Sept. 4, 1934. C. F. BAILEY 1,972,639

ARTICLE OF MANUFACTURE FOR REENFORCING

Filed Feb. 27, 1933

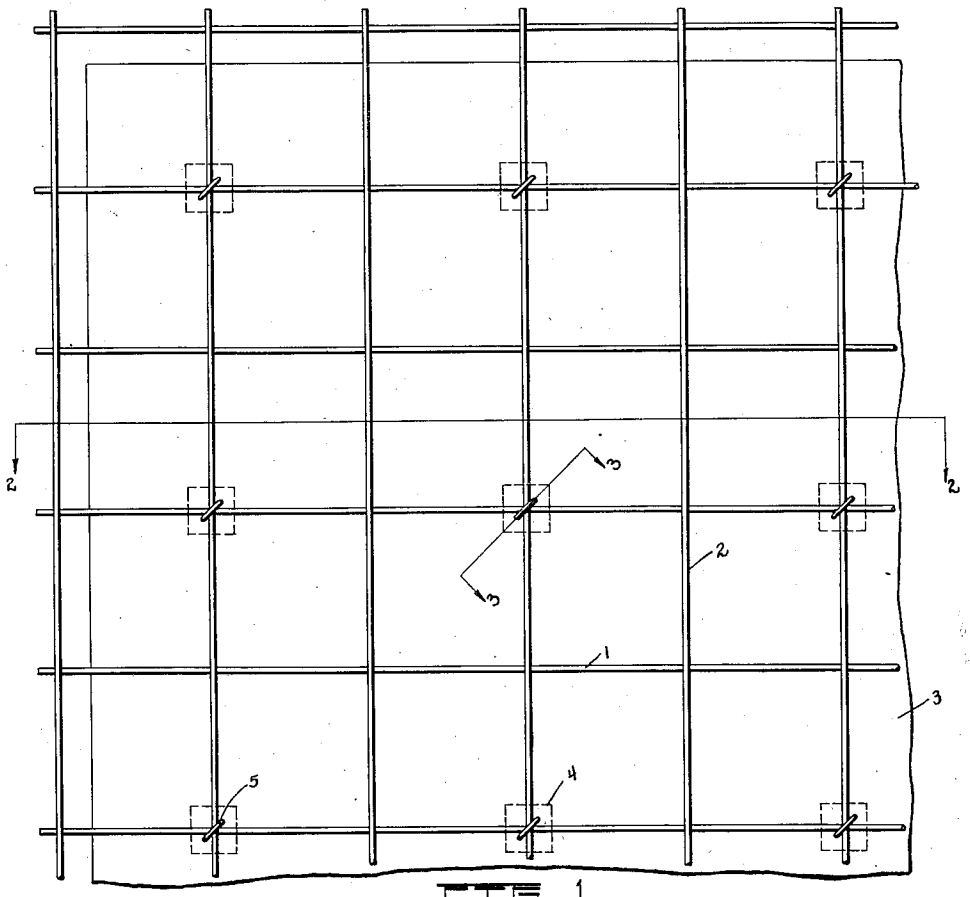


FIG. 1.

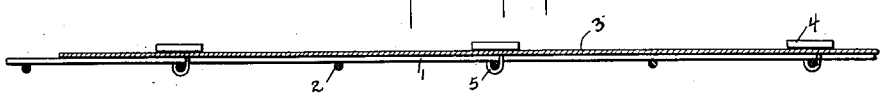


FIG. 2.

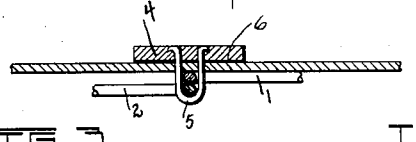


FIG. 3.

INVENTOR

Charles F. Bailey

BY

ATTY

Patented Sept. 4, 1934 1,972,639

UNITED STATES PATENT OFFICE

1,972,639

ARTICLE OF MANUFACTURE FOR REENFORCING

Charles F. Bailey, Peoria, Ill., assignor, by mesne assignments, to The National City Bank of Cleveland, Cleveland, Ohio, a corporation, and John A. Chapman, Chicago, Ill., trustees

Application February 27, 1933, Serial No. 658,755

6 Claims. (Cl. 72—116)

This invention has reference to an article of manufacture which comprises a wire fabric and a paper backing forming a composite structure useful as a reenforcement for stucco, plaster and the like.

The invention has for one of its objects to provide a reenforcing fabric comprising a wire fabric and a paper backing therefor, and a fastening means for attaching the fabric to the paper backing which comprises a stapling means overlying portions of the fabric and clinched through the paper and reenforcing elements disposed in juxtaposed position against the rear face of the paper.

A further object of the invention is to provide a reenforcing fabric comprising a wire fabric made of longitudinal and transverse wires welded at their intersections and backed by a suitable paper backing, the two being secured into a composite structure by clinching staples applied diagonally across predetermined joints of the wires and employing a washer of suitable material disposed coincidental with these staples against the rear face of the paper, and clinching the staples through the paper and washers and with the ends of the staples disappearing within such washers.

That the invention may be more fully understood, reference is had to the accompanying drawing forming part of this description, illustrating a preferred embodiment of the invention, in which:—

Fig. 1 is a face view of an article of manufacture embodying my invention, showing a corner of the article disclosing two of its selvage edges with portions of the body of the article broken away, and the preferred arrangement and location of the means for uniting together the elements constituting the article;

Fig. 2 is a cross-section as the same would appear on the line 2—2 Fig. 1;

Fig. 3 is a detail sectional view as the same would appear on the line 3—3 Fig. 1.

Like characters of reference denote corresponding parts throughout the figures.

In the drawing the wire fabric is composed of cross-wires 1 and 2, the former being designated as longitudinal wires and the latter being designated as transverse wires, the same being united or secured at their intersections by being preferably welded together. In the form shown the wire fabric is made to present a "square mesh" fabric, being the preferred form, although the invention is not necessarily limited to this disclosure. Also the gauge of the wires and the sizes of the meshes may be varied as occasion or practice may require or be deemed desirable.

The backing for the wire fabric is preferably a sheet of paper 3 which should be slightly less in dimensional area than the dimensions of the wire fabric, for purposes well understood by those skilled in the art. This paper backing is imperforate in its original state and remains so when the composite structure is completed. By this I mean there are no openings or perforations made or left in the paper through which it is possible for plaster or the like to leak and thereby cause unnecessary waste when the article is used as a reenforcing.

In the present form of the invention the paper backing 3 is securely fastened to the wire fabric, by employing against the rear face of the paper and at predetermined points, washers 4 of suitable contour and of a size in which may be clinched staples 5. The location of the washers is preferably at predeterminately spaced points coincidental with certain of the intersections of the united cross-wires, and they are preferably flat and shallow in thickness. The staples are applied to the intersections of the cross-wires by being caused to overlie these intersections diagonal to the cross arrangement of such wires; arcuate bends of the staples bearing against the intersections of the wires and the legs of the staples passing through the paper and washers and their ends clinched so as to substantially disappear within the washers somewhat in the manner shown in Fig. 3. The legs of the staples pass cleanly through the paper backing so that no exposed openings are left in the paper whereby the paper is left substantially imperforate, meaning there are no openings in the paper through which plaster or the like may leak and cause unnecessary waste of material. The washers 4 may be initially secured to the paper backing by fastening the same thereto by a suitable adhesive 6. The adhesive being of such a nature that it will be insoluble in water and not affected by moisture or the elements and will thereby not become loosened. These washers may be of wood or any other suitable material.

What I claim is:—

1. An article of manufacture of the character described, comprising a wire fabric composed of cross-wires welded at their intersections and a paper backing therefor, a series of reenforcing elements disposed next adjacent the rear face of the paper one each located at a predetermined welded intersection of the fabric,

and a series of clinching staples one each disposed coincidental with a reenforcing element and overlying a welded intersection and engaging through the paper backing and a reenforcing element and clinched within the latter.

2. An article of manufacture of the character described, comprising a wire fabric composed of cross-wires welded at their intersections and a paper backing therefor, a series of reenforcing elements disposed next adjacent the rear face of the paper one each located at a predetermined welded intersection of the fabric and fastened to the paper by a suitable adhesive, and a series of clinching staples one each disposed coincidental with a reenforcing element and overlying a welded intersection and engaging through the paper backing and a reenforcing element and clinched within the latter.

3. An article of manufacture of the character described comprising a wire fabric and a paper backing therefor, a series of washer-like reenforcing elements, means to fixedly secure each element to a face of the paper at predetermined points thereon, and a series of clinching staples engaged with the fabric and with the paper and with the reenforcing elements for holding all of the last three recited parts in fixed assemblage, there being one element for each staple.

4. An article of manufacture of the character dscribed comprising a wire fabric and a paper backing therefor, a series of reenforcing elements, means to fixedly secure each element to a face of the paper at predetermined points thereon, and a series of clinching staples engaged with the fabric and with the paper and with the reenforcing elements for holding all of the last three recited parts in a fixed assemblage, there being one element for each staple and each element being of a size but comparatively slightly greater than the width of the staple whereby to permit the article to be folded longitudinally or laterally of the article.

5. An article of manufacture of the character described, comprising wire fabric and a paper backing therefor engaged on one side face thereof by the fabric, a series of washer-like reenforcing elements engaged with the paper on the side face thereof opposite to that engaged by the fabric, means to fixedly secure each element to the paper at predetermined points thereon, and a series of clinching staples straddling portions of the fabric and engaged through the paper and having their free ends clinched against the reenforcing elements.

6. An article of manufacture of the character described, comprising wire fabric and a paper backing therefor, a series of relatively small spacing elements engaged with a face of the paper, means to rigidly affix the elements to the paper, at predetermined points thereon, and clinching staples engaged with the fabric, the paper and the elements to hold all of said last three recited elements in fixed assemblage, there being one element for each staple.

CHARLES F. BAILEY.