

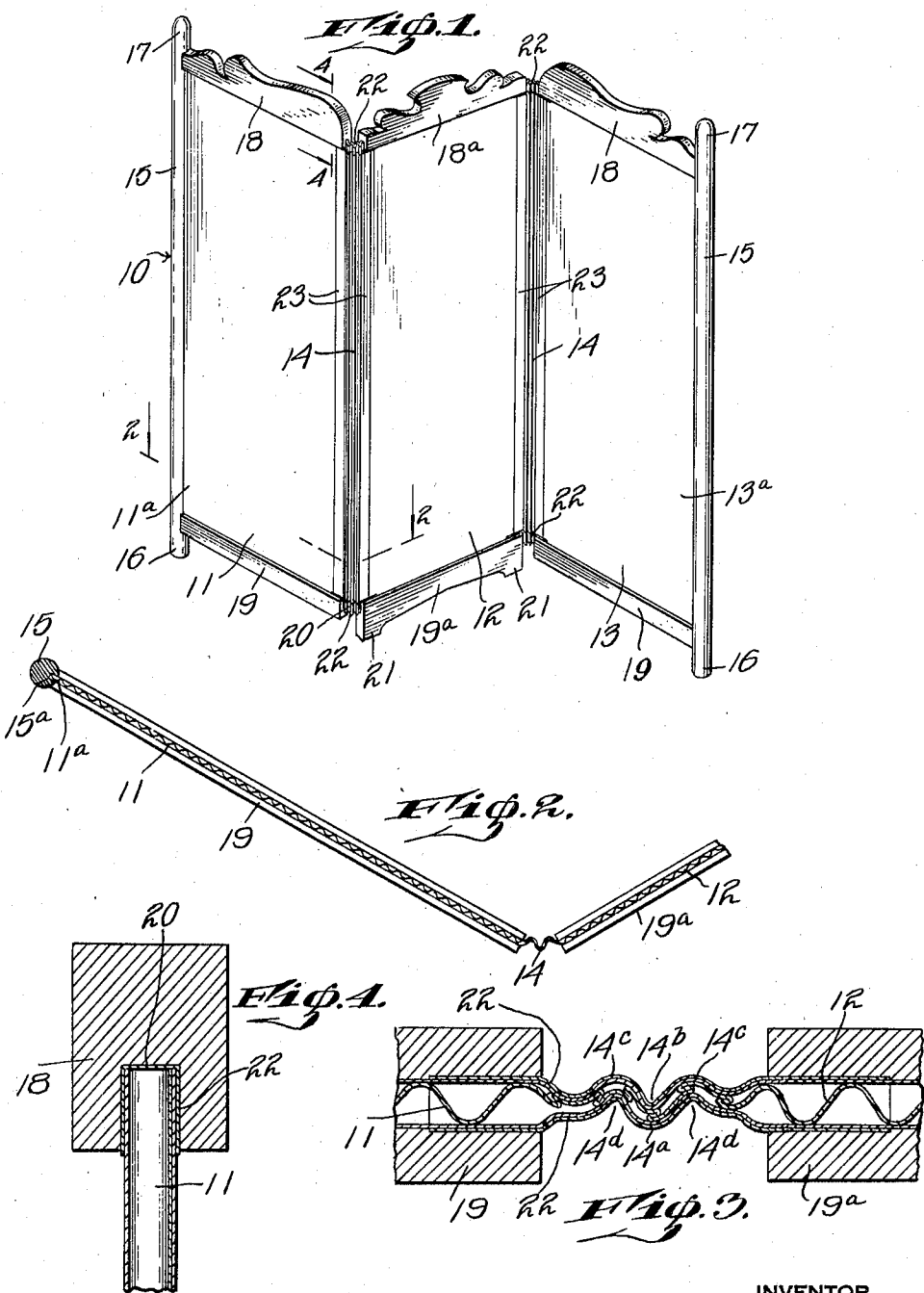
Feb. 24, 1942.

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2,274,047

SCREEN

Filed June 29, 1939



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2,274,047

SCREEN

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Application June 29, 1939, Serial No. 281,782

2 Claims. (Cl. 45—106)

This invention relates to screens and particularly in the provision of a device of this type and kind which may be termed draft-proof in that a positive closure is provided between adjacent foldable edges of the separate screen sections; and the object of the invention is to provide a screen of the character described which is composed of a single sheet of fibre or corrugated board folded on two or more transverse lines to provide a double scoring permitting free folding of the sections, adjacent the fold lines, one upon the other in either direction in providing a series of screen sections or panels, and also in sealing the hinge connection between the sections or panels in producing a draft-proof screen; a further object being to provide the end sections or panels with reinforcing strips longitudinally of the free edges thereof which extend beyond the ends of the panels to form supporting feet and upwardly to provide knobs or posts to give a finish to the resulting screen; a further object being to provide at upper and lower edges of each panel or section of the screen independent reinforcing strips channelled to receive the edges of the corrugated or other sheet material employed, and in characterizing predetermined strips for ornamental purposes, and also to form of one of the bottom strips additional supporting feet for the entire screen structure; a still further object being to provide means representing additional frame parts on the adjacent folded edges of the screen sections to give to the resulting screen the appearance of independent frames extending around all peripheral edges of each panel of the screen; and with these and other objects in view, the invention consists in a screen of the class and for the purpose specified, which is simple in and economical in construction, and which is constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my invention are designated by suitable reference characters in each of the views; and in which:

Fig. 1 is a perspective view of a screen made according to my invention.

Fig. 2 is a sectional view substantially on the line 2—2 of Fig. 1 on an enlarged scale.

Fig. 3 is an enlarged sectional detail view of adjacent portions of two screen sections or panels; and

Fig. 4 is a partial section on the line 4—4 of Fig. 1.

In the construction of screens, it has been the common practice to provide three or more inde-

pendent screen sections or parts, each comprising a rectangular frame, and in hinging or otherwise uniting the adjacent sections so as to provide complete collapse of the sections employed, and the extension thereof to form a screen unit. In devices of this type and kind, spaces are formed between the hinged sides of the screens which will not render the screens completely airtight or draft-proof. Furthermore, each section includes a rectangular frame; or that is to say, a frame bordering all peripheral edges of the panel of the screen. It is the purpose of my invention to provide a screen which will not only be draft-proof in the sense of providing closed hinge mountings between adjacent panels, but also will be considerably less expensive in the construction of the complete screen in eliminating superfluous frame parts at adjacent edges of the separate panels or sections of the screen.

For the purpose of illustrating one adaptation of the invention, I have shown in Fig. 1 of the drawing a screen 10 consisting of three foldably related and coupled panel or screen sections 11, 12, and 13. These sections or the body portions thereof are constructed from a single sheet of fibre board, corrugated board, or the like, scored and folded a number of times as at 14 in forming freely foldable hinge connections between adjacent sections 11—12, and 12—13; and at the same time forming a sealed joint between said sections. In other words, the single sheet of material is of one width throughout the length thereof, the length of the sheet being considered horizontally and not vertically, as presented on the resulting screen.

To the outer edges 11a, 13a, of the sections 11, 13, are secured finishing rods, posts, or sticks, 15, which may be of any cross-sectional contour, but are shown as round rods in the present construction. These rods are grooved as seen at 15a, note Fig. 2, to receive the edges 11a, 13a, which may be cemented or otherwise secured in position within the grooves or channels 15a. The lower ends of the rods 15 protrude beyond the sections 11, 13, to form supporting feet 16, and also protrude at the upper ends as seen at 17 to form finishing rods or knobs. The upper and lower edges of the sections 11, and 13, are finished by reinforcing and stiffening strips 18 and 19 respectively, the strips 18 being of ornamental contour. Both strips are channelled as seen at 20, note Fig. 4, to receive the edges of the panels 11, 13, which are cemented therein. The strips 19 are simply in the form of straight rectangular rods; and both strips 18 and 19 extend from the

rods 15 to a point short of the folded sections 14, where the panels 11 and 13 join the central panel 12.

Secured to the upper and lower edges of the section 12 are reinforcing and finishing strips 18a, 19a, the strip 18a being of an ornamental contour; whereas the strip 19a is extended at its ends to form foot members 21, adjacent the folds 14, which in conjunction with the feet 16 will support the screen in any desired position. The ends of the strips 18a, 19a, also terminate short of the folds 14, and intermediate adjacent ends of the strips 18, 18a, and 19, 19a. The upper and lower edges of the folded portion of the sheet are reinforced by binding tape as at 22, which is folded around said edges to strengthen and reinforce said edges against tearing and raveling when repeatedly flexed in the opening and closing of the screen. The tape 22 will preferably be of a color consistent with the wood finishing strips employed. It is also preferred that other strips 23 be arranged longitudinally of the folded portions 14 to reinforce and strengthen the folder portions 14 of the sheet. These strips 23, which are disposed on both surfaces of the sheet from which the panels, 11, 12, and 13 are formed, will also be colored consistent with the coloring of the wood finishing and reinforcing strips, so as to give the representation of complete rectangular frames, enclosing each panel, 11, 12, and 13. However, in some instances, the representation as at 23 may be simply printed, painted, or otherwise applied to the sheet. In this connection, it is also pointed out that the facings of the single sheet from which the panels 11, 12, and 13 are formed may be printed or lithographed, or may be coated with a printed or lithographed sheet, upon which any desired ornamentation or design may be arranged. If desired, one surface of the sheet may be in one color or combination of colors; and the other surface a different color or combination of colors, as well as different designs. In many instances the panels may be of a solid color throughout the entirety thereof; whereas the wood frames may be of any desired finish or color to suit the use for which the screens are intended.

In considering the complete screen structure, it will appear that the same is produced from six complete parts; that is to say, the sheet forming the several panels 11, 12, 13, the rods 15, two of which are employed; the strips 18, two of which are employed; the strips 19, two of which are employed; the single strip 18a; and the single strip 19a. It will, of course, be apparent that in the production of different types and styles of screens, the structure of the parts 15, 18, 18a,

may be modified; and in fact, this would also apply to the strips 19, 19a. The fold as at 14 is produced by a center rib 14a at one side of the sheet forming a corresponding recess 14b at the opposite side thereof, and at said last side. Bordering the recess 14b are two beads 14c which form at opposite sides of the bead 14a, recesses 14d, as noted clearly in Fig. 3 of the drawing. These beaded and recessed portions form, as will clearly appear in Fig. 3, what may be termed a triple fold. It will be understood that the spacing between the adjacent edges of the rails 18, 18a, and 19, 19a, will be sufficient to provide compact collapsing of the various screen sections, one upon the other, in packing, shipping, and storing thereof.

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

1. A screen of the class described comprising a plurality of foldably related screen sections, said sections collectively being formed from a single sheet of material scored and triple folded to form two-way hinge couplings between adjacent sections, said hinge couplings providing imperforate connections between adjacent sections of the screen, means including channelled rails reinforcing upper and lower edges of each section, other channelled rails extending longitudinally of the free outer edges of the end sections of the screen to reinforce said edges, adjacent edges of the first named reinforcing rails of adjacent sections being spaced apart where the hinge fold is located between said sections, means reinforcing the upper and lower edges of said folded portions intermediate said rails, and means forming supporting feet at the lower edges of all of said sections.

2. A screen of the class described comprising a plurality of foldably related screen sections each section terminating at upper and lower ends in reinforcing strips, vertical reinforcing rails defining outer ends of end sections, said strips and rails collectively forming the sole framework of the screen, a single sheet of material extending between upper and lower strips and said rails uniting said rails and strips, said sheet at adjacent end portions of the upper and lower strips being scored and triple folded to form two-way hinge couplings dividing the sheet into said screen sections, adjacent ends of said strips of adjacent sections being spaced apart to provide swinging movement of said sections, and means reinforcing the upper edges of said folded portions of the sheet intermediate said strips.

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