

A. B. COOK.
DEVICE TO PROTECT PILINGS.
APPLICATION FILED NOV. 20, 1908.

923,813.

Patented June 8, 1909.

Fig. 1.

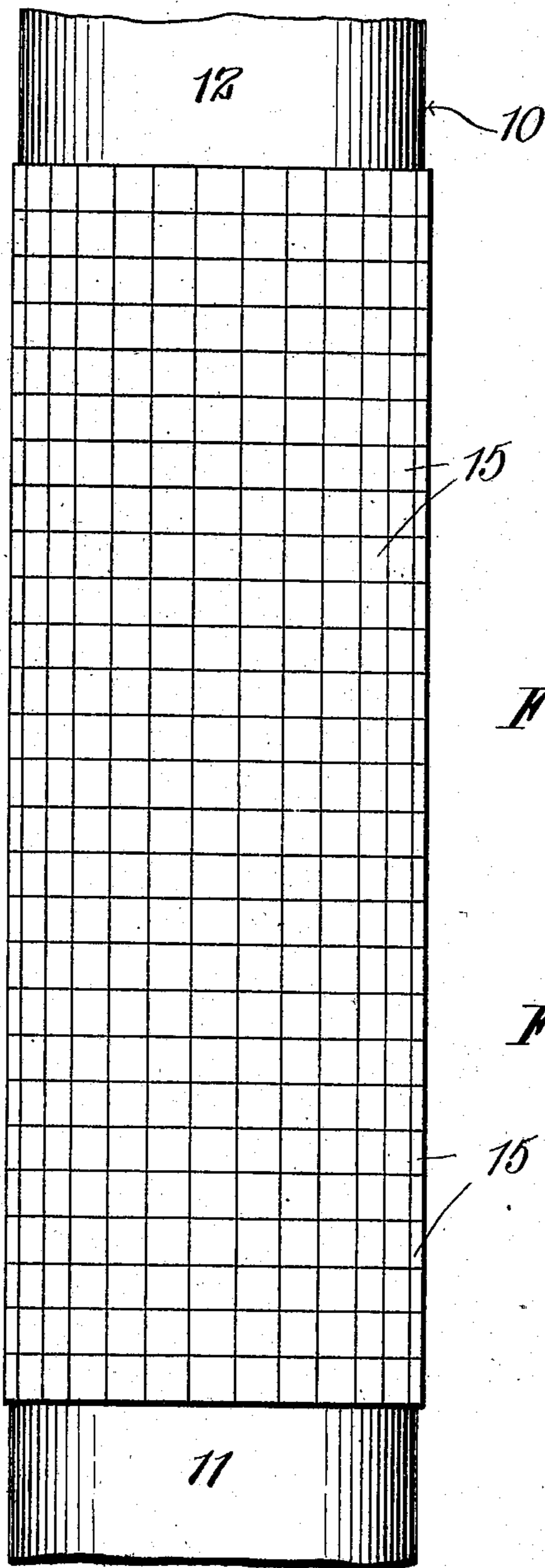


Fig. 2.

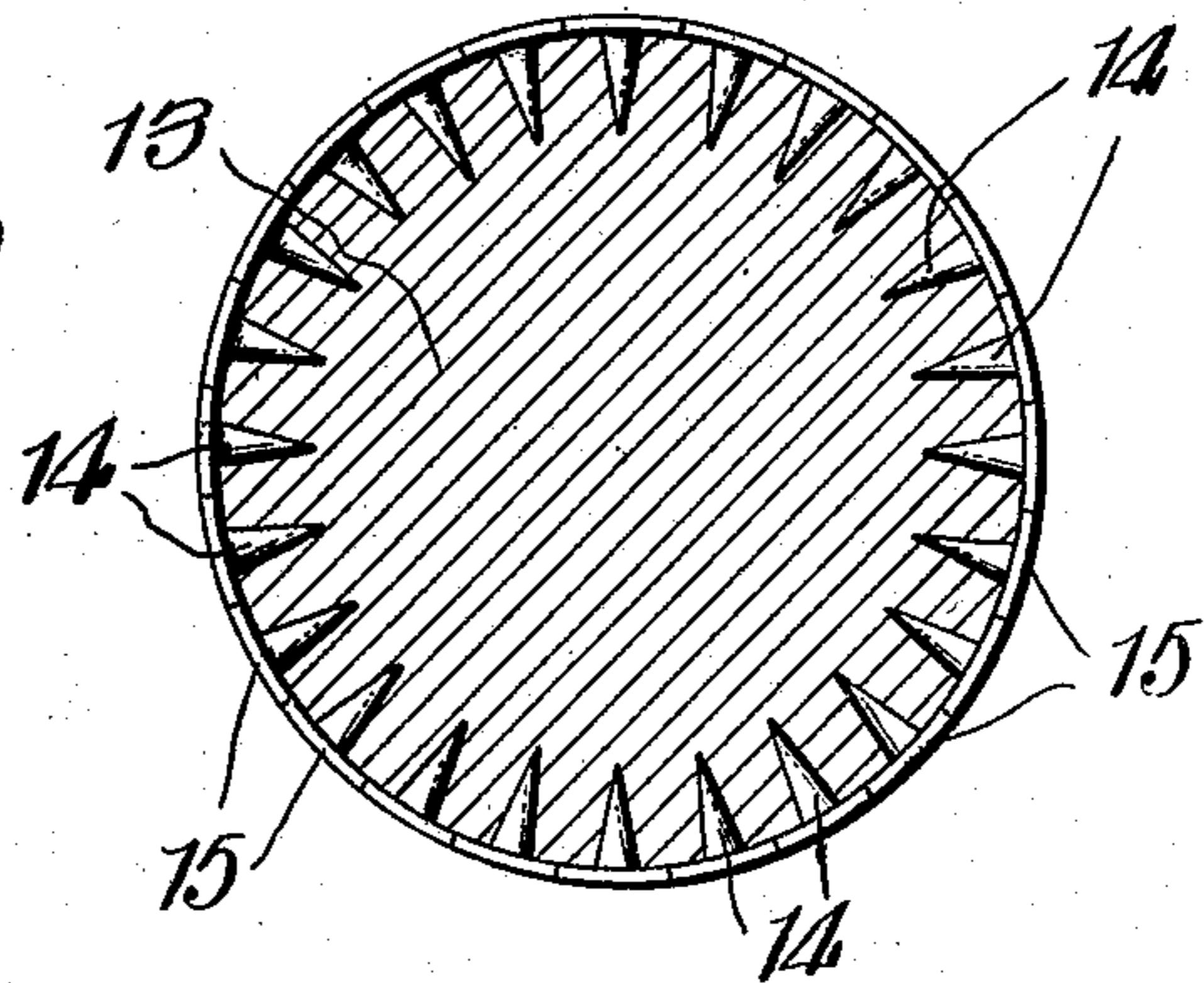


Fig. 3.

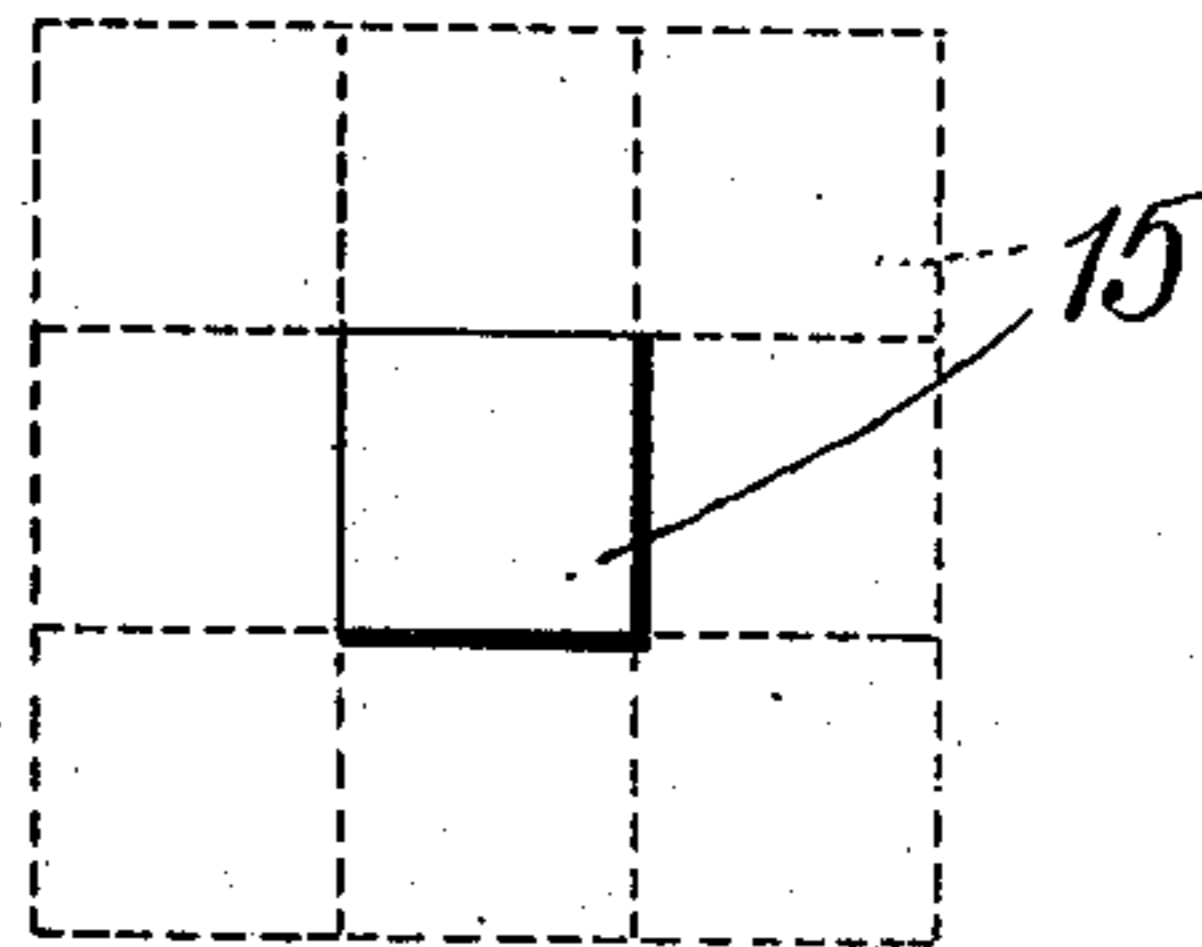


Fig. 4.

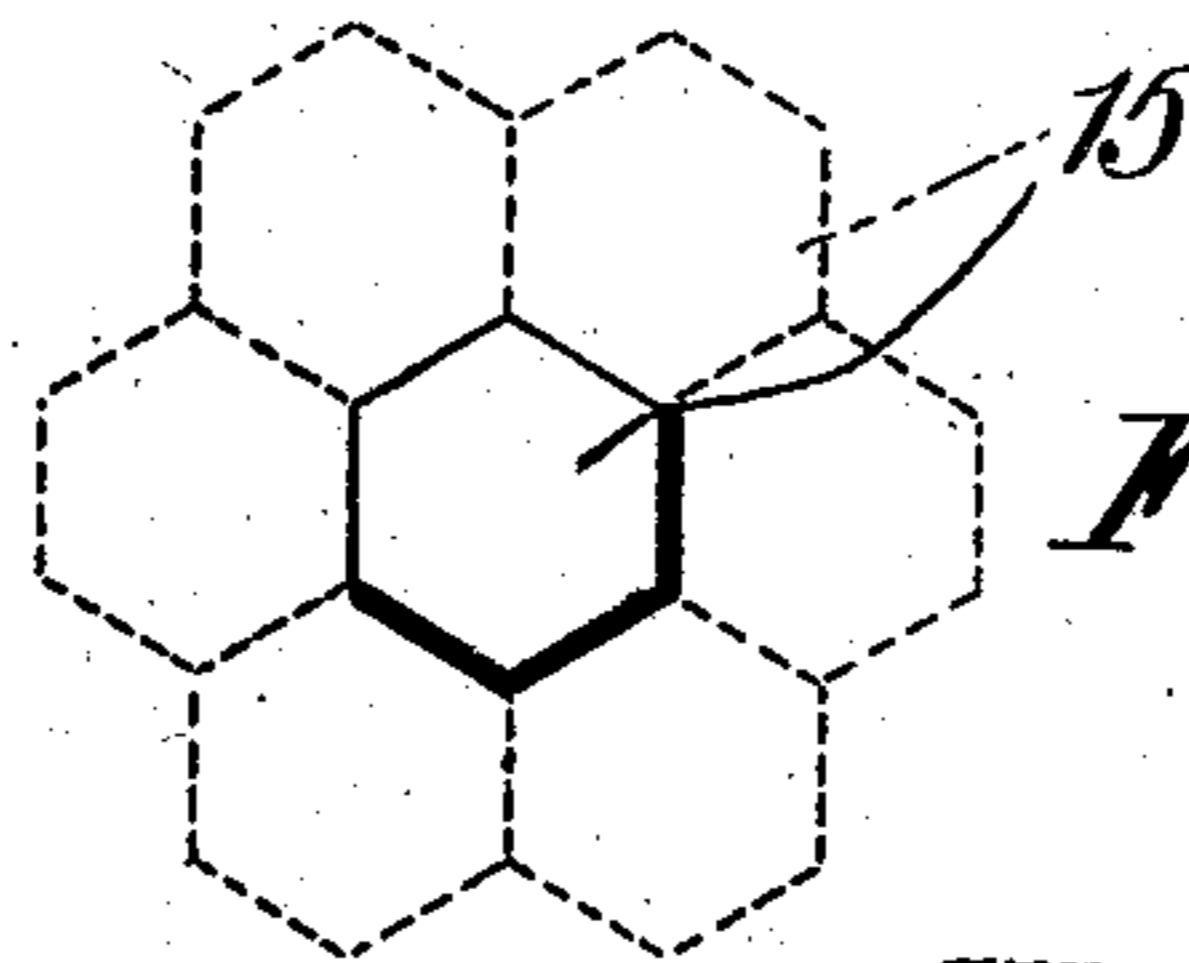
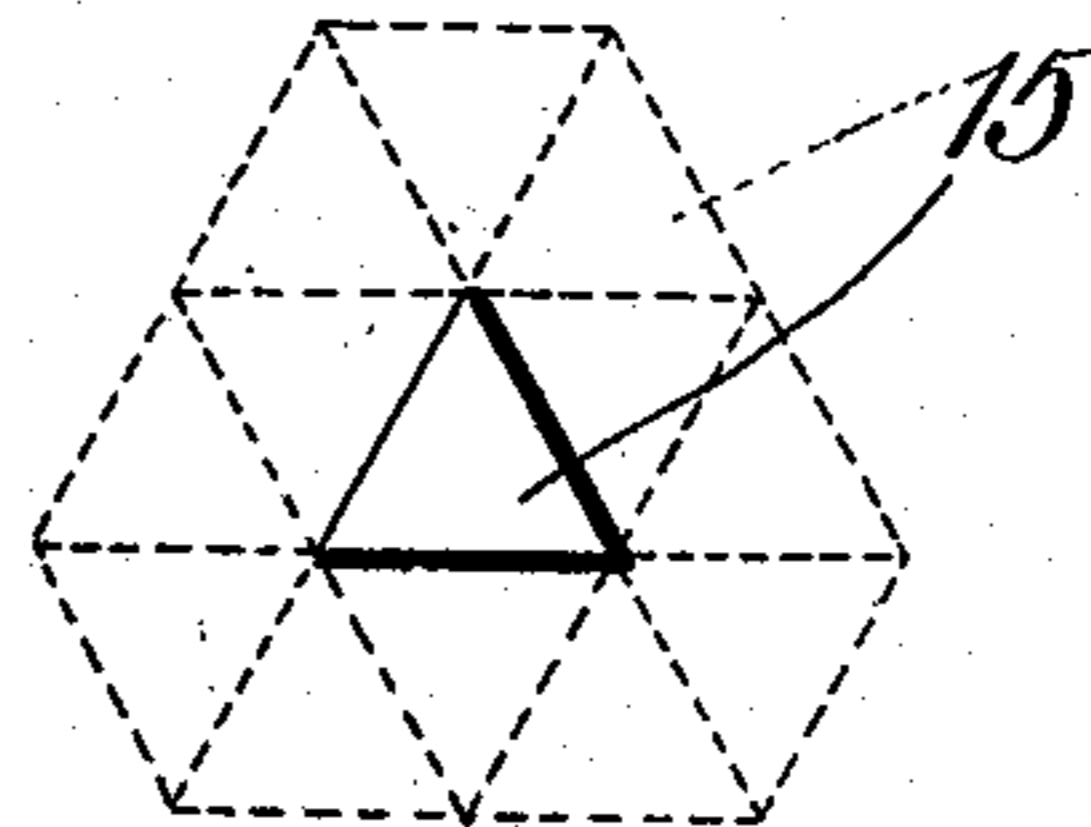


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

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DEVICE TO PROTECT PILINGS.

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To all whom it may concern:

Be it known that I, ALBERT B. COOK, a citizen of the United States, residing at San Pedro, in the county of Los Angeles, State of California, have invented certain new and useful Improvements in Devices to Protect Pilings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to piles such as are commonly used in the building of walls and other similar structures over salt water.

It is a well known fact that there exists in salt water, especially in the tropics, various species of wood boring mollusca and annelidæ.

The object of the present invention is to provide a means for protecting wooden piling and the like from destruction by these mollusca and annelidæ.

With this object in view the invention consists in general of the provision of a continuous metallic coat for piles composed of a multiplicity of headed nails driven in the surface of such a pile around that part immersed in the water.

The invention further consists in a peculiar form of nail especially adapted to this purpose.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and; Figure 1 is an elevation of a pile protected in accordance with this invention. Fig. 2 is a cross section thereof through the protected portion. Fig. 3 is a view showing one form of nail head adapted for this purpose, the adjacent nail heads being indicated by dotted lines. Fig. 4 is a similar view of another form of nail head, and; Fig. 5 is a similar view of a still further form.

It will be noted that the forms of nail heads shown are regular polygons of three, four or six sides. These polygons comprise all those which may be arranged so that the edges of one will contact with the edges of those surrounding it in such manner that the entire periphery may be in contact with portions of the periphery of identical polygons. For the purpose of classifying this peculiar form of polygons they will be termed throughout the specification and claims as of co-peripheral type.

The numeral 10 indicates a pile the lower portion of which as indicated at 11 is in con-

dition to be immersed in the mud or other sea bottom. The upper portion 12 extends above the high water line and is out of the deteriorating influences above mentioned. At 13 is indicated the portion which is immersed in the sea water. This portion is protected from the influences above referred to by having a multiplicity of nails each provided with a relatively thin shank 14 and a relatively broad head in the form of a regular polygon of co-peripheral type as indicated at 15. These nails are preferably driven into the pile so that the heads contact and form a continuous metallic surface. When nails of this type are not available the ordinary wire nail may be used. In any event the heads are arranged so as to contact and expose as little of the wooden surface as possible.

This protective covering is designed to extend slightly above the high water mark and slightly within the bottom of the sea so that positive protection may be assured.

It will be noted that, not only do the heads serve to prevent access to the wooden piling body, but, in the event that a place be accidentally uncovered, the shanks of the surrounding nails will serve to localize injurious effects due to the above mentioned causes.

There has thus been provided a simple and efficient device of the character described and for the purpose specified.

It is to be observed that the nails thus driven will rust as soon as exposed to the action of the salt water and in consequence of this will form a continuous coating of iron-oxid over the entire pile.

Having described the invention, what is claimed as new is:

1. In a device of the kind described, a pile, a protection therefor comprising a multiplicity of headed nails driven into the surface thereof.

2. In a device of the kind described, a pile, a protection therefor comprising a multiplicity of headed nails driven into the surface thereof with the heads contacting.

3. In a device of the kind described, a pile, a protection therefor comprising a multiplicity of nails driven into the surface thereof provided with relatively broad heads in the form of a polygon of co-peripheral type.

4. In a device of the kind described, a pile, a protection therefor comprising a multiplicity of nails driven into the surface thereof provided with relatively broad heads in the form of regular polygons of co-peripheral

type, said nails having their heads contacting to form a continuous metallic surface.

5 5. In a device of the kind described, a pile, a protection therefor comprising a multiplicity of headed nails driven into the surface thereof, the material of the nails being oxidizable in the presence of water, the heads of the nails having such mutual proximity as to insure bridging of the interspaces by the
10 rust formed under working conditions.

6. In a device of the kind described, a pile, a protection therefor comprising a multiplicity of equally spaced headed nails driven

into the surface thereof, the material of the nails being oxidizable in the presence of water, the heads of the nails having such mutual proximity as to insure bridging of the interspaces by the rust formed under working conditions. 15

In testimony whereof, I affix my signature, 20
in presence of two witnesses.

ALBERT B. COOK.

Witnesses:

CHAS. NICOLIN,
E. B. MOORES.