

(No Model.)

A. BRAUN.  
SCREEN FRAME FOR WINDOWS, &c.

No. 515,814.

Patented Mar. 6, 1894.

FIG. 1.

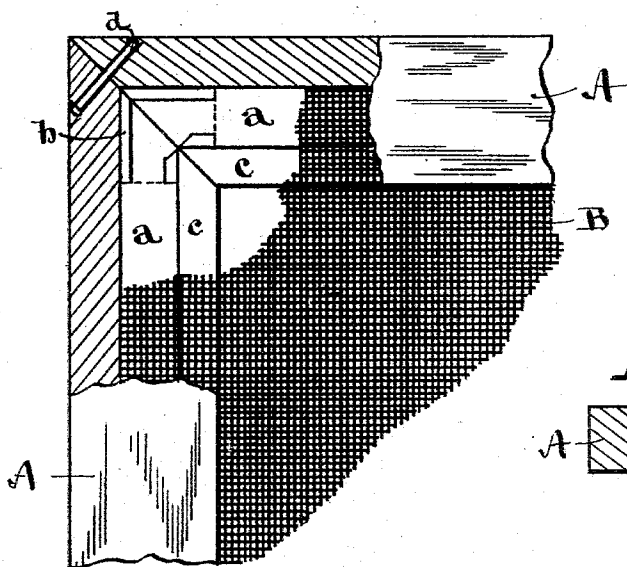


FIG. 2.



FIG. 3.

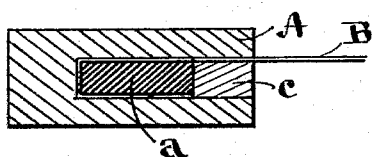
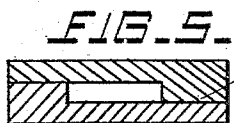
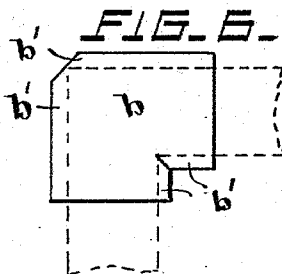


FIG. 4.



Witnesses:  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

ANTON BRAUN, OF NEWPORT, KENTUCKY.

## SCREEN-FRAME FOR WINDOWS, &c.

SPECIFICATION forming part of Letters Patent No. 515,814, dated March 6, 1894.

Application filed December 14, 1893. Serial No. 493,627. (No model.)

*To all whom it may concern:*

Be it known that I, ANTON BRAUN, a citizen of the United States, residing at Newport, Campbell county, Kentucky, have invented new and useful Improvements in Screen-Frames for Windows, &c., of which the following is a specification.

My invention relates to frames for window-screens composed of wire-netting or "gauze," made to fit in the grooves of the sash or door frame as a substitute for the sash or door, for the purpose of excluding insects. It is necessary to have the frame as light as possible in order to fit the narrow spaces of the door and window casings, and also in order to maintain the screened opening to its utmost size, to admit air and light. Under these conditions, and because of the additional fact that the wire netting is to be retained in tension, the light frame necessarily warps or bends and the screen becomes unsightly, or braces are placed between the sides of the screen frame across the screened surface, which are equally objectionable.

The object of my invention is to produce a screen frame free from the objections above referred to, and better adapted to answer the conditions of use.

To this end, my invention consists in a screen frame of wood or other light material, having embedded within the same a skeleton frame of metal to which the gauze or netting is secured, as hereinafter described.

My invention is illustrated in the accompanying drawings, in which—

Figure 1, is a plan view,—partly sectioned to show construction,—of one corner of my improved screen frame complete. Fig. 2, is a cross section of the wooden part of the frame. Fig. 3, is a cross section of the entire composite frame. Fig. 4, is a plan view of one of the blanks employed to unite the corners of the metal strips. Figs. 5 and 6, are cross sections showing the frame made of two pieces secured together, inclosing a space to be occupied by the metal skeleton and avoiding the necessity of an independent strip.

Referring now to the drawings; A, designates the screen frame and, B, the wire netting or gauze.

In the preferred form of construction, the

wooden frame, A, is made up of lengths of homogeneous strip grooved at one edge as at, *g*, in the section Fig. 2. The skeleton metal frame, *a*, is made up of flat rolled bars of iron or steel cut to length and preferably joined at the corners (as in Fig. 1), by sheet metal blanks, *b*, (Fig. 6,) whose flaps, *b'*, are folded upward over the metal strip upon the dotted lines shown in Fig. 6, as shown in full lines in Fig. 1. Around a metal frame so made, the wire netting or gauze, B, is bent and tightly secured by the close fit of the iron frame, *a*, in the groove *g* as shown in Fig. 3. When the parts of the frame are placed together, a filling strip, *c*, is glued or tacked in place as shown in Fig. 3, and the corners of the composite frame are secured together by a diagonal screw or rivet, *d*, (Fig. 1) or by exterior metal coverings (not shown). There is thus formed an exceedingly strong frame capable of resisting the tension of the netting, and holding all parts securely together, and the metal skeleton remains embedded and concealed in the wood. A relatively smaller frame can thus be had, with far greater strength than if composed of wood alone, and capable of always maintaining its proper rectangular shape without cross braces.

The outer or wooden frame, A, can be made of two-part strips divided as indicated in Figs. 5 and 6.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. In a "wire screen" the combination of a recessed wooden frame, an inner strengthening skeleton of metal embedded in and fitting said recess, and a sheet of wire-netting extended at its edges into the recess of the wooden frame and engaged over the metal skeleton, substantially as set forth.

2. The combination of the recessed wooden frame, A, the metallic frame, *a*, wire gauze, B, and filling strip, *c*, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ANTON BRAUN.

Witnesses:

RUDOLPH JUNK,  
L. M. HOSEA.