This invention relates to steel studding systems, and more particularly to novel means for supporting the studs and also providing means for nailing wood and other grounds or trim to the studs.

A primary object of the invention is to provide simple, practical and reliable means for adjusting relatively narrow gauge studs used in forming solid partitions with the ceiling and floor shoes of greater width than the stud, which shoes engage with standard track sections, and, at the same time, provide a convenient nailing ground for the head and base trim. The said shoes carry forward the features of my co-pending application, Serial No. 221,430, filed July 26, 1938, wherein the connection between the stud and the track is made by twisting or rotating the stud into anchoring engagement with the track. More specifically, the invention contemplates quick and easy means for facilitating the attachment of %" or other narrow gauge metal studs to the floor and ceiling, while at the same time providing a flush nailing base for the attachment of wood or metal base boards or trim, and to that end employs a relatively short section of double channel shoe having means for connecting with the regular stud runner or track and also providing nailing means at the sides while the medial portion thereof is provided with a holder for supporting the narrow gauge metal stud.

A further object of the invention is to utilize a portion of a double channel member of the same type as the shoes employed at the ends of the stud along the medial portion thereof so that a nailing ground may be provided for chair rails or other trim elements at any point between the opposite ends of the stud which connect with the track.

With the above and other objects in view which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter described, illustrated and claimed.

A preferred and practical embodiment of the invention is shown in the accompanying drawing in which:

Figure 1 is a perspective view illustrating the invention.

Figure 2 is a side elevation of a stud constructed in accordance with the present invention and illustrating a slightly modified form of stud holder, while at the same time illustrating the use of a nailing ground between the upper and lower nailing grounds.

Similar reference characters designate corresponding parts throughout the several figures of the drawing.

Referring to Figure 1, it will be observed that it is proposed to provide a wall construction wherein the stud system comprises the nailing ground units A and A' and the vertical stud B having its opposite ends fitted in suitable holding means C carried by the members A and A' which constitute both nailing grounds and shoes for connecting the stud with the ceiling and floor.

Considering the nailing ground units A and A' in their capacity as shoes for connecting the stud to the floor and ceiling, it may be pointed out that the same are provided with means for interlocking with the lower track D and the upper track D'. In that connection it may be pointed out that each of the units A and A' essentially includes its organization a pair of arm or chord members 1—1. These members consist of the angle members 2 whose inner legs are connected by the transverse web element 3 at one end while at the opposite end the arms or chord members are connected by the angular track interlocking member 4. This member is notched as indicated at 4' to permit of the unit being twisted into engagement with the opposite attachment of its related track section, as fully described and shown in my co-pending application aforesaid.

With further reference to the units A and A' which are of duplicate construction, it may be pointed out that the angle members 2—2 which form the chords thereof are spaced apart by the web members 3 and the interlocking elements 4 to thereby provide a nailing slot 5 between each of the angle members constituting an arm or chord. This nailing slot is adapted to receive a nail or other fastening element for the purpose of securing the base board, picture molding, or other trim directly to the metal stud system.

The stud holder C is secured to the combined nailing ground unit and shoe. This holder may be in the form of a casing as shown in Figure 1 having the main tubular portion 6 for receiving the stud B and the flanges 7 which may be welded or otherwise attached to the transverse web element 3 and the downward portion of the interlocking angle 4. It will, of course, be understood that the stud holding means C need not necessarily be in the form of a continuous tubular member, but on the other hand, as shown in Figure 2 the holding means may be in the form of transverse straps C'. In either case the same functions are performed. Referring to Figure 2, it will be observed that the
same features of construction are shown as illustrated in Figure 1, the only difference being that the unit A.2. may be positioned anywhere along the stud B between the units A and A.2. This unit A.2. is essentially of the same construction as the units A and A' except for the fact that it has no means for engaging with a ceiling track or a floor track. That is to say, the unit A.2. consists of the opposite chord members 2a formed of the angle members 2--2a arranged back to back and held together by the transverse web members 3 in the same fashion that the web members 3 hold the chord members 1--1 together, while the stud holding means C is in the form of straps having a medial loop portion for receiving the stud and the ends thereof are spot welded or otherwise secured to one side of the members 3. It will thus be understood that the unit A.2. may be positioned anywhere along the stud B depending on whether it is used for supporting a chair rail or any other trim element. In other words the unit A.2. may be positioned nearer the unit A or nearer the unit A' depending upon the type of trim intended to be nailed thereto. It may also be observed that the width of the unit A.2. is the same, or substantially the same as the width of the unit A and A', and it will, of course, be further understood that the width of the units A, A.1. and A.2. may be varied according to the width of the wall or partition being erected.

From the foregoing it will now be observed that the present invention provides in effect a metal stud which may be supported at its opposite ends by suitable holders which provide means for attaching the stud to the floor and ceiling while the medial portion of the stud may receive an additional nailing ground unit of substantially the same construction as the combined nailing ground units and holders A and A'. In practice a stud system including the present improvements may be easily and quickly erected by first nailing the units A and A' to the floor or ceiling with the aid of the track means shown, or, even without such track means by simply nailing the units A and A' respectively to the floor and ceiling. The stud B will, of course, be shorter than the maximum distance between the floor and ceiling so that it is possible to insert one end of the stud in the holding means after one of the units has been properly placed and then the other unit may have its holding means placed over the stud and subsequently secured to its proper anchorage. On the other hand both of the units A and A' may be first assembled with reference to the stud and then the units may be twisted into engagement with the floor and ceiling tracks. In the event that the additional nailing ground unit A.2. is desired, it is, of course, slipped over the stud before the latter is assembled relative to the units A and A'. It may then be secured to the stud bywedging a nail or equivalent element between one side of the channel constituting the stud B and one or both of the holding straps C', or on the other hand, the unit A.2. may be wired on the channel stud B until the metal or other lath has been wired or otherwise secured to opposite sides of the stud, assuming, of course, that metal lath is used. In other words it will be understood that any appropriate means known to those skilled in the art may be used for securing the unit A.2. to the stud.

As will be observed from Figure 2 it is possible to make the plaster or other wall finish which covers the lath L at opposite sides of the stud flush with the outer faces of the chord members 1--1 so that the nailing slot 5 is exposed. The dotted lines W in Figure 2 indicate the outer face of the wall covering. After the wall finish has been applied, it will be apparent that suitable grounds or trim may be readily fastened to the units A, A' or A.2. by simply driving a fastening through the wood so that it enters the nailing slot 5.

The construction shown provides simple and practical units A, A' and A.2. which may be readily fabricated in suitable lengths and then cut into short sections as desired, thereby rendering the invention practical from a manufacturing standpoint while at the same time conserving weight without sacrificing strength or rigidity in the ultimate wall construction.

I claim:

1. A wall forming means including in combination, floor and ceiling tracks, a narrow gauge stud for carrying the lath at opposite sides thereof, and combined track connecting shoes and nailing ground members of greater width than the stud adjustably connected therewith and adapted to engage with said floor and ceiling tracks.

2. A wall forming means including a narrow gauge stud for carrying the lath at opposite sides thereof to form a solid partition, and a combined anchoring shoe and nailing ground member of greater width than the stud and having a member located medially thereof for slidably and adjustably receiving the stud, the said stud anchoring and nailing ground member adapted to have its outer edge portion substantially flush with the face of the finished wall.

3. A wall forming means including, in combination, floor and ceiling track members, a narrow gauge stud for carrying the lath at opposite sides thereof to form a solid partition, and metal nailing grounds of greater width than the stud connected with opposite ends of said stud and adapt ed to interlock with said floor and ceiling tracks.

4. Wall forming means, including, in combination, a stud for carrying the lath at opposite sides thereof to form a solid partition when plaster is applied to the lath, and metal nailing ground units of greater width than the stud adjustably connected with opposite ends thereof, said nailing ground units having means for anchoring the stud to the floor and ceiling.

5. Wall forming means, including, in combination, a stud for carrying the lath at opposite sides thereof to form a solid partition when plaster is applied to the lath, and metal nailing ground units of greater width than the stud and having means between the opposite nail receiving faces thereof for adjustably engaging the stud.

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