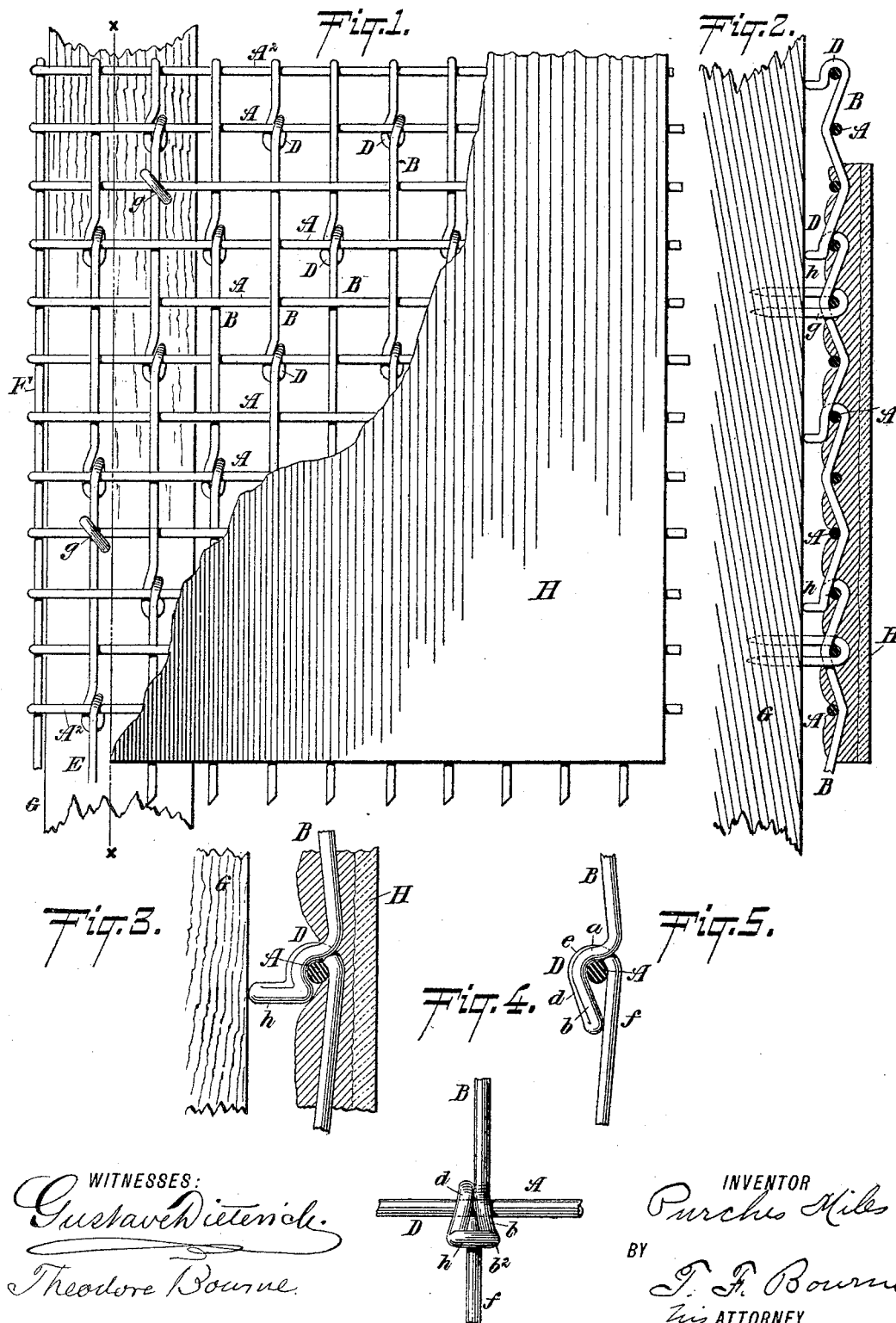


(No Model.)

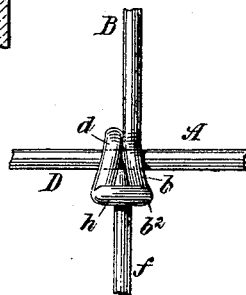
P. MILES.
WIRE LATHING.

No. 459,014.

Patented Sept. 8, 1891.



WITNESSES:
Gustav Dietrich.
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UNITED STATES PATENT OFFICE.

PURCHES MILES, OF BROOKLYN, NEW YORK.

WIRE LATHING.

SPECIFICATION forming part of Letters Patent No. 459,014, dated September 8, 1891.

Application filed July 19, 1890. Serial No. 359,291. (No model.)

To all whom it may concern:

Be it known that I, PURCHES MILES, a resident of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Wire Lath, Netting, Fencing, and the Like, of which the following is a specification.

The object of my invention is to produce a strong, light, and durable wire lath, netting, or the like, wherein the wires will be firmly bound together.

The invention consists in a wire lath or the like composed of a series of substantially parallel wires or rods and another series of wires or rods crossing said first-mentioned series, the wires of one of said series having loops or bends, which loops receive the wires of the other series, the loops being firmly pressed upon the wires they receive to hold them all together.

The invention further consists in the novel details of improvement and the combinations of parts that will be more fully hereinafter set forth, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a side view of a piece of my improved wire lath or netting, the plaster on the same being partly broken away. Fig. 2 is a vertical cross-section on the plane of the line *x x*, Fig. 1. Fig. 3 is a detail cross-sectional view, enlarged, on the plane of the line *x x*, Fig. 1. Fig. 4 is a detail face view, enlarged, showing the loop on the wire B that holds the wire A; and Fig. 5 is a detail sectional side view showing the loop holding the wire A.

In the accompanying drawings, A indicates a series of wires or rods placed substantially parallel and preferably extending longitudinally of the wire lath or netting like warp. B are cross wires or rods placed against the wires A at suitable distances apart, the wires A and B being secured firmly together. The cross-wires B carry loops or holders D, by which the wires A B are bound together. (See Figs. 3 and 5.) I prefer to form the loops D by bending the wire B outward at *a*, (see Fig. 5,) then downward or forward at *b*, then upward or rearward at *d*, substantially parallel with *b*, then inward at *e*, and then downward

or forward at *f*. The loops on the cross-wires all point in the same direction, so that they can be passed under the longitudinal wires when attaching the wires. The cross-bars are spaced at equal distances apart, forming meshes of equal size throughout the length of the netting. To keep the parts *b* and *d* about on a level the wire may be carried sideways at *b*². (See Fig. 4.) The wire B may have any desired number of these loops, so as to engage and hold any desired number of wires A. After the loops D are formed the wires A are placed in the socket formed by the loops and main wire, and then the loop is pressed down on the wire A to confine the wires A and B together. (See Fig. 5.) By this means the longitudinal wires are rigidly held at certain distances apart and a very strong lath or netting is produced. The cross-wires B may project beyond the outer wires A² of the series A, if desired, to form barb-like projections E. These projections or barbs serve as a preventive for climbing or crawling over or under the netting when it is used as a fence. Of course plain wires F may be placed or woven in with the wires A B, if desired.

Wire lath or netting constructed as above shown may be held to the beam, post, or other support G by staples *g*, and the plaster H will envelop the wires A B and the loops D, as well as fill up the spaces between the wires, and thus be firmly held to the lath.

To keep the lath at the proper or desired distance from the beams G in order to permit plastering to key, certain of the loops D may be bent outwardly, forming side projections *h*, that rest against the beam G, (see Figs. 2 and 3,) the staples that hold the lath to the beam keeping the projections *h* pressed firmly against the beam. In Fig. 3 the loop D is shown clasping the wire A, as well as having the projection *h* to rest against the beam G.

By the above construction a very strong structure can be produced with light metal and the wires can be at quite a distance apart, thereby reducing the cost by using less material than in the ordinary woven structures.

Instead of using round wires or rods, as in the drawings, flat wires, straps, or material of any cross-section desired can be used.

Of course the structure above described can be used for other purposes than lathing—as, for instance, for fencing or wherever netting of its class is useful. Of course either
5 the longitudinal or the cross wires could carry loops to engage the opposite wires, if desired.

After the netting or lath is constructed as above it may be galvanized to prevent rusting, &c., which galvanizing also assists in
10 holding the parts more firmly together.

From the foregoing description it will be seen that I produce a complete netting or web in a single structure, the longitudinal wires A being the warp and the cross-bars B the
15 weft, the bars A B being all firmly united by the loops.

I do not claim a stay for barb-wire fences, which stay is put in place after the wires have been strung on the posts and a single
20 stay between two posts, as this is not a completed structure and is not adapted to be used as a lathing, nor is it a netting or web.

Having now described my invention, what I claim is—

25 1. As a new article of manufacture, a me-

tallic lath consisting of a web of wires arranged in two intersecting series, the wires in each series being parallel and spaced equal distances apart, whereby uniform meshes are formed throughout the web, one series of wires
30 being provided with loops or bends which all point in the same direction and are clamped upon the intersecting wires, as specified.

2. In a wirelathing, the wires A, combined with the cross-wires B, having loops that en-
35 gage the wires A, and projections carried by the wires B and extending outwardly to hold the netting at a distance from its support, substantially as described.

3. In a lathing, the combination of the lon-
40 gitudinal wires with the cross-wires B, having a loop to engage and hold the longitudinal wires, said loop being bent outward at *h* to form a rest for the netting, substantially as described.

PURCHES MILES.

Witnesses:

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