Feb. 7, 1928. 1,658,407

P. GUSTAVESON

NAILING BLOCK FOR COMPOSITE WALLS

Filed Sept. 9, 1926

Fig. 1.

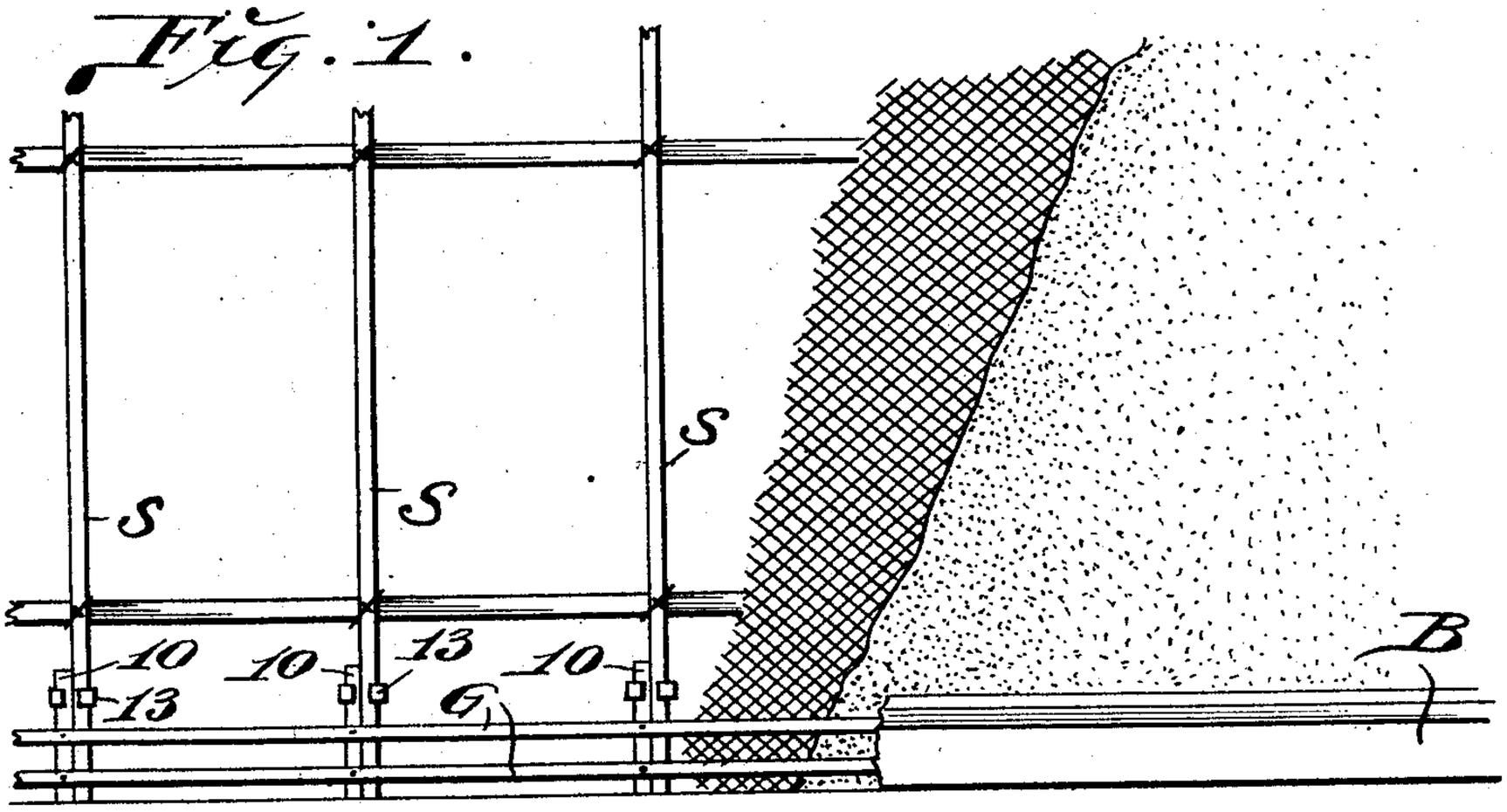


Fig. 2.

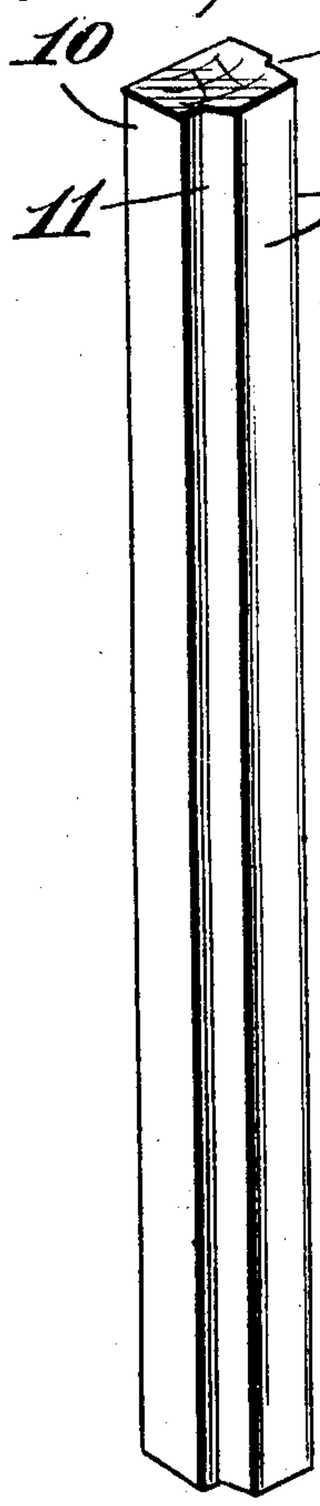


Fig 3.

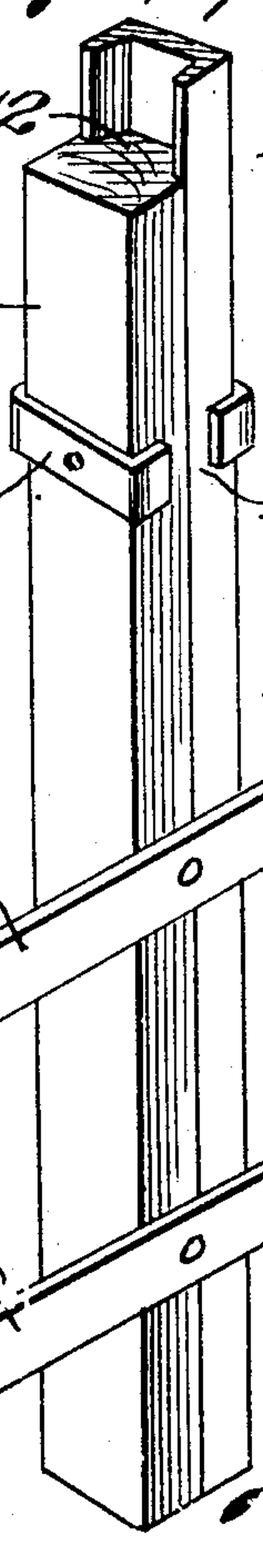


Fig. 4.

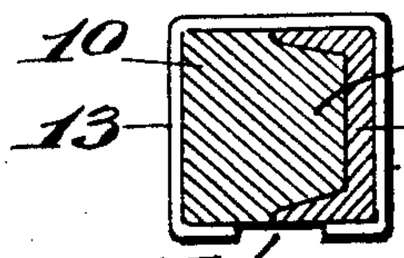


Fig. 7.

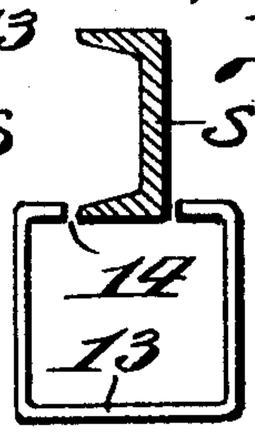


Fig. 9.

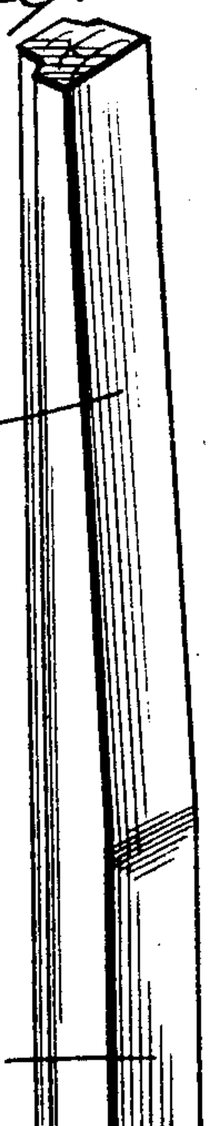


Fig. 5.

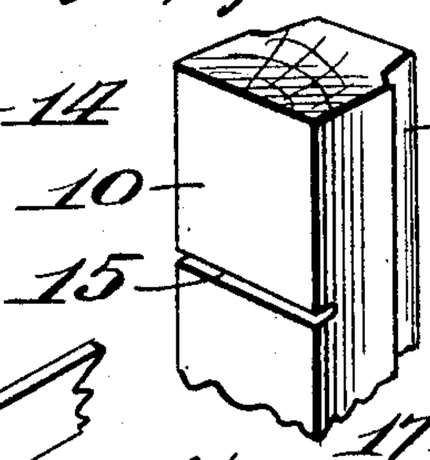


Fig. 8.

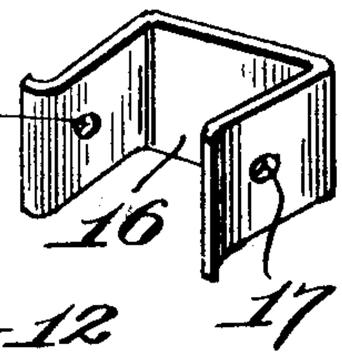
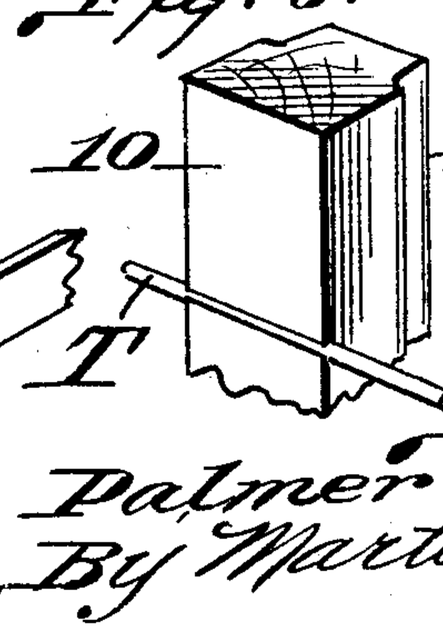


Fig. 6.



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UNITED STATES PATENT OFFICE.

PALMER GUSTAVESON, OF LOS ANGELES, CALIFORNIA.

NAILING BLOCK FOR COMPOSITE WALLS.

Application filed September 9, 1926. Serial No. 134,370.

My invention relates generally to the construction of building walls and partitions and more particularly to nailing blocks that are adapted to be applied to the metal studs that enter into the construction of fabricated metal walls or partition structures and which nailing blocks provide points of attachment for the ground strips to which the base boards or picture moulding are secured and which ground strips also function as plaster stops and gauges.

It will be understood that in the construction of modern buildings it is the general practice where fire proof structure is desired, to form certain of the walls, and particularly the partitions, of metal and plastic material, either plaster or cement, and as the wall or partition frame work is made up of metal bars, wire lath and the like, there must be provided some means for receiving the nails that are utilized in anchoring the ground strips that are an essential part of the wall.

It is the purpose of my invention to provide relatively simple and practical nailing blocks that may be easily and quickly secured to certain of the metal bars that form a part of the wall structure, preferably the flanged upright members that function as studs, and which nailing blocks by virtue of their relatively simple structure may be easily and cheaply produced and also readily applied to the flanged members of the wall structure.

A further object of my invention is to provide relatively simple and efficient means for firmly anchoring or securing the nailing blocks to the flanged metal wall members.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will hereinafter be more fully described and claimed and illustrated in the accompanying drawing, in which—

Fig. 1 is an elevational view of a portion of a wall or partition and showing my improved nailing blocks applied to the lower portions of the stud members of the fabricated metal structure that forms a part of said wall or partition.

Fig. 2 is a perspective view of a nailing block of my improved construction.

Fig. 3 is a perspective view of the nailing block applied to a flanged stud member and showing portions of the ground strip secured to said nailing block.

Fig. 4 is an enlarged horizontal section.

Fig. 5 is a perspective view of a portion of a modified form of the nailing block.

Fig. 6 is a perspective view of a further modified form of the nailing block.

Fig. 7 is a detail view showing the position of the block retaining clip as the same is applied to a stud member.

Fig. 8 is a perspective view of a modified form of the nailing block retaining clip.

Fig. 9 is a perspective view of a modified form of the nailing block.

As illustrated in Fig. 2, my improved nailing block consists of a strip or section 10, preferably of wood or compressed fibrous material, said strip being approximately ten or twelve inches in length and having one of its side faces shaped so as to conform to the flanged wall member to which the block is to be applied.

In practically all composite walls or partitions now erected, the stud members are either metal channels or I-beams and in order that the nailing block may be readily fitted to these forms of stud members, portions of the corners on one side of the nailing block are cut away as designated by 11 in order to receive the flanges of the I-beam or channel stud member. This formation of the nailing block provides on one face a relatively narrow rib or portion 12 that fits snugly between the flanges of the channel or I-beam so that when the block is properly applied to the stud member approximately two-thirds of the body of the block projects beyond the stud member thus providing ample nail-receiving areas on both sides of the block.

When the block is properly applied to the stud member, the rib 12 fills the space between the flanges of said stud member and the side faces of the main body portion of the block, or that portion that projects beyond the flanges, lie flush with the outer faces of the flanges (see Fig. 4).

In the erection of the composite wall the nailing blocks are inserted between the flanges of the stud members S immediately above the floor line as illustrated in Fig. 1 and thus said nailing blocks are in position

to receive the nails that fasten the ground strips G, which latter receive the nails that secure the base board B, and in addition, the upper one of the ground strips serves as a stop and gauge for the plaster that forms the facing of the wall or partition. Obviously where the nailing strips are used as points of attachment for the picture moulding, said blocks are applied to the stud members adjacent to the ceiling structure.

The nailing blocks may be tied or anchored to the stud members by various means, but I prefer to utilize small clips or open loops 13 of metal which are of such dimensions as to encircle the nailing block and stud member to which it is applied and to facilitate the application of these clips to the nailing blocks, the opening 14 in said clip or loop is made wide enough so that the clip may be applied to the flanged stud member by passing said clip edge-wise over said stud member as illustrated in Fig. 7. The clip is applied to the flanged stud member above the nailing block and when lowered so as to embrace said nailing block, the latter is firmly clamped to the flanged member as illustrated in Figs. 3 and 4.

In some instances it may be found advantageous to tie the nailing blocks to the flanged stud members by means of short sections of ductile wire and where this arrangement is carried out, the face of the nailing block opposite the face that is provided with the rib 12 has formed in it one or more horizontally disposed wire-receiving slots or kerfs 15 and which latter receive the central portions of the tie wires.

In Fig. 6 I have shown a modified construction wherein the tie wire T is embedded in the body of the nailing block and which arrangement may be accomplished by the application of sufficient pressure to the wire to force the same into the body of the block.

In Fig. 8 I have illustrated a substantially U-shaped or stirrup-shaped clip 16, the end portions of which are bent slightly toward each other so that when the clip is applied to the block and flanged wall member it will retain its position as a result of the resiliency of the metal in said end portions and which resiliency causes the end portions of the clip to bear with considerable friction against the block and flanged member.

In this form of clip the end portions may be provided with apertures 17 for the reception of nails that are driven into the nailing block to secure the clip thereto.

If desired, the upper portion of one face of the nailing block may be cut away on a gradual taper as designated by 18 and thus when the clip is applied to this form of block, it will gradually draw the block into close engagement with the flanged wall member.

Thus it will be seen that I have provided a nailing block that is especially designed for use in connection with the flanged metal members that function as studs in a composite wall or partition, which nailing blocks are relatively simple in construction, capable of being easily and cheaply produced, easily and quickly applied to the stud members and said block being very effective in performing the functions for which it is intended.

It will be understood that minor changes in the size, form and construction of the various parts of my improved nailing block may be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. The combination with a flanged metal wall member, of a nailing block having one of its faces formed so as to fit between the flanges of said wall forming member vertically disposed shoulders formed on the side faces of said block for engagement with the edges of the flanges of said wall forming member and means for securing said nailing block to said wall member which means comprises an open loop of resilient metal.

2. The combination with a flanged metal wall member, of a nailing block having one of its faces formed so as to fit between the flanges of said wall forming member laterally disposed longitudinally extending shoulders formed on the side faces of said block for engagement with the edges of the flanges of said wall forming member and means comprising an open resilient loop adapted to encircle said block and the flanged member to which it is applied for securing said block to said flanged member.

3. The combination with a flanged metal wall forming member, of a nailing block provided on one face with a rib that is adapted to occupy the space between the flanges of said wall forming member lateral shoulders formed on the side faces of said block between said rib and the body of the block and an open loop of resilient metal adapted to encircle said wall-forming member and said nailing block, which shoulders are adapted to bear on the edges of the flanges of said wall forming member.

4. The combination with a flanged metal wall forming member, of a nailing block provided on one face with a rib that is adapted to occupy the space between the flanges of said wall forming member lateral shoulders formed on the side faces of said block between said rib and the body of the block, which shoulders are adapted to bear on the edges of the flanges of said wall forming member and means comprising an open loop of resilient metal for securing said nailing block to said flanged member.

5. The combination with a flanged metal

wall forming member, of a nailing block having a portion adapted to be positioned between the flanges of said wall forming member the side faces of that portion of the block that project from the wall forming member lying flush with the outer faces of the flanges of said wall forming member and an open loop of resilient metal adapted to be applied to the wall forming member and said nailing block for securing the latter to said wall forming member.

In testimony whereof I affix my signature.

PALMER GUSTAVESON.