No. 875,983. PATENTED JAN. 7, 1908.

J. B. CLAYTON.

CONCRETE CONSTRUCTION.

APPLICATION FILED MAY 20, 1907.

Fig. 1.

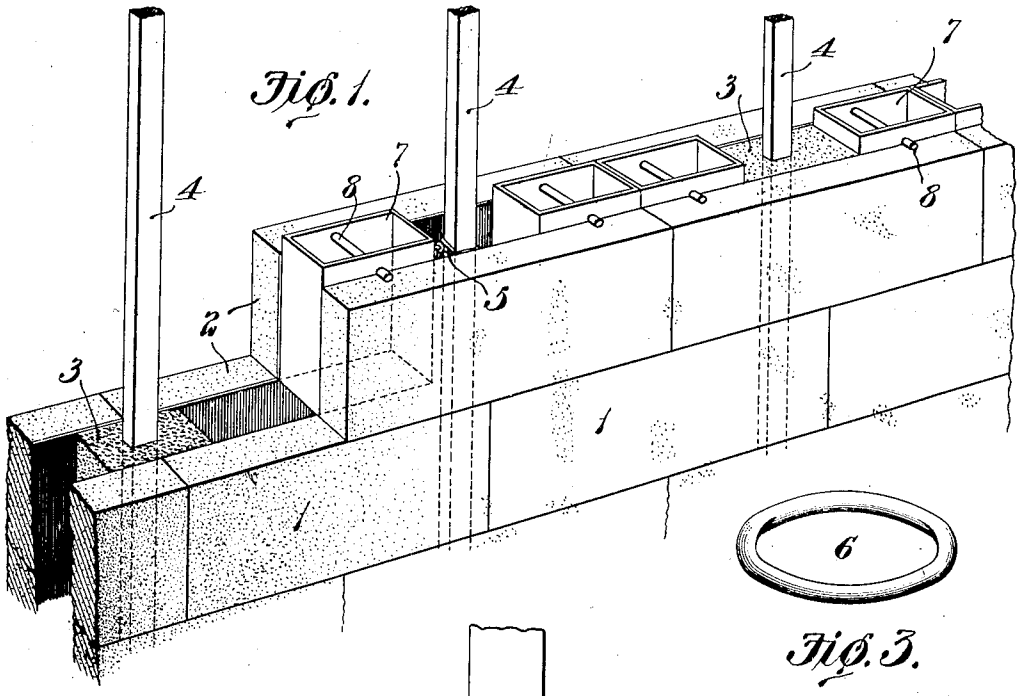
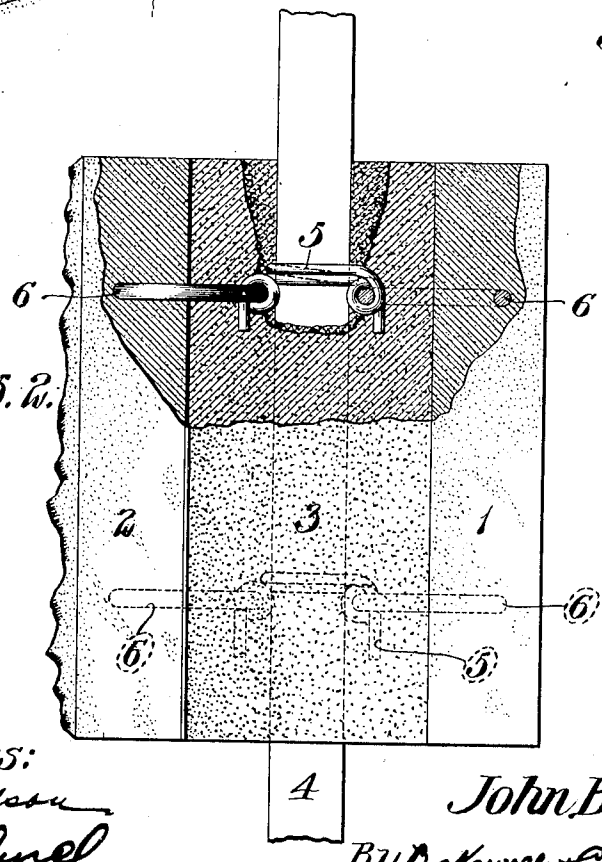


Fig. 3.

Fig. 2.



Witnesses:

Geo. R. Cadson

Wells L. Church

Inventor,

John B. Clayton.

By Rakewell & Cornwall Attys.

UNITED STATES PATENT OFFICE.

JOHN B. CLAYTON, OF KIRKWOOD, MISSOURI.

CONCRETE CONSTRUCTION.

No. 875,983. Specification of Letters Patent. Patented Jan. 7, 1908.

Application filed May 20, 1907. Serial No. 374,643.

To all whom it may concern:

Be it known that I, JOHN B. CLAYTON, a citizen of the United States, residing at Kirkwood, Missouri, have invented a certain new and useful Improvement in Concrete Constructions, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view showing a portion of a wall embodying my invention; Fig. 2 is an enlarged cross sectional view of one course of the wall; and Fig. 3 is a detail view showing one of the devices with which the slabs are provided to enable them to be connected together.

This invention relates to concrete constructions, and particularly to walls for buildings.

One object of my invention is to provide a concrete wall which is so constructed that dampness and moisture cannot penetrate to the interior of the wall.

Another object is to provide a concrete wall which presents a neat and ornamental appearance and which can be constructed at a small cost and in a short space of time. Other desirable features of my improved construction will be hereinafter pointed out.

Referring to Fig. 1 of the drawing which illustrates a wall constructed in accordance with my invention, 1 and 2 designate, respectively, inner and outer slabs formed of thoroughly dried or seasoned concrete, the outer slabs preferably having their outside faces roughened, as shown in Fig. 2, to imitate stone. The slabs 1 and 2 are spaced apart from each other, and a portion of the space between said slabs is filled in with concrete 3 having a vertically disposed strengthening rod or bar 4 embedded therein. The outer and inner slabs are secured to each other in any suitable manner, the means which I have herein shown for accomplishing this consisting of wires 5 which pass through eyes or devices 6 embedded in the inner faces of the slabs. Preferably, the wires 5 of some of the slabs will be wound around the reinforcing rods or bars 4 so that some of the slabs of each course will be permanently connected to the reinforcing members.

In constructing the wall I first lay up a course of slabs and connect them together by the wires 5 some of which I wind around vertically disposed rods 4 arranged between the outer and inner slabs. I then fill in a portion of the space between each pair of slabs with concrete in a very plastic condition, the wet concrete surrounding the rod which forms a reinforcing member for the concrete. Before pouring the concrete between the slabs I interpose forms 7 between the slabs so as to provide air spaces in the completed wall. Preferably, these forms 7 are hollow and are constructed of sheet metal, each form being provided with lateral projections herein shown as a cross pin 8 which rests upon the upper edge of the slabs when the form is in operative position. After one course of the wall has been laid I commence the second course and arrange the outer and inner slabs of the second course so that they break joints with those of the first course. The forms 7 that were used in constructing the first course are removed and are then used with the second course, said forms being so arranged that the air spaces between the slabs of the second course will aline with those of the first course so that the completed wall will be provided with continuous air spaces.

The rods 4 are incased throughout their entire length in concrete so that continuous concrete posts are formed to which some of the outer and inner slabs of each course are permanently connected. The inner faces of either or both slabs, preferably the outer slabs, are coated with water-proof paint or some other suitable water-proof material that will prevent the dampness and moisture from penetrating to the interior of the wall. A construction of this character is inexpensive as the slabs can be molded at the factory and then shipped in compact form to the place where the wall is to be erected. Furthermore, such a construction enables a wall to be built quickly as it is not necessary to wait for the concrete to set or harden, the slabs being thoroughly dried and seasoned before they leave the factory.

Prior to my invention it was possible to construct only a small portion of a concrete wall at a time, it being necessary to then wait for the concrete to set or harden before any weight could be placed upon it. This is entirely overcome by my improved construction as the slabs are thoroughly seasoned so that it is not necessary to wait for the filling of concrete between the slabs to harden.

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

A wall construction comprising an inner and outer portion each of which is made up of rectangular-shaped concrete slabs arranged in courses, an approximately ring-shaped device partially embedded in the inner face of each of said slabs, said slabs being so disposed that the ring-shaped devices in the inner portion of the wall are located oppositely to the ring-shaped devices in the outer portion of the wall, concrete posts interposed between said inner and outer wall portions and separated from each other to provide continuous air spaces, a vertically disposed metallic reinforcing member embedded in the concrete in each of said posts, and flexible connecting members secured to the ring-shaped devices in the oppositely disposed slabs of said inner and outer wall portions and being wrapped around the reinforcing members of the concrete posts; substantially as described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this seventeenth day of May 1907.

JOHN B. CLAYTON.

Witnesses:
WELLS L. CHURCH,
GEORGE BAKEWELL.