This invention, generally stated, relates to partition and like interior constructions and has more especial relation to an improved plaster block and manner of forming a partition, wall and ceiling structure calculated to receive a finishing coat of plaster.

Referring first to the plaster block it is desired to eliminate lathing, either wood or wire, thus reducing cost and lightening structure, and provide a relatively light block of porous material calculated to be sound proofing, fire proofing and temperature resisting in structure. Because of the relatively soft nature of such blocks they may be readily cut when desired to different sizes, and they also provide means whereby picture molding, base boards, door-trims and the like may be readily nailed to place thus reducing the cost of erection of such parts.

Referring now to the manner of erecting the plaster blocks it is the purpose to position same between uprights of channel iron and secure same with respect thereto by means of novel forms of attachment clips prior to application of finishing coat of plaster. In some cases I may however nail the plaster blocks directly to wood studings.

The invention consists of the improvements hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, and in which:

Fig. 1 is a face view of a plaster block made in accordance with the present invention.

Fig. 2 is an edge view thereof.

Fig. 3 is a fragmentary of a wall or partition constructed in accordance with the present invention.

Fig. 4 is a sectional plan view of Fig. 3.

Fig. 5 is a sectional end view, drawn to an enlarged scale, of parts shown in Figs. 3 and 4.

Fig. 6 is a view of a clip prior to bending thereof, and

Fig. 7 is a perspective view of a clip ready for application to a partition or like construction.

For the purpose of illustrating my invention I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalties of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalties as herein shown and described.

With reference to the plaster block as shown in Figs. 1, and 2, and designated by numeral 10, the same is of rectangular construction and is bevelled as at 11 upon the face. The plaster block is made of the following ingredients and in the following manner. It has for a base calcined plaster with which is associated powdered cork and silicate of soda. Calcined plaster and cork both in dry powdery form and in the proportion of substantially four and one-half parts of calcined plaster to substantially one part cork are mixed together by the addition of sufficient cool water to form a mixture sufficiently plastic to be molded to desired form, about two ounces of silicate of soda being added to mixture. The silicate of soda causing hardening of the block, serves to provide waterproofing characteristics and also functions to eliminate "rapid suction" when plaster is being applied to a partition or the like formed of said blocks. Additional silicate of soda may be added to hasten the hardening process if desired. A block made in this manner is very light in weight, is porous, is possessed of sound proofings, fire proofing and temperature resisting qualities and possesses many other advantages. A plaster block of the kind may if desired be reinforced by embedding therein, at the time of molding, a sheet of very loosely woven burlap. Thus a block is better able to stand the abuse of transportation and cannot readily break and fall apart. Such reinforcement is shown by dotted lines in Fig. 2 and is designated 12. If a block for out-door use is desired I add to the 4½ parts of calcined plaster and 1 part of cork—1 part of magnesite, ½ part of chloride and 1 part of pulverized asbestos. For out-door use I prefer to have additional loosely woven burlap sheets adjacent the block surface.

I will now describe one way of using my improved plaster block for interior wall, ceiling and partition work, reference being had to Figs. 3 to 7 inclusive. Secured to
a suitable supporting structure as a floor 13 are spaced supporting members as channel iron 14. A plaster block is slightly less in width than is the distance between adjacent channel irons and the blocks are positioned therebetween, end to end with the lowermost block resting upon floor 13. Clips, best seen in Figs. 6 and 7 are employed for retaining the blocks in this position prior to application of surfacing material 15 as plaster. Such clips are stamped from metal as shown in Fig. 6, to provide a backing plate 16, pairs of spaced, oppositely disposed arms 17-18 and oppositely disposed intermediate arms 19. One of the arms 17 is bent forwardly and the other arm 17 bent rearwardly of the backing plate 16. See Fig. 7, and the intermediate arm 19 between said arms 17 is bent forwardly and then bent at right angles as 19'. In this position of parts a clip is ready for use the remaining arms 18 having their ends serrated as at 18', being perforated at 21 for tool insertion during a bending operation hereinafter to be described and a weakened line 20 being provided said arms adjacent the backing plate. With a block in position a clip is arranged so that its backing plate abuts against the plane face of a channel iron and the two short or intermediate arms bent into the channel of a support. This may be readily done with a hammer. A suitable implement or tool is then inserted in the aperture 21 of each arm 18, each arm being bent around the weakened lines 20 into parallelism with arms 17. Thus a pair of opposed U-shaped sockets are provided for block accommodation, see Fig. 4. The serrated portions of arms 18 may be then forced into the block. As many clips may be utilized as desired the number shown being merely for illustrative purposes. While these clips suffice to retain the blocks in position I prefer to make the connection rigid and for this purpose employ plates 22 adapted to straddle the edges of adjacent blocks, see Fig. 3, which plates are apertured for nail reception. With a plate in position as shown I drive a nail 23 through the plate into the channel of a support 14 to cause the point thereof to engage under the clinched part 19' of an arm 19, see Fig. 5. In order to maintain adjacent edges of superimposed blocks in alignment I employ other clips, see Fig. 3, having oppositely disposed fingers 24 forming U-shaped sockets for engaging over said blocks see top of Fig. 5. Plaster 15 is now applied to block surfaces. The plaster fills the spaces between the block edges and the channel irons to form a bond and also fills the space formed by the bevelled meeting faces of the blocks. If desired grooves 25, see top of Fig. 5, may be provided to increase the bond at this part of the structure.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

What I claim is:

1. A clip of the character stated comprised of a backing plate having extended therefrom pairs of oppositely disposed arms to form U-shaped block receiving sockets and channel iron engaging arms arranged between said first mentioned arms some of said arms having serrated, block engaging edges.

2. A clip of the character stated comprising an integral structure having a thin, flat backing plate bent out from which at each end are oppositely disposed arms, each pair of arms forming a U-shaped socket to accommodate a plaster block, and a channel iron engaging lip bent out from said plate between each pair of said arms and projected into one of said U-shaped sockets, one pair of said arms being weakened vertically considered along a line paralleling the juncture of a lip with said plate.

3. A clip of the character stated comprising an integral structure having a thin, flat backing plate bent out from which at each end are oppositely disposed arms, each pair of arms forming a U-shaped socket to accommodate a plaster block, and a channel iron engaging lip bent out from said plate between each pair of said arms and projected into one of said U-shaped sockets, one pair of said arms being weakened vertically considered along a line paralleling the juncture of a lip with said plate.

In testimony whereof, I have hereunto signed my name.

FREDERICK M. VENZIE.