

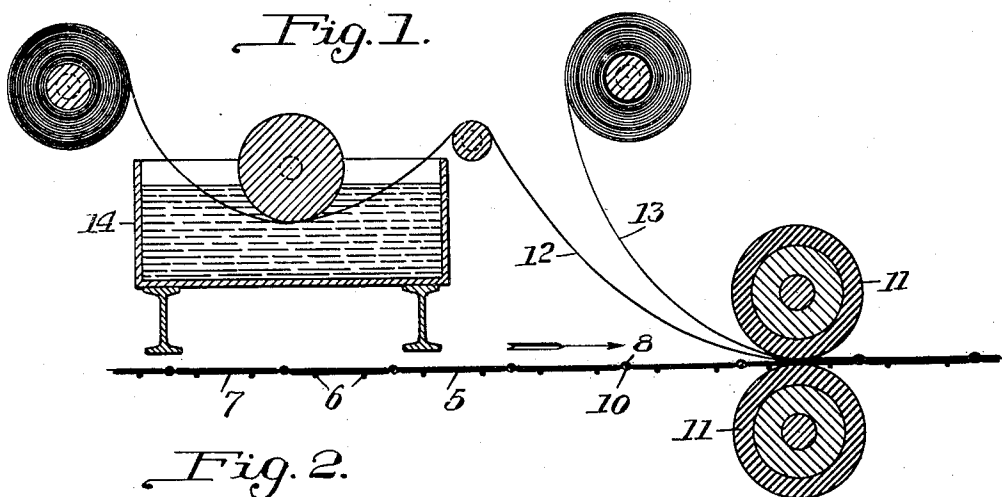
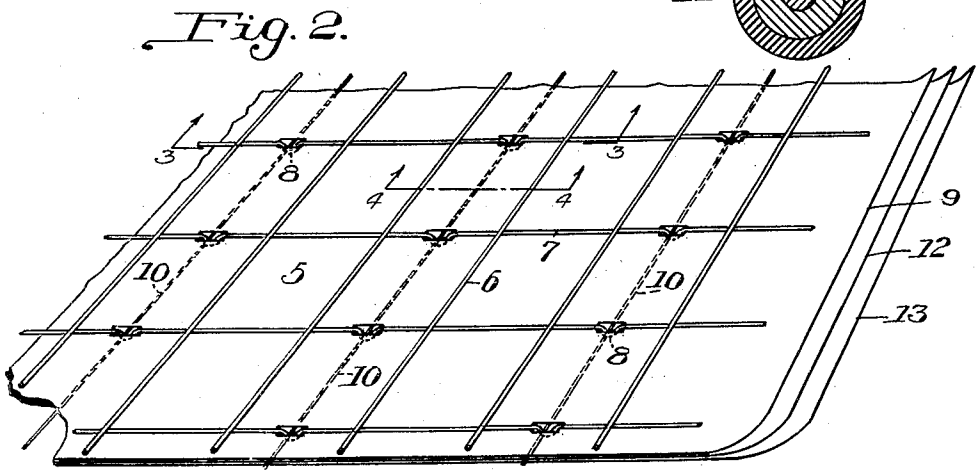
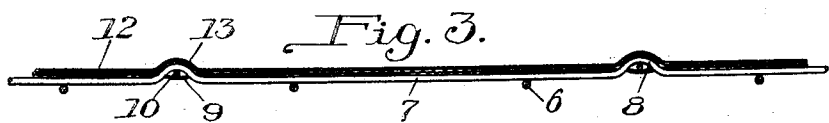
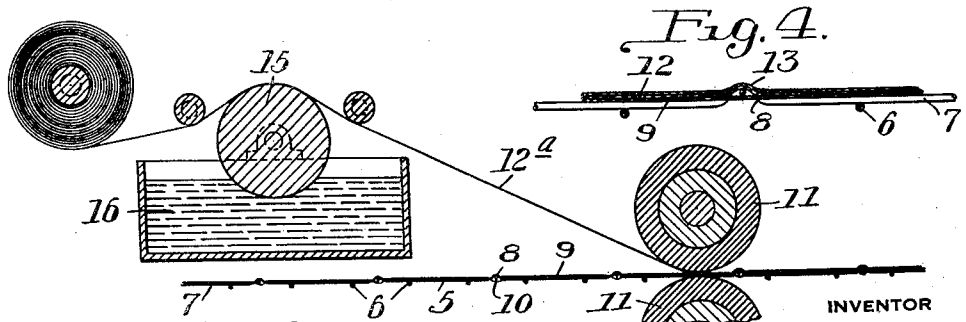
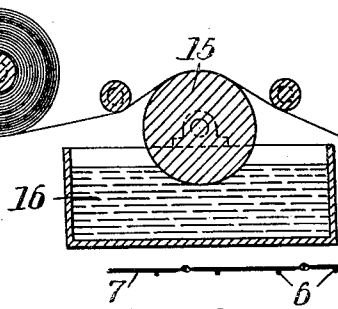
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1,665,433

E. L. BENEDICT

FABRIC STRUCTURE

Filed Aug. 13, 1926



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UNITED STATES PATENT OFFICE.

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FABRIC STRUCTURE.

Application filed August 13, 1926. Serial No. 128,943.

My invention relates to fabric structures and particularly to paper backed wire mesh structures that are employed in the formation of stuccoed walls, ceilings and the like.

5 This invention constitutes an improvement upon or a modification of the structure shown in my Patent No. 1,502,012, issued July 22, 1924, and my Patent No. 1,597,507 of August 24, 1926, wherein is shown a wire mesh structure to which a paper backing is secured, the paper serving as a backing for the plaster that is applied to the wire mesh.

10 In the building of walls composed of plaster that is deposited upon a paper backed fabric, it is in some instances desirable to subject the backing sheet to a water proofing process, as by coating it with a moisture proof material to prevent passage of moisture through the walls. The materials commonly employed for water proofing the paper are of such character that they may either render the sheet so brittle that it cracks and breaks in handling or the water proofing substance may be of such character that it softens under the action of moisture or heat, thereby rendering it difficult to assemble the paper and the fabric, and to handle the structure after the assembling operation.

15 My present invention has for one of its objects the provision of means for so constructing a water proofed plaster ground that the objectionable features above referred to are eliminated.

20 Another object of my invention is to provide a fabric structure of improved form generally and to effect an improvement in the method of making the same.

25 One means by which my invention may be practised is shown in the accompanying drawing, wherein Figure 1 is a longitudinal sectional view of apparatus for applying a water proofing sheet to a paper backed wire mesh; Fig. 2 is a perspective view, on an enlarged scale, showing a portion of the completed fabric-structure of Fig. 1, on an enlarged scale and in inverted position; Fig. 3 is a longitudinal sectional view of a portion of the fabric structure of Fig. 1; Fig. 4 is a side elevational view of a portion of the completed fabric structure of Fig. 1, and Fig. 5 is a modification of a portion of the apparatus of Fig. 1.

While the invention is applicable to paper backed fabrics of other forms than that

shown in my Patent 1,502,012 above referred to, I have shown the same as applied to that particular form of fabric, for convenience of description. The paper backed fabric is represented generally by the numeral 5 and is composed of a wire mesh having stay wires 6 and strand wires 7, which are welded to one another at their points of intersection. The wires 7 are bent at intervals as indicated by the numeral 8, so that when a paper backing sheet 9 is pressed against the body of the fabric, the bends or loops 8 will be forced through the sheet to permit the insertion of retaining rods 10 between the rear surface of the sheet 9 and the bends or loops 8, to hold the sheet against the rear side of the wire mesh. The sheet will then have substantially the form shown in my said patent, except that the ends of the retaining rods 10 need not be bent back to prevent them slipping out of place. It will be understood that twine or other material may be employed instead of the rods or wires 10 and that the paper backing 9 may be secured to other forms of open work fabric in various other ways.

30 The fabric sheet 5 is fed forwardly by rolls 11, which may be of suitable elastic material, such as rubber, and driven from any suitable source of power (not shown). Sheet materials represented by the numerals 12 and 13 are also fed forwardly by the rollers 11 simultaneously with the advancement of the fabric 5. The material 12 is preferably of paper and is passed through a tank 14 which contains moisture proof material, such as asphalt paint, or the like, it being desirable to employ a coating liquid that is of an adhesive nature as well as being water proof. The material 13 is preferably plain or untreated paper, and serves to prevent sticking of the sheet 12 to the upper roll 11, as well as to cover the exposed surface of the sheet 12 so that the sticky nature thereof will not interfere with convenient handling of the completed fabric structure. The sheet 12 is pressed into snug engagement with the backing sheet 9 and will adhere thereto, as well as to the exposed portions of the bars 10, so that the bars will be held against slipping out of position.

35 One or both of the rolls 11 is yieldable to such extent that the bends 8 in the strand wires 7 will not be forced through the sheet 12. The sheet 12 will therefore not only

prevent passage of moisture which penetrates the backing sheet 9, but will also prevent passage of moisture through the openings in the backing sheet.

5 The covering 13 need not be in the form of a single sheet that is coextensive with the fabric, but may be in the form of a plurality of transversely spaced narrow strips each of which overlies one of the wires 10.

10 If desired, the sheet 13 may be dispensed with and the sheet 12 coated only on one side, as indicated in Fig. 5, wherein a sheet 12^a is shown as passing over a roller 15 which extends into a bath 16 of water proof material.

15 The sheet 12^a will be pressed against a backing sheet in any suitable manner as by the rolls shown in Fig. 1.

I claim as my invention:

1. Fabric structure, comprising a wire mesh, having portions thereof offset from the plane of the mesh, a backing sheet secured to said offset portions, a sheet of material coated on both sides with an adhesive water proofing substance and placed against the rear side of the backing sheet, and a third sheet of material placed against the said coated sheet.

2. Fabric structure, comprising a mesh formed of strand and stay wires, some of said wires having bends formed therein which extend in a direction transverse to the plane of the mesh, a backing sheet placed against said mesh and having openings for said bends, retaining members extending through said bends and lying against the rear side of the backing sheet, and an adhesive sheet applied to the rear side of the backing sheet.

3. Fabric structure, comprising a mesh formed of strand and stay wires, some of said wires having bends formed therein which extend in a direction transverse to the plane of the mesh, a backing sheet placed against said mesh and having openings for said bends, retaining members extending through said bends and lying against the rear side of the backing sheet, an adhesive sheet applied to the rear side of the backing sheet, the second named sheet being coated

on both sides with an adhesive substance, and a third sheet placed against the rear side of the coated sheet.

4. Fabric structure comprising a wire mesh formed of strand and stay wires, some of said wires being provided with bends extending transversely of the plane of the mesh, a backing sheet placed against the rear side of said fabric and provided with openings through which said bends extend, key rods extending through said bends and lying against the rear side of the backing sheet, and an adhesive sheet placed against the rear side of said backing sheet and serving to retain the rods in place.

5. Fabric structure comprising a wire mesh formed of strand and stay wires, some of said wires being provided with bends extending transversely of the plane of the mesh, a backing sheet placed against the rear side of said fabric and provided with openings through which said bends extend, key rods extending through said bends and lying against the rear side of the backing sheet, and an adhesive sheet placed against the rear side of said backing sheet and serving to retain the rods in place, the said coated sheet serving as a moisture proof covering for the backing sheet and the openings there-through.

6. Fabric structure composed of wires, a backing sheet, attaching members extending from points rearwardly of said sheet and connected to said wires, for holding the sheet in place, and an adhesive sheet applied to the rear sides of said sheet and the attaching members.

7. Fabric structure composed of wires, a main backing sheet, attaching members extending from points rearwardly of said sheet and connected to said wires, for holding the sheet in place, a supplemental backing sheet, and means for securing said supplemental sheet in position against the rear sides of the main backing sheet and the attaching members.

In testimony whereof I, the said EDWARD L. BENEDICT, have hereunto set my hand.

EDWARD L. BENEDICT.