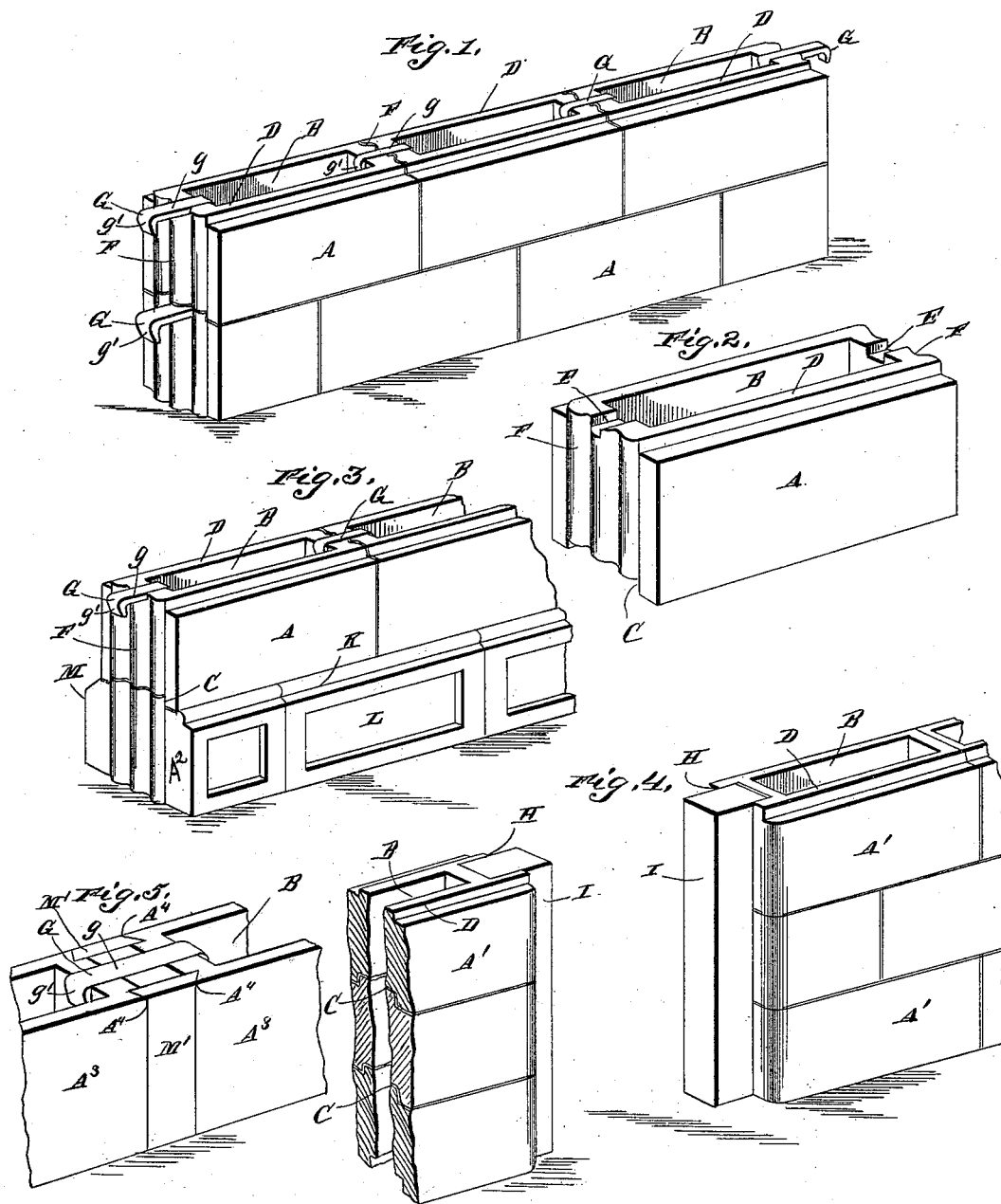


(No Model.)

H. S. PALMER.
BUILDING BLOCK.

No. 384,541.

Patented June 12, 1888.



Witnesses

C. B. Taylor.

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UNITED STATES PATENT OFFICE.

HARMON S. PALMER, OF CHATTANOOGA, TENNESSEE.

BUILDING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 384,541, dated June 12, 1888.

Application filed February 15, 1887. Serial No. 227,696. (No model.)

To all whom it may concern:

Be it known that I, HARMON S. PALMER, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Improvement in Building-Blocks, of which the following is a specification.

My invention relates to an improvement in building-blocks for walls and other structures; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a wall in course of erection and constructed with my improved building-blocks. Fig. 2 is a detailed perspective view of one of the blocks. Fig. 3 is a perspective view of a part of a wall of a house in course of erection, showing the lower blocks provided with moldings and panels on their inner sides to form a wash-board, and with offsets or shoulders on their outer sides to form a water-table. Fig. 4 is a similar view showing a window or door frame built into the wall. Fig. 5 is a similar view illustrating means for adjusting the length of the wall.

My building-blocks are composed of concrete molded into rectangular forms, and each block A has a vertical longitudinal opening, B, in its interior, which extends from its lower to its upper side and nearly from end to end of the block, thereby making the latter hollow, to reduce its weight and effect an economy of the material of which the block is composed.

On the lower side of the block is a longitudinal central groove, C, and on the upper side of the block is a longitudinal central tongue, D, adapted to enter the groove of its companion superincumbent blocks and bind the blocks together. On the upper side of each block are made grooves E, which extend from the ends of the opening B to the ends of the block, for the purpose to be hereinafter described. The ends of each block are provided with vertical flutes or scallops, F, adapted to fit together when the blocks are arranged end to end.

G represents clamps or keepers, which are preferably made of iron or other suitable metal, and comprise bars *g*, having depending arms

g' at their ends, the said arms being wedge-shaped longitudinally.

The bars are adapted to enter the grooves E of two adjoining blocks, and the arms of the clamps bear against the inner ends of the blocks, thereby locking them firmly together and preventing them from being longitudinally displaced. By reason of the grooves E the clamps are countersunk in the blocks, and are thus prevented from projecting beyond the upper sides thereof.

In erecting a wall the blocks are laid in horizontal courses, care being taken to have the joints in each course midway between the joints of the subjacent course, as shown.

I do not secure the blocks together ordinarily by means of cement or mortar, but prefer to employ strips of tarred paper or canvas coated with any suitable glutinous substance. These strips of tarred paper or canvas are inserted between the joints of the blocks, both at the ends and at the upper and lower sides thereof. The fluted meshed ends of the blocks admit of the paper being inserted between them without being torn, and effect joints which are sufficiently tight to exclude air and light.

By arranging some of the blocks directly over each other in building a wall, so that the interior openings in the blocks will align with each other, a chimney or flue can be formed, as will be readily understood. In this case the fluted ends of the blocks of that portion of the chimney or flue which projects above the roof give a very neat and tidy finish to the chimney.

In order to enable window or door frames to be built into the wall while the latter is being constructed, I provide some of the blocks A', which are to form the sides of the opening in the wall, with vertical rectangular grooves H in one end, the said grooves being adapted to receive and retain the sides of the frame I, as shown at Fig. 4. Those blocks which are to form the lower course of an outside wall just above the floor are made with moldings K on their inner sides, and panels or other ornamental forms, L, below the moldings to form the wash-board, and on their outer sides the said blocks are formed with projecting offsets or shoulders M, having beveled upper sides to form the water-table of the wall.

In order to avoid cutting any of the blocks to make all the courses of the wall of equal length, I provide certain blocks, A³, with vertical dovetailed grooves A⁴ on their opposing ends, and further provide space blocks or keys M' of various widths and made of the same material as the blocks. These keys have their side edges beveled and thereby adapted to enter the grooves A⁴ and fill the spaces between the blocks A³, as shown at Fig. 5.

By means of the blocks and devices hereinbefore described walls can be erected very rapidly and without employing the services of skilled masons. Such walls are also absolutely fire and water proof, and are exceedingly strong and durable. Such walls are also adapted to be taken down, when desired, very quickly and easily and without destroying the material.

If it be desired to increase the strength and durability of a wall erected for permanent use, this may be accomplished by omitting the use

of the tarred paper and pouring concrete in a thin and plastic condition into the hollow of the wall, so as to completely fill the same.

Having thus described my invention, I claim--

As a new article of manufacture, a hollow rectangular concrete building block having the projecting tongue D on its top and the groove C in its lower side, the tongue of one block fitting in the groove of the superimposed block, and the ends of the block being provided with a series of scallops or vertical corrugations extending entirely across the end thereof, substantially as described and shown.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HARMON S. PALMER.

Witnesses:

T. T. WILSON,

WM. H. PAYNE.