

946,312.

C. C. ARMSTRONG.
SCREEN.
APPLICATION FILED DEC. 11, 1908.

Patented Jan. 11, 1910.

Fig. 1.

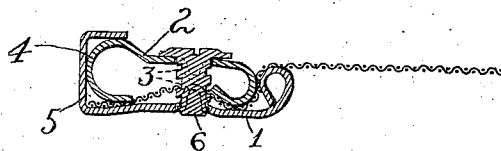
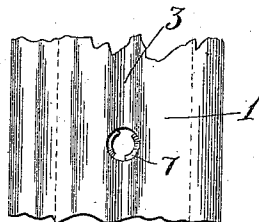


Fig. 2.



Fig. 3.



ATTEST.
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SCREEN.

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To all whom it may concern:

Be it known that I, CHARLES C. ARMSTRONG, citizen of the United States, residing at Marysville, Ohio, have invented certain
5 new and useful Improvements in Screens, of which the following is a specification.

My invention relates to window screens, and is an improvement upon the general form of screens disclosed in Letters Patent
10 of the United States, granted to me July 17, 1906 and numbered 825952.

My present improvement concerns particularly the construction and arrangement of the screw which passes through the clamping
15 members and the edge of the screen cloth held between them. In my former patent a screw of substantially ordinary form was employed, having a comparatively fine thread, as ordinarily, and in order to employ a screw
20 of this character it was found necessary to punch the lower clamping member, insert an eyelet therein and rivet this eyelet in place, and furthermore, the eyelet required to be tapped out to receive the screw thread. With
25 a screw of substantially ordinary form, having a thread of the ordinary degree of fineness, it has been found difficult for an inexperienced person to secure the parts together, for as the screw is inserted it very often happens that a single strand of wire is caught by
30 the screw, preventing it from entering the threaded eyelet and damaging the delicate thread on the screw, and in the eyelet.

My present invention is designed to avoid
35 the use of the eyelet and to prevent damage to the screw or to the threaded member in which the screw works, and with this object in view my invention includes a screw having a coarse thread adapted to cut its own
40 way through the wire or to spread the strands thereof, combined with a socket to receive the screw, said socket having its threads stamped up and formed directly in the metal of the clamping member, the
45 stamping forming the thread at the same time the hole is being punched to receive the end of the screw.

The invention is disclosed in the accompanying drawings, in which,

50 Figure 1 is a sectional view through the clamping members of the screen with the wire in place and the screw passing through the said members and wire. Fig. 2 is a detail view of the screw itself, and Fig. 3 is a

plan view of the clamping member having the screw threaded socket or opening formed therein.

In these drawings, 1 indicates the main or lower clamping member, and 2 the upper clamping member. These clamping mem-
60 bers are preferably formed of metal, and each is provided with a rolled edge adapted to receive the screen cloth between them, and each is also provided with a longitudinal corrugation, as at 3, to give strength and a certain degree of resiliency to the parts. The
65 upper clamping member is also provided with a rolled edge 4, fitting in a channel portion 5, of the lower clamping member in which channel the upper member is adapted
70 to have pivotal movement. The screw for holding the parts together is shown at 6, this having a flat kerfed head and having also a coarse thread of substantially double pitch in respect to the thread of an ordinary screw.
75 The clamping members are punched with openings at the corrugations, and the opening in the lower or main member is provided with a screw thread, as shown at 7. This screw thread is formed directly in the metal
80 of the clamping member itself, and is made at the same time that the opening is punched, suitable dies being provided to punch the opening and form the screw thread at one operation.

By reason of the construction described
85 the screw will cut through the strands of the wire or force them apart without damage to its own thread, and by engaging the thread at the opening in the lower clamping mem-
90 ber the screw will draw the clamping members together and securely hold them in place with the screen cloth clamped between them. It is not necessary, with a screw of this form to spread the strands of the wire in order to
95 insert the screw.

The corrugation in the clamping member lends itself materially to the proper carrying out of my invention, particularly as regards the formation of the screw thread di-
100 rectly in the metal of the corrugation itself.

I claim as my invention:—

1. In a screen frame, a pair of clamping members having the screen cloth between them, and a screw of coarse pitch passing
105 through the said members and through the screen cloth, one of the clamping members having a punched opening and a punched

screw thread formed from the metal at the edge of said punched opening to receive the screw, substantially as described.

2. In combination in a screen frame, a
5 pair of clamping members having screen cloth between them and a screw passing through the said members and cloth and engaging a punched screw thread formed at the edge of the punched opening in one of

the members, said member at the screw 10 threaded opening being corrugated, substantially as described.

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

CHARLES C. ARMSTRONG.

Witnesses:

ROBT. McCORRY,
L. C. McDOWELL.