(No Model.)

R. GORTON.

WIRE HOOK AND HANGER.

No. 451,122. Patented Apr. 28, 1891.

Fig. 1.

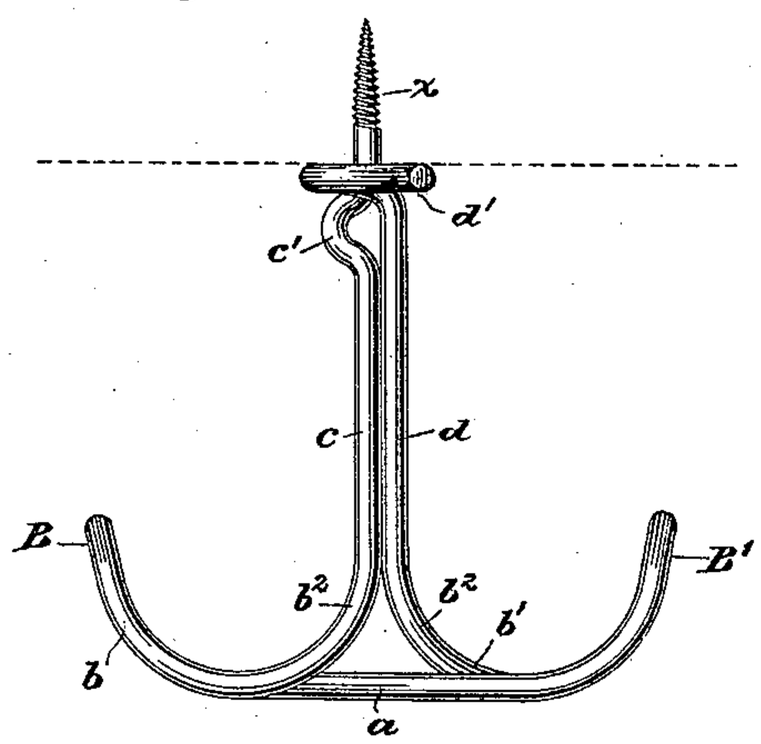


Fig. 2.

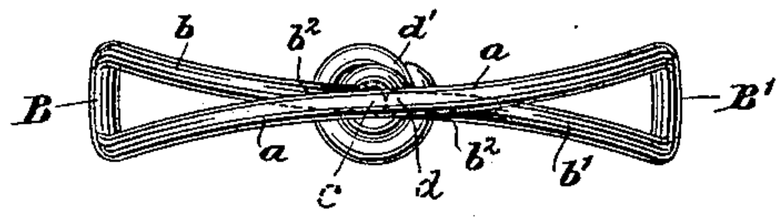
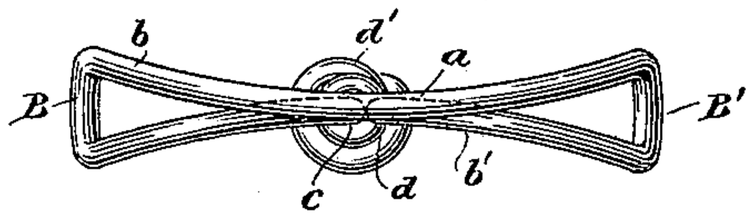


Fig. 3.



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UNITED STATES PATENT OFFICE.

ROBERT GORTON, OF PLAINFIELD, NEW JERSEY.

WIRE HOOK AND HANGER.

SPECIFICATION forming part of Letters Patent No. 451,122, dated April 28, 1891.

Application filed April 26, 1890. Serial No. 349,600. (No model.)

To all whom it may concern:

Be it known that I, ROBERT GORTON, a citizen of the United States, residing at Plainfield, county of Union, and State of New Jersey, have invented certain new and useful Improvements in Wire Hooks and Hangers, of which the following is a specification.

The invention relates to ceiling-hangers having opposite hooks, the entire hanger being bent up from a single piece of wire. A number of ceiling-hooks of this character have heretofore been patented; but none of them, so far as I am aware, have been bent in the peculiar manner below described, nor have they had the characteristics of my improved hanger.

In the accompanying drawings, Figure 1 is a side elevation of a hanger, the dotted line indicating the board or stringer into which the hook is vertically screwed. Fig. 2 is a bottom view of the same, and Fig. 3 a bottom view showing a modified construction.

I take a piece of wire, preferably screw-threaded upon the end to form a fastening attachment, and at points about equally distant from its center *a* the wire is bent upon itself in the same plane with the central part *a*, so as to form loops B B′. In Figs. 1 and 2, as will be observed, the wire at the loop B is turned in the opposite direction from the wire at the loop B′—that is to say, looking at Fig. 1, the loop B is formed by bringing the wire *b* toward the observer, while at the loop B′ the wire *b′* is turned away from the observer. The wires *b b′* are carried toward each other preferably until they abut immediately over the central point *a*, being curved upwardly, as shown at b^2. The two sides composed of the parts *a*, B, and *b* and *a* B′ *b′* are turned up to form hooks, as clearly shown. As a result of this formation the central part *a* of the wire extends diagonally from the side of one loop B to the opposite side of the other loop B′, and the hanging faces of the two hooks being formed by both of the parallel wires there is a broad bearing for the garment or garment-suspension loop.

From the points b^2 the wires *b b′* are carried up vertically, these parts of the wire being marked, respectively, *c* and *d*. The part *c* is formed with an outward bend or shoulder *c′* near the top or screw-threaded end, while the part *d* is bent over and turned around the part *c* above the bend *c′* in one or more convolutions or turns in the same plane, so as to form a shoulder or bearing *d′*. The screw-threaded end *x* of the hook serves as a convenient means of attaching and supporting it.

In Fig. 3 a hook is shown in which the wires *b b′* are both turned in the same direction and extend inwardly, as before, toward the axial center of the hook. The part *a* connects corresponding sides of the loops B B′, but is bent inwardly, so that its middle *a* comes directly under the parts *c d*. The result is much the same as in the construction shown in Figs. 1 and 2. The hooks are formed by wires *b a* and *b′ a*, occupying the same horizontal planes, so that the broad or double wire bearing is obtained and strains upon either hook are sustained in the manner below described.

The parts *c d* are shown as extending up side by side untwisted, and that is the way I prefer to have them; but obviously whatever disposition may be made of these parts of the wire the formation of the other part of the hanger will not be affected.

The structure of the hook is obvious not only from the foregoing description, but from the drawings. In describing it I have not attempted to specify in the order that they should be made the various bendings of the wire. My object has only been to show the formation of the hook, and obviously the successive bendings could follow each other in different order from that suggested.

Among the advantages incident to this hook it may be stated that by reason of the particular formation of the base of the hanger the strain upon the hooks is comparatively without torsion and is not liable to distort the hanger. Any strain upon the hook from which the wire *c* extends will be received in a great measure directly upon the screw-threaded end, while any strain upon the opposite hook will be similarly transferred to the screw-threaded end by reason of the bearing *d′*, resting upon the shoulder *c′* of the wire *c*.

I claim as my invention—

1. A ceiling-hook formed from a single piece of wire having the part *a*, the looped ends B B′ of the hooks, the parts *b b′*, turned

in reverse directions at the loops B B′ in planes at right angles to the vertical plane of the hook and having curved parts b^2 and vertical parts *c d*, the bearing parts of the wires *b* or *b′* and *a* of each hook being side by side or in the same transverse horizontal lines, and a securing-screw at the end of and in line with the vertical part *c d* of the hook, all substantially as hereinbefore described.

2. A ceiling-hanger hook formed from a single piece of wire screw-threaded at one end, said hanger having hooks with looped ends B B′, the part *a* extending diagonally from one side of one loop to the opposite side of the other loop, the parts *b b′*, turned at said loops in reverse directions and extending toward each other, being curved at b^2 b^2, the parallel parts *c d*, the shoulder *c′* in the wire *c*, and a bearing *d′*, formed by one or more convolutions of the wire *d* around the opposite wire between the screw-threaded end *x* and the shoulder *c′*, substantially as set forth.

3. A ceiling-hanger hook formed from a single piece of wire having opposite hooks in the same vertical and horizontal planes formed by loops B B′, the wire *a*, running in a horizontal direction directly from loop to loop and forming a side of each loop, wires *b b′*, bent at right angles to the vertical plane of the hook and respectively forming the remaining sides of said loops, the parts or wires *b* or *b′* in each hook in that part forming the hanging or bearing surface of the hook being side by side, or, in other words, in the same transverse horizontal lines, the curved or turned-up parts b^2, forming continuations of the parts *b b′*, the vertical parts *c d*, forming continuations of *b b′*, and a securing-screw at the end of and in line with the vertical parts *c d*, all substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

ROBERT GORTON.

Witnesses:
H. V. D. TERHUNE,
W. LESLIE SCRYMSER.