

Dec. 27, 1927.

1,653,840

G. N. BYL

CLAMPING DEVICE

Filed July 14, 1926

Fig. 1

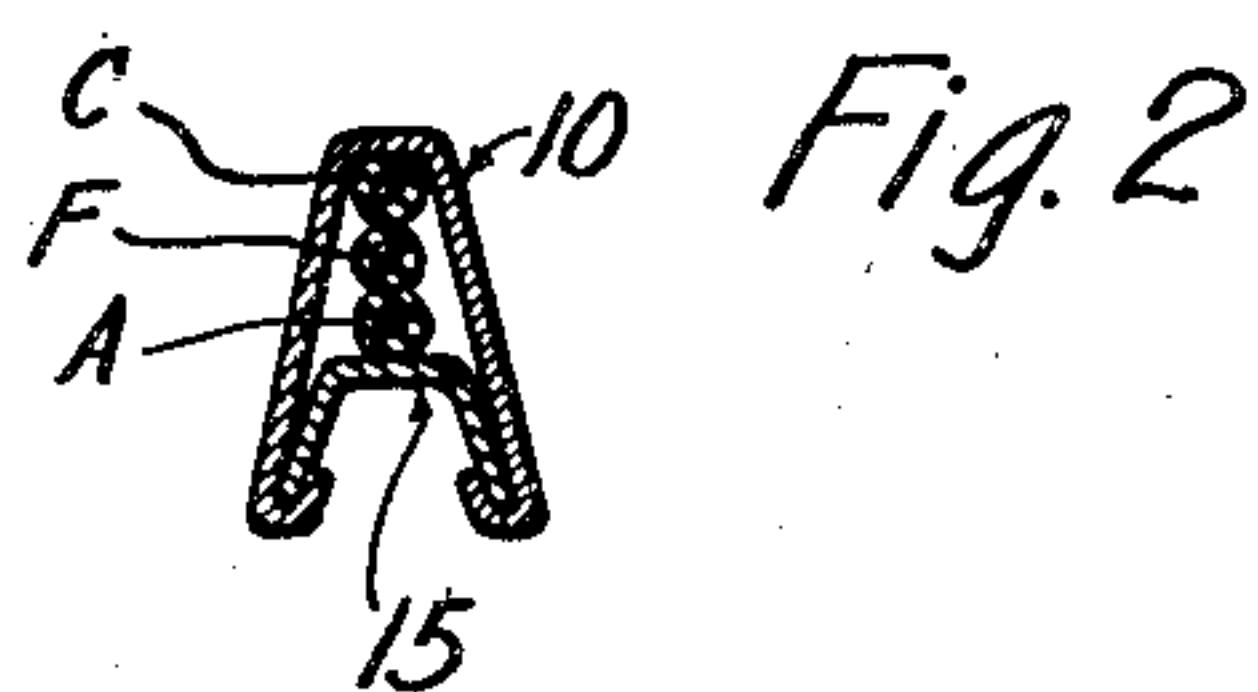
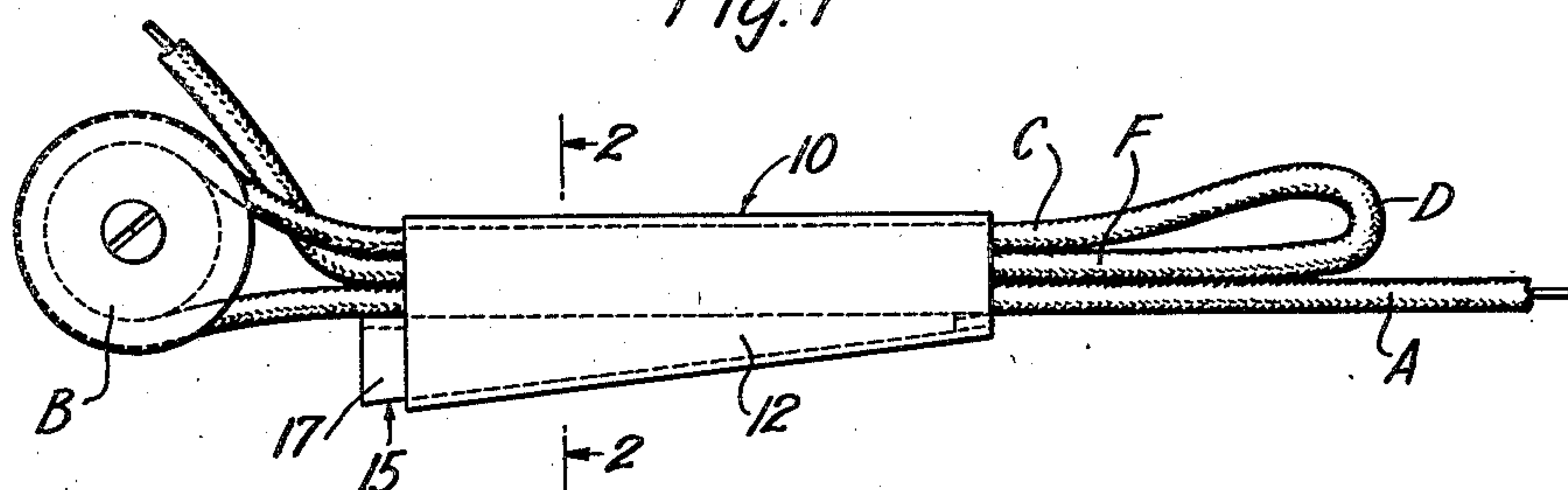


Fig. 3

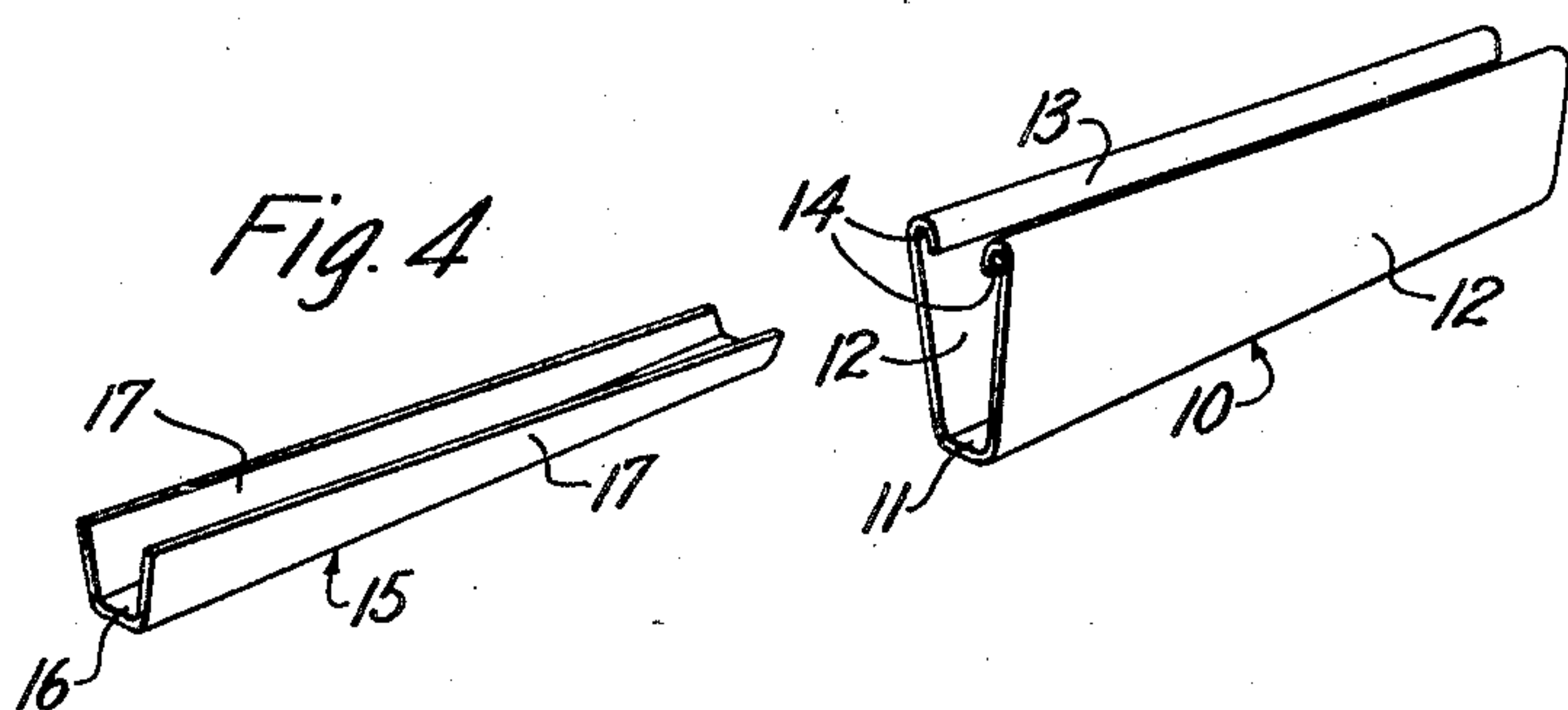


Fig. 4

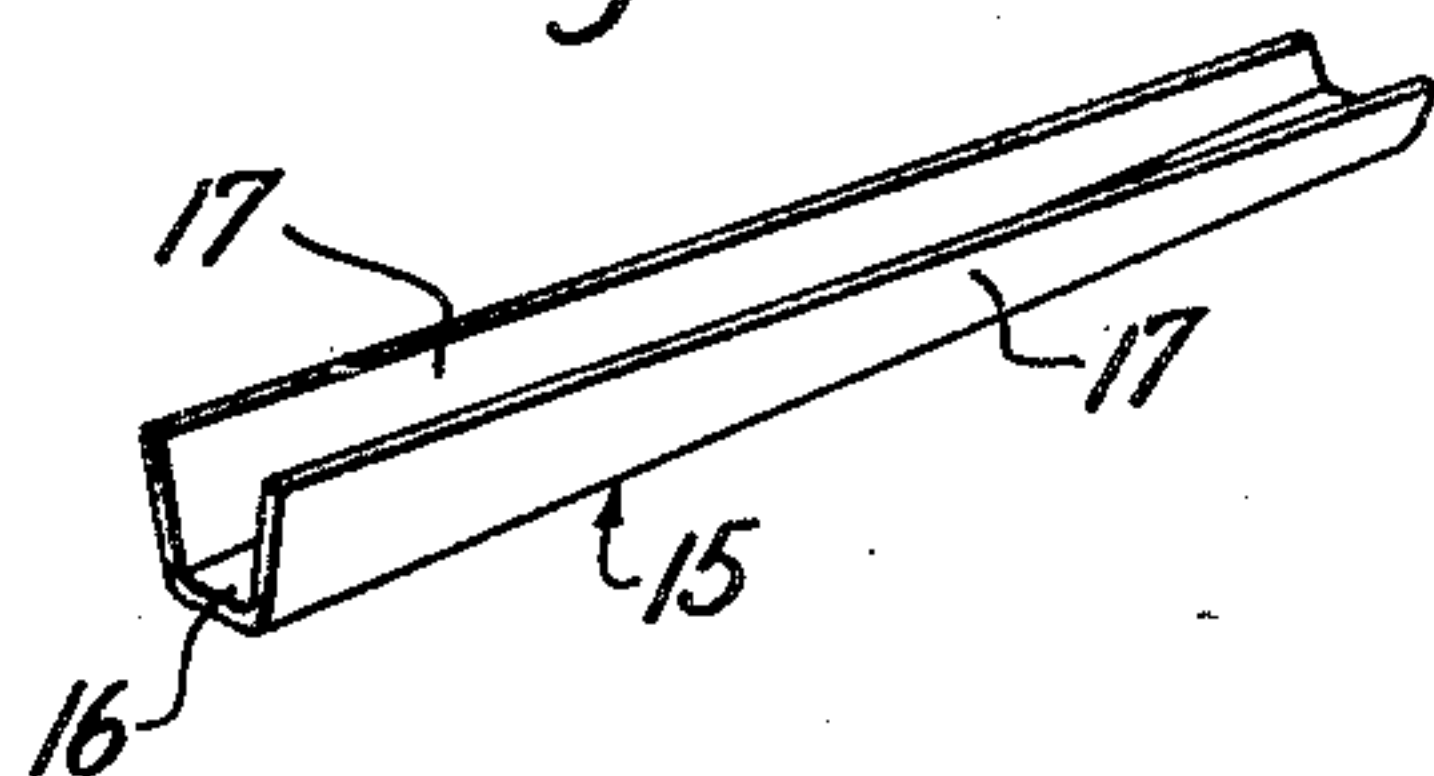
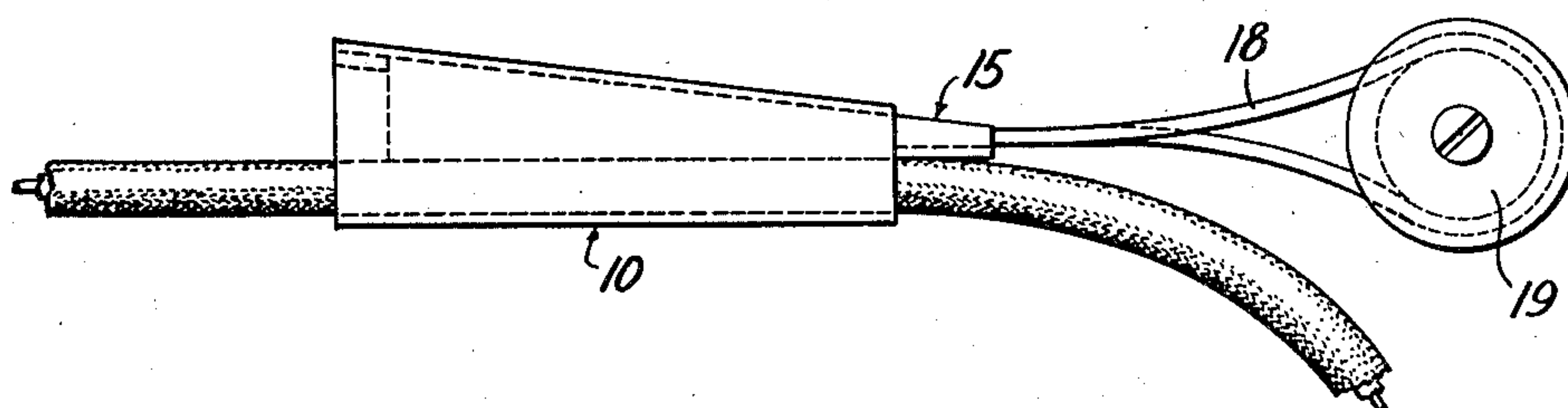


Fig. 5



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UNITED STATES PATENT OFFICE.

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CLAMPING DEVICE.

Application filed July 14, 1926. Serial No. 122,345.

This invention relates to improvements in clamps for securing flexible members and more particularly to means for securing electrical conductors to supports.

It is now common practice when attaching a span of an electrical conductor to a support which is to carry the weight of the span, to loop the conductor around an insulating knob attached to the support, lay a portion of the conductor parallel to and adjacent the span for a short distance, and secure the parallel lays together by a separate tie wire which is wrapped around the lays several times and tied at each end about the conductor. Much time is consumed and labor expended in this process, for, unless care is exercised, the tie may become ineffective and serious consequences may result. Furthermore, owing to the difference in the character of the ties employed by different linemen, there will be a lack of uniformity in both appearance and strength.

An object of this invention is to fasten conductors or other flexible strands to supports without using tie wires and with but a minimum expenditure of time and labor.

Another object of the invention is to so clamp conductors or other flexible members that the natural pull thereon will tend to tighten the clamping action.

The above objects are attained by means of a clamp of simple construction which may be easily and cheaply produced from sheet metal or the like and which is easily and quickly applied or removed without injury to the insulating covering usually enclosing the conductor. In one embodiment of the invention described herein the clamp consists of a sheet metal channel member having its longitudinal edges intumed to form guide-ways for a second sheet metal channel member with tapered sides, this second member acting as a wedge to hold conductor elements securely together in the trough formed by the first member. In a modification, a single strand of a conductor is held in the clamp, which is separately secured to a support.

In the drawing:

Fig. 1, is a side view of the clamp in use;
Fig. 2, is a sectional view taken on line 2—2 of Fig. 1;
Fig. 3, is a perspective view of the body member;

Fig. 4, is a perspective view of the wedge, and

Fig. 5, is a view similar to Fig. 1 of a modified form of clamp.

Referring to the drawing, the body 10 comprises a base 11 formed with slightly diverging walls 12 along its side edges. As illustrated, the edges of the walls 12 taper toward one end to form a tapered box like structure of substantially U-shaped cross section. Formed along the free edges of the walls 12 are intumed reinforcing and guide flanges 13 forming channels or guide-ways 14 for the reception of the side walls of the wedge 15. This wedge comprises a base 16 and tapered side walls 17 which cooperate with the body 10, and like the body, the wedge is substantially U-shaped in cross section. The walls 17 of the wedge at their widest ends are only about one-half of the width of the walls 12 of the body at the narrowest portion, and the taper of said walls 17 corresponds to that of the walls 12. Accordingly, when the device is assembled, the base 16 remains parallel to the base 11 regardless of the distance which the wedge projects into the body.

In use one end of a wire span A is passed around a supporting knob B and extends parallel with the span for a short distance as at C. The wire is then looped as at D and a parallel lay F laid between the span A and lay C. The body 10 is then slipped over the parallel portions of the wire and the wedge 15 placed in the position shown in Fig. 1. By placing the body 10 so that its larger end is toward the knob, it will be apparent that the natural pull on the span A will tend to urge the wedge 15 into the body and more tightly bind the wires together.

In the modification shown in Fig. 5, a wire loop 18 is attached to the wedge 15 and the bight portion thereof is hung around a support such as the knob 19. Such an arrangement eliminates the necessity of looping the conductor as above described and by reason of the pull of the conductor on the body and against the wedge, the clamping action of the device is materially improved.

What is claimed is:

1. A clamp comprising an elongated transversely U-shaped tapered body, an elongated transversely U-shaped tapered wedge regis-

tering therein and inturned reenforcing flanges along the marginal edges of the sides of the body, said flanges forming guide-ways for the free edges of the side walls of the wedge.

5 2. A clamp comprising an elongated transversely U-shaped tapered body, an elongated transversely U-shaped tapered wedge registering therein, inturned reenforcing flanges
10 along the marginal edges of the sides of the body, said flanges forming guide-ways for the free edges of the side walls of the wedge, and an attaching loop secured to the wedge for attachment to a support in such a man-

ner that pull on a conductor held by the clamp will increase the clamping action of the device. 15

3. A clamp comprising an elongated body of sheet metal bent into a channel section, the marginal edges of said body being bent inwardly, and an elongated sheet metal wedge bent into a channel section, the free edges of said wedge being adapted to be guided into position by said edges of said body. 20 25

In witness whereof, I hereunto subscribe my name this 2nd day of July, A. D. 1926.

GEORGE N. BYL.