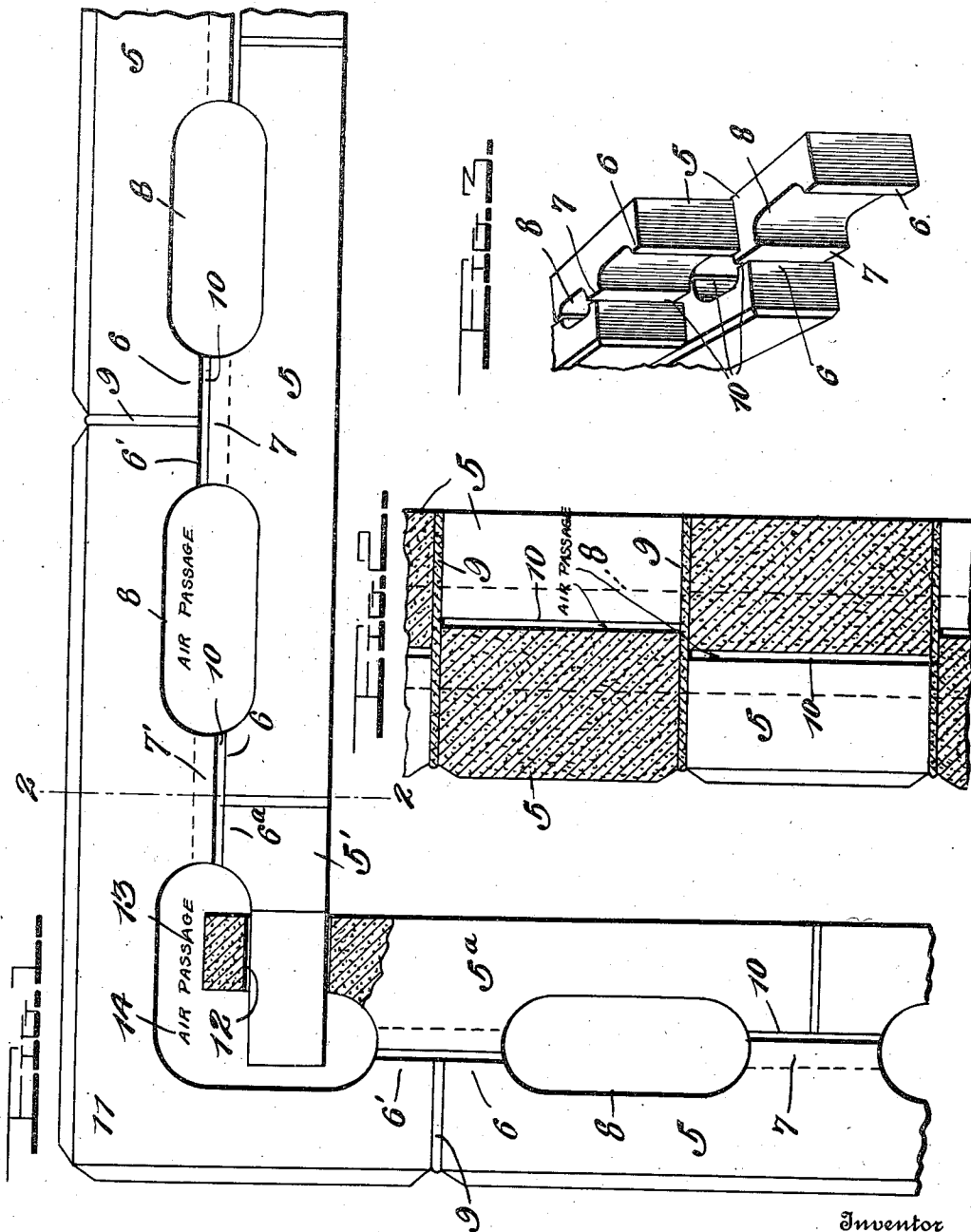


T. S. SMITH.
 BUILDING CONSTRUCTION.
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To all whom it may concern:

Be it known that I, THOMAS S. SMITH, a citizen of the United States, residing at Ashland, in the county of Saunders and State of Nebraska, have invented certain new and useful Improvements in Building Construction, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to building construction and more particularly to an improved form of cement block whereby a building wall may be constructed having vertical and longitudinal ventilating passages, while at the same time the entrance of moisture to the inner face of the wall will be effectually prevented.

Another object of the invention is to provide a cementitious building block of simple form, said blocks being adapted for arrangement in longitudinal courses, each course of blocks consisting of two longitudinal series, the blocks of one series overlapping the ends of adjacent blocks of the other series, said blocks being provided with means whereby continuous vertical air passages are formed in the wall and a longitudinal passage is formed in each course of the building blocks connecting said vertical passages.

Another object of the invention resides in the provision of a corner block of improved form and means for connecting the inner longitudinal series of wall blocks at the corner of the wall to secure a rigid connection between the side and end building walls and a vertical air passage at the corner of the wall.

A still further object of the invention is to provide a building block whereby a wall may be easily and quickly constructed at small cost, said blocks being so formed and arranged that the necessity of employing metallic binders between the series of blocks is eliminated.

With the above and other objects in view, the invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which

Figure 1 is a horizontal section through one of the side and corner walls of a building illustrating the manner in which the blocks are laid or assembled and the connection of the inner series of blocks at the corner of the wall; Fig. 2 is a section taken on the line

2—2 of Fig. 1; and Fig. 3 is a perspective view showing a number of the blocks of two adjacent longitudinal courses properly assembled.

Referring in detail to the drawing 5 designates the building blocks of which the wall is formed. These blocks are constructed from cement and are molded in a suitable machine of any approved form now in common use for this purpose. These blocks are of elongated rectangular form as shown and at the ends thereof upon one face they are provided with the vertical ribs 6. Upon the same face of the block and centrally thereof another vertical rib 7 is formed, said latter rib, however, being of greater width and thickness than the end ribs 6 and projecting beyond the plane of the vertical faces of said end ribs. The provision of these ribs 6 and 7 upon the face of the building block forms the spaced channels 8 thereon.

In assembling the blocks in the formation of a building wall, the same are laid in longitudinal courses in the usual manner, each course consisting of two parallel alined series of blocks. As clearly shown in Figs. 2 and 3, the end ribs 6 on one of the longitudinal series of blocks of each course are opposed to the central ribs 7 on adjacent blocks of the other longitudinal series, the abutting end ribs 6 of adjacent blocks having their inner vertical edges disposed in the same plane as the corresponding edges of the rib 7 on the block of the opposed series. The blocks of the next longitudinal course of the wall are adapted to be laid upon the assembled blocks of the last course, mortar or other binding plastic material indicated at 9 being arranged upon the upper surfaces of the blocks and the opposed ends thereof. The blocks of each series of the new course extend upon the opposed blocks in the corresponding series of the lower course to the central portions thereof. As shown in Fig. 3 the inner vertical face of the central rib 7 of each block is disposed out of the vertical plane of the corresponding faces of the end ribs 6 on the blocks of the lower series, and extends beyond the face of the central rib on the other series of blocks of the lower course. The opposing faces of the central and end ribs of the longitudinal series of blocks in each course are spaced apart as indicated at 10 so that a longitudinal air passage is provided for each course of building blocks. The channels 8 of the building blocks, form

continuous spaced vertical air passages through the wall, thus insuring the exclusion of all dampness from the inner face of the wall and rendering the wall absolutely fire-proof.

Attention is now directed to Fig. 1 wherein there is illustrated a corner block 11 of right angular form in cross section. Each end of this block has a vertical rib 6' formed upon its inner face and upon the longitudinally extending portion of the block a vertical rib 7' is formed which is provided for the same purpose and corresponds in all particulars with the ribs 7 above referred to. A short longitudinal wall block 5' is provided for the corner of the wall which has a laterally disposed rib 6^a formed on one face. This block is adapted to be disposed through an opening 12 provided in one end of the block 5^a of the inner series of blocks forming the end wall of the building. The outer end faces of the blocks 5' and 5^a are spaced from the inner face of the angularly extending portions of the corner blocks 11 as indicated at 13 so as to provide a continuous vertical air passage 14 extending around the enlarged end portions of the blocks 5' and 5^a. It is of course, understood that the walls of the openings 12 in the end wall blocks are first provided with a lining of mortar so that the proper adhesiveness can be secured upon the walls of the block 5' to securely retain the same in position.

From the foregoing it is believed that the form and construction of my improved building blocks will be fully understood as well as the manner of assembling the same in the formation of the building wall.

The invention provides means whereby the walls of buildings may be easily and quickly constructed at a minimum expense of time and manual labor, the relative arrangement of the courses of wall blocks effectually excluding all moisture from the inner faces of the walls.

It will be understood that the outer faces of the outer series of wall blocks may be ornamented in any desired manner to enhance the attractive appearance of the wall. It will further be understood that the invention is susceptible of many minor modifications in the form and proportions of the building blocks without departing from the essential feature or sacrificing any of the advantages thereof.

Having thus described the invention what is claimed is:—

1. In a building wall, longitudinal and end wall sections each consisting of inner and outer blocks, said blocks having formed on their inner faces spaced channels to form

central and end ribs, the said central rib being of substantially twice the width and length of each end rib, the opposite faces of the inner and outer blocks of each section being spaced apart to provide air channels, corner blocks of right angle form in cross section and provided on their inner face with spaced channels one of which being right angular in cross section, the inner blocks of the longitudinal section being each provided with a reduced extension, the inner blocks of the end wall section at the corner of the wall having an apertured extension for the reception of the said reduced extensions, the said extensions on the inner blocks of the longitudinal and end wall sections at the corner of the wall extending within the right angular spaced channel formed within the outer right angular corner block and spaced therefrom, whereby a continuous vertical air passage is formed in the corner of the wall having communication with the air channels in the vertical and end wall sections which are produced by spacing the inner and outer blocks.

2. In a building wall, longitudinal and end wall sections each consisting of inner and outer wall blocks having their opposed faces spaced apart to form air channels therein, right angular corner blocks, the inner block of the end wall section at the corner of the wall being provided with an opening to receive the inner block of the longitudinal section of the wall, the engaged ends of said inner blocks of the wall sections being spaced from the inner face of the corner block and from said inner blocks whereby a continuous vertical air passage is formed in the corner of the wall extending around the projecting end portions of said blocks and having communication with the channels in the longitudinal and end wall sections.

3. In a building wall, a corner block of right angular form in cross section, an inner longitudinal wall block, an end wall block having an opening through which said longitudinal wall block is disposed, the end faces of said end and longitudinal wall blocks being spaced from the inner face of the corner block whereby a continuous vertical air passage is formed in the corner of the wall extending around the projecting end portions of said inner longitudinal and end wall blocks.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

THOMAS S. SMITH.

Witnesses:

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