J. J. QUERTINMONT.

MOLDING FRAME FOR MAKING SHEET, PLATE, OR WIRE GLASS.

APPLICATION FILED OCT. 7, 1907.

911,679. Patented Feb. 9, 1909.

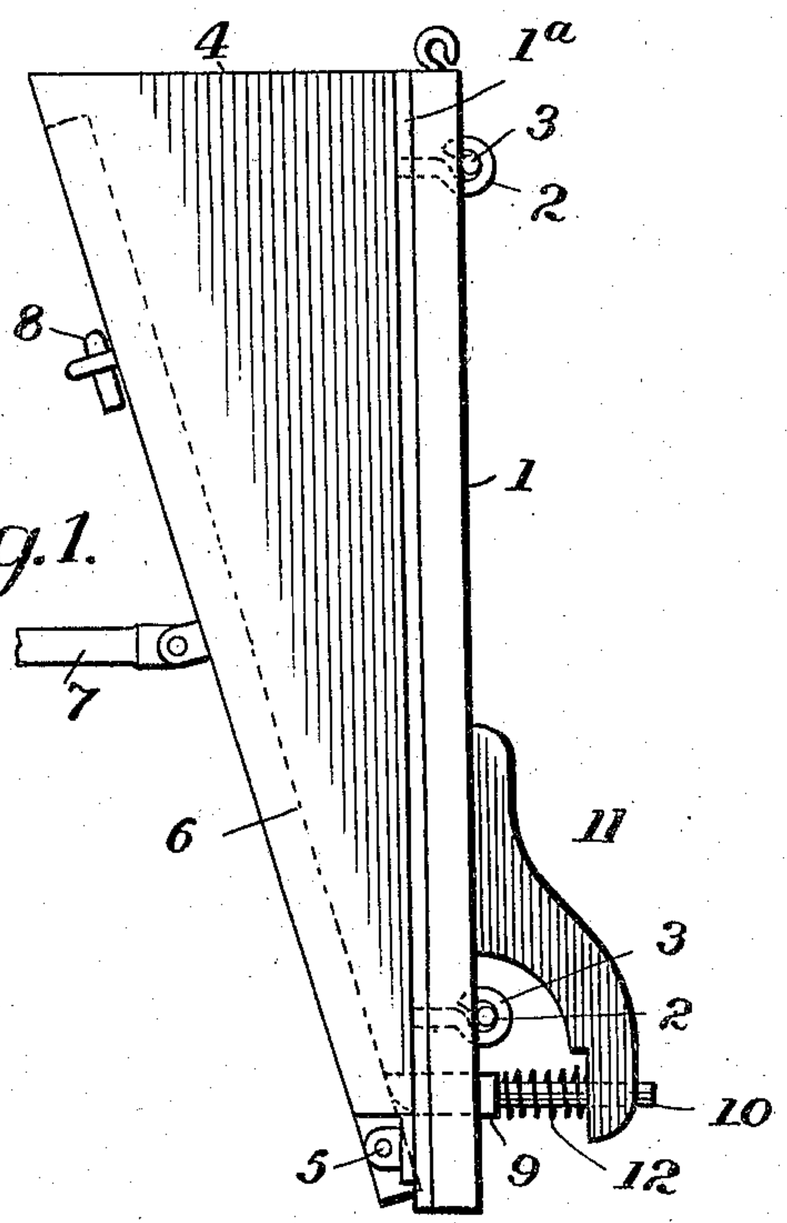

Fig. 1.

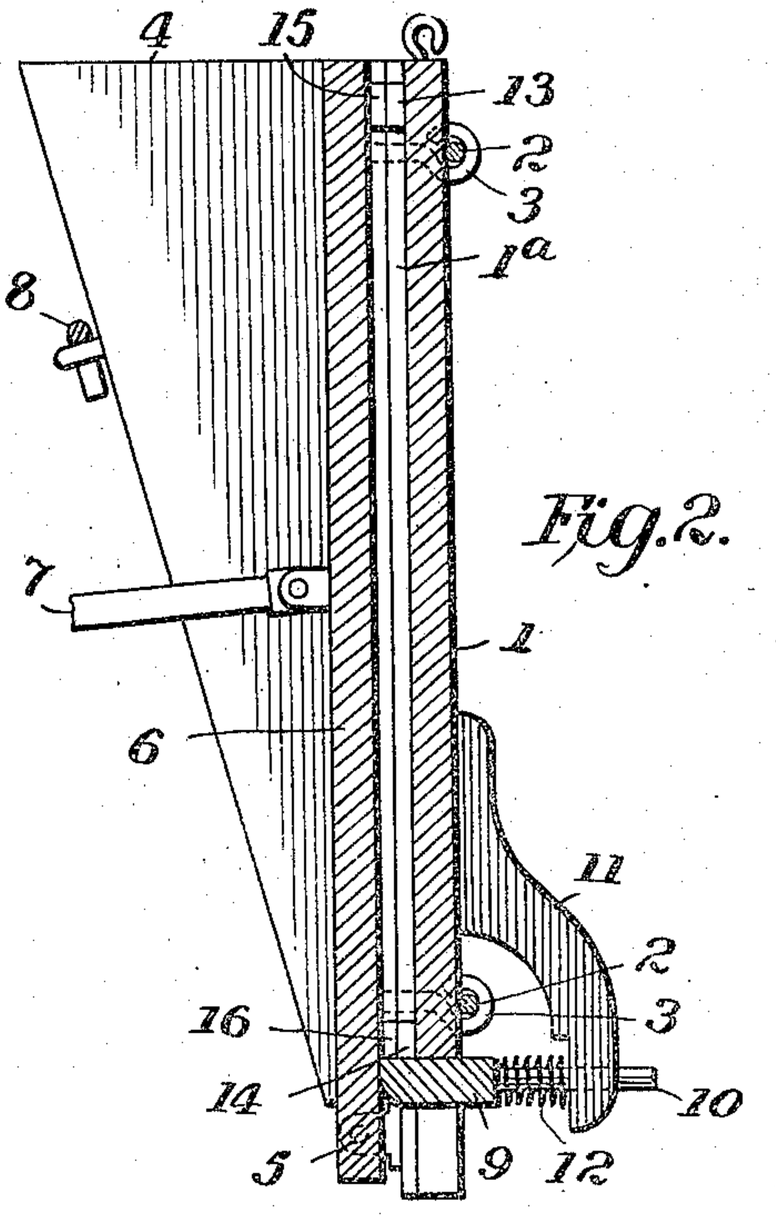

Fig. 2.

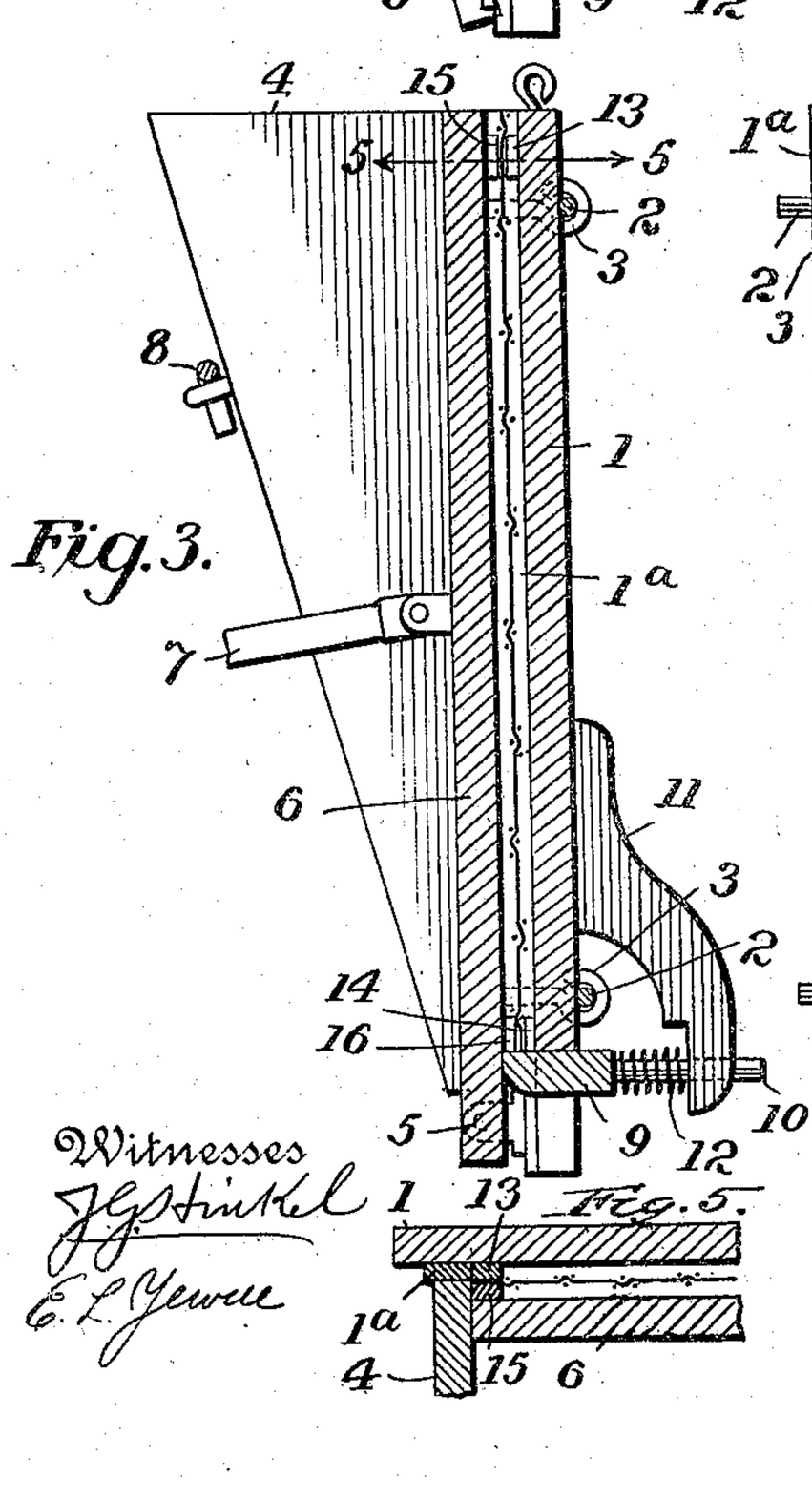

Fig. 3.

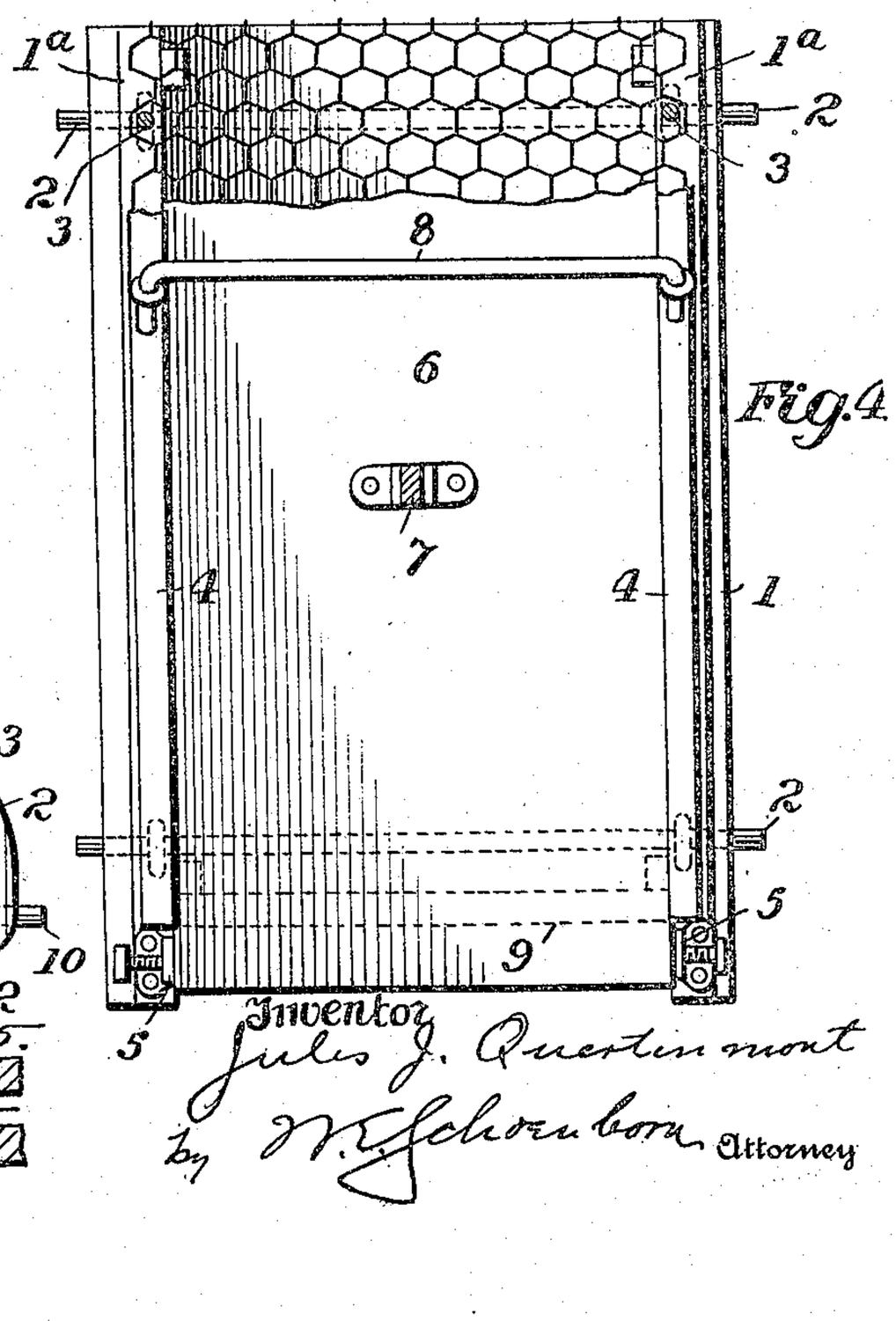

Fig. 4.

Fig. 5.

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UNITED STATES PATENT OFFICE.

JULES J. QUERTINMONT, OF POINT MARION, PENNSYLVANIA.

MOLDING-FRAME FOR MAKING SHEET, PLATE, OR WIRE GLASS.

No. 911,679. Specification of Letters Patent. Patented Feb. 9, 1909.

Application filed October 7, 1907. Serial No. 396,224.

To all whom it may concern:

Be it known that I, JULES J. QUERTINMONT, a citizen of the United States, residing at Point Marion, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Molding-Frames for Making Sheet, Plate, or Wire Glass, of which the following is a specification.

My invention relates to the molding of sheet, plate or wire glass and it is designed to provide a simple and efficient apparatus by which molten glass can be readily formed or compressed in order to insure a uniform and inexpensive product.

The object of the invention is to construct an apparatus which can be easily operated, repaired or cleaned and at the same time adapted for either sheet, plate or wire glass making.

The invention consists of structural features and relative arrangement of elements, which will be hereinafter more fully described and particularly pointed out in the appended claims.

In the one sheet of drawing, Figure 1, is a side elevation of the invention showing the movable side in its outer position; Fig. 2, is a vertical section showing the movable side in its inner position; Fig. 3, is a vertical section similar to that of Fig. 2, showing the manner of using the same for making wire glass. Fig. 4, is a front elevation of Fig. 3, partly broken away; Fig. 5, is a section on line 5—5 of Fig. 3.

Similar reference characters indicate corresponding parts in the several figures of the drawing.

Referring to the drawing, 1 represents the back wall of the mold having secured near its upright edges strips 1^a, 1^a. Side walls 4, 4, seated against the strips 1^a, 1^a and removably secured to the back wall by means of upper and lower eye-bolts 2, 2, which pass through the back wall 1 and strips 1^a, 1^a are held in position by means of rods 3, 3 passing through the outer eyes of the bolts 2, 2, and lying against the outer side of the back wall 1 as shown.

Pivotally secured to the lower end of the back wall by means of hinges 5, 5, and between the side walls 4, 4, is a movable front wall 6, adapted to swing on its lower pivot to either of its two extreme front or back positions as indicated in Figs. 1 and 2.

7 is an arm attached to the outer side of the front wall 6 and may be connected to any suitable mechanism for forcing the front wall towards the back wall. 8 is a removable stop for the pivoted front wall and consists of a transverse rod seated in eyelets fastened on opposite sides of the outer ends of the side walls 4, 4. Slidingly supported in said back wall at its lower end is a movable bottom 9 whose inner end is yieldingly forced against the inner side of the lower or pivotal end of the movable front wall 6.

10, 10 are pins connected to the movable bottom 9 having their outer or free ends guided in a suitable support 11, situated on each side of back wall and near the bottom. A coil spring 12, surrounds each of said pins 10, 10 abutting against the support 11, and movable bottom 9, thereby forcing said bottom against the movable front wall 6.

13 and 14 are respectively upper and lower stops fastened to the inner side of the back wall 1, and 15 and 16 are similar stops fastened on the front wall 6 and said stops are arranged so that the stops 15 abut against stops 13 and 16 against 14, and when the front wall 6 is swung into its extreme inner position a space is formed between the back and front walls as indicated in Figs. 3 and 5 which represents the thickness of the glass plate hereinafter described.

The mode of operation of the invention is as follows: When it is desired to make ordinary window plate, or sheet glass, the molding frame is opened by having its movable front wall assume its outer position as indicated in Fig. 1. A quantity of molten glass sufficient to make the desired width, thickness and length of glass is introduced into the bottom of the molding frame. Power is then applied to the arm 7 to force the movable front wall 6 towards the back wall 1 until further movement is arrested by the stops 13 and 15 and 14 and 16, coming in contact as indicated in Fig. 2. During the foregoing operation the molten glass which has been introduced into the mold has been forced up and made to occupy the space between the front, back and side walls thereby forming a sheet of glass as will be readily understood. When it is desired to make wire glass, the rods 3, 3, are removed from the eye bolts 2, 2, when said side walls can be removed from the back wall. A wire mesh of the proper dimensions is then placed on the strips 1^a, 1^a, as indicated in Figs. 3 and 4, and the side walls are then replaced and

locked in position on the strips 1ª, 1ª, and back wall 1, which at the same time firmly holds the wire mesh stretched in place inside and across the frame and from strip 1ª to the other as indicated in Fig. 5. As above described the proper quantity of molten glass is introduced into the mold and the operations above outlined repeated when the molten glass will be forced around the wire mesh and make a pane or sheet of glass having a wire mesh uniformly surrounded by glass on each side.

From the foregoing description of my invention it will be readily seen that I have devised means for carrying out the same wherein plate, window, or wire glass can be easily and cheaply manufactured with one form of apparatus.

Various changes may be made in the specific construction of the molding frame and said frame must not necessarily be used in a vertical form as it can be used in a horizontal position just as well.

While I have shown the preferred form of carrying out my invention I do not care to limit myself to these specific arrangements, as they could be modified in many ways without departing from the spirit of my invention and accomplish the same result.

What I claim as new and desire to secure by Letters Patent is as follows:—

1. A molding frame for making plate, window or sheet glass comprising an upright back wall, side walls attached to and extending from said back wall, and a movable front wall pivoted at one end to the bottom of the back wall and adapted to pass between the side walls.

2. A molding frame for making plate, window or sheet glass comprising an upright back wall, side walls attached to and extending from said back wall, a movable front wall pivoted at one end to the bottom of the back wall and adapted to pass between the side walls and a movable bottom supported in said back wall and abutting against the inner side and near bottom of the front wall.

3. A molding frame for making plate, window or sheet glass comprising an upright back wall, side walls removably connected to and extending from said back wall and a movable front wall pivoted at one end to the bottom of the back wall and adapted to pass between the side walls.

4. A molding frame for making plate, window or sheet glass comprising a back wall, side walls removably connected to said back wall, a movable front wall pivoted at one end to the back wall and adapted to pass between the side walls, and a spring pressed and movable bottom supported in said back wall and abutting against the inner side of the front wall.

5. A molding frame for making sheet or wire glass comprising a back wall having side strips attached thereto, upper and lower stops secured to the back wall adjacent to the inner faces of the side strips, side walls seated on said side strips and removably connected with the back wall, a movable front wall pivoted at one end to the back wall and adapted to pass between the side walls and upper and lower stops on the inner side of the front wall and adapted to register with the stops on the back wall.

6. A molding frame for making sheet or wire glass comprising a back wall having side strips attached thereto, upper and lower stops secured to the back wall adjacent to the inner faces of the side strips, side walls seated on said side strips and removably connected with the back wall, a movably front wall pivoted at one end to the back wall and adapted to pass between the side walls, upper and lower stops on the inner side of the front wall and a spring pressed and movable bottom supported in said back wall and abutting against the inner side of the front wall.

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

JULES J. QUERTINMONT.

Witnesses:
W. T. DEVLIN,
FLORISE DULIERE.