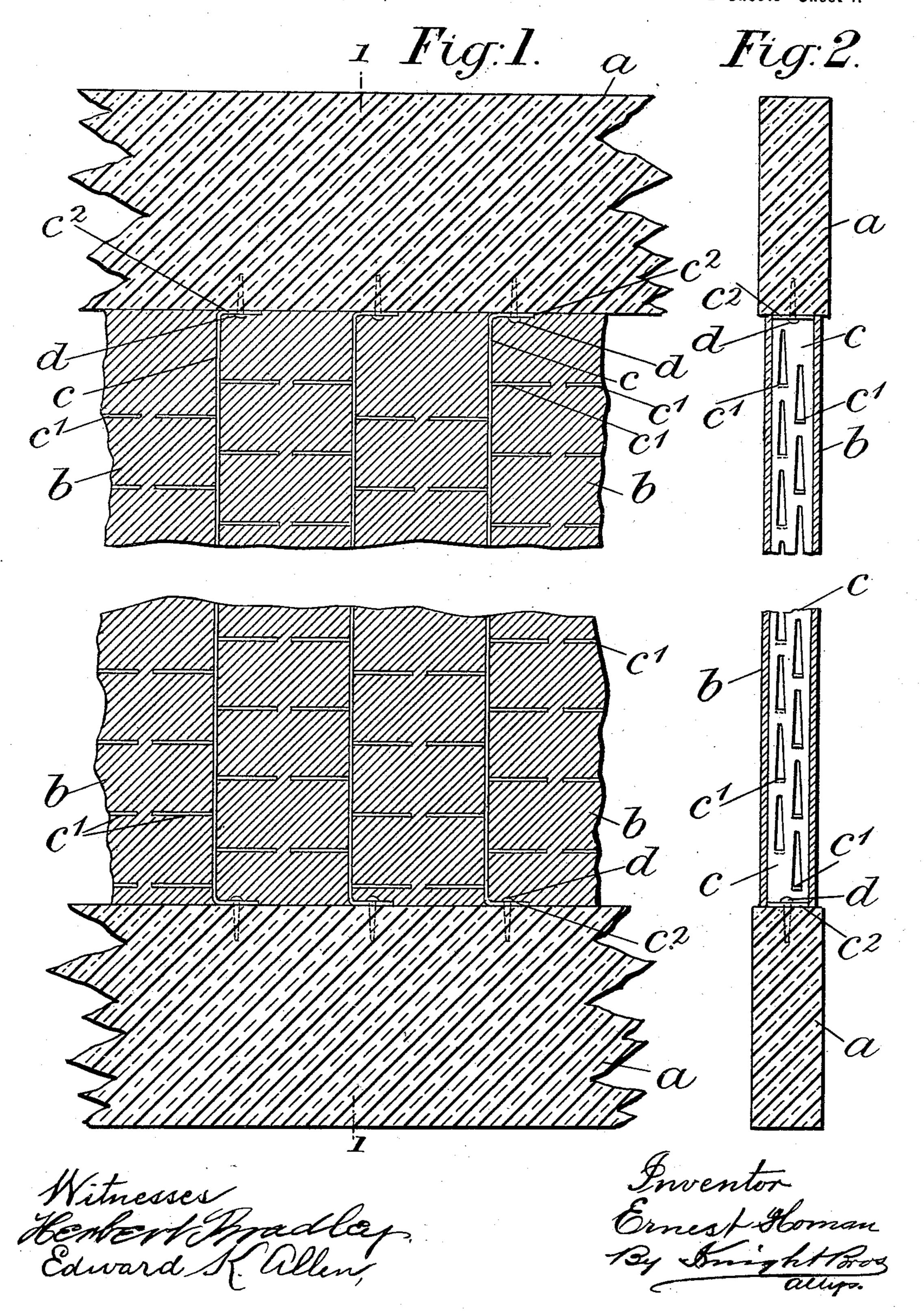
#### E. HOMAN.

### CONSTRUCTION OF WALLS, PARTITIONS, CEILINGS, &c.

(Application filed Dec. 30, 1897.)

(No Model.)

2 Sheets—Sheet I.



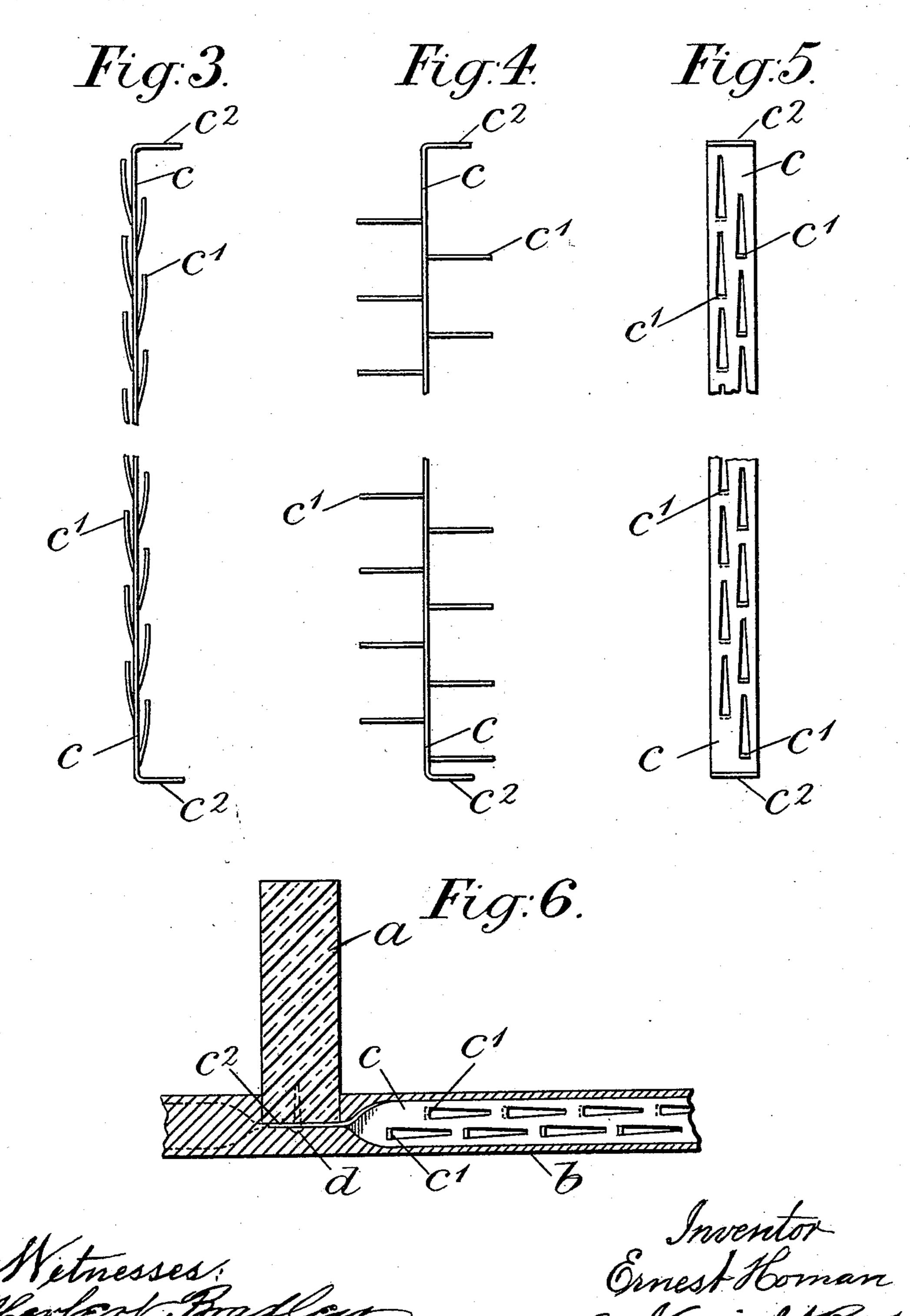
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(Application filed Dec. 30, 1897.)

(No Model.)

2 Sheets—Sheet 2.



# United States Patent Office.

ERNEST HOMAN, OF LONDON, ENGLAND.

## CONSTRUCTION OF WALLS, PARTITIONS, CEILINGS, &c.

SPECIFICATION forming part of Letters Patent No. 616,329, dated December 20; 1898. Application filed December 30, 1897. Serial No. 664,715. (No model.)

To all whom it may concern:

Be it known that I, ERNEST HOMAN, engineer, a subject of the Queen of Great Britain, residing at 17 Gracechurch street, in the city 5 of London, England, have invented certain new and useful Improvements in or Connected with the Construction of Walls, Partitions, Ceilings, or the Like, (for which I have obtained a patent in Great Britain, No. 28,888, 10 dated December 16, 1896,) of which the following is a specification, reference being had to the drawings hereunto annexed and to the letters marked thereon.

The invention relates to improvements in 15 or connected with the construction of walls,

partitions, ceilings, or the like.

In modern buildings thin party-walls are sometimes formed by arranging vertically and edgewise at intervals metal laths, across the 29 edges of which is strained wirework, wiregauze, or the like to afford a key to the plaster of which the wall is formed and which is filled in between and over the laths; but walls of this character are expensive, and the ob-25 ject of the present invention is to cheapen the construction thereof.

In carrying the present invention into effect the strained wirework or its equivalent is dispensed with and the framework of the 30 wall is composed of a number of laths or strips of iron of a suitable width, generally that which is commonly known as "hoopiron" would be employed, and this material is formed by passing it between suitably-35 shaped rolls or otherwise with a number of tongues or tangs, which are pressed out at intervals from opposite sides of the metal.

In the accompanying drawings, Figure 1 is a vertical-longitudinal section of a portion of 40 a wall or partition constructed according to the present invention. Fig. 2 is a transverse section thereof, taken on the line 11 of Fig. 1. Fig. 3 is an edge view of one of the tongued laths or strips previous to opening 15 out the tongues. Fig. 4 is a similar view to Fig. 3, but showing the tongues opened out. Fig. 5 is a face view of Fig. 4, and Fig. 6 is a vertical section of a ceiling constructed according to the present invention,

In the several figures like parts are indicated by similar letters of reference.

Referring to Figs. 1 to 5, a represents the |

wooden bearers of the wall. b represents the plaster or cement, and c represents the metal lathes or strips.

The laths c are formed by passing them between suitably-shaped rolls or otherwise with a number of tongues or tangs c', which are pressed out at intervals from opposite sides of the metal, as represented at Fig. 3.

In constructing a wall with metal laths a sufficient number of laths or strips c to form the required length of the wall are arranged, preferably, vertically and edgewise at suitable intervals, which may, for example, be 65 slightly greater than the length of two tongues

c', as represented at Figs. 1 and 2.

In order to fix the laths or strips c to the bearers a, their ends  $c^2$  are bent at right angles to the body thereof, as represented more 70 particularly at Figs. 1 and 4, and the returned ends or flanges  $c^2$  receive nails or other fastening means d, by the aid of which the strips or laths c are securely fastened to the rafters or joists a or other means of support. The 75 tongues or tangs c' are then opened out from the body c of the lath or strip, as represented at Figs. 1, 2, 4, and 5, so as to project laterally at right angles from the faces of the laths or strips c in such manner that the points of 80 the tongues or tangs c' nearly meet, and the plaster or cement b to form the body of the wall is filled in between and over the edges of the laths c from each side of the structure, or it might be from one side thereof if a wood 85 centering or backing were temporarily held against the opposite side in such manner that the plaster completely conceals the laths or strips c, and when the plaster b has become set the wall may be finished in any desired 90 manner.

In the example given at Fig. 6, which represents a ceiling constructed according to the present invention, the ends  $c^2$  of the laths or strips c instead of being bent round or re- 95 turned in the manner shown in the previous figures are twisted so as to receive nails, screws, or fastenings d, by means of which the laths or strips c are securely fixed to the joists a, with the body of the laths or strips 100 arranged vertically and edgewise to the thickness of the plaster forming the ceiling. By these means the plaster is more efficiently keyed with the laths or strips c than heretofore, added to which advantage the cost of the strained wirework or its equivalent covering is practically saved, the expense of forming tongues or tangs c' upon the laths or strips c being very small.

It will be evident that the invention is also applicable to other like structures than those

hereinbefore shown and described.

Having now particularly described and as10 certained the nature of the said invention and
in what manner the same is to be performed,
I declare that what I claim is—

1. A wall, partition, ceiling or the like comprising suitable supports or bearers strips or bands of metal fastened to and extending between the bearers or supports and formed with projecting tongues or tangs, and a fill-

ing of plaster or cement substantially as herein shown and described.

2. A strip or band of metal adapted to be 20 fastened by its ends to the supports or bearers of a wall and formed with tongues or tangs pressed out of the body thereof and lying approximately in line with the face of the strip or band so that when opened out at right 25 angles to the face of the strip or band when the latter is fastened in position said tongues or tangs form a key for the cement or plaster; substantially as herein shown and described.

ERNEST HOMAN.

Witnesses:

C. MELBOURNE WHITE,

C. H. WHITE.