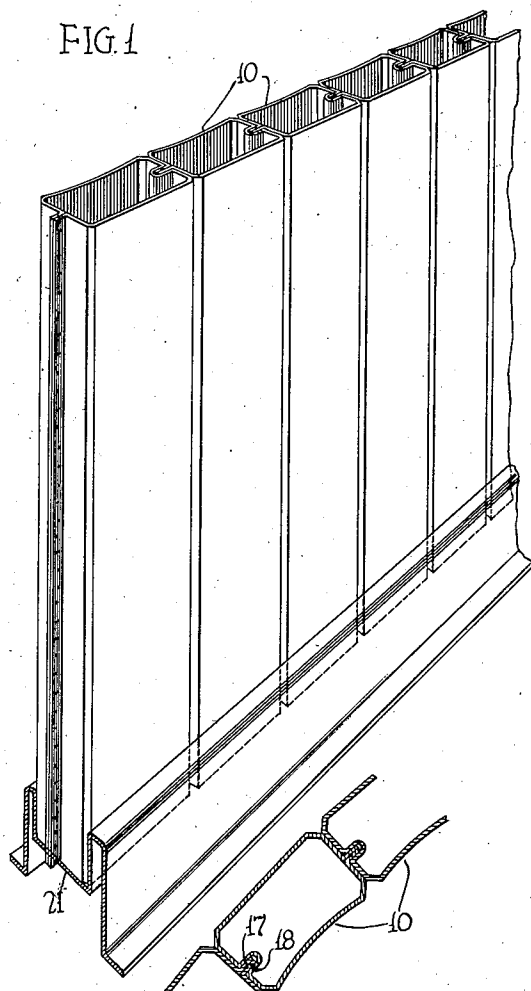
Jan. 26, 1937. E. G. BUDD 2,069,176

METALLIC WALL OR PARTITION

Filed April 2, 1934

FIG. 1



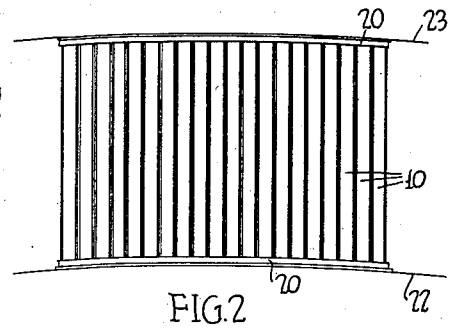


FIG. 2

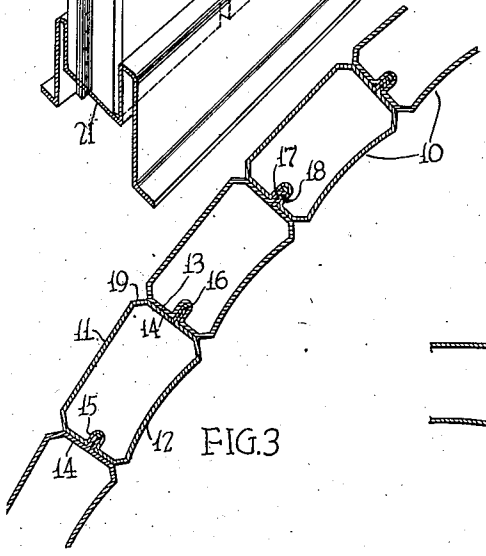


FIG. 3

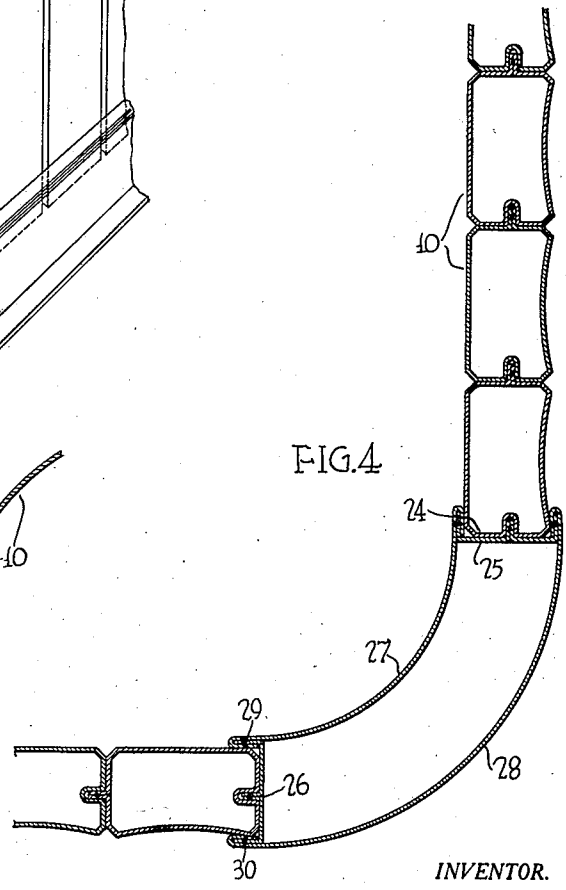


FIG. 4

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METALLIC WALL OR PARTITION

Edward G. Budd, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania

Application April 2, 1934, Serial No. 718,578

2 Claims. (Cl. 189—34)

My invention relates to a metallic partitioning.

It is among the main objects of my invention to provide a double walled metallic partition which may be economically fabricated, is light in weight, durable in construction, is flexible in use, and lends itself readily to ornamentation and sound-proofing.

I attain these objects in large part through the construction of the partition or wall out of similar unit sections, each consisting preferably of a single sheet of metal, such as light gauge stainless steel, pressed or rolled by successive operations into a box cross-section form having side and end walls, and in providing each of the opposite end walls of a section with means adapted to interlock transversely with adjacent sections. According to one form of the invention these interlocking means may comprise a depression or channel opening outwardly and formed into one end wall and a projection on the opposite end wall adapted to fit into a corresponding channel on an adjacent unit section. The projection may be formed by outwardly projecting overlapping edge flanges on the unit section, which may, for additional stiffness and strength in the section, be secured together by spot welding.

The units in the partition have their ends received by channels secured to the floor and ceiling in which the partition is used, and the units are readily assembled to form the partition either with both channels receiving their ends secured in place or with one in place, and the other one movable laterally into place and secured after the assembly.

The hollow box section units with their end interlock form a very rigid construction and one which is fairly soundproof, although this latter condition may be readily improved by this construction by filling the hollow sections with soundproofing material. The partition is flexible in that it may be used readily under conditions, such as forming the walls of compartments between ships' decks, where the decks are provided with the usual camber. Since the sections are relatively narrow, they can be readily adjusted to such cambered decks. Indeed, the partition can be used in almost any relation in which a light, strong and soundproof wall is desirable.

The corner sections of the partition may be varied to suit various conditions. Where rounded corners are desired, a box section unit having rounded side walls and having channel section end walls to receive an adjacent unit of the partition may be provided. If a wall having a slight curvature is desired, the narrow sections will readily accommodate themselves to take care of it. The unit sections of my partition lend themselves readily to any ornamentation desired. If a fluted effect is desired, one of the side walls of the units may be curved. This also adds to the strength of the unit. To strengthen the corners of the box-section the end and side walls may and are preferably connected by narrow angular portions. These also add to the ornamental effect in providing in the assembled structure shallow vertical grooves breaking up the continuity of the surface.

Other and further objects and advantages and the manner in which they are attained will become apparent from the following detailed description when read in the light of the accompanying drawing, in which,

Fig. 1 is a perspective view of a fragmentary portion of the improved partition showing the manner in which the sections interlock and are secured at their ends.

Fig. 2 is a side elevation on a reduced scale of the novel partitioning as shown applied between the transversely cambered decks of a ship.

Fig. 3 is a fragmentary horizontal section through the partition of my invention arranged on a slight curve.

Fig. 4 is a similar view showing a rounded corner construction.

The partitioning of my invention is constructed of units 10 of hollow box cross section form and, except at corners or at door or window openings, these units may all be made of the same form out of a single metal sheet. To secure maximum lightness combined with desired strength, I prefer to use stainless steel of high tensile strength, such as cold-worked 18—8, and the contour of the unit sections may be obtained by successive die stamping or rolling operations. Since the units are of like cross-section, they can be formed from a continuous strip of sheet metal of any desired length, and after the forming they may be cut to any desired lengths.

Each section or unit 10 comprises side walls 11 and 12 and end walls 13 and 14. The side walls being of any suitable form either flat or curved or otherwise configured to give improved ornamental or strength effects. In the form shown, one of the side walls, as 11, is relatively flat, while the other 12, is concavely curved to give to that side of the wall a fluted effect.

The end walls 13 and 14 of adjacent units abut each other and form transverse bracing between the side walls.

The units are transversely interlocked by the

means now to be described. One end wall, as 13, is formed medially with a depression or outwardly facing channel 15 which is adapted to coact with a projection on an adjacent unit fitting into the channel 15. The other end wall 14 of a unit has an outward projection or rib 16 formed, in the instant case, by narrow flanges 17 and 18 provided at the margins of a sheet from which the unit is formed. To increase the strength and rigidity of the units, these overlapping edge flanges may be spot welded together.

The side and end walls are preferably joined by narrow angularly extending portions 19 which add additional stiffness and provide the ornamental spaced grooves in the completed partition. To hold the partitioning in place, the upper and lower ends of the unit sections of which it is built up are received in members 20 also preferably of light gauge sheet metal having a channel 21 formed therein to directly receive the ends of the unit sections and provided with edge flanges 22 through which they are secured to a floor or ceiling or the deck of a ship, as the case may be. If the wall or partition is to have a curved contour as shown in Fig. 3, the channel members 20 will, of course, be correspondingly curved.

Where the partitioning is applied between transversely cambered decks of a ship, as 22 and 23, Fig. 2, the channel members 20 will, of course, conform to said camber, but all of the unit sections 10 may be of the same length.

The end one of a series of similar unit sections 10 may fit into, as shown in Fig. 4, a channel 24 formed as part of a corner section, and where rounded corners are desired, a special corner section such as is shown in Fig. 4 may be utilized. This may comprise a box cross-section structure comprised of outwardly open channel end members 25 and 26 and curved inner and outer side wall members 27 and 28 joined in their margins to the side walls of the channel end members, in the present instance by crimping their edges over the side walls of the channels as at 29 and 30, and spot welding through said crimped edges.

While I have hereinbefore described a preferred form of construction for carrying out the objects of the invention, I do not wish to be limited to the precise details thereof, for it will be understood by those skilled in the art that changes and modifications may be made, without departing from the spirit and scope of the invention as expressed in the claims appended thereto.

What I claim is:

1. A wall or partition consisting of a plurality of interlocking units, each unit being formed from a single piece of light gauge sheet metal bent into box section form having side and end walls, the one end wall of the unit having in its medial portion a longitudinal depression defining an outwardly-opening channel and the opposed end wall being formed by the meeting edge portions of the sheet, the margins of said edge portions being flanged outwardly to a depth substantially equal to that of the channel and secured together.

2. A wall or partition unit formed from a single piece of light gauge sheet metal bent into substantially box section form having side and end walls, the one end wall of the unit having the metal along its medial portion depressed inwardly defining an outwardly-opening channel and the opposed end wall being comprised of the meeting edge portions of the sheet, which have the abutting margins of the said edge portions flanged outwardly and secured together with the width of the flanges approximating the depth of the channel.

EDWARD G. BUDD.