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CONCRETE CASING FOR PILES

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Fig. 1.

Fig. 2.

INVENTOR.
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ATTORNEYS.
To all whom it may concern:

Be it known that I, William W. Brier, a citizen of the United States, resident of Los Angeles and State of California, have invented new and useful Improvements in a Concrete Casing for Piles, of which the following is a specification.

This invention relates to a reinforced concrete casing adapted to be placed about wooden piles and the like.

Wooden piles are subject to disintegration when placed in salt water due to certain marine life attacking the same. The result is that structures, such as wharves and docks, built with wooden piles as a foundation become weakened in time and collapse. It is often found advisable to cover piles with a casing of material such as cement or concrete. Covering the piles with such cementitious material without disturbing the structure is a difficult and laborious process.

The objects of this invention are, first, to provide an article in the form of a casing, which may be easily placed in position; second, to provide a casing which may be applied to the pile in sections; third, to provide a split casing which may be placed about the pile embracing it and then locked; and fourth, to provide a casing which can be easily and economically manufactured, and permit easy handling of the same.

These objects together with other objects and corresponding accomplishments are obtained by means of the embodiment of my invention illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view of one section of my improved casing with parts in locked position; and Fig. 2 is an enlarged transverse section through Fig. 1, the dotted line showing the position of the casing when open.

The casing is made up of sections of reinforced concrete pipe. Each section has a reinforcement consisting of wire extending circumferentially. A preferable manner of reinforcing consists of forming a cage of a spirally wound wire, with the convolutions separated by longitudinally extending spacing bars. In the drawing, the spacing bars are not shown, but the spirally wound wire is indicated by 3. The pipe is cast by placing the reinforcement in a suitable mold and pouring concrete about the same. The mold is such that the pipe is cast with two longitudinally extending and diametrically disposed slots 4 and 5, the spiral reinforcement being exposed at the slots. The reinforcement is then cut at one of the slots and the cut ends turned to form hooks indicated by 6. The reinforcement at the opposite slot serves as a hinge so that the section may be opened as shown in dotted lines in Fig. 2.

A casing may be made in any suitable style. Thus, each section may have a spigot end 7 adapted to fit into the bell end 8 of the adjoining section. The sections may be locked together in any approved manner. It is evident that the casing being in the form of a cylinder or pipe can be easily moved by rolling it into position for placing about the pile. The casing section is then opened, placed about the pile and then closed. Links 9 are hooked over the ends of contiguous reinforcement wires to lock the section about the pile. The space between the pile and the casing may be filled with concrete, and the slots 4 and 5 also filled to form a complete cylinder. However, the method of applying the casing to the pile is immaterial.

What I claim is:

1. An article of the character described comprising a casing of cementitious material longitudinally divided to form two parts, a circumferentially extending reinforcement of flexible material uniting said parts at one division so as to form a hinge joint and divided at the other division to split the casing, and means to secure the ends of said reinforcement at said second division.

2. An article of the character described comprising a hollow cylinder of cementitious material longitudinally divided into halves, a circumferentially extending reinforcement of flexible material uniting the halves at one division so as to form a hinged joint and separated at the other division.
to split said cylinder, and means to secure the ends of said reinforcement at said split division.

3. An article of the character described comprising a hollow cylinder of concrete longitudinally divided into halves, a circumferentially extending reinforcement of flexible metal wire uniting the halves at one division so as to form a hinged joint and separated at the other division to split said cylinder, and means to secure the ends of said reinforcement at said split division.

In witness that I claim the foregoing I have hereunto subscribed my name this 21st day of January, 1922.

WILLIAM W. BRIER.