Aug. 2, 1927.

1,637,419

C. H. KLEIN

NAIL EXPANSION ANCHOR

Filed Aug. 23, 1923

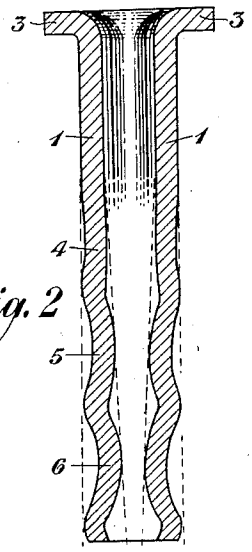


Fig. 2

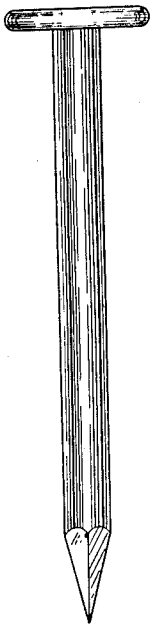


Fig. 1

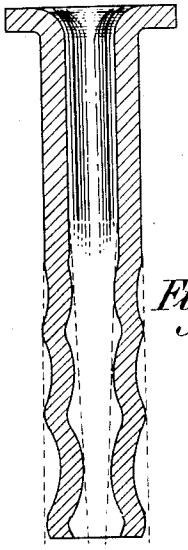


Fig. 3

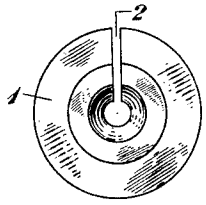


Fig. 4

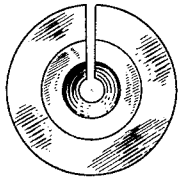


Fig. 5

INVENTOR

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BY

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tented Aug. 2, 1927. 1,637,419

UNITED STATES PATENT OFFICE.

HARLES H. KLEIN, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO AMERICAN TELEPHONE AND TELEGRAPH COMPANY, A CORPORATION OF NEW YORK.

NAIL-EXPANSION ANCHOR.

Application filed August 23, 1923. Serial No. 659,023.

This invention relates to nail expansion ıchors, and the object is to provide an im-oved and extremely simple, economical eans for securing cable clamps and other vices to masonry.

The invention is embodied in a hollow linder, made preferably from sheet metal. he anchor is placed in a hole drilled in the asonry, and a nail is driven into the cylin-r, thus firmly securing the clamp or other vice to the masonry.

In the accompanying drawing, Fig. 1 ows in side elevation the nail which is iven into the anchor cylinder; Figs. 2 id 3 show in cross-section two desirable rms of anchor constructed according to pplicant's invention; and Figs. 4 and 5 ow top plan views corresponding to Figs. 2 id 3 respectively.

With reference to the details of Figs. 2 id 4 of the drawing, 1 designates the wall f the cylinder, which wall is parted by the ngitudinal slot 2, this slot extending over ıe entire length of the cylinder wall and ermitting extra expansion and adjustment variations in the diameter of the drilled ole. The top 3 is flared out to form a col-ır for the purpose of holding the clamp or ther device to the wall. Circular corruga-ions 4, 5 and 6, which may be pressed in the heet metal around the circumference of the ylinder, reduce the diameter of the center ıole at the low points of the corrugations. The outwardly projecting ridges formed by he corrugations are rounded. Due to the provision of rounded points of contact be-ween the cylinder and the wall of the hole, the device will not tend to cut into the masonry at the first slight expansion of the shield, which cutting would prevent longitudinal movement in the hole, this longitudinal movement being desirable in order to insure a tight fastening on the final blow of the hammer. When the nail is driven into the anchor and forced through the points where the corrugations have reduced the inside diameter, it causes expansion of the anchor, producing pressure on the wall of the hole sufficient to give the desired holding power.

Fig. 3 shows an anchor having differently formed corrugations but otherwise corresponding to the form of Fig. 2.

It is understood that the drawing discloses two desirable forms of applicant's anchor merely for purposes of illustration, and does not limit the scope of the invention, which is determined by the appended claim.

What is claimed is:

An expansion anchor consisting of a hollow cylinder parted by a longitudinal slot, the top of said cylinder being flared and the lower portion of said cylinder carrying a plurality of circular corrugations, said corrugations reducing the diameter of the center hole at the low points of the corrugations, and the outwardly projecting ridges formed by said corrugations being rounded.

In testimony whereof, I have signed my name to this specification this 22nd day of August, 1923.

CHARLES H. KLEIN.