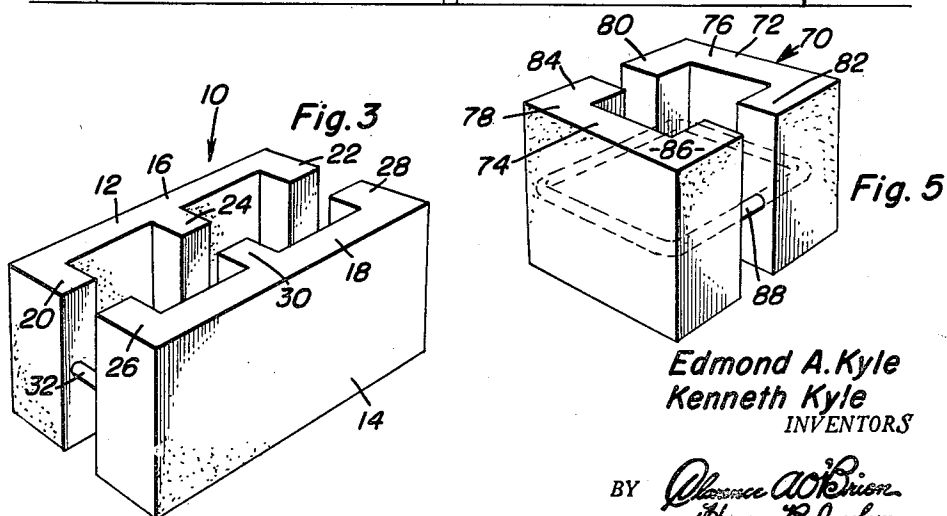
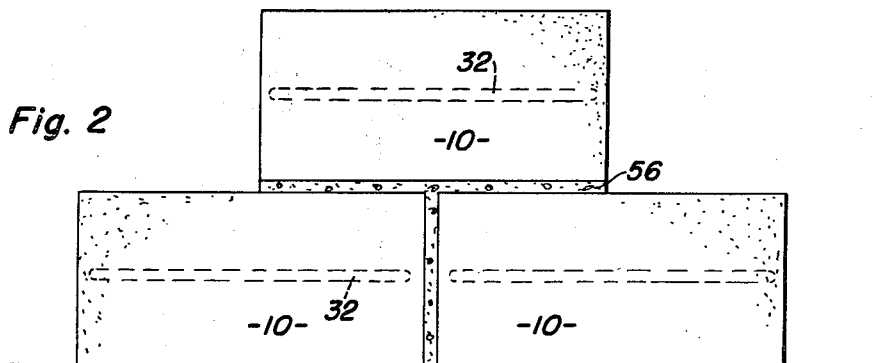
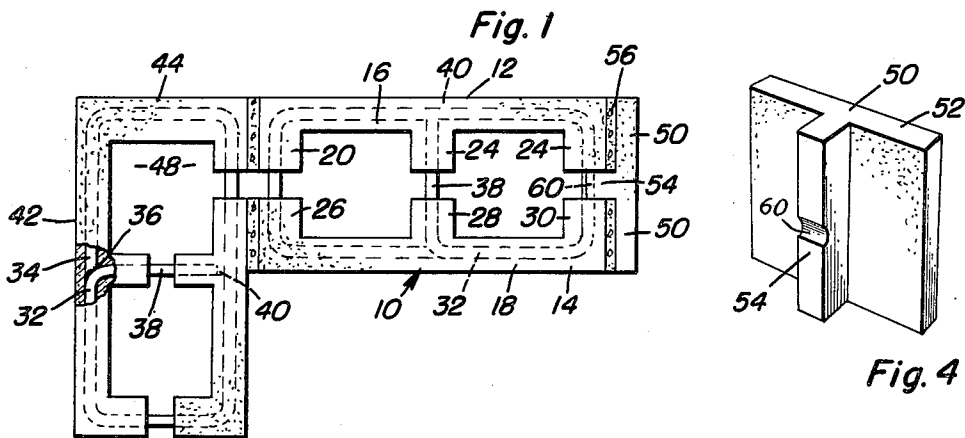


Feb. 8, 1955

E. A. KYLE ET AL  
HOLLOW WALL CONSTRUCTION

2,701,464

Filed March 10, 1953



Edmond A. Kyle  
Kenneth Kyle  
INVENTORS

BY *Alfred A. Brown*  
and *Harvey B. Jacobson*  
Attorneys

1

2,701,464

## HOLLOW WALL CONSTRUCTION

Edmond A. Kyle and Kenneth Kyle, Tampa, Fla.

Application March 10, 1953, Serial No. 341,512

1 Claim. (Cl. 72—44)

This invention relates to masonry and concrete construction and more particularly to a novel insulative building block.

The primary object of this invention resides in the provision of a building block which while being substantially stronger than conventional cement or aggregate blocks whereby means for providing a substantially continuous air space between inner and outer spaced sections thus affording numerous advantages. By employing building blocks constructed in accordance with the concept of this invention the cost of erecting a building will be substantially reduced because plastering and other textures and finishers can be applied directly on the inner sections of these building blocks eliminating the cost of furring, lathing and damp-proofing treatment for the outer walls due to the continuous air space provided by these blocks.

Other advantages of this type of building construction reside in the availability of greater water space thus affording a wall of greater strength, less expansion cracks due to the increased flexibility of construction, and the elimination of condensation.

Still further objects of the invention reside in the provision of a building block that is strong and durable, simple and inexpensive to fabricate, comparatively light in weight and easy to handle, and in which water lines and electrical conduits can be installed conveniently.

The construction of this invention features the combination of prefabricated jambs, door and window frames, and other like structures which can be used in combination with these building blocks to afford permanent installation thereof with a minimum of expenditure of time and labor.

These, together with the various ancillary objects and features of the invention which will become apparent as the following description proceeds, are attained by these building blocks, preferred embodiments of which have been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a top plan view of a corner construction employing building blocks constructed in accordance with the present invention and also illustrating the manner in which a prefabricated jamb is lockingly held in place at the end of a building block;

Figure 2 is a side elevational view showing a section of a wall constructed from the instant building blocks;

Figure 3 is a perspective view of a preferred embodiment of this building block;

Figure 4 is a perspective view of a portion of a prefabricated jamb; and,

Figure 5 is a perspective view of a half block constructed in accordance with the concept of this invention and adapted for use when the building blocks comprising the present invention are arranged in staggered courses at a point where it is desired to install a vertical member such as a door or a window frame.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, reference numeral 10 generally designates a building block constructed in accordance with the concept of the present invention which is adapted to be arranged in staggered courses when constructing a wall or other like type construction. Each of the building blocks 10 are provided with inner and outer sections 12 and 14 which include inner and outer walls 16 and 18 respectively. It is to be noted that there is integrally molded with the inner wall 16 end ribs 20 and 22 and a central rib 24. Likewise, the outer wall 18 is provided with end ribs 26 and 28 together with a centrally

2

located rib 30 positioned medial the end ribs 26 and 28. The ribs 26, 28 and 30 are positioned in aligned but spaced relationship relative to the ribs 20, 22 and 24 and held in such position by an endless reinforcing member 32 embedded in the inner and outer walls 16 and 18 and in all of the integrally cast ribs. It is to be noted that the reinforcing member 32 has its terminal portion 34 welded as at 36 to the arm 38 thereof to form an endless reinforcing member configured to conform to the shape of a figure 8. The arm 38 may be optionally welded as at 40 to the portion of the reinforcing member 32 extending through the outer 16 if such is desired.

In the corner construction as is shown in Figure 1, it will be noted that the outer wall 42 of the corner block is provided with an end wall 44 integrally formed with the outer wall 42 thus effectively providing a continuous facing for the corner of the wall while permitting a continuous air space 48 to exist between the corner block and any of the other blocks arranged in courses. It is to be noted that the corner blocks can be arranged in staggered relationship using right and left hand blocks.

When it is desired to install a door or window frame or jamb at any given point in the wall it is merely necessary to install the prefabricated building construction elements as indicated at 50. These elements include an end wall 52 which has integrally cast and formed therewith a rib 54 adapted to extend partially into the space between the inner and outer sections 12 and 14 to interlock the element 50 with the building block. Obviously, mortar 56 may be used to further secure mortar 56 between the building element 50 and one of the blocks 10. The mortar 56 is of course, positioned between the building blocks 10 at the vertical and horizontal blocks therebetween. If desired, the rib 54 may be notched or recessed to receive a portion as indicated at 60 of the reinforcing member 32 therein to vertically position the building element 50 relative to the blocks 10. In order to form a vertical end surface for walls constructed in accordance with the present invention, half-blocks as generally indicated at 70 are employed which consist of inner and outer sections 72 and 74 respectively, which have inner and outer walls 76 and 78 having ribs 80 and 82, and 84 and 86 integrally cast therewith. An endless reinforcing element having its ends joined and generally indicated at 88 is embedded in the inner and outer walls 72 and 74 and the ribs integrally formed therewith.

Since from the foregoing, the construction and advantages of this building block are readily apparent, further description is believed to be unnecessary.

However, since numerous modifications will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawings, it is not intended to limit the invention to the precise embodiment shown and described, but all suitable modifications and equivalents may be readily resorted to which fall within the scope of the appended claim.

What is claimed as new is as follows:

A wall construction including a first construction element including insulative building block comprising an inner section and an outer section arranged in spaced relationship, said outer section including an outer wall having a plurality of inwardly extending ribs integrally formed therewith, said inner section including an inner wall having a plurality of inwardly extending ribs in alignment with and spaced from the ribs integral with said outer wall, and an endless reinforcing member extending through said inner and outer walls and said ribs rigidly holding said sections in their spaced relationship, said ribs being located at the ends of said inner and outer walls and medial the ends of said inner and outer walls, said reinforcing member being configured to conform to the shape of the figure 8, and a second construction element including an end wall extending perpendicularly to said inner wall and said outer wall and overlying one end of said inner wall and said outer wall, and a rib integral with said end wall extending partially into the space between said inner and outer sections to interlock said second element relative to said block, said rib on said second element being provided with a recess for reception of a portion of said reinforcing member to lockingly hold said

second element in a predetermined vertical position relative to said block.

References Cited in the file of this patent

UNITED STATES PATENTS

1,377,149 Hadland ----- May 3, 1921

2,078,144  
2,359,214  
2,540,349

23,296

Kenan ----- Apr. 20, 1937  
George ----- Sept. 26, 1944  
Reed ----- Feb. 6, 1951

FOREIGN PATENTS

Norway ----- May 5, 1913