

F. L. KANE.  
 PLASTER SUPPORT FOR WALL COVERING.  
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1,103,362.

Patented July 14, 1914

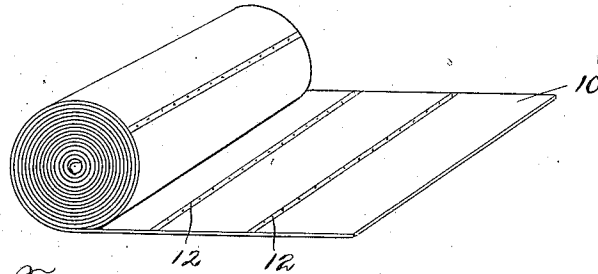


Fig. 1,

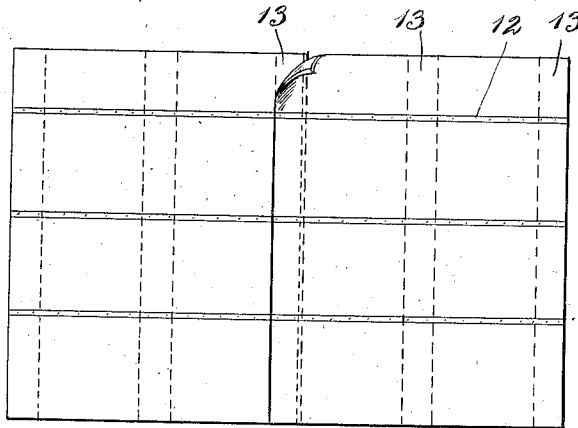


Fig. 2,

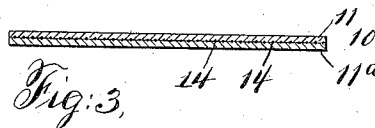


Fig. 3,

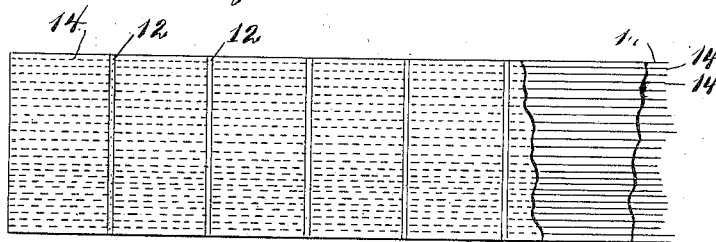


Fig. 4,

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# UNITED STATES PATENT OFFICE

FREDERICK L. KANE, OF HUNTINGTON, NEW YORK.

PLASTER-SUPPORT FOR WALL-COVERING.

1,103,362.

Specification of Letters Patent.

Patented July 14, 1914.

Application filed February 28, 1911. Serial No. 611,491.

*To all whom it may concern:*

Be it known that I, FREDERICK L. KANE, of Huntington, Suffolk county, New York, have invented a new and useful Improvement in Plaster-Supports for Wall-Covering, of which the following is a full, clear, and exact description.

My invention relates to improvements in plaster supports such as are attached to the studding of a wall in lieu of lath, and to which a body of plaster is afterward applied, although my improved plaster support may be used in itself for a wall covering if desired, as it forms a much stronger surface than ordinary paper or other fabric.

The prime object of my invention, however, is to produce a cheap, perfectly flexible and exceedingly strong plaster support which can be rolled up and easily shipped, which can be readily applied to the studding of a wall or ceiling beams, and which will afford a good surface on which to plaster and will have sufficient strength to maintain the plaster until the latter is set.

It is well understood in the trade that a paper surface is a most excellent material to which wet plaster may be applied, as the plaster enters the pores of the paper and anchors itself thereto. A difficulty has been found, however, in the fact that plaster when applied is saturated with water and so paper or analogous fabric, becomes quickly saturated, loses its tensile strength, and either breaks away while wet or else sags to such an extent that a good deal of extra plaster is necessary in the finishing coat or coats in order to make the surface level. To overcome this objection I have used a paper preferably laminated and provided with thin flexible cross strengthening strips as disclosed in my application for Letters Patent of the United States No. 572,088, filed July 15th, 1910. I find that this strengthening of the fabric, which is preferably paper, is a great advantage and that it does not interfere with the rolling and shipping and otherwise handling of the paper, but I find also that it is desirable to strengthen and stiffen the fabric between the transverse strengthening strips, so that there will be no tendency to sag either transversely or longitudinally, to the end that the paper may be kept perfectly flat after the wet plaster is applied. To bring about this result I have discovered that I can incorporate in the body of the fabric which as

stated is preferably paper, longitudinal strands of fine material, and this material is preferably very fine wire. If the paper is laminated, the wire can be readily laid between these adjacent sheets, and so the paper or other fabric will on its surface, appear like the ordinary roll of paper, but it will be extremely strong lengthwise by reason of these strands which correspond to the warp of woven goods, while in the other direction the plaster supporting sheet will be strengthened by the transverse strips above referred to and disclosed in my prior application above mentioned. All this will be made very clear from the description which follows.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar reference characters indicate corresponding parts in all the views.

Figure 1 is a perspective view of a roll of material made in accordance with my invention. Fig. 2 is a front elevation showing the material as applied to the studding of a room, the studding being shown by dotted lines. Fig. 3 is a transverse section of a sheet of the material enlarged to bring out its structure, and Fig. 4 is a flat view of a strip of the material, the parts being broken away to disclose the location of the strands or wires.

The plaster sheet 10 is made preferably of laminated paper so that it can be rolled up readily as in Fig. 1, and of a width which will enable it to be applied readily to the studding of a room, a convenient width being such as to span the space of two ordinary studs as shown in Fig. 2. Obviously this width may be varied, however. As illustrated the sheet is made up of two layers of fabric 11 and 11<sup>a</sup>, though more layers can be used if desired, and the sheet is strengthened by the transverse flat strengthening strips 12, all of which is as disclosed in my prior application above named. The novel feature of this invention, however, lies in the application to the fabric of the longitudinal strands 14 which can be of any approved strengthening material, but which are preferably in the form of metallic wires made very fine so as to be readily incorporated with the plaster supporting sheet 10, and it will be seen that fine wires can be readily fed between the two sheets 11 and 11<sup>a</sup> as the latter are united by pressure, cement, or otherwise. When the

sheet is complete, the wires are of course not shown as they will be hidden in the middle of the plaster sheet, but it will be seen that the sheet will be enormously strengthened in the direction of its length, and as it is also strengthened transversely by the strip 12, it will be able when attached to the studding or ceiling beams, to form a perfect support for wet plaster and even for the plaster after it is dried.

In carrying out my invention, the strands 14 can be applied in the most convenient way, and I do not limit myself to any material. Metal is preferable, however, because 15 strands of ordinary fibrous material or twine are liable to shrink and expand under varying moisture conditions, whereas the metal wires do not appreciably vary in length under any of these conditions. The chief ob-

ject of the wires is, as stated, to keep the paper taut and flat between the transverse strengthening strips until the wet plaster has set, and if the wires should rust out afterward it would not be material, as the plaster would be in its flat position, and the paper when dry is sufficiently strong.

I claim:—

A plaster support comprising a plurality of flexible sheets of paper united so as to form a single flexible sheet, longitudinal strands embedded between the paper layers, and thin, flat, transverse strengthening strips spaced apart and firmly secured to the surface of the paper.

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Witnesses:

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