(No Model.)

W. G. ANDERSON.

METHOD OF MAKING WINDOW SCREENS.

No. 279,851. Patented June 19, 1883.

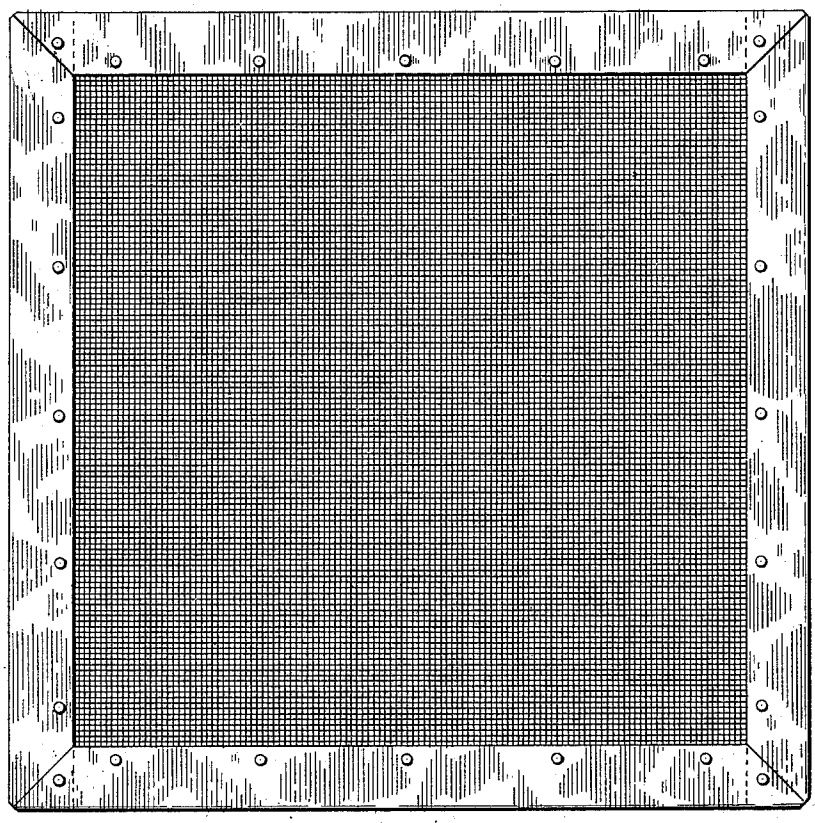


Fig. 1.

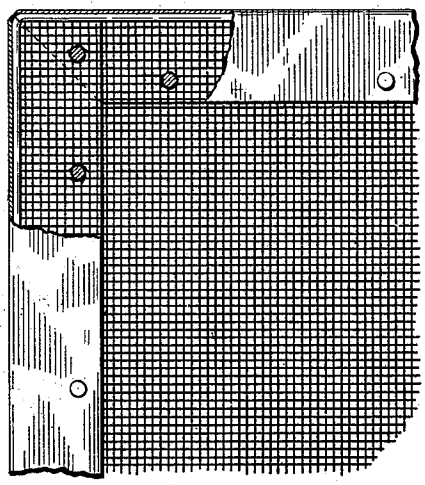


Fig. 2.

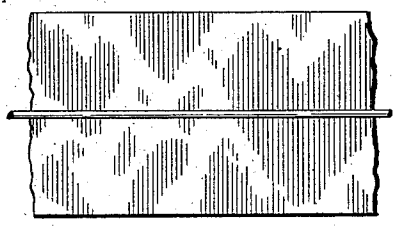


Fig. 3.

Witnesses:

Wolcott Bates

P. L. Wilson

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N. PETERS. Photo-Lithographer. Washington. D. C.

UNITED STATES PATENT OFFICE.

WILLIAM G. ANDERSON, OF BOSTON, MASSACHUSETTS.

METHOD OF MAKING WINDOW-SCREENS.

SPECIFICATION forming part of Letters Patent No. 279,851, dated June 19, 1883.

Application filed September 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. ANDERSON, of Boston, county of Suffolk, and State of Massachusetts, have invented a certain new and useful Improvement in the Method of Making Window-Screens, of which the following is a specification.

Adjustable window-screens heretofore employed have presented certain difficulties in their manufacture and use. Owing to the material of which the frames were made—generally wood, sometimes faced with metal—these screens were cumbersome and expensive, and not only interfered with the closing of the inner or outer blinds, as the case might be, but having been fitted for one window were useless for others, as the shape once given to them became permanent.

The object of my invention is to make an adjustable window-screen that will be light and inexpensive, so thin that it will not offer the least obstacle to the proper opening and closing of the inner or outer blinds, sufficiently flexible to admit of its being fitted to window-frames of any desired curve, and at the same time as strong and durable as any window-screen now in use. The means by which I accomplish these results is shown in the accompanying drawings, in which—

Figure 1 is a plan of the screen. Fig. 2 is a corner of the screen on an enlarged scale, the frame being cut away to show the method of inserting the netting therein. Fig. 3 shows the method of forming the frame by bending a piece of malleable metal about a stiff wire rod.

The method of constructing my improved frame is as follows: A piece of sheet-tin, zinc, brass, or other malleable metal, of any desired length and two or three inches broad, is first bent back upon itself around a stiff wire rod, as shown in Fig. 3, in a manner familiar to tinsmiths, by hand or machinery, the rod being retained inside the metal to lend stiffness to the frame. Into the groove left between the two leaves thus formed is inserted the edge of a sheet of wire or cloth netting, and the metal is then hammered together upon the netting and riveted firmly, thus producing a strong light frame and screen.

Any other mallable material may be used, if desired, instead of metal; but the frame, rod, and netting employed should be of such quality and thickness that it may readily be bent into any form the window may require and retain the position into which it is bent, the malleable material being simply bent back upon itself to inclose the netting, as before described.

It will add greatly to the durability of the screen if it is japanned with heat after it is made. This is rendered possible by the fact that the screen is entirely of metal, and thus capable of bearing the heat of the japanning-oven; and, as far as I know, no screens heretofore made are capable as mine are of being japanned in this way.

Whatever the shape in which these screens are to be used they will be packed for transportation in a straight or flat condition. As the screen is non-elastic and will retain the shape into which it is bent until force is applied to change its shape, it is evident that the same screen may be used until it is worn out, either for straight or curved window-frames, one great advantage of this frame over those heretofore used lying in this adaptability to different windows.

I am aware that steel has been used for window-screen frames accompanied with a wooden bead, and adjusted to retain its place in a curved window by its elasticity; but it is my aim to avoid this elasticity, my screen being held in place by friction alone.

To render the screen absolutely dust-tight, I prefer to fasten a thin piece of felt along the frame on the top and bottom, no such felt being required for the sides, which fit in grooves in the window-frame whether the screen is placed inside or outside of the sashes.

I claim—

1. The above-described improvement in making window-screens, which consists in bending a piece of malleable material around a metallic wire to form the frame, inserting the edges of the netting between the two leaves of the frame thus formed, and then securely fastening said netting to the frame by rivets or otherwise, as herein described and shown.

2. The above-described adjustable window-screen, consisting of a wire-netting and a frame of malleable metal inclosing the edges of said netting and securely fastened thereto, the whole screen being flexible to admit of its fitting windows of different curvatures, as herein described and shown.

3. The combination of a metallic frame, stiffening-wire, and wire-netting riveted to said frame, as hereinbefore shown and described.

WILLIAM GEORGE ANDERSON.

Witnesses:
LELIA J. ROBINSON,
W. P. PREBLE, Jr.