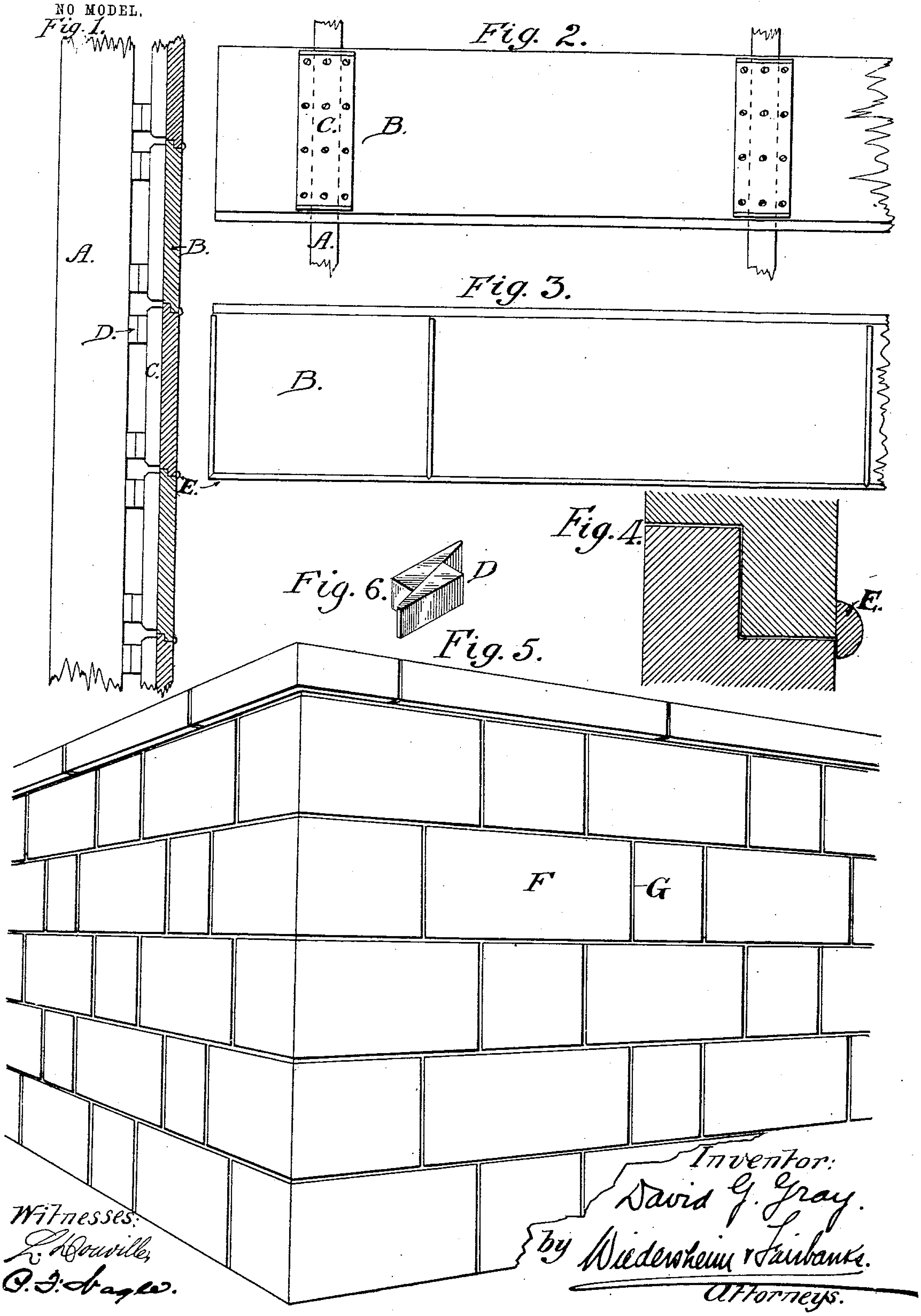
No. 751,789. PATENTED FEB. 9, 1904.

D. G. GRAY.

METHOD OF BUILDING CONCRETE WALLS, &c.

APPLICATION FILED JUNE 24, 1903.

NO MODEL.



Witnesses:
L. Douville,
C. J. Sagle.

Inventor:
David G. Gray.
by Wiedersheim & Fairbanks.
Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 751,789. Patented February 9, 1904.

UNITED STATES PATENT OFFICE.

DAVID G. GRAY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO McGAW AND GRAY, OF PHILADELPHIA, PENNSYLVANIA, A FIRM.

METHOD OF BUILDING CONCRETE WALLS, &c.

SPECIFICATION forming part of Letters Patent No. 751,789, dated February 9, 1904.

Application filed June 24, 1903. Serial No. 162,839. (No model.)

To all whom it may concern:

Be it known that I, DAVID G. GRAY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Methods of Building Concrete Walls, &c., of which the following is a specification.

My invention relates to an improvement in the method of building concrete walls, piers, or abutments.

It comprises means for joining the mold-boards in such a manner that as the wall increases in height the lower boards may be released and reused above.

It further comprises a wooden or metal molding on the lower edge of each board and overhanging said edge and similar moldings placed vertically at a desired distance apart, which molds form recesses in the face of the concrete representing any system of ashler or broken-range jointing desired.

It further consists of novel features of construction, all as will be hereinafter described.

Figure 1 represents a vertical section of the mold boards or forms used in the practice of my invention as they appear when set in position for use. Fig. 2 represents a partial rear elevation of one of the mold-boards. Fig. 3 represents a partial front elevation of the same. Fig. 4 represents, on an enlarged scale, a partial cross-section of two of the boards. Fig. 5 represents in perspective a finished concrete wall, showing ashler jointing. Fig. 6 represents a pair of the wedges employed.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates the timber studding or framing, which is first erected at the required distance from the faces of the wall to be built.

B designates mold-boards, which may be of wood heavily coated with linseed-oil or the like to prevent absorption of moisture.

C designates wooden battens screwed to the back of the boards B to prevent warping.

D D represent wedges inserted between the frame A and battens C.

E represents a molding attached to the boards B at their lower edge and vertically at any desired distances apart.

F represents a wall having recesses G imitating ashler jointing.

The operation is as follows: Frames A having been set up and properly braced parallel to each other on each side of the wall to be built, rows of boards B are placed therebetween facing each other and supported from the frames A by wedges D D. The concrete mass is then placed between the boards B and properly tamped, one or more (usually one) additional row of boards being superposed on the first as the work progresses. It will be seen from Fig. 4 that the joint between the boards is broken and that the bead E, secured at the lower edge of each board above the first, tends to keep the boards in proper position in relation to each other. As the wall solidifies the lower boards may be removed and placed at the top of the structure for reuse, as desired, and any defects remedied while concrete is fresh. To remove the boards, it is only necessary to withdraw the wedges D D. It will be evident from the above that great economy is effected in the number of boards required.

It will be evident that various changes may be made by those skilled in the art which may come within the scope of my invention, and I do not therefore desire to be limited in every instance to the exact construction herein shown and described.

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

1. A device for molding a concrete wall which comprises a plurality of mold-boards against which the concrete mass is placed and means for supporting said boards one above another, the adjacent edges of said boards being covered by a projecting molding secured to one of said parts and adapted to form a recess in the wall.

2. In a device for molding a concrete wall, a mold-board having a molding secured to its face adjacent and overhanging one of its edges, whereby said molding is adapted to overlap an adjoining mold-board.

3. In a device for molding a concrete wall, a plurality of mold-boards having broken joints and moldings secured to the face of each adjacent and overhanging one of its edges, whereby said molding is adapted to overlap an adjoining mold-board.

DAVID G. GRAY.

Witnesses:
ROBERT F. MCGAW,
ANDREW GRAY.