

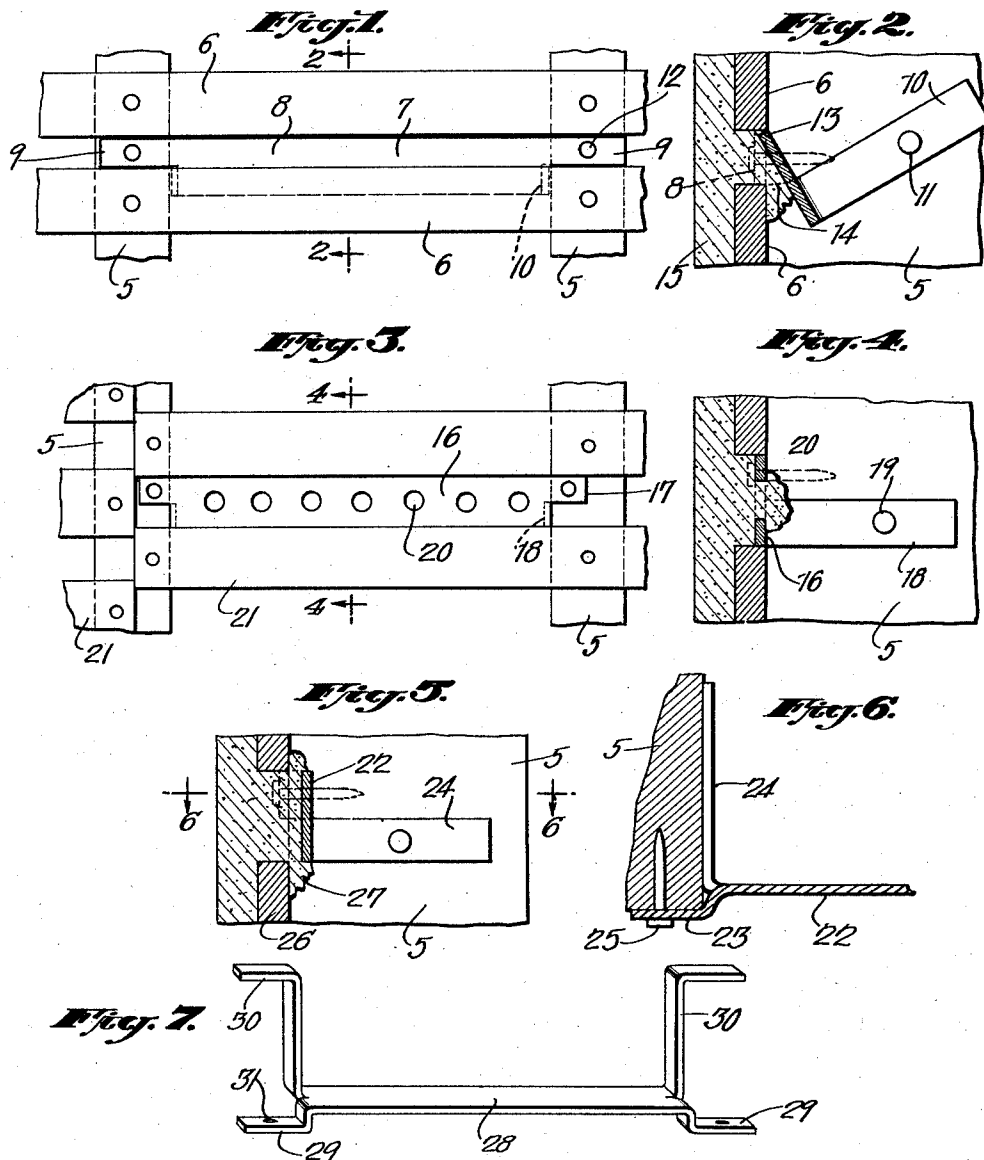
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BUILDING BRACE

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BUILDING BRACE

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This invention relates to braces and in particular to a type especially adapted for use in the building trade.

A particular object of the invention is to provide a stud brace for use in the walls of a building under construction to maintain the studs a distance apart whereby the walls of the building will be strengthened and the plaster will be securely anchored.

A more particular object of the invention is to provide a stud brace which will eliminate the old type of bracing blocks which were cut to any length and inserted between the studs to reinforce the same. Various trades affiliated with building construction as plumbers and electricians, when running their pipes and wires up between the studs would invariably knock these stud bracing blocks out and thereby weaken the studs and consequently weaken the entire wall structure, which resulted in an unevenness of expansion of the stud and consequent cracking of the plaster.

A further object of the invention is to provide a stud brace which may be secured in place between the studs with a minimum of time and effort and which permits the passage of pipes between the studs without the removal of the brace, it being of course also understood that the brace provides room between the adjacent laths for a good mortar bond which is necessary in the wall construction.

To enable others skilled in the art to fully comprehend the underlying features of my invention that they may embody the same in the various modifications in structure and relation contemplated, a drawing depicting a preferred form has been annexed as a part of this disclosure and in such drawing, similar reference characters denote corresponding parts throughout all the views, of which,

Figure 1 is a view in elevation of a section of a wall comprising the studs and laths and illustrating my improved bracing member positioned between the laths and arranged to reinforce the stud.

Figure 2 is a section taken on the line 2—2 of Figure 1 and shows the construction of the bracing member whereby room is provided

between adjacent laths for a bond of the mortar which forms the plaster base.

Figure 3 is a view in front elevation of a lath and stud construction in combination with which is employed a different type of stud brace, and

Figure 4 is a section taken on the line 4—4 of Figure 3 showing how the stud brace is secured in position between the studs.

Figure 5 is a view in sectional elevation of a brace of a different type, the body of which is depressed relatively to the stud engaging projection thereof so that the mortar can pass under the lath to form a bond.

Figure 6 is a fragmentary section taken on the line 6—6 of Figure 5 and illustrating the shape of one end of the stud brace.

Figure 7 is a view in perspective of the stud brace illustrated in Figures 5 and 6, the offset stud engaging portions thereof being clearly illustrated.

Referring to the drawings in detail, 5 indicates the studs used in building construction to form walls, the same being spaced apart and arranged to receive the laths 6 over which the mortar is spread preparatory to plastering. These laths, of course, are secured to the studs by suitable nails and are spaced apart so that a mortar bond can be formed between them. Heretofore in the building operation, the studs have been spaced and supported by suitable blocks placed therebetween and nailed at their ends to the studs and, when a plumber or electrician wished to run pipes or wires up in the walls, it was found necessary to knock out the supporting blocks placed between the studs with the result that the wall structure was weakened and subsequent cracking of the plaster would take place.

In order to overcome this objection I have provided a brace member indicated by the numeral 7 consisting of a central body portion 8 and end extensions 9, the extensions 9 being formed by splitting the ends of the body 8 and arranging the ends 9 to rest against the face of the stud, while the turn down portions 10 of the body 8 are arranged to fit alongside the stud and to be nailed thereto as at 11. It is of course understood that

nails 12 may be employed to hold the brace 7 in position against the face of the stud.

It is quite evident that a brace made of metal and of substantial construction will not only take the place of the wooden blocks heretofore used, but will eliminate the necessity of removing the blocks when pipes or wires are to be run up between the studs as my improved brace allows room for the pipes or wires and does not in any manner weaken the structure of the wall.

In order to form a bond between the laths 6 in those portions of the laths which lie adjacent the brace 7, I have bent the body 8 of the brace at an angle to the ends 9, as indicated by the numeral 13 in Figure 2 so that a space 14 is left between the edge of the lath and the bent body 8 of the brace, this space providing a bond for the mortar 15, which is applied over the laths.

In the event that a brace is desired where the body portion is not bent, I have provided a modified form indicated by the numeral 16 in Figure 3 and whose ends are split to provide the end portions 17 and 18, the latter of which are turned down alongside the stud and nailed thereto as indicated at 19, it of course being understood that the extensions 17 are also nailed to the face of the stud to maintain the brace 16 in place. This brace is provided longitudinally with perforations 20 through which the mortar may exude to form a bond between the laths. In this type of construction, the laths 21 would be nailed to the studs 5 in substantially staggered relation and the brace 16 would not interfere in any respect with the placing of the laths.

I have shown in Figures 5 and 6, a still further modified form of brace consisting of a body member 22, split at its ends to provide the extensions 23 and 24, the latter of which extends alongside the stud 5 and is secured thereto in the usual manner while the extension 23 rests against the face of the stud and through the medium of the nail 25 is secured to the stud. In this instance, the body 22 of the brace is so bent that it is offset inwardly from the plane of the face of the stud and consequently, when the laths are placed against the face of the stud an opening is left between the body portion 22 of the brace and the edge of the lath, indicated by the numeral 26 so that a mortar bond 27 is provided.

Further forms of my bracing device are illustrated in Figure 7, in which the body portion 28 is split at its end to provide the stud engaging members 29 and 30 which embrace the stud at opposite sides and through the medium of the openings 31, are secured to the stud. This construction is particularly adapted for studs forming room partitions. In this instance also, the body of the brace is in a plane slightly offset inwardly from the plane of the faces of the studs consequently, the space between the lath and adja-

cent the brace, provides a bond for the mortar.

It is quite evident, therefore, that I have provided a brace adaptable for use between the studs in a building construction and so arranged that they will not interfere with the passage of pipes or wires between the studs.

It is also evident that the braces, being made of metal or other suitable material of a substantial nature, will greatly reinforce the studs and give added strength to the structure.

It is evident that the use of the braces does not interfere with the bond of the mortar between the laths and the bracing being of a substantial nature, will prevent undue movement of the stud and consequently reduce to a minimum cracking of the plaster.

It is also evident that my improved brace can be used in its many forms under various conditions and without in any way interfering with the placing of the laths on the studs, the braces being so constructed that they will not interfere with the building codes or the materials of construction prescribed thereby.

While I have illustrated and described my invention with some degree of particularity, I realize that in practice various alterations therein may be made. I therefore reserve the right and privilege of changing the form of the details of construction or otherwise altering the arrangement of the correlated parts without departing from the spirit of the invention or the scope of the appended claim.

Having thus described my invention what I claim as new and desire to secure by United States Letters Patent is:—

A brace for wooden building studs to which wooden laths are to be secured comprising a brace bar having portions at one end for individually engaging different faces of the wooden studs against which the said end of the bar is disposed and constituting means through which fastening elements may be driven to secure the ends of the bar to the studs, between wooden laths, and said bar being inwardly offset with respect to some of said stud engaging portions whereby a mortar anchor is provided by the brace with respect to adjacent wooden laths.

In testimony whereof I affix my signature.
RAYMOND MENES. [L. s.]