

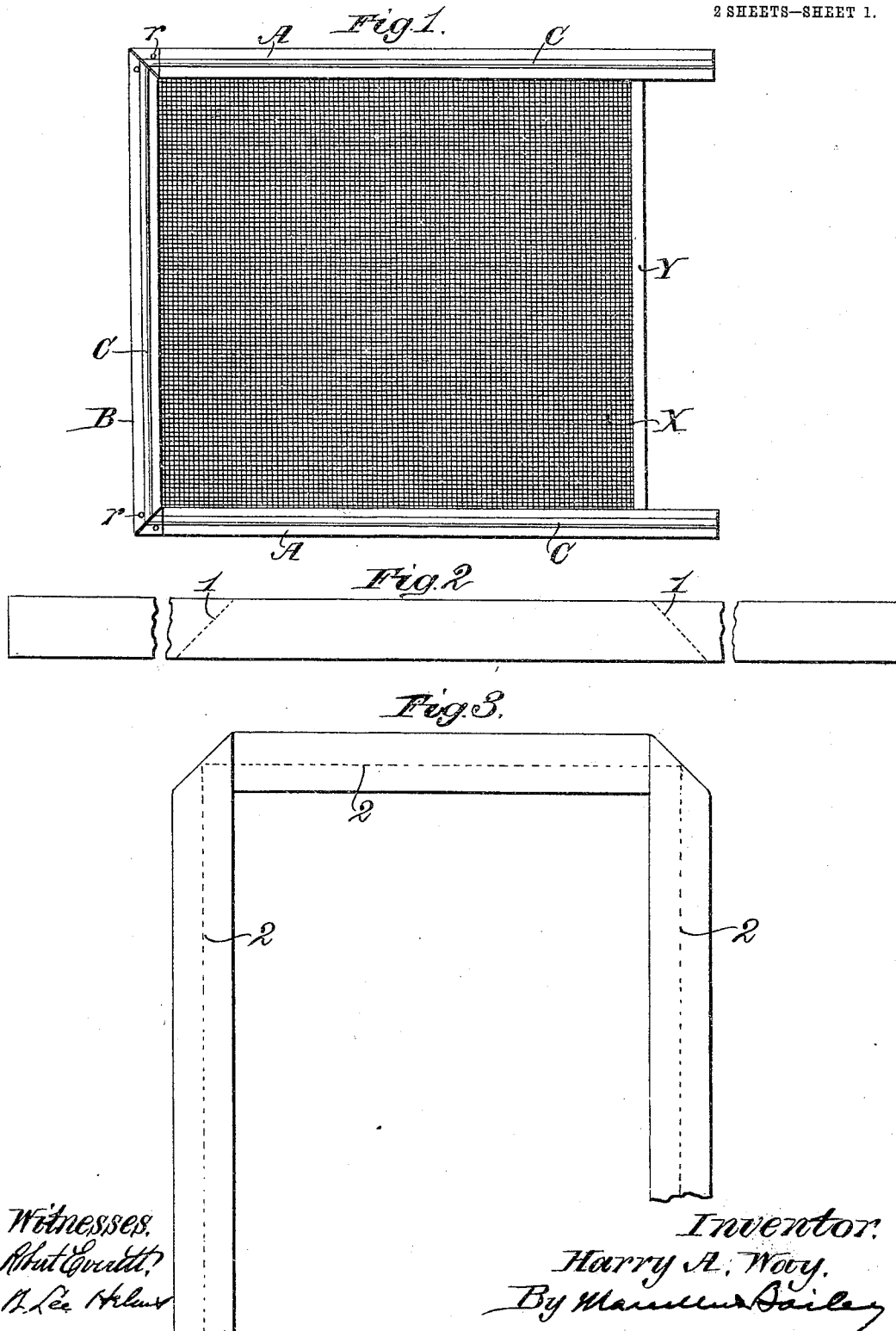
H. A. WAY.
METALLIC SCREEN.

APPLICATION FILED OCT. 27, 1908. RENEWED SEPT. 1, 1909.

956,614.

Patented May 3, 1910.

2 SHEETS—SHEET 1.



Witnesses,
Robert G. Smith,
H. Lee Wilson

Inventor,
Harry A. Way,
By Manuel Bailey
Att'y.

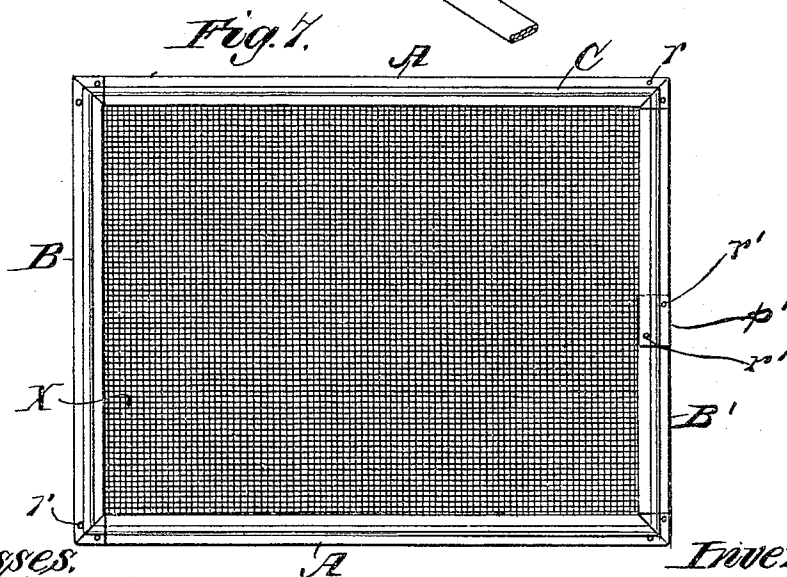
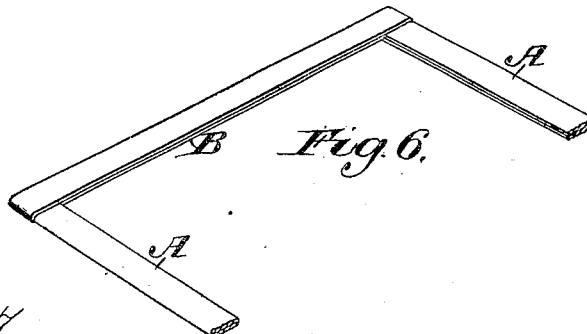
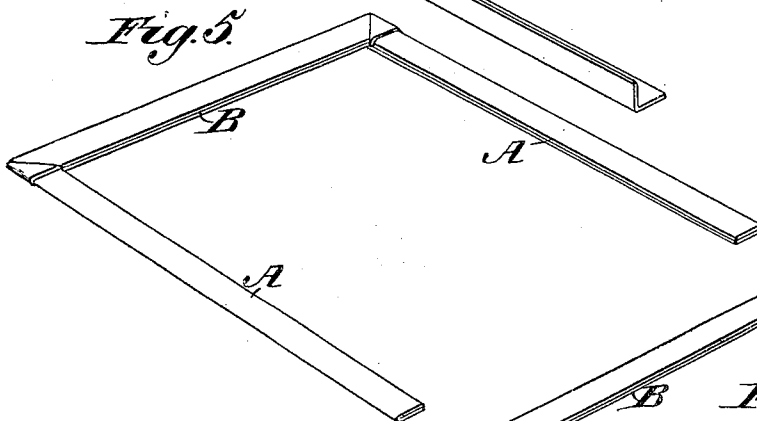
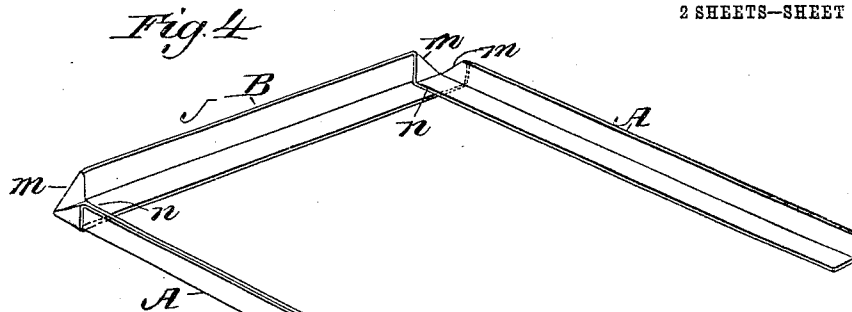
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2 SHEETS—SHEET 2.



Witnesses:
Robert Smith.
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UNITED STATES PATENT OFFICE.

HARRY A. WAY, OF BURLINGTON, VERMONT.

METALLIC SCREEN.

956,614.

Specification of Letters Patent.

Patented May 3, 1910.

Application filed October 27, 1908, Serial No. 459,798. Renewed September 1, 1909. Serial No. 515,612.

To all whom it may concern:

Be it known that I, HARRY A. WAY, a resident of Burlington, in the county of Chittenden and State of Vermont, have invented a new and useful Improvement in Metallic Screens, of which the following is a specification.

This invention relates to a screen, the frame of which is made of a continuous strip of sheet metal, and it has to do with the folding of the strip for that purpose.

The characteristic of the invention is that to produce the limbs of the frame the sheet metal strip is folded on itself diagonally and at an angle of 45° at the points where the corners of the frame are to be located, and the limbs thus produced are then folded longitudinally, each upon itself, to form the frame bars between the folds of which the marginal portions of the screen fabric or wire netting are inserted and held. In this way the metal at the corners of the frame is effectively taken care of, the corners are laid flat and the process of converting the continuous metallic strip into a screen frame becomes expeditious and free from complication. So far as I am aware the diagonal folding at the corners prior to the lengthwise folding of the strip is new with me.

The invention is applicable to any metallic screen. It has, however, been devised with more particular reference to its use in a metallic extension screen which in other respects is the same in construction as the extension screen which is the subject of Patent No. 882,397 of March 17, 1908; and it is in this connection that I shall illustrate and describe it, although I do not limit myself to its use in that form.

In the accompanying drawings to which I shall now refer for a more complete understanding of my improvement—Figure 1 is a view of one of the sliding screen sections of an extension screen having a three sided frame made from a continuous strip of metal in accordance with my invention. Fig. 2 is a plan of the sheet metal blank or strip with the lines of the first two folds dotted thereon. Fig. 3 is a plan of the blank after it has been thus folded, having dotted thereon the lines on which the limbs of the frame are subsequently folded each lengthwise on itself to form the top, bottom and outer end bars of the frame section. Fig. 4 is a view of the strip after having been thus folded partly and opened to

disclose the manner in which the corner folds are laid. Fig. 5 is a view of the same folded down flat. Fig. 6 is a view of the other face of the thus-folded strip. Fig. 7 is a view of a modification hereinafter more particularly referred to.

In Fig. 1, A, A are the top and bottom bars and B the outer end bar of a three sided frame section made from a continuous strip of sheet metal in accordance with my invention. X is the wire cloth and Y the "center iron" inserted between the folds of the bars and there held by longitudinal corrugations C in said bars, which also serve as a lateral tongue and groove connection between the overlapping side faces of the top and bottom bars of the two sliding frame sections which form the complete screen, as set forth in Patent No. 882,397, hereinbefore referred to. I have not deemed it necessary to represent the clips with which the top and bottom frame bars are provided when forming part of an extension screen. These may be provided in the manner illustrated in Patent No. 882,397, or in any other suitable way. Rivets r may be employed at the corners to hold the folds more closely together at these points.

To form the screen frame I take a strip of sheet metal, preferably soft sheet steel, wide enough to provide, when folded as hereinafter described, top, bottom and end frame bars of the width and length desired. Such a strip is shown in Fig. 2. This strip is first transversely folded on itself diagonally at an angle of 45°, at the points where the corners of the frame are to be located. These diagonal lines of fold are indicated by dotted lines 1, 1, in Fig. 2; and the thus folded strip is represented in Fig. 3. By these folds the strip has been formed into three connected limbs, two of which are parallel with one another and extend from opposite ends of, and at right angles to, the third limb. The next step is to fold the limbs longitudinally and centrally, each upon itself, to form the frame bars A, A, B between the folds of which the screen fabric and "center" iron are to be inserted. These central longitudinal lines of fold are indicated by the dotted lines 2, 2, 2, in Fig. 3; and the thus folded strip is represented in Figs. 4, 5 and 6. By these two folding operations the frame is virtually completed. It will be noted by reference to the partly folded and opened blank in Fig. 4 that in each

bar one of its folds extends full width for the whole length of the bar, the two corresponding folds at the meeting ends of any two bars overlapping one another, as indicated at *n, n*; see also Fig. 4. On the other hand, the other fold of each bar has mitered ends, *m, m*, the meeting ends of these folds in contiguous bars fitting endwise snugly against one another to form a miter joint, as indicated more plainly in Fig. 5. The sheet metal strip can be of such length as to inclose all four sides of the wire cloth, thus dispensing with the center iron *Y*, as illustrated in Fig. 7. The strip is bent and folded at all four corners, in the manner hereinbefore indicated. The overlapping meeting ends of the strip, which form the fourth vertical side *B'*, are tucked one in the other as indicated at *p'*. After the wire cloth has been inserted in place between the folds of

the side *B'*, this side may be longitudinally corrugated as in the case of the other sides *A* and *B*, and the overlapping ends may be secured by rivets *r'*.

What I claim herein as new and desire to secure by Letters Patent is:

In a metallic screen, a screen frame having bars made from one continuous strip of sheet metal, folded upon itself first transversely along the diagonal lines 1 at the points where the corners are to be located, and then longitudinally and centrally along the lines 2 to form frame bars between the folds of which the screen fabric is held.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY A. WAY.

Witnesses:

ETHEL EDSON,
EUGENE D. SEGAR.