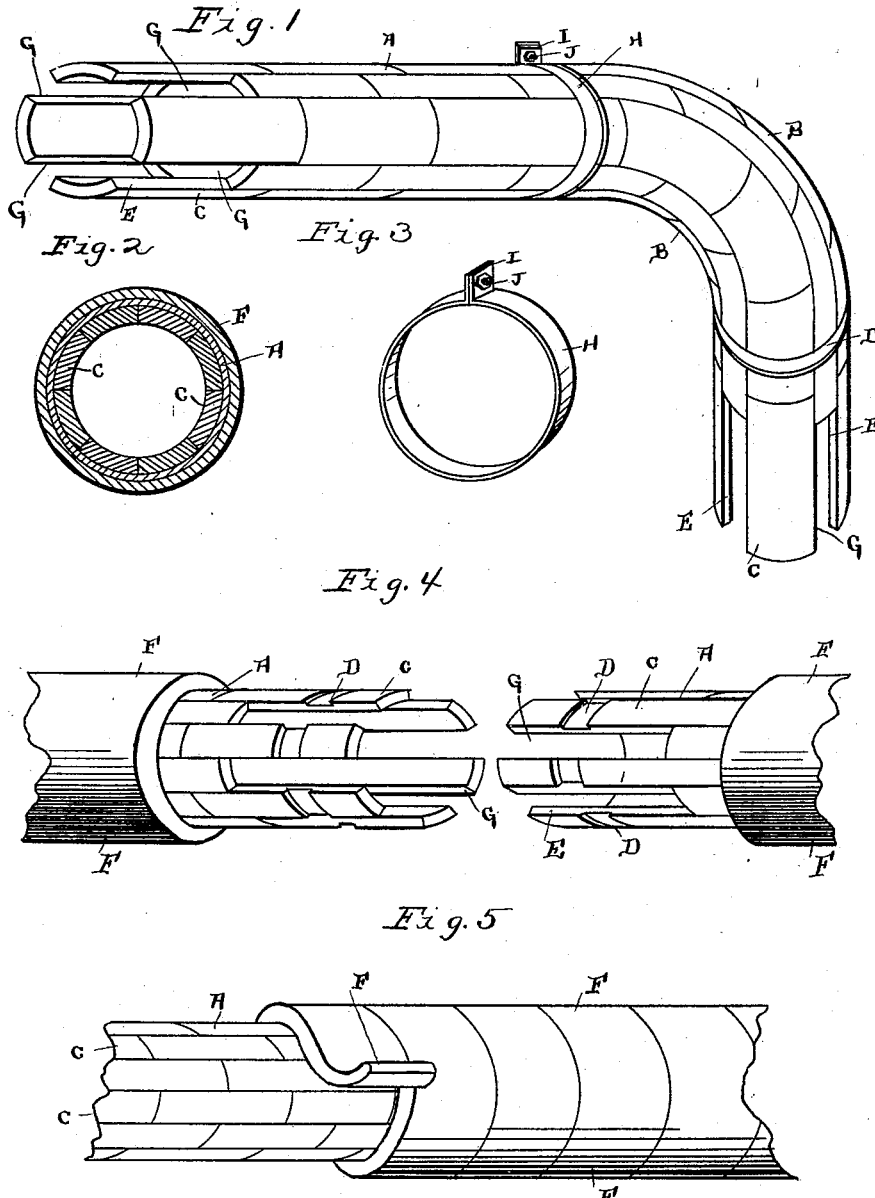


(No Model.)

M. D. ARMS.  
WOOD WATER PIPE.

No. 490,892.

Patented Jan. 31, 1893.



Witnesses  
Thos. H. Milstead.  
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# UNITED STATES PATENT OFFICE.

MELFORD D. ARMS, OF SAN DIEGO, CALIFORNIA, ASSIGNOR OF ONE-HALF  
TO FRANK R. STRONG, OF SAME PLACE.

## WOOD WATER-PIPE.

SPECIFICATION forming part of Letters Patent No. 490,892, dated January 31, 1893.

Application filed November 8, 1892. Serial No. 451,404. (No model.)

### *To all whom it may concern:*

Be it known that I, MELFORD D. ARMS, a citizen of the United States, and a resident of San Diego, in the county of San Diego, State of California, have invented a new and useful Improvement in Wood Water-Pipe in Combination with Wood Veneering; and I do hereby declare that the following is a full, clear, and exact description of my said invention, reference being had to the accompanying drawings.

My invention relates to wood water pipe constructed out of wood staves having smoothly beveled edges placed together in a suitable form, and bound tightly together by suitable iron hoops or bands at desired points on same, and when thus constructed the pipe is covered with wood veneering held firmly to the pipe by suitably prepared cement.

The following description fully explains the nature of my said invention, and the manner in which I proceed to construct, apply, and use the same.

Figure 1 is a perspective view of the wood water pipe, one end of which shows an elbow connected and firmly held by bands, while the position of the open ends is for coupling or continuing the length of same, as desired. Fig. 2 is an end section view of the wood pipe showing the position of the staves and wood veneer surrounding the same. Fig. 3 represents one of the metal spring bands for holding the pipe together and securing coupling joints. Fig. 4 is a perspective view of the coupling ends of pipe ready to be coupled together, also showing the groove around the same for receiving the iron band for holding same together, and the veneer covering pipe for the continuing of said coupling as shown. Fig. 5 is a perspective view of wood pipe constructed of staves, being covered by wood veneering held around same by suitably prepared cement.

Similar letters refer to similar parts throughout all the views.

"A" is a wood pipe constructed of any size, out of any sized wood staves. "B" an elbow constructed in like manner out of staves "C;" and "D" represents a groove cut around the pipe in which a spring metal band "H" is placed and is brought tightly together by screw bolt "J" passing through lips "I" forming the band "H," and "E" represents the beveled edges of the staves "C," similar to ordinary barrel staves.

"F" is the wood veneering which is wound around the pipe and held in position by prepared cement. "G" the openings formed by the alternate position of the staves "C" while constructing the pipe "A." The end of another pipe made in the same manner but having reversed openings "G" constitutes a coupling. These couplings are secured in a substantial manner by bands "H" fitting in grooves "D," and tightened by bolt "J" through lips "I," after which a suitable coating is formed either upon the veneering "F" or around the circumference of the pipe "A," when the said veneering is wound around said pipe tightly, consequently by the aid of the cement the said veneering is held firmly around said pipe, thus forming a perfectly constructed wood water pipe of great strength and utility.

My invention will thus be seen to be the construction of a wood water pipe, free from leakage, out of bevel edge staves of any desired length, placed together in the form of a pipe in the manner shown in all the figures. When thus constructed, suitable wood veneer is applied with suitably prepared cement, which firmly seats the said veneer, thus forming a solid embodiment of all the parts as shown in constructing water pipe of the material and in the form set forth. Couplings may be made at any point desired on any length of piping in the manner described.

Having thus fully described my invention, what I claim and desire to secure by Letters Patent is—

A wood pipe constructed of suitable staves having beveled edges, and formed exteriorly with circumferential grooves, in combination with a continuous covering of wood veneerings secured to said pipe by a cement coating, and a spring band or clasp surrounding the pipe within the grooves, substantially as shown and for the purpose set forth.

In witness whereof I have hereunto affixed my signature in presence of two witnesses.

MELFORD D. ARMS.

Witnesses:

JOHN B. STANNARD,  
FRANK R. STRONG.