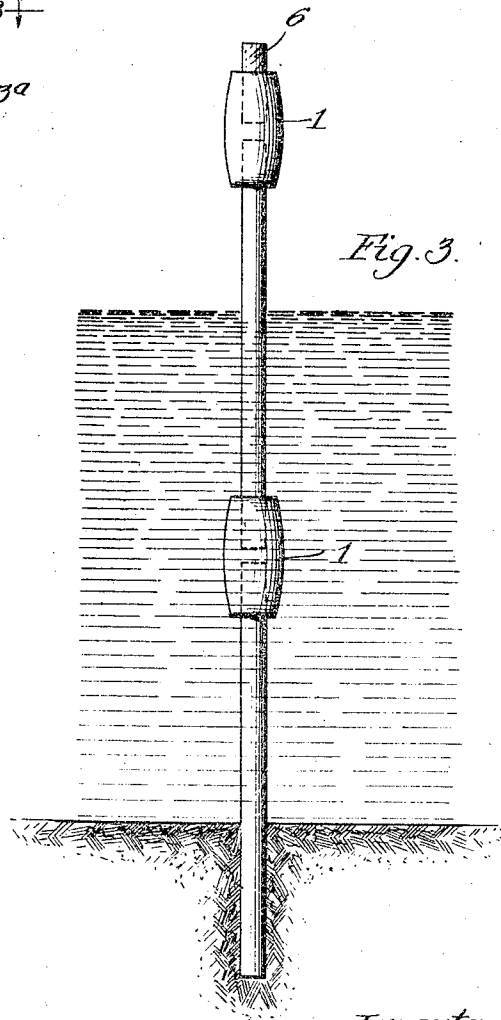
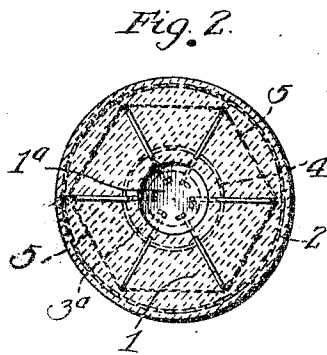
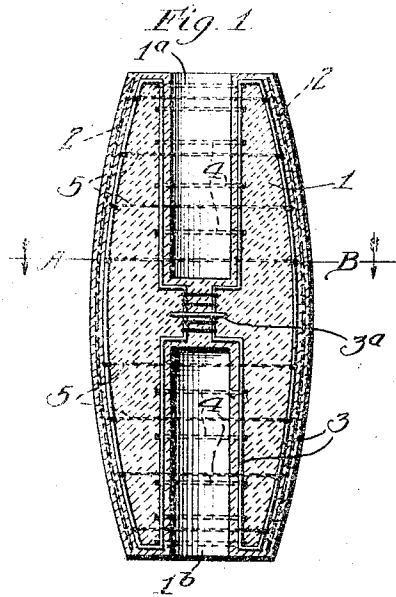


C. F. FRANCISCO.
 PILE SPLICING AND DRIVING DEVICE,
 APPLICATION FILED SEPT. 7, 1911.

1,024,069.

Patented Apr. 23, 1912.



Witnesses:

Geo. J. Hunting.
 Edwin E. Rodabaugh.

Inventor:

Charles, F. Francisco.
 By A. B. Bowman
 his attorney

UNITED STATES PATENT OFFICE.

CHARLES F. FRANCISCO, OF SAN DIEGO, CALIFORNIA.

PILE SPLICING AND DRIVING DEVICE.

1,024,069.

Specification of Letters Patent.

Patented Apr. 23, 1912.

Application filed September 7, 1911. Serial No. 648,200

To all whom it may concern:

Be it known that I, CHARLES F. FRANCISCO, a citizen of the United States, and a resident of San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Pile Splicing and Driving Devices, of which the following is a specification:

This invention relates to the art of splicing piles where it is desired to add to their lengths and for driving piles either below or above the surface of the water or earth, and it is more particularly adapted for concrete piles, and the objects are, first, to provide simple, durable, and easily installed devices for splicing the ends of two sections of a pile together, second, to provide such a device for facilitating the driving of concrete piles, and third, to provide such a device for driving piles where it is desired to leave the top end below the surface of the water or the earth.

With these and other objects in view, as will appear, my invention consists of certain novel features of construction, combination and arrangement of parts as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawings, and to the characters of reference thereon, which form a part of this specification, in which:—

Figure 1 is a sectional view of my device, Fig. 2 is a sectional view thereof through A—B in Fig. 1, and Fig. 3 is an elevational view showing a pile in sections, showing my device connecting the ends of two pile sections together, and showing a wooden cushion in connection with one of them to facilitate the driving of concrete piles.

Similar characters of reference refer to similar parts throughout the several views.

My device consists of plastic material 1, preferably concrete, shaped as shown best in Figs. 1 and 2 and provided with a hole in each end, 1^a and 1^b. It is ellipsoidal shaped except that the ends are flat, and it is provided near its outer surface with a woven wire reinforcement 2, which extends around the same. Inside of said reinforcement surrounding the holes 1^a and 1^b, are a plurality of reinforcing bars 3, shaped as shown best in Figs. 1 and 2. The ends of these bars 3 are connected by means of plate 3^a, which is provided with holes into which said ends are inserted, so that the ends overlap each other therein. In this case I have shown

six of said bars. These reinforcing bars are preferably made of twisted steel, and the inner members thereof are connected together in their relative positions by means of a plurality of connecting bars 4, and their outer members are connected together by a plurality of connecting bars 5. In case it is desired to splice two members of a pile, one end of the member is placed in one of the holes 1^a or 1^b of the device, and one end of the other member is placed in the other hole as shown best in Fig. 3, after which thin cement may be filled in around the ends of the members. In case it is desired to use this device for driving piles, the upper end of the pile is placed in one of the holes 1^a or 1^b, and in the other hole is placed a short wooden pile 6, as shown in Fig. 3. This pile 6 acts as a cushion between the pile driver and the concrete pile, and it and the device may both be removed after the pile is driven.

It will be readily seen that this device is simple of construction, easily installed for use and if composed of concrete, reinforced as described and shown, it is very strong and substantial.

Though I have shown and described a particular construction and reinforcement, I do not wish to be limited to this construction and reinforcement, but desire to include in my invention, the construction and reinforcement substantially as set forth in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A pile splicing and driving device comprising, an ellipsoidal shaped piece made of plastic material, provided with a hole in each end, longitudinally and laterally reinforced, all substantially as set forth.

2. A pile splicing and driving device comprising, an ellipsoidal shaped concrete piece, provided with a hole in each end, extending nearly to the center, woven wire reinforcement near the outer surface of said plastic piece, longitudinal reinforcements between said holes and said outer surface and connecting reinforcements, all substantially as set forth.

3. In a pile splicing and driving device, the combination of an ellipsoidal shaped concrete or plastic material piece, provided with a flat surface on each end and holes therein and longitudinally and laterally reinforced by means of woven wire and twisted steel

bars, and an elastic piece adapted to fit into one of the holes therein, all substantially as set forth.

4. A pile splicing and driving device, 5 comprising a reinforced ellipsoidal concrete body with flat ends, and a recess in each end thereof adapted to receive the end of a pile, all substantially as set forth.

5. A device of the kind described, comprising an ellipsoidal concrete body with both 10 ends flat, longitudinal and radial reinforcing pieces therein, a net wire circumferential reinforcement therein, near the outer surface of said body, and a hole in each end of 15 said body adapted to receive the end of a pile, all substantially as set forth.

6. A device of the character described, comprising, an ellipsoidal concrete body with

both ends flat and provided with a recess in each end thereof adapted to receive the end 20 of a pile, connecting longitudinal and radial reinforcement near the outer surface and the walls of said recesses, a plate means centrally located for holding the ends of said longitudinal reinforcement in position, and a 25 circumferential wire net reinforcement near the surface of said body, all substantially as set forth.

In testimony whereof, I have hereunto subscribed my name in the presence of two 30 subscribing witnesses.

CHARLES F. FRANCISCO.

Witnesses:

ABRAM B. BOWMAN,
ELMER E. RODABOUGH.