Aug. 10, 1926. 1,595,728

H. W. PLEISTER

TELEPHONE WIRE AND CABLE SUPPORT

Filed July 29, 1924 2 Sheets-Sheet 1

Fig 1

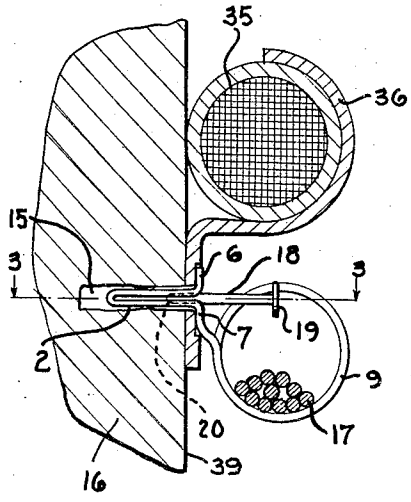


Fig 2

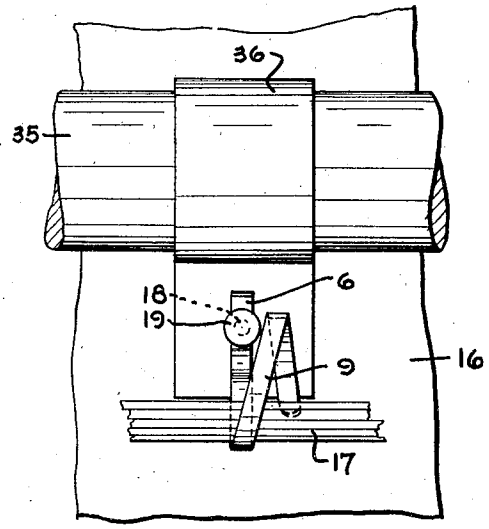
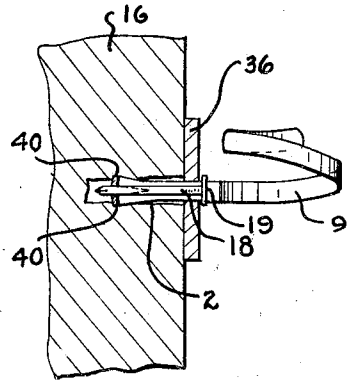


Fig 3



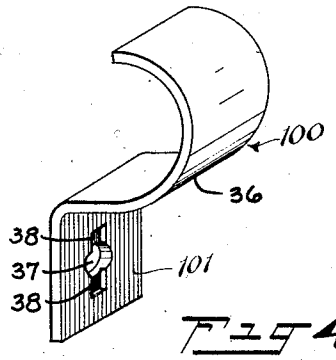
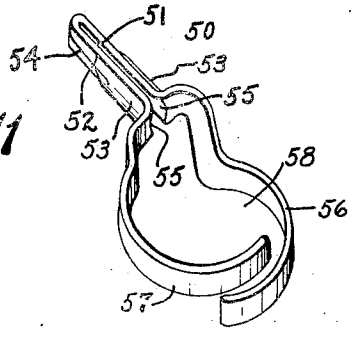


Fig 4

Fig 11



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TELEPHONE WIRE AND CABLE SUPPORT

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Fig 5

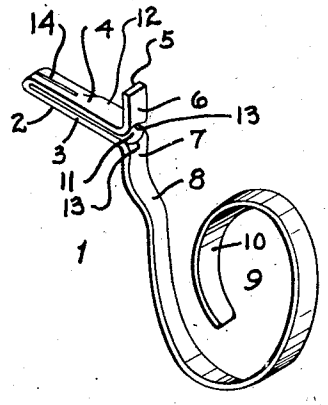


Fig 6

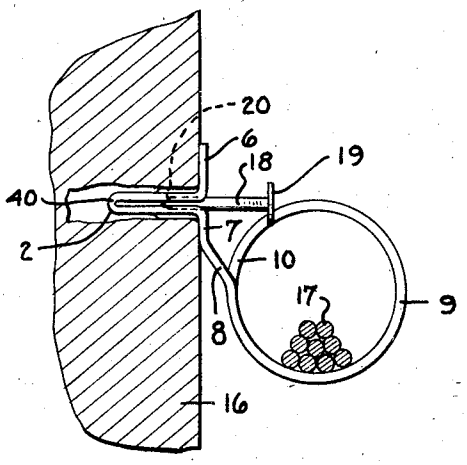


Fig 7

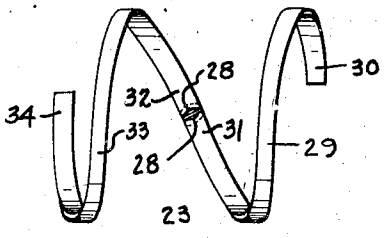


Fig 8

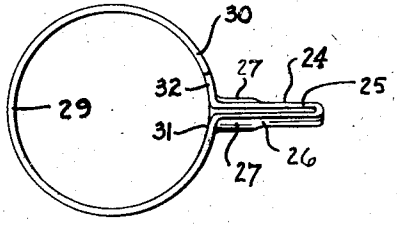


Fig 9

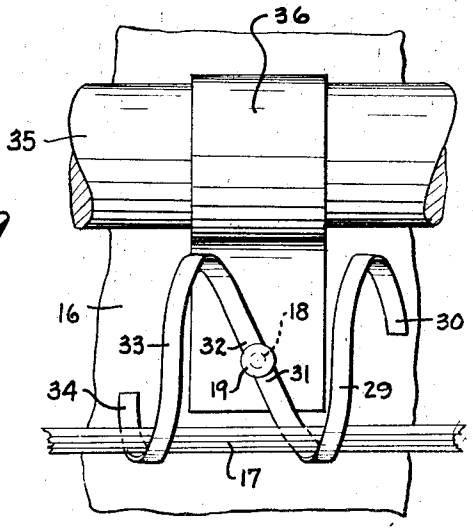
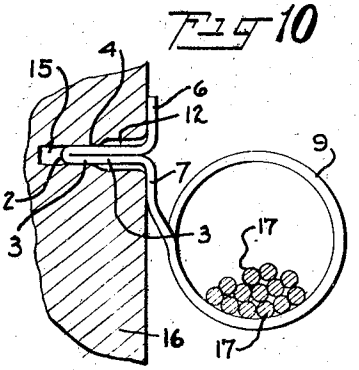


Fig 10



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Patented Aug. 10, 1926. 1,595,728

UNITED STATES PATENT OFFICE.

HENRY W. PLEISTER, OF WESTFIELD, NEW JERSEY, ASSIGNOR TO HENRY B. NEWHALL.

TELEPHONE WIRE AND CABLE SUPPORT.

Application filed July 29, 1924. Serial No. 728,899.

My invention relates to telephone wire and cable supports, and more particularly to an integral nail and bridle ring which may be used alone, or in combination with a supplemental expanding member, such as an ordinary nail of commerce.

My invention further relates to the combination of such an integral nail and bridle ring and a cable clamp.

My invention further relates to such an integral nail and bridle ring in which the bridle ring may be of the single pigtail type, or the double pigtail type.

My invention further relates to certain articles of manufacture, combinations, and sub-combinations, and details of construction, all of which will be more fully hereinafter described and pointed out in the claim.

In the drawings I have shown different embodiments of my invention, but it is of course to be understood that my invention is not to be confined to these embodiments shown by way of illustration.

In the drawings the same reference numerals refer to similar parts in the several figures.

Fig. 1 is a vertical section through a support and cable clamp, showing in side elevation, one form of my integral nail and bridle ring, used in combination with an expanding member, such as a nail;

Fig. 2 is a front elevation;

Fig. 3 is a horizontal section substantially on the line 3—3 of Fig. 1;

Fig. 4 is a perspective view of a cable clamp used with my integral nail and bridle ring;

Fig. 5 is a perspective view of the preferred form of my integral nail and bridle ring;

Fig. 6 is a vertical section through a wall or other suitable support, showing the integral nail and bridle ring in side elevation with an expansion member;

Fig. 7 is a front elevation of a modified form of integral nail and bridle ring, in which the bridle ring is of the double pigtail type;

Fig. 8 is a side elevation of the modified form of bridle ring shown in Fig. 7;

Fig. 9 is a front elevation of a modified form shown in Fig. 7;

Fig. 10 is a vertical section, similar to Fig. 6, but showing my integral nail and bridle ring used without an expanding member;

Fig. 11 is a perspective view of a modification.

It is common in this art to employ a bridle ring having an integral screw, the bridle ring being formed of wire bent back upon itself and having one end screw-threaded. To attach such a threaded bridle ring to a wall or other suitable support formed of stone, brick, masonry, concrete or similar material, it is necessary to drill a hole in the wall, or other suitable support, and insert a screw anchor, or similar expansion member, in the hole, and then screw the screw-threads of the bridle ring into the screw anchor or expansion by turning the entire bridle ring. The hole that has to be drilled to receive or accommodate the screw anchor or expansion, is much larger than that which would be required to receive simply the screw-threaded end of the bridle ring. This entails additional labor and expense to drill a larger hole.

By my invention I avoid the necessity of using a separate screw anchor or expansion, so that the hole to be drilled in the wall or other suitable support, will be much smaller than that necessary to accommodate a screw anchor. Moreover, my combined integral nail and bridle ring can be secured to the wall by one or two sharp blows of a hammer to drive the split nail into the hole. If an expanding member is also employed then one or two additional blows on the head of the expanding member, to expand the split nail, will form a stronger and more powerful bond between the integral nail and bridle ring and the wall than will be accomplished simply by driving the integral split nail into the wall. It is, of course, to be understood that my invention may be used either with or without an expanding member, which expanding member is usually the ordinary wire nail of commerce. The attaching of my combined bridle ring and integral nail is simpler, quicker, and cheaper than the old method, previously described, in which a screw anchor has to be inserted into the hole and the old form of bridle ring screwed into it. It is also cheaper to manufacture.

Another advantage of my invention is that I may employ my integral nail and

bridle ring with a one hole cable clamp so as to secure said clamp to a wall or other suitable support, the integral nail and bridle ring either alone supporting the cable clamp, or an expanding member, such as a nail, may be employed to expand the integral split nail of the bridle ring.

In the different figures of the drawings, I have illustrated different embodiments of my invention.

The preferred form of my integral nail and bridle ring 1 is shown in Fig. 5. I preferably form my integral nail and bridle ring out of stamped sheet metal, bending the blank back on itself near one end to form the split nail 2, having the sides 3 and 4, the very end 5 of the blank being bent up to form a head 6. The continuation of the side 3 is bent down to form a head 7, similar to the head 6, and is then bent out and down at 8 to form the single pigtail bridle ring 9, having the end 10 bent back upon itself so as to clear the heads 6 and 7 and the axial bore 11 extending between the sides 3 and 4.

At the same time that the integral nail 2 is formed, or subsequently, I preferably bend the sides 3 and 4 so as to form external longitudinal ribs 12, 12 and corresponding internal longitudinally extending grooves 13, 13. I may also provide the nail 2 with a weakened portion 14 for a purpose to be hereinafter described.

The simplest use of my invention is shown in Fig. 10 in which a small hole 15 has been drilled or otherwise formed in brick, stone, concrete or other material 16, and into which the integral nail 2 has been driven by one or more blows of a hammer upon the heads 6 and 7 of the integral nail. As the integral nail is forced into the hole 15 the sides 3 and 4 are forced together, the longitudinal ribs 12, 12 assisting this action and also preventing rotation of the nail in the hole 15. In many locations where drop wires and messenger wires 17, 17 are supported by the pigtail bridle ring 9, the bond or grip formed by driving the integral nail 2 within the hole 15 will be found sufficient.

In other locations and with heavier loads a firmer bond or grip will be obtained with the wall or other suitable support 16 by driving an ordinary wire nail 18 (Fig. 6) into the axial bore 11 formed between the two sides 3 and 4 of the integral nail, until the head 19, of the expanding member or ordinary nail, is brought up flush against the heads 6 and 7 of the integral split nail.

In some cases, though not necessarily, I weaken the end of the nail 2 by providing it in any suitable manner with a groove 14 or other weakening means, so that the end 20 of the nail 18 will pierce through the end of the nail 2 and will expand the portions 40, 40 of the end of the nail in a different direction from the main expansion of the sides 3 and 4 as shown in Fig. 3. This will give a still further grip or bond in the wall or other suitable support 16.

Instead of employing a single pigtail bridle ring I may, in some cases, use an integral nail with a double pigtail bridle ring, as shown for example in Figs. 7, 8 and 9.

In this form, the combined integral nail and bridle ring 23 is formed from a piece of sheet metal which is bent back on itself at approximately its center to form the integral split nail 24, having the two sides 25 and 26 and provided with longitudinally extending ribs 27, 27 and interior longitudinally extending grooves 28, 28, substantially the same as shown in the first form, previously described. In this form, the continuation of the side 26 is bent down to form the pigtail 29, its end 30 being bent up but clearing the heads 31 and 32 of the integral nail 24. The other side of the integral nail 25 is bent up to form the integral head 32 and then down to form the second pigtail 33. This pigtail as well as its end 34 clears the heads 31 and 32 of the integral nail 24, so that the heads 31 and 32 of the integral nail 24 may be driven by a hammer to locate it within a hole, such as 15; or, an ordinary wire nail 18 having a head 19 may be employed as in the other form.

In Figure 11 I have shown another modification in which the integral nail and bridle ring 50 is formed from one piece of sheet metal which is bent back on itself at approximately its center to form the integral split nail portion 54 having the two sides 51 and 52 and provided with longitudinally extending ribs and interior longitudinally extending grooves, 55, 55. In this form the continuation of the side 51 is bent down and out to form the pigtail 56. The continuation of the side 52 is likewise bent down and out to form the second pigtail 57, the ends of the two pigtails preferably overlapping to form a substantially closed ring 58. By bending the two pigtails down the grooves 55, 55 are unobstructed so that a nail may be driven into the nail member 54, or the end of the nail member 54 may be driven into a hole by a hammer or similar tool.

My invention is also adapted to be used in connection with, and form a part of the fastening, to support a cable 35 (Figs. 1 and 2).

In the one hole cable clamp 100 formed of the hook 36 and the base 101 adapted to lie against the exposed surface 39 of a wall or other support, I provide the ordinary securing hole 37 in the base 101 and in addition recesses 38, 38 in the base 101, extending from the hole 37.

In positioning the cable clamp 36 it is

brought up to the face 39 of the wall or other suitable support 16, and the integral nail 2, of the integral nail and bridle ring 1, is passed through the hole 37 so as to permit the heads 6 and 7 of the integral nail to be received in and cooperate with the grooves 38, 38 in the cable clamp 100 (Fig. 1). The integral nail 2 can then be driven home by one or two blows of a hammer.

When my invention is used both to support a cable and bridle or drop wires, I preferably employ an expanding member, such as the nail 18, to spread the sides 3 and 4 of the integral nail 2 and also, though not necessarily, to pass through the end of the integral nail and expand that end as shown in Fig. 3 which gives the strongest bond or grip between the wall or support and the split integral nail.

In Figs. 1, 2 and 3 I have shown an integral nail provided with a single pigtail bridle ring, used in combination with the cable clamp; in Fig. 9 I have illustrated an integral nail and double pigtail bridle ring used in connection with a cable clamp, it being noted that in all forms the heads 6 and 7 or 31 and 32 of the integral nail can be readily driven by the head of a hammer without interference from the pigtail or pigtails, and that this also applies to the head 19 of the ordinary wire nail 18, when such a nail is used to get a firmer bond or grip in expanding the split integral nail 2 or 24 as the case may be.

Having thus described this invention in connection with illustrative embodiments thereof, to the details of which I do not desire to be limited, what is claimed as new and what is desired to secure by Letters Patent is set forth in the appended claim.

What I claim is:—

The combination of a cable clamp provided with a base to lie against a wall or support, said base having a hole to receive a fastening member and with one or more recesses adjacent the hole, and a fastening device provided with means to cooperate at one and the same time with the hole and the recesses to prevent the cable clamp turning on the fastening member.

HENRY W. PLEISTER.