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H. P. FOLSOM & H. JONES.
STERILIZING AND PRESERVING POSTS AND POLES.
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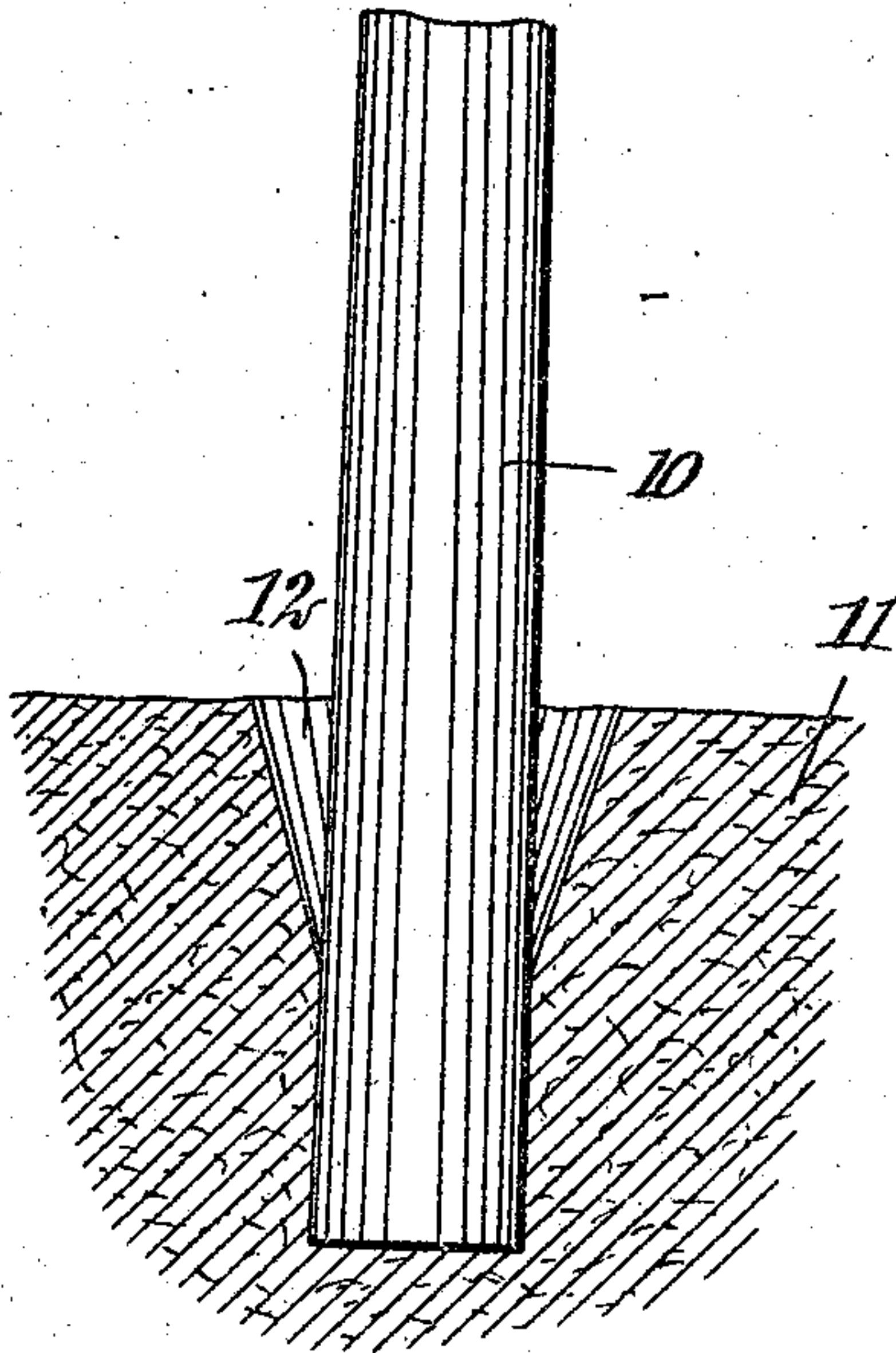


Fig. 1.

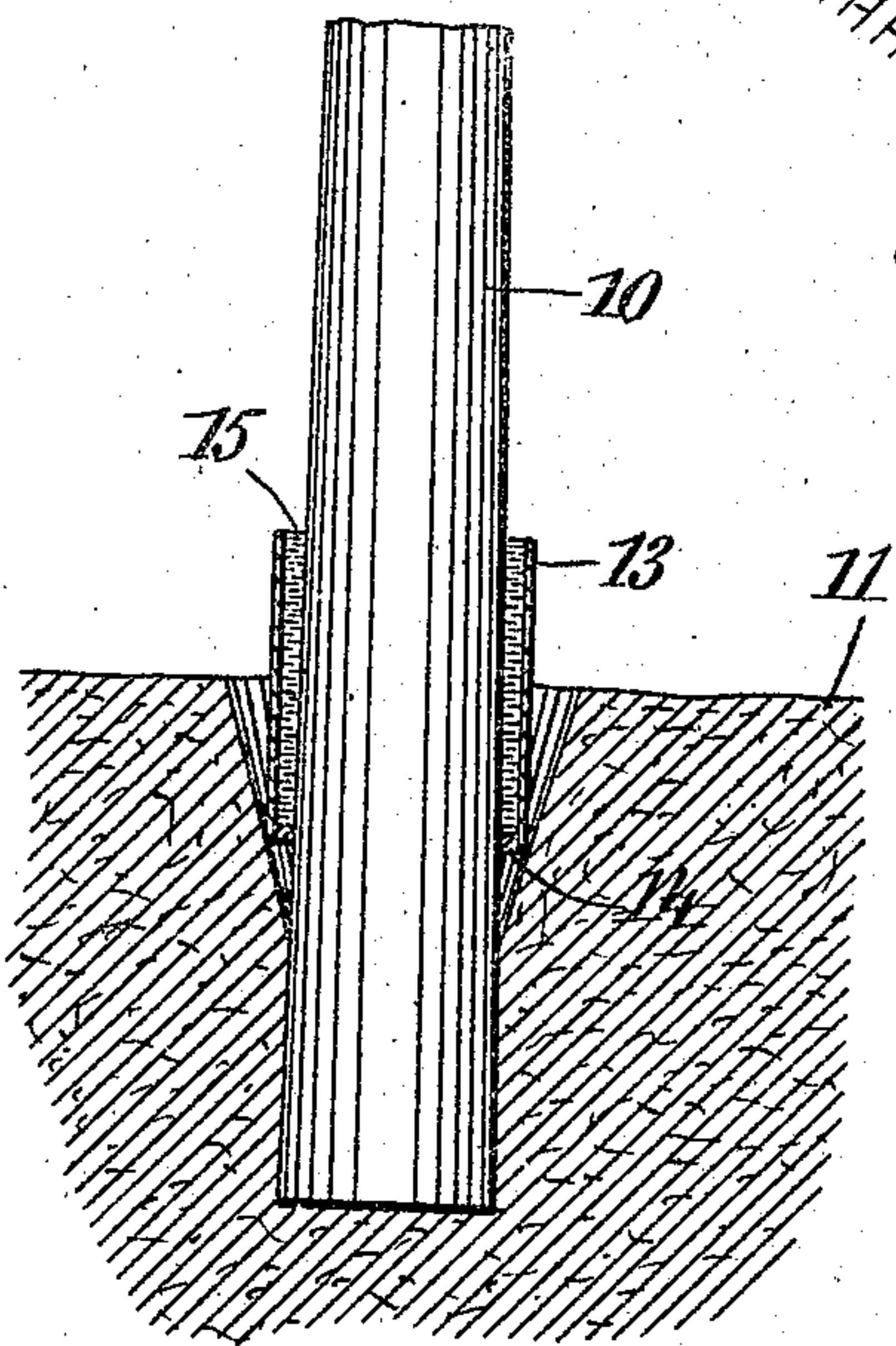


Fig. 2.

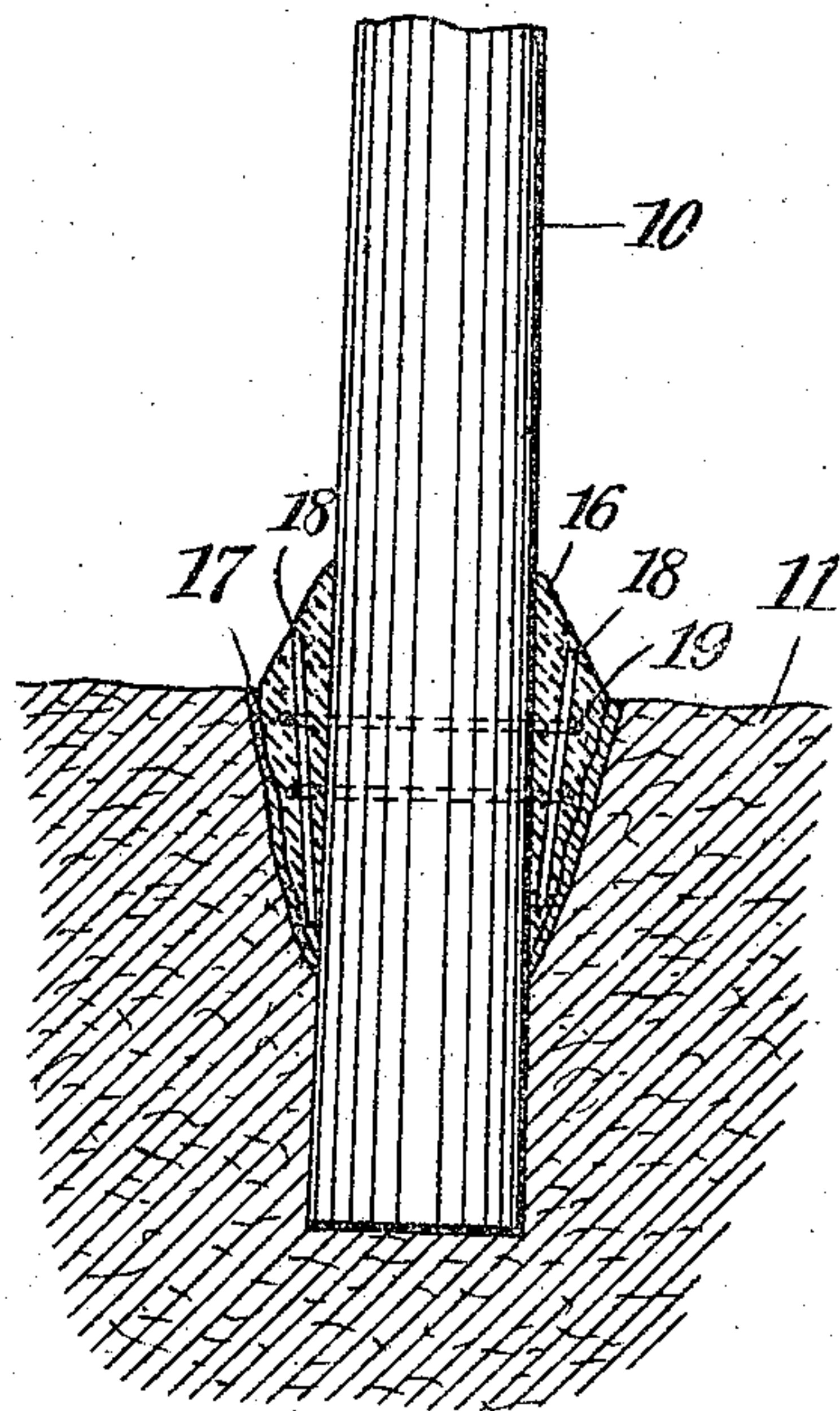


Fig. 3.

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HENRY PAGE FOLSOM AND HOWARD JONES, OF CIRCLEVILLE, OHIO.

STERILIZING AND PRESERVING POSTS AND POLES.

No. 894,619.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed October 12, 1907. Serial No. 397,104.

To all whom it may concern:

Be it known that we, HENRY PAGE FOLSOM and HOWARD JONES, citizens of the United States, and residents of Circleville, in the county of Pickaway and State of Ohio, have invented a new and Improved Method of Sterilizing and Preserving Posts and Poles, of which the following is a full, clear, and exact description.

10 This invention relates to certain improvements in methods of treating poles and posts already erected in the earth and which may have become decayed or infected either adjacent the surface of the earth or at any point therebelow, and the object of the invention is to so treat the post or pole as to thoroughly disinfect the same to stop decay and kill any germs or parasites that may be at work upon the same, and, at the same time, to prevent further access of germs, air, insects, or other cause of decay, infection, or deterioration.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which

Figure 1 is a view showing a pole having the earth or other material surrounding the same excavated in preparation for the treatment of said pole; Fig. 2 is a view similar to Fig. 1, showing one form of construction whereby the disinfecting liquid is held in engagement with the pole; and Fig. 3 is a view showing the pole at the completion of the operation.

As above stated, our improved process is especially adapted for treating posts or poles set in the ground, but it is, of course, independent of the use to which the pole may be put. The process is applicable to telegraph or telephone poles, fence posts, or any other wooden pole or post having one end inserted in the ground. In carrying out our process in connection with a pole or post 10 having the lower end thereof inserted in the ground 11, we excavate the earth or other material from about the pole for a distance of from six to twenty inches, dependent upon the extent of the infection or decay, and thus form an annular opening or cavity 12, as illustrated in Fig. 1. The pole at its infected point is then treated with a liquid disinfectant, said liquid being retained in engagement with the infected part for a material length of time. For holding the liquid

disinfectant in engagement with the infected part, we may, if desired, insert a temporary sleeve 13 illustrated in Fig. 2 and of a size somewhat larger than the pole. The sleeve may be made of any suitable water-tight material and the lower end thereof is closed to prevent the escape of the solution. If desired, we may close the space between the sleeve at its bottom and the post or pole by a packing material 14 of asphaltum or other adhesive material impervious to moisture. The annular chamber formed by the pole, the sleeve 13 and the packing 14 is then filled with a liquid disinfectant, which may consist of an insecticide, germicide, or any other suitable solution for treating the pole, said solution depending upon the nature of the infection or deterioration. The liquid may be applied at any suitable temperature from the boiling point down to the temperature of the atmosphere, depending upon the condition of the post, and is retained within the chamber for a sufficient length of time to permit of its entry into all of the interstices, cracks and hollows of the post, and to be drawn by capillary attraction to a slight distance above and below the upper and lower liquid levels. After the liquid has had sufficient time to thoroughly saturate the wood and to disinfect the same, the remaining liquid is removed and the temporary sleeve is withdrawn. After the removal of the liquid and the sleeve, the excavation is filled with a suitable self-hardening disinfecting material, as, for instance, concrete mixed with well-known germicidal chemicals, and this material, as illustrated at 16 in Fig. 3, not only takes the place of the earth excavated from about the pole, but also extends above the ground; that is, it slopes from the outer edge of the excavation upward to the pole to shed off water running down the pole.

In place of the concrete, any suitable mixture of Portland or other cement, together with sand, pebbles, or crushed stone may be employed, or we may employ asphaltum pitch mixed with the sand, pebbles or stone, the pitch being melted together with the chemicals and poured into the opening in a hot condition, the heat aiding in the disinfecting or sterilizing action. As the pitch cools it becomes sufficiently hard to be durable and firm. The mixture not only prevents the entrance of deteriorating agents into engagement with the pole, but also

maintains a permanent disinfectant to neutralize the effect of any germs of decay which may have remained unaffected by the disinfecting solution or may find access to the infected point.

5 Instead of using the temporary sleeve 13 for retaining the solution in place, we may, if desired, merely line the opening about the post with a thin layer of cement, pitch, or asphaltum, as illustrated at 17 in Fig. 3. 10 This lining to the opening retains the solution in place while it is acting upon the post, and also serves as a mold for the reception of the hardening material 16, when the latter is 15 inserted.

In connection with the concrete 16, we may, if desired employ metal reinforcements to prevent the concrete from cracking or breaking and to better retain it in position. 20 As shown in Fig. 3, there are employed a plurality of metal reinforcing bars 18 extending in the same general direction as the post, and a plurality of reinforcing rings 19 encircling the post.

25 Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. The method of sterilizing poles erected in the ground, consisting in excavating about 30 the infected portion of the pole, forming a substantially water-tight chamber about said infected portion, filling said chamber

with a liquid disinfectant, and later filling the opening formed by the excavating with a self-hardening material.

2. The method of sterilizing poles already 35 erected, consisting in excavating about the infected portion of the pole, forming a substantially water-tight chamber about said infected portion, filling said chamber with 40 a liquid disinfectant, removing the excess of disinfectant after it has remained in the chamber a sufficient length of time, and filling the opening formed by the excavating 45 with a self-hardening material containing a disinfectant.

3. The method of sterilizing poles already erected, consisting in forming a substantially 50 water-tight chamber about the infected portion of the pole, filling said chamber with a liquid disinfectant, removing the excess of disinfectant after a sufficient length of time, and encircling the infected portion with a self-hardening material containing a disin- 55 fectant.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HENRY PAGE FOLSOM.
HOWARD JONES.

Witnesses:

SAMUEL WARD,
GEORGE W. MORRISON.