M. KENNEDY.

Fastening for Wire-Cloth.

No. 221,322. Patented Nov. 4, 1879.

Fig: 1

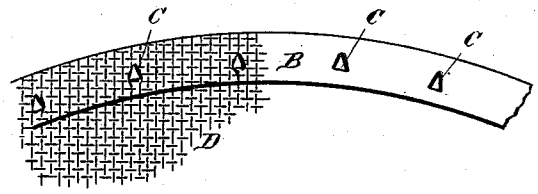


Fig: 2

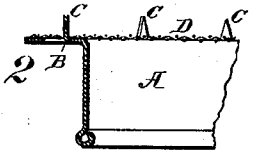


Fig: 3

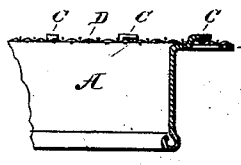


Fig: 4

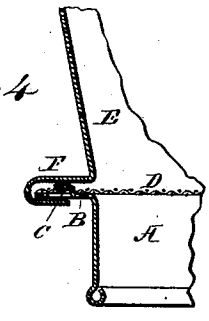
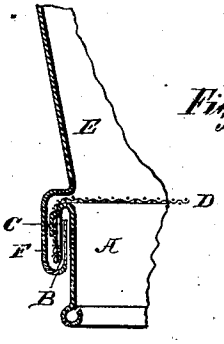


Fig: 5



WITNESSES

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MICHAEL KENNEDY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN FASTENINGS FOR WIRE-CLOTH.

Specification forming part of Letters Patent No. **221,322**, dated November 4, 1879; application filed March 21, 1879.

To all whom it may concern:

Be it known that I, MICHAEL KENNEDY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fastenings for Securing Wire-Cloth; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to a novel construction of a joint in which it is the purpose to secure a wire-cloth margin, and has for its object to provide a fastening not dependent upon friction of the united parts merely, but one in which the cloth is positively engaged by its meshes to one of the parts with which it is joined.

To this end my invention consists in a joint composed of two plates, one or both of which are metallic, between which the wire-cloth is held, wholly or in part, by points or serrations formed on the strip or band of sheet metal which constitutes one of said surfaces, which points enter or hook into the meshes of the cloth, thus positively engaging the cloth by its meshes, while the opposing surface covers and protects said points and prevents any disengagement of the wire-cloth therefrom.

My invention is herein illustrated in its application to a metallic or tin-rimmed sieve. The rim or body of the sieve consists of two parts, namely, an upper and a lower band, and the wire-cloth bottom is secured in the seam which unites these two parts.

In the drawings, Figure 1 shows, in plan view, a horizontal flange turned on, say, the lower band of a tin-rimmed sieve, having points cut and thrown up therefrom. It also shows a portion of the wire-cloth bottom applied to the points. Fig. 2 is a vertical section of the lower or foot band of the sieve, showing the points in position to receive the wire-cloth. Fig. 3 is a similar section of the same band, showing the points turned downward and outward upon the wire-cloth after the latter has been hooked or caught upon them. Fig. 4 shows the margin of the upper band clasped over the flange and hooks of the lower band, and over the cloth after the cloth has been secured by the points, as shown in the last preceding figure. Fig. 5 shows the double flange-seam of Fig. 4 turned down against the foot-band.

The same letters are applied to corresponding parts in the several figures.

A is the lower or foot band, and E is the upper band, of the rim or body of the sieve. The two bands are united to form the body by means of flanges turned on their meeting margins, in the usual manner of joining sheet metal to sheet metal. B is a flange turned on the foot-band A, and F is a wider flange similarly turned on the upper band, E, to form the joint.

Now, for the purpose of firmly securing the wire-cloth sieve-bottom D between the upper and lower bands B and F, I form slender points or projections C C on one of the flanges, (say, B,) and throw them up vertical to the flange, or perpendicular, as shown in Fig. 2. Upon these points the wire-cloth D is placed, so that the points C enter and project upward through the meshes of said cloth at a short distance from its margin, on all sides. After the cloth has been forced down about the points into contact with the flange, the points are turned over outwardly upon the wire-cloth, as shown in Fig. 3. Thereafter the seam joining the band A with the upper band, E, is completed, as shown in Fig. 4; or it may be further turned to lie close to the body, as shown in Fig. 5.

In the several figures of the drawings it is sought to show the relation of the parts alone, and not at all their closeness in the finished sieve; for, in practice, the hooks C are forced very nearly or quite into their original position as part of the flange, and the two flanges firmly clamp the wire-cloth between and about the points C C, as well as the points themselves.

The points are herein shown as being thrown up from the central portion of the flange E; but obviously they may be formed in the margin if preferred. It is of course immaterial whether they are formed on the upper or lower flange.

By throwing the points slightly inward the wire-cloth will be tightened somewhat in being forced down about them, and it will, in any case, be stretched or drawn in folding the points outward into the position shown in Fig

3. Special tightness will, however, be given to the cloth in compressing the seam, or in overfolding it, as shown in Fig. 5.

My improved fastening may be applied to a wood-rimmed sieve by means of a metal strip fitted to the wooden hoop, and provided with the points C, thrown outward to receive the wire-cloth. The cloth being first attached to the metal band by means of the points which are turned down, as shown in Fig. 3, the band and cloth can be inserted within the hoop, and secured either by nails or by swaging, as may be preferred. Similarly, wire-cloth may be securely fastened to the frames of window and door screens, and, if preferred, in these structures the points may pass through the meshes directly into the wood, and not be overfolded, as shown in the drawings.

I am aware that wire-cloth has heretofore been secured to a surface by points protruding from said surface through the meshes of the cloth, and therefore do not claim that mode without the additional security hereinbefore described.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The wire-cloth fastening described, which consists in a sheet-metal part having points or serrations that enter and positively engage the meshes of the cloth, combined with a second part between which and that bearing the points the wire-cloth is closely embraced, substantially as set forth.

2. The combination, in a tin-rimmed sieve, of the parts A and E, having the flanges B and F, respectively, one of them being provided with the points or projections C, and of the wire-cloth D, clasped over the points C and between the flanges, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

MICHAEL KENNEDY.

Witnesses:
M. E. DAYTON,
JESSE COX, Jr.