Nov. 5, 1929. J. K. MAYS ET AL 1,734,685

ART OF PLASTERED BUILDING PARTITION CONSTRUCTION

Filed March 30, 1929 2 Sheets-Sheet 1

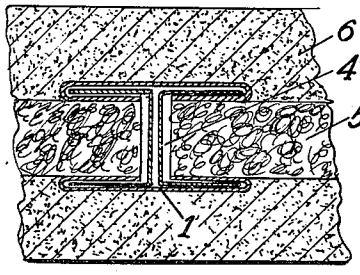


Fig. 1

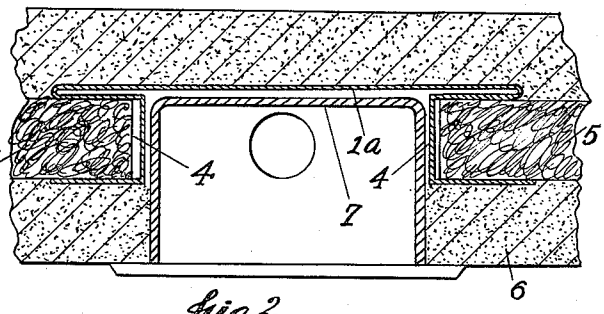


Fig. 2

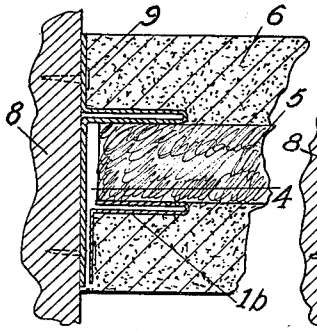


Fig. 3

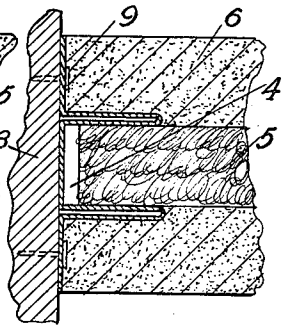


Fig. 4

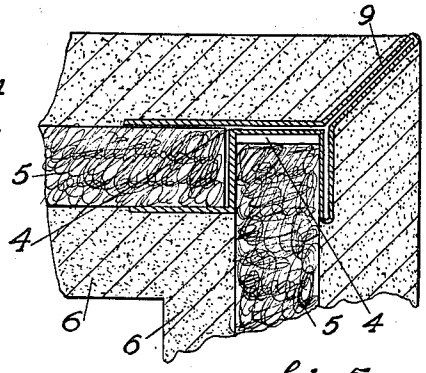


Fig. 5

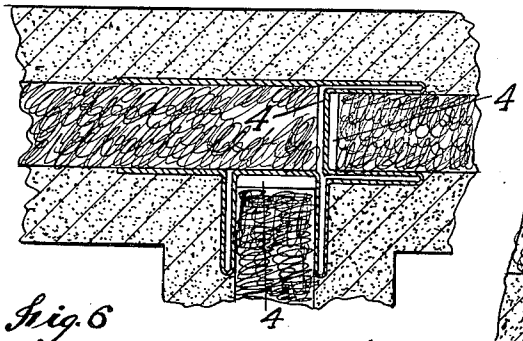


Fig. 6

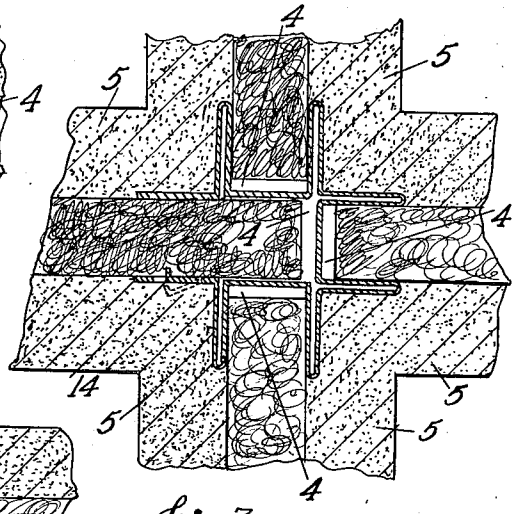


Fig. 7

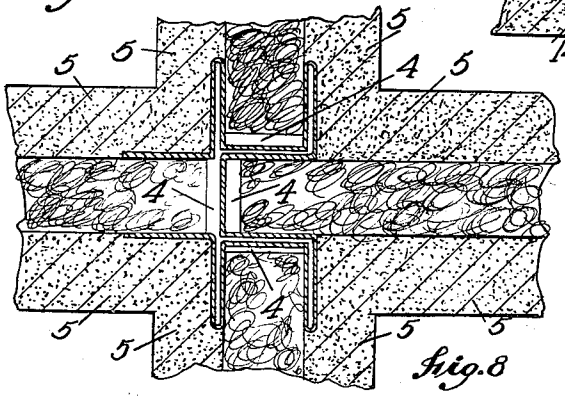


Fig. 8

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ART OF PLASTERED BUILDING PARTITION CONSTRUCTION

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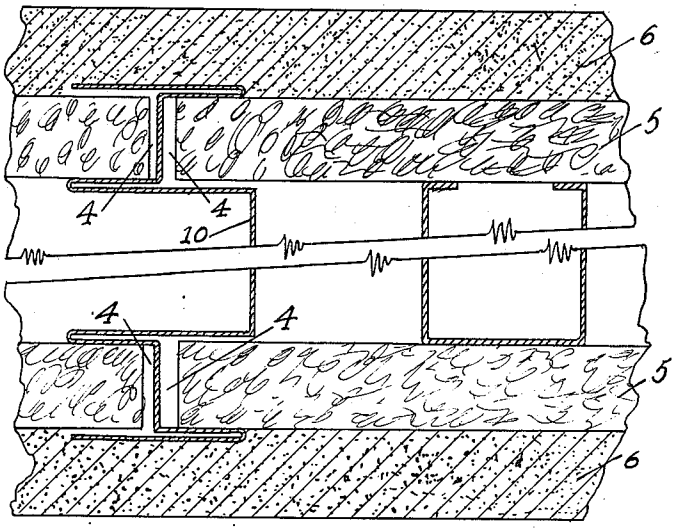


Fig. 9

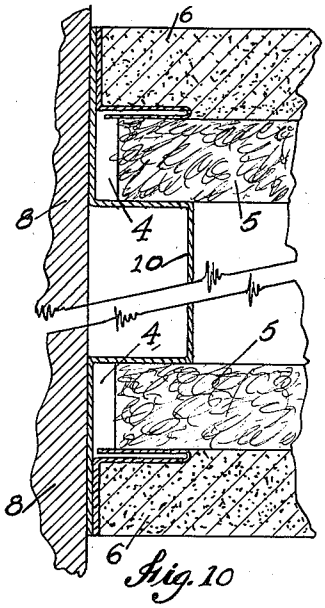


Fig. 10

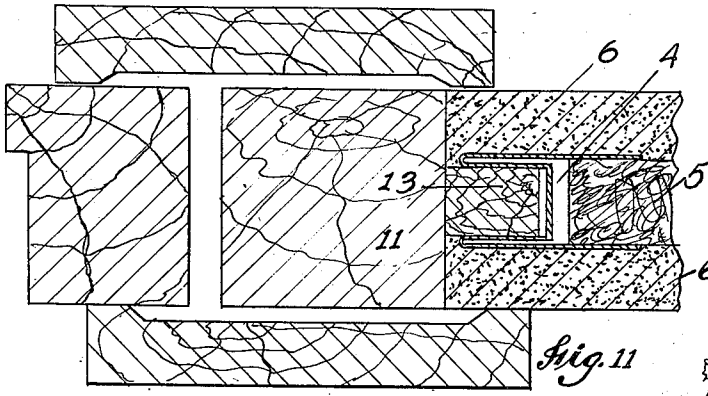


Fig. 11

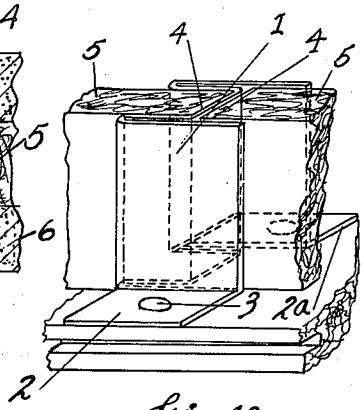


Fig. 13

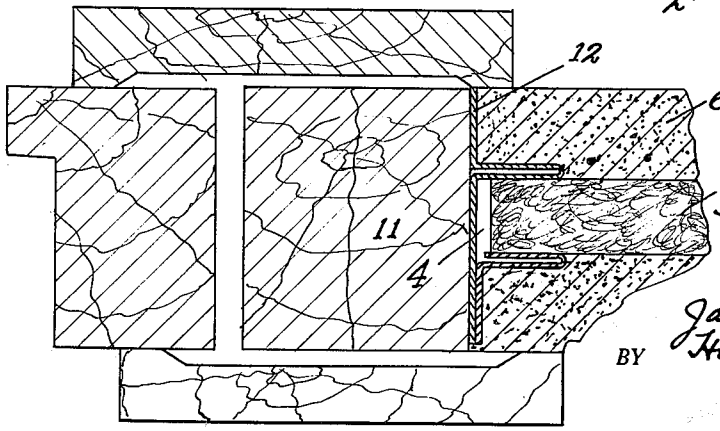


Fig. 12

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UNITED STATES PATENT OFFICE

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ART OF PLASTERED-BUILDING-PARTITION CONSTRUCTION

Application filed March 30, 1929. Serial No. 351,341.

Our invention relates to the building construction art and particularly to the art of plastered partition construction.

In the construction of partitions it has been customary to extend studding from the floor level to the ceiling and to attach thereto wood or metallic lath over which plaster is coated to a desired thickness. The thickness of such partitions is ordinarily about six inches. Such thickness, in this type of construction, is necessary to provide necessary rigidity and insulation both for heat and sound.

It is our object to provide a method of construction which will provide effective insulative properties against the transmission of heat and sound, and which will at the same time greatly economize the space required for the partition as the thickness of our partition will only be about one third of that formerly required. It is further our object to disclose a partition which will be susceptible of much more ready construction thereby creating a great saving in the labor required. It is still another object to provide a construction which will be much more economical from the point of view of cost of materials.

The above broad objects and other specific objects to which reference will be made in the ensuing disclosure we accomplish by that certain combination and arrangement of parts of which we have shown several examples of this art.

Referring to the drawings:

Figure 1 is a detail sectional view of a portion of a partition between the corner edges thereof.

Figure 2 is a detail sectional view of a portion of a partition through which electric conduits or pipes may be extended.

Figure 3 is a detail sectional view of a corner edge of a partition.

Figure 4 is a detail sectional view of a corner edge of a partition similar to that shown in Figure 3, in which a different type of metallic studding is used.

Figure 5 is a detail sectional view of a portion of a corner formed by the meeting of two partitions made in accordance with our invention.

Figure 6 is a detail sectional view of a portion of a corner formed by the meeting of three partitions.

Figure 7 is a detail sectional view of a portion of a corner formed by the meeting of four partitions.

Figure 8 is a detail sectional view of a portion of a corner formed at the juncture of four partitions in a similar arrangement as is shown in Figure 7 wherein a different type of metallic studding is employed.

Figure 9 is a detail sectional view of a portion of a double wall partition.

Figure 10 is a detail sectional view of a double wall partition at a side edge thereof.

Figure 11 is a detail sectional view of a partition showing the connection with a door or window jamb.

Figure 12 is a detail sectional view of a partition shown at its juncture with a door or window jamb similar to that shown in Figure 11 in which a different type of studding is employed.

Figure 13 is a detail perspective view showing the end attachment of the metallic studding used which may be employed either at the floor or ceiling level.

Referring first to Figure 13 we have shown a preferred method of attachment of the metallic studding, the use of which in sequence during the construction of the partition forms an important part of our invention along with the adaptation of certain types of studding for use in accordance with the particular requirements of the job.

The metallic studding as shown in Figure 13 is preferably fastened to the floor and ceiling and plaster base is fitted within the studding following which the plaster may be applied. Thus we show the studding 1 having a flange 2 which may be secured at the floor or ceiling level as with a nail 3 or screw. It will be noted that in the simplest form of studding an H formation is bent or formed up out of metal sheets providing channels 4 which retain the strips of plaster base indicated at 5. Both sides may have flanged portions for attachment to the floor and ceiling as are indicated by the parts 2 and 2^a in Figure 13.

The metallic studding employed is in each

case bent or formed up from a flat piece of metal with the object in view of retaining the plaster base in desired position, and of also providing portions of each stud at angles with other portions so that the tendency to bend will be prevented by providing suitable reinforcing portions.

In Figure 1 we have shown a metallic stud 1 having strips of plaster base 5 retained in the channels 4 and extending so as to form the inner layer of the partition, plaster being coated as indicated at 6 to form the finished partition. In Figure 2 we have shown parts similar to those shown in Figure 1, excepting that the metal is extended in a wide strip as indicated at 1^a to provide space for the insertion of a conduit basing as indicated at 7.

In Figures 3 and 4 we have shown a partition abutting a building wall 8. In such instances the metallic studding may be suitably attached to the building wall as with nails 9. It will be noted that the only difference between the studding shown in Figures 3 and 4 is that a removable angle 1^b is formed in one of the attaching flanged portions in Figure 3.

Figure 5 shows the corner of two partitions meeting at right angles. This forms a particularly efficacious arrangement, inasmuch as the studding 1 has the channels 4 extending at right angles so that a piece of plaster base forms the inner support for each of the meeting walls with an extension 9 extending out at an angle to the bases of the channels for providing both the support for the layers of plaster at the outer corner of the meeting partitions, and also as reinforcement for the corner will prevent damage to the corner of the plaster as by striking the same and chipping off pieces.

Figure 6 shows a corner of three meeting walls in which channels 4 are provided for three sections of plaster base, two in alignment and the other extending at a right angle to the other two. Figures 6 and 7 show a corner of four meeting walls in the form of a cross in which there are four channels 4 for retaining the plaster base.

Figure 9 shows a double partition with a ventilating space between the partitions and in this instance it should be noted that there are two of the metallic H shaped pieces 1 joined by a spacing plate 10 which not only provides accurate spacing, but also provides additional reinforcement. Figures 9 and 10 show a similar double partition in which the partitions are secured to a wall, but in which the plate 10 has the same function as in the studding shown in Figure 9.

Figure 11 shows the joint between a plaster partition and the frame 11 of a window or door. Figure 12 shows a similar arrangement as is shown in Figure 11, excepting that the studding in the latter case has a flat base 12 suitable for attachment to the frame. In Figure 11 the studding is supported by the engagement of a channel with an upright stud 13 secured to the frame.

In constructing a partition in accordance with our invention, we start at a corner provided with a stud such as is indicated in Figures 3 or 4, and first secure within the channel a strip of plaster base of sufficient length to reach from floor to ceiling, or made up of several pieces which joined together have sufficient length to extend from ceiling to floor. We then mount on the unsecured edge of the plaster base another section of metallic studding such as is indicated in Figures 1 or 13, and if we are comparatively far from the opposite end of the partition we secure the studding to the floor and ceiling and proceed with another section of plaster board. When we have arrived at a point at which, if we seat the next section of plaster board within the exposed channel we cannot subsequently attach another section of integral studding, we may leave the studding unsecured at the top and bottom which will allow room to bend the sections of plaster base out of alignment with the wall until they can be fitted in together in proper position. Ordinarily, however, we set in the last section of the plaster base and secure it with a removable angle stud as shown in Figure 3 at 1^b.

In some instances we may provide the metallic studding with tongues punched out from the sides of the channels such as are indicated at 14 in Figure 7, which may after the insertion of the plaster board section be bent back to securely hold the section in position.

In the installation of metallic studding, in the past it has been common practice to first install the studding and then the plaster. It is a feature of our invention therefore that the studding may be installed section by section as the construction of the wall progresses. After the studding and plaster base have been set up to form the inner reinforcement for the partition wall, the outer surfaces of the plaster base is coated with plaster in the usual manner. The corner guide and reinforcement shown in Figure 5 will be found to be particularly effective in gauging the thickness of plaster to be applied.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is:—

1. In the art of constructing plastered partitions, the steps which include setting a channeled metallic stud at one end of the partition, mounting a panel of plaster base within the channel of the stud, securing thereto by means of a channel therein a doubly channeled metal stud, then inserting in the open channel of the stud another panel of plaster base, and progressively proceeding

with the alternate installation of panels of plaster base and channeled metallic studding until the opposite edge of the partition has been set up, securing each piece of studding at its top and bottom and then after the last panel has been set in securing said panel at its inner edge with a stud member separable from the main stud of which it forms a part.

2. In the art of constructing plastered partitions, the steps which include setting a channeled metallic stud at the corner of the partition, inserting therein a panel of plaster base extending from floor to ceiling in the channel of the stud, then inserting at the free edge of the plaster base a doubly channeled stud, and progressively proceeding with the alternate installation of panels of plaster base and channeled metallic studding until the opposite edge of the partition has been set up, securing the panel on the said opposite edge and then plastering the surfaces of the plaster base to a thickness determined by a projection of one of said studs.

3. In the art of constructing plastered partitions, the steps which include mounting a panel of plaster base at one side of the partition, securing thereto by means of a channel therein a doubly channeled metal stud, then inserting in the open channel of the stud another panel of plaster base, and progressively proceeding with the alternate installation of panel of plaster base and channeled metallic studding until the opposite edge of the partition has been set up, securing each piece of studding at its top and bottom and securing the last panel of plaster base with a removable member of the end stud.

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