E. C. DITTMAR.

PANEL CONSTRUCTION.

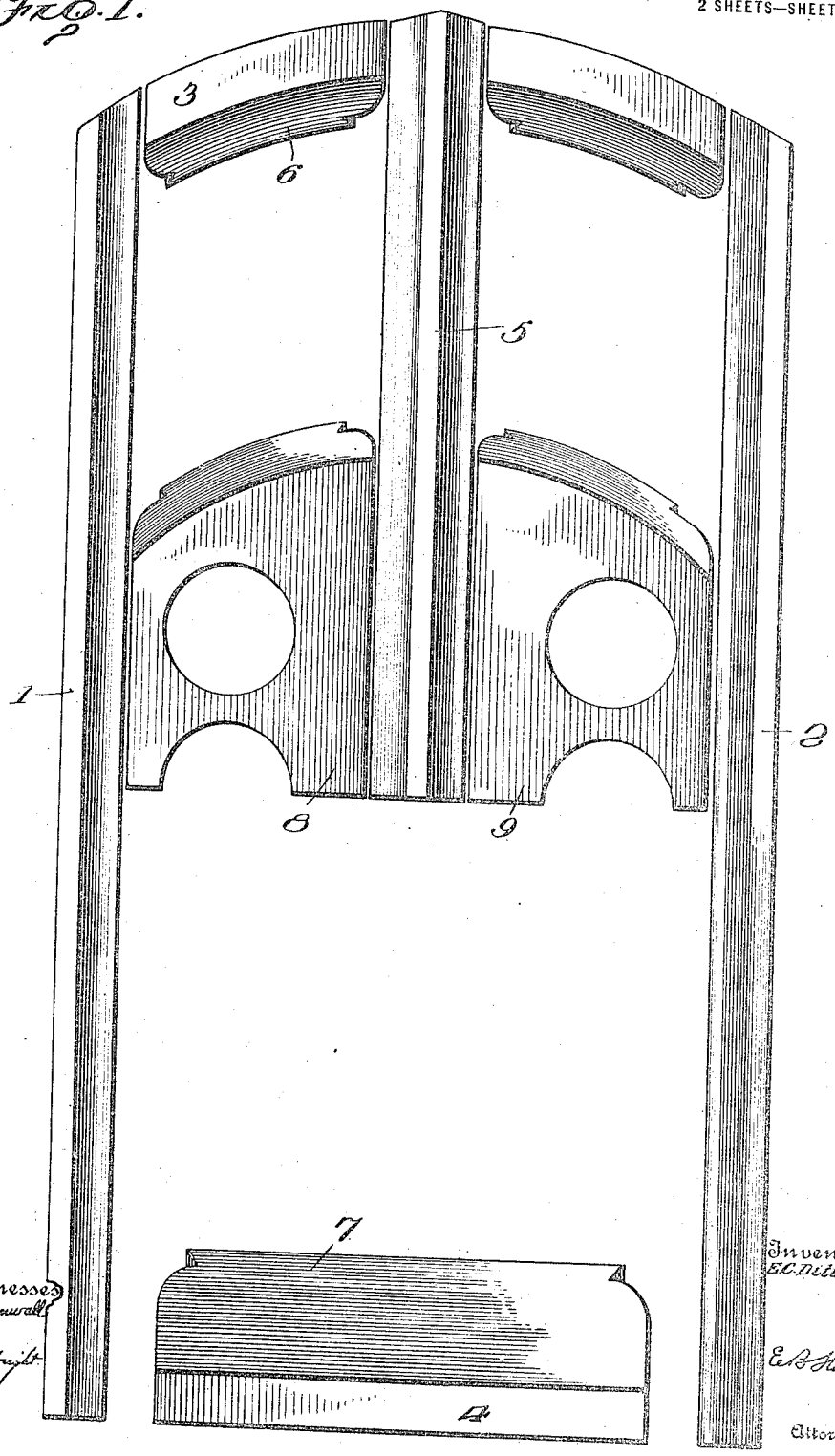
APPLICATION FILED MAR. 17, 1916.

1,247,381.

Patented Nov. 20, 1917.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses
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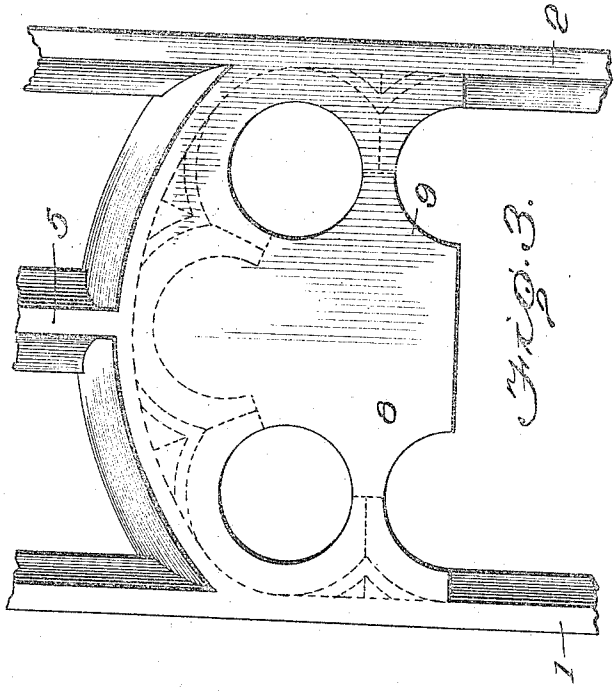


Fig. 3.

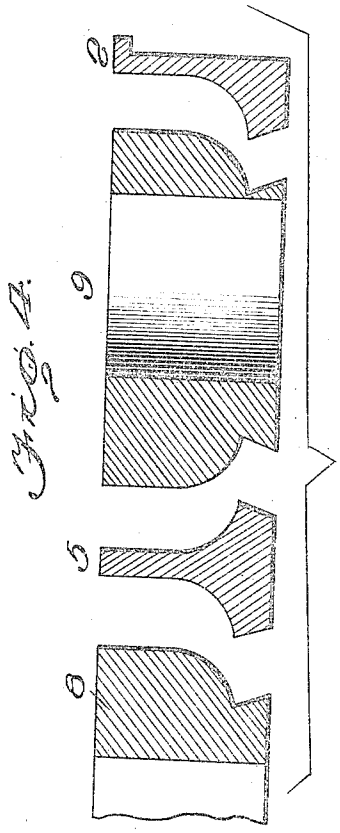


Fig. 4.

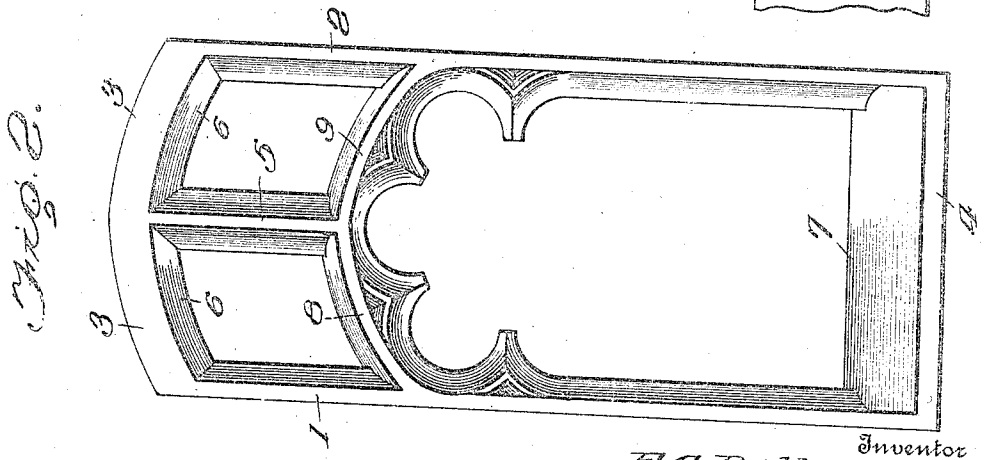


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

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PANEL CONSTRUCTION.

1,247,381. Specification of Letters Patent. Patented Nov. 20, 1917.

Application filed March 17, 1916. Serial No. 84,935.

To all whom it may concern:

Be it known that I, ELMER C. DITTMAR, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Panel Constructions, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a method of constructing panels used for ornamenting walls, church pews and the like, and for various other purposes; the object being to construct a panel of strips of stock material assembled in such a manner that the cost of forming acute and obtuse angles, is greatly reduced.

Another and further object of my invention is to produce a panel in which the stock material employed in the construction of the same, is all arranged with the grain running the same way, so as to give the complete panel the effect of being constructed of a single piece.

Another and further object of the invention is to produce a panel out of a series of rabbeted stock pieces assembled in such a manner that acute and obtuse angles are formed at the junction of the stock pieces which eliminates the hand-work now employed in producing a panel of this construction, thereby greatly reducing the cost of production and providing a panel in which the appearance of the same is not changed, in any way.

Another and further object of the invention is to construct a panel of rabbeted strips which when assembled, and secured by glue or other adhesive material, form a panel with acute and obtuse angles at the junction of the stock pieces, these stock pieces being cut to the desired shape by machinery before being assembled, the central stock piece having openings formed therein to allow the milling tool to complete the desired design therein.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawings—

Figure 1, is a plan view of a series of stock pieces in position to be assembled to form the complete panel;

Fig. 2, is a plan view of the complete panel showing the central pieces milled to produce a Gothic design;

Fig. 3, is a detail plan view of a central portion of the panel, constructed of the stock pieces, showing in dotted lines, the central portion milled to the desired design; and

Fig. 4, is a transverse section through a series of stock pieces arranged to be assembled.

Like numerals of reference refer to like parts in the several figures of the drawings.

In carrying out my invention to produce a Gothic panel, I employ side stock pieces 1 and 2, which are provided with rabbeted inner edges adapted to receive the rabbeted edges of top and bottom stock pieces 3 and 4 herein shown having their opposite edges rabbeted to join with the side pieces 1 and 2.

The top pieces 3 are cut on the arc of a circle and their inner edges are also rabbeted to fit a central stock piece 5, the opposite sides of which are rabbeted to correspond with the top pieces 3 as clearly shown, so that when the panel is formed by the central piece, side pieces and top and bottom pieces, the top of the panel will be curved and the bottom of the panel will be straight.

The bottoms of the top pieces are provided with concaved faces 6 and the top of the bottom piece 4 is provided with a beveled face; it, of course, being understood that the formation of these pieces will be varied according to the Gothic design desired, but it will be noted that where these pieces join the central piece and side pieces, an acute angle is formed which eliminates the hand-work now employed for forming the angles at these points.

Arranged between the side pieces 1 and 2 are the central stock pieces 8 and 9, the tops of which are beveled and the side edges rabbeted to fit the rabbeted faces of the side pieces and central piece, these central pieces 8 and 9 being formed with openings as shown, so as to allow the milling tool to be inserted in order to cut away the central portion of the panel, thus formed, to produce a Gothic design as shown in dotted lines in Fig. 3.

In constructing the panel, the stock pieces 1, 2, 3, 4, 5, 8 and 9 are cut to the desired

length with their ends at the desired angles, as shown in Fig. 1, and these pieces are formed of stock material in which the grain of each piece runs in the same direction so that when these stock pieces are forced together and secured by adhesive material under pressure, a body portion for a panel is formed, which has the appearance of a panel formed of a solid piece of lumber.

The panel thus formed, is then milled away by an ordinary milling tool on the dotted lines, as shown in Fig. 3, to produce the central Gothic effect.

Previous to my invention, Gothic panels were constructed from a single plank which was first cut out to approximately the design desired, and the panel was then milled by a milling tool, but in forming the acute and obtuse angles, it was necessary that these angles be formed by hand, and, therefore, the cost of producing a panel was greatly increased, while with my construction, all of these angles formed, are by the joining of stock pieces together.

While I have shown and described a particular design for panels, I do not wish to limit myself to any particular design, the main object to be accomplished being to produce a panel out of a series of pieces of stock material cut to the desired shape and having rabbeted edges which are adapted to be united in such a manner that a panel can be constructed with acute and obtuse angles without employing hand labor for accomplishing this style of panel.

I claim:

1. An improvement in the art of producing panels comprising longitudinal and transverse elements similar to stiles, rails, mullions, and the like in which the inner, adjacent or component faces are molded or shaped to present substantial relatively salient portions, (previously formed by carving of an integral block,) which improvement consists in making those portions which lie transversely to the others separate therefrom and making the molded contour of one set of parts as the stiles or mullions continuous throughout the lengths of such parts and making the end surfaces of the parts of the other set as the rails, a complement of such molded contour, and fitting each rail and stile or mullion to form a design.

2. An ornamental open work panel formed of separate longitudinally and transversely disposed stock pieces having what are, in the finished product, their inner or confronting faces molded throughout their length to present substantial salient portions, the end surface of the transversely disposed pieces conforming to the molded contour of the longitudinal pieces.

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

ELMER C. DITTMAR.

Witnesses:
OLIVER J. DECKER,
BEATRICE M. BURNS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."