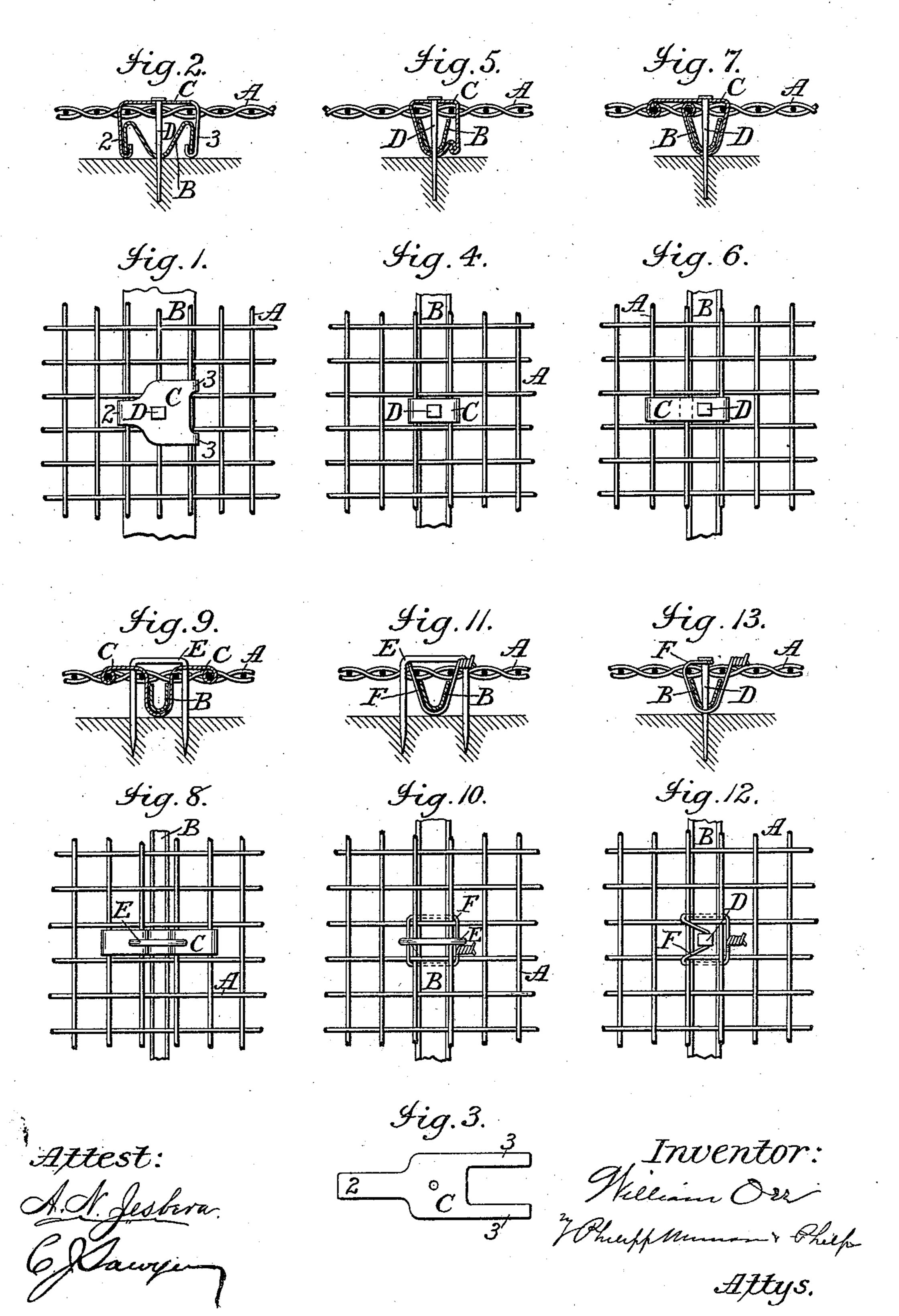
## W. ORR. WIRE CLOTH LATHING.

No. 560,531.

Patented May 19, 1896.



## United States Patent Office.

WILLIAM ORR, OF TRENTON, NEW JERSEY.

## WIRE-CLOTH LATHING.

SPECIFICATION forming part of Letters Patent No. 560,531, dated May 19, 1896.

Application filed August 16, 1888. Serial No. 282,893. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ORR, a citizen of the United States, residing at Trenton, county of Mercer, and State of New Jersey, have invented certain new and useful Improvements in Wire-Cloth Lathing, fully described and represented in the following specification and the accompanying drawings,

forming a part of the same.

This invention relates to what is known as "wire-cloth lathing material," which consists of a web woven of wire and having coarse meshes through which the plaster is forced to form the clenches. In order to use this lath-15 ing material to good advantage, it is necessary that it should be so stretched and supported as to be quite taut and thus yield very little when the plaster is applied, as any considerable amount of yield in the lathing material 20 would prevent the proper application of the plaster and also cause it to crack afterward. In order to properly support this lathing material and keep it properly taut, it is necessary to provide at comparatively short inter-25 vals furring-strips for the support of the cloth. These furring-strips are also necessary where the cloth is applied to a wall of masonry or other flat surface in order to support the cloth a sufficient distance away from such surface 30 to provide an air-space and also to permit the plaster to clench.

It is the object of the present invention to provide, as a new article of manufacture, wirecloth lathing which will be so strengthened 35 at intervals that it can be applied directly to the studding of the room or to a flat surface without the interposition of furring-strips and will possess sufficient stiffness to properly support the plaster, and will also in the case 40 of a flat surface be supported a distance from such surface to provide a suitable air-space behind the plaster. To this end I provide the wire-cloth, which is woven in the form of a web in the usual manner, with transverse stiff-45 ening-bars, which may be made in a variety of forms, which will be herein explained and which extend from one edge to the other of the web at short or comparatively short intervals and are secured upon one side of the 50 cloth by means of metal clips or lacing or fastening-wires, which are passed through the meshes of the cloth and around, or partly

around, the stiffening-bars. The cloth thus prepared is put up in rolls for the trade in the usual manner, the transverse stiffening-55 bars not interfering in the least with the rolling of the cloth, and when used for lathing it is simply unrolled and applied to the wall or ceiling without the use of furring-strips, it being secured to the wall or ceiling by nails or 60 staples, which pass through the meshes of the cloth and straddle or pass through the stiffening-bars or clips and stiffening-bars. By this means the value of the cloth as a lathing material is greatly enhanced and the facility with 65 which it can be used is greatly increased without adding proportionately to its cost.

As a full understanding of the invention can be best given by an illustration and a somewhat detailed description of the cloth 70 provided with stiffening-bars of different forms and secured to the cloth in different manners, all further preliminary description will be omitted and a full description given, reference being had to the accompanying 75

drawings, in which—

Figures 1 and 2 are respectively a plan view and a section of a portion of the cloth and one of its stiffening-bars, showing one of the clips for securing the stiffening-bar to the cloth. 80 Fig. 3 is a plan view of the blank from which the clip is formed. Figs. 4 to 13 are views similar to Figs. 1 and 2, illustrating stiffening-bars and clips of different forms and different means for securing the cloth and its stiffen-85 ing-bars to the wall or ceiling.

Referring particularly to Figs. 1 and 2, it is to be understood that A represents a piece of wire-cloth lathing woven in the usual manner. This cloth, after being woven in the 90 form of a web, is provided at suitable intervals with transverse stiffening-bars B, which extend transversely of the web from edge to edge upon one side and are secured to the cloth by means of clips C, which pass through 95 the meshes of the cloth and around or partly around the stiffening-bars. The stiffeningbars B may be made in a variety of forms. They may be formed of sheet metal corrugated longitudinally either to the M form 100 shown in Figs. 1 and 2, or to the V form shown in Figs. 4 to 7 and 12 and 13, or they may be formed of strips of sheet metal corrugated or bent longitudinally to any other desired form

in cross-section. The forms shown are, however, the preferred forms. Where the stiffening-bars are of the form shown in Figs. 1 and 2, they will preferably be secured to the cloth 5 A by means of clips C of the form shown in Figs. 1 to 3, these clips consisting of sheetmetal blanks, having prongs 2 3, which pass through the meshes of the cloth and are clenched around the edges of the stiffening-10 bars, as shown. The clips may, however, be of any other suitable form—as, for example, straight strips of sheet metal, which pass through the meshes of the cloth and around the stiffening-bars and are hooked together 15 at their ends, as shown in Figs. 4 and 5, or are bent around the weft-wires of the cloth, as shown in Figs. 6 to 9. The cloth and its attached stiffening-bars and clips may be secured to the wall or ceiling by means of nails 20 D, which pass through openings formed for that purpose in the clips and stiffening-bars, as shown in Figs. 1 to 7, or they may be secured to the wall or ceiling by means of staples E, as shown in Figs. 8 and 9, the legs of 25 which pass through openings in the clips and straddle the stiffening-bars. Instead of using the sheet-metal clips for securing the stiffening-bars to the cloth, wire F may be employed for that purpose, as shown in Figs. 10 to 30 13. This wire may be passed through the meshes of the cloth and around the stiffening-bars in any suitable manner. Where wire is employed for this purpose, the cloth and its stiffening-bars will preferably be se-35 cured to the wall or ceiling by means of staples, as shown in Figs. 10 and 11; but they may be secured by nails, as shown in Figs. 12 and 13. The clips will preferably be arranged to extend over two or more of the 40 weft-wires and also two or more of the warpwires, so that when the nails or staples are passed through the clips and driven into the wall or ceiling they will draw upon the clips and also upon the cloth and thus tend to 45 stretch it to some extent. The same result will be accomplished by the use of the staples used as shown in Figs. 8 to 11 or by the nails used as shown in Figs. 12 and 13.

What I claim is— 1. In a lathing material, the combination with the wire-cloth A, of the transverse stiffening-bars B projecting on one side of the cloth to form furring-strips and consisting of pieces of sheet metal bent longitudinally, and 55 metal fastenings independent of the cloth by which the stiffening-bars are secured to the

cloth, substantially as described.

2. In a lathing material, the combination with the wire-cloth A, of the transverse stiff-60 ening-bars B consisting of pieces of sheet metal bent longitudinally, and clips passing through the meshes of the cloth on the side of the cloth opposite the stiffening-bars and

securing said bars upon one side of the cloth, whereby the lathing may be secured to the 65 beams or studs by nails driven through the

bars, substantially as described.

3. In a lathing material, the combination with the wire-cloth A, of the transverse stiffening-bars B consisting of pieces of sheet 70 metal bent longitudinally, and sheet-metal. clips C passing through the meshes of the cloth on the side of the cloth opposite the stiffening-bars and securing said bars upon one side of the cloth, whereby the lathing may be se- 75 cured to the beams or studs by nails driven through the clips and bars, substantially as described.

4. In a lathing material, the combination with the wire-cloth A, of transverse stiffen- 80 ing-bars B formed of pieces of sheet metal M-shaped in cross-section, and sheet-metal clips C passing through the meshes of the cloth on the side of the cloth opposite the stiffening-bars and securing said bars on one 85 side of the cloth, whereby the cloth may be secured to the beams or studding by nails driven through the clips and bars, substan-

tially as described.

5. In a lathing material, the combination 90 with the wire-cloth A, of the transverse stiffening-bars B consisting of pieces of sheet metal, and clips C passing through the meshes of the cloth and securing the stiffening-bars on one side of the cloth, said clips embracing 95 two or more wires of the cloth on the side of the cloth opposite the stiffening-bars, whereby the cloth may be secured to the beams or studding by nails driven through the clips and bars and the cloth drawn taut by the 100 clips, substantially as described.

6. In a lathing material, the combination with the wire-cloth A, of the transverse sheetmetal stiffening-bars B bent longitudinally, and clips C securing the stiffening-bars on 105 one side of the cloth and provided with prongs 2, 3 passing through the meshes of the cloth and embracing two or more of the warp and

weft wires, substantially as described.

7. In a lathing material, the combination 110 with the wire-cloth A, of the transverse sheetmetal stiffening-bars B bent longitudinally, and clips C passing through the meshes of the cloth and securing the stiffening-bars on one side of the cloth, said clips and bars being pro- 115 vided with holes registering with each other for the attachment of the cloth to the beams or studding by nails, substantially as described.

In testimony whereof I have hereunto set 120 my hand in the presence of two subscribing witnesses.

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m WM.~ORR}.$ 

Witnesses:

A. D. CARNAGY, EDMUND RIEDEL.