

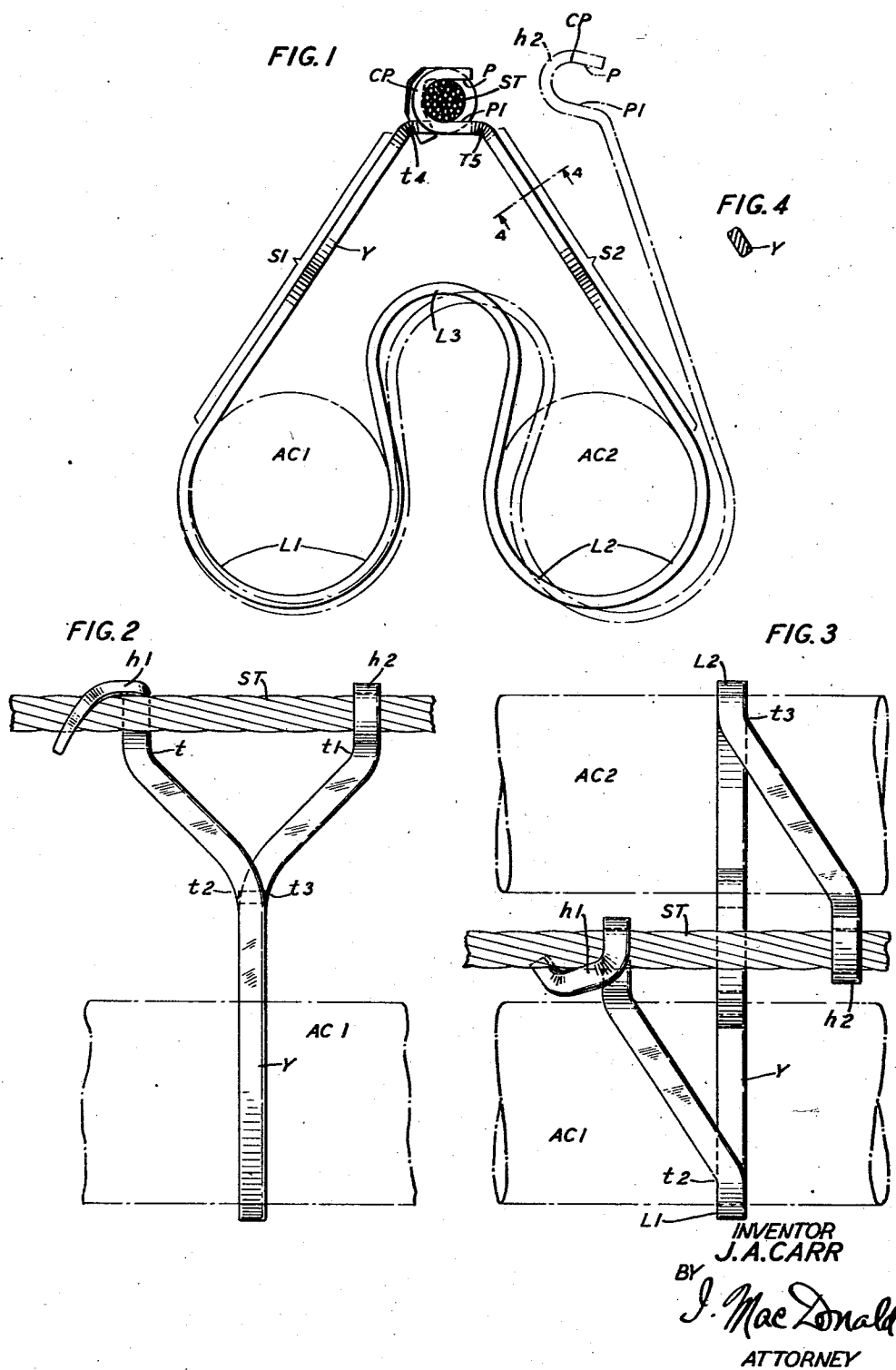
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HANGER DEVICE

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HANGER DEVICE

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1 Claim. (Cl. 248—61)

This invention relates to hanger devices of the type used for the suspension of aerial conducting cables from a supporting strand.

In connection with carrier transmission where two parallelly disposed aerial conducting cables are used, these conducting cables are generally supported by hangers punched from metallic sheets and bent in a manner to form a hook on each side of the blank, the thickness of the sheet determining the extent of the space between the parallelly disposed cables, resulting, due to their close proximity, in considerable induction effect between the cables. Furthermore, due to the necessity of punching this type of hangers from relatively thin metallic sheets and the fact that the free ends of the hooks are not supported, the hangers have been found to possess an insufficient amount of rigidity to prevent their deformation under the load of the cables.

Still another type of hanger for aerial cables is used requiring a supporting strand for each conducting aerial cable with an equal number of hangers for each strand and cable, the separation between the cables being determined by the position of their supporting insulators on cross arms at the top of poles.

The object of this invention is the provision of a hanger device of a simple and cheap construction which is capable of supporting two aerial conducting cables in an efficient manner and in large spaced relation to each other so as to minimize the cross induction effect between the cables, a single supporting strand being employed for the two cables.

In the drawing:

Fig. 1 is a front view of the hanger device of the invention shown in the hooked position on a supporting strand, the aerial cables being shown diagrammatically in the spaced loops of the hanger;

Fig. 2 is a side view 90 degrees from that of Fig. 1;

Fig. 3 is a top view; and

Fig. 4 is a cross-sectional view taken on line 4—4 of Fig. 1.

According to this invention a hanger for supporting a pair of parallelly disposed aerial cables from a so-called messenger strand is constructed of a laminated steel strip Y, shown in Fig. 4, of rectangular cross-section having considerable hardness and resiliency. The strip Y is formed at one end with a helical-shaped hook portion $h1$, as shown in Figs. 2 and 3, substantially encircling the circumference of the supporting strand ST and at the opposite end with a hook

portion $h2$ having parallel sides P and $P1$ and a semicircular CP, this semicircular portion being of a diameter corresponding to that of the strand ST.

The strip Y is bent adjacent the hook portions $h1$ and $h2$ at points t and $t1$ and at points $t2$ and $t3$ so as to offset the hook portions $h1$ and $h2$ as shown in Figs. 2 and 3 at a substantially equal distance from the downwardly extending portion of the strip which forms the aerial supporting loops $L1$ and $L2$, such offset distance being approximately two inches from the hooks $h1$ and $h2$ for distributing the load of the aerial cables AC1 and AC2 to different points along the supporting strand ST. In addition to the bending of the strip Y so as to form the hooks $h1$ and $h2$ and the offset bents $t-t1$, $t2-t3$, this strip is bent at points $t4$ and $t5$, see Fig. 1, to direct the sides $S1$ and $S2$ tangent to the bent portions of the strip forming the open loops $L1$ and $L2$ which are each of a diameter corresponding to the diameter of the aerial cables AC1 and AC2 while an inverted open loop $L3$ formed between the loops $L1$ and $L2$ serves for spacing the cables AC1 and AC2 at any desired distances so as to reduce within practical limits the cross-induction effect between these conductors.

A separating distance of approximately one inch between the aerial cables AC1 and AC2 as determined by the diameter of loop $L3$ when the two hooks $h1$ and $h2$ at the ends of the hanger engage the strand ST as shown in Figs. 1, 2 and 3 has been found in actual use entirely satisfactory, the strip Y being of such resiliency or stiffness as to require a pressure of substantially twelve pounds for flexing it from the position shown in dot and dash lines to the hooked position shown in full line in Fig. 1, when the diameter of the loops $L1$ and $L2$ tightly fit around substantially two-thirds of the circumference of the aerial cables AC1 and AC2.

The relatively great tension to which the strip Y is submitted upon being hooked to the supporting strand ST has been found to materially assist in preventing the deformation of the different bent portions as $t-t1$, $t2-t3$ and $t4-t5$ and that of the loop $L3$ under the load of the aerial cables, while permitting the use of a metallic strip of relatively small cross-section area with a corresponding saving in the material required and in the number of hangers required for any given length of aerial cable thus supported.

What is claimed is:

A hanger device for suspending a pair of cables in horizontal and parallel spaced relation to each

other from a supporting strand, said device consisting of a resilient metallic strip having three curved portions, each forming substantially two-thirds of a circle, two straight portions offset from the plane of the curved portions and a hook portion at each end of the strip, the diameter of curvature of one of said curved portions deter-

mining the spaced relation between the cables and the other of said curved portions tightly closing over substantially two-thirds of the circumference of the cables when the hooks are engaged with the supporting strand.

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