J. L. McCALL.

REINFORCEMENT FOR CONCRETING WOODEN PILES.

APPLICATION FILED APR. 13, 1914.

1,133,484. Patented Mar. 30, 1915.

Fig. 1.

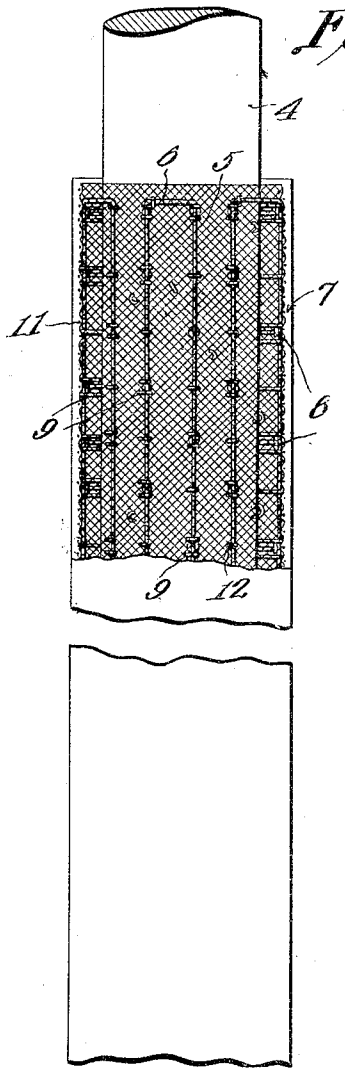


Fig. 2.

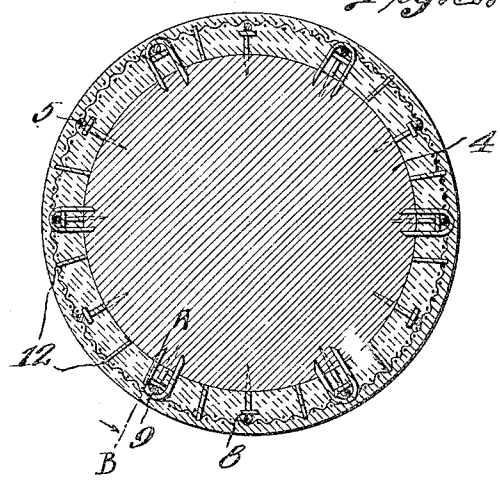
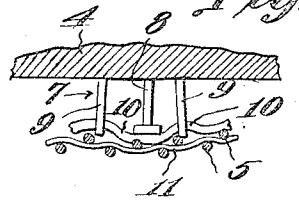


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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REINFORCEMENT FOR CONCRETING WOODEN PILES.

1,133,484. Specification of Letters Patent. Patented Mar. 30, 1915.

Application filed April 13, 1914. Serial No. 831,664.

To all whom it may concern:

Be it known that I, JAMES L. McCALL, a citizen of the United States, residing at Tampa, in the county of Hillsborough and State of Florida, have invented a new and useful Reinforcement for Concreting Wooden Piles, of which the following is a specification.

This invention relates to improvements in reinforcements for the concrete coating employed with pilings.

An object of the present invention is to provide a reinforcement and bonding means for the concrete coating which may be easily and quickly applied to a pile and when installed in position thereon will be rigidly and permanently secured thereto.

A further object is to provide a reinforcement including spaced longitudinal rods around which a wire netting is positioned and securedly locked thereto.

A further object is to provide economical spacers for the longitudinal rods including a pair of spaced staples with a headed nail intermediate the same, the wire or rod passing beneath the staples and over the nail head, thus held against motion in either direction.

A further object is to provide a concrete covering for wooden piles which extends well above high water and to a point below the ground so as to protect the wooden pile from marine borers or insects.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the drawings accompanying this specification and forming a part thereof, the preferred embodiment of my invention is illustrated, in which:—

Figure 1 is a view in elevation of a piling equipped with my improved reinforcement and partially covered with concrete. Fig. 2 is a view in cross section thereof. Fig. 3 is a detail view illustrating one of the longitudinal reinforcing and retaining rods with its accompanying spacer, said view being a section taken on line A—B Fig. 2 with the concrete removed.

Referring to the drawings wherein similar reference numerals designate corresponding parts throughout the several views, a wooden pile or core 4 is provided with a plurality of longitudinally extending rods 5, the said rods being spaced equidistant around the pile and may comprise a single length of material for which reason the upper cross connection 6 has been illustrated, or may be formed of separate and independent rods or lengths of heavy wire.

In order to hold the reinforcing longitudinal rods in spaced relation with respect to the peripheral surface of the pile, the spacers 7 are provided and are located at various intervals along the rods. The spacers 7 each include a headed nail 8 which is driven into the piling and to each side of which are driven the staples 9. The staples 9 are driven into the pile in such manner that the reinforcing longitudinal rod 5 which extends over the head of the nail and through the staples 9 is offset or corrugated as at 10 and thus positively holding them in place against either radial or longitudinal movement. The spacer as thus formed while being exceedingly simple and economical is admirably adapted for the purpose.

A wire netting 11 is wrapped around the piling, rests against the longitudinal rods, and is held in proper and definite relation with the piling thereby. A plurality of staples 12 are driven into the piling and engage the wire netting, holding the same into forced contact with the said rods. With the reinforcement as so outlined in place, a form of the usual and preferably sectional type is placed about the piling and held in spaced relation to the reinforcement in the usual manner and is therefore not illustrated. The concrete coating is formed about the piling, embedding the reinforcement therein and thus provides an efficient coating for the pile. The reinforcement allows the piling with the concrete thereon and with the form removed, to be driven into the earth without danger of the concrete coating becoming loosened or broken.

Having thus fully described my invention, what I claim is:—

1. The combination with a pile or the like, of a reinforcement for a concrete coating,

said reinforcement including a rod, means engaging the pile for holding the rod spaced from the pile, and means engaging the rod at opposite sides of the spacing means for crimping the rod and holding it upon the spacing means.

2. A reinforcement for concrete coatings comprising a plurality of longitudinally extending rods, spacers engaging said longitudinal rods adapted to hold the same in spaced relation to a pile, each of said spacers including spaced staples and a headed nail there intermediate, said staples and nail coacting to corrugate and rigidly engage the longitudinal rods.

3. A spacer for concrete reinforcing longitudinal rods comprising a pair of staples spaced a distance apart, and a headed nail there intermediate and with the outer surface of the nail-head extending a slight distance beyond the line joining the sets of said staples.

4. The combination with a core, of means thereon for reinforcing a plastic coating, said means including longitudinal rods, spacing devices interposed between each rod and the core, and means straddling each rod for holding it against displacement relative to the spacing devices.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES L. McCALL.

Witnesses:
H. B. Haskins,
Wm. T. Rogers.