

J. KENNEDY.

NAIL ANCHOR.

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1,052,347.

Patented Feb. 4, 1913.

Fig. 1,

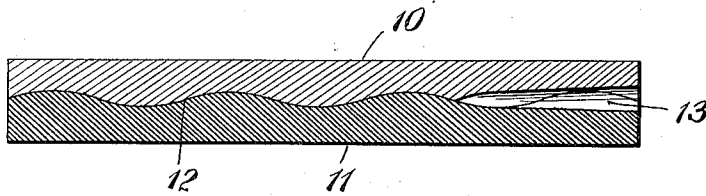


Fig. 3,

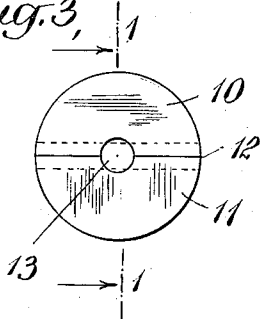


Fig. 2,

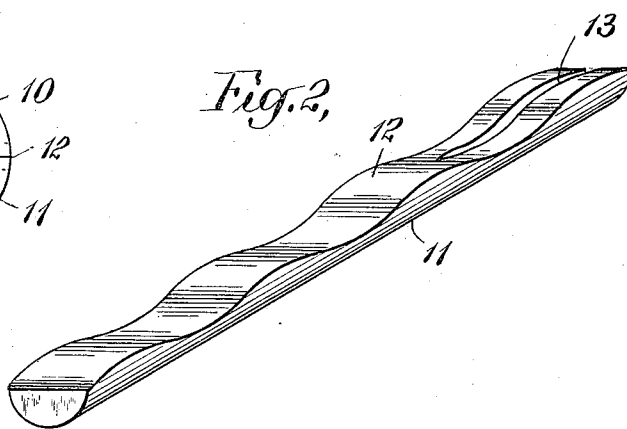


Fig. 4,

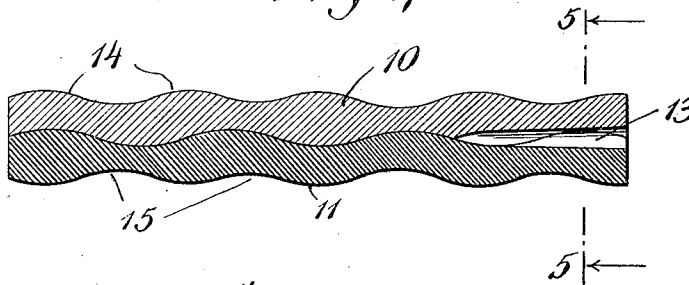
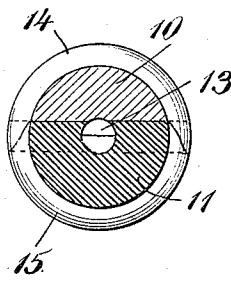


Fig. 5,



WITNESSES:

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NAIL-ANCHOR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH KENNEDY, a citizen of the United States of America, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Nail-Anchors, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to nail anchors of the type employed to secure nails in holes in brick or stone walls and the like, and adapted to be expanded in intimate engagement with the walls of the said holes by, and upon the insertion of, the nail to be anchored.

The particular type of nail anchor to which my invention relates is that comprising an expansible shield composed of a plurality of longitudinally divided laterally separable sections, the divisional surfaces of which are undulated or corrugated.

It is the main object of my present invention to improve and simplify the construction of this type of nail anchor, increase the strength thereof, and reduce the cost of manufacture of the same; and to this end I provide the anchor with simple undulating surfaces which are readily made, and register or coact with each other so as to increase the strength of the structure. This form of nail anchor will be found to be light in weight owing to the reduction in quantity of metal from that ordinarily employed, yet of increased strength owing to the more uniform distribution of the metal.

My invention also consists in providing the sections of the anchor with a recess of such shape as to engage the nail, and to guide it while it is being driven.

In order that my invention may be fully understood, I will now proceed to describe an embodiment thereof, having reference to the accompanying drawings illustrating the same, and will then point out the novel features in claims.

In the drawings: Figure 1 is a view in central longitudinal section upon the line 1—1 of Fig. 3. Fig. 2 is a perspective view of one of the sections of the anchor. Fig. 3 is an end view of the anchor with the sections placed together. Fig. 4 is a central longitudinal section of an anchor in which the outer surface is made uneven. Fig. 5 is

a section on line 5—5 of Fig. 4 looking in the direction of the arrows.

The anchor is of cylindrical form, being preferably constructed of a plurality of sections in the form shown in the drawings. The anchor is composed of two sections 10—11 in mutual engagement.

The engaging surfaces are corrugated in a direction at right angles to the length of the anchor, and the corrugations are so arranged that they fit each other when placed together and secure the sections against longitudinal displacement. Preferably these corrugations are even in character and are of such depth as to extend an equal distance on either side of a medial plane passing through the axis of the anchor.

The anchor is provided at one end with a recess 13 to receive the point of a nail, and this recess is preferably conical in shape so that as the nail is driven in it engages the anchor firmly and at once guides the nail in its further progress and by reason of its conical form causes the anchor to expand and grip the sides of the hole in which it is placed. This prevents any displacement of the anchor while the nail is driven in to its full extent. Preferably the throat or recess 13 at which the nail is admitted, is of such a size that the nail enters readily to a point where its end will engage the inner part of the recess so as to give the nail a considerable bearing in the anchor, and in that manner aid in guiding it. The nail once driven part way in holds the sections of the anchor against lateral displacement.

As the nail is driven in a further amount the point will engage the corrugations 12 which will alternately bend the nail one way, and then the other, at the same time expanding the sections of the anchor to still more firmly engage the walls of the hole in which it is placed.

In use the anchor is inserted with the recess 13 toward the front in a hole in a stone or brick wall or other place in which the nail is to be anchored, and the nail is then inserted in the recess and driven in as far as desired. As the nail is driven home the inner end of the anchor will be expanded so as to grip the walls of the hole and so fasten the anchor securely in place, and with it the nail. Owing to the position of the recess at the end of the anchor and in which the nail lies, the tendency of the anchor is

to expand more at the inner end or bottom of the hole, and forms a more or less wedge-shaped mass which makes it a very difficult shape to withdraw from the hole, even
5 under heavy stress.

The anchor may be provided with corrugations on its outer surface, as shown at 14—15 in Figs. 4 and 5. These outer corrugations may be of the same or different pitch
10 from those on the divisional surfaces of the sections. Preferably they will not be in register as the unevenness of the section will then cause it to bend unevenly at the several
15 places throughout its length where the cross-section is of a different amount, when the nail is driven home, and so make the anchor very uneven or corrugated throughout its length and better adapted to engage some
20 classes of material.

What I claim is:

1. A nail anchor, composed of two sections together with a cylindrical body provided with inter-engaging surfaces adapted

to fit each other whereby longitudinal displacement of the sections is prevented, and
25 provided with an axial recess at one end adapted to receive the point of a nail, whereby when the nail is driven beyond said recess, the sections are spread apart and the
30 nail is bent by said surfaces.

2. A nail anchor composed of two sections together forming a cylindrical body, the outer surface of said cylinder being provided with annular corrugations, said sections being provided with inter-engaging
35 surfaces adapted to fit each other whereby longitudinal displacement of the sections is prevented, and provided with an axial recess at one end adapted to receive the point
40 of a nail, whereby when the nail is driven beyond said recess the sections are spread apart and the nail is bent by said surfaces.

JOSEPH KENNEDY.

Witnesses:

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HENRY S. LAMB.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."