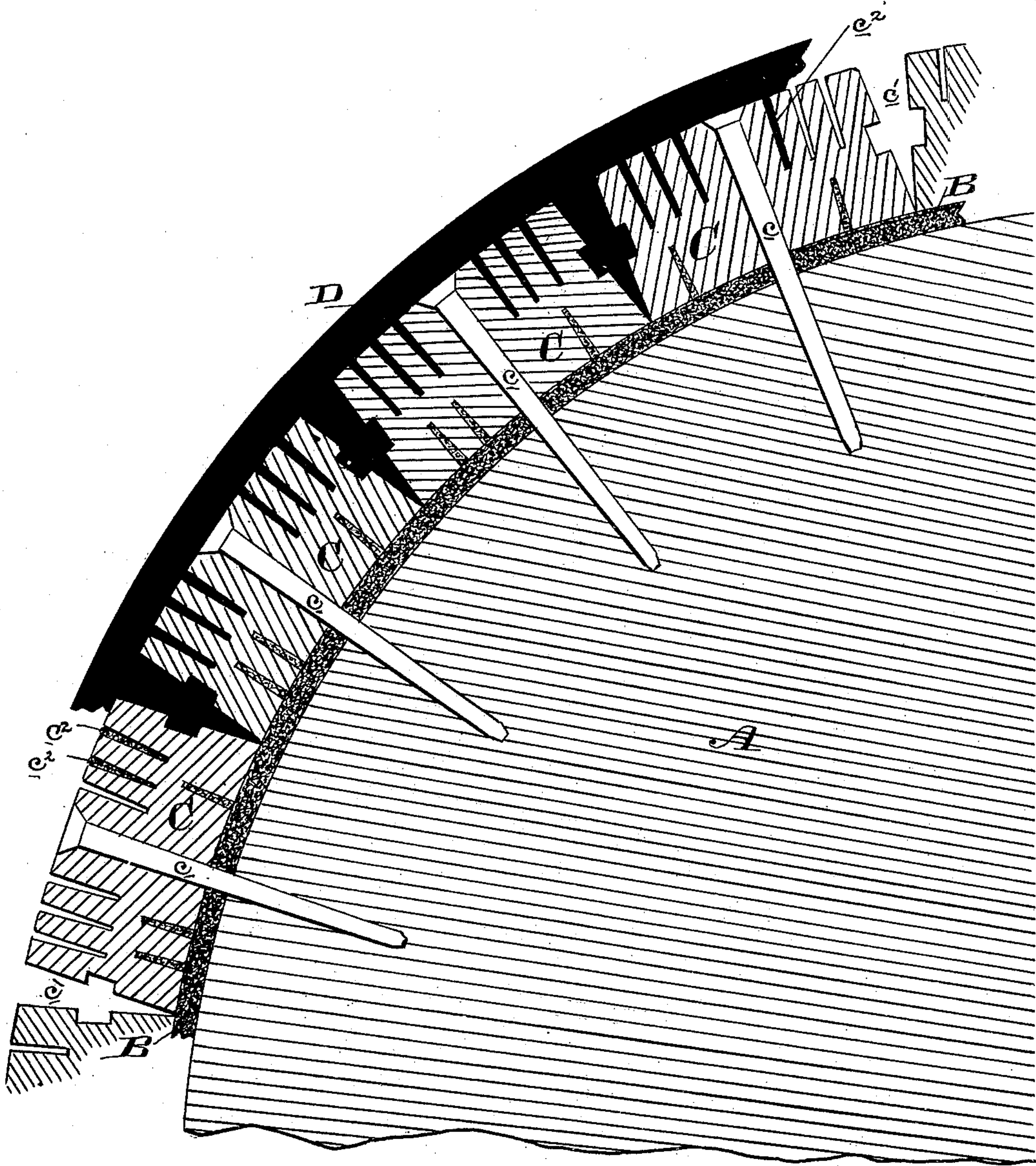


(No Model.)

C. C. LANE.
PRESERVING PILES.

No. 383,531.

Patented May 29, 1888.



Witnesses,
Geo. H. Strong
J. H. Morse

Inventor,
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UNITED STATES PATENT OFFICE.

CHARLES C. LANE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO JOHN H. BOALT, OF SAME PLACE.

PRESERVING PILES.

SPECIFICATION forming part of Letters Patent No. 383,531, dated May 29, 1888.

Application filed December 22, 1887. Serial No. 238,775. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. LANE, of the city and county of San Francisco, 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 wood, and more especially to the preservation of piles and other immersed timber or lumber.

The object of my invention is to protect the wood from the ravages of marine insects, especially the teredo.

My invention consists, essentially, in incasing or covering the immersed surface of the pile or other wood with a sheathing of wood which has previously been prepared by pricking or puncturing it, by subjecting it then to a bath of some light preservative or protective material, whereby its open pores are caused to absorb said material, and by finally sealing the punctures or openings in it with a heavier material.

My invention also consists in first covering the exposed surface of the wood with a coating of a protective material or composition—such as asphaltum and sand—then securing over said coating the sheathing of wood prepared as described, and then covering said sheathing with an outer coating of material similar to that forming the inner coating, all of which I shall fully describe by reference to the accompanying drawing, in which the figure is a cross-section of a pile, showing the application of my preserving device.

A is a pile, around which is placed a coating of some preservative or protective material—such as a composition of asphaltum and sand—which said coating is represented by B.

C is an outer sheathing of wood, which is preferably applied to the pile in sections and secured by means of pins or bolts *c*, spaces *c'* being left between the sections of the sheathing. Before this sheathing is applied to the pile it is pricked or punched, so as to make a number of openings or punctures all over its surface, these being made by suitable machinery, such as rollers armed with punches or awls. After the piece of sheathing has thus been pricked or punched, it is treated to a bath of suitable preservative or protective chemicals—such,

for example, as creosote—in order to provide for the impregnation of all portions of the substance of the sheathing. After this bath, it is treated with a second bath of heavier materials—such as coal-tar or asphaltum—here represented by *c*², and which fills or seals all the punctures of the sheathing. After the sheathing thus treated and prepared has been secured to the pile, a coating (here represented by D) of some such preservative or protective material as a mixture of asphaltum and sand is placed around the exterior of the sheathing, a proper bond for holding it being effected by entering the spaces *c'* between the sections of said sheathing and uniting with the material, *c*², which fills up the punctures thereof.

I am aware that it is not new to incase the exposed surface of a pile with a coating of preservative and protective material—such as a mixture of asphaltum and sand; nor is it new in connection with said coating to use a sheet of felt or fabric which is also covered by said material. I am also aware that in connection with these coats of resistant material and intervening felt a wooden sheathing of battens has been placed around a pile to hold all together, and, finally, I am aware that it is not new, broadly, to preserve lumber by puncturing it and treating it to a bath of light material—such as creosote—and afterward filling the punctures with a heavier material—such as tar; and I do not, therefore, claim separately any of these devices.

My invention lies in the application of a sheathing, previously prepared as described, to the surface of wood to prevent the ravages of marine insects.

The advantages in this application are, that I obtain a preservative and resistant sheathing or jacket for the pile without weakening the pile itself, as would be the case if the punctures or holes were made directly in the pile in order to apply this treatment.

The difficulty in handling a pile renders such a plan impractical, while by my plan I obtain all the advantages of protection without weakening the pile and without having to handle it.

The application of this prepared sheathing need not be made as direct as shown, for I may in some cases make a box of the sheath-

ing, fit it over the pile, and fill in the space with proper protecting material.

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

1. The improvement in the method of preserving and protecting piles and other exposed wood surfaces, which consists in encircling or covering the pile or wood with a sheathing of wood prepared by first pricking or puncturing it, then treating it with a bath of preservative or protective material to permeate its substance by absorption through its pores, and then sealing up its punctures, substantially as herein described.

2. The improvement in the method of preserving and protecting piles and other exposed wood surfaces, which consists in applying a

coating of preservative or protective material, then securing over said coating a sheathing of wood prepared by first pricking or puncturing it, then treating it with a bath of a preservative or protective material to permeate its substance by absorption through its pores, and then sealing up the punctures, and in finally coating the surface of the sheathing after it has been secured with a preservative or protective material, substantially as herein described.

In witness whereof I have hereunto set my hand.

CHARLES C. LANE.

Witnesses:

S. C. STROCK,
J. H. BLOOD.