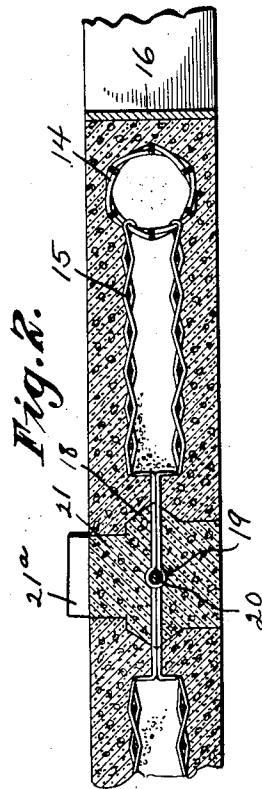
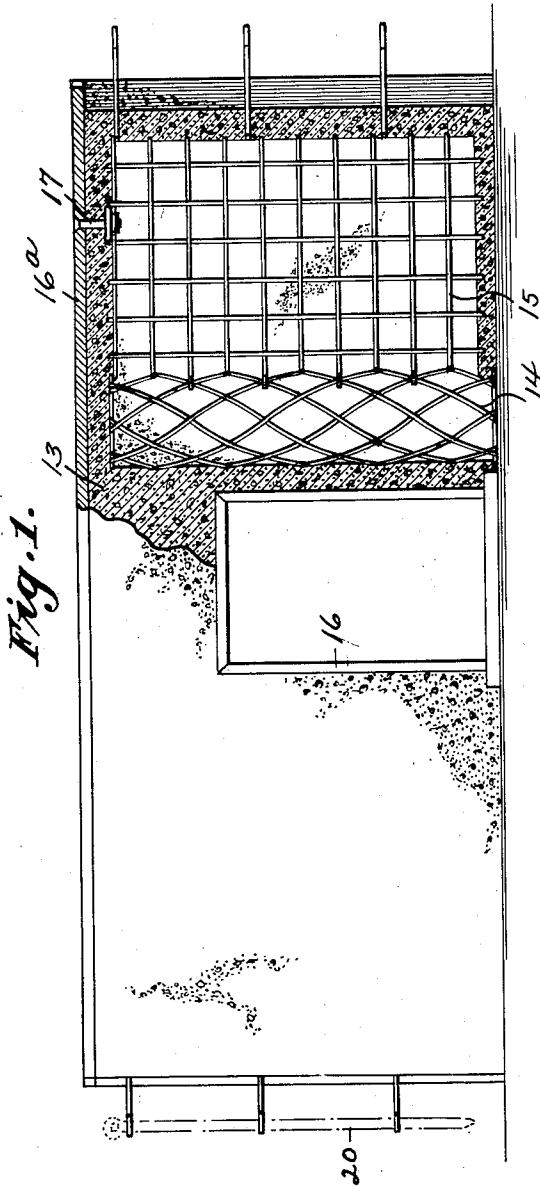


R. C. COTTMAN.
BUILDING WALL CONSTRUCTION.
APPLICATION FILED JULY 13, 1920.

1,392,402.

Patented Oct. 4, 1921.

2 SHEETS—SHEET 1.



Inventor
Richard Clark Cottman

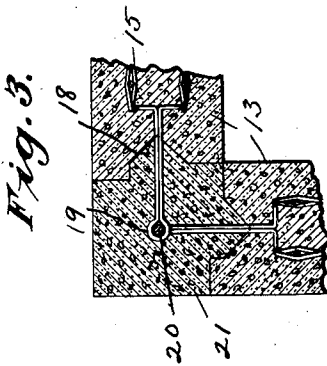
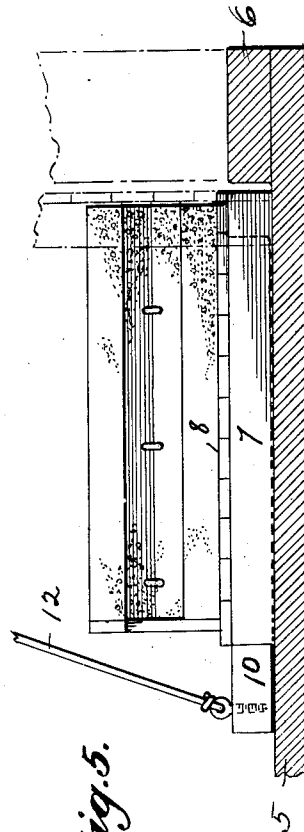
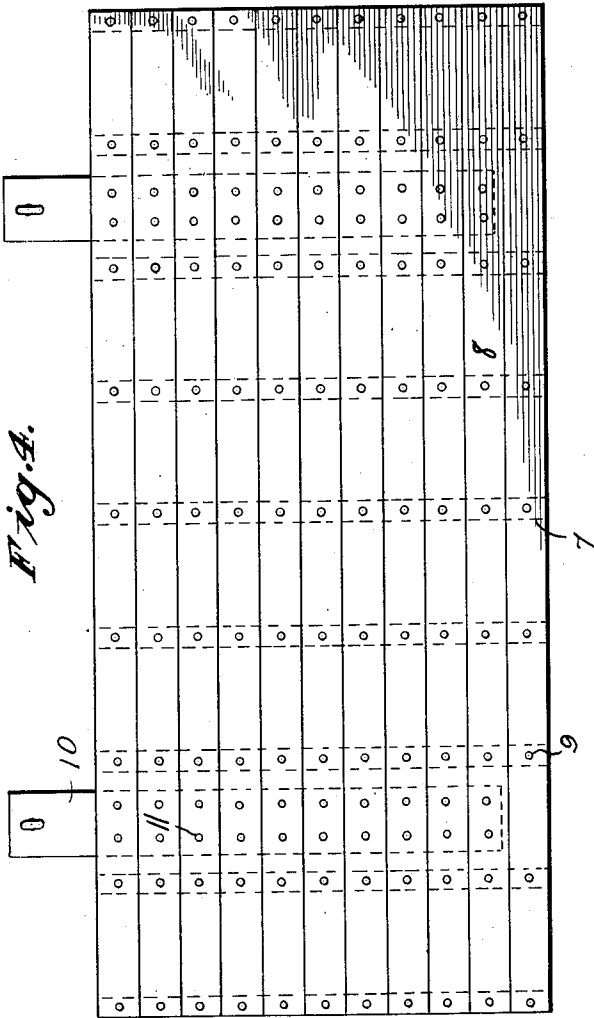
By *Shepherd Campbell*

Attorneys

R. C. COTTMAN.
 BUILDING WALL CONSTRUCTION.
 APPLICATION FILED JULY 13, 1920.

1,392,402.

Patented Oct. 4, 1921.
 2 SHEETS—SHEET 2.



Inventor
 Richard Clark Cottman

By *Shepherd Campbell*
 Attorneys

UNITED STATES PATENT OFFICE.

RICHARD CLARK COTTMAN, OF MERCED, CALIFORNIA.

BUILDING-WALL CONSTRUCTION.

1,392,402.

Specification of Letters Patent.

Patented Oct. 4, 1921.

Application filed July 13, 1920. Serial No. 395,987.

To all whom it may concern:

Be it known that I, RICHARD CLARK COTTMAN, a citizen of the United States, residing at Merced, in the county of Merced and State of California, have invented certain new and useful Improvements in Building-Wall Construction, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to building wall construction and it has for its object to provide an improved type of wall constructed in such manner that it may be manufactured in a horizontal position and afterward elevated to a vertical position.

15 A further object of the invention is to provide an improved wall of the character indicated having means for hingedly uniting the ends of adjacent wall sections or for hingedly uniting the wall sections at the corners, together with means for filling in the joints between the wall sections in such manner as to effectually prevent the passage of air therethrough and to form an absolutely weather-proof joint.

20 A wall constructed in accordance with the present invention saves labor and material, prevents the waste of lumber for forms and scaffolding, saves the cost of lathing and plastering and, if desired, saves the cost of stuccoing, since a light finish on the interior and a pebble-dash finish on the exterior will provide a sound and well finished wall, at much less cost than by the present methods of construction.

25 Further objects and advantages of the invention will be set forth in the detailed description which now follows.

In the accompanying drawings:

30 Figure 1 is a view partly in side elevation and partly in longitudinal section of a wall constructed in accordance with the invention;

35 Fig. 2 is a horizontal sectional view through parts of two adjacent alined wall sections;

Fig. 3 is a horizontal sectional view through one of the corners;

40 Fig. 4 is a plan view of the platform upon which the wall is to be constructed and by which the wall is afterward swung to vertical position; and

45 Fig. 5 is an end elevation of the form with a wall thereon and with the floor and a part of the foundation in section.

50 Like numerals designate corresponding

parts throughout the several figures of the drawings.

Referring to the drawings and particularly to Fig. 5, 5 designates the floor and 6 the foundation which is preferably built up about four inches above the floor all around. The platform illustrated in Fig. 4 consists of a plurality of 2x4 timbers 7 laid on edge on the floor, with boards or sheathing 8 nailed to them as indicated at 9. Two or more pieces of 4x6 timbers 10 are nailed to the platform as at 11, these pieces of timber lying between adjacent 2x4's. The timbers 10 project a sufficient distance from one side of the platform, to permit of the attachment thereto of a rope 12, from a derrick, not shown, by which the platform and the wall thereon may be raised to a vertical position.

55 The main body of the wall is formed of concrete indicated at 13, this concrete having tubular columns of wire mesh indicated at 14 embedded therein and having longitudinally extending webs 15 of metal lath or other wire mesh located therein, by which the walls are lightened and strengthened.

60 The space between the webs 15 may be left empty or it may be filled in as desired. Door or window frames indicated at 16 may be put in position, when the wall is lying horizontally, so that the completed wall will be ready for use after being lifted to a vertical plane. Wooden plates 16^a are preferably secured to the upper edges of the walls by bolts 17 that are embedded in the concrete of the wall, these plates serving to support second floor joists or other timbers, as desired. The ends of the walls are formed with recesses 18. Eyes 19 project from the ends of the wall and receive vertical rods 20, which serve to tie adjacent wall sections together, whether the walls lie in longitudinal alinement with each other or whether they lie at right angles to each other as in Fig. 3. In either case, a filling of concrete or cement indicated at 21 completes the joint between the walls, projecting portions 22 of this filling entering the recesses 18 to break the joint through the wall and form a weather-proof joint at this point. The connecting of the wall sections by the eyes and pins permits limited movement of the wall sections with relation to each other so that they may be brought to positions of accurate alinement, while at the same time these sections are tightly tied together. Furthermore the eyes and pins form rein-

forcing elements in the filling material 21 to prevent lateral shifting of this filling material and to maintain the filling in accurate alinement with the outer face of the wall.

5 The filling material may, if desired, be caused to project beyond the face of the wall as indicated at 21^a, in Fig. 2, so that this material not only serves as a joint in completing the wall, but may be caused to serve
10 as a pilaster for supporting beams, trusses, or the like.

From the foregoing description it will be seen that simple and efficient means are herein provided for carrying out the objects
15 of the invention. However, it is to be understood that the invention is not limited to the precise construction set forth but that it includes within its purview whatever changes fairly come within either the terms
20 or the spirit of the appended claim.

Having described my invention, what I claim is:

A wall construction comprising a plurality of separately built up units lying in spaced

relation to each other and each comprising 25 a body portion of cementitious material having reinforcing elements embedded therein consisting of a tubular column of wire mesh and two spaced wire mesh sections with
30 of said wire mesh sections being attached to the tubular column of wire mesh, eyes projecting centrally from the ends of said units the shanks of said eyes extending to and
35 entering the spaces between the two spaced wire mesh sections, said eyes being adapted to be brought into overlapping relation with
40 each other, vertical pins adapted to traverse said eyes to unite the sections and joint filling material between the adjacent ends
45 of the units, the ends of said units being vertically recessed for the reception of said joint filling material and said joint filling material surrounding and inclosing the eyes and the rods.

In testimony whereof I hereunto affix my signature.

RICHARD CLARK COTTMAN.