(No Model.)

F. J. HEARNSHAW.

SUPPORT FOR WIRE LATHS AND PARTITIONS.

No. 573,512. Patented Dec. 22, 1896.

Fig. 1.

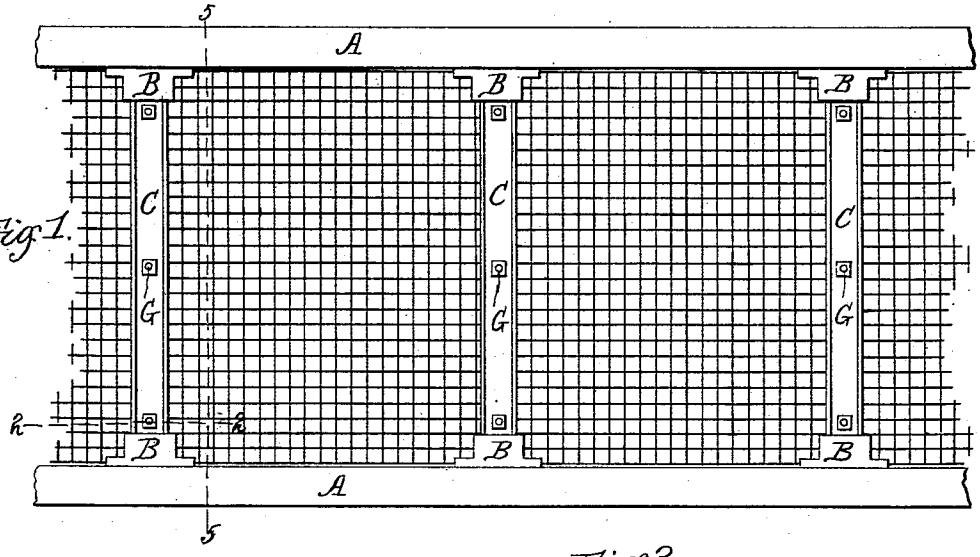


Fig. 2.

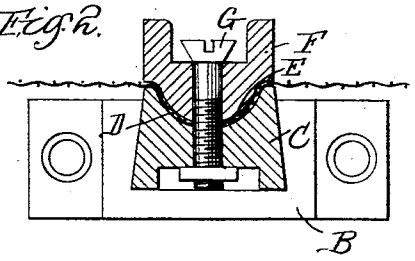


Fig. 3.

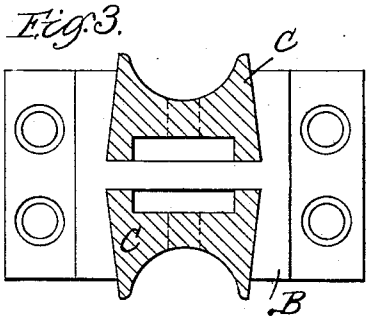


Fig. 4.

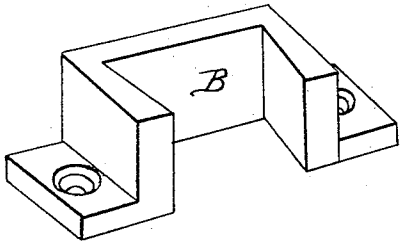
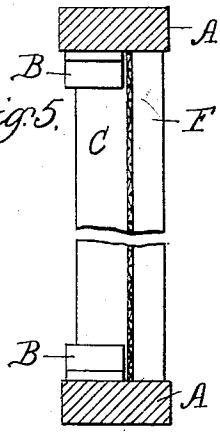


Fig. 5.



Witnesses.

Wm. M. Rheem.

M. E. Shields

Inventor.

Frank J. Hearnshaw

by Raymond & Quohundro

Atty's

UNITED STATES PATENT OFFICE.

FRANK J. HEARNSHAW, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRANK HEARNSHAW AND AQUILLA WINTERMUTE, OF SAME PLACE.

SUPPORT FOR WIRE LATHS AND PARTITIONS.

SPECIFICATION forming part of Letters Patent No. 573,512, dated December 22, 1896.

Application filed July 1, 1895. Serial No. 554,552. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. HEARNSHAW, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Supports for Wire Laths and Partitions, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in supports for wire or gauze laths when used either against the walls of rooms or buildings or as a partition to support the plastering, being especially adapted for fireproof constructions. Prior to my invention many different forms of such supports have been devised, all of which, so far as I am aware, have proven objectionable in practice by reason of their expensive construction, the number of parts and consequent complication, and the expense and difficulty of applying them to their intended uses; but probably the most serious objection to these prior constructions is their lack of stiffness and proper support for the wire lathing, which permits the latter to sag or bulge, so as to produce cracks in the plaster carried by the latter.

The object of this invention is a wire-lath support, possessing in the maximum degree simplicity, durability, and economy, which shall be easy of application, comprising the minimum number of parts and capable of tightening the wire lathing throughout to any desired degree of tension, where it will be held without the liability or possibility of loosening and thereby permitting the wire lathing to sag or bulge, whether used as a side-wall covering, partition, or ceiling. This and such other objects as may hereinafter appear are attained by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a section of wire lathing having supports applied thereto embodying my invention. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1, taken through one of the supports. Fig. 3 is a horizontal section of a modification of my invention, showing a double support. Fig. 4 is a detail view of one of the end brackets or steps; and Fig. 5 is a sectional elevation on the line 5 5 of Fig. 1, showing the lower end of one of the supports.

Similar letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A indicates the floor and ceiling beams, which may be composed of I-beams, as usual in fireproof constructions, or of any other shape and kind of material desirable. To each of these beams at suitable intervals is rigidly secured a bracket or step B by means of bolts or otherwise, these brackets being arranged in registering pairs on the respective beams. These brackets are provided with dovetailed or other suitable interlocking sockets, as more clearly illustrated in Fig. 4, to receive the correspondingly-shaped ends of an upright C, to which one or both of the brackets may be applied before they are fastened to the beams, the purpose being that the upright C shall be of a length substantially corresponding with the distance between the beams. Of course if the brackets are simply provided with sockets that do not extend the full depth of the bracket, then the uprights would have to be correspondingly less in length.

One face of the upright, as more clearly illustrated in Figs. 2 and 3, is concaved or otherwise suitably recessed at D to receive a correspondingly-shaped rib E upon another upright F, of a length substantially corresponding with that of the upright C, the two uprights, when put together, constituting a sectional support for the wire lathing, as will be described farther on. The wire lathing lies between the uprights C and F, which latter are fastened together by a series of screw-bolts G, which not only serve to unite the sections but also serve to place tension on the wire lathing lying between the supports, the tightening-bolts G being passed through the interstices of the lathing, or, where gauze is used, through suitable perforations provided therein.

In practice, in the formation of a partition or in applying the lathing to a wall, I first set up all of the uprights C and then fasten

the wire screen firmly to the uprights at the ends of the wall or partition. The uprights F are then applied to the uprights C, and the proper tension is put upon the lathing by tightening up the bolts G, which gives to the lathing a rigidity sufficient to support any amount of plaster usually applied thereto without the danger of bulging, and as the supports are entirely covered by the plastering, when the wall or partition is finished, the parts are thereby locked against loosening, so that the tension will be maintained.

In practice the sections of the support constitute grounds as a gage for leveling up the "brown coat," which is laid flush with the outer edges thereof, and if, as a result of carelessness in applying the tension, the lathing is found to be not rigid enough, it can be further tightened before the application of the "white coat," or finishing-coat of white plaster, which will cover up the lathing and its supports. In practice, if it is desired to have a double partition or lathing with an air-space between the two lathings for the purpose of increasing the fireproofing qualities of the partition, the steps or brackets may be formed double, and two uprights, like C, may be applied thereto, back to back, and two uprights F may be applied to the first-mentioned uprights, so as to secure the two lathings and maintain them suitably separated to provide an air-space between them in the manner previously described.

In Fig. 3 I have illustrated the double bracket, with its accompanying uprights C, and it will be understood that the uprights F are preferably applied thereto by a single bolt, which shall serve for both pairs of uprights.

It will thus be seen that the wire lathing or gauze is supported and drawn up or stretched at every point throughout its surface instead of at separate points, as heretofore, and the result is a tightening of the lathing between the supports and beams much after the manner of a drum-head. The ease and readiness with which these supports may be applied to any building will be readily perceived, and it will be equally apparent that no especial skill is required to be exercised in the use of my invention. The durability and economy thereof are also apparent, and the supports and partition or wall formed thereby may be rendered as rigid as is necessary for any practical purpose, there being no specified limit to the number of supports which may be applied to any particular wall or partition. Furthermore, the supports, when applied to a wall, will subserve the purpose of "furring-strips" to provide an air-space between the lathing and the wall and prevent contact of the plastering with the wall.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A support for wire or gauze lathing comprising a bar composed of rigid or inflexible longitudinal sections, brackets or steps for receiving and securing one of said sections to the building-beams, and means for securing the other section to the first-mentioned section, the meeting faces of said sections having interlocking surfaces throughout their length, between which the lathing is clamped, substantially as and for the purpose described.

2. A support for wire or gauze lathing comprising a bar composed of rigid or inflexible longitudinal sections, brackets or steps for receiving and securing one of said sections to the building-beams, and means for securing the other section to the first-mentioned section, one of said sections having a recessed or concaved face throughout its length, and the entire length of the other section being provided with an opposing ribbed or convexed face, between which faces the lathing is clamped, substantially as described.

3. A support for wire or gauze lathing comprising a bar composed of rigid or inflexible longitudinal sections, brackets or steps secured to the building-beams and provided with recesses to receive the ends of one of said sections, and means for securing the other section to the first-mentioned section, the meeting faces of said sections having interlocking surfaces throughout their length, substantially as described.

4. A support for wire or gauze lathing comprising a bar composed of rigid or inflexible longitudinal sections, steps or brackets secured to the building-beams, and provided with sockets to receive the ends of one of said sections, and means for securing the other section to the first-mentioned section, one of said sections having a recessed or concaved face throughout its length, and the entire length of the other section being provided with an opposing ribbed or convexed face, substantially as described.

5. A support for wire or gauze lathing comprising a bar composed of rigid or inflexible longitudinal sections, steps or brackets secured to the building-beams and provided with sockets to receive the ends of one of said sections, and bolts passing through both of said sections so as to secure the same together, the meeting faces of said sections having interlocking surfaces throughout their length, between which the lathing is clamped, substantially as described.

FRANK J. HEARNSHAW.

Witnesses:
O. R. BARNETT,
M. E. SHIELDS.