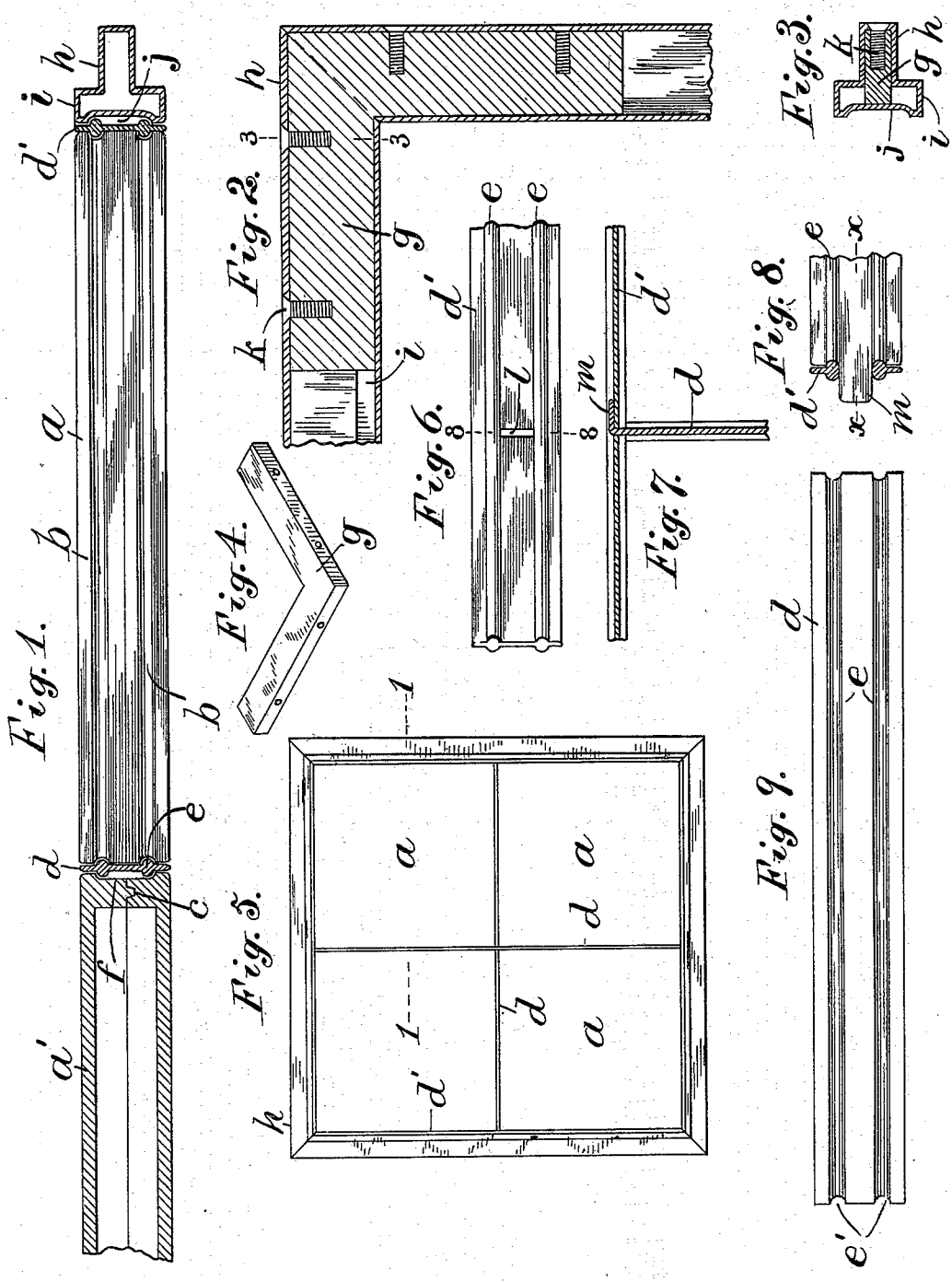
No. 651,943. Patented June 19, 1900.

J. WHITE.

FRAMING FOR TILES.

(Application filed Sept. 13, 1899.)

(No Model.)



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FRAMING FOR TILES.

SPECIFICATION forming part of Letters Patent No. 651,943, dated June 19, 1900.

Application filed September 13, 1899. Serial No. 730,355. (No model.)

To all whom it may concern:

Be it known that I, JAMES WHITE, a citizen of the United States, residing at New York, (Brooklyn,) county of Kings, State of New York, have invented certain new and useful Improvements in Framing for Tiles, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The present invention relates to a frame having border-strips and mullion-strips provided with double ribs upon their faces to engage doubly-grooved tiles. Such a frame is especially adapted to hold two-part glass tiles which are provided with a joint at the margin and each part formed with a groove to engage one of the ribs upon the frame.

Glass tiles may be used with prismatic surfaces to refract light or with plain surfaces and hollow interior to preserve the temperature of an apartment, and the present invention is designed especially for supporting a series of such tiles in or near a window-opening.

To facilitate the manufacture of the frame, the border-strips are made of the same pattern or cross-section as the mullion-strips, and sections of hollow rectangular tubing are employed for the body of the frame to give it sufficient strength and are molded or shaped upon their inner sides to engage the ribs upon the border-strips.

The details of construction which are claimed herein will be understood by reference to the annexed drawings, in which—

Figure 1 is a cross-section on line 1 1 in Fig. 5. Fig. 2 is a section through the plane of the frame at one corner at the middle of its thickness. Fig. 3 is a cross-section on line 3 3 in Fig. 2. Fig. 4 is a perspective view of the elbow-piece for one corner. Fig. 5 is an elevation of a frame containing four tiles. Fig. 6 is a side view of one of the border-strips near the junction of a mullion-strip. Fig. 7 is a section through the middle of the thickness at the junction of a border-strip and mullion-strip, taken on line $x\,x$ in Fig. 8. Fig. 8 is a section of the border-strip on line 8 8 in Fig. 6, with the mullion-strip projected through the slot in the border-strip; and Fig. 9 is a side view of a mullion-strip adapted to extend from one mullion-strip to another between two tiles.

All the figures are drawn of the natural size excepting Figs. 4 and 5, which are reduced, respectively, one-half and one-quarter.

In Fig. 1, a designates a tile having two grooves b upon its edges. a' designates the two parts of such a tile in section, showing a tongue c for centering the parts upon one another, the edges of the two parts being formed with a wide groove f to facilitate the introduction of the two parts upon opposite sides of the frame in making repairs of broken tiles. The mullion-strips d and border-strips d' are formed of thin flat bars with two longitudinal ribs e upon their opposite faces, so that both sides of the strip may engage the double grooves of the tile, as shown at d in Fig. 1.

The body of the frame is formed of T-shaped rectangular tubing in four sections, as shown in Fig. 5, united by internal elbow-pieces g. The hollow tubing is drawn with a relatively-thin shank h and a wider head i, having a longitudinal recess j upon its face adapted to receive the ribs e upon the border-strip d'. The elbow-pieces fit within the shank portion h and are retained in the corners of the frame by screws k. The border-strips d' are provided with mortises or slots l where the mullion-strips join the same, and each mullion-strip d is formed with a tongue m to extend through the slot, as shown in Fig. 8, and clench therein, as shown in Fig. 7.

In a frame with many tiles one set of the mullion-strips would be extended all the way across the frame, and the transverse mullion-strips would be cut into short divisions to engage the ribs e upon the longer mullion-strips. One of the division-strips d is shown in Fig. 9, being represented of the same length as the tile a, (shown in Fig. 1,) and is provided with the notches e' upon the ends to engage the ribs e upon the mullion-strips or border-strips d'. In making up such a frame with the grooved tiles the mullion-strips are first placed between the tiles and the border-strips then applied to the tongues m, which are clenched thereon. The body of the frame is then applied to the ribs upon the outer sides of the border-strips, and the corners of the frame are united by the elbow-pieces g and screws k, which hold the whole rigidly together upon the border-strips, which engage the recesses j in the body of the frame. The

T-shaped tubing for the body of the frame is drawn by the use of suitable dies, and the formation of the shank *h* thinner than the head *i* adapts the frame to be clamped between other parts of the same thickness as the frame.

The two-part tiles which are shown herein are readily made of glass by pressing each part in a mold and simultaneously forming the groove in the edge adapted to engage one of the ribs *e* upon the bars *d* or *d'*. Such tiles are claimed in my copending application, Serial No. 712,988.

The present improvements furnish a means for assembling and holding a series of such tiles in a frame with great economy and facility.

Having thus set forth the nature of the invention, what is claimed herein is—

1. A frame for framing glass tiles, comprising the T-shaped hollow tubing, with the flat elbow-pieces *g* secured within the leg of the T at the corners of the frame.

2. A frame for framing glass tiles, comprising the T-shaped hollow tubing with groove upon the face, and the flat elbow-pieces *g* fitted within the leg of the T and against the metal of the face and secured by screws extended through the walls of the tubing into the elbow-pieces, substantially as herein set forth.

3. A frame for glass tiles, comprising border-strips and mullion-strips having double ribs upon their faces, and a marginal frame of rectangular drawn tubing joined at the corners by internal elbows, and recessed upon the face to engage the double ribs.

4. A frame for glass tiles, comprising border-strips and mullion-strips having double ribs upon their faces, and the shorter division-strips being notched at the ends to fit movably upon the ribs of the adjacent strips.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JAMES WHITE.

Witnesses:
EDWARD V. SCHENCK,
F. W. THOMPSON.