

(No Model.)

3 Sheets—Sheet 1.

H. ANDERSON
PILE COVERING.

No. 419,998.

Patented Jan. 21, 1890.

Fig. 1.

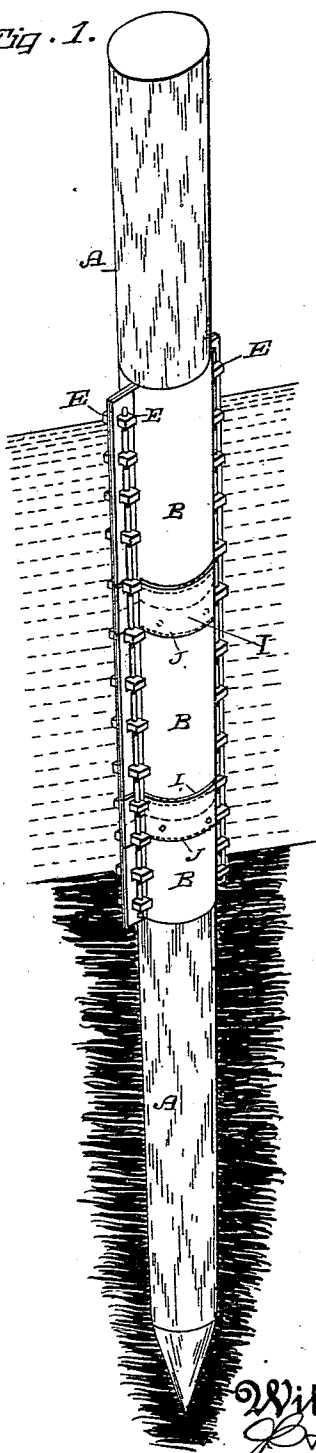


Fig. 2.

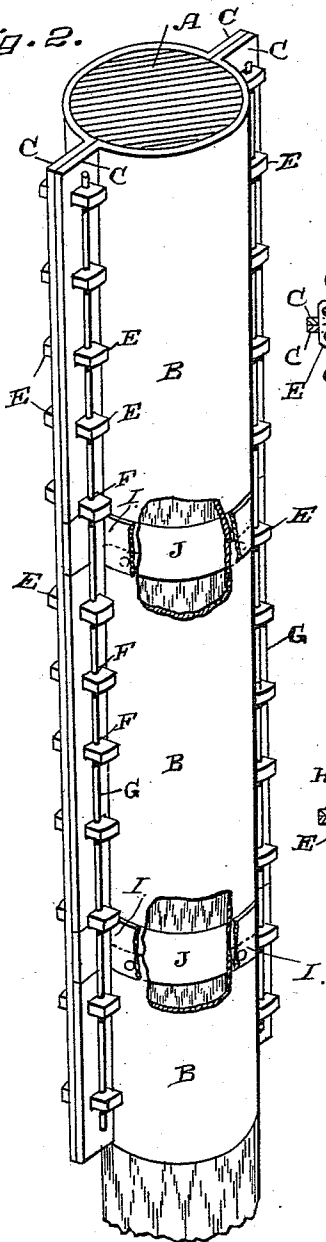


Fig. 3.

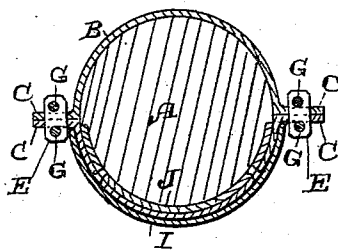
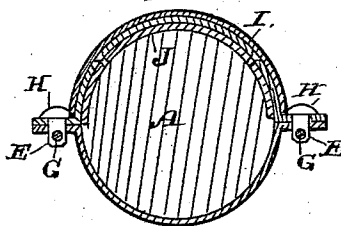


Fig. 4.



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Fig. 5.

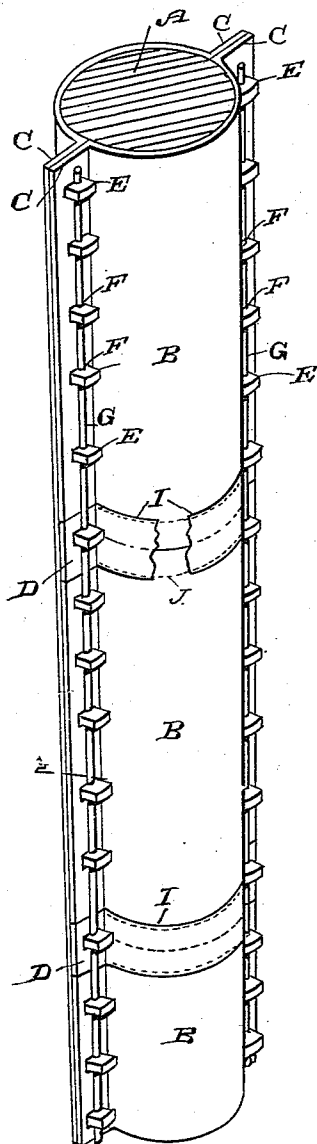
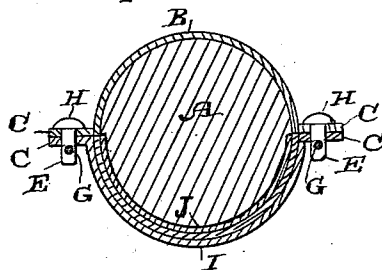


Fig. 6.



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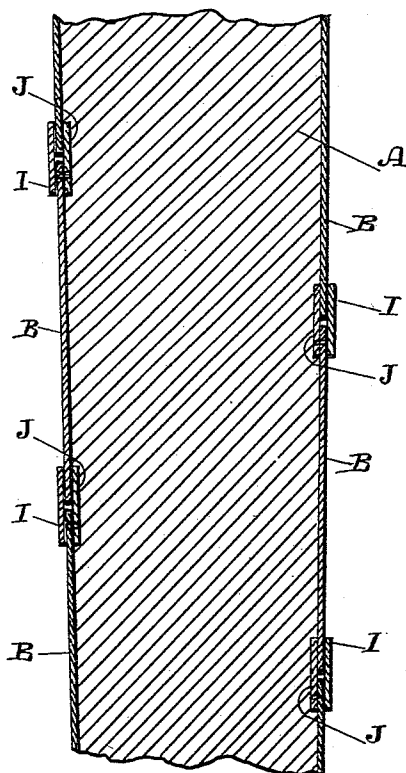
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Patented Jan. 21, 1890.

Fig. 7.



Witnesses,
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J. H. Hourse

Inventor,
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UNITED STATES PATENT OFFICE.

HENRY ANDERSON, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO R. J. DAVIS, OF SAME PLACE.

PILE-COVERING.

SPECIFICATION forming part of Letters Patent No. 419,998, dated January 21, 1890.

Application filed October 16, 1889. Serial No. 327,219. (No model.)

To all whom it may concern:

Be it known that I, HENRY ANDERSON, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Pile-Coverings; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improved covering for piles which are to be driven for building wharves and other similar purposes; and it consists in certain details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a pile with my covering. Fig. 2 is an enlarged portion of the same, showing the casing broken away to show the straps J. Figs. 3 and 4 are horizontal sections. Fig. 5 is an enlarged view showing the band I on the outside of the casing. Fig. 6 is a section of the same. Fig. 7 is a vertical sectional view.

A is a pile, which I desire to protect from the action of marine worms and other damaging agencies. Around this pile is fixed a casing consisting of sections B of sheet metal bent to such a curve as to approximately fit the shape of the pile and having flanges C, by which they are united together when placed about the pile. If desired, the pile may be first treated with any protecting or preparatory substance or coating, which I do not here describe, as many of these coatings are already well known and in common use. I prefer to make the covering metallic sections B in semi-cylindrical or equivalent pieces, so that they may be applied from either side of the pile, and these pieces are put on so as to break joints—that is to say, the joints where the ends of the sections meet upon one side of the pile will preferably meet at some other point than that where the sections upon the opposite side of the pile meet, as shown, for instance, in Fig. 7.

In order to unite the vertical flanges together, I have shown bolts E, which are made preferably flat, as shown in section, Fig. 3, and have holes F made through them of sufficient size to admit the long rods G. The opposite ends of these bolts E have enlarged

heads H. Slots or holes are perforated through the flanges C of sufficient size to admit the body E of each of the bolts to pass through the slots, the heads H being sufficiently large to abut against the opposite flange C, and when the rods G are passed down through the holes F in the bolts E it will be seen that the whole structure is firmly united together. Where desirable, I may leave off the heads H of the bolts E and make slots or holes F through both ends of the bolts to receive the rods G on both sides, thus forming a double lock and key in this case, the former case being a single lock and key.

At the point where the ends of each of the sections B abut I have shown a band I, (see Figs. 5 and 6,) which passes around these meeting sections, being semicircular in form and having the ends turned outwardly, as shown at D, so as to correspond with the flanges C, and countersunk or let into said flanges to form a continuous and smooth surface. The bands I are secured by the bolts and rods in the same manner as described, the flanges C being smooth and presenting no obstruction to the rods and bolts when driven home, thus locking the band in place with the other parts. Riveted under the upper edge of each section B, before the upper section is fitted, is a butt-strap J, which lies directly under the joint of the two sections, but is arranged to leave a smooth surface.

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

1. A pile-covering consisting of the semi-cylindrical plates having longitudinal meeting flanges on opposite sides, slots made through said flanges and bolts fitting said slots, and holes made through the shanks of said bolts, with rods passing through said holes parallel with the flanges, whereby they are locked together, substantially as herein described.

2. A pile-covering consisting of the semi-cylindrical plates with flanges, perforated bolts, and locking-rods, in combination with bands or straps inclosing the meeting or abutting ends of the covering-sections, these straps having outwardly-turned perforated flanges and bolts, whereby said flanges are

secured in conjunction with the main section, substantially as herein described.

3. A pile-covering consisting of the semi-cylindrical plates with meeting flanges, perforated bolts passing through the flanges, and
5 locking-rods passing through the bolts, bands encircling the plates at their joints and secured to the flanges by the bolts and rods, and butt-

straps on the inner surface of the plates at their joints, substantially as herein described. 10

In witness whereof I have hereunto set my hand.

HENRY ANDERSON.

Witnesses:

S. H. NOURSE,

H. C. LEE.