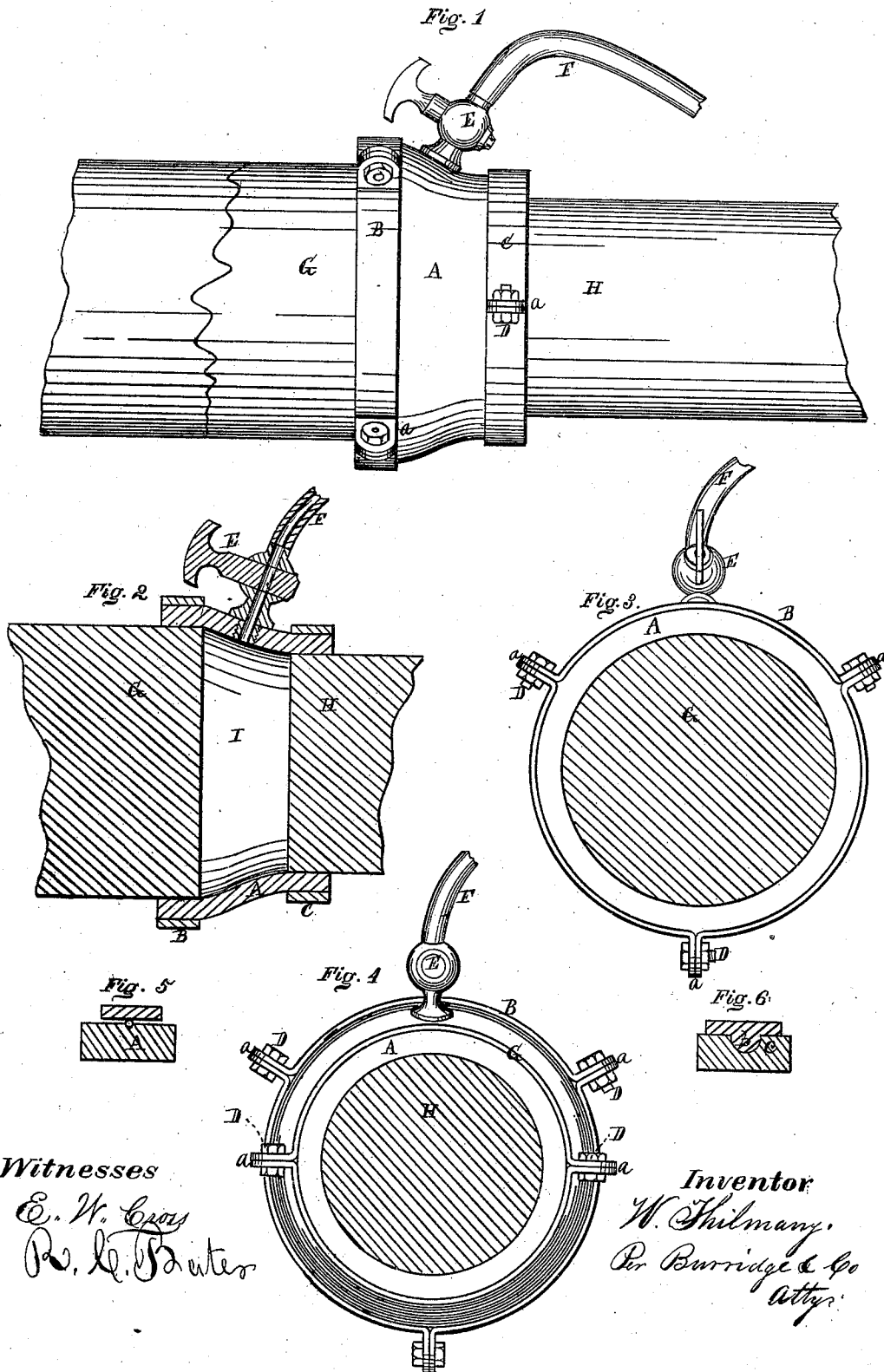


W. THILMANY.

APPARATUS FOR IMPREGNATING TIMBER WITH ANTISEPTICS.

No. 177,770.

Patented May 23, 1876.



Witnesses

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IMPROVEMENT IN APPARATUS FOR IMPREGNATING TIMBER WITH ANTISEPTICS.

Specification forming part of Letters Patent No. **177,770**, dated May 23, 1876; application filed April 1, 1876.

To all whom it may concern:

Be it known that I, WALDEMAR THILMANY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Apparatus for Impregnating Timber with Antiseptics; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side view of the apparatus as applied to the timbers. Fig. 2 is a longitudinal section. Figs. 3 and 4 are transverse views. Figs. 5 and 6 will be referred to.

Like letters refer to like parts in the several views.

This invention is an apparatus for conducting the process of charging timber with antiseptics for their preservation from decay. The apparatus is constructed and operated substantially as follows:

The apparatus referred to consists of an elastic band or ring, A, of rubber, or other suitable material, rubber being preferred for this purpose. On each end of the band is fitted a metal clamp, B and C, respectively, as will be seen in Figs. 1 and 2. Said clamps may consist of two or more sections or arcs of a circle, the ends of which are turned outward, forming ears, in which bolts D are inserted, whereby the sections are connected to each other and clamped tightly around the band, as will be seen in the drawings. E is a stop-cock, secured in the band A, and to which is attached a hose, F. The practical application of the above-described apparatus, to the timbers for the purpose specified is as follows:

In practice it is found convenient to treat two pieces of timber or logs at once, and which pieces of timber may be both of a size or of unequal size or lengths, as shown in the drawings, in which G and H represent two logs or timbers. The ends of the timbers are cut straight across, and are then brought close to each other, leaving a space between them,

as will be seen in Fig. 2 at I. Over the proximated ends of the two logs is placed the band A, as shown in said Fig. 2. Should there be a difference in the size of the two logs, as shown in the drawings, the elasticity of the band will allow it to stretch and adapt itself to this difference; also, the clamps may be adjusted to this difference by means of the bolts D, which may be left of considerable length for that purpose. Said clamps, it will be seen, are bound around the two ends of the band respectively, thereby clamping the band tightly to the ends of the timbers, covering the space I, as will be seen in Fig. 2. The logs thus prepared are now charged with the antiseptic solution, which, by means of a pump, hydrostatic pressure, or other suitable means connected to the apparatus by the hose F, is forced through the stop-cock E into the space I between the logs, thence into the pores of the wood, thereby charging the timber with the chemicals, for the purpose specified. In the event extraordinary pressure is expected to be exerted in order to charge the timber, to prevent the band from being forced from the logs, a clamp may be used, having a rib along the inner side, as will be seen at b, in Fig. 6, which represents a transverse section of a clamp with the rib buried in the band c. This rib will prevent the band from pulling out from under the clamp. In place of the rib a piece of wire may be placed around the band under the clamp, as will be seen in Fig. 5. This expedient, however, will not often be resorted to, as the band can be bound sufficiently tight to the logs without.

In making the clamp in several sections it will readily adapt itself to the ends of logs that may not only be of various diameters, but of irregular shape; hence, strong and tight joints will always be secured by the use of the jointed clamps. By the use of this apparatus two logs can be treated at once, obviously requiring but little more time than would be needed in treating one only.

The chemicals designed to be used are chlo-

ride of barium and sulphate of copper; but other chemicals may be used with the apparatus for the same purpose.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the elastic ring or band A, clamps B and C, consisting of two or more sections each, stop-cock E, and pipe F, substantially as described, and for the purpose set forth.

2. The elastic band A, open at each end to receive a log, in combination with clamps B and C, and pipe F, in the manner as described, and for the purpose specified.

WALDEMAR THILMANY.

Witnesses:

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