Jan. 1, 1929. 1,697,277

C. L. HOOPES

SCREEN

Filed Oct. 21, 1925

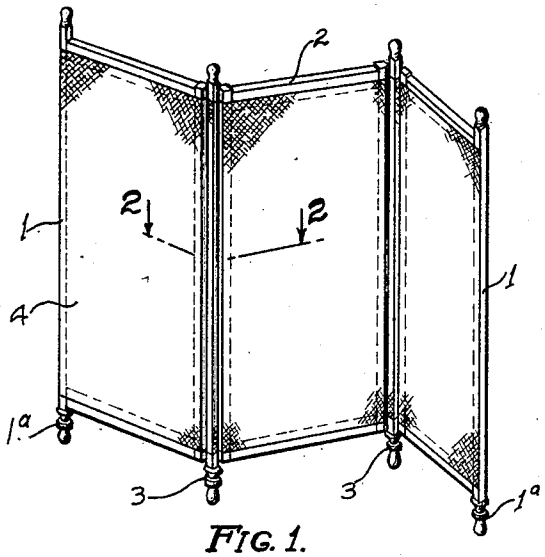

FIG. 1.

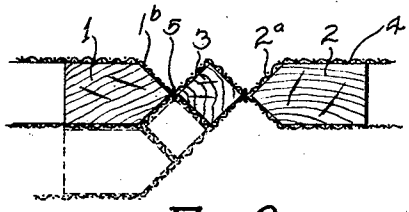

FIG. 2.

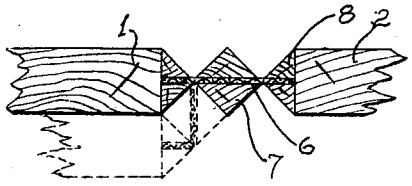

FIG. 3.

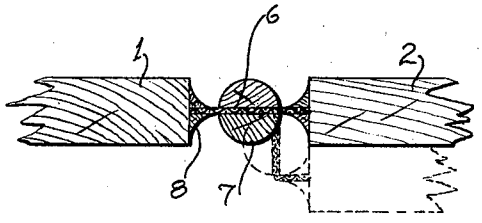

FIG. 4.

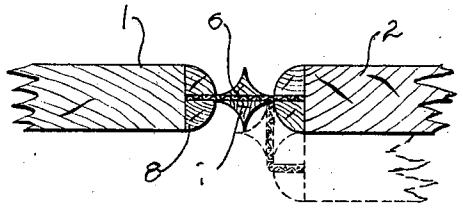

FIG. 5.

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Patented Jan. 1, 1929. 1,697,277

UNITED STATES PATENT OFFICE.

CHARLES L. HOOPES, OF SAN DIEGO, CALIFORNIA.

SCREEN.

Application filed October 21, 1925. Serial No. 63,908.

My invention relates to screens such as are used for concealing objects in a room and the like.

The objects of my invention are: First, to provide a screen of this class having a substantially rigid joint made of flexible material in a manner to bar visibility and exclude air currents at the joint portion; second, to provide a screen of this class which is supported on the floor at its joints by single hinge members positioned intermediate adjacent edges of panels of the screen and forming the intermediate hinge members and a part of the double joints of the screen; third, to provide a screen of this class made of a plurality of panel frames covered with flexible material forming also a flexible connection or joint between said panel frames; fourth, to provide a screen of this class made of a plurality of panel frames positioned with their edges adjacent and hinge members between adjacent edges thereof, the coincident sides of the panel frames and the hinge members being covered by strips of flexible material at the opposite sides of the panel frames and hinge members forming simultaneously a light weight covering for said panel frames and substantially rigid, yet flexible double joints for the panels of the screen; fifth, to provide a joint structure, applicable for screens of this class, consisting of a pair of members having an edge of each adjacent and parallel to each other, a hinge member positioned between and parallel to said edges, and flexible material connecting said pair of members and said hinge member; sixth, to provide a novelly constructed joint of this class, seventh, to provide as a whole a novelly constructed screen of this class, and eighth, to provide a screen of this class which is simple and economical of construction, durable, practical, and which will not readily deteriorate or get out of order.

With these and other objects in view, as will appear hereinafter, my invention consists of certain novel features of construction, combination and arrangement of parts and portions, as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawings and to the characters of reference thereon, which form a part of this application, in which:

Figure 1 is a perspective view of my screen in one form of construction; Fig. 2 is an enlarged transverse sectional view taken through one of the vertical joints thereof and indicated by the line 2—2 in Fig. 1, the panels being shown fragmentarily and the one panel and hinge member being shown by dotted lines folded against the other panel, and Figs. 3, 4 and 5 are similar enlarged transverse sectional views of the joint, all showing slightly modified forms of construction in which the flexible material at and forming the joint are substantially concealed.

Like characters of reference refer to similar parts and portions throughout the several views of the drawings.

The screen shown in Fig. 1 consists essentially of end panel frames 1 provided at their outer edges only with downwardly extending legs 1^a adapted to support the ends of the screen from the floor, an intermediate panel frame 2, combined hinge and leg members 3 positioned longitudinally intermediate and parallel to the adjacent and spaced apart edges of the intermediate panel frame 2 and the end panel frames 1, the lower ends of the hinge and leg members 3 forming leg portions for supporting the screen from the floor at the hinge portions of the screen, and a flexible material 4 hingedly connecting the several members. The inner edges of the end panel frames 1 and the edges of the intermediate panel frame 2 are beveled at their opposite sides at approximately 45°, as indicated by 1^b and 2^a, respectively, in Fig. 2, forming substantially sharp right-angled edges between which are diagonally positioned the combined hinge and leg members 3 of square cross-section, with their opposed sharp edges extended toward the corresponding and similarly shaped edges of the panel frames. Over the coincident sides of the panel frames and the combined hinge and leg members is secured, by any suitable means, such as an adhesive, the covering of fabric or other similarly flexible material 4. The portions of the fabric or other flexible covering 4 at the opposite sides of the screen and between the respective adjacent edges of the panel frames and the hinge and leg members substantially meet in the spaces between said adjacent edges and are secured together from top to bottom by any suitable means, such as stitching 5, shown in Fig. 2. This fabric or other flexible covering provides an

efficient and substantially rigid hinge between the respective panel frames and hinge members, as well as forms light weight panels for the panel frames of the screen, as shown in Figs. 1 and 2. The inclined faces at the adjacent and coincident sides of the adjacently positioned panel frame edges and the hinge members are adapted to be folded tightly against each other, forming efficient hinges to permit the coincident sides of the panels of the screen to be compactly folded against each other at either side.

In the modified form of construction, shown in Fig. 3, the general shape of the edges of the panels and of the hinge member is substantially the same as that shown in Figs. 1 and 2, but the fabric or other flexible material for forming the hinge is substantially concealed instead of being secured at the outer sides of the respective members forming the hinge. The hinge member in this construction, indicated by 7, is longitudinally split from top to bottom in right-triangular-cross-sectional strips secured in a similar relation to the panels but at opposite sides of the fabric or other flexible hinge material 6. The hinge material 6 in this construction is secured to the panels by means of and between right-triangular molding strips 8, forming similar substantially right-triangular edges for the panels, as described in connection with the structures shown in Figs. 1 and 2. In this modified form of construction the one panel is similarly folded against the coincident side of the adjacently positioned panel at either side thereof, as shown by dotted lines in Fig. 3.

The modified forms of construction, shown in Figs. 4 and 5, are similar to that shown in Fig. 3, in that the fabric or other flexible hinge material 6 is concealed respectively between split portions and molding strips of the hinge and leg member 7 and the panels 1 and 2. In the construction shown in Fig. 4, the hinge member 7, however, is made circular in cross-section and the molding strips 8 are quarter sections in which the outer rounded faces are concave to receive the rounded portions of the hinge member 7, as shown by dotted lines in Fig. 4.

In Fig. 5 of the drawings, the cross-section of the hinge member 7 and the molding strip 8 are reversed from that shown in Fig. 4, forming a slightly differently shaped hinge structure, but performing a similar function.

Though I have shown and described a particular construction, combination and arrangement of parts and portions and certain modifications thereof, I do not wish to be limited to this particular construction, combination and arrangement nor to the modifications, but desire to include in the scope of my invention, the construction, combination and arrangement substantially as set forth in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a foldable screen structure, a pair of members having an edge of each adjacent and parallel to each other, a hinge member positioned between and parallel to and substantially abutting said edges of said members, and flexible material connecting said members and said hinge member.

2. In a foldable screen structure, a pair of members having an edge of each adjacent and parallel to each other, a hinge member positioned between and parallel to and substantially abutting said edges of said members, a pair of strips of flexible material secured to the opposite sides of said members and said hinge member, and means securing said strips together between the abutting edges of said members and the hinge member.

3. In a foldable screen structure, panel frames with their edges positioned adjacent each other, a hinge member positioned intermediate said adjacent edges, and substantially abutting therewith, continuous sheets of flexible material secured over the coincident sides of said panel frames and said hinge member, forming panels for said frames and hinges therebetween and said hinge member, and means securing said sheets of flexible material together between the abutting edges of said panel frames and said hinge member.

In testimony whereof, I have hereunto set my hand at San Diego, California, this 7th day of October, 1925.

CHARLES L. HOOPES.