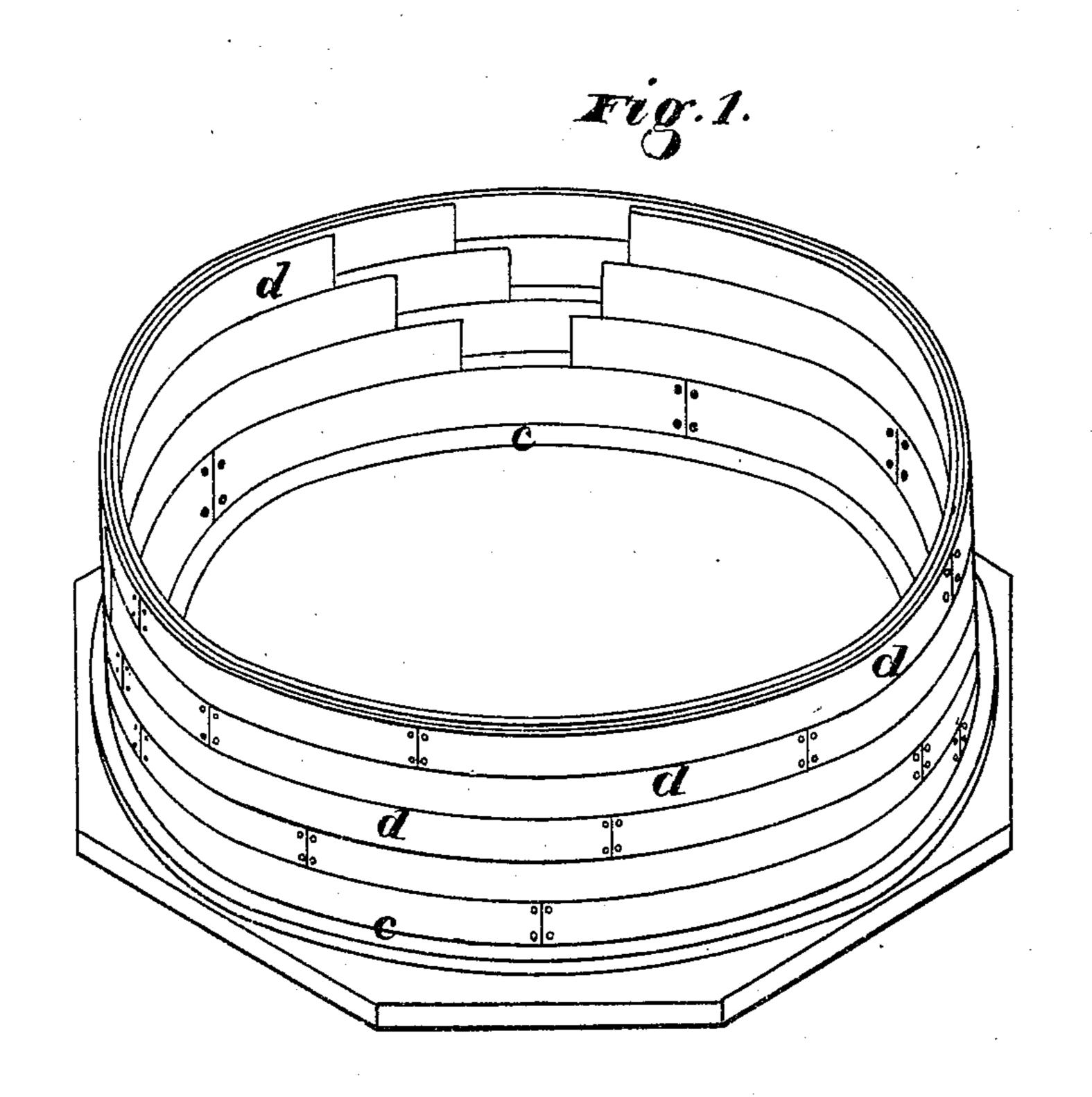
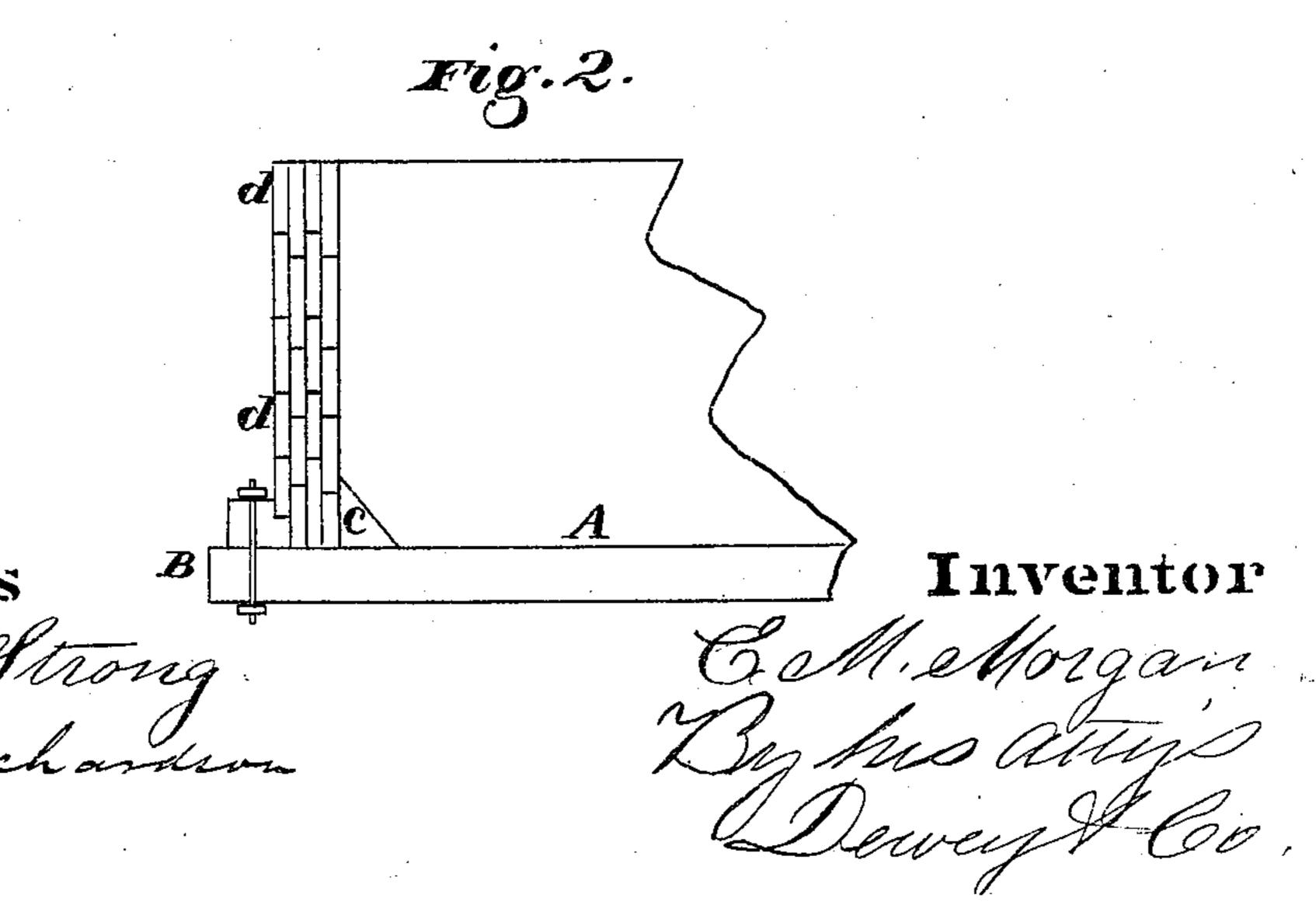
E. M. MORGAN.

CONSTRUCTION OF WOODEN TANKS.

No. 179,041.

Patented June 20, 1876.





UNITED STATES PATENT OFFICE.

EDGAR M. MORGAN, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN F. AGER, OF SAME PLACE.

IMPROVEMENT IN THE CONSTRUCTION OF WOODEN TANKS.

Specification forming part of Letters Patent No. 179,041, dated June 20, 1876; application filed May 13, 1876.

To all whom it may concern:

Be it known that I, EDGAR M. MORGAN, of San Francisco city and county, State of California, have invented Improvements in the Construction of Wooden Tanks; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My improvement in the construction of tanks consists in building up the sides of the tank of two or more thicknesses of overlapping applied horizontally.

In order to more fully represent and describe my invention, reference is had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of my tank.

Fig. 2 is a section of the tank.

Let A represent the bottom or base of the tank, which may be made of wood or other suitable material. This bottom or base I make larger than the intended circumference of the tank which is to be constructed upon it, so as to give a projecting rim, B, outside of the tank. I then take boards d, of any desired length, width, and thickness, and bend them to the proper curvature to give the desired circumference of tank. These bent boards I place one outside of another, so that each course will break joint with the course next to it, and continue building upward, breaking the joint until the desired height of tank and thickness of wall are obtained. The end of each board I nail to the middle of the board in the

course next to it, and, as the boards are arranged to break joints, it will be impossible, if more than two courses are used, to have any nails passing entirely through the wall or sides. In the angle which is formed by the meeting of this wall with the bottom, both inside and outside of the tank, I secure a strip, c, which will not only secure the wall in place, and preserve a tight joint around the bottom of the tank, but will also serve as a brace to strengthen it.

If desired, the inside of this tank can be lined with cement or other covering, to protect the wood and prevent the water from boards, which are properly bent, so as to be coming in contact with the nails. By this means I am able to construct a strong and durable tank for containing liquids at a com-

paratively small expense.

No iron hoops or bands are required, as in the construction of tanks with upright staves, and there is no danger of the tank falling to pieces in case it is left empty for a few hours; but every part is strongly supported and fastened.

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

A tank constructed of two or more thicknesses of boards, d, which are arranged to overlap each other at the end and edge joints, and built upward to the desired height, substantially as and for the purpose described.

In witness whereof I hereunto set my hand and seal.

EDGAR M. MORGAN. |L. s.| Witnesses:

GEO. H. STRONG, C. M. RICHARDSON.