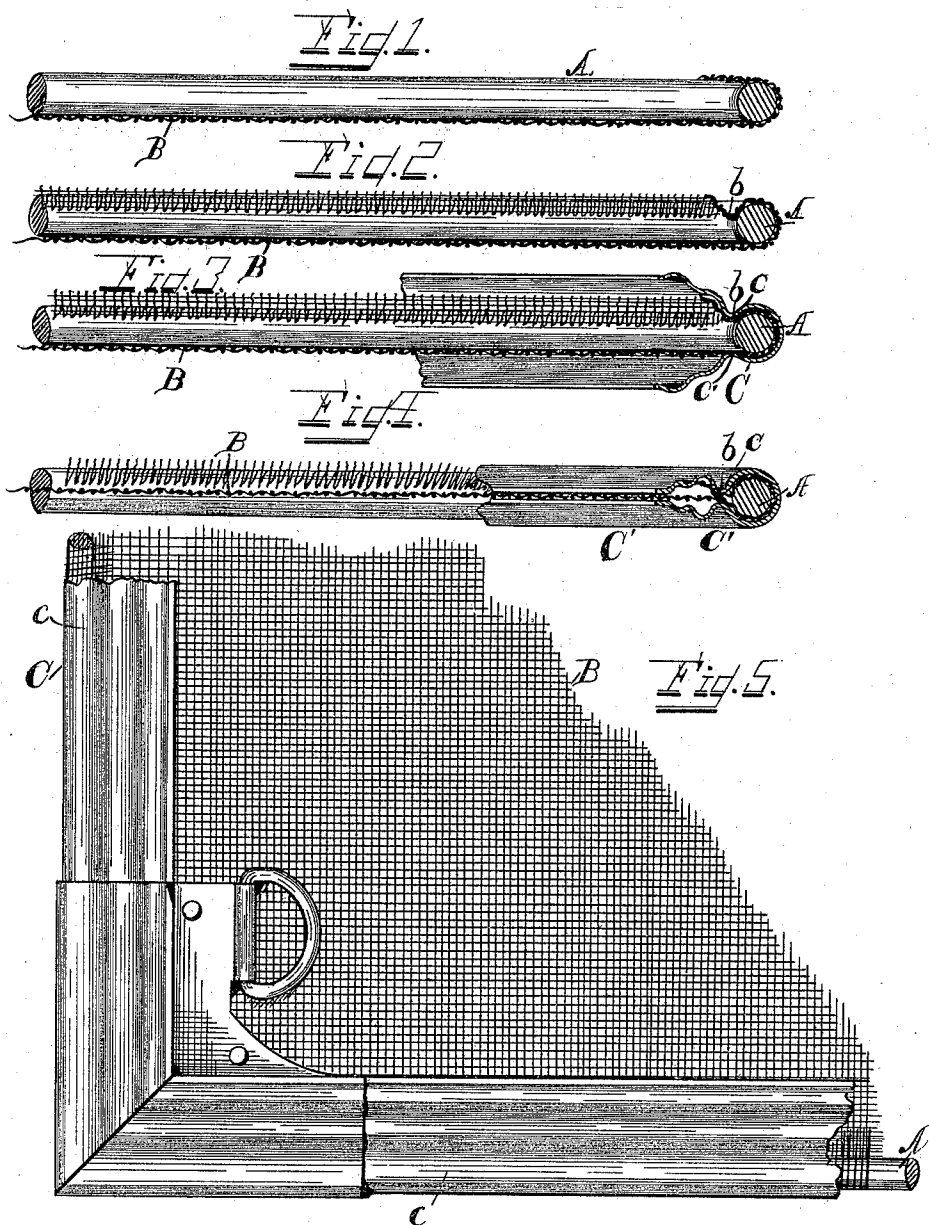


(No Model.)

H. HIGGIN.
WINDOW SCREEN.

No. 537,924.

Patented Apr. 23, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY HIGGIN, OF NEWPORT, KENTUCKY.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 537,924, dated April 23, 1895.

Application filed September 13, 1893. Serial No. 485,395. (No model.)

To all whom it may concern:

Be it known that I, HENRY HIGGIN, a citizen of the United States of America, residing at Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

The advantages which a practical metallic screen-frame would possess, both in utility and appearance over the cumbersome wooden frame, have long been appreciated and various attempts have been made to produce such a screen, but none of the metallic screens thus far produced have proved a commercial success, chiefly for want of simple, efficient and economical means for stretching the screen cloth in position, and permanently holding it in the stretched position. The usual plan has been to stretch the cloth over the frame, then fasten it by rivets or otherwise, and remove the stretching agent.

The object of my invention is to produce a light, strong, durable and economical metallic screen, and the invention consists in the construction and combination of parts hereinafter described and claimed, whereby the stretching agent becomes an element of the frames and constitutes the permanent holding device for the screen cloth.

My invention consists in the novel means employed for carrying out these objects and in the combination and construction of parts hereinafter described and claimed.

In the drawings, Figure 1 is a cross-section of a screen and frame showing the screen cloth bent over the frame in position for being crimped; Fig. 2, a similar view showing the screen cloth crimped; Fig. 3, a cross-section showing the metallic binding in position for clamping on the frame; Fig. 4, a similar view showing the binding on the frame; Fig. 5, an elevation of a part of the completed screen.

In the manufacture of my screen, a frame, A, of suitable size and shape, preferably formed of wire rod, is placed upon a screen

cloth, B, large enough to permit its edges to be lapped or turned over the frame. A bend or crimp, *b*, is made in the edges, or lapped portion of the screen cloth, adjacent to wire A, after the cloth has been partly wrapped upon the wire frame. A molding or binding, C, of iron or sheet metal, adapted to be bent and to retain the form imparted to it, is placed around the frame in such manner as to embrace the edges of the screen cloth. This molding is provided with ribs, *c*, and *c'*, one adapted to take into the bend in the edge of the screen cloth and hold it against movement toward the wire over which it is lapped and the other adapted to engage with the main body of the cloth just within the frame. As the binding is placed over the frame one of its ribs engages with the bend, *b*, in the screen cloth and holds it from slipping toward the frame. The leaves of the binding are then pressed together by rolls or other suitable means. The rib *c'* takes against the screen cloth and presses it toward the central plane of the screen thereby stretching the cloth. As the leaves of the molding come together the screen cloth is firmly gripped between them and held in its stretched position.

I claim—

The combination in a window screen of a frame, a screen cloth adapted to cover one side and lap over the edges thereof, a V-shaped depression or crimp in the lapping edges of the screen cloth, a binding adapted to take over the frame and lapping edges of the screen cloth and provided with ribs on opposite sides of the frame, one adapted to take into the V-shaped crimp in the cloth and hold it from retrograde movement while the other engages the cloth and stretches it on the frame, substantially as and for the purpose set forth.

HENRY HIGGIN.

Witnesses:

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