

C. A. RANNEY.

SCREEN.

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934,570.

Patented Sept. 21, 1909.

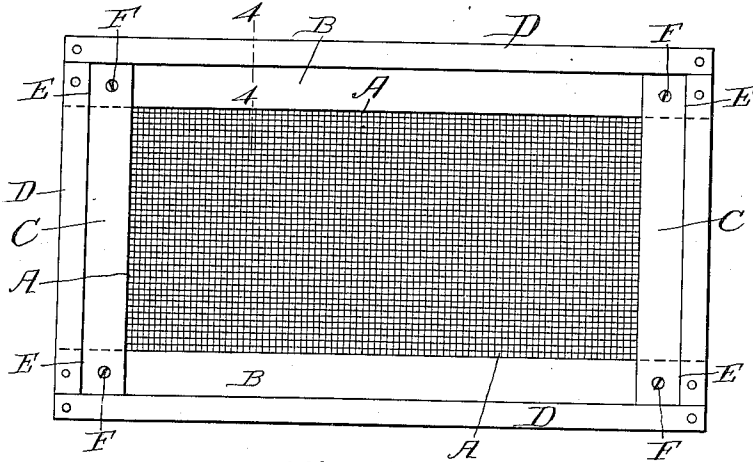


Fig. 1.

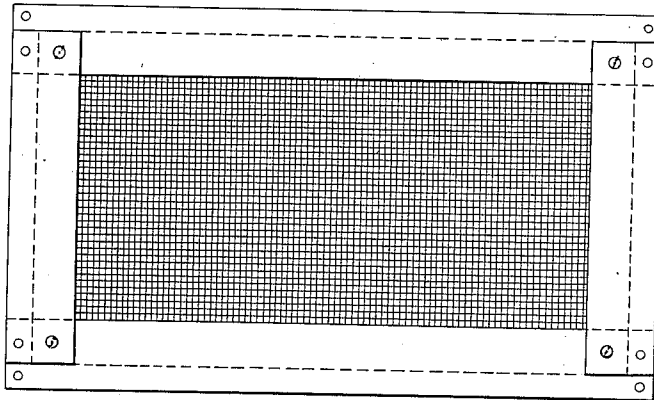


Fig. 2.

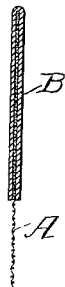


Fig. 3.

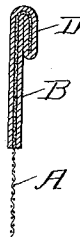


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

CAROLINE A. RANNEY, OF WINN, MAINE.

SCREEN.

984,570.

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To all whom it may concern:

Be it known that I, CAROLINE A. RANNEY, of Winn, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Screens, of which the following is a specification.

My invention consists in the novel features hereinafter described, reference being had to the accompanying drawings, which illustrate my invention, said invention being fully disclosed in the subjoined description and particularly pointed out in the following claims.

Referring to the said drawing Figure 1, is a complete screen showing the inside view; Fig. 2, showing the reverse side; Fig. 3, is a sectional view showing the screen fabric in position in the frame before fastening; Fig. 4, is a sectional view on 4-4 of Fig. 1.

In the manufacture of metallic screens several difficulties have been encountered in placing them upon the market, among which may be enumerated that of providing a construction of sufficient lightness, strength and durability, at a minimum cost, and that of securely and permanently attaching the wire fabric to the sustaining frame and making a frame that shall be stable enough to hold its original shape.

The object of my invention is to overcome all these difficulties and to produce a screen of cheapness, durability and simplicity.

Referring to the drawing A is the screen fabric of usual construction, such as woven wire; B, B are the end bars, and C, C are the side bars.

In constructing the screen I take a piece of the screen fabric A, cut to the required size and rectangular in shape, and to two opposite edges I attach the end bars B. Each of these bars is formed of a strip or plate of sheet metal of suitable length and width, which plate is bent or folded longitudinally substantially midway between its longitudinal edges, and the opposite side portions of the fold are pressed into engagement with the screen fabric adjacent an edge thereof, as shown in Fig. 3. The length of the plate is shorter than the edge of the fabric to which it is to be applied, by an amount equal to twice the width of the marginal flange to be formed. The folded plate is again folded longitudinally back upon itself, see Fig. 4, to form a marginal flange D, thereby permanently and firmly uniting the screen fabric and the bar and

at the same time giving rigidity to the frame. Each of the end bars is connected with the screen fabric A as described, and I clip back such portion of the folded fabric which protrudes beyond the ends of the marginal flange.

The plates which are to form the side bars C are cut of a length to exactly fit between the marginal flanges D of the end bars, and each side bar is folded longitudinally in the manner heretofore described, and pressed into engagement with the fabric A, the folded plate being again folded back upon itself to form the marginal flange D, as before. The joint between each side and end bar is made by inserting the end of the end bar between the opposite side portions of the side bar, as shown in Figs. 1 and 2, the extremity of the end bar extending outward to substantially the second bend which is made to form the marginal flange of the side bar. Screw bolts F, Fig. 1, through the overlapping portions of the side and end bars rigidly connect such bars and complete the screen.

It will be obvious that the strength and tension of the screen as a whole is due in part to the construction of the corners thereof, effected by the interlocking of the bars at the corners, as set forth.

By the construction described the outer edge or marginal flange portion of the frame is of the same thickness throughout, so that when the screen is placed upon a smooth surface and fastened by any suitable means there will be no crevice through which insects can pass.

Various changes or modifications in detail of construction and arrangement may be made by those skilled in the art without departing from the spirit and scope of my invention as set forth in the annexed claims.

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

1. The combination, with a flexible screen fabric, of a frame comprising side and end bars each composed of a plate folded longitudinally substantially midway between the longitudinal edges thereof and the opposite side portions of the fold pressed into engagement with the screen fabric adjacent an edge of the same, and each folded plate being again folded longitudinally back on itself to form a marginal flange, the joint between each side and end bar being made

by inserting the end of the end bar between the opposite side portions of the side bar, such side bar extending only to the inner edge of the flange of the end bar.

- 5 2. The combination, with a flexible screen fabric, of a frame comprising side and end bars each composed of a plate folded longitudinally substantially midway between the longitudinal edges thereof and the opposite
10 side portions of the fold pressed into engagement with the screen fabric adjacent an edge of the same, and each folded plate being again folded longitudinally back on itself to form a marginal flange, the joint
15 between each side and end bar being made by inserting the end of the end bar between the opposite side portions of the side bar, and

the said end bar extending to substantially the bend of the marginal flange on the side bar, the ends of each side bar fitting between the marginal flanges of the two end bars, and a fastening member passing through the overlapping portions of a side and end bar at each corner, the marginal flanges on all of the bars being located on the same side thereof, substantially as and for the purpose set forth. 20 25

In testimony whereof I have affixed my signature, in presence of two witnesses.

CAROLINE A. RANNEY.

Witnesses:

VIOLA LYNCH,
MARGARET M. RANNEY.