No. 709,204. Patented Sept. 16, 1902.

S. CLARK.

WOOD BENDING.

(Application filed Jan. 6, 1902.)

(No Model.)

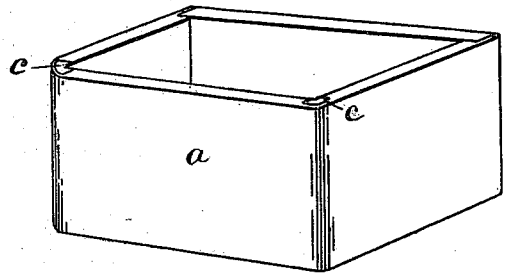


Fig. 1.

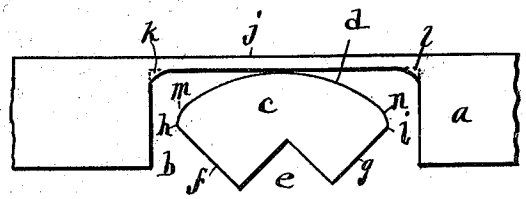


Fig. 3.

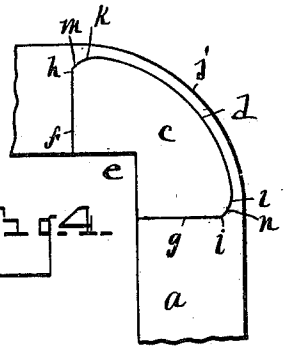


Fig. 4.

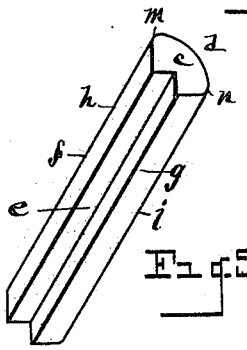


Fig. 5.

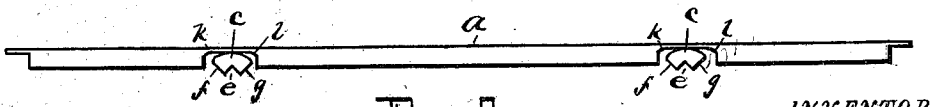


Fig. 2.

WITNESSES.

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WOOD-BENDING.

SPECIFICATION forming part of Letters Patent No. 709,204, dated September 16, 1902.

Application filed January 6, 1902. Serial No. 88,481. (No model.)

To all whom it may concern:

Be it known that I, SPENCER CLARK, a citizen of the United States, residing at Northville, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Wood-Bending to Form Round Bent Corners; and I 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, which form a part of this specification.

My invention pertains to wood-bending to form round bent corners; and it consists of the novel constructions and combinations hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective, illustrating my invention. Fig. 2 is an edge view of a continuous piece of wood prepared to be bent about end pieces shown in plan in connection therewith. Fig. 3 is an enlarged view in detail of the construction to form one of the corners. Fig. 4 is a view in plan, showing one of the completed corners. Fig. 5 is a view in perspective, showing one of the corner-pieces.

My invention is particularly applicable to the construction of water-closet tanks and is shown in connection therewith in Fig. 1. I do not, however, limit myself to the adaptation of my invention solely to water-closet tanks, as it may be applied to stair construction, to music-boxes, and other analogous constructions.

In carrying out my invention, *a* represents a continuous piece of wood of any desired length, width, and thickness, from which the wall of a tank, box, or other structure is formed. In Fig. 1 said piece is shown as forming one side and the two ends of a tank, the same being bent to form two round corners of the tank. This piece or board is provided with one or more corner recesses or grooves *b*, each to receive a corner-strip *c*, about which the board or piece is bent. This corner-strip is made rounding on one side thereof, as shown at *d*.

In the formation of water-closet tanks I prefer that the opposite face of the strip shall be formed with a rectangular groove, (shown at *e*.) The strip is formed with lateral surfaces *f g*, which diverge in the direction toward the rounded portion *d* of the strip, forming angles or corners *h i* between the lateral surfaces *f g* and the rounded portion *d*. In forming the recesses *b* in the piece *a* it is obvious that the outer wall *j* of the recesses is made quite thin to be suitably bent about the curved portion of the strip to form a rounded corner. Heretofore in similar constructions this wall *j* of the recess has been made with a straight inner face throughout the recesses, terminating laterally in rectangular corners, as indicated by the dotted lines in Fig. 3, thereby weakening the wall at said corners, in consequence of which weakening said wall was liable to break at said corners in bending the same about the rounded surface of the strip. This has heretofore been a very serious difficulty. To remedy this difficulty is the special feature of my invention. To overcome this difficulty, I reinforce the wall of the groove adjacent to the corners of the groove, as shown at *k l*, by thickening said wall adjacent to said corners. To allow for said thickening or reinforcement of said walls at *k l*, the rounded surface *d* of the strip entering the groove is correspondingly cut away adjacent to the corners *h i* thereof, as shown at *m n*. This permits the reinforced portions *k l* of the wall to fit in snugly about the corner-strip. This reinforcing of said wall adjacent to the corners of the recess and the corresponding cutting away of the corner-strip adjacent to the corners *h i* thereof enables the wall *j* to be bent about the corner-strip without breakage and successfully accomplishes the bending of the wood about the corner-strip. The wall at the back of the recess, it will be seen, is reinforced adjacent to the corners of the recess by thickening, and thereby strengthening, the walls at these points.

What I claim as my invention is—

A bent corner structure comprising a piece of wood formed with one or more recesses having a thin outer wall, and a corner-strip

in said recess rounded on the side thereof adjacent to said wall, said piece bent about the curved side of the corner-piece, said wall thickened and reinforced adjacent to the corners of said recess, and said corner-strip correspondingly cut away adjacent to the reinforced portions of said wall.

In testimony whereof I sign this specification in the presence of two witnesses.

SPENCER CLARK.

Witnesses:
C. A. DOLPH,
W. E. AMBLER.