April 27, 1943. J. A. TEAS, SR 2,317,825

STRAP FOR ANCHORING DUPLEX ELECTRIC CONDUCTORS

Filed July 20, 1942

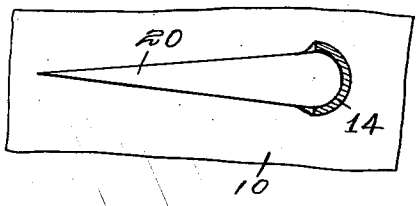


Fig. 3

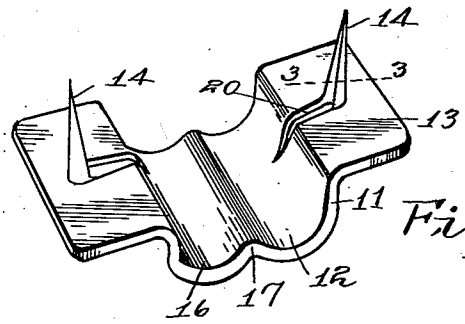


Fig. 1.

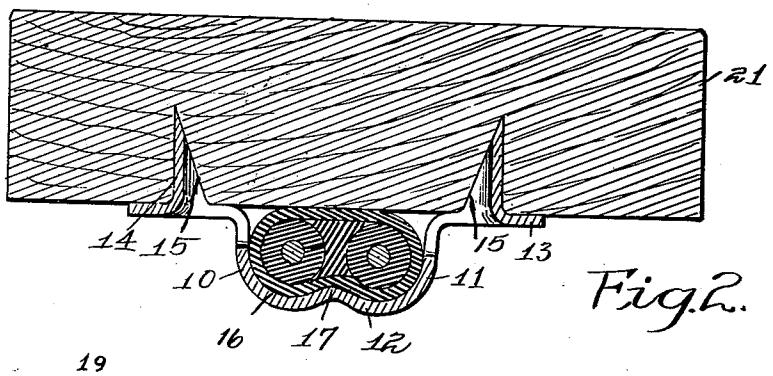


Fig. 2.

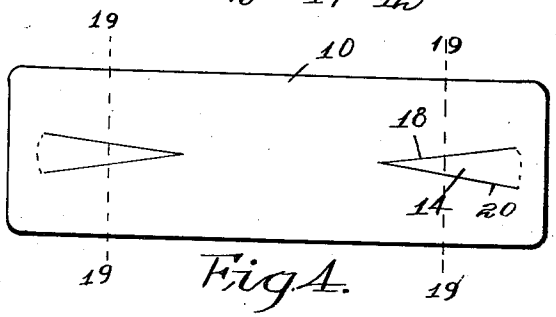


Fig. 4.

Inventor
John A. Teas Sr.
by Irving & Hague, Attys

Patented Apr. 27, 1943

2,317,825

UNITED STATES PATENT OFFICE

2,317,825

STRAP FOR ANCHORING DUPLEX ELECTRIC CONDUCTORS

John A. Teas, Sr., Des Moines, Iowa

Application July 20, 1942, Serial No. 451,677

3 Claims. (Cl. 24—129)

This invention relates to improvements in fastening means for securing into position electric conductors, and especially that type consisting of two parallel wires formed in an insulated casing wherein the casing is flat with rounded edges, this strap being particularly designed to be used in connection with that type of conductors commonly known in the trade as the Romex non-metallic cables.

The object of my invention is to provide a very simple and inexpensive strap having formed in the flanges thereof, by the die and press method, pointed spurs projecting upwardly from the flanges to provide fastening means without the use of nails, wherein a considerable amount of time is saved in the application of the straps, inasmuch as the operator does not need to go to the trouble of finding nails and placing the nails in position, while at the same time he is supporting the cable and the strap also in position.

A further object is to provide an improved strap wherein the fastening means consists of spurs stamped from the strap, wherein comparatively long spurs may be provided with comparatively short flanges, and in connection therewith provide an improved spur which is more rigid and which is supported with one of its faces perpendicular to the flange.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of my improved strap;

Figure 2 is a central longitudinal sectional view showing the manner in which the strap is applied to the beam and the manner in which the conductor is supported therein;

Figure 3 is an enlarged detail sectional view taken on the line 3—3 of Figure 1;

Figure 4 is a plan view of the blank from which the strap is formed, showing the manner in which the spurs are cracked therefrom and the lines on which the loop of the strap is formed.

My improved strap comprises a body portion 10, including sides 11, a bottom portion 12, and laterally extending flanges 13, said flanges having formed upright spurs 14, said spurs being concavo-convex in cross section with the concave sides innermost, the convex sides being perpendicular to the top face of the flanges 13, with the edges 15 of the spurs extending upwardly and outwardly, the side edges thus formed serving as braces for the body of the spur to hold their outer ends rigidly against movement toward and from each other, the bottom 12 being formed to provide concaved recesses 16, with its inner portion bulged upwardly to form a rib 17, the strap being preferably formed by first providing a rectangular blank of the desired width and length and then cracking in each end of the blank V-shaped incisions 18, then pressing the spurs 14 thus formed, upwardly by suitable dies to the shape above described, then bending the central portion of the blank downwardly along the lines 19—19 with said lines crossing the openings 20 formed by the removal of the members 14, so that the inner ends of the openings 20 are formed in the upper edges of the walls 11, and at the same time from, the bead 17. The openings 20 provide means whereby the strap may be more rigidly secured in position, if so desired, by means of nails extended upwardly through the openings, in addition to the spurs. This is sometimes desirable when the conductors are under heavy strain and the beam is of comparatively soft substance, or in case one of the spurs should accidentally be broken off or bent in the driving operation.

By this method it will be seen that a comparatively long spur may be provided and at the same time maintain comparatively short flanges 13.

By this construction it will be seen that I have provided a strap which is particularly adapted to receive a duplex conductor and which may be easily and quickly applied to the beam 21 by simply placing the conductor in the strap, then placing the pointed ends of the spurs against the under surface of the beam and striking the under surface of each of the flanges 13 with a hammer, the vertical distance between the walls 11 and the members 14 being sufficient so that the members 14 will be substantially in alinement with the center of the hammer at the time the blow is applied, so as to prevent the spur being bent sidewise. By forming the spurs 14 with their pointed ends extending inwardly at the time they are punched from the blank it will be seen that it is possible to form a spur near the outer ends of the blank and at the same time have the spurs in central alinement with the blow of the hammer, and at the same time provide a comparatively short blank.

By concaving the spurs it will be seen that the spurs are greatly strengthened, the bead 17 providing means whereby the central portion of the

under surface of the conductor will be pressed upwardly to form a better grip between the strap and the conductor.

I claim as my invention:

1. A strap for anchoring electric conductors, formed of sheet metal, comprising a body having a bottom, upright sides, the upper edges of said sides being provided with horizontal and outwardly extending flanges, each flange supporting near its outer end an upright and pointed spur stamped from its respective flange and adjoining side member, each spur being concavo-convex in cross section, with its outer side at right angles to said flange and pointed at its upper end.

2. A strap for anchoring duplex electric conductors, formed of sheet metal, comprising a body having a bottom, upright sides, the upper edges of said sides being provided with horizontal and outwardly extending flanges, each flange supporting near its outer end an upright and pointed spur stamped from its respective flange and adjoining side member, each spur being a concavo-convex in cross section, with its outer side at right angles to said flange and pointed at its upper end, the bottom being formed with parallel concaved and transverse recesses to fit the contour of the conductors supported therein and to form an upwardly extending central bead to apply pressure to the longitudinal center of the under surface of the conductors when applied to a support.

3. A strap for anchoring electric conductors, formed of sheet metal, comprising a body having a bottom, and upright sides, the upper edges of said sides being provided with horizontal and outwardly extending flanges, each flange supporting near its outer end an upright and pointed spur stamped from its respective flange, and adjoining said member, each spur being concavo-convex in cross section, with its outer side at right angles to said flange and pointed at its upper end, the flanges projecting from their respective sides such a distance that the flange and lower end of the corresponding prong may be struck a direct blow by means of a hammer or similar article..

JOHN A. TEAS, SR.