

(No Model.)

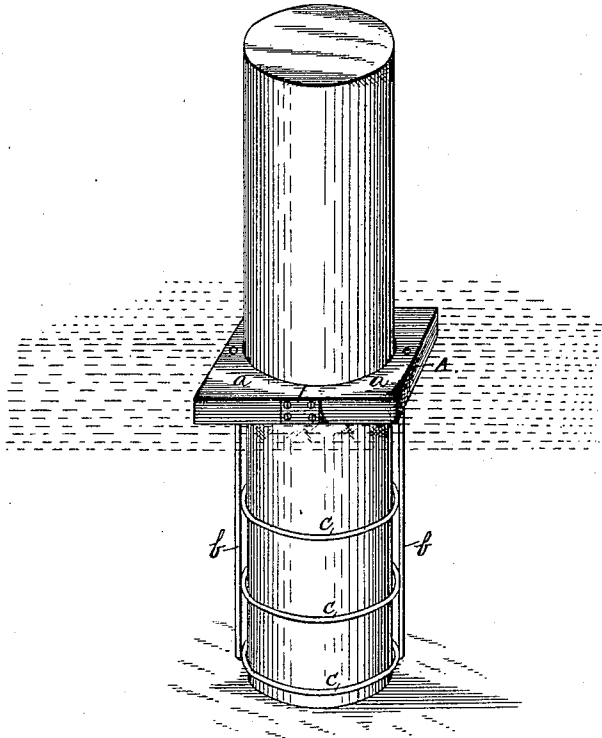
J. CLARK.

DEVICE FOR PROTECTING PILES OR OTHER TIMBERS.

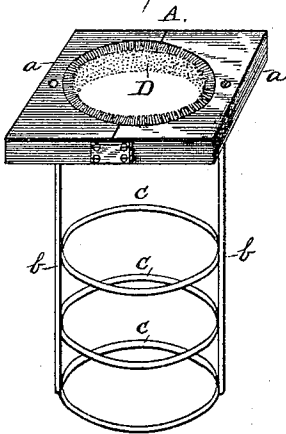
No. 443,897.

Patented Dec. 30, 1890.

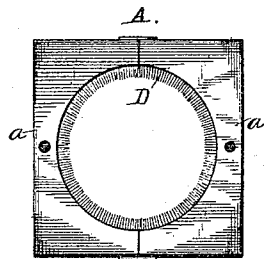
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

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# UNITED STATES PATENT OFFICE.

JAMES CLARK, OF TACOMA, WASHINGTON.

## DEVICE FOR PROTECTING PILES OR OTHER TIMBERS.

SPECIFICATION forming part of Letters Patent No. 443,897, dated December 30, 1890.

Application filed November 25, 1889. Serial No. 331,494. (No model.)

### *To all whom it may concern:*

Be it known that I, JAMES CLARK, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented a certain new and useful Device for Protecting Piles or other Timbers; 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.

It is well known that wooden structures submerged in salt-water are greatly injured by the depredations of the toredo or ship-worm. This worm—a species of the testaceous mollusk—by boring and penetrating such structures perforates them with small holes, through which the water entering the grain and heart of the wood in a very short time softens and rots it to such an extent as to render it useless for the purpose intended. No remedy against this pest has heretofore been discovered; but it is believed that the new and useful device hereinafter described will be an effectual and sure protection against it.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective of a pile having my invention attached thereto. Fig. 2 is a perspective of my device detached from the pile. Fig. 3 is a plan of one form of the block or float, showing the brush attachment.

A is a block or float, made of wood, cork, sheet metal, or any suitable material. It may be constructed in two sections *aa*, each having a semicircular cut made in one side corresponding to the circumference of the pile or timber it is designed to fit. The concave faces of these sections *aa* may be provided with stiff friction-brushes *D*, as shown in Fig. 3.

Depending vertically from the block or float *A*, on opposite sides thereof, are rods *bb* of a length equal to the depth of the water at the lowest tide. Attached to these rods *bb* at their lower end and at suitable intermediate points are metallic or other rings *cc* of a diameter slightly larger than the pile they are designed to fit, and of which may employ any desired number. In place of the rods *bb* I

may use a series of telescoping short rods, or I may employ chains.

In applying my device to a pile the rods *b* *b*, with the rings *cc* attached, are first slipped over the pile, or the rings may be applied in any convenient manner. The block or float *A* is then applied to the pile by fastening together the sections *aa* about it by metallic plates and screws, as shown, or otherwise. The rods *bb* are then attached to the float, and the device is complete. It is now obvious that as the tide rises and falls the block and rings will be carried up and down with it, and the result will be to scrape and clean the pile or other timber and detach and throw off any foreign substances which may have become attached thereto.

The float or block *A* may be used on a single pile, or it may be made large enough to embrace several piles.

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

1. A protector for piles or other timber, consisting of a ring or shell surrounding said pile or piles or other timber and free to move up and down thereon by the motion of the water, said ring or shell being provided with a roughened or brush-like surface on its interior face, substantially as described.

2. The combination, with a float surrounding the pile or other timber, of a ring or rings arranged below said float and secured in a pendent manner thereto, substantially as described.

3. A pile-protector consisting of a ring or shell surrounding the pile and free to move up and down thereon by the action of the water, substantially as described.

4. A pile-protector comprising one or more rings or shells surrounding the pile and free to move thereon by the action of the water, in combination with a float, substantially as described.

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

JAMES CLARK.

Witnesses:

CHAS. CARROLL,  
L. A. PALMER.