F. C. GUNN.

SHEET METAL TRIM.

APPLICATION FILED DEC. 9, 1912.

1,085,605.

Patented Feb. 3, 1914.

Fig. 2

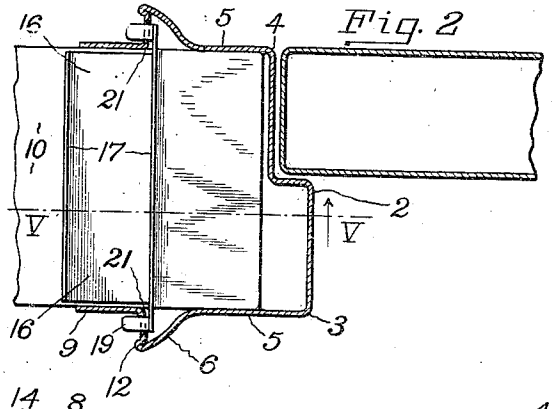


Fig. 1

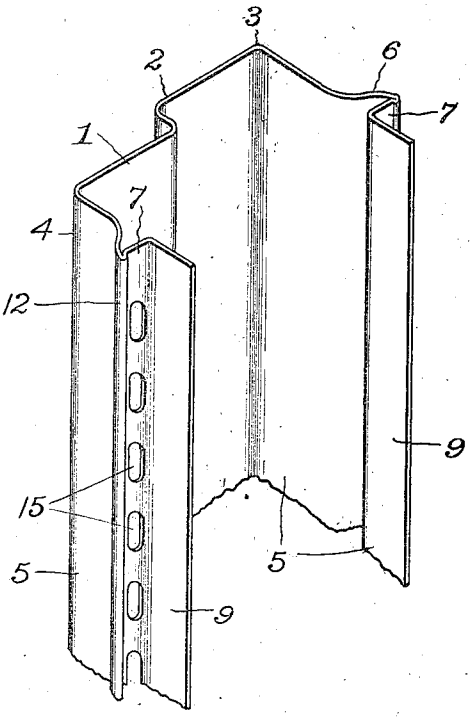


Fig. 3

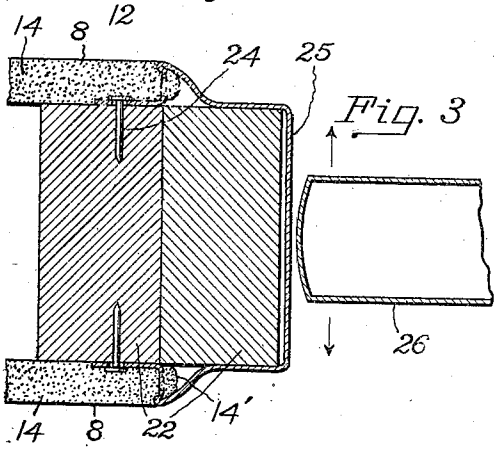


Fig. 4

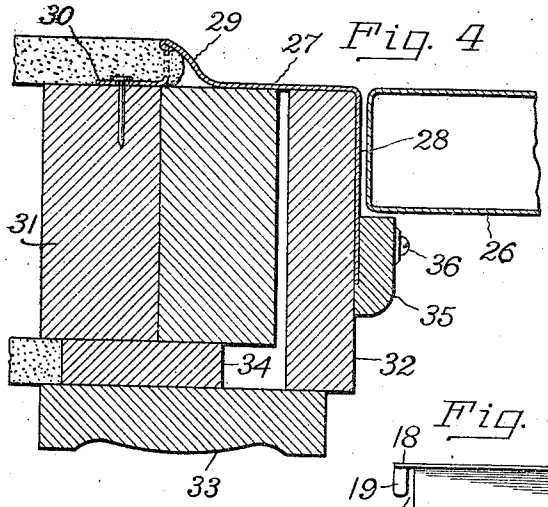


Fig. 5

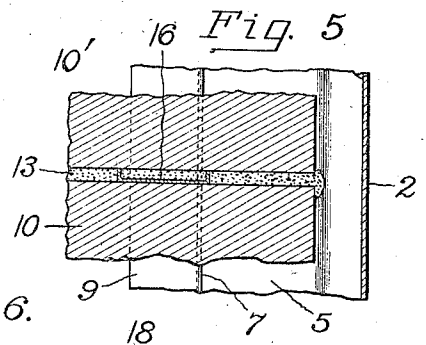
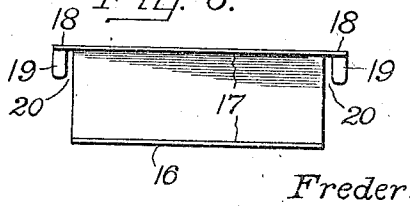


Fig. 6.



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SHEET-METAL TRIM.

1,085,605. Specification of Letters Patent. Patented Feb. 3, 1914.

Application filed December 9, 1912. Serial No. 735,737.

To all whom it may concern:

Be it known that I, FREDERICK C. GUNN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Sheet-Metal Trims, of which the following is a specification.

My invention relates to sheet metal trims, frames or casings for door- and window-openings, and has for one of its objects to provide a sanitary trim, frame or casing of the kind, which will be especially desirable for use in hospitals, school-houses, and kitchens.

A further object of the invention is to provide metal frames adapted to have a maximum amount of bearing surface directly upon the supporting wall; the advantages of which will be obvious.

A further object of the invention is to provide trims of the kind with integral architrave moldings which will serve as guides for plasterers' finishing tools, and to provide such moldings with integral means for bonding with the plaster and avoiding the cracks between plaster and trim which always develop where wooden trim is used. As my trim is made from one piece of sheet metal, no cracks exist therein to harbor dust and germs, and all its exterior surfaces are easily accessible for cleaning.

A still further object of the invention is to provide improved anchoring devices for securing these trims to tile or brick walls and to the mortar and plaster thereof.

In order that my invention may be fully understood, reference will now be made to the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a trim, frame or casing for a doorway for single-swing doors, the trim being detached. Fig. 2 is a horizontal section of the same trim in position upon a brick or tile partition wall, the mortar being omitted to show the construction; also showing a portion of a door associated with the frame. Fig. 3 is a horizontal section of the same trim adapted for double-swing doors, and a portion of such a door; the trim being fixed in position upon a wooden studded wall with the plaster thereon. Fig. 4 is a horizontal section of a modified style of frame which is designed for use where the trim is metallic on one side of a wall and of wood on the other side; showing also a portion of a door. Fig. 5 is a detail view taken in vertical section on a line V—V of Fig. 2, showing a mortar-embedded anchor. Fig. 6 is a plan view of one of the anchors, detached.

Referring first to Fig. 1, this form comprises a sheet-metal body or jamb 1 on which is the door-stop 2, which extends to a corner 3. Extending at right angles from corners 3 and 4 of the body, are two similar, opposed cheeks 5 which are spaced apart to fit accurately upon the sides of the wall for which the trim is designed. In each cheek 5 is formed an architrave molding 6, which preferably has an ogee or similar curvature, as shown in Fig. 2. These moldings have abrupt inner walls 7, which are normal to the wall surface (8, Fig. 3) and set a short distance from the edges of the cheeks 5, thus leaving flanges 9 which fit the tile or brick (10, Fig. 2) snugly. At the outer edges, the metal of the normal walls 7 is sharply bent and doubled upon itself to form small lips or rolls 12, which tend to protect the plastering from injury and insure a sharp line at the visible line of contact of the metal with the plaster. The depth of said walls, including their lips 12, determines the depth of the plastering, and said lips provide useful grounds for the plaster finishing tools, as the plaster is finished flush with said grounds. The moldings 6 are curved sharply away from said grounds, so as to present only narrow surfaces to said tools. The walls 7 are each provided with a longitudinal series of slots 15, the spacing of which may vary somewhat. Said apertures have two functions: first, to receive coengaging parts of devices for anchoring the trim to a brick or tile wall; second, to provide means for bonding the trim to the plaster 14 (Fig. 3) at numerous points by the act of laying the plaster. The anchors, above mentioned, are each formed of a single bar of sheet metal, 16, (Fig. 6) provided with narrow flanges 17 upon its longer edges. One of said flanges is extended in length past the ends of the main bar 16, as shown at 18, and the projecting ends 18 each have an integral lug 19, projecting at approximately right angles thereto, or in a plane parallel to that of the bar 16. The notches 20, when the anchor is in position, receive the flanges 9 (Fig. 1) of the trim. The flanges 17 are made of less depth than the usual thickness of mortar laid between courses of brick or tile, and the lugs 19 are spaced to register with the two rows of slots 15. In erecting a vertical piece of this trim in a brick or

tile partition, the trim is stayed in position before the adjoining partition is built. The brick or tile are placed as far into the trim as they will go, which will be nearly in contact with the part 1 (Fig. 1). As soon as a mortar course is reached that registers horizontally with any pair of the slots 15, one of the anchors 16 is placed in the trim through the open side thereof by holding the anchor obliquely and then turning it to level position, then passing the anchor lugs 19 through opposite slots 15 until the bottoms of the notches 20 strike the corners 21 (Fig. 2) of the trim. With the anchor in this position, the mason embeds it in mortar, 13, as shown in Fig. 5, said mortar then receiving the superposed brick or tile 10'. After the mortar has set, it is obvious that the anchor 16 will be immovably fastened by its flanges 17 against any outward pulling force. Each anchor also serves as a positive tie between the frame cheeks 5, by means of its lugs 19 which hold the parts 5 and 9 against spreading stresses. As many anchors 16 may be applied to one piece of trim as the judgment of architects may specify. It is an important advantage of this trim, that its opposite sides 5 (Fig. 2) make actual contact with the end of the partition or wall: the shocks caused by slamming of the door being received by the partition or wall instead of by the side metal of the trim, or by fastening devices. When the plaster is applied (the lath not being shown in the drawing) some plaster will spread through the slots 15 (Fig. 1) into the interior of the moldings 6, and will form mushroom-heads 14' (Fig. 3) therein, the plaster being thus locked into the frame at numerous points.

The style of trim shown in Figs. 1 and 2 is adapted for mounting on wooden bucks, as 22, Fig. 3, by punching nail-holes in the flanges 9 to receive nails 24 that are driven into the bucks. The frame 25, shown in Fig. 3, is made without a stop and is adapted for double-swing doors, as 26. The anchoring nails 24 are repeated at suitable vertical distances.

Fig. 4 illustrates a modified metal trim which I have designed for use on partitions having a sanitary metal trim on one side and an ordinary trim on the other. In this figure the metal trim, 27—28, is right-angled in section and comprises the architrave member 27 and the jamb member 28. Integral with member 27 are the molding 29 and the flange 30, which is nailed to the buck 31. A jamb 32 is erected outside of the bucks, and the trim 33 is fastened to said jamb and a ground 34. The stop 35 is rabbeted to receive the edge of the metal trim part 28, which it conceals. 36 is one of the fastening screws which pass through both the stop and the metal trim part 28. It will be observed that the trim 27—28 has contact with two surfaces of the jamb.

It is obvious that the manner of erecting metal trims in accordance with my invention would vary with the conditions under which they are used, and that various circumstances may arise by which the herein described constructions would be modified, and yet be within the scope of the invention.

The trim shown in Fig. 2 or Fig. 4 may easily be adapted for window framing, and that in Fig. 4 to an outside door, as will be understood by all persons skilled in the art.

Having described my invention, I claim as new, and desire to secure by Letters Patent:

1. A metal trim, frame or casing, having a side member adapted for flat contact with a partition wall or bucks, said side member having a raised, hollow architrave molding thereon, the outer edge of said molding having a longitudinal lip, adapted to protect plastering from injury and to insure a sharp line at the visible line of contact of the metal with the plastering.

2. A metal trim, frame or casing, having opposed cheeks adapted for flat contact with a partition wall or bucks, each of said cheeks having a raised, hollow molding thereon, and one wall of said molding having a series of openings therein, adapted to admit plaster to the interior of said molding and combined tie-bars and anchors having terminals to enter said opening, for the purpose described.

3. A metal trim, frame or casing having integral architrave moldings on its opposite sides, one wall of each molding having a longitudinal series of openings therein, in combination with an anchor tie-bar adapted to tie the sides of the trim together, said anchor tie-bar having lugs which enter one opening of each series for the purpose specified.

4. In combination with a brick or tile wall, a metal trim having opposed wall-fitting cheeks provided with raised, hollow moldings; one wall of each molding having openings therein at different heights; and a metal anchor and tie-bar lying transversely within the wall, embedded in mortar, said bar comprising lugs which enter openings in said walls of the moldings, said bar locking the trim against removal.

In testimony whereof I affix my signature, in the presence of two witnesses.

FREDERICK C. GUNN.

Witnesses:
F. G. FISCHER,
L. J. FISCHER.