A. E. JOHNSON. CABLE HANGER.

Patented Mar. 13, 1894. No. 516,205. Fig. 2 Fig. 5 Fig. 6 Fig. 7 Witnesses, Kenry K. Commings.

United States Patent Office.

ADOLF E. JOHNSON, OF WAKEFIELD, MASSACHUSETTS.

CABLE-HANGER.

SPECIFICATION forming part of Letters Patent No. 516,205, dated March 13, 1894.

Application filed July 6, 1893. Serial No. 479,698. (No model.)

To all whom it may concern:

Be it known that I, ADOLF E. JOHNSON, a citizen of the United States, residing at Wakefield, in the county of Middlesex and State of Massachusetts, have invented a new and useful Hanger or Clip, of which the following is a specification.

My invention relates to improvements in such hangers (or what are commonly called 10 "clips") as are used to suspend telephone or other cables or wires from a supporting or guard wire, and the objects of my improvements are, first, to produce a hanger that can be made to clasp cables of different circum-15 ferences firmly enough to retain its relative location on the cable when said cable is drawn along under the supporting wire, and, second, to provide means by which the hanger may be repeatedly put on and taken off without 20 destroying it, and, third, to so construct it that it can be manufactured very cheaply. I attain these objects by the mechanism illustrated in the accompanying drawings, in

Figure 1, is an elevation showing the shape of the blank of which the hanger is formed, before it is bent into position. Fig. 2, is an end elevation showing the blank partially adjusted to the supporting wire and the cable, and ready to be drawn tight and secured in a manner hereinafter described. Figs. 3 and 4 are end elevations showing the blanks drawn tightly into position in different ways, and secured. Fig. 5, is a side elevation as seen from the left in Fig. 3. Fig. 6, is a side elevation as seen from the right in Fig. 3. Fig.

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vation as seen from the right in Fig. 3. Fig. 7, shows the upper portion of a modified form of blank made in accordance with my invention. Fig. 8, is an end elevation showing the manner in which the modified form of blank is drawn into position and secured.

Similar letters refer to similar parts throughout the several views.

The blank A which is made of any suitable material,—preferably zinc—is provided with one or more locking fingers as a and b which are arranged respectively above and below the tongue opening C in Fig. 1, also with the tongue B, provided with one or more finger openings as e of suitable size to allow the passage through them of the locking fingers a or b, and with the tongue openings c and d said

openings being of suitable size to allow the passage through them of the tongue B.

In Figs. 2, 3, 4, 5, 6, and 8, the supporting 55 or guard wire is marked S, and the cable is marked C.

The blank A is adjusted into position and made to form a hanger in the following manner:—The end A' in which is the opening d, 60 is bent loosely over the supporting wire S, and the opening d is brought down opposite the opening c as shown in Figs. 2, 3, and 4. Then the end of the blank on which is the tongue B is drawn around the cable and the said tongue 65 B passed through the tongue openings d and c respectively and drawn up as tightly as desired. The tongue B may then either be bent up over the previously formed loop D as in Fig. 3, allowing the locking finger a to pass 70 through one of the finger openings e in the tongue B, or else the said tongue B may be bent down over the lower or cable supporting loop E allowing the locking finger b to pass through one of the said finger openings e in 75 said tongue B. The locking finger a or b whichever is used is then by suitable means formed into a hook as in Figs. 3 or 4, the bend taking place at a point between the tip and the root of said locking finger a or b determined 80 by the circumference of the cable C and the opening e most favorable for the purpose. This construction is desirable because in putting on and taking off the hanger repeatedly, either of the locking fingers a or b may be 85 weakened or broken, in which case recourse may be had to the remaining one.

The modified form of blank G as shown in Fig. 7 is provided with only one locking finger as f, arranged with relation to the end 90 opening g of said Fig. 7, the opening h being similar to opening d of Fig. 1, and the tongue B and finger openings e being similar in both forms of blanks. This form of hanger is applied to its position by bending the upper end 95 loosely over the supporting wire sin a direction opposite to that as shown in Figs. 2, 3, and 4, the tongue openings g and h brought opposite each other, the tongue B passed through the said tongue openings h and g respectively (in 100 the same manner as in the other form of hanger) the most favorably located of the finger openings e in the tongue B made to engage with the locking finger f, the tongue B

516,205

drawn tightly over the top of the loop j, and, lastly, the locking finger f bent upwardly into the form of a hook, all as shown in Fig. 8.

This invention is not limited to the exact shape shown for the blank, or for the tongue or fingers used, but the shapes shown are among the most desirable known to me.

What I claim as my invention, and desire

to secure by Letters Patent, is—

A clip or hanger composed of a metallic strap having tongue slots substantially as de-

scribed, and provided at one end with a tongue having one or more finger openings, said strap having one or more locking fingers, one of said fingers being adapted to enter one of said 15 finger openings after said tongue has been inserted through the tongue slots, substantially as described.

ADOLF E. JOHNSON.

Witnesses:

ARTHUR W. CROSSLEY, HENRY H. CUMMINGS.