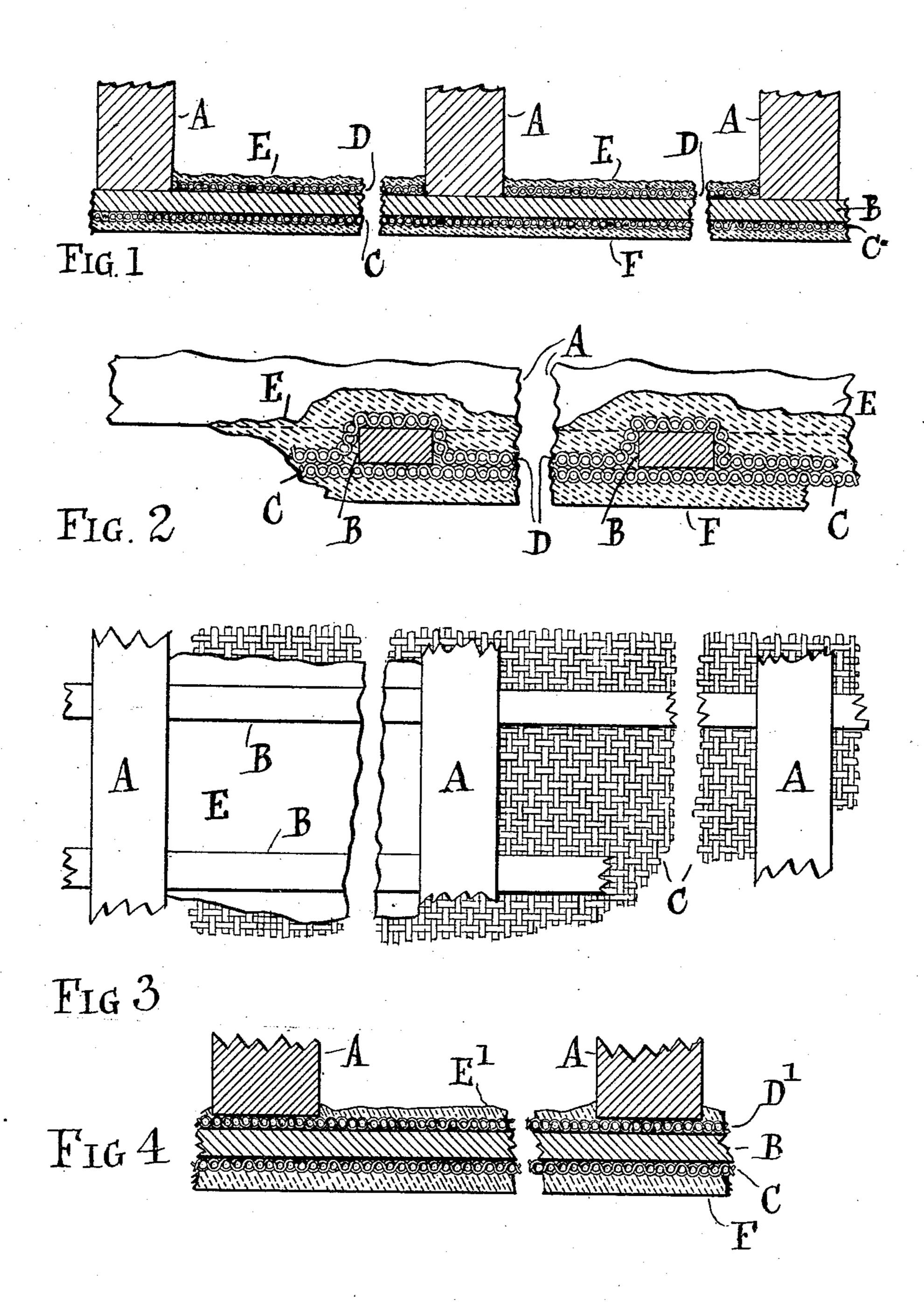
E. COOMBS. FIBROUS PLASTERING. APPLICATION FILED JUNE 14, 1907.



Tituesses; Ostensta AllMeale, fr. Inventor;.
E. leoomber
Ly Wilkinson, Fisher Hiller form
his attorners.

UNITED STATES PATENT OFFICE.

EDWIN COOMBS, OF AUBURN, VICTORIA, AUSTRALIA.

FIBROUS PLASTERING.

No. 862,715.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed June 14, 1907. Serial No. 379,074.

To all whom it may concern:

Be it known that I, Edwin Coombs, a subject of the King of Great Britain and Ireland, &c., residing at Auburn, in the State of Victoria, Commonwealth of Australia, have invented certain new and useful Improvements in Fibrous Plastering; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the plastering of ceilings, stud partitions, and the like it has been found that methods hitherto used have not been such as to give a permanently satisfactory appearance; the defects most seen have been liability for cracks to occur, and for portions to fall; while if fibrous plaster be used—laid on in slabs—although the durability is greater, yet the joints are liable in time to become visible, and the use of slabs entails some other defects.

My invention includes a new method of fibrous plas-20 tering and new combinations of parts to form ceiling or wall or partition as the case may be;—and this invention can be carried into effect rapidly, economically, and easily by competent artisans.

The construction and procedure will be understood by reference to the accompanying drawings and the description below.

Figure 1 is an end elevation in vertical section, and Fig. 2 a side elevation in vertical section showing a plastered ceiling,—finished. Fig. 3 is a plan view from above of a plastered ceiling shown in part finished, and in part unfinished. Fig. 4 shows an end elevation in vertical section of a ceiling, as made when it is not accessible from above.

Characteristic features of my finished ceiling, or the like, are that it is all (or to any area predetermined) one body having its elements united at its own site; it is not made of slabs and nevertheless it is fibrous. It has no joints, as in the case of slabbing; it can be made weight for weight stronger and cheaper than slabbing; the latter also entails nailing up—a mode of fixing not used by me in respect of plaster. From the explanation herein as to ceilings other applications of the invention, as to partitions, panels, and general stud work will be apparent.

In these drawings joists or the like are marked A. Textile material of coarse mesh as scrim C is fastened to the under side of the said laths (not to joists direct, as swelling of the latter and staining by them of the plaster may occur,—and if joists swell plaster fixed to

canvas fastened to such joists direct may crack). Or- 50 dinary laths B are shown affixed transversely to the joists; they are not required to be anything like so close together as in ordinary lathing. Closeness in the latter case has been for keying, which is essential,—and to insure good keying in ordinary plastering skill 55 is needed. My laths (of wood or other material) are fastened in any suitable positions; the parallelism of lathing of ordinary plastering is not essential. Metal laths are strong and thin and well adapted for my use, and these may be interlaced. In ordinary plastering, 60 wood laths are nailed up dry, but I find it better to soak them in water to swell them before putting them up.

In Figs. 1 to 3 transverse laths B are usually fixed to joists A from about six inches to two inches apart. 65 Then freely apertured coarse meshed textile material (fireproofed when desired) C is taken and stapled or fixed (stretched) to the under side of laths B. In some cases I also fix up to these laths wire netting or coarse gauze. In other cases I use material C (herein- 70 after called scrim) having inter-woven in it metallic wires or suitable strips to act as stiffening. Then I take scrim D, saturate and cover it thickly with liquid plaster of paris, or binding composition, lay it between the joists upon laths B and in contact with ma- 75 terial C, so that the plaster or binding composition penetrates the apertures of and keys to and binds material C. The plaster is worked through in any suitable way, and boarding as below described is used under the lower scrim C to act as a temporary 80 backing or surfacer. When the plaster or binding composition (which when desired has in it any fireproofing or other ingredients known to be serviceable in plastering) has set, the upper D and lower sheets C of scrim are part of one permanently united mass. 85 E is the top of the plaster covering scrim D which top is of irregular surface. After the said setting the ceiling is given any desired facing or finish F, as by skimming with plaster of paris, and troweling smooth. If the ceiling is not accessible from above I fix to 90 joists A, Fig. 4 upper scrim D¹ first (using it wireinterwoven or stiffened). I then force liquid plaster up through it, the top surface being marked E¹ then attach as by staples the laths B (preferably metal); then attach to the laths stretched scrim C then apply 95 under and force up through the latter, plaster making it unite with plastered scrim D1; then finish face F as before described. For greater strength additional

sheets of scrim and layers of plaster are if desired added. Any suitable thickness of each material used is adopted.

What I do claim as my invention and desire to secure 5 by Letters Patent of the United States is:—

- 1. A structure composed of joists, laths secured to said joists, metallic meshed material on each side of said laths, and plaster embedding said meshed material, and uniting the two sheets together between the laths, sub-10 stantially as described.
- 2. A structure composed of supporting joists, laths secured thereto, a layer of scrim on each side of said laths, and plaster embedding said scrim, and uniting the two sheets together between the laths, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

EDWIN COOMBS.

Witnesses:

GEORGE G. TURRI, BEATRICE M. LOWE.