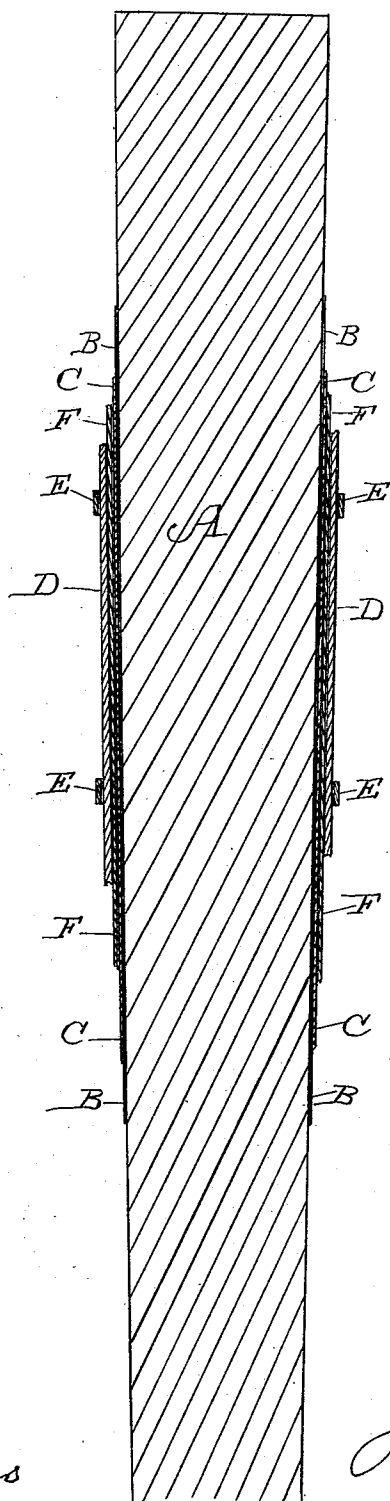


(No Model.)

J. CASS.
PRESERVING PILES.

No. 508,279.

Patented Nov. 7, 1893.



Witnesses,
G. H. House
J. A. Bonfless

Inventor,
James Cass
R. Duvey & Co.
attys

UNITED STATES PATENT OFFICE.

JAMES CASS, OF CAYUCOS LANDING, CALIFORNIA.

PRESERVING PILES.

SPECIFICATION forming part of Letters Patent No. 508,279, dated November 7, 1893.

Application filed June 26, 1893. Serial No. 478,894. (No specimens.)

To all whom it may concern:

Be it known that I, JAMES CASS, a citizen of the United States, residing at Cayucos Landing, San Luis Obispo county, State of California, have invented an Improvement in Preserving Piles; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the art of preserving piles, and other submerged wooden structures from the ravages of marine worms and insects.

My present invention is an improvement upon that process of preserving piles heretofore patented to me September 28, 1886, No. 349,835, and it consists in placing between the felt coating and the exterior battens, a layer of sheet lead.

Referring to the accompanying drawing for a more complete explanation of my invention,—the figure is a vertical section of a pile showing the application of the preservative coatings or layers of my invention, these coatings or layers being shown broken away above and below and different planes in order to better distinguish them.

In preparing a pile A, the bark is peeled away from that portion which is to be protected, and it is then coated with a suitable waterproof compound B preferably of a poisonous nature, such, for example, as I described in my previous patent, and consisting of equal parts of pitch and coal tar, and about one-quarter of a pound of arsenic to the gallon of tar. This compound is applied to the pile hot. Over this coating I place a layer of common ship felt represented by C. Around this felt I then place a layer of sheet lead, represented by F, said lead entirely covering the felt; and, finally, around this lead I secure an outer layer of battens represented by D, which cover the lead entirely, and are secured in

any suitable manner, as by the hoops E which encircle the whole.

It will be observed that in this invention, the several steps and features of my previous patent are involved and followed out, and in addition thereto I now place between the felt layer and the outside battens, the layer of sheet lead. I have found by experiment that this material, namely, sheet lead, is the best possible for the purpose, it being non-corrosive, light and flexible, and not too expensive. The object of introducing it, is that in the course of time, the battens become worm eaten and the water getting to the felt, swells it and finally washes it off in patches; but by the interposition of the sheet lead between the felt and the battens, the former is fully protected and held in place, even though the latter be entirely eaten away. It is, therefore, a complete protector to the felt after the battens become badly eaten.

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

1. In piles and structures to be submerged having an inner and outer lining, a non-corrosive and flexible metal envelope placed between said linings, and means for securing the same in position.

2. Piles or structures to be submerged, having a water proof coating applied to their surfaces, a layer of felt placed over said coating, a layer of sheet lead placed over the felt, battens or strips on the outer side of the lead, and means for securing the several layers and battens, substantially as herein described.

In witness whereof I have hereunto set my hand.

JAMES CASS.

Witnesses:

J. J. SIMMLER,

A. L. BURROUGHS.