Oct. 4, 1938. A. HENDERSON 2,131,803

BUILDING BLOCK

Filed May 15, 1936 2 Sheets-Sheet 1

Fig. 1.

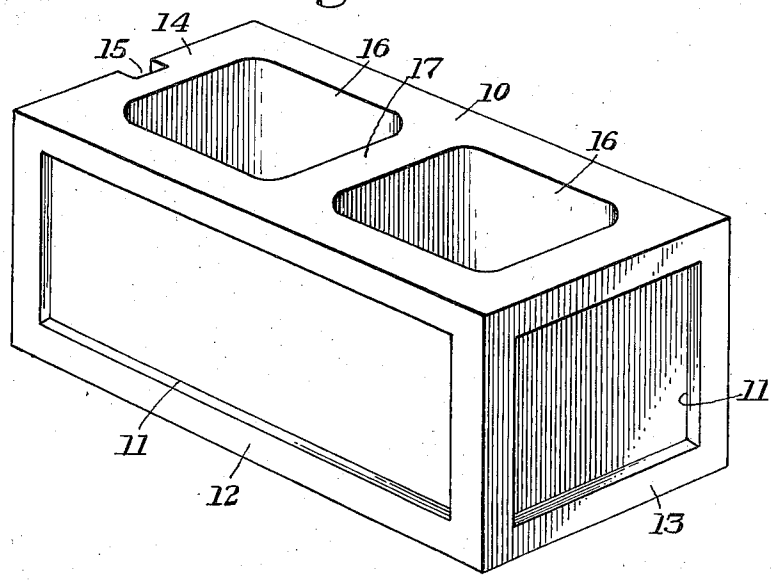


Fig. 2.

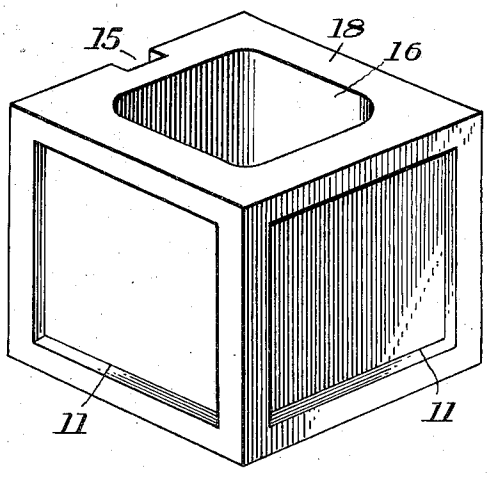
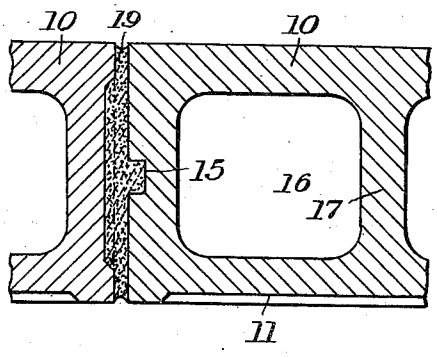


Fig. 3.



INVENTOR

Albert Henderson

by his attorneys

Stebbins Blenko & Parmelee

Oct. 4, 1938. A. HENDERSON 2,131,803

BUILDING BLOCK

Filed May 15, 1936 2 Sheets-Sheet 2

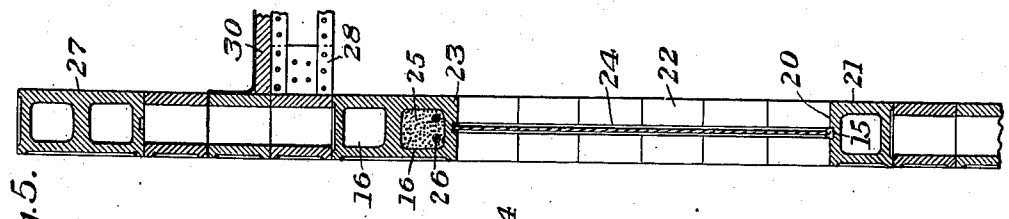


Fig. 5.

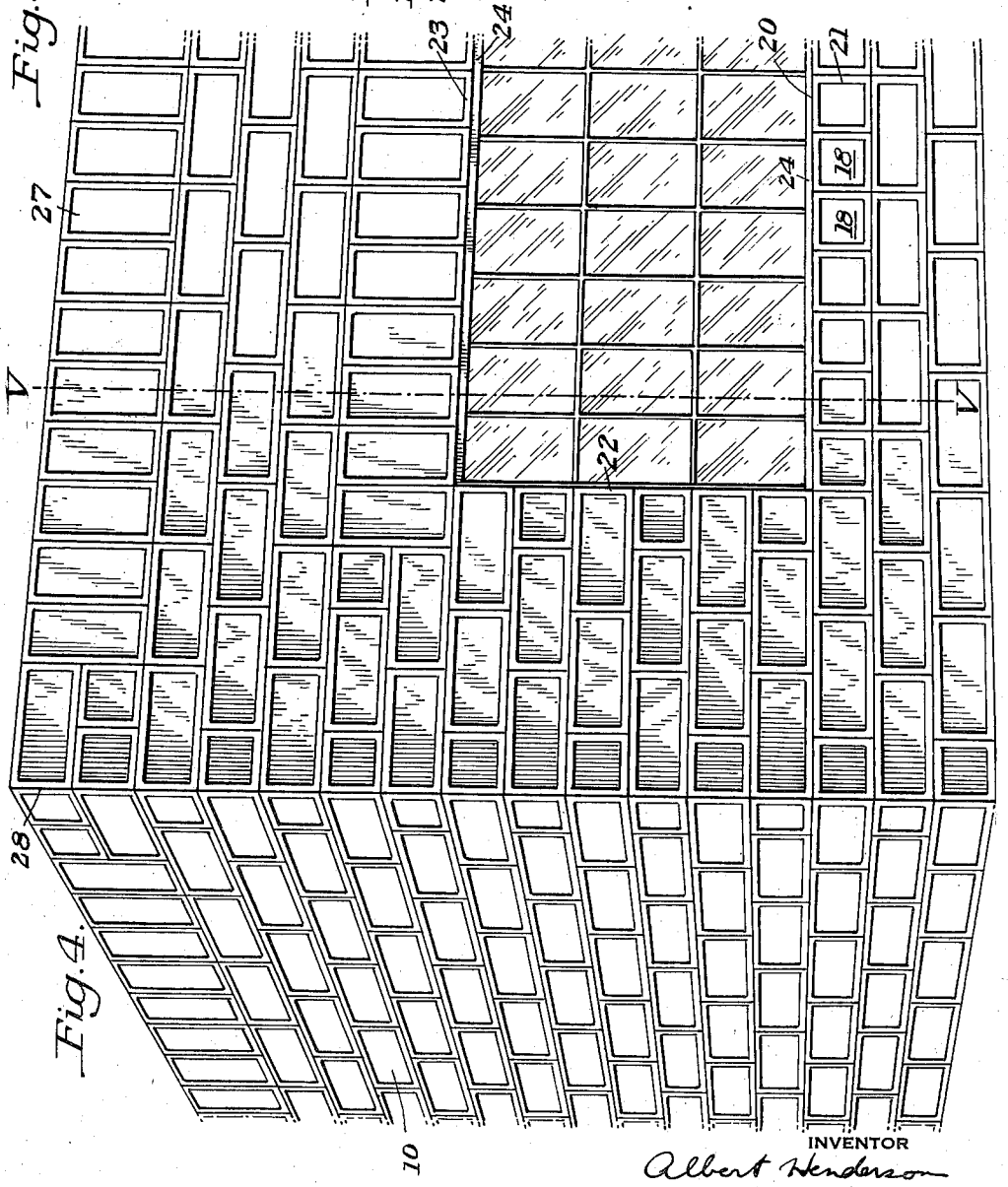


Fig. 4.

INVENTOR

Albert Henderson

by his attorneys

Stebbins Blenko & Parmelee

Patented Oct. 4, 1938 2,131,803

UNITED STATES PATENT OFFICE

2,131,803

BUILDING BLOCK

Albert Henderson, Pittsburgh, Pa., assignor to William P. Witherow, Pittsburgh, Pa.

Application May 15, 1936, Serial No. 79,870

3 Claims. (Cl. 72—41)

This invention relates to a building block and, in particular, to a molded concrete block adaptable for various functions in the construction of different types of buildings.

As manufactured at present, concrete building blocks are usually provided with a rock face on one side. This necessitates that the blocks be molded from a relatively dry mix. As a result, the finished blocks are porous and a wall composed thereof is not proof against permeation by rain water. The rock face, furthermore, increases the cost and weight of the blocks. The appearance of the rock face reveals its artificial character. The difference between the cost of rock face blocks and plain blocks is such that it is economical to use the latter in foundations or other places where the blocks are concealed. It is thus necessary for the manufacturer to stock two different types of block. In addition, the blocks used as stretchers are not well suited to other purposes such as lintels, jambs or copings, etc. and it has been the practice to make special blocks for these particular portions of a building.

I have invented a block which overcomes the aforementioned objections to the present type of rock face block and is characterized by additional advantages which will be pointed out in the course of the following detailed description. In accordance with my invention, I provide blocks having a recessed panel formed on one side and one end. In the other end I form a groove adapted to receive the edge of a sash placed in window openings forming a wall constructed of my improved block. The block may be used in stretcher courses and is also well adapted for various other uses such as lintels, jambs or copings. By providing a recessed panel in one side and one end, I obtain a finished apearance at the exterior of wall corners, without requiring a special block. My invention also contemplates a half block to be used at certain points. The half block has half the length of the whole block but is otherwise somewhat similar to the whole block.

A preferred embodiment of the invention is illustrated in the accompanying drawings, in which

Figure 1 is a perspective view of the block;

Fig. 2 is a similar view of the half block;

Fig. 3 is a partial horizontal section through a joint between adjacent blocks;

Fig. 4 is a perspective view of a wall built of the blocks of my invention; and

Fig. 5 is a sectional view along the line V—V of Fig. 4.

As shown in Figure 1, the block indicated generally at **10** has a recessed panel **11** formed in a side **12** and an end **13**. The end **14** is provided with a groove **15** disposed centrally thereof. The usual voids **16** extend through the body of the block leaving a strengthening web **17** therebetween.

The half block **18** shown in Figure 2 is similar to the whole block, but is only half as long. Because of its reduced dimension, it has only one void **16**. The panels **11** on adjacent sides and the groove **15** in one end, however, are characteristic of both the whole and the half blocks.

Figure 3 shows how the groove **15** serves as a key for mortar **19** forming a joint between adjacent blocks. The recessed panel **11** in the end of the abutting block is likewise effective in this regard. As a result, a wall formed of blocks has very great resistance to horizontal thrust.

Figure 4 illustrates the exterior of a corner in a wall constructed of my improved blocks. As there shown, the stretcher courses are composed of blocks **10**. The blocks at the corner have a side exposed in one portion of the wall and an end in the other, presenting a fully finished corner without requiring special blocks.

A window opening **20** is defined by a course **21** of half blocks **18** laid with the groove **15** upwardly and parallel to the face of the wall. These blocks constitute a window sill. The jamb **22** is composed of alternating whole and half blocks while the lintel **23** is composed of whole blocks laid endwise with their grooved ends down. The grooved ends of the jamb blocks are likewise exposed to the window opening. The grooves **15** of the sill, jamb and lintel blocks thus provide a recess for the edges of a sash **24**. The alined voids **16** of the lintel blocks may be filled with concrete as shown at **25**, after disposing reinforcing bars **26** therein. The resulting beam is amply strong to carry the load of the blocks above the lintel blocks.

A coping **27** is formed by disposing blocks on end with their grooved ends down. The arrangement of the blocks forming the corner of the coping is clearly shown at **28**. The voids of these blocks are preferably filled with cement. By disposing the corner blocks horizontally, finished surfaces in both portions of the wall are provided.

Beams **29** may be laid in the wall to support a floor or deck roof **30**.

The advantages of my invention over the prior

practice in the manufacture of concrete blocks will be readily apparent. From the standpoint of appearance, my blocks are not artificial looking and on the contrary are very attractive when laid up in a wall. They are cheaper and lighter than rock faced blocks. The cost of the blocks, furthermore, is such that they may be used in foundations or other places where concealed from view without sacrificing economy. Since my blocks do not require concrete of a relatively dry mix for forming the face, they may be made of a wet mix and the molds vibrated to ensure proper filling and a smooth surface on the finished product impervious to moisture. All parts of the building block can be built up from the one type of block, including sills, jambs, lintels, copings, etc. The web 17 of the whole block is useful in picking up the blocks by one hand.

While I have disclosed but one embodiment of my invention, changes therein may be made without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. A building block having top and bottom faces constituting mortar-receiving portions of the block, and side and end faces, all generally at right angles to one another, at least one end face having a recessed panel whose margins are spaced inwardly from all four edges of such face, but which panel extends over the major portion of the face, the other end face having a slot therein extending from the top face to the bottom face, whereby, when such blocks are disposed end to end in courses, the slot in one block and the recessed panel in the end of an adjacent block form keys with the mortar therebetween.

2. A wall including an exterior corner composed of a plurality of courses of blocks, each of said blocks having top and bottom faces constituting mortar-receiving portions of the block, and side and end faces, all generally at right angles to one another, at least one end face having a recessed panel whose margins are spaced inwardly from all four edges of such face, but which panel extends over the major portion of the face, the other end face having a slot therein extending from the top face to the bottom face, whereby the slots and recessed panels of adjacent blocks laid end to end in said courses form keys with the mortar between adjacent blocks.

3. A wall including a window opening, said wall comprising a plurality of courses of blocks, each of said blocks having top and bottom faces constituting mortar-receiving portions of the block, and side and end faces, all generally at right angles to one another, at least one end face having a recessed panel whose margins are spaced inwardly from all four edges of such face, but which panel extends over the major portion of the face, the other end face having a slot therein extending from the top face to the bottom face, the blocks adjacent said window opening being laid with their slotted faces adjacent the said opening, providing a continuous recess thereabout adapted to receive the edge of a sash, the slot in the end of one block in a course and the recessed panel in the abutting end of an adjacent block disposed end to end therewith forming keys with the mortar disposed therebetween.

ALBERT HENDERSON.