G. PFEIFFER, JR.

WOOD PRESERVATION AND MEANS FOR EFFECTING THE SAME.

APPLICATION FILED JULY 25, 1919.

1,369,539. **Patented Feb. 22, 1921.**

Fig. 1.

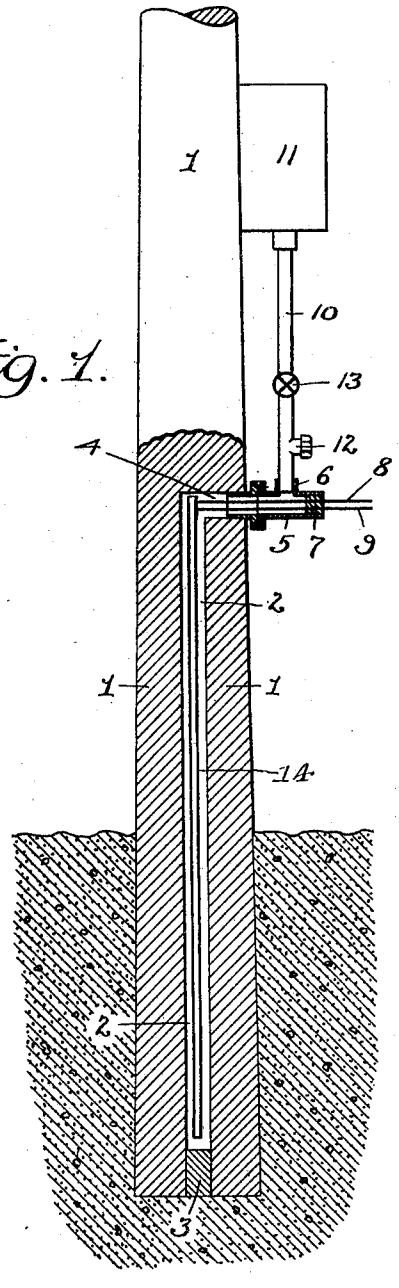
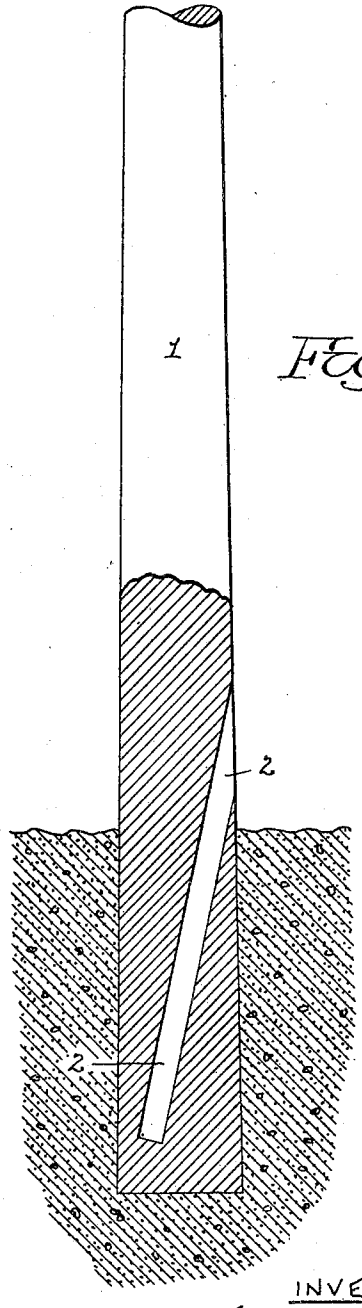


Fig. 2.



INVENTOR

GEORGE PFEIFFER, JR.

BY HIS ATTORNEY Harry Smith

NORRIS PETERS, INC., LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE PFEIFFER, JR., OF CAMDEN, NEW JERSEY.

WOOD PRESERVATION AND MEANS FOR EFFECTING THE SAME.

1,369,539. Specification of Letters Patent. Patented Feb. 22, 1921.

Application filed July 25, 1919. Serial No. 313,339.

To all whom it may concern:

Be it known that I, GEORGE PFEIFFER, Jr., a citizen of the United States, residing in Camden, New Jersey, have invented certain Improvements in Wood Preservation and Means for Effecting the Same, of which the following is a specification.

My invention relates to the treatment of wooden poles or posts such, for instance, as telegraph and telephone poles, fence posts and the like, in such a manner as to preserve them from decay, especially at the surface of the ground in which they are set and where they are subjected to alternate wetting and drying as the weather changes. My invention is especially directed to that method of preservation in which the preservative fluid is stored in a chamber in the center of the post and from this reservoir permeates the pores of the wood and finds its way to all parts of the post requiring treatment.

The object of my invention is to facilitate such permeation and thereby lessen the time required for effective treatment.

In the accompanying drawing—

Figure 1 represents the lower portion of a pole partly in elevation and partly in longitudinal section and equipped for preservative treatment in accordance with my invention, and

Fig. 2 is a similar view illustrating the application of my invention to a pole which had been previously set.

The pole 1, shown in Fig. 1, has in its lower portion a central bore 2 extending from the bottom of the pole up into the same as far as the treatment is intended to extend, the lower end of this bore being closed by a plug 3 and its upper end having a lateral branch 4 whose outer end communicates with a short pipe 5, with elbow 6, this pipe forming an extension of the branch 4 and being closed at its outer end by a plug 7 of electrical insulating material.

Extending throughout the bore of the plug are two runs 8 and 9 of an electrical conductor, these runs being connected to a resistance body 14 in the chamber 2, passing through fluid-tight openings in the plug 7, and being connected, respectively, to the positive and negative poles of an electric generator of any desired character.

From the elbow 6 extends upwardly a pipe 10, communicating with a reservoir 11 containing the desired preservative fluid and mounted at any appropriate height on the pole 1 to impart to the preservative fluid the head necessary to maintain it under pressure in the bore 2, or said pipe 10 may have a branch 12 for connection with a pump for imparting pressure to said fluid, the pipe 10 in this case being provided with a stop or check valve 13 located below the reservoir.

I have found that the preservative fluid will permeate the pores of the wood more quickly when heated, and any required degree of heat can be imparted to the preservative in the chamber 2 throughout any desired length of time by passing an electric current through the resistance body 14 contained in the preservative fluid in said chamber.

By providing the opposite ends of the chamber 2 with detachable plugs the introduction or removal of the electrical conductors can be readily effected, and this may be accomplished even without the bottom plug 3, although the use of both plugs is preferred.

In applying the invention to poles which have already been set in the ground, the chamber 2 may extend diagonally downward and inward from the outside of the pole, as shown in Fig. 2, in order that it may be readily formed without disturbing the pole.

I claim:

1. The combination of a pole having a chamber therein, means for supplying a preservative fluid to said chamber, and an electrical resistance body contained in said chamber.

2. The combination of a pole having in its lower portion a central chamber, with lateral branch at its upper end, an insulating plug closing the outer end of said branch, means for supplying said chamber with preservative fluid, and an electrical resistance body contained in said chamber and with its supply wires passing out through openings in said insulating plug.

3. The combination of a pole having a chamber therein for holding a preservative fluid, said chamber having a removable plug at its lower end, means for supplying said chamber with preservative fluid, and an electrical resistance body contained in said chamber and with its supply wires passing out through the upper end of the same.

4. The combination of a pole having therein a chamber for holding a preservative fluid, said chamber having at its upper end a projecting pipe with elbow therein, a pipe extending upwardly from said elbow, said pipe having a branch therein through which fluid may be pumped and above said branch a reservoir for supplying preservative fluid to said pipe, and between said branch and reservoir a valve for preventing upward flow through the pipe.

In testimony whereof I have signed my name to this specification.

GEORGE PFEIFFER, JR.