

April 19, 1960

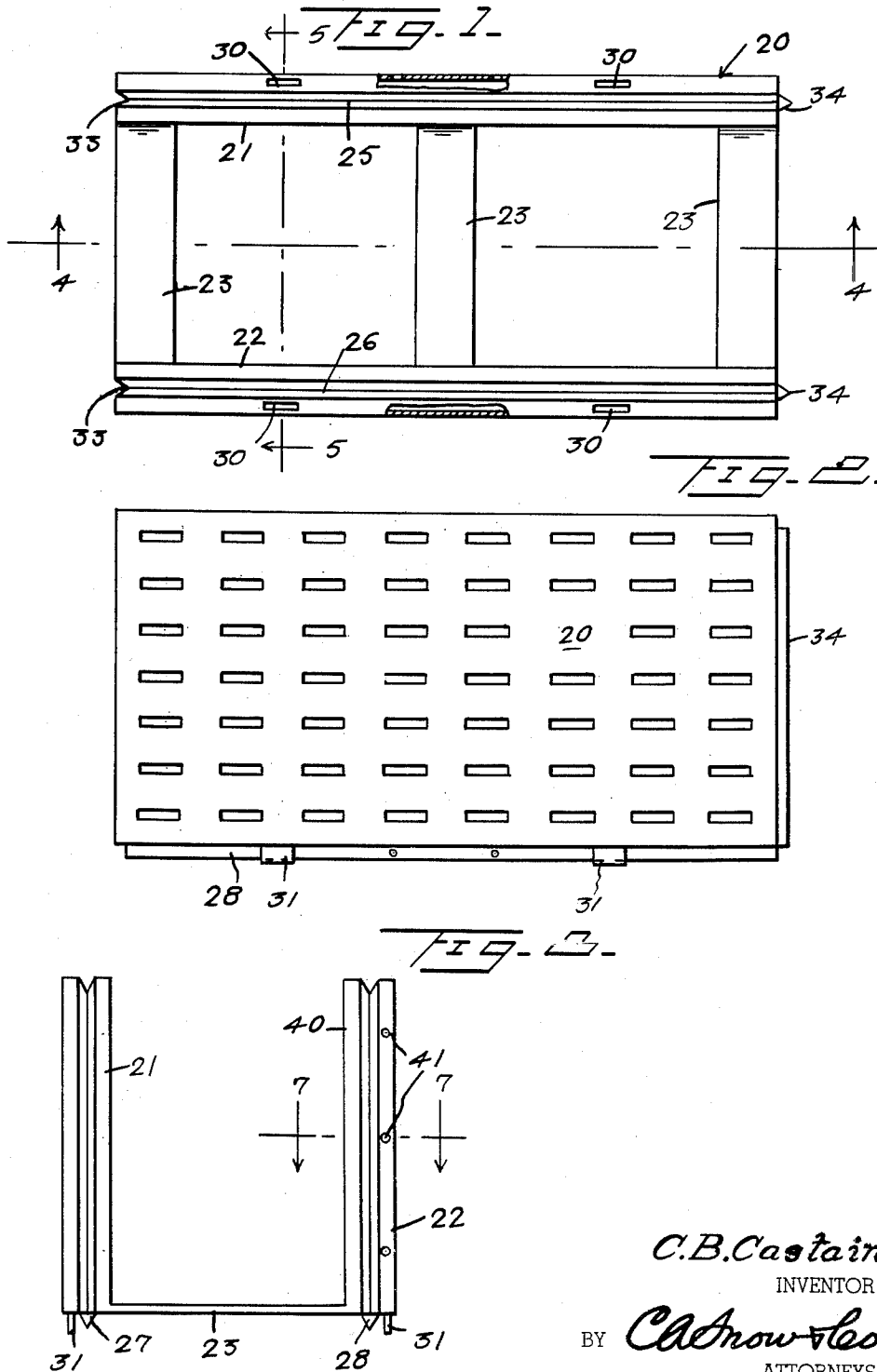
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2,933,166

METAL BLOCK CONSTRUCTION

Filed Aug. 4, 1958

2 Sheets-Sheet 1



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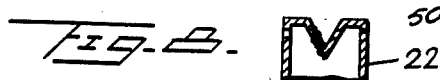
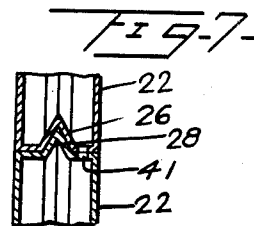
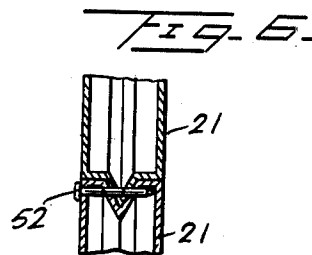
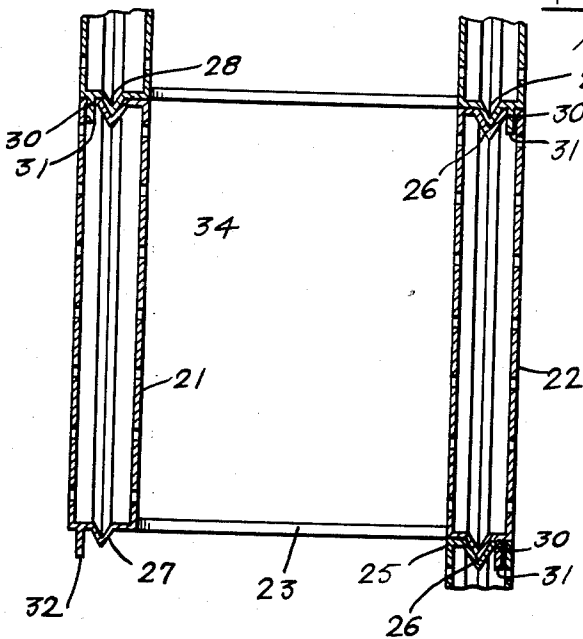
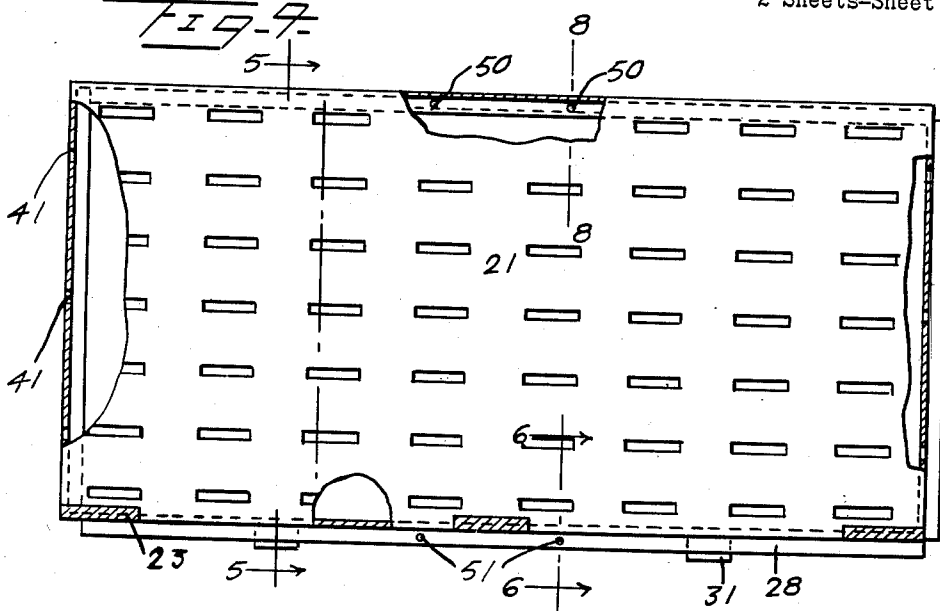
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2,933,166

METAL BLOCK CONSTRUCTION

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2 Sheets-Sheet 2



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2,933,166

METAL BLOCK CONSTRUCTION

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1 Claim. (Cl. 189—34)

This invention relates to a metal building block construction, and has as its primary object the provision of an improved block adapted to be constructed of metal, such as light sheet steel, or sheet or cast aluminum.

An additional object of the invention is the provision of such a block which comprises inner and outer wall surfaces, one of which provides an air space.

Still another object of the invention is the provision of such a block which is open on three sides, the fourth side being connected by spacer members.

An additional object of the invention is the provision of such a block provided with male and female V tongues and grooves for interconnection of the block.

An additional object of the invention is the provision of pin locks for interlocking the V tongues and grooves to insure secure alignment of the blocks.

Still another object of the invention is the provision of such a block having positioning tabs and opposed recesses for the reception of such positioning tabs to insure proper vertical alignment of the adjacent blocks.

Still another object of the invention is the provision of such a building block which will provide an interior space in which metallic reinforcement and poured concrete may be filled, and which will provide an outer face to which interior plaster or wall finish may be applied, an outer space to which stucco or similar finish such as brick trim or brick veneer may be applied if desired.

Still another object of the invention is the provision of such a construction having its outer faces provided with projections formed from slots, to anchor the wall finish thereto.

A still further object is the provision of a wall block of this character which is sturdy and durable in construction, reliable and efficient in operation, and provides an insulated and damp and moisture proof wall, and which further may be simply and inexpensively manufactured and assembled.

Still other objects reside in the combinations of elements, arrangements of parts, and features of construction, all as will be more fully pointed out hereinafter and disclosed in the accompanying drawings wherein there is shown a preferred embodiment of this inventive concept.

In the drawings:

Figure 1 is a top plan view of one form of block embodying features of the instant inventive concept.

Figure 2 is a side elevational view of the block of Figure 1.

Figure 3 is an end elevational view of the block of Figure 1 as viewed from the left.

Figure 4 is an enlarged sectional view taken substantially along the line 4—4 of Figure 1 as viewed in the direction indicated by the arrows.

Figure 5 is an enlarged sectional view taken substantially along the line 5—5 of Figure 1 as viewed in the direction indicated by the arrows, showing in section the interconnection of upper and lower blocks.

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Figure 6 is an enlarged sectional view taken substantially along the line 6—6 of Figure 4 showing a locking pin in position.

Figure 7 is an enlarged sectional view taken substantially along the line 7—7 of Figure 3, but showing an additional block positioned relative to the end thereof.

Figure 8 is an enlarged sectional view taken substantially along the line 8—8 of Figure 4.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Having reference now to the drawings in detail, the metallic building block of the instant invention is generally indicated at 20, and includes an inner side wall 21, and an outer side wall 22. The inner and outer side walls are connected at their lower portions by spacer strips 23, the number of spacer strips being suitably varied in accordance with the dimensions of the block.

The top portion of each inner wall 21 and outer wall 22 is provided with a female groove 25 and 26 respectively, each groove being of V-shaped cross section and extending substantially the full length of the block.

The under side of each inner and outer wall is correspondingly provided with a male tongue of V-shaped configuration, 27 and 28 respectively conforming in cross sectional configuration to the adjacent female groove.

The upper side of each inner and outer wall portion is provided with a plurality of spaced positioning slots 30, and the underside of each block is provided with coacting positioning tabs 31 adapted to engage in the adjacent positioning slots of the adjacent block.

Each inner and outer wall is also provided at one end with a female groove 33 and at its opposite end with a male tongue 34, the dimensions corresponding, in order to provide an inter-engagement between the blocks.

The inside wall of each block is provided with an interior partition 40, which forms an air space, air venting being admitted through a series of holes 41, positioned in both the sides and ends of the inner wall, for the purpose of admitting air into the air space.

The outer wall may omit the inner partition if desired, or may be completely enclosed as shown in Figure 5.

Means are provided for locking the blocks in position, and comprise suitable spaced apertures 50, which are extended through the side walls of the inner grooves, and similar openings 51 are provided in the lower tongues of each block.

These openings are adapted to be suitably aligned in positioning of the blocks, and may be positioned near the center of each tongue and groove, in order to permit a stepped positioning of adjacent upper and lower blocks. The openings 50 and 51 have pins 52 passed therethrough, the pins serving securely to lock the upper and lower grooves in related assembly.

Obviously the blocks may be made in a wide variety of sizes, and may take the form of corner blocks, both inside and outside, half sections, or any other desired measurements.

When a suitable number of courses of blocks have been positioned, suitable reinforcing material may be inserted in the spaces between the inner and outer walls, and concrete or similar filling matter may be poured thereinto.

The inner and outer walls may then be surfaced with any desired material, and the resultant product is an improved wall structure which is relatively light in weight, yet which is remarkably strong construction, and which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the

embodiment herein before shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.

What is claimed is:

In a metallic building block, the combination of inner and outer metal walls, spacers connecting said inner and outer metal walls along the lower edges thereof, and tongue and groove connecting means on the top, bottom and ends of each wall, at least one of said walls being hollow to provide an air space, each of said walls having guide slots on one edge thereof, guide tabs on the opposite edge, and pin locking means extending transversely

through said contacting tongue and groove of adjacent blocks, securing said blocks together.

References Cited in the file of this patent

UNITED STATES PATENTS

1,721,918	Meyercord	July 23, 1929
2,017,973	Jenkins	Oct. 22, 1935
2,173,020	Kubach	Sept. 12, 1939
2,535,494	Hult et al.	Dec. 26, 1950
2,741,341	Anderson	Apr. 10, 1956