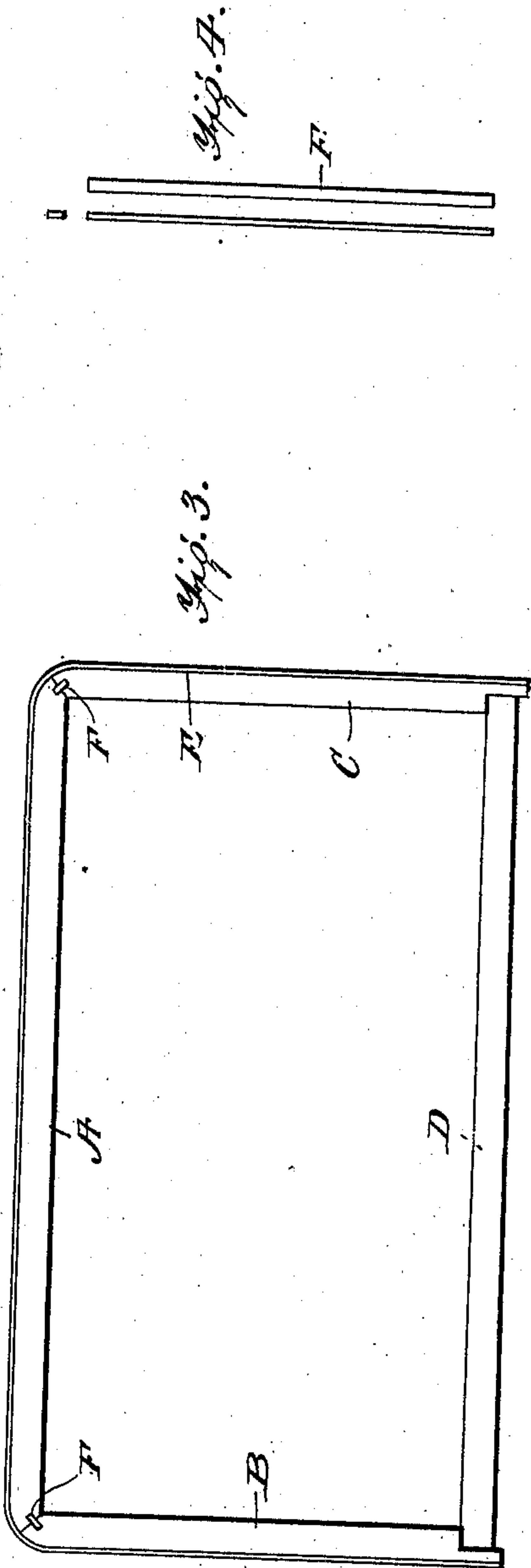
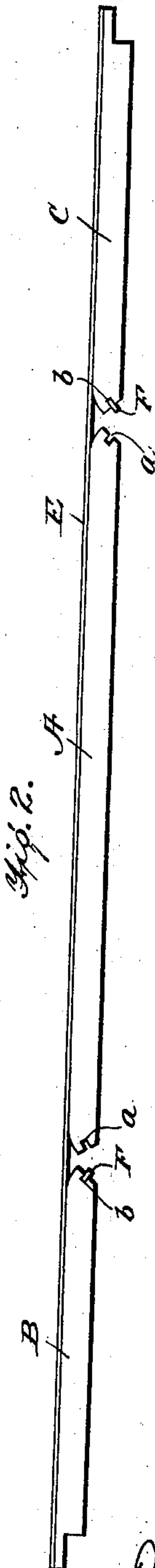
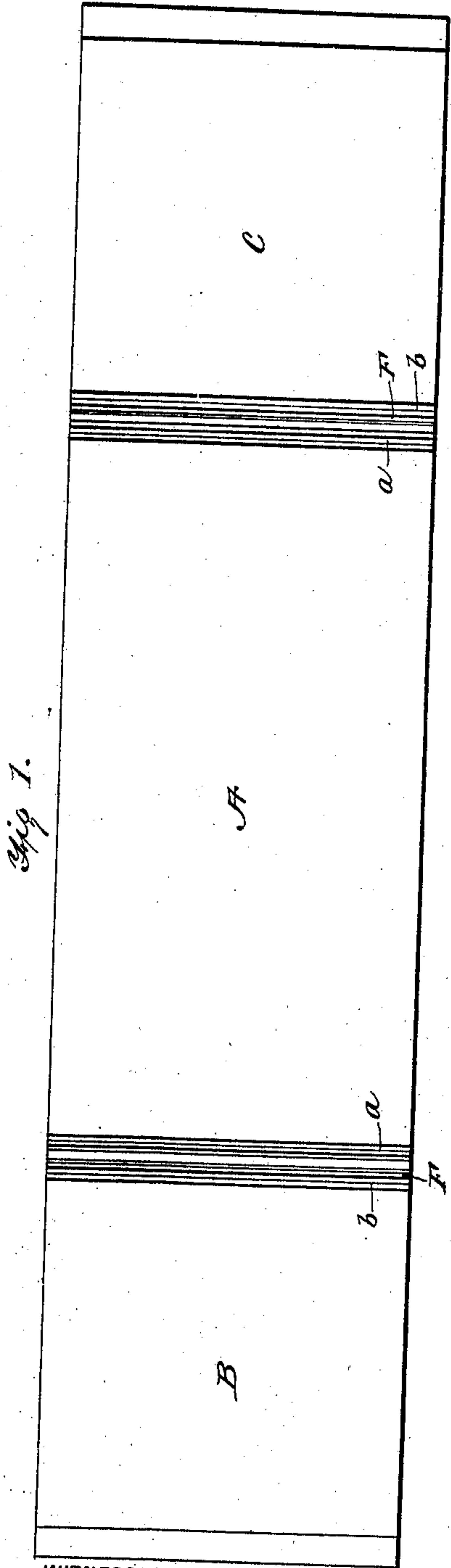


D. F. WHITMORE.  
METHOD FOR CONSTRUCTING BENT WOOD TANKS.  
APPLICATION FILED JAN. 14, 1910.

963,491.

Patented July 5, 1910.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## METHOD FOR CONSTRUCTING BENT-WOOD TANKS.

963,491.

Specification of Letters Patent.

Patented July 5, 1910.

Original application filed June 14, 1907, Serial No. 379,020. Divided and this application filed January 14, 1910. Serial No. 538,154.

*To all whom it may concern:*

Be it known that I, DANIEL FRANCIS WHITMORE, a citizen of the United States of America, and a resident of the city of Trenton, county of Mercer, and State of New Jersey, have invented certain new and useful Improvements in Method for Constructing Bent-Wood Tanks, of which the following is a specification.

This is a divisional application of my original application No. 379,020, filed June 14th, 1907, for tanks.

The object of my invention is to improve the construction of tanks, especially wooden tanks, designed for flushing purposes, to lessen the number of parts, and to simplify the making and putting together of the tank and thereby to provide an improved, durable, strong and water-tight tank.

In the construction of tanks which are made of several pieces dove-tailed together or otherwise secured, it is important that as few joints as possible should exist, inasmuch as moisture is apt to force its way through said joints in time, and also because after a time the joints are apt to work loose, and it is also important, if possible, to have the sides and front of the tank made of a continuous unbroken piece of wood or such other material as may be used in the construction of the tank.

Wood is the most usual material employed in the manufacture of such tanks, and it is important that the sides and front should be of considerable thickness to secure the necessary strength. The rounded front corners must also be of good thickness and difficulty has heretofore arisen in securing this desired thickness without multiplying the number of parts and joints and thereby importing an undesirable weakness into the structure.

To remedy these defects and to accomplish these objects I make my improved tank with substantially strong and thick side-pieces, front, and back-pieces, and secure the front and side-pieces at the meeting corners by a single key at each corner, while at the same time I reinforce the sides and front and make a permanent watertight body by covering the front and side-pieces with a single continuous piece of veneer, which extends entirely over their outer surfaces and thereby forms a solid watertight surface at the corners as well as at the sides and front.

In the accompanying drawings I have

shown one form of tank embodying my invention, in which:

Figure 1, shows the side-pieces and front attached to the veneer strip and spread out flat. Fig. 2, is a top view of the same. Fig. 3, is a top view of the tank body assembled together. Fig. 4, shows the relative size and shape of the key, as to length, breadth and thickness.

Same letters indicate similar parts in the different figures.

A is the front piece.

B, C, are the side-pieces.

D, is the rear or back-piece.

E, is the continuous veneer covering for the sides and front of the tank including the rounded corners.

F, is the key by which the edges of the front piece and the front edges of the side-pieces are fastened together, by aid of the grooves *a, b*, in which the key fits snugly.

The method of forming and associating the tank is as follows:—Suitable pieces for the front, back, and sides are first formed out of suitable material, as wood, of desired strength and thickness, the forward edges of the side pieces being formed with suitable grooves, and the edges of the front piece being also formed with grooves, so that they may be ultimately joined by suitable keys. A strip of veneer of sufficient width to correspond with the height of the tank is then prepared of suitable length to form the entire front, and sides, of the tank as a continuous, unbroken, facing. This veneer is glued, cemented or otherwise united to a strip of crinoline or other water-proof material. When this union has thoroughly set, the veneer is spread out flat and by suitable glue or cement the front and side pieces are firmly united with the veneer, being laid thereon in such a way as to leave sufficient space between them to allow for the bend at the corners. Suitable keys for joining the sides with the front piece are then inserted in the grooves of the side pieces so as to project toward the edges of the front piece. The parts are now ready for bending into shape. This is done by carefully bringing the side-piece around into a position at right angles to the front piece, the keys entering the grooves of the front piece, as the corners close until finally the body of the tank is formed. The back is now set in place. It is obvious that in most cases it will be



necessary to render the veneer temporarily pliable by steaming before the bending begins. The bottom of the tank is then inserted in the usual way and the tank becomes complete and ready to be finished according to taste.

The great simplicity of construction, the few parts involved, and the quickness with which the structure can be made and put together are, I think, obvious without further explanation. And it will be also seen that a tank thus made will have the strength and finish, without the disadvantages of more elaborately built tanks.

I claim:—

1. The method of constructing bent-wood tanks which consists in forming the side-pieces and front separately, grooving the edges thereof and securing them upon a continuous piece of wood-facing with spaces between them to allow for the rounded corners when bent into position, and then bending the facing so as to bring the side-pieces into position at the desired angles to the front, and causing separate uniting keys to enter

the edge-grooves of the front and side-pieces whereby a complete and watertight exterior is secured for the tank without break or joint.

2. The method of constructing bent-wood tanks which consists in forming the side-pieces and front separately, forming projecting keys on the front edges of the side pieces, and forming edge grooves on the front piece; and securing said side pieces, and front upon a continuous piece of veneer with spaces between them to allow for the rounded corners when bent into position, and then bending the veneer so as to bring the side-pieces into position at right angles to the front, and causing the projecting keys of the side-pieces to enter the edge-grooves of the front, whereby a complete and watertight exterior is secured for the tank without break or joint.

DANIEL FRANCIS WHITMORE.

Witnesses:

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