April 14, 1959 M. PREININGER 2,881,614

BUILDING OR CONSTRUCTION BLOCKS

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Fig. 2.

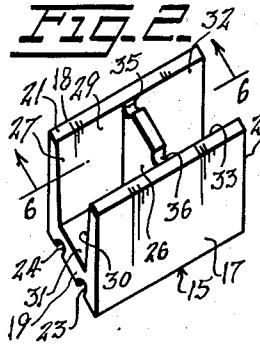


Fig. 3.

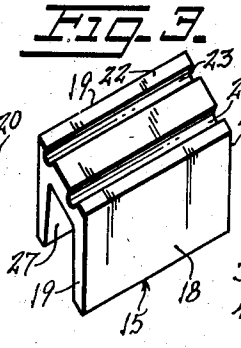


Fig. 4.

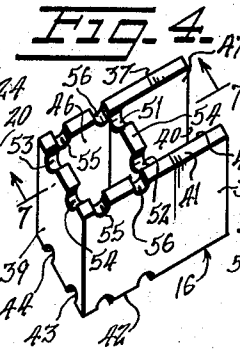


Fig. 5.

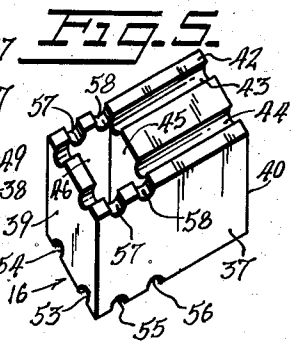


Fig. 6.

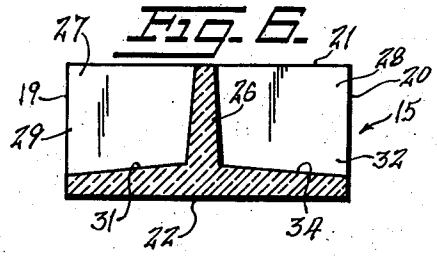


Fig. 7.

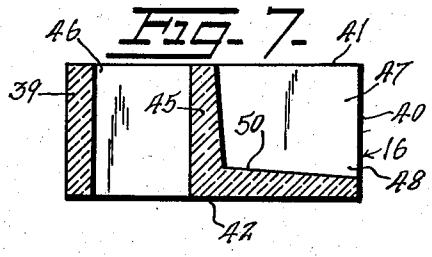


Fig. 1.

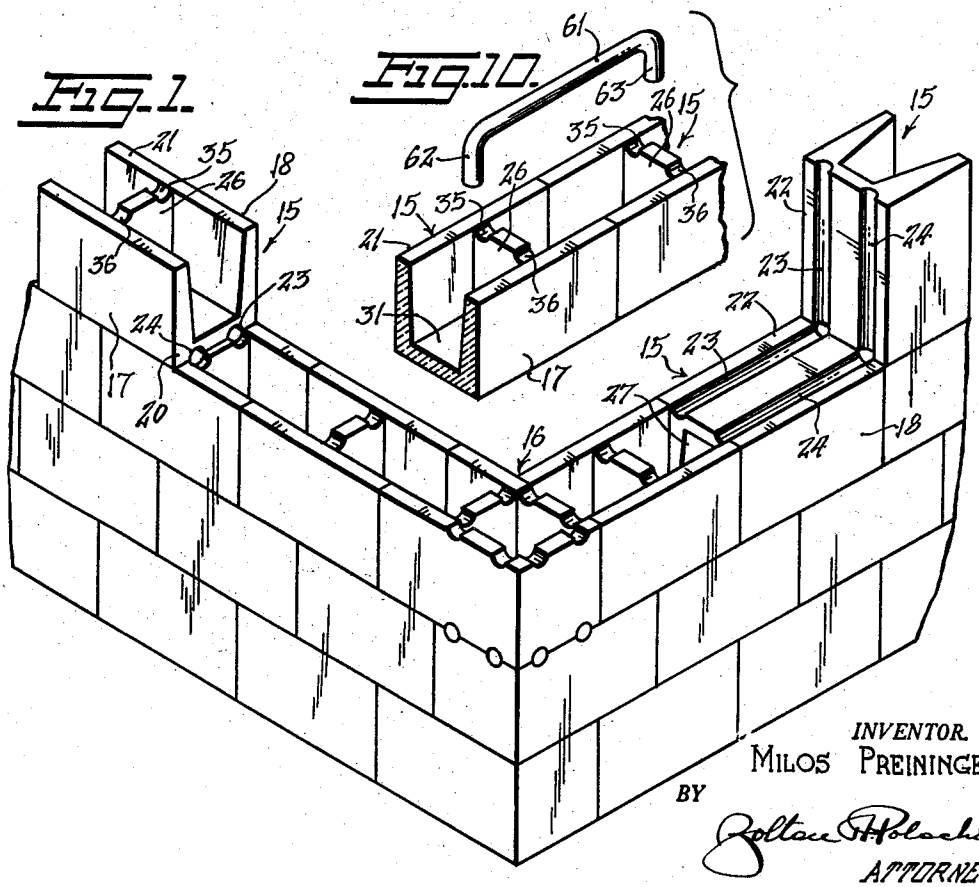


Fig. 10.

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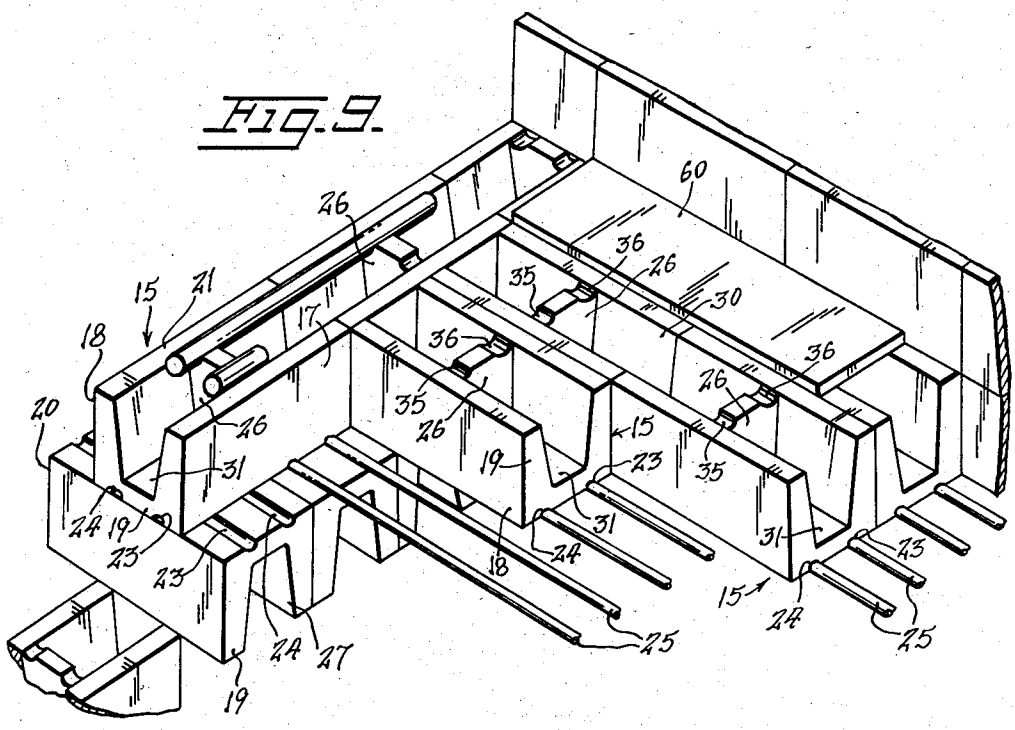
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Fig. 9.



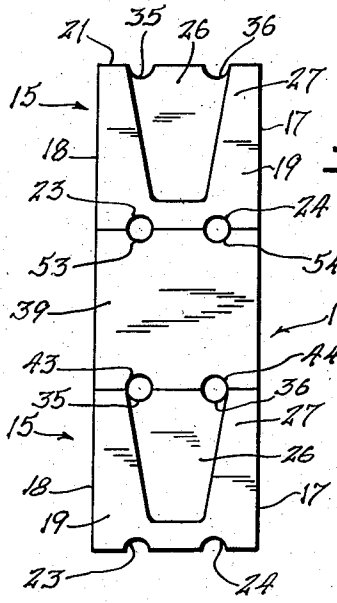


Fig. 8.

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2,881,614

BUILDING OR CONSTRUCTION BLOCKS

Milos Preininger, New York, N.Y.

Application August 31, 1955, Serial No. 531,738

1 Claim. (Cl. 72—42)

This invention relates to new and useful improvements in building or construction blocks.

More particularly, the present invention proposes the construction of an improved building block which can be used in a number of different ways and positions for simplifying building and improving construction.

As a further object, the present invention proposes to provide two building blocks or units which are simple, handy and light with no fragile parts and which can be used to form outside walls, partitions, corners, frames for windows or doors, floors, stairs and for anchoring on roofs.

Still further, the present invention proposes forming one block as a main block and the other as a second or corner block, both blocks having cavities adapted to be aligned with those in other blocks for filling with concrete or the like to join the blocks together and reinforcing rod or conduit grooves alignable with those in other blocks for filling with concrete or the like to join the blocks together and reinforcing rod or conduit grooves alignable with those in other blocks to lock the blocks further together by rods, pipes, or conduits.

Another object of the invention proposes constructing the blocks so that they can be used either filled with cement or like material or not filled and so that pipes or other conduits can easily be inserted or placed between the blocks.

A further object proposes forming the blocks for use as a toy with a connecting bar or rod removably to hold them together without interfering with the stacking or laying of the blocks in building with them.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a perspective view of a foundation wall built of blocks constructed and arranged in accordance with the present invention.

Fig. 2 is a perspective view of one of the blocks shown in Fig. 1.

Fig. 3 is a view similar to Fig. 2 but showing the block turned upside down.

Fig. 4 is a view similar to Fig. 2 but showing another of the blocks shown in Fig. 1.

Fig. 5 is a view similar to Fig. 4 but showing the block turned upside down.

Fig. 6 is a sectional view taken on line 6—6 of Fig. 2.

Fig. 7 is a sectional view taken on line 7—7 of Fig. 4.

Fig. 8 is an end view of the two blocks shown in Figs. 2, 3, 4 and 5.

Fig. 9 is a fragmentary perspective view illustrating another way of building with the blocks.

Fig. 10 is a fragmentary perspective view of two of the blocks and a connecting rod removably to hold them together.

Referring more particularly to the drawings, the building blocks shown in the several figures consist of a main block **15** and a second or corner block **16** both preferably made of the same material, of the same size and molded, cast or otherwise formed in block form.

Main block **15** has two sides **17** and **18**, two ends **19** and **20**, and a top and bottom **21** and **22** respectively. Preferably the sides **17** and **18** and the top and bottom **21** and **22** are of the same area or have the same outside dimensions and ends **19** and **20** are identical to one another.

Bottom **22** has a pair of spaced reinforcing rod or conduit grooves **23** and **24** extending between ends **19** and **20** and spaced from sides **17** and **18**. The grooves **23** and **24** are adapted to receive reinforcing steel rods or conduit pipes **25** (see Fig. 9).

A center wall **26** extends from the top **21** toward the bottom **22** between the sides **17** and **18** and preferably is formed integrally with the block. Block **15** also has a pair of cavities **27** and **28** on each side of the center wall **26** with inclined inner cavity walls **29**, **30** and **31**, and **32**, **33** and **34** extending in converging relation from the top **21** of block **15** toward the bottom **22** and from the center wall **26** to the ends **19** and **20**.

The center wall **26** also has a pair of spaced reinforcing rod or conduit grooves **35** and **36** adjacent the top **21** of the block **15** and adjacent the sides **17** and **18** of the block.

Second or corner block **16** has two sides **37** and **38**, two ends **39** and **40**, and a top and bottom **41** and **42** all of the same area as their counterparts on the main block **15**.

Bottom **42** of block **16** has a pair of spaced reinforcing rod or conduit grooves **43** and **44** extending between the ends **39** and **40**, spaced from sides **37** and **38** and adapted to align with grooves **23** and **24** of main block **15** when the two blocks **15** and **16** are aligned end to end.

A partition wall **45** is provided in block **16** adjacent to and spaced from end **39**. Second block **16** also has an opening **46** between the partition wall **45** and end **39** extending through the block. Block **16**, in addition, has a cavity **47** between the partition wall **45** and end **40** with inclined inner cavity walls **48**, **49** and **50** extending in converging relation from the top **41** toward the bottom **42** and inclined from the partition wall to end **40** for alignment with one of the cavities of the main block or with another cavity **47** in another second block.

Partition wall **45** has a pair of spaced reinforcing rod or conduit grooves **51** and **52** and end **39** has a similar pair of grooves **53** and **54** adjacent the top **41** of the block and adjacent sides **37** and **38**.

Sides **37** or **38** also contain spaced reinforcing rod and conduit grooves **55** and **56** and **57** and **58** at the top **41** and bottom **42** of the block **16**.

A wall can be made with the blocks, as shown in Fig. 1. On a concrete foundation a first course or layer of blocks can be laid top side up starting with a second or corner block. Adjoining cavities are filled with cement mortar. In this way a horizontal beam is formed.

Reinforcing rods or pipes **25** wet with cement "milk" are put in the grooves, the rods or pipes **25** having substantially the same diameter as the grooves. A second layer or course can then be put on top of the first, the adjoining cavities not being filled. Further layers or courses may be added as desired. One layer or course is put bottom side up crosswise so that the ends partly extend into adjoining rooms. Pipes or rods **25** as long as the room is wide are put in the grooves bridging the room and blocks are laid on these pipes or rods bottom

down. On top of the blocks boards **60** (Fig. 9) are placed. In this way ceilings, floors and the like can be made or stairs can be formed.

Another example of the construction possible with the blocks is as follows: one course is laid with the cavities not filled, the second course laid with cavities filled so as to form a horizontal beam between the ends of the two courses.

In the openings which extend through the second or corner blocks, when corner blocks are laid one upon another, cement mortar can be poured from above to form vertical pillars. Also reinforcing rods may be extended through these openings.

For use as toys, the blocks can removably be locked together by a connecting rod **61** adapted to fit in the grooves and having bent end portions **62** and **63** adapted to hook over a center or partition wall and over the ends of the blocks.

The corner blocks may be used also as main blocks; they may be used in the middle of the length of the wall in such a way that a vertical channel occurs. This vertical channel may serve as a chimney or conduit for water pipes, etc. and when filled with mortar a pillar will be made.

The blocks can be also manufactured with any number of grooves and with built in outlet box for electric wires.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A cornered wall construction including superposed hollow blocks along the straight portions thereof and superposed hollow blocks at its corners, the blocks along the straight portions each having flat side and bottom walls and being open at the top and ends, a partition wall extending across the space between the side walls at the center thereof, said bottom wall having parallel spaced grooves in its bottom surface extending the length thereof and being spaced inwardly from the side walls, said partition wall having grooves in the intersecting ends of the top and side edges thereof, the corner blocks each having side and bottom walls adapted to align with the side and bottom walls of the blocks in the straight portions of the wall, said corner blocks each having a wall at one end thereof, the other end of the block being open, a partition wall across the space between the side walls spaced inwardly from said end wall thereby providing a space between the end and partition walls, said space being open at the top and bottom, said bottom wall having spaced parallel grooves in its bottom surface, extending the length of said bottom wall, said end wall having grooves across its bottom edge in line with the grooves in said bottom wall and in line with the grooves in the bottom surface of the bottom wall of the next adjacent block in the straight wall portion, forming a continuation of the open end thereof, said end wall having grooves across its top edge in vertical alignment with the grooves across its bottom edge, the side walls of said corner block having spaced grooves across the top and bottom edges thereof, adjacent the space between the end and partition walls, said side wall grooves being in vertical alignment, and disposed in horizontal alignment with the grooves in the intersecting end edge walls of the partition wall of the next adjacent block of the straight wall portion abutting said end of the corner block, the side and partition walls being tapered upwardly and the bottom walls being tapered outwardly from the adjoining partition wall.

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