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2,528,288

INSULATED NAIL

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Fig. 1.

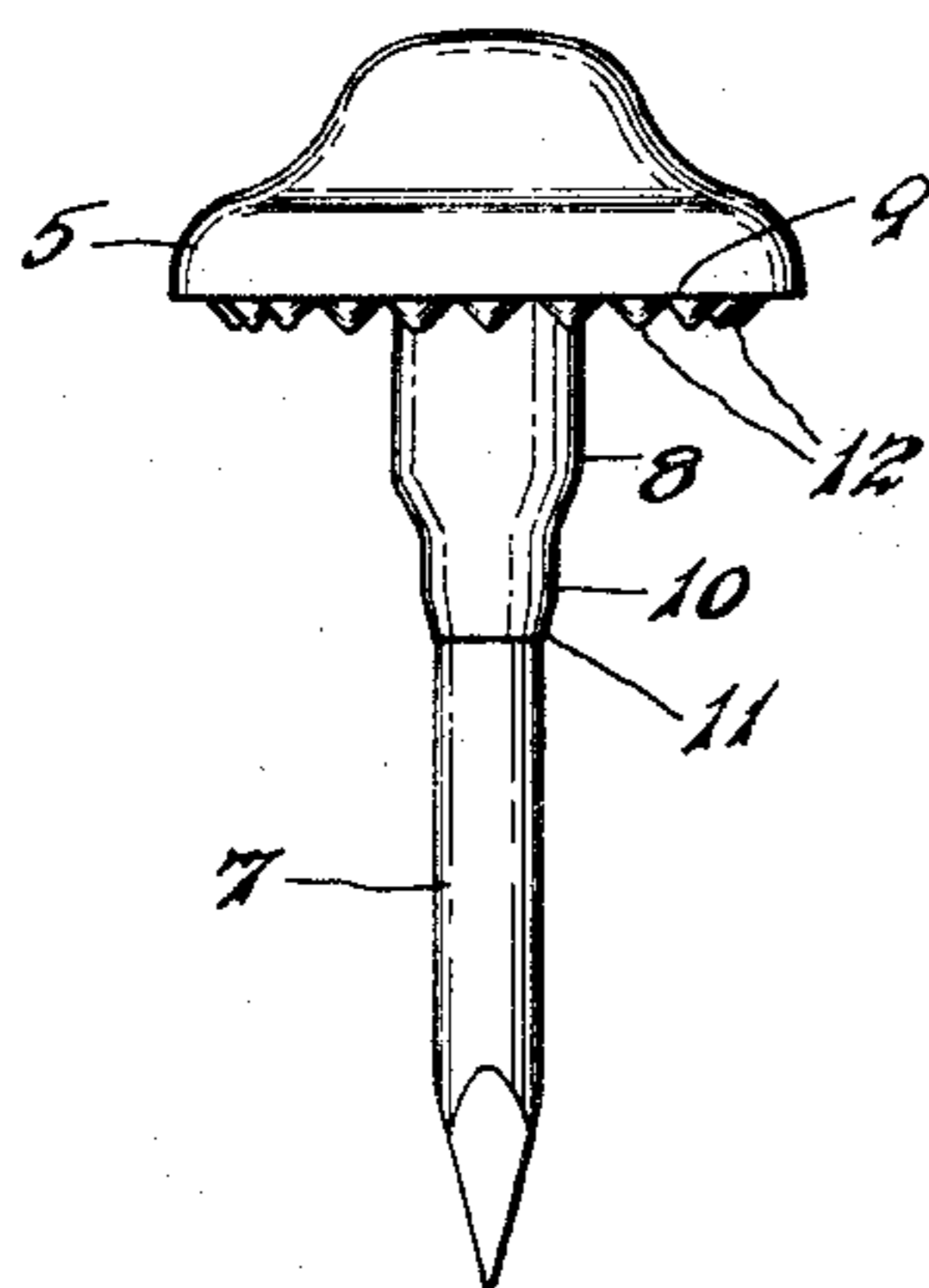


Fig. 4.

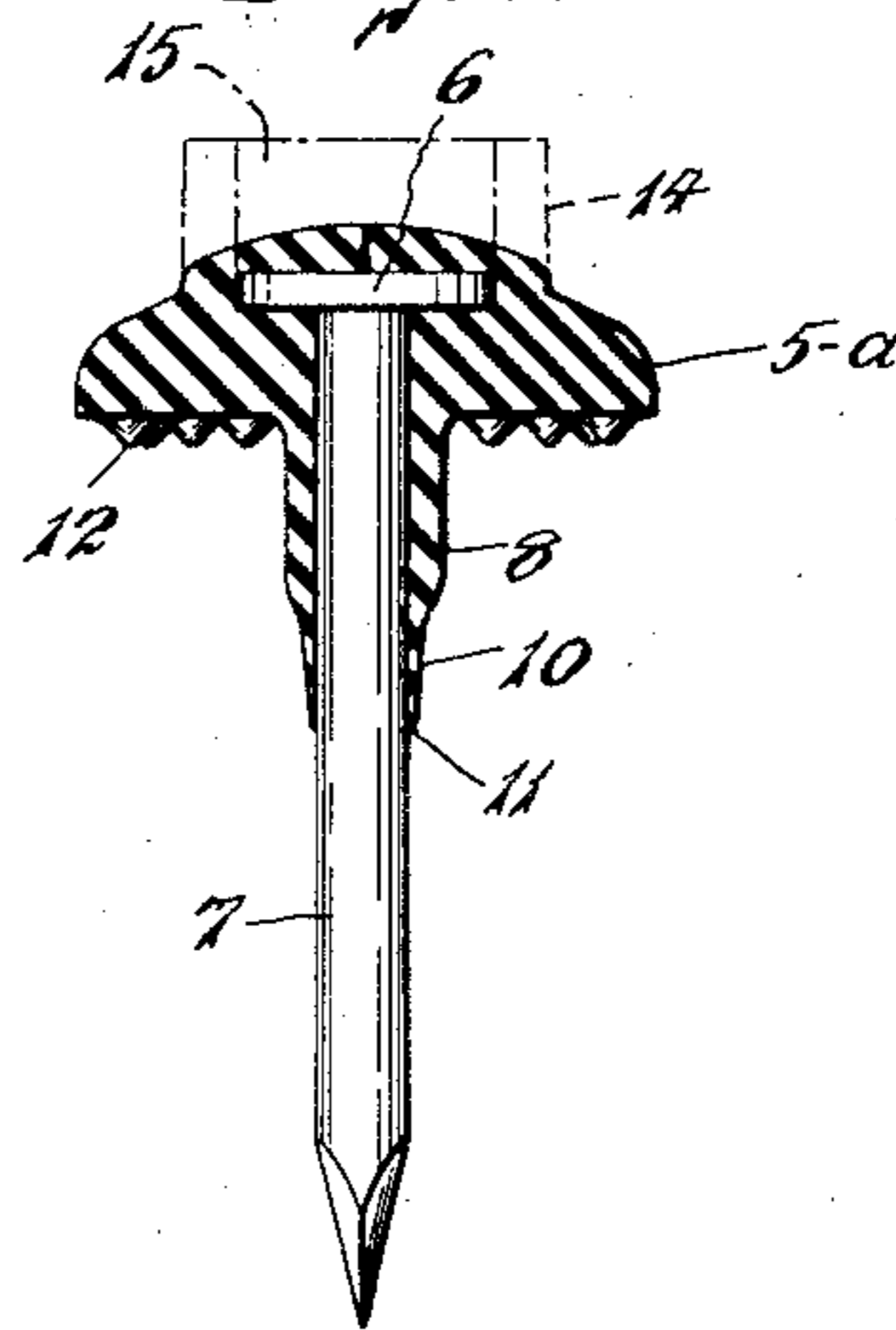


Fig. 2.

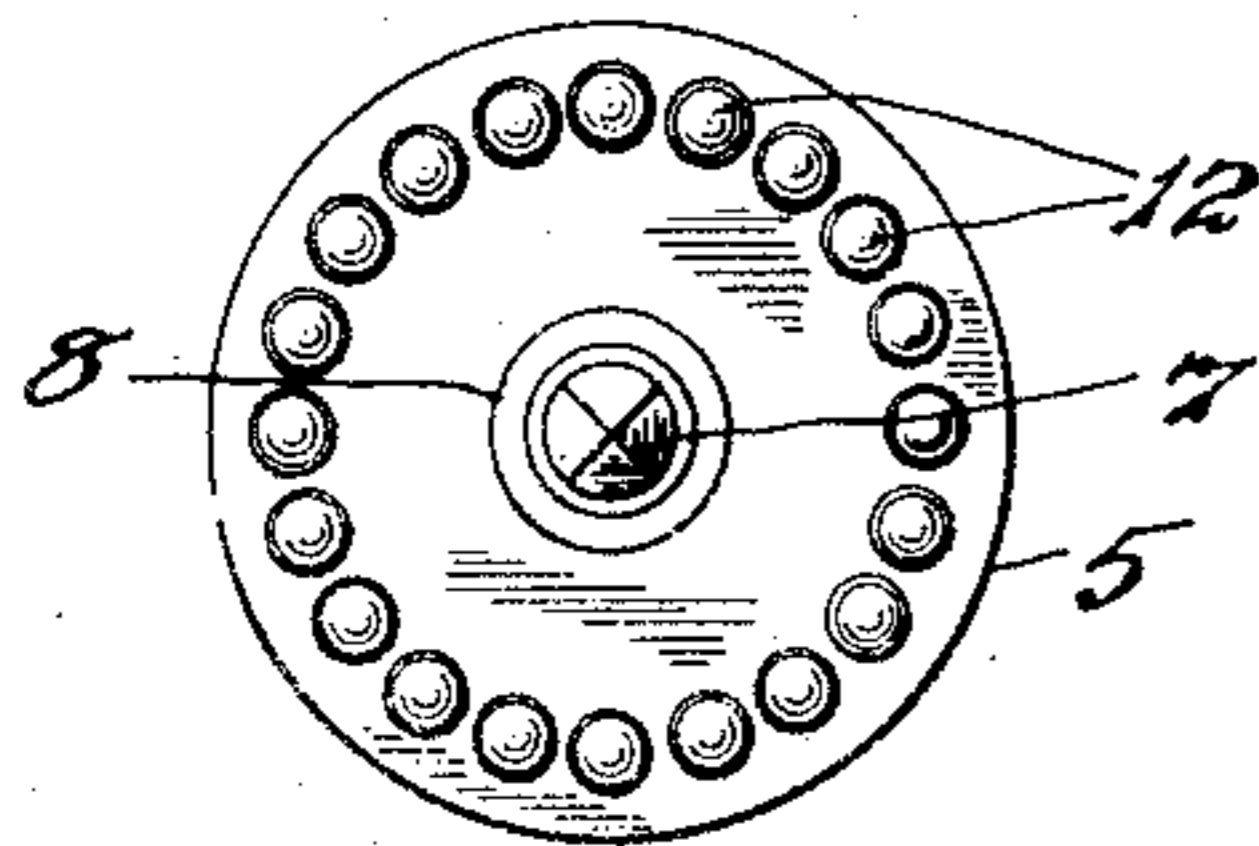
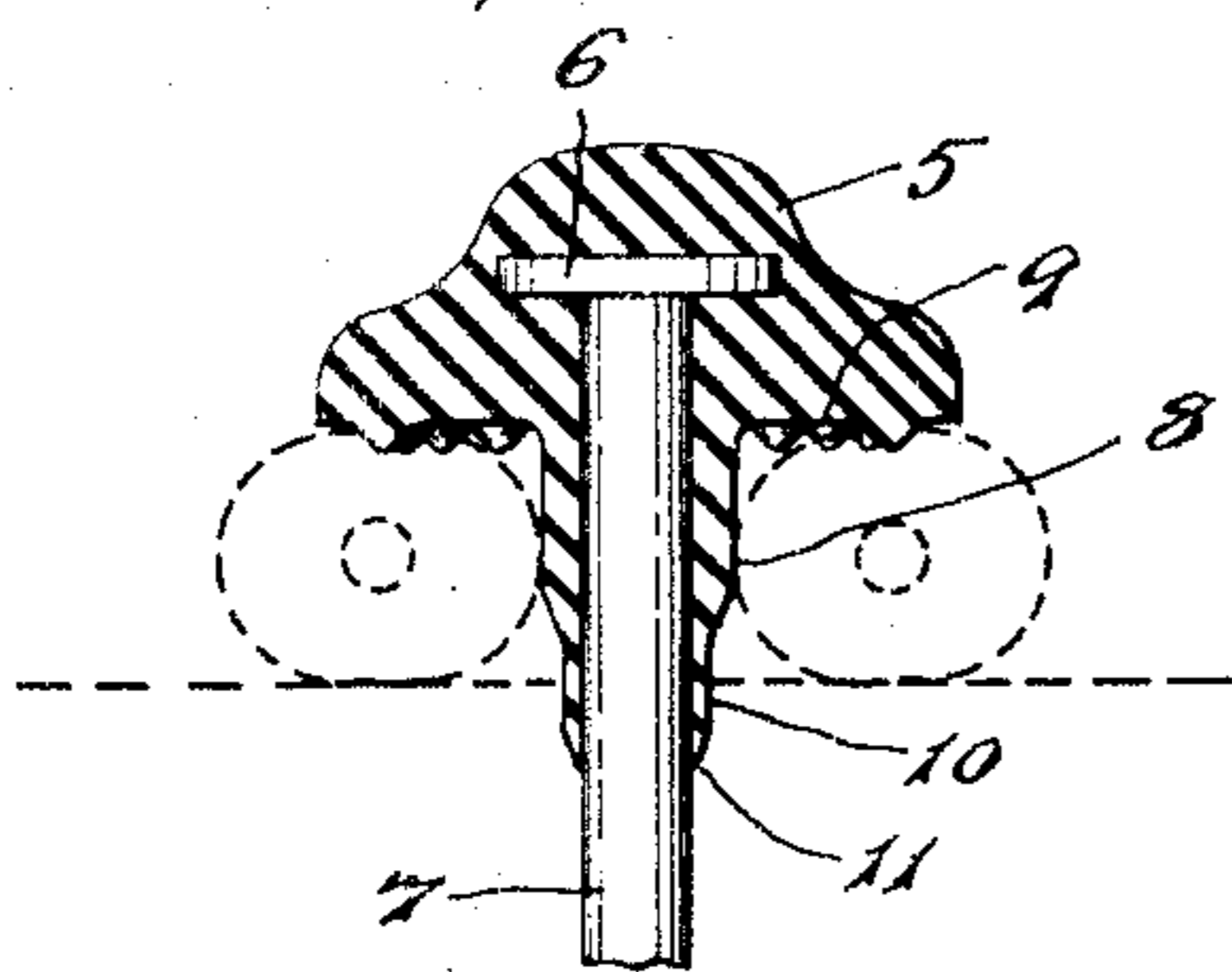


Fig. 3.



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INSULATED NAIL

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1 Claim. (Cl. 174—159)

1

This invention relates to an insulated nail and more particularly to such nails as commonly used in the installation of telephone wires, or other electric wires or cords, where they are fastened to a wall or the like.

An object of this invention is to provide such a nail having an insulated head and an insulated shank portion projecting therefrom lengthwise along said nail and adapted to be inserted between two wires to space said wires apart against electrical contact and secure them in position against the surface to which the wires are mounted.

A further object of the invention is to provide such a head having downwardly projecting prongs or bosses adapted to become embedded into the insulation of the electric wires and thereby securely retain them in position.

Further objects and advantages of this invention will be more clearly understood from the following description and from the accompanying drawings, in which—

Fig. 1 is an elevational side view of an insulated nail embodying my invention.

Fig. 2 is an elevational bottom view thereof.

Fig. 3 is a view of said nail, in central vertical section, with the end of the nail broken off.

Fig. 4 is a side view, in central vertical section, of a modified form of an insulated nail embodying my invention.

As shown in the drawings, my improved insulated nail is preferably constructed to provide an insulating head comprising a body 5 of suitable insulating material, such as plastic or the like, over the head 6 of a conventional nail 7.

As clearly shown in Fig. 3, the said head 5 is preferably molded over the head 6 of the nail and has an extending sleeve portion 8 which depends from a flat bottom surface 9 thereof and extends along the shank of the nail for a suitable distance. The end portion of said insulating sleeve 8 is reduced in diameter, as at 10, and preferably ends in a feather edge 11 which permits the partial entry of said insulating sleeve into the surface of the wall and thereby provides complete separation of the wires by insulating material extending for the full distance between the surface of the wall and the bottom surface 9 of the head 5, as illustrated in dotted lines in Fig. 3.

It is preferred that the bottom surface 9 of the head 6 be provided with an annular row of pointed projections or bosses 12 which are adapted to bite into the insulating covering of the wires, indicated at 13 in Fig. 3, and thereby retain said wires firmly in position against lateral displacement relatively to said head 5 and to each other.

The said head 5 may be molded by any well known process directly over the head 6 of the nail, as shown in Fig. 2, or, if desired, it may be preformed by a suitable molding process in the

2

form illustrated in dotted lines in Fig. 4 wherein an annular wall 14 is provided and which extends upwardly around an axial recess 15 that receives the head 6 of the nail. The said wall 14 is sufficiently malleable to permit spinning thereof over the head 6 of the nail, and also sufficiently hard to resist hammer blows applied thereto in the driving of the nail. A hole, extending through the shank 8, is also formed in said head to receive the metallic shank of the nail with a drive fit.

In assembling the form illustrated in Fig. 4, the nail is forced through the hole 8 until the head 6 thereof is seated against the bottom of the recess 15. The wall 14 is then spun inwardly over the head 6 until the insulating head 5—a of said nail assumes the shape illustrated. It will be noted, however, that the said head also includes all of the other novel characteristics above described and illustrated in Figs. 1, 2 and 3 of the drawings.

I claim:

An insulated nail comprising in combination a metallic nail having a head and a shank, an insulating head of hard plastic material capable of withstanding hammer blows molded over the said head, a tubular sleeve of the same material extending from said head and surrounding a portion of said nail shank; said sleeve including upper and lower portions having outer surfaces parallel to the longitudinal axis of the nail; the lower portion being of a lesser diameter than the upper portion and terminating in a thin edge at the surface of said shank to permit the said lower portion to enter between a pair of wires and into the work into which the nail is driven with a minimum of resistance and thereby positioning the said upper portion of increased thickness between the said wires and outwardly of the work to insulate the said wires from each other and from the shank of the metallic nail, and an annular row of bosses projecting from the underside of said insulating head and adapted to bite into the covering on said wires.

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