A. P. WHITE.

LATHING.

APPLICATION FILED NOV. 13, 1909.

960,751. Patented June 7, 1910.

Fig. 1.

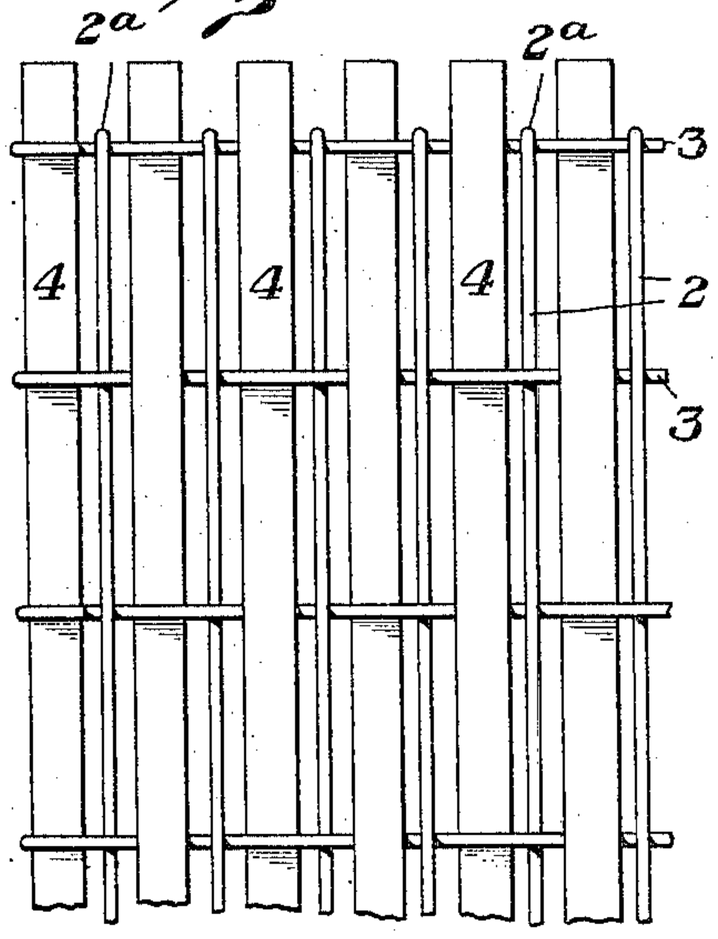


Fig. 2.

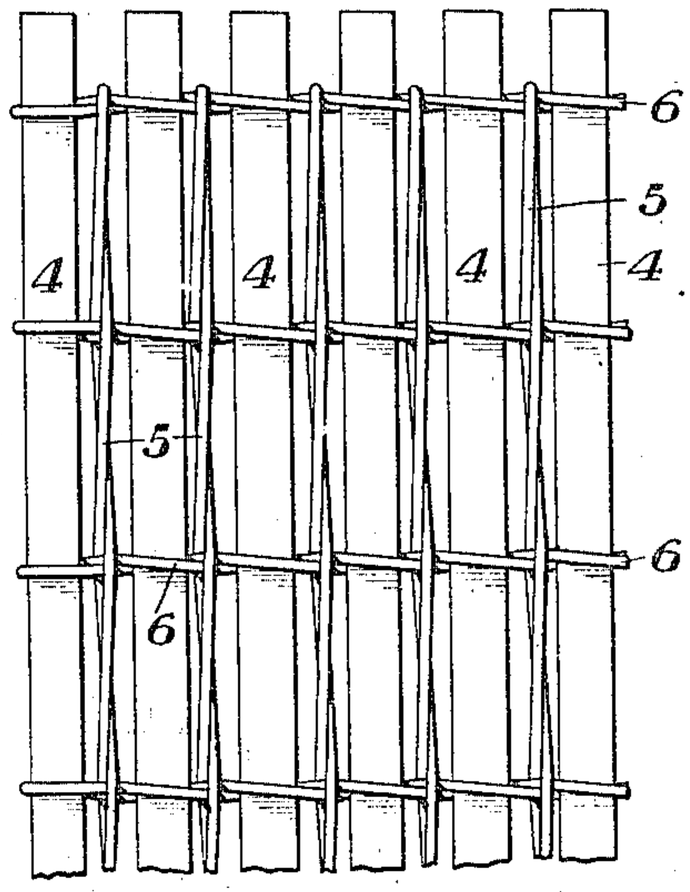


Fig. 4.

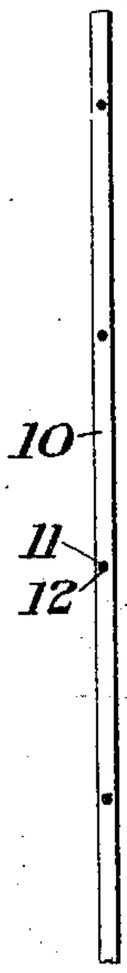
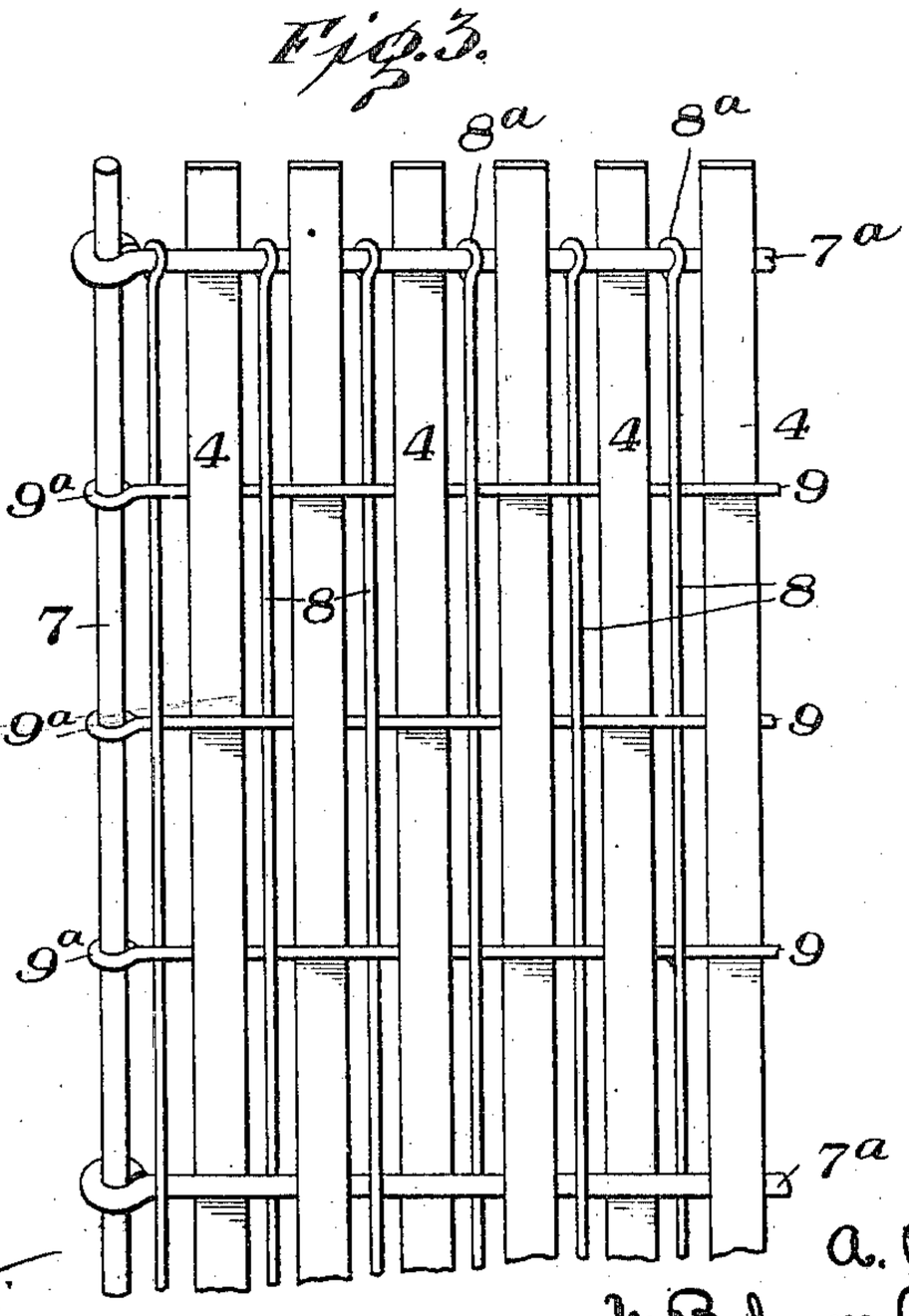


Fig. 3.



WITNESSES

R. J. Baldeson

A. M. Connie

Inventor:
A. P. White,
by Bakewell, Byrnes & Parmelee,
his Attys.

UNITED STATES PATENT OFFICE.

ALEXANDER P. WHITE, OF CALDWELL, NEW JERSEY.

LATHING.

960,751. Specification of Letters Patent. Patented June 7, 1910.

Application filed November 13, 1909. Serial No. 527,819.

To all whom it may concern:

Be it known that I, ALEXANDER P. WHITE, a citizen of the United States, residing in Caldwell, Essex county, State of New Jersey, have invented a new and useful Improvement in Lathing, of which the following is a specification.

This invention relates to lathing which is applied to walls and ceilings in building construction, for the purpose of holding plaster; and the object of the invention is to provide a cheap and improved lathing for this purpose.

As is well known, metallic wire fabrics made by weaving or interlacing wire strands are used largely at the present time for lathing. Sheet metal suitably perforated to hold the plaster is also used, as well as sheets slitted and drawn open at the slits, to form what is known as expanded metal. In all these articles, when the strands or portions between the openings are thin or of small diameter, the tendency of the metal is to "cut the plaster." The narrow surfaces offer little resistance to the mortar substance and much care is necessary to make the application of the plaster and avoid waste of the same. If the metal surfaces were increased in area, the resultant increase in weight would render the cost excessive and make very difficult the manipulation of the metallic body in its application in places where it must be bent into certain forms.

By my invention, I make a novel and practical combination of metal and non-metallic substances, which not only overcomes the present objections but reduces very materially the cost of the lathing. It permits a more desirable distribution or location of the metal used, in that it is possible to concentrate the metal at given places where it will give positive strength to the plaster body. This will be better understood when attention is directed to the fact that in many cases the light wire fabrics used are practically merely vehicles to hold the plaster until it sets and becomes rigid. After it has done this the light lath has practically no function as the light wires contribute little to the rigidity of the wall. If the amount of metal in such light wires were concentrated in fewer strands, the openings or meshes would be too wide to retain the plaster. My invention, however, permits this concentration for the flat non-metallic strands or portions which I employ, as hereinafter described, cover so much of the surface that it is not necessary to rely on the metal wires to perform this service. Hence a given quantity of metal can be fixed in thicker strands that reinforce the plaster structure and the studding that holds the lathing can be placed at greater distances, thus effecting further decided economy.

In accordance with my invention, I provide a lathing which comprises a metallic fabric or grid, having combined therewith interstitial fillers of a lighter, and preferably non-metallic filler. In carrying out my invention, I prefer to use for these fillers the heavy indurated papers, which are made by processes well known in the paper manufacturing art by pressing and rolling fibrous material into sheets or boards. I form this material in strips. These strips can also be cut from the sheets or boards as now manufactured. I prefer to cut the strips in widths of about one quarter of an inch and to arrange them in parallel rows in the lathing fabric, as shown in the drawings. I select metal wire of a suitable gage, say 18 standard gage and weave these wires into a network placing at suitable intervals in the network the fiber strips in lieu of wires. I prefer to place the fiber strips so that the space between them will be about one-half inch and have one wire strand between each strip, or in other words, to make the metal and the fiber strands alternate. Almost any of the methods of interlacing wires to make woven wire work are available to produce this material.

In the drawings, Figures 1, 2, and 3 are plan views of portions of lathing showing different forms of my invention; and Fig. 4 is a detail sectional view showing another modification.

In Fig. 1, I show a construction using plain wires 2 and 3, the wires of two series being passed alternately over and under each other, and the paper strips 4 being held in the loops formed by this weaving of the wires. The ends of the wires 2 are shown as hooked or coiled over the top wire 3 at 2^a.

In Fig. 2, a similar construction is shown, except that twisted wires 5 and 6 are employed.

In Fig. 3, I show a construction in which some of the wires, 7 and 7^a of both series, are heavier than the other wires 8 and 9. These heavier wires give positive strength to the structure, and typify the explanation

hereinbefore given with reference to the desirability of concentrating the metal. The smaller wires 8 and 9 serve to hold the fabric together and also to reduce the openings between the non-metallic strips. The ends of the wires 8 and 9 may be hooked or coiled around the heavier wires at the edges of the fabric as shown at 8^a and 9^a. As many of these heavier wires, spaced at intervals, may be employed, as may be desired.

In Fig. 4, I illustrate a construction in which the paper strips 10 are perforated edgewise, as indicated at 11, and the transverse fabric wires 12 are passed through these perforations.

The paper or fiber strips are practically water-proof, and I prefer to use this class of material, although other material may obviously be employed.

It will be obvious that my invention is susceptible of various other embodiments than those herein shown and described, since metallic supporting fabrics or grids of various characters can be provided with interstitially arranged filling strips in various ways within the scope of my invention and of the appended claims. The filling strips may be arranged to run in both directions of the lathing, and various other changes may be made.

My broader claims are intended to cover the form of Fig. 4, as well as the other forms shown, and I wish to be understood as using the words "across" and "interwoven" in my claims to include such structure.

I claim:

1. Lathing comprising a metallic supporting grid containing wires which cross and intersupport each other, combined with interstitial strips of a lighter non-metallic material which strips are broader than the wires and are interwoven with the metallic supporting grid and extend across some of the wires thereof, substantially as described.

2. Lathing comprising a metallic supporting grid containing wires which cross and intersupport each other, combined with interstitial strips of a lighter non-metallic material which strips are broader than the wires and are interwoven with the metallic supporting grid and extend across some of the wires thereof, said strips being formed of non-metallic fibrous material.

3. Lathing comprising a metallic supporting grid having wires which cross each other and form openings, combined with interstitial strips formed of artificial fibrous material which strips are broader than the wires in the plane of the fabric and are interwoven with the supporting grid and extend across some of its wires, substantially as described.

4. Lathing comprising a metallic supporting grid having wires which cross each other, combined with interstitial paper strips, which are broader than the wires in the plane of the fabric and are interwoven with the supporting grid and extend across some of the wires thereof, substantially as described.

In testimony whereof, I have hereunto set my hand.

ALEXANDER P. WHITE.

Witnesses:

EUGENE H. MURPHY,

CLARENCE D. KERR.