

(Model.)

W. F. MOULTON.

WATER TUBING.

No. 246,187.

Patented Aug. 23, 1881.

Fig. 1.

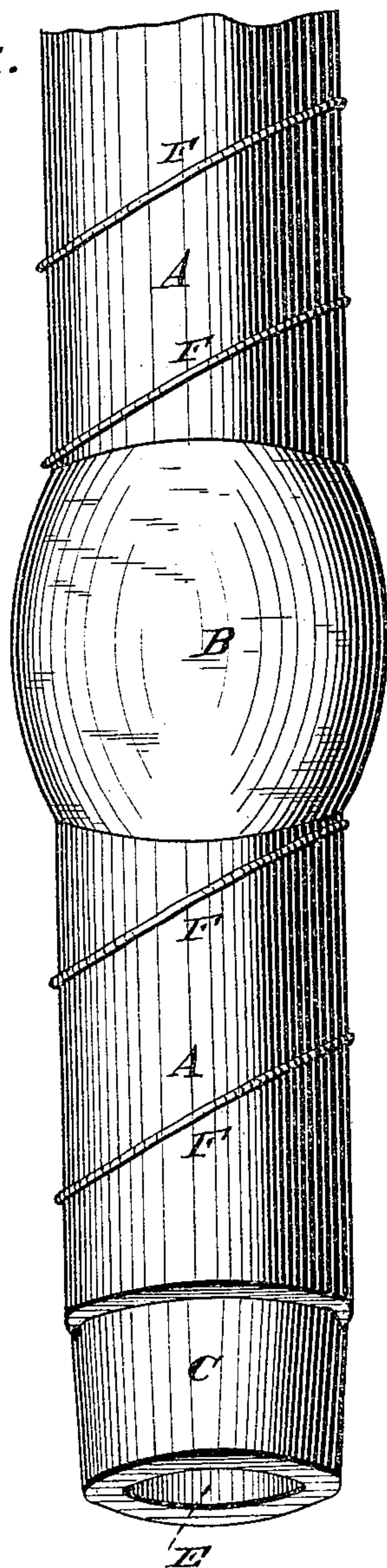


Fig. 2.

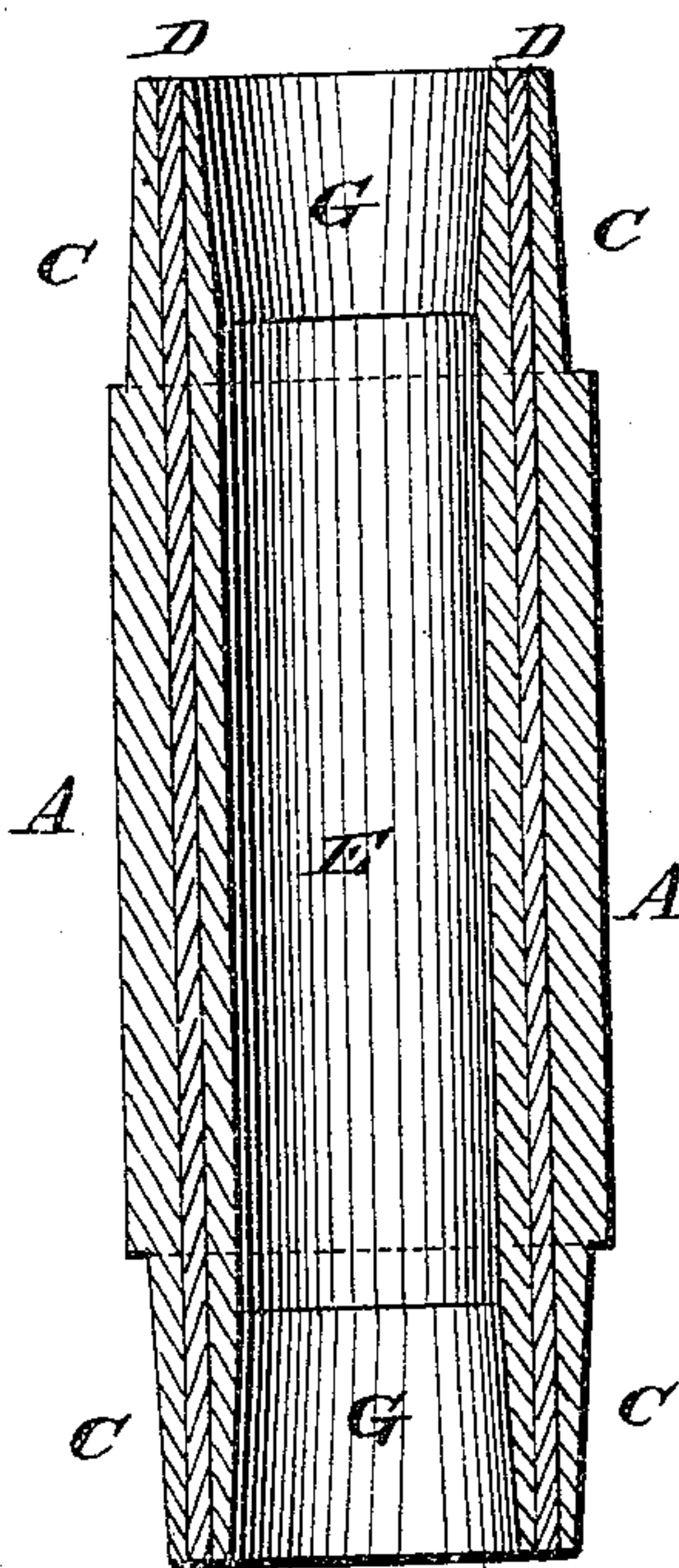
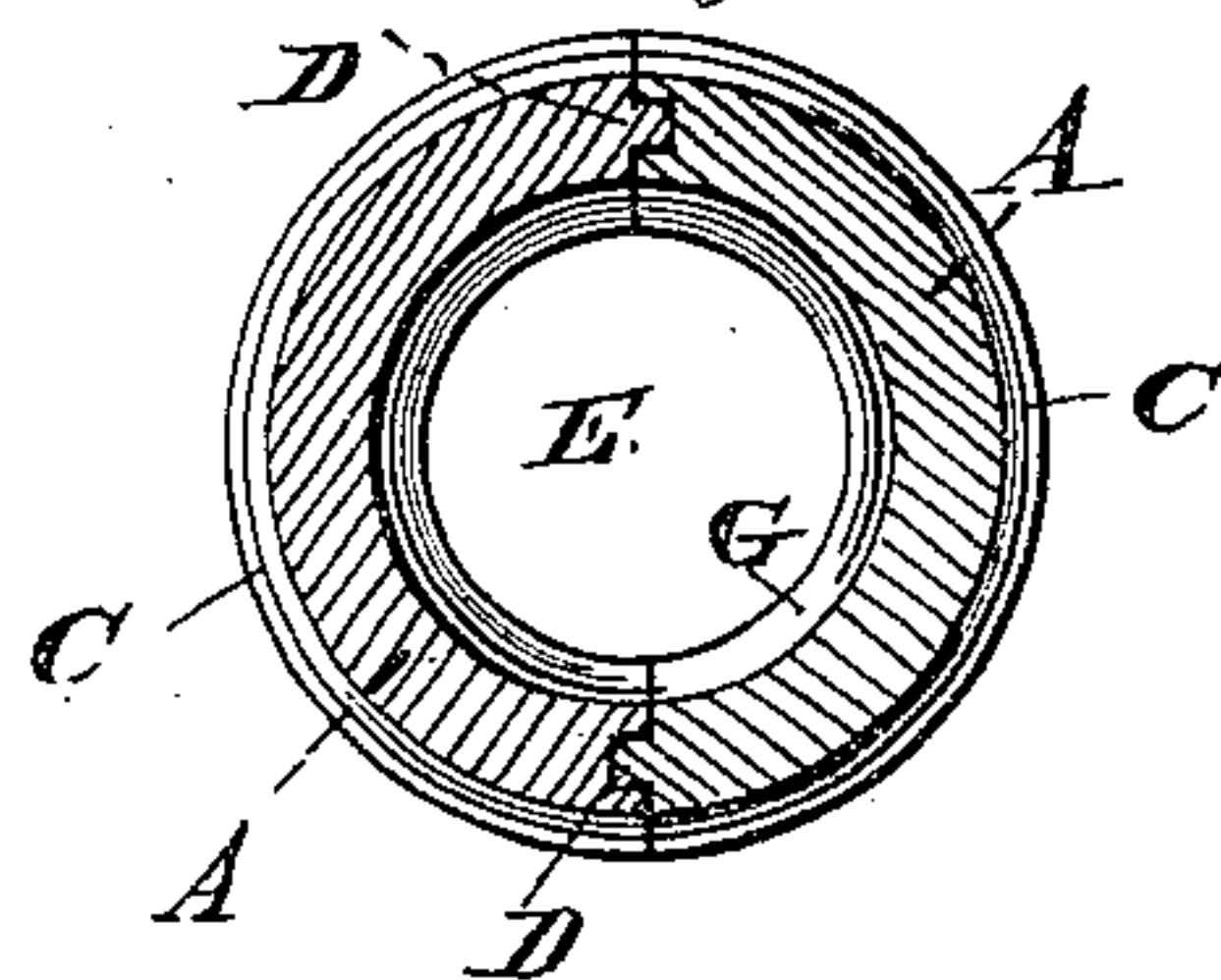


Fig. 3.



Witnesses:

L. L. Lawrence.  
James Lewis.

Inventor:

William F. Moulton.  
per Charles E. Allen,  
Attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM F. MOULTON, OF JERICHO, VERMONT.

## WATER-TUBING.

SPECIFICATION forming part of Letters Patent No. 246,187, dated August 23, 1881.

Application filed May 7, 1881. (Model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. MOULTON, a citizen of the United States, residing at Jericho, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Water-Tubing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved construction of the water-tubing for which United States Letters Patent were granted to O. W. Stearns, under date of May 6, 1862, and numbered 35,186, which said patent was subsequently assigned to me, and which I now own. My improvement in said patent consists, principally, in the tapering of the interior surface of the tenon of the tubing from within outward, for the purpose of allowing for the expansion or swelling of the tubing at its extremities without thereby contracting the size of the channel or bore at these points.

In the accompanying drawings, Figure 1 is a perspective view of a section of the tubing. Fig. 2 is a longitudinal section of the same; and Fig. 3 is a transverse section.

A A are semi-cylindrical channeled pieces of wood with edges correspondingly grooved and tongued to fit each other, thus forming, when properly matched, a tube with a uniform smooth channel or bore for the passage of water, the joints being water-tight.

B is a metallic coupling or ferrule, which tapers from the center toward each end, and into which the tenons C, which are correspondingly tapered, are tightly driven.

D D are the matching pieces of the tubing A.

E is the channel or bore of the tubing A.

F is the wire which is wound around the tub-

ing to retain the parts rigidly together and enable the tubing to successfully resist any pressure which may be exerted from within.

G is the channel or bore of the tenons C. Its interior diameter is the same as that of the tubing. By being rimmed from the extremity of the tubing it is made to taper gradually outward, so that its exterior diameter is somewhat greater than its interior, in order that the otherwise uniform size of the channel or bore of the tubing may not be contracted by the inward expansion or swelling of the wood at the extremities of each section of the tubing A.

Finding from practical experience in the use of this tubing that where no provision of this character is made the passage for the water at these points frequently becomes so contracted as to practically reduce the carrying capacity of the tubing to that of its least diameter at the extremities of each section, I have devised this simple and effectual improvement, which consists in the enlarging the bore of the tenons to the extent of their liability to contraction.

With this device I succeed in preserving, under all circumstances, a uniform channel throughout the entire length of the tubing.

The tubing is better preserved from decay by being boiled in impervious coating.

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

In a water-pipe, a section of pipe having the tenons on its ends enlarged internally, so that should the ends or tenons be contracted in size the internal bore of the pipe will not be contracted thereby, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM F. MOULTON.

Witnesses:

CHARLES E. ALLEN,

CHAS. F. LEWIS.