W. ZERNS.

CRIMPING WIRE CLOTH.

No. 49,356. Patented Aug. 8, 1865.

Fig: 1.

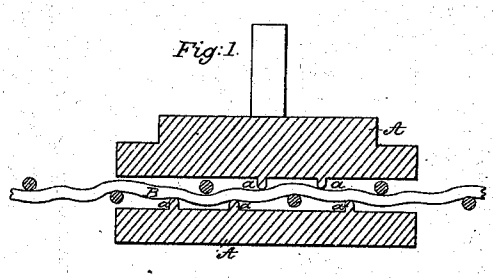


Fig: 4

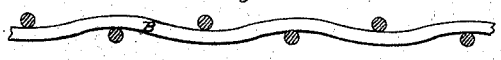


Fig: 2.

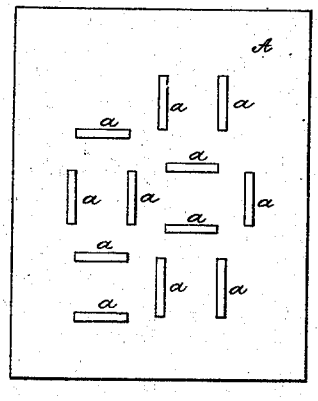


Fig: 3

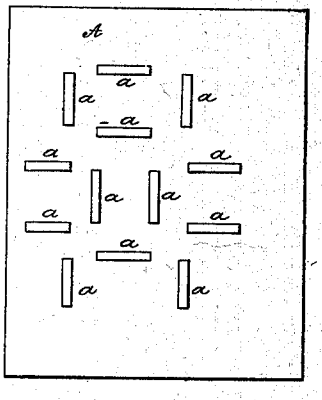
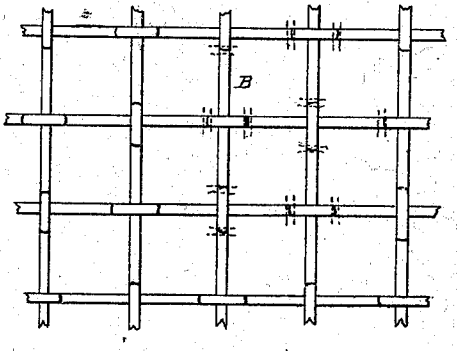


Fig: 5



Witnesses:
Chas Tusch
Wm Greurn

Inventor:
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Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM ZERNS, OF POTTSVILLE, PENNSYLVANIA, ASSIGNOR TO HIMSELF, JOHN R. DEIGHM, AND JASPER SNELL, OF SAME PLACE.

IMPROVEMENT IN CRIMPING WIRE-CLOTH.

Specification forming part of Letters Patent No. **49,356**, dated August 8, 1865.

To all whom it may concern:

Be it known that I, WILLIAM ZERNS, of Pottsville, in the county of Schuylkill and State of Pennsylvania, have invented a new and useful Improvement in Crimping Wire-Cloth; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of the device or means employed for carrying out my invention; Figs. 2 and 3, face views of the same; Fig. 4, a section of a piece of wire-cloth before being crimped by my improved mode; Fig. 5, a plan or face view of a piece of wire-cloth crimped according to my invention.

Similar letters of reference indicate corresponding parts.

Wire-cloth of the coarse kind require to have the wires crimped or bent in order to bring the same as near as possible to a plane surface and retain the wires in position. Hitherto the wires have been crimped before the weaving process; but by my improvement I crimp them after they are woven by means of toothed plates, as hereinafter set forth.

A A represent two metal blocks, which are of rectangular form, and have steel teeth *a* inserted in them, of oblong form, as shown in Figs. 2 and 3. These teeth *a* have such a position that when a piece of wire-cloth, B, is inserted between the blocks A A the teeth *a* will cross the wires at right angles, as indicated in red in Fig. 5, and when the blocks have pressure applied to them the wires will be bent or crimped at both sides, or "double-crimped," as it is termed, so as to cause the cloth to approximate to a plane surface and the wires to be firmly secured in position.

I design to have the blocks A A of such dimensions that an entire sheet or section of cloth may be crimped at one operation.

According to the old plan of double-crimping, the wires, after being bent or crimped, are woven by hand. By my improvement the wire-cloth is woven and taken from the loom and then crimped by means of the toothed plates, as described.

I claim as new and desire to secure by Letters Patent—

The crimping of wire-cloth by placing the same, after being woven, between toothed plates and subjecting it to pressure, substantially as set forth.

WM. ZERNS.

Witnesses:

JAS. F. SEIDERS,

JACOB CHRISMAN.