Jan. 8, 1929. 1,698,065

A. L. OTTO

METALLIC SCREEN

Filed April 28, 1924

Fig. 1.

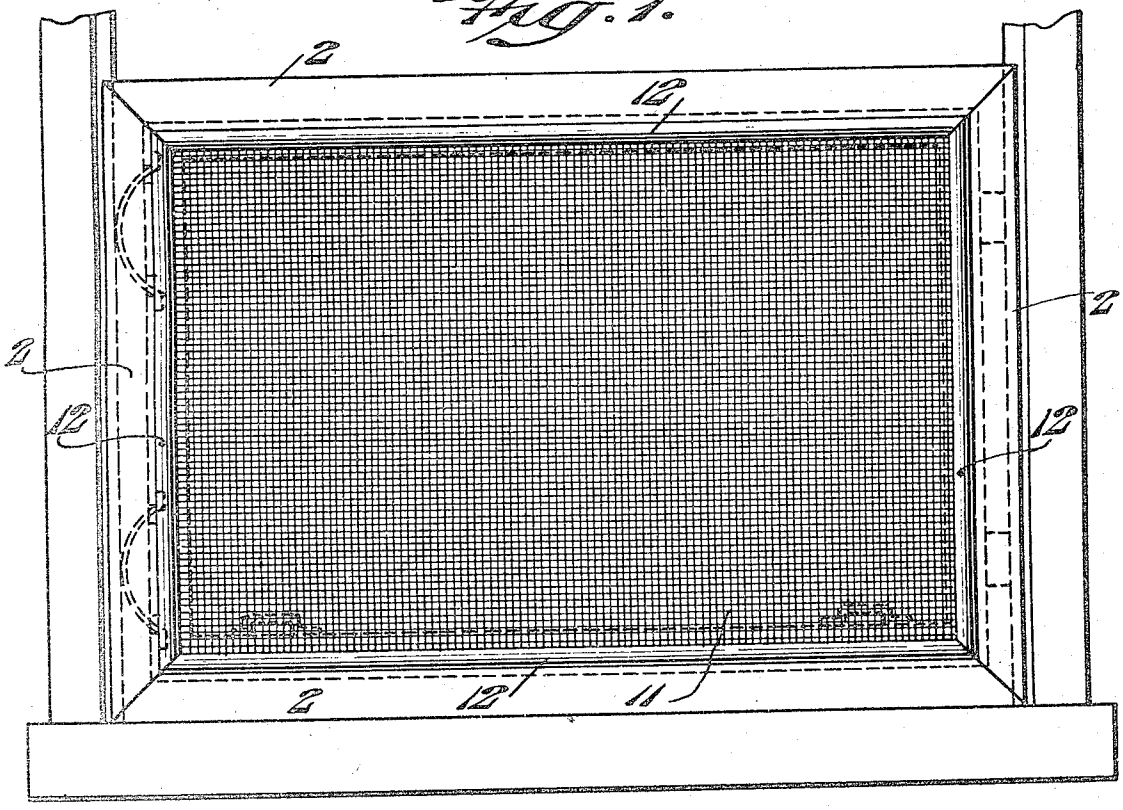


Fig. 2.

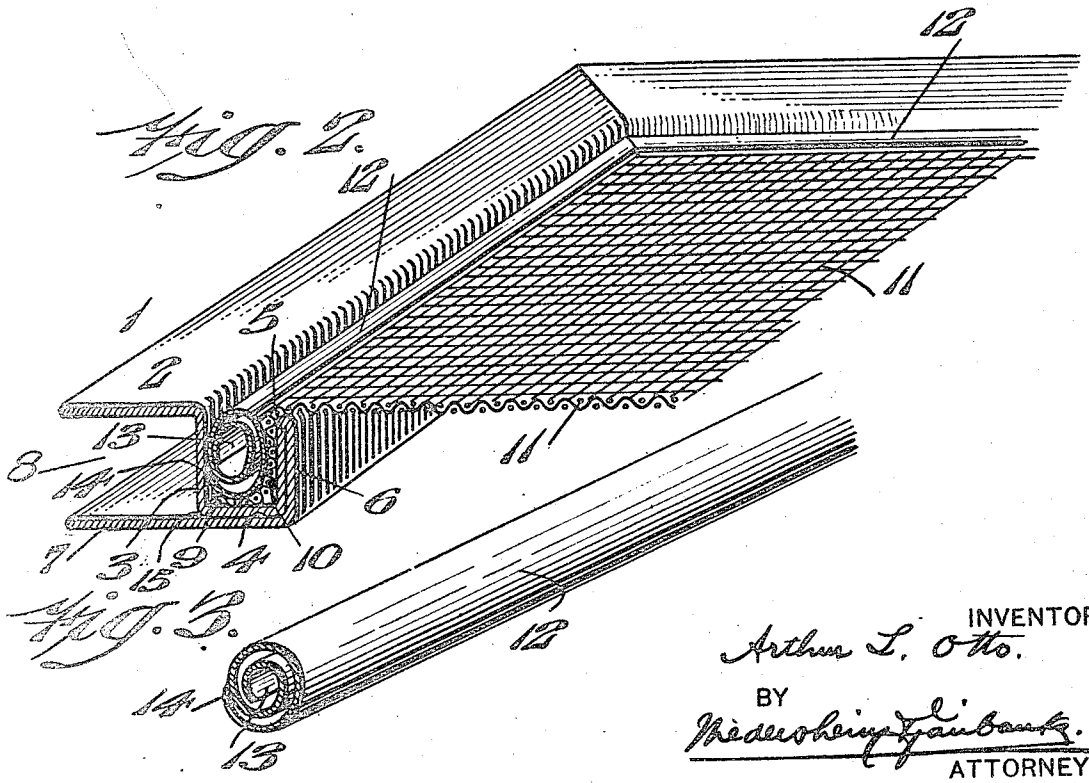


Fig. 3.

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METALLIC SCREEN.

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My invention relates to metallic screens and more particularly to a novel construction of a frame which is provided with an outer guiding channel, and an inner screen retaining channel formed in a novel manner in which latter the edges of the screen are positioned, in conjunction with a novel construction of an anchoring device for securing the outer edges of the metallic screen in position, said anchoring device being composed of a resilient convoluted or spiral strip which is adapted to be forced into the screen retaining channel and frictionally to retain the terminal edges of the metallic screen in fixed position.

It further consists of a novel construction of an anchoring device composed of a resilient, helical or convoluted member, whose outer walls are adapted to be compressed when said anchoring member is in use so as firmly to hold the edges of the metallic screen in position within the screen retaining channel.

It further consists of other novel features of advantage and construction, all as will be hereinafter fully set forth and particularly pointed out in the claims.

For the purpose of illustrating my invention, I have shown in the accompanying drawings forms thereof which are at present preferred by me, since they will give in practice satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a plan view of a metallic screen embodying my invention.

Figure 2 represents a perspective sectional view of a corner of the screen, its frame and anchoring member showing the manner of applying the latter to the screen retaining channel.

Figure 3 represents a perpective view of an end of the spiral or convoluted anchoring member.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—

1 designates my novel window screen frame, the same comprising the member 2, which is deflected at its inner portion at substantially a right angle to form the member or wall 3, which latter is deflected at substantially a right angle to form the member or wall 4.

The wall 4 is continued upwardly to form the member or wall 5, which is parallel to the member 3, and said wall 4 is then deflected downwardly to form the member 6, which is parallel with and in contact with the member 5, said member 6 being then deflected outwardly at a right angle and extended contiguous to and parallel with the member 4, as indicated at 7, in Figure 2. The walls 7 and 2 are parallel so as to form the outer guiding channel 8, and between the walls 3 and 5 is formed the screen retaining channel 9, within which the deflected end 10 of the screen 11 is received and secured in position by the anchoring element 12. This anchoring element is composed of a spirally bent or convoluted piece of resilient sheet metal of any suitable material, which is convoluted as seen in Figure 3, its inner terminal being indicated at 13, and its outer terminal at 14.

It will be seen from the foregoing that by my novel construction of frame, a very cheap, durable and efficient integral structure is produced and that the inner upright portion of the frame, which is formed by the walls 5 and 6 is of double thickness or reinforced by the provision of the double walls, so that when the anchoring member 12 is forced into position the outer edges of the screen will be effectively locked within the screen retaining channel, and the construction of the anchoring member 12 is such that after it is forced into the position seen in Figure 2, its resiliency will cause its outer periphery to expand tightly against the contiguous portion of the screen and thus hold the latter immovably in position.

It will be understood that if desired I may spotweld, braze, solder or otherwise secure the walls 4 and 7 to each other along the joint 15 seen in Figure 2. This, however, can be omitted if desired.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and de-

scribed the preferred embodiments thereof which have been found in practice to give satisfactory and reliable results, it is to be understood that the same are susceptible of modification in various particulars without departing from the spirit of scope of the invention or sacrificing any of its advantages.

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

In a metallic screen frame having a screen retaining channel in the face thereof and having a metallic screen fabric mounted thereon with the edges of said fabric thereof deflected into and disposed within said screen retaining channel, a resilient anchoring member convoluted a plurality of complete turns within itself and adapted to be positioned in a part of said screen-retaining-channel for securing a part of the edge of said screen fabric in said channel.

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