No. 649,847. **Patented May 15, 1900.**

J. E. HYNES.

FORMER FOR GUTTER HANGERS.

(Application filed Sept. 16, 1899.)

(No Model.)

Fig 1

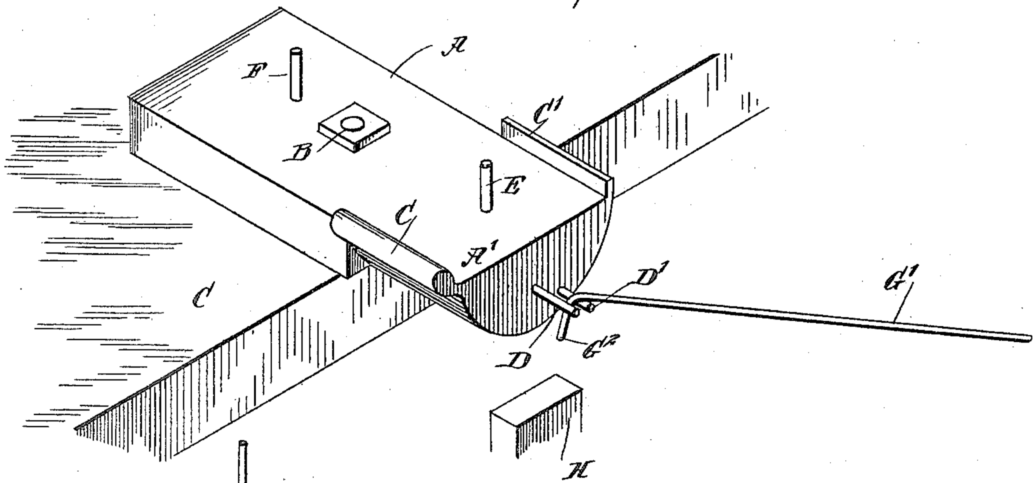


Fig 2

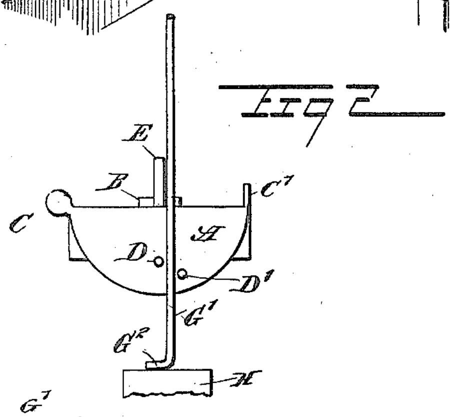


Fig 3

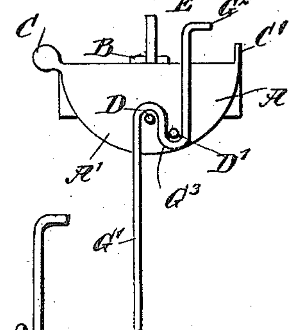


Fig 4

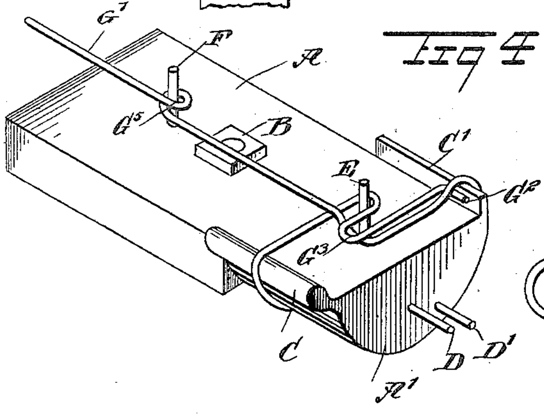
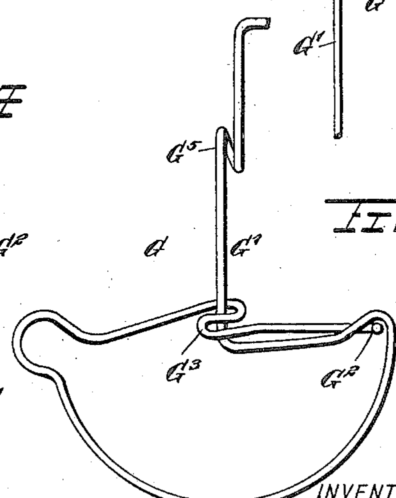


Fig 5



WITNESSES:

H. Walker

[illegible]

INVENTOR

James E. Hynes

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES EDWARD HYNES, OF HANNIBAL, MISSOURI.

FORMER FOR GUTTER-HANGERS.

SPECIFICATION forming part of Letters Patent No. 649,847, dated May 15, 1900.

Application filed September 16, 1899. Serial No. 730,697. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWARD HYNES, of Hannibal, in the county of Marion and State of Missouri, have invented a new and useful Former for Gutter-Hangers, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved former for wire hangers for supporting roof-gutters, whereby a piece of wire can be quickly formed into the desired shape to produce a very strong and durable hanger at a comparatively-low cost.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

A practical embodiment of my invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement with the parts of the wire in position at the start. Figs. 2 and 3 are end views of the same, showing succeeding steps in the operation. Fig. 4 is a perspective view of the same, showing the last step in the operation; and Fig. 5 is an enlarged end elevation of the finished gutter-hanger.

The gutter-hanger former consists, essentially, of a body A, adapted to be secured by a bolt B to a table, bench, or other support, the forward end of the body projecting beyond the side of the support, the bottom being rounded off and one side formed with a transverse flange C, round in cross-section. The opposite side is provided with a flange C′, extending a distance above the flat top of the end A′, so as to conform to the cross-sectional shape of an ordinary roof-gutter, the said flange C conforming to the bead on the outside of the gutter and the flange C′ corresponding to the inner upper edge of the gutter.

On the front face of the end A′ are secured two parallel pins D D′, standing in different vertical planes, one somewhat above the other, as is plainly indicated in Figs. 2 and 3, and on the top of the end A′, between the flanges C C′, is held a pin E, and a similar pin F is disposed on the rear portion of the body A, likewise on the top and in longitudinal alinement with the pin E.

In order to produce the wire hanger G on the former above described from a single piece of wire G′, I proceed as follows: One end of the piece of wire G′ is passed between the pins D D′ and then bent to form the angular end G^2, after which the piece of wire is placed in a vertical position between the wires D D′, the angular end G^2 resting on a rest H, placed a suitable distance below the pins D D′. When in this position, the ends of the wire above and below the pins D D′ are turned in opposite directions by a suitable tool, so that the upper part of the wire is bent downward over the pin D and the lower part is bent upward under the other pin D′ to the position shown in Fig. 3, forming the loop G^3. The piece of wire is now removed from the pins D D′, and the bend formed by the pin D is now hooked upon the pin E, the end of the wire having the angular part G^2 extending toward the flange C′, as plainly indicated in Fig. 4. The wire is now bent through the portion leading from the pin E transversely around the flange C and under the rounded bottom of the end A′, up over the flange C′ and over the angular end G^2, and then under the loop G^3 and over the wire extending from the pin E to the flange C, it being understood that the bend at G^3 is made on the pin E. After this the wire is bent once around the pin F, so as to form a nail-hole G^5 for attaching the hanger to the roof-timber for supporting the gutter.

When the several parts have been bent in the manner described, the end of the wire having the loop G^5 is disengaged from the pin F and then bent upward in alinement with the pin E to finish the hanger, a pair of tongs or other suitable means being employed to hammer the wire upon the peripheral surface of the end A′ to give it the desired shape, especially at the curved bottom of the flange C. (See Fig. 5.)

From the foregoing it is evident that the former is very simple and durable in construction, and it requires very little, if any, skill on the part of a mechanic to form a piece of wire into a strong and durable hanger conforming in its bottom portion to the cross-

section of the gutter, so that the hanger fits snugly on the gutter and also forms a brace on the inside of the gutter to hold it firmly and stiffly in position without the use of the soldered brace heretofore used.

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

As a new article of manufacture, a former for gutter-hangers, the same comprising a body having a flat top, a rounded bottom at one end, a rounded flange above the flat top at one side of said end and a second flange above the flat top at the other side of said end, and pins projecting from the said top and the end of the body, as and for the purpose set forth.

JAMES EDWARD HYNES.

Witnesses:
J. T. LORD,
ALEX. SMEATHERS.