May 12, 1936. C. H. LAWRENCE 2,040,556

FRAME

Filed March 26, 1935 3 Sheets-Sheet 1

Fig. 1.

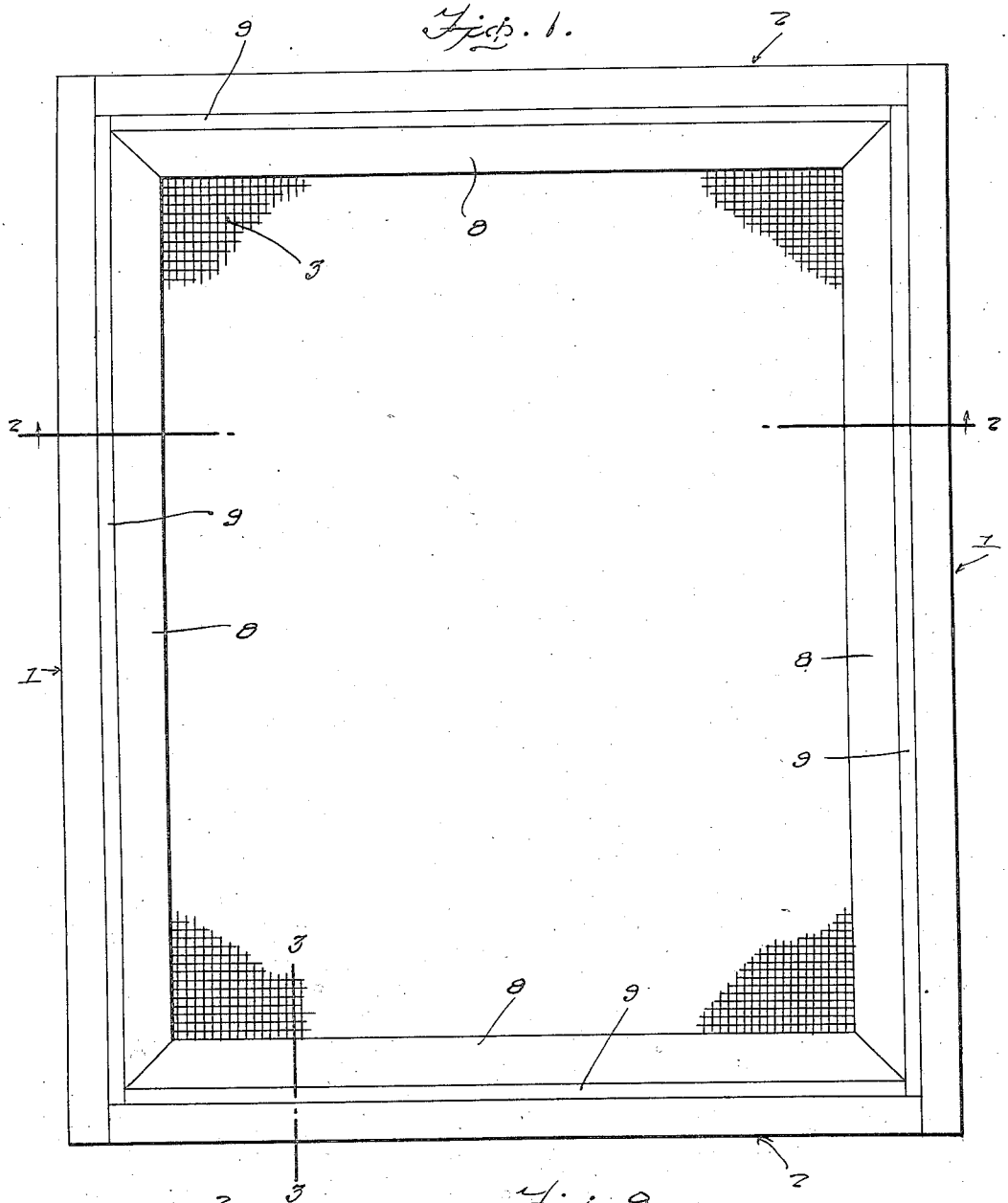
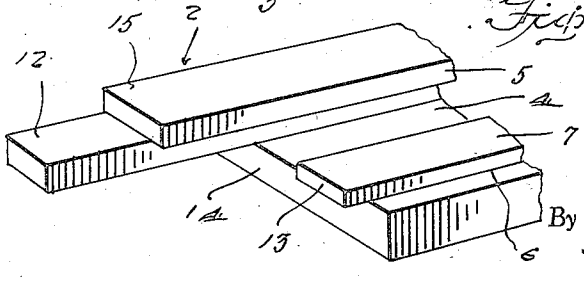


Fig. 8.



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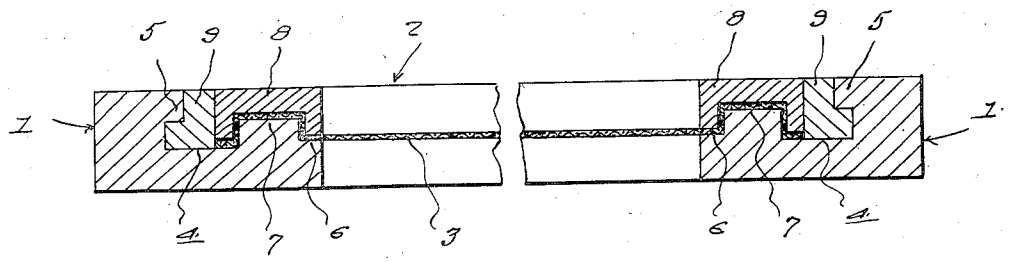
Attorney

May 12, 1936. C. H. LAWRENCE 2,040,556

FRAME

Filed March 26, 1935 3 Sheets-Sheet 2

Fig. 2.



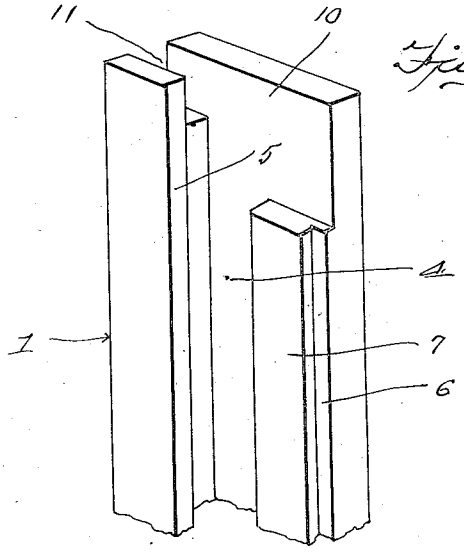


Fig. 9.

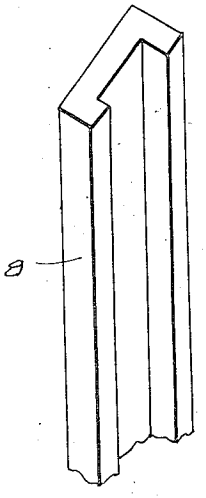


Fig. 10.

Fig. 3.

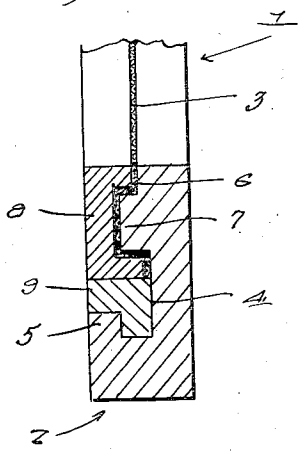
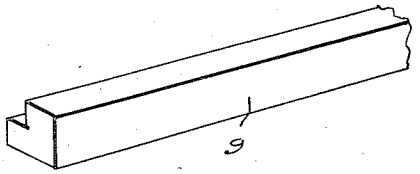


Fig. 11.



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May 12, 1936. C. H. LAWRENCE 2,040,556

FRAME

Filed March 26, 1935 3 Sheets-Sheet 3

Fig. 4.

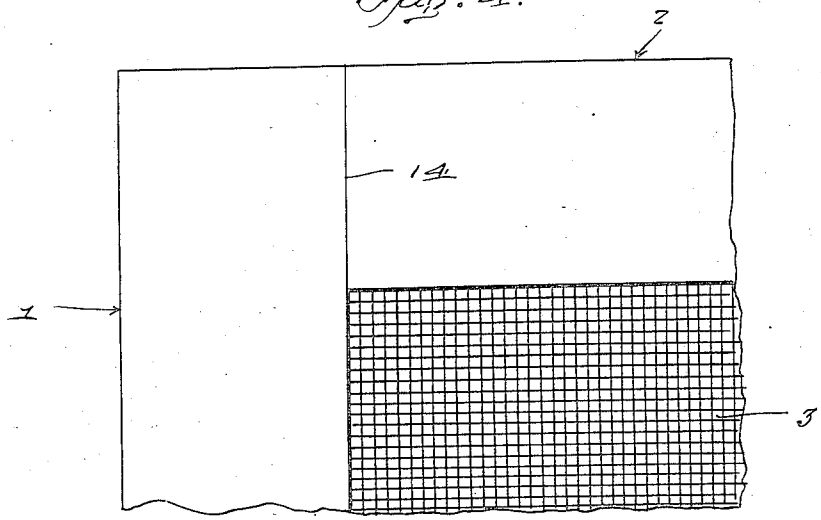


Fig. 5.

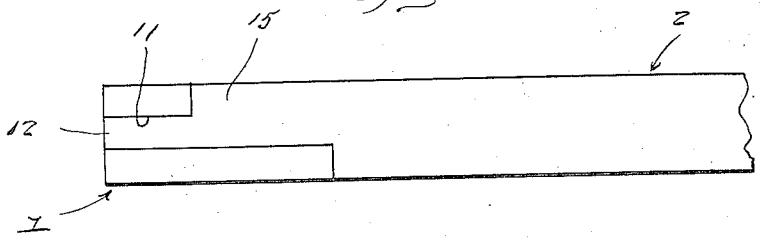
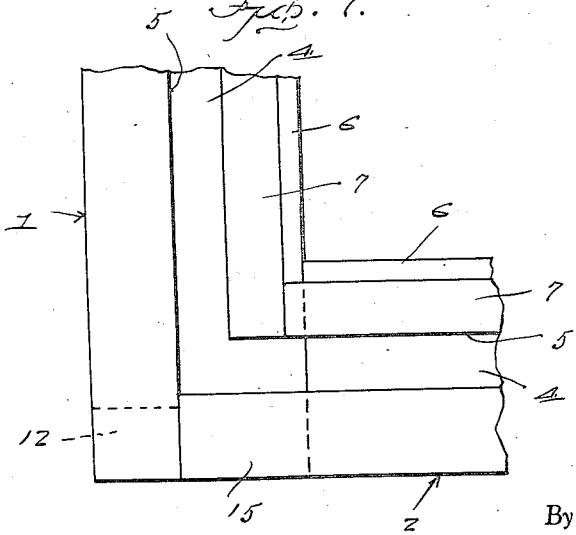


Fig. 7.



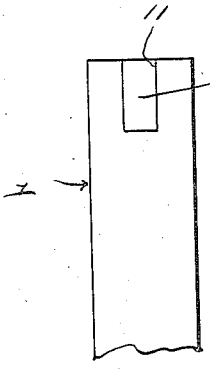


Fig. 6.

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2,040,556

UNITED STATES PATENT OFFICE

2,040,556

FRAME

Charles Harrison Lawrence, Ysleta, Tex., assignor to Henry C. Lawrence, St. Louis, Mo.

Application March 26, 1935, Serial No. 13,160

2 Claims. (Cl. 156—14)

The present invention relates to new and useful improvements in frames for holding various materials, such as screening, canvas, paper, etc., and has for one of its important objects to provide, in a manner as hereinafter set forth, a frame of this character which may be expeditiously assembled or disassembled and which includes novel means for securing the material therein.

Another very important object of the invention is to provide a frame of the character described which is such that the material may be placed therein or removed therefrom without expert or skilled labor.

Other objects of the invention are to provide a frame of the character set forth which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact, light in weight, attractive in appearance and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:—

Figure 1 is an elevational view of a frame constructed in accordance with the present invention, showing a sheet of window screening mounted therein.

Figure 2 is a sectional view, taken substantially on the line 2—2 of Figure 1.

Figure 3 is a vertical sectional view, taken substantially on the line 3—3 of Figure 1.

Figure 4 is an elevational view of a corner portion of the invention, looking at the outer side thereof.

Figure 5 is a plan view of a corner portion of the invention.

Figure 6 is a view in side elevation of a corner portion of the frame.

Figure 7 is an elevational view of a corner portion of the frame, looking at the inner side thereof, the screen and securing means therefor being omitted.

Figure 8 is a perspective view of one end portion of one of the end members.

Figure 9 is a perspective view of an end portion of one of the side members.

Figure 10 is a perspective view of an end portion of one of the material anchoring strips.

Figure 11 is a perspective view of an end portion of one of the anchoring strip retainers.

Referring now to the drawings in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a pair of side members designated generally by the reference numerals 1, and a pair of end members which are designated generally by the reference numeral 2. A screen 3 is shown mounted in the frame formed by the members 1 and 2.

Each of the members 1 and 2 has formed in one face thereof a channel 4, the outer side wall of which is undercut (see Figures 2 and 3) in a manner to provide a flange or lip 5. This face of each member 1 and 2 is further provided, at its inner edge, with a rabbet 6 which, in conjunction with the channel 4 provides a rib 7.

The screen 3 or other material is positioned against the ribs 7 after the members 1 and 2 are assembled and substantially channel-shaped anchoring strips 9 are then forced into position in the manner illustrated to advantage in Figures 2 and 3 of the drawings, the marginal portions of said screen 3 being engaged in the channels 4. It will be noted that the channels 4 are deeper than the rabbets 6 and that the outer legs or sides of the substantially channel-shaped anchoring strips 8 are substantially correspondingly longer than the inner sides or legs thereof. The reference numeral 9 designates retaining strips of angular cross section which are adapted to be inserted in the channels 4 in engagement with the outer sides of the anchoring strips 8 and which are engageable beneath the flanges or lips 5, as also shown to advantage in Figures 2 and 3. It will thus be seen that the screen 3 or other material will be stretched and securely clamped in position in the frame.

The corner portions of the frame are identical in construction. The end portions of the side members 1 are cut to provide, on the sides thereof from which the ribs 7 project, a substantially flat recess or surface 10 and an open mortise 11 (see Figure 9). The mortises 11 receive tenons 12 which project from the ends of the end members 2. The ends of the ribs 7 of the end members 2 project beyond the ends of the main bodies of said end members 2, as at 13, for engagement in the rabbets 6 of the side members 1, said ends 13 abutting the inner sides of the ribs 7 of said side members 1. These ends 14 of the main body portions of the end members 2 abut the inner sides of the side members 1 when the frame is assembled. Extensions 15 on the main body portions of the end members 2, which are integral with the tenons 12 have their ends in abutting

engagement with the inner side of one of the legs of the mortises 11. The construction and arrangement is such that the channels 4 and the rabbets 6 of the members 1 and 2 communicate with each other. If desired, suitable securing elements, such as small nails or tacks may be used for positively securing the anchoring strips 8 in position, although this is thought to be unnecessary. When the screen has been secured in position the ends of the strips 9 of the end members 2 abut the sides of the corresponding strips on the side members 1. As best seen in Figure 1 of the drawings, the ends of the substantially channel-shaped anchoring strips 8 are beveled.

It is believed that the many advantages of a frame constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:—

1. A frame of the class described for sheet material comprising a plurality of members, said members having communicating channels therein and further having communicating rabbets therein, ribs on said members between the channels and the rabbets, a flange extending over the channels, substantially channel-shaped anchoring strips engageable on the ribs for clamping the material thereon, and retaining strips of angular cross section mounted in the channels and engaged with the anchoring strips, said retaining strips engaged beneath the flanges.

2. A frame of the class described for sheet material comprising side members and end members, said side and end members having communicating channels therein, and further having communicating rabbets therein, ribs on the side and end members between the channels and rabbets thereof, the end portions of the ribs of the end members being engaged in the rabbets of the side members, substantially channel-shaped anchoring strips for clamping the material on the ribs, flanges extending over the channels, and retaining strips of angular cross section mounted in the channels beneath the flanges and engaged with the anchoring strips.

CHARLES HARRISON LAWRENCE.