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METAL-BASE WALL CONSTRUCTION

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Fig. 1

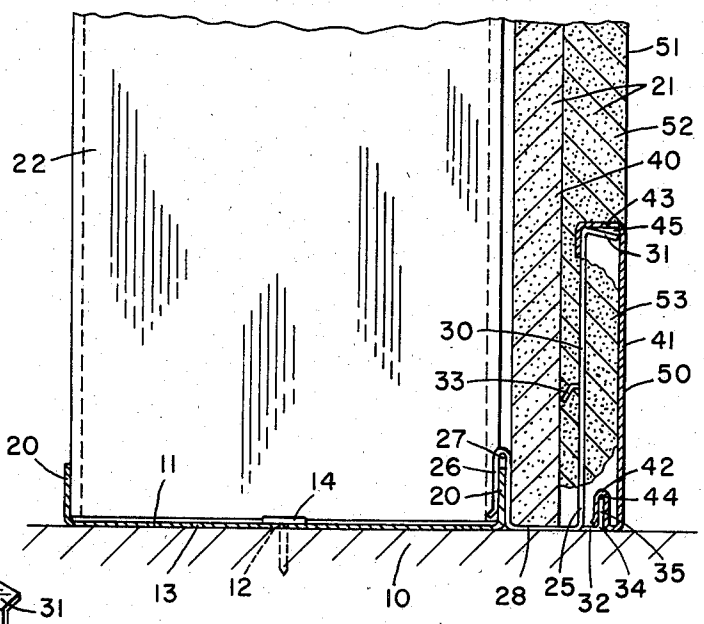
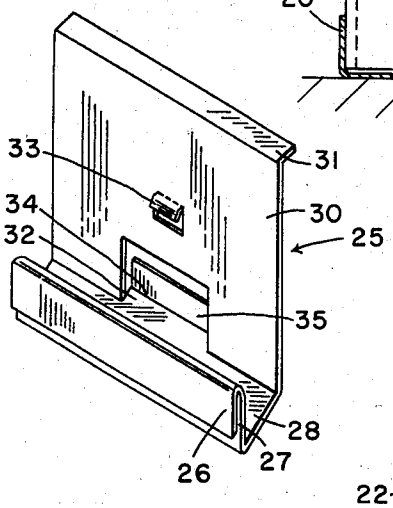


Fig. 2



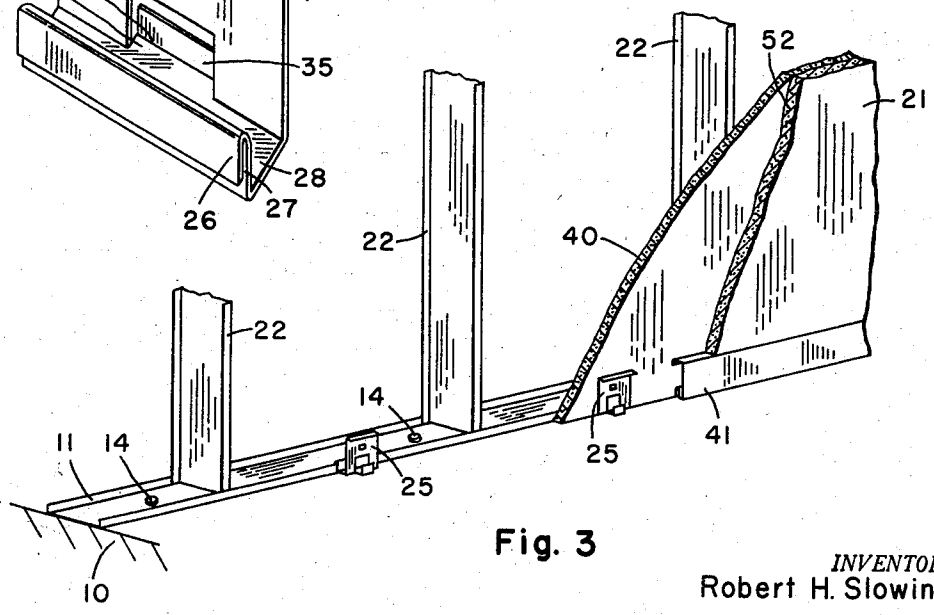


Fig. 3

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METAL-BASE WALL CONSTRUCTION

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1 Claim. (Cl. 72—46)

This invention relates to wall construction and is especially directed to the base structure thereof.

A metal frame wall or partition having an exposed metal baseboard extending along the floorline and ordinarily a surface of plaster flush with and extending upward from the baseboard is a well recognized, economical wall construction. Various known structures have been provided as means for supporting, at the base, the studs, lath, plaster and baseboard. A most economical and rapidly constructed means, and one which is least conducive to damage during subsequent operations, is highly essential in such structures.

It is, therefore, an object of this invention to provide a partition base structure wherein the several elements may be applied with facility as required and, thus, need not be applied simultaneously at a time prior to the need for the presence of any element, avoiding interference of prematurely applied elements with the possibility of damage to these obstructing elements. Briefly, this is accomplished by a novel arrangement of the means for attaching successive portions of the base structure to one another.

A further object of the invention is to provide a partition base structure which permits a substantial improvement in the speed of erection of the partition. Briefly, this is accomplished by providing simplified means for attaching successive elements so that once a simple floor runner is fixed along the desired extent of a partition, subsequent elements may be readily set in place and will be self-supporting due to their structure without requiring further steps of attachment.

These and other objects and advantages will appear more fully when considered in connection with the following detailed description of a preferred embodiment of the invention and the accompanying drawings in which:

Fig. 1 is a sectional view of the base portion of a wall constructed in accordance with and embodying the invention.

Fig. 2 is a perspective view of the novel base clip included in Fig. 1.

Fig. 3 is a perspective view of the base portion of the wall of Fig. 1.

Referring now to Fig. 1, the numeral **10** designates a floor, which may be of wood, concrete or any other of the usual construction materials. In accordance with the invention, an elongate floor runner **11**, of U-shaped cross section, is disposed on the surface of the floor **10** extending whereat a partition or wall is desired to be constructed. A plurality of holes **12** are suitably spaced along the center-line of the channel base **13** for the reception of nails **14** or other suitable fasteners which are driven therethrough into the floor **10** to affix the runner **11** along its desired disposition.

Runner **11** has two short vertical flanges **20** extending upward from each lateral edge thereof, providing means for the rapid application of subsequently applied elements of the partition. Fig. 1 shows the subsequently applied

elements applied on one flange **20** only of runner **11** to form a wall **21**, it being understood that a partition, being two oppositely facing walls, may be constructed by similar application on the opposite flange **20** of similar elements.

After positioning and affixing runner **11** or a plurality of runners **11** disposed end to end in the desired straight line or angular relation, one to the other, the vertical studs **22** are then installed, extending upward from runners **11** to provide horizontal support of wall **21** throughout the vertical extent thereof. Studs **22** may be of any of the usual forms, the preferred form being, as shown, a vertically disposed U-channel, and a plurality of such studs are incorporated and disposed at positions spaced apart horizontally in the order 16 to 24 inches throughout the extent of wall **21**.

In the fabrication of wall **21**, base clips **25** are slid or pushed into position on flanges **20**, the clips **25** being preferably spaced apart a distance equal to the stud spacing and disposed on flanges **20** substantially midway between stud dispositions. Clips **25** are formed from a blank of sheet metal by proper cutting and bending as described herebelow.

At the inner base portion of clip **25**, a reversely bent lip **26** forms a groove **27**, suitable for a tight-fitting reception of flange **20**, the groove **27** being of sufficient depth to allow the bottom face **28** of clip **25** to be supported by the floor **10** when lip **26** is disposed about flange **20**.

Extending upward from the opposite edge of the clip bottom-face **28** is a base strip retaining portion **30** having a top lip **31** bent over to form an angle in the order of 80°. Two cut-out tabs **32** and **33** in the retaining portion **30**, cut therefrom on three sides and bent outward at the fourth to extend without the plane of the retaining portion. Lower tab **32** extends outward in the plane of the bottom-face from the junction line of the bottom-face **28** and the retaining portion **30** for a short distance to a 90° bend **34**, from which bend the tab **32** extends upward to form a bottom lip **35**. The central tab **33**, bent along the top edge thereof, extends acutely inward and downward.

Following the slip-on application of clips **25**, lath **40**, preferably in the form of narrow gypsum boards, is applied to the studs **22**, the bottom edges of lath **40** being disposed in the clips **25** between lips **26** and retaining portions **30**. Central tabs **33** are bent inward sufficiently to urge lath **40** inward against lips **26**. Attachment of the lath to studs may be by any of the usual methods and forms no part of this invention.

After applying the lath, elongate strips of metal base **41** are readily slid or pushed onto the previously attached base clips **25**, due to the complementary form thereof. The metal base **41** is a strip of any suitable length having a constant sectional form consisting of a double reverse bend **42** along the bottom edge thereof and an inverted J-bend **43** along the top edge. The double bend **42** forms a downward opening groove **44** for a tight-fit reception of bottom lip **35** and is formed to allow the metal base to abut the floor **10** when so mounted on clips **25**. The J-bend **43** along the top edge of base **41** forms a wide groove **45**, with a width slightly less than the width of top lip **31**, to provide a generally locking engagement therewith to prevent accidental misaligning of base **41** during subsequent operations.

It will be apparent that the general form of the base clip **25** and the base **41** is such that the distance between the bent lip **26** and the outer face **50** of base **41** is equal to the total thickness of wall **21** to provide the preferred construction wherein the base **41** is flush with the wall finished surface **51**. Thus fabrication of the wall **21** is

completed by the application of suitable coats of plaster 52, in the manner, so that the finished surface 51, is flush with base 41. A plaster grout 53 will also, ordinarily, be formed in or filled into the space between the base 41 and lath 40 to provide stability to the base 41.

Thus, it will be apparent that each of the successively applied elements of the wall base structure need not be applied, in the course of the wall construction, prior to the immediate need of the element for the purpose or functions for which it is included. The novel base structure has been broken down to the most desirable number of elements capable of being applied to the system at the most opportune time in the construction schedule and due to the combinations of readily appliable complementary portions of the successive elements, a rapidly fabricated, clearly improved, more economical and desirable structure is provided.

I claim:

A metal base, plastered sheet lath, hollow wall comprising an elongate floor runner having a relatively wide, flat, horizontally disposed, base portion and relatively short flanges extending upwardly from each edge thereof, said floor runner being affixed to a floor along the extent of said wall, vertical studs having an end portion affixed between said flanges at spaced positions along the extent of said floor runner and extending vertically therefrom, base clips slidably fixed at spaced positions on said flanges and disposed generally outward of said flanges for reception of sheet lath and metal base strips, sheet lath having a bottom edge disposed within said clips, and elongate metal base strips mounted on said clips, said clips each including a flange-receiving, downwardly

opening, U-shaped lip portion slidably affixed upon said flange, an upright base strip retaining portion, and a flat, floor-engaging, bottom face therebetween providing a spacing for sheet lath receiving groove, said upright base strip retaining portion having an upper lip slidably mounted within a downwardly opening channel portion along the top edge of said base strip and a lower cut-out tab disposed outwardly of the general body portion of said upright base strip retaining portion, said tab having an upwardly extending base strip engaging bottom lip slidably mounted within a downwardly opening channel portion along the bottom edge of said base strip, means on said clip maintaining said base strip in spaced relation outwardly from said sheet lath, and a plaster coat adhering to the outer face of said sheet lath having a finished surface flush with the outer face of said base strip and abutting the top edge of said base strip, said plaster extending as a grout into the space between said base strip and said sheet lath bottom edge, said bottom edge and said top edge of said base strip each being removable from said clip only by relative upward movement of said base strip, and said abutting plaster coat preventing any upward movement of said base strip.

References Cited in the file of this patent

UNITED STATES PATENTS

2,283,167	Burson	May 19, 1942
2,313,839	Olsen	Mar. 16, 1943
2,317,634	Olsen	Apr. 27, 1943
2,540,305	Tomlinson	Feb. 6, 1951
2,676,483	Nelsson	Apr. 27, 1954