N. J. CLAYTON. CELLULAR WALL BUILDING BLOCKS.

No. 181,043. Patented Aug. 15, 1876 Fig. 1 Fig. 3 Fig. 7 Fig. 5 Fig. 6 WITNESSES: N. Hongwist

UNITED STATES PATENT OFFICE.

NICHOLAS J. CLAYTON, OF GALVESTON, TEXAS.

IMPROVEMENT IN CELLULAR-WALL BUILDING-BLOCKS.

Specification forming part of Letters Patent No. 181,043, dated August 15, 1876; application filed May 22, 1876.

To all whom it may concern:

Be it known that I, NICHOLAS J. CLAYTON, of Galveston, in the county of Galveston and State of Texas, have invented a new and Improved Cellular-Wall Building-Block, of which

the following is a specification:

Figure 1 is a perspective view of a portion of a building in process of erection, illustrating the use of my improved building-blocks. Fig. 2 is a detail view of one of the main-wall building-blocks. Fig. 3 is a detail view of one of the partition-wall building-blocks. Fig. 4 represents two forms of angle-blocks or quoins. Fig. 5 is a perspective view and a cross-section of one of the bearing-blocks for the joists. Fig. 6 is a detail view of one of the flue-blocks. Fig. 7 represents a jamb-block.

The object of this invention is to furnish building - blocks of artificial stone, cement, baked clay, &c., for the construction of hollow-walled buildings, which shall be so constructed as to tie the outer and inner parts of the hollow walls securely together, and form a wall with numerous cells or passage through

The invention consists in the main building-blocks made with an offset in their middle parts, so that one part of said blocks may form a part of the outer wall, and the other part may form a part of the inner walls; in the corner-blocks, whether made with their outer ends solid for the thickness of the wall or not, in combination with the main blocks; in the bearing-blocks, in combination with the main blocks, for supporting the ends of the joists; in the flue-blocks, made straight and with a flange upon the inner side of their middle part, in combination with the main blocks, as hereinafter fully described.

A are the building-blocks for the main walls, which are made with offsets in their middle parts, so that the one end part may | form a portion of the outer wall, and the other part may form a part of the inner wall, the middle part or web binding the two walls together. The offsets of the blocks A have rabbets a' formed in them to form seats for

the ends of the adjacent blocks.

By this construction, when the blocks are laid, there will be spaces or cavities between the end parts of the adjacent blocks.

The blocks for the partition-walls are the same as those for the main walls, except that they may be made lighter, and the planes of their end ports at a less distance apart, making lighter walls and narrower cavities.

The partition-wall blocks may be made with or without the rabbets a', as may be desired.

B represents corner-blocks, which may be formed of two wings meeting each other at right angles, the shorter wing being of a length equal to the thickness of the wall; or the outer end of the block B may be made solid for a distance equal to the thickness of the wall, and with a hole through said solid part. C are right-angled blocks, the outer wing of which is vertical, and forms a part of the outer walls. The inner wing of the blocks C is horizontal, and forms a support or rest for the ends of the joists. Through the horizontal parts of the blocks C, between the places where the ends of the joists will rest, are formed holes to connect with the cavities above and below said blocks.

The space above the horizontal wing of the block C, and between the ends of the joists, may be filled with concrete, or with blocks of the proper size, to support the blocks A placed

above them.

For forming chimney and ventilating flues, the blocks D may be used, which are made with a projection or flange upon the middle part of their inner sides of such a height as to meet the inner ends of two adjacent blocks, and thus form flues. In places where woodwork is to be attached to the wall, recesses are formed in the blocks to receive pieces of wood to which said wood-work may be nailed.

In the upper and lower edges or sides of the blocks A are formed holes or recesses of any desired shape for the cement or mortar, with which said blocks are laid, to enter, and thus key or dowel the said blocks together.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. The building-block A, made of two equal parts, connected by a middle portion at an angle thereto, as shown and described.

2. The block A, having offset in the middle, with rabbets a', arranged as and for the purpose set forth.

- 3. The corner-block made solid for a distance equal to the thickness of wall, and with a hole through said solid part, as shown and described.
- 4. The bearing-blocks C, in combination with the blocks A, for supporting the ends of the joists, substantially as herein shown and described.
- 5. The flue-blocks D, made straight and with a flange upon the inner side of their middle part, in combination with the blocks A, substantially as herein shown and described.

 NICHOLAS J. CLAYTON.

Witnesses:

WM. THOMSON, I. M. ALLARDYCE.