March 18, 1924. 1,487,212

R. L. COBURN

SYSTEM OF BUILDING CONSTRUCTION

Filed Oct. 5, 1920

Fig. 1

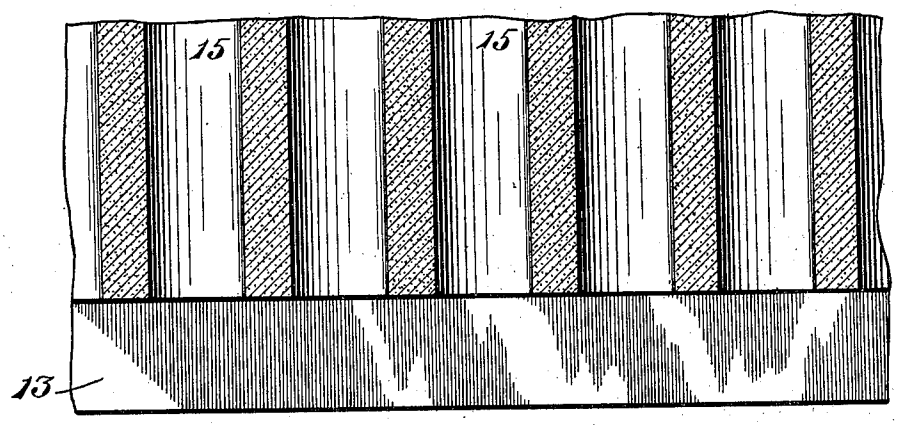


Fig. 2

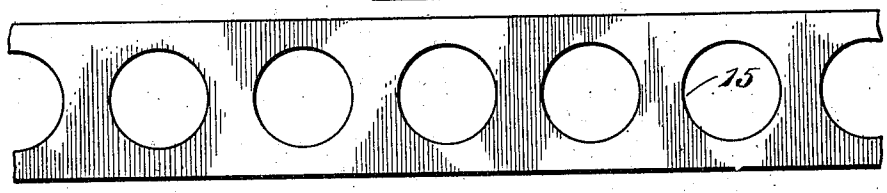
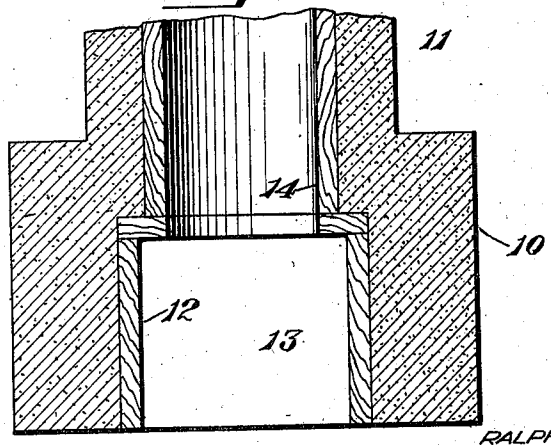


Fig. 3



INVENTOR.
RALPH L. COBURN.
BY Chas. E. Townsend,
ATTORNEY

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UNITED STATES PATENT OFFICE.

RALPH L. COBURN, OF SAN FRANCISCO, CALIFORNIA.

SYSTEM OF BUILDING CONSTRUCTION.

Application filed October 5, 1920. Serial No. 414,863.

To all whom it may concern:

Be it known that I, RALPH L. COBURN, citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Systems of Building Construction, of which the following is a specification.

This invention relates to building structures, and more particularly to such building structures having walls formed of clay, or a like material, which requires baking or drying for setting and hardening.

The object of the invention is to form the structure so that it may be efficiently baked or dried by artificial heating means.

In carrying out the invention the structure, whether for a house or other purposes, is formed with a hollow base and the walls supported thereby are formed with a plurality of passages communicating with the passage formed in the base. The upper ends of the wall passages preferably communicate with the atmosphere, and by means of a fire or other artificial heating means in the base passage a circulation of heat through the passages is had and a uniform baking or drying of the structure accomplished.

The invention is illustrated by way of example in the accompanying drawings, in which:

Fig. 1 is a central longitudinal vertical section of a wall showing the use of my invention.

Fig. 2 is a top plan view of the same.

Fig. 3 is a transverse vertical section view illustrating the forms used for forming different passages.

Referring to the drawings in detail, 10 indicates the base of the structure, and 11 a vertical wall supported thereby. The base in this instance is shown of greater thickness than the wall. This, however, is only preferable. It can be arranged to suit the judgment of the builder. The structure is shown and built like a concrete wall, that is, by means of retaining walls, and within the retaining walls there is provided forms for securing the different passages necessary.

In Fig. 3 the form 12 is shown which extends the entire length of the structure, and which forms the base passage 13, as shown in Fig. 1. In the top of the form 12 longitudinally thereof there is provided a plurality of spaced circular openings, and over each opening there is seated a cylindrical form 14. These cylindrical forms provide passages 15 in the wall 11. The forms in this instance are made of wood, the form 12 being square in cross section, and the form 14 being circular.

In baking the structure the forms and retaining walls are preferably retained. In case wooden forms are used they may be burnt while baking the walls of the structure, and in case the walls are made of sheet iron they may be removed after the baking is completed, or they may be allowed to remain for strengthening and reinforcing the structure, if so desired.

The length of time for baking and the intensity of the heat applied is, of course, dependent upon the material used in forming the structure. The fire is made in the base passage 13, which will supply dry heat. Other suitable means for supplying a dry heat of course can be used. The heat will circulate through the wall passage 15, and in this way a uniform and expedient baking of the structure may be had.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A method of constructing building walls consisting of casting a permanent vertical wall of unbaked clay, forming said wall with a series of vertically extending passageways on its interior and a horizontally extending passageway at its base communicating with all of the said vertical passagewavs, and baking the material of said wall by means of heat applied within the communicating passageway.

2. A method of constructing permanent building walls which comprises the casting of a vertical wall of unbaked plastic material and forming said wall with a horizontal passageway at its base and a plurality of vertically extending passageways extending the height of the wall and forming a communication between the atmosphere

and the horizontal passageway, and baking said wall by introducing heat within said horizontal passageway.

3. A process of constructing a building which includes forming a wall of plastic clay with continuous vertical passages and burning the walls by means of heat applied at the bottom of the vertical passages.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

RALPH L. COBURN.

Witnesses:
SYDNEY OSBORNE,
T. C. CHIOINO.