 471,317.

Patented Mar. 22, 1892.



Witness:

James F. Duhamel
Horace A. Dodge.

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Inventor.

By *Dodger & Sons*
Attys.

UNITED STATES PATENT OFFICE.

ROBERT F. PAINTER, OF GREENFIELD, MASSACHUSETTS, ASSIGNOR TO THE
WARNER MANUFACTURING COMPANY, OF SAME PLACE.

CANOPY-ROD HOLDER.

SPECIFICATION forming part of Letters Patent No. 471,817, dated March 22, 1892.

Application filed December 21, 1891. Serial No. 415,757. (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 Holders, of which the following is a specification.

My invention relates to canopy-rod holders, and is designed, primarily, as an improvement for that which Letters Patent No. 463,165 were granted to me November 17, 1891.

In the drawings, Figure 1 is a perspective view of my improved holder; Fig. 2, a similar view with the parts separated; Fig. 3, a vertical longitudinal sectional view on the line 3 3, Fig. 4, a horizontal longitudinal sectional view on the line 4 4, Fig. 3; and Fig. 5 a vertical transverse sectional view on the line 5 5 of Figs. 3 and 4.

A indicates the bracket as a whole, having arms or legs *a* for attachment to the carriage, a hemispherical head or bulb *b*, and laterally-projecting studs *c c* in line with the horizontal axis of the head *b*, the whole preferably constituting a single casting.

B indicates a bail or loop pivoted at its inner end upon the studs or projections *c c* and provided at its head with an inwardly-projecting neck or collar *d*, upon which fits the holder-block C, as clearly shown in Figs. 3, 4, and 5, the said block C being provided with a hole for this purpose. It is to be understood, however, that this neck or collar *d* may be omitted, if desired; but it will be found advisable to use it, as it gives stability to the device and renders less likely the displacement of the parts. The bail is further provided with a threaded opening *e* to receive a clamping-screw D, the threads extending, preferably, all the way through the collar or neck *d*, as shown in Figs. 3 and 4.

The block C, which receives the canopy-rod, is provided, as before stated, with an opening at one end, into which fits the collar or neck *d*, and is provided at its opposite end, where it is enlarged, with a circular opening *f* of a diameter less than the diameter of the head or bulb *b*, but large enough to afford quite an extended bearing upon the said head, as shown in Figs. 3 and 4. It is also provided with a vertical hole or opening *g*, through

which the canopy-rod passes, the side walls of the opening being extended above and below, as at *h*, to support the rod on the sides. The rod, after being inserted into the openings, is held in place by the screw D, which, bearing against the rod, presses the latter firmly against the upright wall *i* of the hole or opening *g*, which, it will be observed, is placed in advance of the head or bulb *a*, so that the rod when in place will not touch the bulb. The pressure exerted by the screw against the canopy-rod not only serves to hold the rod firmly to its seat in the block, but also forces the block against the bulb or head *a*, thereby holding the rod in any of its adjusted positions.

When it is desired to adjust the rod vertically with reference to its holding-block, it is only necessary to relieve the rod of the pressure of the clamping-screw and raise or lower the rod and then again clamp it with the screw.

The bail may be raised and lowered at its outer end, so as to give the desired backward or forward inclination or adjustment, while the block may be turned either to the right or left to give the desired lateral inclination.

The bail will advisably be made of malleable iron, and after the insertion of its collar or neck into the block the ends of the bail will be applied to the studs or journals of the head or bulb, and after being bent or hammered to place effectually prevent the disengagement of the separate parts, a matter of considerable importance.

From this it will be seen that no screws, bolts, rivets, or other special fastening devices are required to hold the various parts together and that the parts cannot become disconnected and lost, except perhaps the clamping-screw; but even this can be obviated by heading the latter after it is inserted.

It will be observed that under the construction herein described I employ one block or part less than was employed in my prior construction, the form of the bulb or head permitting both a vertical and a lateral movement of the holding-block.

Having thus described my invention, what I claim is—

1. In a canopy-rod holder, the combination, with an attaching-bracket having a hemi-

spherical head or bulb, a bail pivoted to the head, a block interposed between the head or bulb and the head of the bail and adapted to receive the canopy-rod, and a screw carried
5 by the bail and adapted to bind the rod to its block and the block to the head or bulb, all substantially as shown and described.

2. In a canopy-rod holder, the combination, with bracket A, having hemispherical head *b*
10 and studs *c*, bail B, pivoted to the studs and provided with neck or collar *d*, block C, fitting at one end upon the neck and at its opposite end against the bulb or head *b* and provided with an opening to receive the canopy-rod, and a clamping-screw D, carried by the
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bail and adapted to bear upon the rod passing through the block, all substantially as shown and described.

3. In combination with a bracket having a hemispherical head, a bail pivoted thereto, a
20 single block swiveled in the bail and bearing against the head, and a clamping-screw carried by the bail to clamp the parts, all substantially as shown and described.

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

ROBERT F. PAINTER.

Witnesses:

JOHN E. OSGOOD,

WILLIAM CRONNINGSHIEL.