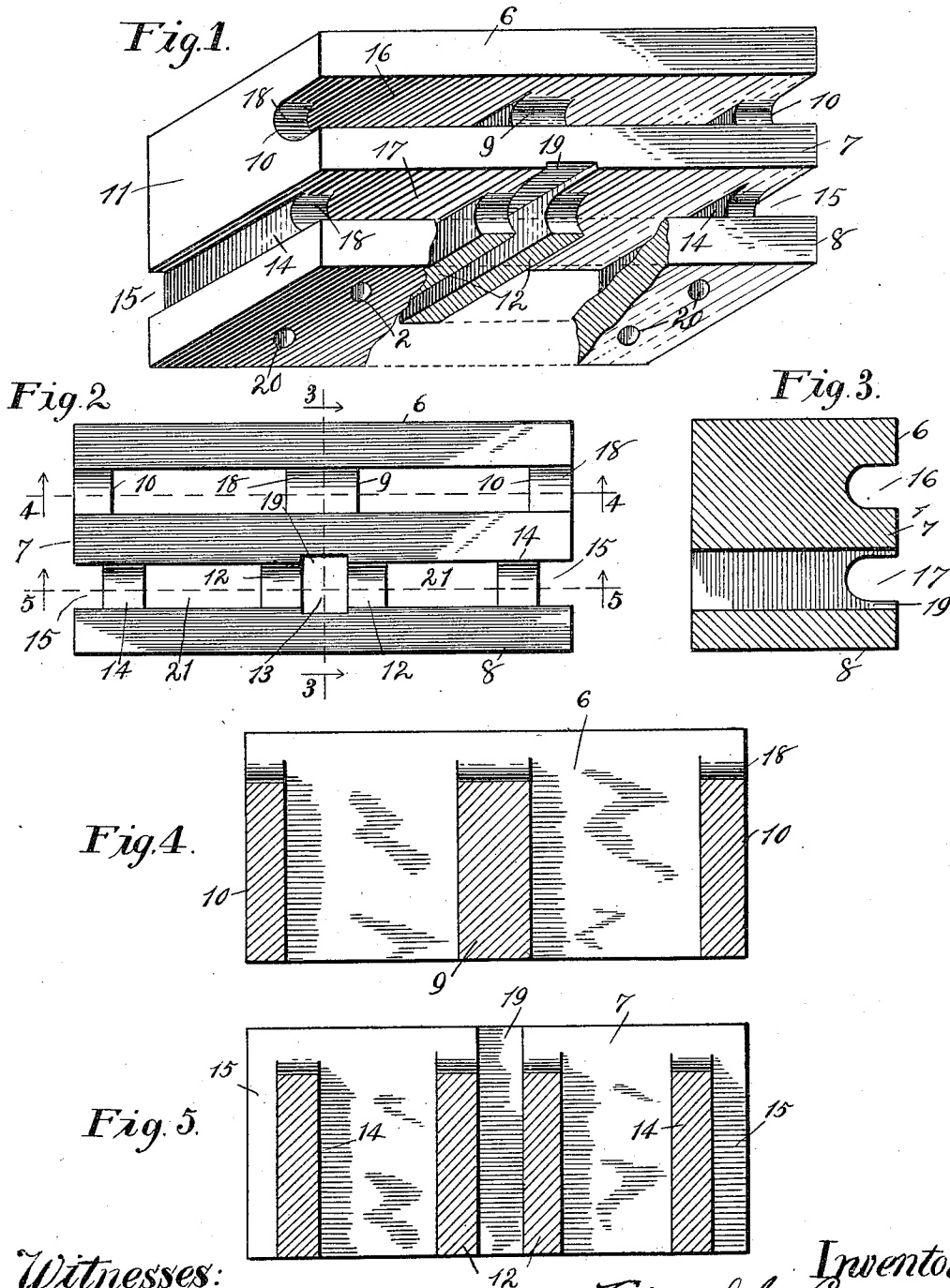


E. C. LANNING.
CEMENT BLOCK.
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960,562.

Patented June 7, 1910.



Witnesses:

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UNITED STATES PATENT OFFICE.

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Specification of Letters Patent.

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Application filed August 8, 1907. Serial No. 387,598.

To all whom it may concern:

Be it known that I, EDWARD C. LANNING, citizen of the United States, residing at St. Charles, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Cement Blocks, of which the following is a specification.

My invention relates to building blocks, and refers especially to articles made of cement, clay, or other similar plastic material which has the property of setting or becoming hard.

The important objects of my improvements are to supply a hollow block for building walls, in which provision is made for leaving communicating air spaces for the purpose of rendering the walls so constructed less pervious to moisture and to produce a wall having heat non-conducting properties which are desirable in ordinary structures.

Other objects attained by the improved block herein described are to furnish separate air spaces extended in two dimensions and so related as to afford special protection against radiation, and having the additional advantage of rendering the walls in a high degree fire resisting, and to furnish a building block having the advantages set forth that can be rapidly produced at a minimum cost.

I accomplish the objects sought by means of the structure illustrated in the accompanying drawing which forms a part of this specification and in which:—

Figure 1 is a perspective view of my improved block, a portion of one face being broken away; Fig. 2 is a top plan view; Fig. 3 is a transverse section taken on the line 3—3 of Fig. 2, and Figs. 4 and 5 are longitudinal sectional views on the lines 4—4 and 5—5 respectively, of Fig. 2.

The construction of the block will be more easily and clearly understood by considering it as composed of three parallel plates 6, 7, and 8, rectangular in form and joined together by vertical ribs or webs. The median plate 7 is joined to the outer or face plate 6, by three webs 9, 10, the former 9 located midway between the ends of the plates and the latter, 10, joining the extreme ends and producing in conjunction with the margins a plane surface 11. The said plate

7 is connected to the opposite face plate 8 by four webs the two inner webs 12, being separated by a comparatively narrow space 13 and the outer or end webs 14 are located a short distance from the end margins of the adjacent plates, thus leaving a channel or groove 15, in the end faces of the block. Upon the lower edge of the block the said plates and webs extend to and are limited by a single plane. The said webs, however, are discontinued just short of the upper face, thus leaving longitudinal channels 16, 17. The upper margins or ends of the webs are made concave, as shown at 18, and between the median webs 12, 13 the plate 6 is furnished with a channel or recess 19. This channel, may be made of considerable comparative depth without weakening the plate 6 since this part is reinforced by the web 9. The outer surface or face of the plate 6 is left intact, but the plate 8 is furnished with apertures 20, which communicate with the spaces 21, which are situated between the plates 7, 8, and limited longitudinally by the ribs 12 and 14.

It will be seen that a wall constructed of blocks having the formation thus described, will have both vertical and horizontal air spaces co-extensive with the wall structure, and as these spaces are in communication, the arrangement will result in a general distribution of the non-conductive fluid.

While the vertical channels or spaces upon one side of the median plate 7 are arranged to connect with the channels located upon the corresponding side of contiguous blocks, it will be noted that there is no communication between the channels upon opposite sides of said plate, and as a consequence, a wall laid in courses will have two distinct systems of air flues.

Having thus described my invention I claim:—

A building block composed of an inner face plate, an outer face-plate and a middle plate integrally formed and connected by parallel ribs spaced apart to form vertical air-chambers, the end ribs between the inner face plate and the middle plate being inset to provide inclosed flues in the ends of the blocks when arranged in a wall, and the center ribs between the inner face-plate and the middle plate being spaced apart to form

an inclosed flue midway of the block one of
said ribs between the middle plate and the
outer face plate being arranged opposite the
said midway flue, and all of said ribs termi-
5 nating short of one face of the block to form
parallel continuous passages separated from
each other by the middle plate.

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

EDWARD C. LANNING.

Witnesses:

GEO. H. KELLER,
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