

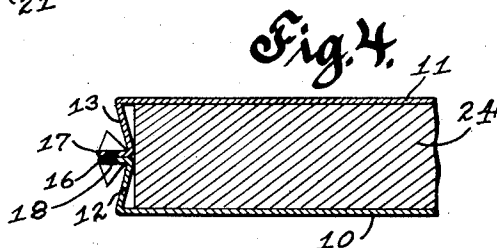
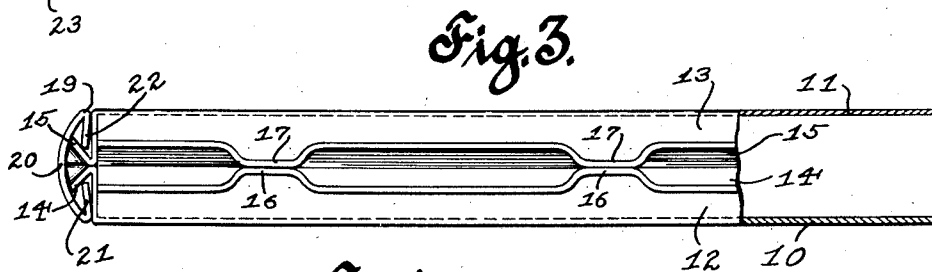
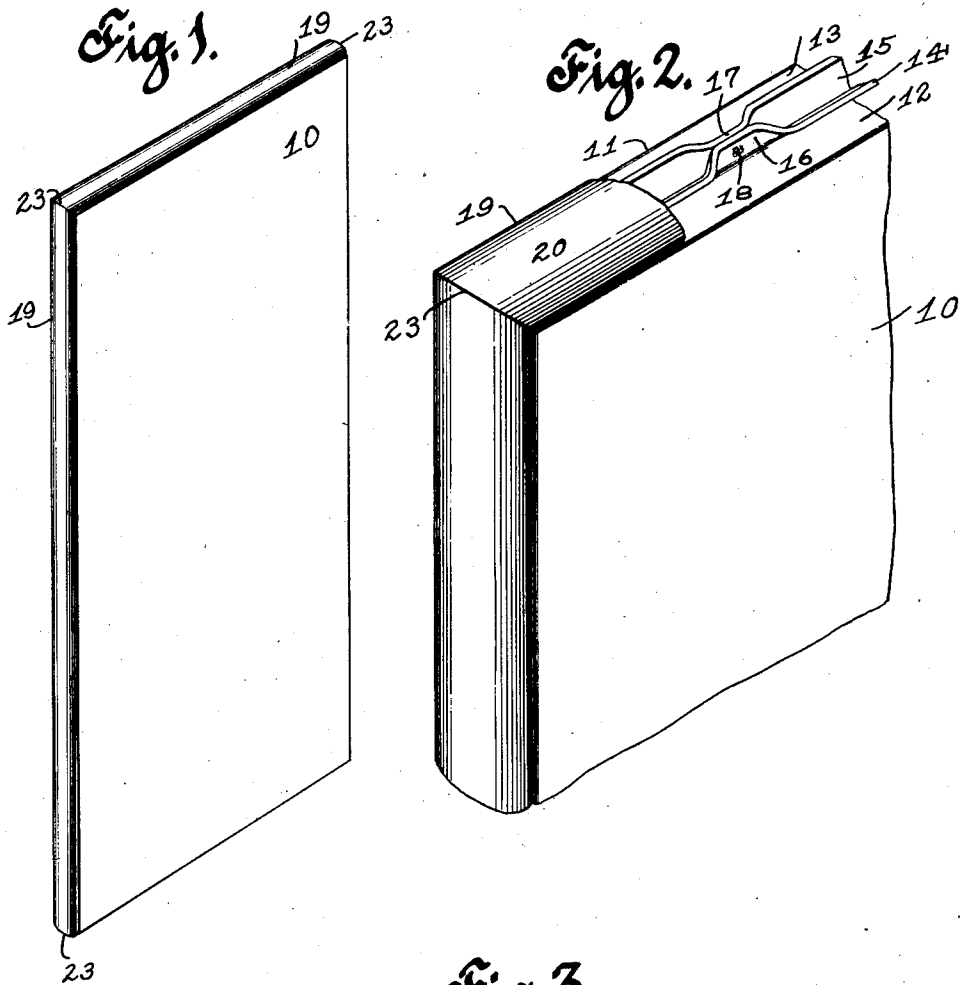
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METAL PANEL CONSTRUCTION

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METAL-PANEL CONSTRUCTION

Application filed September 11, 1930. Serial No. 481,166.

This invention relates to metal panel construction, and more particularly to an improved form of metal panel for use in doors, partitions and the like.

One object of the present invention is to provide a metal panel of the above nature constructed from two opposed flat pan sections connected together at their edges.

A further object is to provide a metal panel of the above nature in which the side pan sections are provided with flanges which are bent inwardly into line contact throughout the entire periphery of the panel and also having outwardly inclined flanges bent into flat contact at spaced intervals and integrally connected at said contact points by spot welding.

A further object is to provide a metal panel of the above nature in which the joint and edge flanges thereof are covered over by an ornamental concealing molding strip.

A further object is to provide a metal panel of the above nature which will be simple and rigid in construction, inexpensive to manufacture, easy to assemble, compact, ornamental in appearance, very efficient and durable in use.

With these and other objects in view, there has been illustrated on the accompanying drawing, one form in which the invention may be conveniently embodied in practice.

In the drawing, Fig. 1 represents a perspective view of a completed door panel embodying the invention.

Fig. 2 is a fragmentary perspective view upon an enlarged scale, of the upper left-hand corner of the door panel shown in Fig. 1.

Fig. 3 is a top view of one end of said door panel with the concealing molding removed, the right-hand part of said figure being shown in section.

Fig. 4 is a transverse sectional view of the left-hand portion of the door shown in Fig. 3, prior to the assembly of the concealing molding, the section being taken through one of the contacting spot-welded portions of the inclined flanges.

Referring now to the drawings in which like reference numerals denote corresponding parts throughout the several views, the nu-

merals 10 and 11 indicate a pair of opposed shallow pan sections having inwardly extending flanges 12 and 13 on all four edges thereof, said flanges 12 and 13 being adapted to have line contact with each other. Provision is also made of diverging inclined flanges 14 and 15 integrally connected with the flanges 12 and 13 along their entire periphery and forming an angle of substantially 90 degrees with one another.

In order to connect the pan sections 10 and 11 integrally together and thus avoid the possibility of relative lateral shifting or "weaving," which was common with previous doors of this general nature where the separate halves thereof were not so joined, the inclined flanges 14 and 15 are bent inwardly into flat contact at spaced intervals 16 and 17 and permanently joined together by spot-welds 18.

In order to cover the joint at the edges of the door panel, provision is made of four concealing molding strips 19 each of which has a curved outer surface 20 and a pair of inwardly extending inclined flanges 21 and 22 adapted to resiliently engage the flanges 14 and 15 over which they are adapted to slide. The ends 23 of the molding strips 19 are mitered in such a manner that when all four of said strips are slid into position, the four corners thereof will lie flush with each other, as shown.

When the panel is to be employed as a partition, no concealing strip 19 is necessary, as in this case the framework in which the panel is fitted covers the joint between the two halves thereof. When so used, however, the angle between the flanges 12 and 13 on the edges of the pan sections 10 and 11 will be made somewhat less than 90 degrees so as to avoid cutting too deeply into the framework surrounding the edge joints.

The interior of the door panel may also be provided if desired with an interior filling block 24 of any suitable sound-deadening or stiffening material, as shown in Fig. 4.

It will be understood that any suitable hardware, trimmings, or fittings may be attached to the panel according to the desires of the user.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only and that the invention is not to be limited to the specific disclosures, but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new, and for which it is desired to secure Letters Patent, is:

1. In a panel, a pair of flat metal pans having alined inwardly extending edge flanges, said flanges having line contact with each other, and outwardly extending flanges integrally joined together at spaced intervals.
2. In a panel, a pair of metal pans having alined inwardly extending edge flanges, said flanges having line contact with each other, and outwardly extending inclined flanges integrally joined together at spaced intervals.
3. In a panel, a pair of metal pans having alined inwardly extending edge flanges, said flanges having line contact with each other, and outwardly extending flanges spot-welded together at spaced intervals.
4. In a panel for doors, partitions and the like, a pair of opposed metal pans having abutting edge flanges, inclined outwardly extending flanges integral with said abutting flanges, said inclined flanges bent into flat contact at spaced sections, and means for rigidly connecting said sections together.
5. In a panel for doors, partitions and the like, a pair of opposed metal pans having abutting edge flanges, inclined outwardly extending flanges integral with said abutting flanges, said inclined flanges bent into flat contact at spaced sections, and means for rigidly connecting said sections together by spot-welding.
6. In a panel, a pair of metal pans having alined inwardly extending edge flanges, said flanges having line contact with each other, and outwardly extending inclined flanges integrally joined together at spaced intervals, the edges of said panel being covered by a concealing molding strip slidable over said outwardly extending flanges.
7. In a panel for doors, partitions and the like, a pair of opposed metal pans having abutting edge flanges, inclined outwardly extending flanges integral with said abutting flanges, said inclined flanges bent into flat contact at spaced sections, and means for rigidly connecting said sections together, the edges of said panel being covered by a concealing strip interlocking with said inclined flanges.
8. In a panel, a pair of metal pans having alined inwardly extending edge flanges, said flanges having line contact with each other,

and outwardly extending flanges integrally joined together at spaced intervals, the edges of said panel being covered by a concealing molding strip engaging said outwardly extending flanges.

In testimony whereof, we have affixed our signatures to this specification.

MAXWELL S. HART.

GUSTAV H. ANDERSON.

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