March 12, 1929. C. W. TOBEY 1,705,144

INSULATED STAPLE

Filed June 7, 1927

Fig. 1

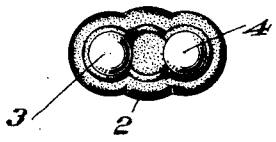


Fig. 2

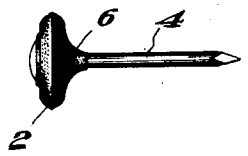


Fig. 3

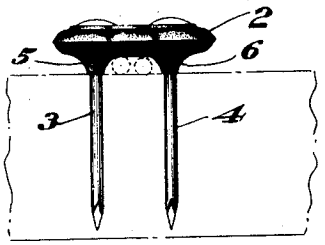


Fig. 4

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UNITED STATES PATENT OFFICE.

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INSULATED STAPLE.

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This invention relates to insulated fastenings and is especially concerned with fastenings designed to be used in securing in place electric wires which carry relatively little power, such for example, as those used in telephone and signal service, bell systems, and the like.

It is the chief object of the invention to devise an article of this character which will be sturdy and substantial in construction, can be manufactured economically, will be convenient to use, and will present a neat and pleasing appearance.

The nature of the invention will be readily understood from the following description when read in connection with the accompanying drawings, and the novel features will be particularly pointed out in the appended claims.

In the drawings,

Figures 1, 2 and 3 are plan, end and side views, respectively, of an insulated staple embodying this invention; and

Fig. 4 is a plan view showing one method of using the staple.

The staples shown comprise a bar or bridge piece 2 with two nails 3 and 4 projecting therethrough. The bridge piece 2 is made of insulating material, fibre preferably being used for this purpose. That grade of fibre which is sold in sheet form as fibre board and which is used quite commonly for insulating purposes, is a very satisfactory material for this purpose. The bridge pieces can be cut or died out of this material and the nails driven through them, the bridge piece then being molded about the nails to the desired form. This anchors the nails rigidly in the bridge piece.

It is preferable to make the bridge piece somewhat larger in cross-sectional dimensions between the two nails in order to increase the mechanical strength of this member at this point, and it is desirable, also, to mold tapered projections 5 and 6 around the shanks of the nails where they project from the lower surface of the bridge piece so that the metal surfaces of the nails will not come directly in contact with the electric conductors which the device secures in place.

The distance by which the nails are spaced apart will depend to some extent upon the size of the staple, but it is preferable to locate them sufficiently close to each other so that both heads of the nails can be struck simultaneously by a hammer. This facilities the driving of the staple, and this operation further is facilitated by using nails of the common wire type and which have substantially symmetrical points, the tendency of the nails to slant one way or the other thus being avoided.

These staples may be used conveniently in securing either a single or multiple wire in place. They are easily driven, are not likely to break the insulation on the wires, and they present a neat and finished appearance when in place. The fact that the wires or conductors are prevented from contact with the nails by the insulating projections 5 and 6 also is an important practical advantage.

Having thus described my invention, what I desire to claim as new is:

1. A fastening device of the character described comprising a bridge piece of insulating material and two nails projecting through said bridge piece, said bridge piece having two tapered projections extending from the lower side thereof and encircling the respective nails, and said nails being spaced apart, whereby they cooperate with said bridge piece to form an insulated staple.

2. A staple of the character described comprising a bridge piece of molded fibre and two nails projecting through said bridge piece, said nails being spaced apart and rigidly secured in said bridge piece against removal therefrom.

3. A staple of the character described comprising a bridge piece of molded fibre and two nails spaced apart and projecting through said bridge piece, said bridge piece being molded about portions of said nails adjacent to their heads thereby rigidly securing the nails in said bridge piece.

4. A staple of the character described comprising a bridge piece of molded fibre and two nails projecting through said bridge piece, said bridge piece being molded about portions of said nails adjacent to their heads, thereby rigidly securing the nails in said bridge piece, said nails having heads located on the upper surface of said bridge piece and being spaced apart by a substantial distance but located sufficiently close to each other to be struck simultaneously by a hammer.

5. A staple of the character described comprising a bridge piece of molded fibre and two nails projecting through said bridge piece, said bridge piece being molded about

portions of said nails and thereby rigidly securing the nails in said bridge piece, said nails being spaced apart and said bridge piece including a section of increased cross sectional dimensions located between the nails.

6. A staple of the character described comprising a bridge piece of molded fibre and two nails projecting through said bridge piece, said bridge piece being molded about said nails, thereby rigidly securing the nails in said bridge piece, said bridge piece having two tapered projections extending from the lower side thereof and through which the respective nails extend.

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