(No Model.)

A. G. HULBERT.

WIRE NETTING.

No. 302,845. Patented July 29, 1884.

Fig. 1.

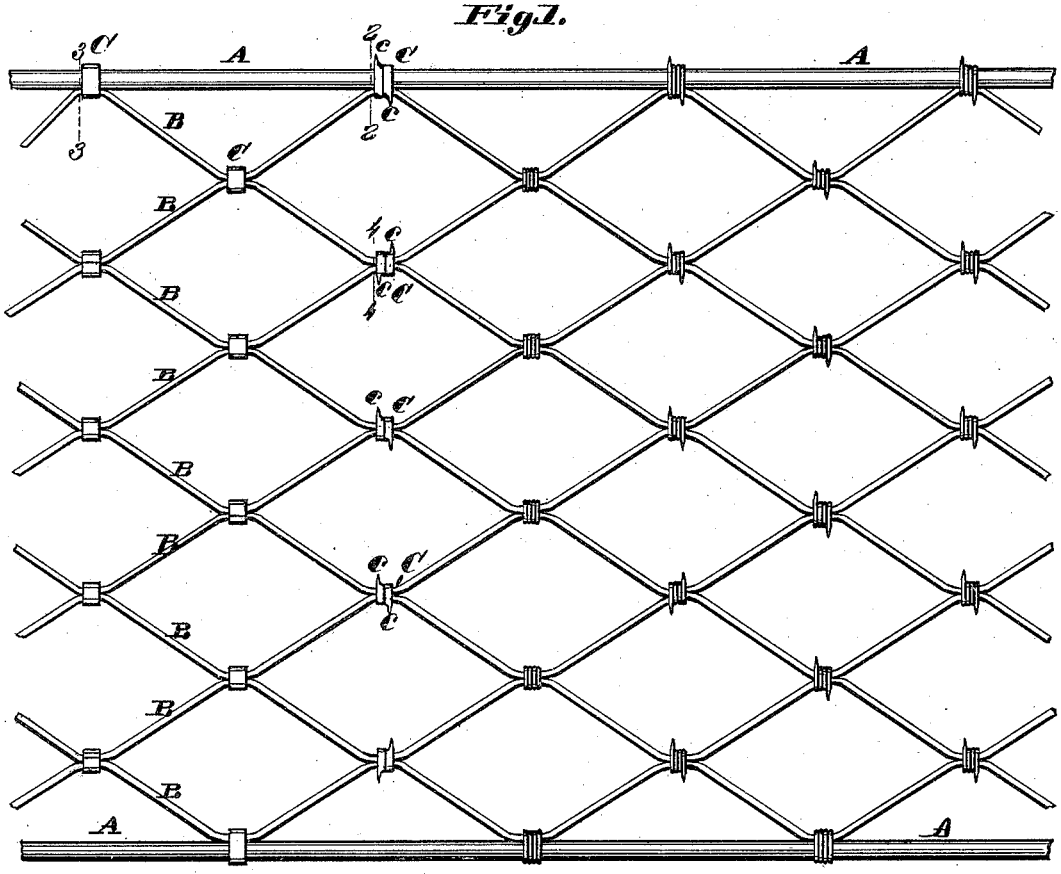


Fig. 2

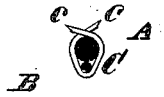
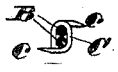


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

ARTHUR G. HULBERT, OF ST. LOUIS, MISSOURI.

WIRE-NETTING.

SPECIFICATION forming part of Letters Patent No. 302,845, dated July 29, 1884.

Application filed May 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR G. HULBERT, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Wire-Nettings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present improvement consists of a netting composed of two supporting marginal wires or cables, with intermediate or body wires connected to the marginal or selvage wires and to each other by simple ring or coil binders, either plain or barbed, tightly compressed thereon by clamping or clinching, as hereinafter described.

Figure 1 is a side view of a section of the netting. Fig. 2 is a transverse section at 2 2. Fig. 3 is a transverse section at 3 3. Fig. 4 is a transverse section at 4 4.

A are the selvage-wires, shown stretched parallel with each other at any desired distance asunder.

B are zigzag body-wires, the outer ones of which are connected to the selvage-wires A, at intervals, by binders C, composed of wires or flat strips or plates bound or coiled tightly around the parts, substantially as shown. The body-wires are connected together at points intermediate between the other connections by similar binders. The binders may be plain, as shown in some cases in the drawings, or the ends *c* of the binders may be allowed to project, and thus form barbs, as shown in part of Fig. 1, and in Figs. 2 and 4. The plain form is shown in Fig. 3. The barbs *c* may project laterally, so as to extend beyond the face of the fence, as shown in Fig. 4, or may project only on one side; or, as shown in Fig. 1, the barbs may extend in the plane of the fence upward and downward into the meshes; and said barbs may, if desired, be of considerable length, to decrease or divide the mesh.

Common staples may be used for the binders by clamping them around the wires and allowing the points to project as barbs in any desired directions.

A very simple and cheap process of the manufacture of the netting is to draw all the wires from stationary spools or coils parallel to a reel on which the finished fabric is to be wound, and clinch on binders by a hand-tool or pliers to form the junctions of the wires; or the plain wires may be put upon posts for fencing and joined alternately with one another, as described, thus completing the fence; or the fabric may be made automatically by a machine constructed to draw the wires off spools or coils, and cut and apply binders from continuous lines of wire or metal strips supplied by intermittent feed. I have in process of invention a machine for this purpose, for which I expect to make application for patent.

The binders being clamped or clinched on the wires prevents them from slipping, for where the binders are loose they are easily shifted on the wires, and destroy the uniformity of the fence by increasing or diminishing the size of the meshes. By tightly compressing the binders in the act of clamping or clinching them to the wires, the latter are sufficiently bent to prevent the sliding of the binders thereon.

I am aware that wire-nettings have been made with diamond-formed meshes; but in such cases, as far as my knowledge extends, the wires either cross each other, or are hooked, looped, or twisted together at the points of connection, or are loosely engaged in open links, disks, or hooks not possible to be put on automatically, except by very expensive and complicated machinery. The chief object of my invention is to produce a wire-netting of simple and rigid construction and uniform design from common round or flattened wire, either by hand or automatic machinery, and of either fine wire or heavy rod.

I claim as my invention—

1. In a wire-netting, the combination of continuous zigzag body-wires, selvage wires or cables, and binders clinched around the body-wires and body and selvage-wires at points of contact, and having the ends of such encircling binders projecting past each other to form barbs, as set forth.

2. In a wire-netting, the combination of zigzag continuous body-wires and binders clinched around the body-wires at each point of contact, and projecting to form barbs, as set forth.

3. In a wire-netting, metal binders having beveled or pointed extremities coiled around mesh-wires, and projecting to form barbs, as set forth.

Witnesses: ARTHUR G. HULBERT.
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