Feb. 19, 1929. 1,702,626

T. BEYRLE

FRAME AND PROCESS OF MAKING SAME

Filed May 24, 1926

Fig. 1.

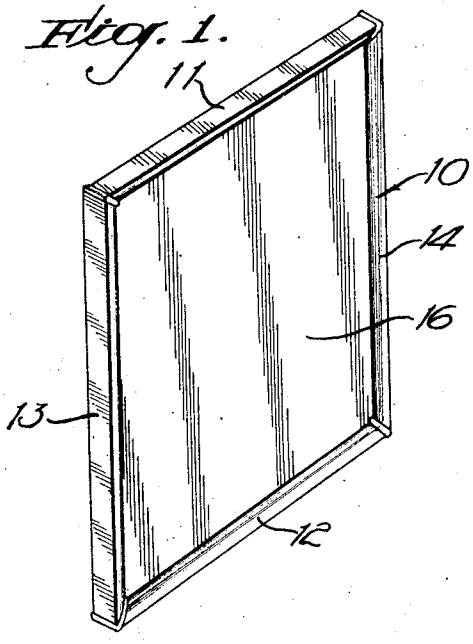


Fig. 2.

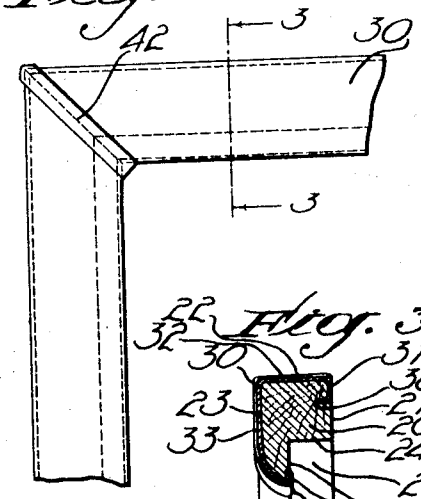


Fig. 3.

Fig. 7.

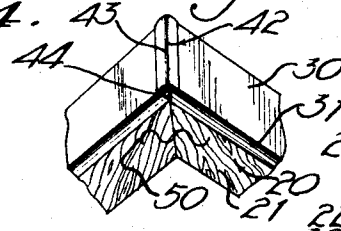


Fig. 4.

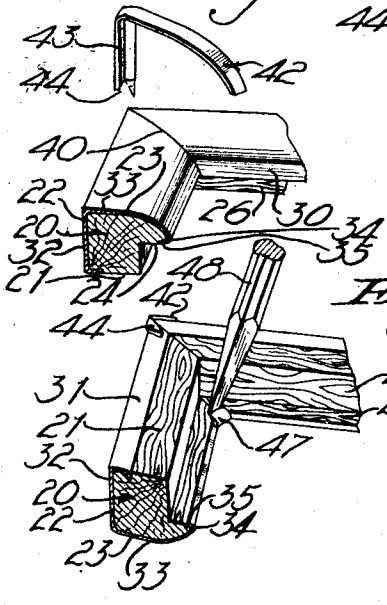


Fig. 5.

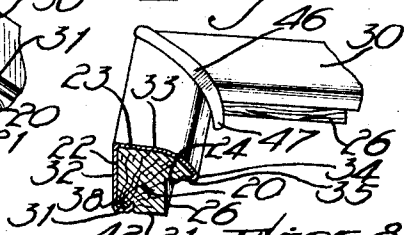
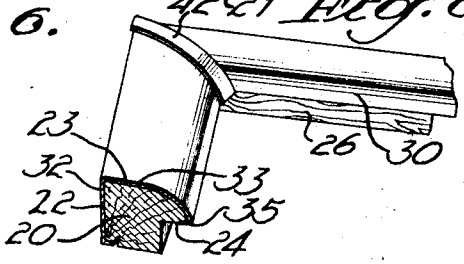


Fig. 6.

Fig. 8.



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UNITED STATES PATENT OFFICE.

THOMAS BEYRLE, OF LOS ANGELES, CALIFORNIA.

FRAME AND PROCESS OF MAKING SAME.

Application filed May 24, 1926. Serial No. 111,467.

My invention relates to a process of making metallic or semi-metallic perimetric frames, and particularly to a novel joint for attaching the frames members together.

In the forming of frames for pictures, mirrors and the like, which are adapted to be hung upon the wall of a dwelling, the greatest difficulty is to provide a strong and inexpensive joint for securing the frame members together at the corners of the frame.

It is an object of my invention to provide a new process for securing together the frame members of a perimetric frame by which a strong joint may be inexpensively formed.

It is a further object to provide a novel perimetric frame which is unusally strong, attractive in appearance, sanitary in use, and inexpensive to construct.

Further objects and advantages are made manifest in the following description and the accompanying drawing in which:

Fig. 1 is a perspective view of a perimetric frame of my invention.

Fig. 2 is a fragmentary detail view of a corner of the frame shown in Fig. 1.

Fig. 3 is a sectional view taken on the line 3—3.

Fig. 4 is a perspective view of a corner of the frame of my invention during a step of the process of its manufacture.

Fig. 5 is a perspective view of a corner of my frame in the step of its manufacture which follows that illustrated in Fig 4.

Fig. 6 is a perspective view which illustrates a step in the manufacture of a corner of my frame which follows the step illustrated in Fig. 5.

Fig. 7 is a perspective view illustrating the next step in the manufacture of a corner of my glass frame which follows the step illustrated in Fig. 6.

Fig. 8 is a perspective view illustrating a completed joint of the frame of my invention.

Referring specifically to the drawing, Fig. 1 shows a frame 10 having upper and lower frame members 11 and 12 and side frame members 13 and 14. The frame 10 is here shown as completely manufactured and as having a glass 16 installed therein The frame members 11, 12, 13 and 14 have a cross section as indicated in Fig. 3. In these members a base portion 20 is formed of wood which is given the shape shown by being run through a stripper. This shape is common to frame members employed generally in the construction of frames such as the frame of my invention. The wooden base 20 has a rear face 21, a perimetric face 22, and a front face 23. The rear face 21 is shorter than the front face 23 and joins the upper face 24 of a glass retaining recess 25 which has a rear face 26. The front face 23 of the wooden base 20 curves inwardly at its lower portion to join the lower edge of the face 26.

A sheet metal sheath 30 is formed about the wooden base 20 and has a rear portion 31 which contacts the upper border of the rear face 21, a perimetric portion 32 which is bent from the portion 31 to contact the outer face 22, and a front portion 33 which is bent from the portion 32 to contact the face 23, the inner edge of the portion 33 being crimped inwardly at 34 to form a retaining lip 35 which contacts the lower portion of the face 26. The portion 31 of the metallic sheath 30 has a lip 38 formed at its inner edge which is forced inwardly into the wooden base 20. The wooden base 20 thus covered with the metallic sheath 30 is first formed in long pieces from which frame members of any desired length are cut.

When it is desired to make a frame of rectangular form, as shown in Fig. 1, the frame members 11 and 12 are cut of an equal length, being mitered on their opposite ends at an angle of 45 degrees. The frame members 13 and 14 are also cut of an equal length and mitered on their opposite ends at an angle of 45 degrees. The frame members 11, 12, 13 and 14 are now placed together upon a flat table or working bench in the relation in which it is desired they be disposed in the completed frame shown in Fig. 1. When thus placed together the mitered faces of adjacent frame members will abut together as shown in Fig. 4. A surface line of juncture 40 will thus be formed where adjacent edges of the metallic sheath 30 of adjacent frame members meet.

A strip of metal 42 is formed, as shown in Fig. 4, for the purpose of connecting together the frame members at the corners of the frame. The strip 42 has a corner forming portion 43 which is formed in the shape of an angle iron and which is of the same length as the width of the portion 32 of the metallic sheath 30. The strip 42 is bent at the upper end of the corner forming portion 43 so as to form a portion 46 which is directed inwardly and downwardly, as shown, so that when the metallic strip 42 is placed over the corner formed by abutting frame members to cover

the line of juncture 40, the outer and front portions of the line of juncture 40 are covered by the strip 42. A retaining prong 44 is formed from the lower end of the corner forming portion 43 of the strip 42. This prong 44 is bent at right angles to the axis of the corner forming portion 43 so as to project over the outer rear corner of the joint and contact the rear face of the portion 31 of the metallic sheath 30. This prong 44 assists in holding the strip 42 in its covering position, as above described. When a strip 42 has thus been placed over each corner formed by adjacent frame members 11, 12, 13 and 14 which are held rigidly in the relative positions which it is desired they are to hold in the finished frame, the corner forming portion 43 of each strip 42 is soldered to the adjacent edges of outer metallic sheath portions 32 which meet on the line of juncture 40. The soldering of corner forming portions 43 of metallic strips 42 to the members 11, 12, 13 and 14, as above described, serves to join these members together into a single frame 10. The frame 10 is now turned over upon the table and the inner tip 47 of the inwardly projecting portion 46 of the metallic strip 42 is bent inwardly and down over the lips 35 by the use of a punch 48, as illustrated in Fig. 6. This secures abutting ends of frame members 11, 12, 13 and 14 rigidly together and provides a complete covering for the lines of juncture 40 formed at the juncture of the metallic sheaths 30 at adjacent ends of these members. The frame is now ready for use and a glass 16 may be mounted in the recess 25 or the frame may be used for any desired purpose. However, for the additional strengthening of the frame it is present practice to drive a corrugated staple 50 into the abutting ends of the wooden bases 20 of adjacent frame members as clearly illustrated in Fig. 7. It is sometimes practice to drive the staples 50 into place before the strips 42 are placed so as to hold the frame members while the strips are being placed.

While the strip 42 is shown in Fig. 4 as having the corner formed portion 43 already bent and the front portion 47 already curved before the strip 42 is disposed for forming the corner of the frame 10, it is not essential to thus form the strip 42 prior to application. It will thus be seen that the use of such a strip in such a manner forms a novel process which is of great value in inexpensively forming a semi-metallic perimetric frame. Moreover, the frame 10 formed by the process above described is beautiful as well as sanitary, is of great strength and durability, and is quite inexpensive to manufacture.

I claim as my invention:

1. A perimetric frame comprising: frame members mitered at their opposite ends and placed together so as to form a closed figure, and so that adjacent ends of each pair of adjacent members meet to form mitered joints; a metallic sheath secured upon each of said members so as to provide a metallic surface upon the perimetric and the front faces of said frame; and a metallic strip applied to each of said joints so as to cover the line of juncture of the perimetric and front faces of said metallic sheaths of adjacent frame members, said strip overlapping and being soldered at one end to said perimetric surfaces, the other end of said strip being secured in place by bending the tip thereof about said adjacent members at the juncture of their inner edges.

2. A perimetric frame comprising: frame members mitered at their opposite ends and placed together so as to form a closed figure, and so that adjacent ends of each pair of adjacent members meet to form mitered joints; a metallic sheath secured upon each of said members so as to provide a metallic surface upon the perimetric and the front faces of said frame; a metallic strip applied to each of said joints so as to cover the line of juncture of the perimetric and front faces of said metallic sheaths of adjacent frame members, said strip overlapping and being soldered at one end to said perimetric surfaces, the other end of said strip being secured in place by bending the tip thereof about said adjacent members at the juncture of their inner edges; and a corrugated staple binding together adjacent frame members at each joint.

3. A perimetric frame having side members comprising: shaped molding of a fibrous material; and a metallic sheath adapted for application to said molding so as to cover the exposed surface thereof and conform to the shape thereof, said metal sheath having edge portions adapted to be forced into said molding.

4. A perimetric frame having side members comprising: shaped molding of wood; and a metallic sheath adapted for application to said molding so as to cover the exposed surface thereof and conform to the shape thereof, said metal sheath having edge portions adapted to be forced into said molding for holding said sheath thereon.

5. A perimetric frame comprising: side members of molding having their outer surfaces sheathed with metal and mitered at their ends to fit together; metallic hoods adapted for application to said members at their points of juncture, and overlapping said adjacent members and soldered to metal surfaces of said members so as to provide corner shoes for said frame; and tongues provided upon said hoods adapted to be bent to retain said hoods in embracing relation upon said members.

6. A perimetric frame comprising: side members of molding having their outer surfaces sheathed with metal and mitered at their ends to fit together; hoods pre-shaped from

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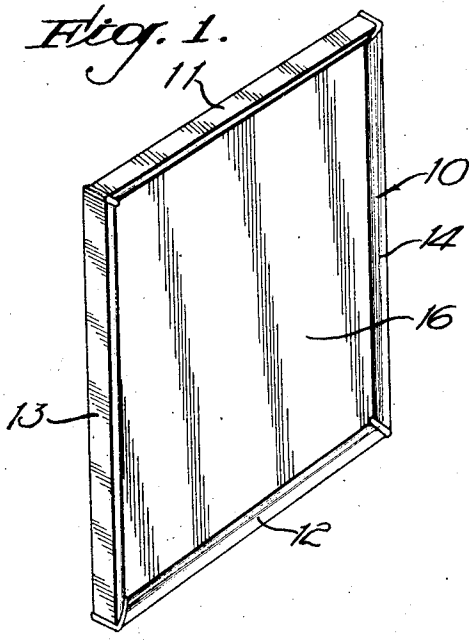


Fig. 2.

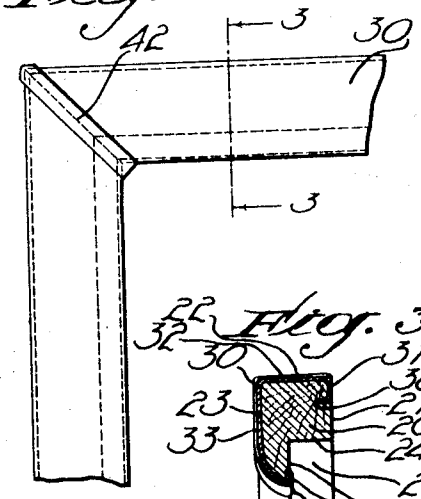


Fig. 3.

Fig. 7.

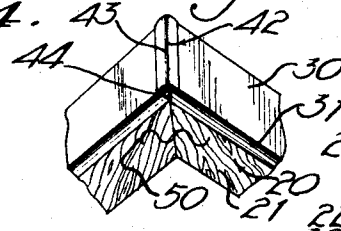


Fig. 4.

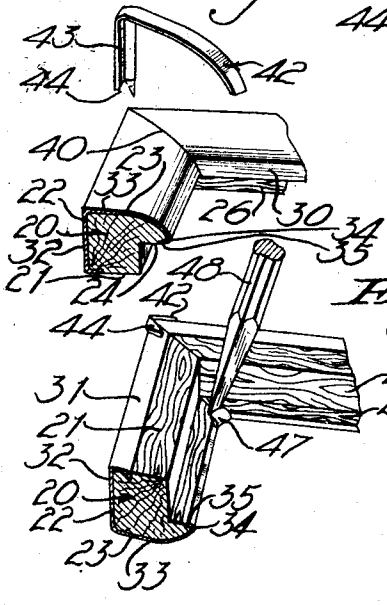


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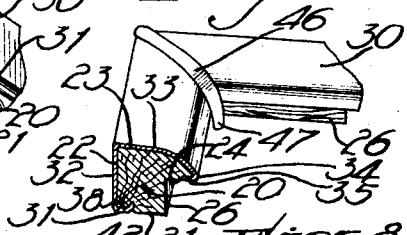
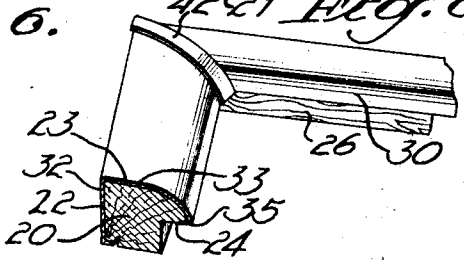


Fig. 6.

Fig. 8.



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