Oct. 11, 1932. H. S. JOHNS 1,882,499

PLASTER BASE

Filed March 18, 1930

Fig. 1.

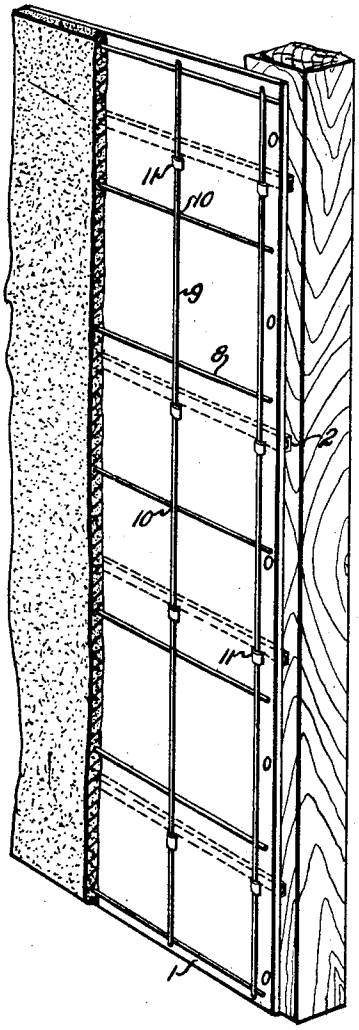


Fig. 2.

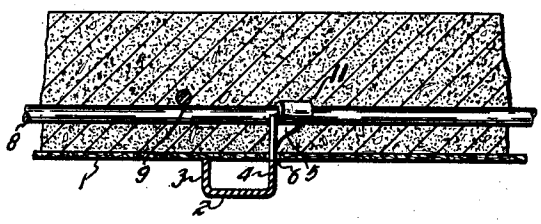


Fig. 3.

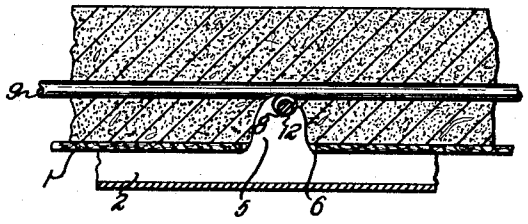


Fig. 4.

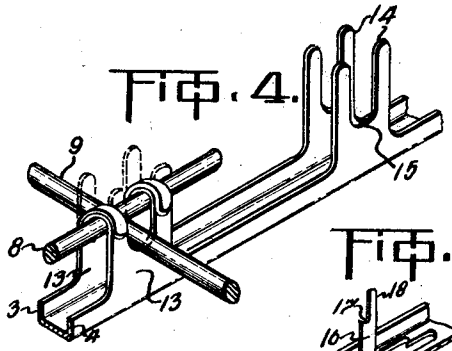


Fig. 7.

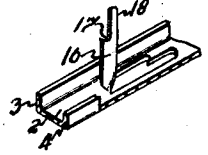


Fig. 6.

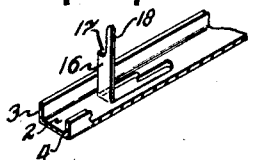
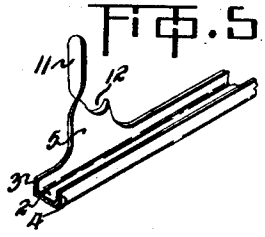


Fig. 5.



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Patented Oct. 11, 1932 1,882,499

UNITED STATES PATENT OFFICE

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PLASTER BASE

Application filed March 18, 1930. Serial No. 436,876.

My invention relates to improvements in plaster bases and the object of my invention is to provide a fibre sheet backing supporting a wire fabric which is spaced away therefrom so that the wire fabric reinforces the plaster which is applied to the backing.

A further object of my invention is to furnish a plurality of parallel channel members upon the opposite sides of the backing to the fabric, such members being formed with lug members which pass through the backing and engage the wire fabric.

A still further and particular object of my invention is to so mount the fabric in respect to the backing that it is spaced away therefrom, whereby the plaster when applied, passes between the fabric and the face of the backing thus permitting the fabric to properly and thoroughly reinforce the first plaster coat.

My invention consists of a plaster base constructed and arranged all as hereinafter more particularly described and illustrated in the accompanying drawing, in which

Fig. 1 is a perspective view of a fragmentary portion of a wall stud and my plaster base secured thereto, the first plaster coat being shown partially applied to the base.

Fig. 2 is an enlarged vertical cross sectional view through a portion of the plaster covered base.

Fig. 3 is a similar horizontal cross sectional view.

Fig. 4 is a perspective view of an alternative form of rib construction showing a fragmentary portion of the wire fabric secured to the rib, the backing sheet which extends between the rib and fabric not being shown.

Fig. 5 is a similar view to Fig. 4 showing a single wire fabric supporting member upon the rib, and

Figs. 6 and 7 are perspective views of fragmentary portions of the ribs partially in section, showing the wire fabric supporting members extending from the bases of the ribs instead of the sides.

Like characters of reference indicate corresponding parts in the different views in the drawing.

In the erection of a building the partition and ceiling studs are erected in the usual manner, and sheets of my plaster base are secured to extend between the studs instead of the plaster laths which have been used quite extensively heretofore. The sheets of backing are secured to the studs by means of common wire nails, and the sheets so spaced that all the joints overlap to provide a continuity of the wire fabric between adjacent sheets.

In the form of backings illustrated in Figs. 1, 2 and 3 I provide a sheet of tough fibrous backing 1 reinforced by a plurality of spaced apart parallel ribs, such ribs being of channel form and consisting of bottom portions 2 and side members 3 and 4, such ribs lying along the rear face of the backing and formed with lugs 5 which extend through slits 6 in the backing and support the wire fabric.

The wire fabric comprises a plurality of spaced apart parallel horizontal and vertical wire members 8 and 9 which are spot welded together at their intersections 10, the lugs 5 on the reinforcing ribs engaging the vertical wires 9.

The lugs 5, as formed upon the sides of the ribs, are of the form illustrated in Fig. 5, each consisting of a tongue member 11 adapted to be wrapped around a wire of the fabric and a concave seat portion 12 formed beside the tongue member at the base thereof in which the wire rests, such tongue member 11 being twisted at right angles to its base lug 5, so that it can be wrapped around the wire as illustrated in Figs. 2 and 3. The lug 5 is, of course, considerably higher than the thickness of the fibre backing sheet 1 so that the wire fabric is considerably spaced apart from the backing sheet.

In the form of rib and lug construction illustrated in Fig. 4, instead of furnishing single lugs 5 upon the sides 4 of the channels I have furnished pairs of lugs 13 extending from both sides 3 and 4 of the channels, the lugs of each pair being positioned opposite to each other. Extending upwardly from each lug I form pairs of tongue members 14, the tongue members of each lug being spaced apart so that they form a U-shaped projection

having a wire receiving seat 15 therebetween.

In this type of construction the ribs are positioned along the rear face of the backing in a similar manner to the form illustrated in Figs. 1, 2 and 3, the lugs 13 extending through the backing. The lugs 13 have the same spaced relation upon the ribs as the spaced relation of the wire fabric so that when such wire fabric is laid in position the wires 9 extend through the seats 15. The tongue members 14 are then lapped over each other around the horizontal wires 8. It is to be also understood that the distance between the seats 15 of the lugs 13 and the base of the lugs or upper edges of the channel sides 3 and 4 is considerably greater than the thickness of the fabric backing so that the wire fabric is considerably spaced apart from the backing in order to permit the plaster passing between the fabric and the backing.

In the form of construction illustrated in Figs. 6 and 7 instead of providing lugs which extend from the edges of the sides of the ribs, I furnish lugs 16 which are cut from the bases 2 of the ribs, such lugs being of the same form as the lug illustrated in Fig. 5 and are adapted to engage the wire fabric at its intersection points 10 so that one wire is contained within the seat 17 and the tongue 18 wrapped around the other wire. The lugs may either extend crosswise of the channels as illustrated in Fig. 6, or twisted to extend parallel to the channels as illustrated in Fig. 7.

From the foregoing description it will be apparent that I have devised a particularly simple and rigid form of plaster base which is inexpensive to manufacture, and in which the wire fabric can be retained in spaced apart relation to the face of the backing so that the plaster, when applied, can freely pass between the fabric and the backing and thus become properly reinforced by the fabric, and although I have illustrated and described several forms of my base it is to be understood that my invention basicly consists of providing a wire plaster reinforcing fabric supported by a plurality of rib members which retain the wire fabric in spaced relation to the surface upon which the plaster is applied.

What I claim as my invention is:

1. In a plaster base backing sheet of the character described incorporating a backing sheet presenting an entirely flat unbroken surface across its plaster receiving face, the combination with the wire fabric positioned in front of the sheet and a plurality of ribs positioned upon the back of the sheet, of lugs extending from the ribs through the sheet and supporting the fabric entirely out of contact with the sheet.

2. In a plaster base backing sheet of the character described incorporating a backing sheet presenting an entirely flat unbroken surface across its plaster receiving face, the combination with the wire fabric positioned in front of the sheet and a plurality of ribs positioned upon the back of the sheet, of lugs extending from the ribs through the sheet and upon which the wires of the fabric are seated out of contact with the sheet, and tongues formed upon the ends of the lugs encircling the wires.

3. A plaster base of the character described having in combination a backing sheet, a wire fabric positioned in front of the sheet, a plurality of channel shaped ribs extending across the back of the sheet, lugs extending from the bottoms of the ribs through the backing sheet and having fabric wire receiving seats formed upon their ends, and tongues formed upon the ends of the lugs adjacent the seats and encircling the wires.

4. A plaster base of the character described having in combination a backing sheet, a wire fabric positioned in front of the sheet and comprising horizontal and vertical intersecting wires, a plurality of channel shaped ribs extending across the back of the sheet, lugs extending from the bottoms of the ribs through the backing sheet and having wire receiving seats formed upon their ends to receive the fabric wires running in one direction, and tongues formed upon the ends of the lugs adjacent the seats adapted to encircle the fabric wires running in the opposite direction.

5. A plaster reinforcing device having in combination a sheet of wire fabric, a plurality of ribs extending behind the wire fabric, lugs extending from the ribs and having wire receiving seats formed upon their ends to receive the fabric wire, and tongues formed upon the ends of the lugs adjacent the seats adapted to encircle the fabric wires.

HENRY STINSON JOHNS.