

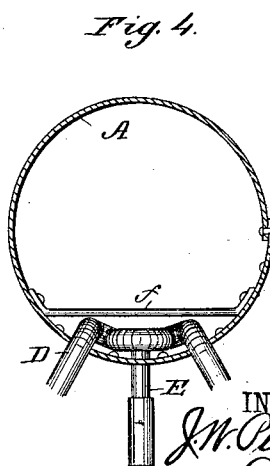
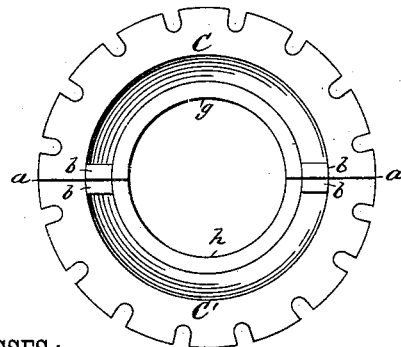
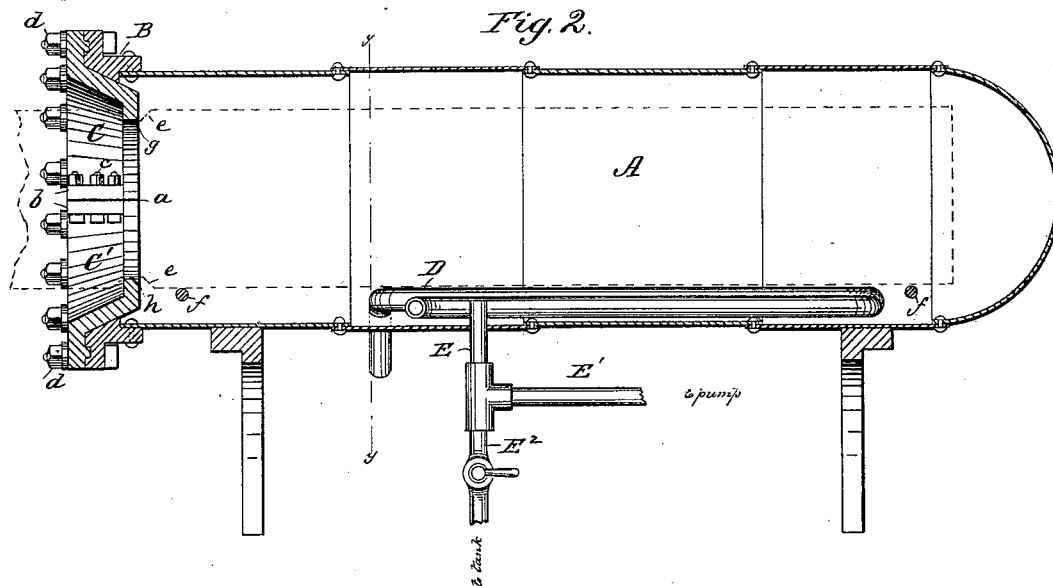
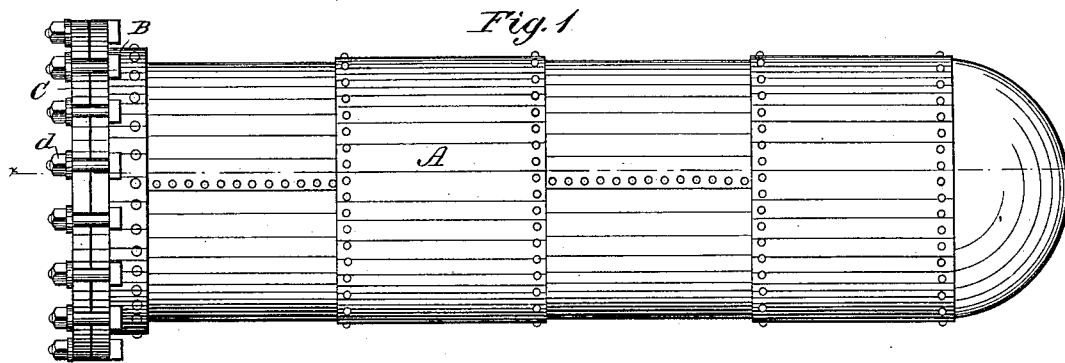
(No Model.)

J. W. PUTNAM.

# APPARATUS FOR TREATING TIMBER WITH ANTISEPTICS.

No. 266,516.

Patented Oct. 24, 1882.



WITNESSES :

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# UNITED STATES PATENT OFFICE.

JOSEPH W. PUTNAM, OF NEW ORLEANS, LOUISIANA.

## APPARATUS FOR TREATING TIMBER WITH ANTISEPTICS.

SPECIFICATION forming part of Letters Patent No. 266,516, dated October 24, 1882.

Application filed May 19, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH W. PUTNAM, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Apparatus for Treating Timber with Antiseptics; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of the receptacle. Fig. 2 is a vertical longitudinal section of the entire apparatus. Fig. 3 is a face view of the sectional annular head, and Fig. 4 is a cross-section through the line *yy* of Fig. 2.

My invention relates to an improved apparatus for treating the end of a piece of timber with an antiseptic to prevent decay and the attacks of marine animals. It is designed more particularly for treating the upper end of piles, which are exposed to the influences of the weather and said animals; and it consists mainly in the peculiar construction of the annular head of the receptacle which receives the timber, which annular head is so constructed as to be clamped around the pile at a sufficient distance from the end to inclose the portion of the pile that is to be treated, and makes a tight joint around the pile without putting the whole of the pile in the receptacle, as hereinafter fully described.

In the drawings, A represents the receptacle, which receives the portion of timber to be treated. This receptacle is of a cylindrical shape, and made of boiler-iron capable of withstanding a pressure of from fifty to two hundred pounds, and its length is sufficient to take in all of that portion of the pile which requires treatment. This receptacle is arranged upon any suitable supports in horizontal position, and has at one end a strong flange, B, bolted to the same. At this end of the cylinder is arranged an annular head, C C', which is made in two parts with a diametrical joint at *a a*. These two sections of the annular head have adjacent flanges *b b* at the diametrical joints *a*, which permit the two sections of the head to be bolted together by bolts *c*. The peripheral edge of the head and the flange B have also open slots or bolt-seats, which receive the bolts *d*, that fasten the head to the cylinder. To more effectually resist the

internal pressure, the head is preferably made concaved or dished inwardly, as shown.

D is a steam-coil, inserted in the bottom of the receptacle for raising the temperature within, and E is a pipe for the introduction and removal of the antiseptic liquid, one branch of which, E', leads to the pump and the other of which, E'', is provided with a stop-cock, and leads to the tank containing the antiseptic compound.

Now, in treating the end of the pile, which is shown in dotted lines in Fig. 2, a peripheral groove, *e*, is first cut around the same at a proper distance from the end to define the length to be treated, and the pile is then inserted into the receptacle and allowed to rest upon the cross-bars or bridge-pieces *f f*. The groove *e* of the pile is then fitted over the edge *h* of the lower section of the head and the edge *g* of the upper section of the head fitted down into the portion of the groove on top of the pile, and the two sections of the head are then tightly bolted together by bolts *e* to make a tight joint, the head then bolted to the flanged edge of the cylinder by bolts *d*, and the end of the pile is then ready for treatment by the steam and the antiseptic liquor.

The object in cutting the groove *e* in the pile is not only for the purpose of making a tight joint, but also for the purpose of holding the pile in and preventing it from sliding out like a piston-rod when the pressure is exerted within.

As shown, I have the steam-pipe arranged for heating by radiation only; but I may in some cases admit the steam to direct contact with the pile, driving out the sap, and thus securing a partial seasoning effect before admitting the antiseptic liquor.

Having thus described my invention, what I claim as new is—

1. An elongated tank for treating timber, provided with a detachable annular head made in two sections with a diametrical joint, and also containing suitable steam-pipes and connections for steaming the timber and heating the antiseptic material.

2. The combination of the receptacle A, having marginal flange B, and the sectional annular head C C', having a diametrical joint, with flanges *b b* and the bolts *c* and *d*, substantially as shown and described.

3. The combination of the receptacle A, having heads made in two sections, C C', with a circular opening in the center, combined with and adapted to operate upon a pile having a  
5 peripheral groove fitted to the circular opening in the head, for the twofold purpose of making a tight joint and resisting the tendency of the internal pressure against the pile to force it out of the tank.

4. The combination of the receptacle A with head C C', and steam-inlet and perforated pipe for steaming the timber, and steam-coil for heating the antiseptic fluid, substantially in the manner shown, and for the purpose described.

JOSEPH W. PUTNAM.

Witnesses:

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