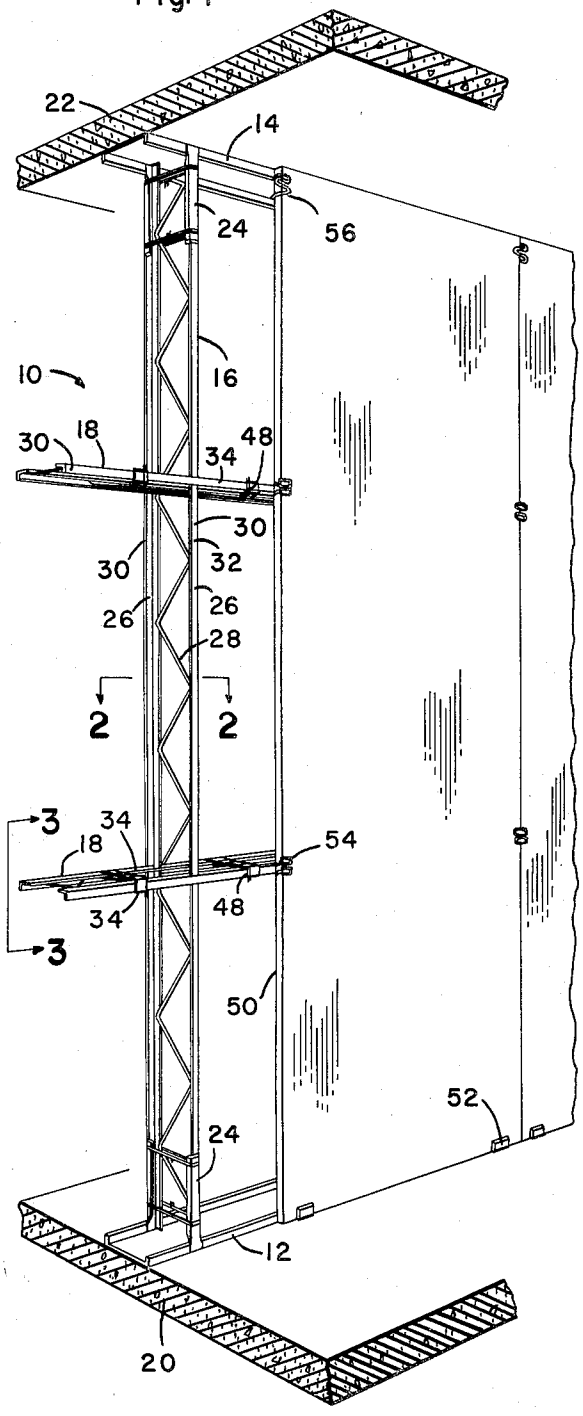
April 4, 1961 J. W. SCHNELLER 2,978,076

LONG LENGTH LATH PARTITION SYSTEM

Filed Jan. 29, 1958

Fig. 1



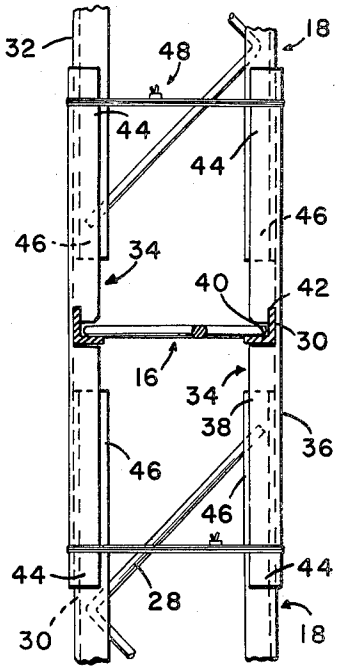


Fig. 2

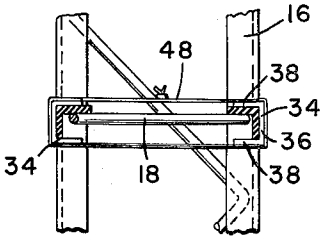


Fig. 3

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LONG LENGTH LATH PARTITION SYSTEM

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Filed Jan. 29, 1958, Ser. No. 711,966

3 Claims. (Cl. 189—34)

This invention relates to an improved partition structure and is directed particularly to a steel stud framework structure and the combination thereof with long length vertically disposed lath sheets.

A most economical, but structurally sufficient, framework and lath system is obviously desired and continually sought by the building trade. Such economy is sought both in respect to materials and in respect to facility of erection.

It is an object of the present invention to provide a novel framework and lath system, suitable for partition construction, with an amount of structural elements relatively less than normal, which is susceptible to rapid and easy erection.

It is a further object to provide a partition framework structure having an improved arrangement of framing members for obtaining an optimum distribution of stress resistance, and to provide such novel arrangement of framing members with all such members of equal dimension, particularly dimensions normal to the partition, avoiding overlapping or interference between elements.

These and other objects of the invention will be more readily apparent when considered in relation to the preferred embodiment of the invention as set forth in the specification and shown in the drawings in which:

Fig. 1 is a perspective view of an uncompleted partition structure constructed in accordance with the inventions.

Fig. 2 is a sectional top view taken on line 2—2 of Fig. 1.

Fig. 3 is a sectional end view taken on line 3—3 of Fig. 1.

Referring to the drawings, a partition framework 10 is shown including a floor track 12, ceiling track 14, widely spaced apart vertical metal studs 16 and horizontal metal studs 18 which extend between vertical studs 16.

Floor track 12 and ceiling track 14 are attached respectively to a building floor 20 and a building ceiling 22 and vertical studs 16 extend therebetween with the ends thereof affixed respectively to the floor track 12 and ceiling track 14 by known means, such as stud shoes 24, wire tied in clamping relation thereto.

Vertical studs 16 are spaced apart a distance in the order of from one-third vertical stud height to one vertical stud height, the preferred spacing in ordinary room height partitions being equal to the vertical stud height, whereby a single form and length of stud is employed for use as vertical studs 16 and horizontal studs 18.

The studs 16 and 18 of the invention are of the lightweight metal type including two opposed chords 26 and a sinuous wire web 28 all united as by welding. Chords 26 have a greater width than the web 28 thickness, providing a flange 30 at each outer face 32 of the studs 16 and 18.

Horizontal studs 18 are affixed at the ends thereof to vertical studs 16 by a pair of short attachment channels 34. Each channel 34 is of three-sided rectangular cross section including an outer wall 36 and two inwardly directed flanges 38 spaced apart substantially the width of stud chord flange 30. Each flange 38 is slotted to the full depth thereof to form an inwardly-based L-shaped slot 40 at substantially the longitudinal center, the slots 40 of the two opposed flanges 38 being in line one with the other.

The slots 40 are disposed about the edge of vertical stud 16 and the base portion 42 of the L-shaped slot 40 has a width which tightly grasps the flange 30.

The two opposed channels 34 provide two pair of oppositely-directed, inwardly-opening channel ends 44. The horizontal studs 18 are supported by the stud ends 46 being within and between a pair of channel ends 44. A wire 48 is tightly tied around the channel ends 44 to firmly hold the stud end 46 therebetween.

To originally mount one of the short attachment channels 34 on the edges of a vertical stud 16, the channel outer wall 36 is easily bent adjacent the slots 40, opening the slots 40 during positioning. After positioning, outer wall 36 is straightened, closing the slots to tightly grasp the stud edge. The tied wire 48 holds the channel 34 straight, tightly grasping vertical stud 16.

The partition framework 10 is particularly adaptable for application thereto of vertically disposed, full partition height lath sheets 50. Lath sheets 50 are attached to framework 10 by known lathing clips, including, as shown, base starter clips 52 attached to floor track 12, lath edge clips 54, attached to horizontal studs 18, and finishing clips 56 attached to ceiling track 14.

Having thus completed a detailed disclosure of a preferred embodiment of the invention so that those skilled in the art may practice the same, I contemplate that variations may be made without departing from the scope of the invention as defined in the appended claims.

I claim:

1. The method of mounting horizontal studs between spaced vertical studs in a partition framework comprising the steps of bending the outer wall of a short channel having an outer wall and two inwardly directed flanges with slots in said flanges substantially complementary to the edge profile of said vertical studs and extending the full depth of said flanges whereby said bending occurs at said slots and opens and enlarges said slots, disposing said opened slot about the edge portion of said vertical stud at a height desired for said horizontal studs, straightening the outer wall of said channel whereby said slots contract and tightly grasp said vertical stud edge portion, attaching a second channel of like construction with the same abovesaid steps to the opposite edge portion of said vertical stud, placing the ends of two horizontal studs in the two oppositely directed ends of said opposed channels and attaching said channel ends tightly against said horizontal stud ends whereby said slot is held contracted and graspingly engaging said vertical stud.

2. The method of mounting horizontal studs between spaced vertical studs in a partition framework wherein said vertical studs include substantially L-shaped elongate edge portions, comprising the steps of bending the outer wall of a short channel having an outer wall and two inwardly directed flanges with L-shaped slots in said flanges substantially complementary to said L-shaped edge portions, said slots extending the full depth of said flanges whereby said bending occurs at said slots and opens and enlarges said slots, disposing said opened slot about said L-shaped edge portion at a height desired for said horizontal studs, straightening the bent outer wall of said channel whereby said slots contract and tightly grasp said L-shaped edge portion, attaching a second channel of like construction with the same abovesaid steps to the op-

posite L-shaped edge porton of said vertical stud, placing the ends of two horizontal studs in the two oppositely directed ends of said opposed channels and attaching said channel ends tightly against said horizontal stud ends whereby said slot is held contracted and graspingly engaging said vertical stud.

3. In a partition framework, lightweight metal vertical studs disposed at widely spaced positions and horizontal studs extending substantially from one vertical stud to adjacent vertical studs, two said horizontal studs disposed on opposite sides of one said vertical stud at a common height, the respective adjacent ends of said two horizontal studs being disposed in a pair of short channels, said channels having an outer wall and two inwardly directed flanges, each said channel engaging one edge of each of said two horizontal studs and being affixed said vertical stud disposed therebetween, said vertical stud having elongate flanges extending along each outer edge thereof forming a generally L-shaped edge portion, said inwardly directed flanges of said channels having L-shaped slots substantially complementary to said vertical stud edge portion, said slots extending the full depth of said channel flanges with the base of said L-shaped

slots extending immediately adjacent the outer wall of said channels, said vertical stud edge portions being disposed and tightly grasped in said channel slots, the end portions of a respective pair of said channels being urged together and grasping the end portions of said horizontal studs therebetween by attachment means affixed thereabout, said attachment means further holding said channel outer walls straight and restraining said slots from opening and releasing the grasped relation on said vertical stud edge portions.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 2,978,076 April 4, 1961

Joseph W. Schneller

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 3, line 16, after "affixed" insert -- to --.

Signed and sealed this 3rd day of October 1961.

SEAL)
ttest:

RNEST W. SWIDER
ttesting Officer

DAVID L. LADD
Commissioner of Patents

USCOMM-DC