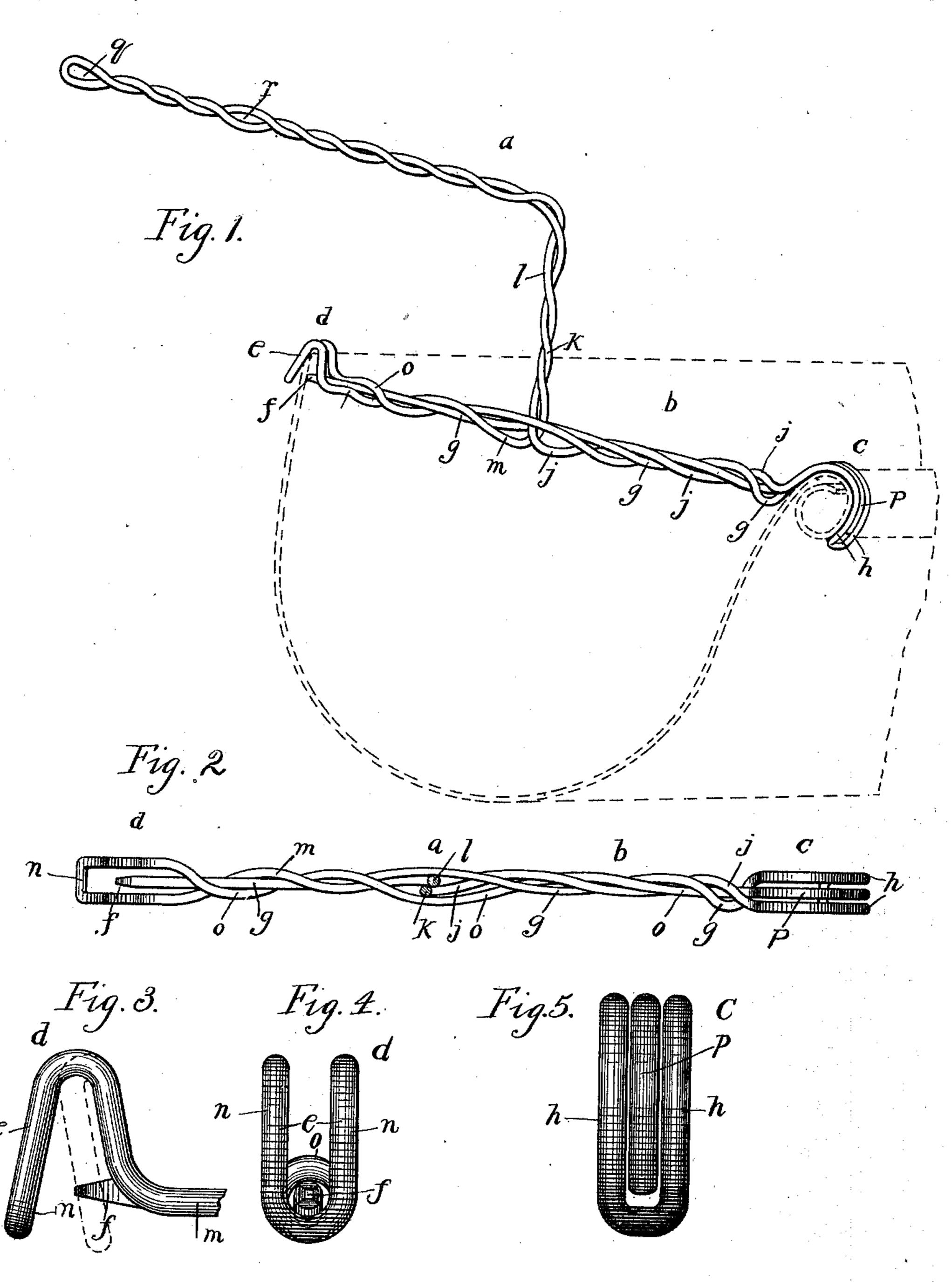
No. 670,676.

Patented Mar. 26, 1901.

C. A. KARPENSTEIN. EAVES TROUGH HANGER.

(Application filed Nov. 5, 1900.)

(No Model.)



Witnesses: Um Geiger. Watson Hurlburk Inventor:
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Ittys.

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United States Patent Office.

CHARLES A. KARPENSTEIN, OF CHICAGO, ILLINOIS.

EAVES-TROUGH HANGER.

SPECIFICATION forming part of Letters Patent No. 670,676, dated March 26, 1901.

Application filed November 5, 1900. Serial No. 35,444. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. KARPEN-STEIN, a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Eaves-Trough Hangers, of which the following is a specification.

My invention relates to a new and useful hanger for eaves-troughs, and is designed to produce a strong and efficient hanger that can be readily twisted up from a single piece of wire and which can be readily and securely attached to the trough with which it is designed to operate.

In carrying out my invention I preferably form the entire hanger of a single piece of wire, and in describing the construction employed and to assist in tracing out the course of the wire it will be necessary to designate certain portions of the wire by separate reference characters.

To illustrate my invention, I have annexed hereto a sheet of drawings in which the same reference characters are used to designate identical parts in all the figures, of which—

Figure I is a perspective view of the hanger, showing it in position upon the trough. Fig. 2 is a top plan view of the hanger. Figs. 3 and 4 are a side and end elevation, respectively, of the clamping end; and Fig. 5 is an end elevation of the curved end that coöperates with the bead of the trough.

The hanger, considered as a whole, consists of the rod or supporting portion a and the cross-bar portion b, which is provided at one 35 end with the curved end c, which is adapted to hook over the bead when turned to the proper angle, but serving to hold it securely when the cross-bar is horizontal, and at the other end with the hook-clamp d, having the 40 outer portion e, adapted to be bent from the full-line position of Fig. 3 to the dotted-line position, in which the plain edge of the trough is permanently secured by its being forced over the end of the point f. Beginning with 45 the point f, the portion g of the wire extends across the cross-bar portion of the hanger and then forms the double-loop portion h, which constitutes the edges of the curved end. From this double-loop portion h the portion j re-

turns to the center of the cross-bar, from 50 which point the portion k extends to the end of the rod portion a, whence the portion l returns to the center. From the center the portion m extends to the hook-clamp end, where another double-loop portion n forms the hook- 55 clamp d, differing from the double-loop portion h only in its shape, as clearly seen. From the portion n the portion o extends across the cross-bar part and may terminate in the curved end p, which in that case forms the 60 central portion of the curved end c, as will be clearly seen. Each of the portions g, j, k, l, m, n, and o, as clearly seen, is twisted uponthe portions lying adjacent thereto, so as to stiffen the structure, and the portions k and l 65 have their twist arranged so as to leave the two apertures q and r, through which are passed the fastenings by which the hangers are secured to the eaves.

The operation of the device will be readily 70 apparent, and it will be seen that I have produced an extremely simple hanger that, despite the material of which it is constructed, has great rigidity and which can be readily and easily applied and which supports the 75 trough with the utmost certainty.

While I have shown my invention as embodied in the form which I at present consider best adapted to carry out its purposes, it will be understood that it is capable of modifica- 80 tions and that I do not desire to be limited in the interpretation of the following claims except as may be necessitated by the state of the prior art.

What I claim as new, and desire to secure 85 by Letters Patent of the United States, is—

1. An eaves-trough hanger formed of a single piece of wire and consisting of the rod portion a and the cross-piece portion b terminating at one end in the curved loop b and at the 90 other end in the looped hook-clamp d and having one end of the wire extending in a substantially horizontal line from the center of the cross-piece and terminating in the point f which passes into the loop of the hook-clamp 95 when the hanger is clamped in place, substantially as and for the purpose described.

2. An eaves-trough hanger formed of a sin-

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gle piece of twisted wire and consisting of the rod portion a and the cross-piece portion b formed of three twisted strands and terminating at one end in the curved loop h reinforced by the correspondingly-curved end p of the wire and at the other end in the looped hook-clamp d and the point f constituting the other end of the wire and passing into the

loop of the hook-clamp when the hanger is clamped in place, substantially as and for the 10 purpose described.

CHARLES A. KARPENSTEIN.

Witnesses:

LOUISE E. SERAGE, HATTIE O. HALVORSON.