

(No Model.)

E. E. HIATT.
BUILDING WALLS.

No. 378,838.

Patented Feb. 28, 1888.

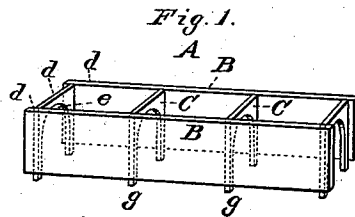
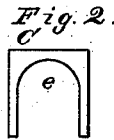
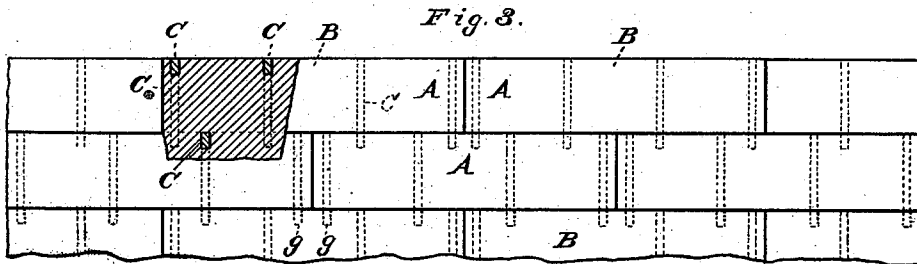
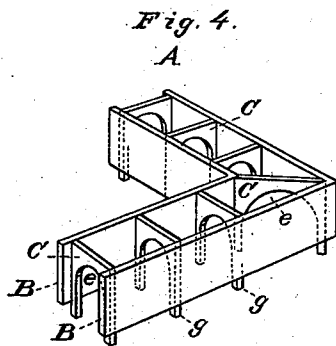
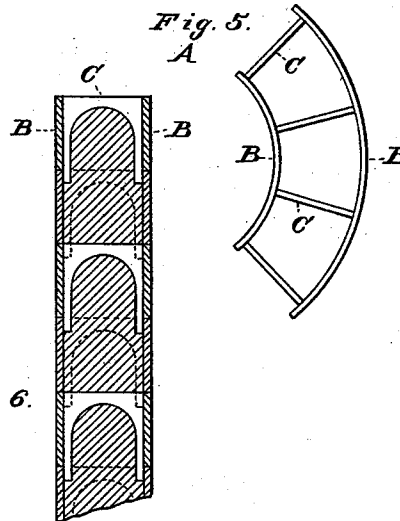


Fig. 6.

WITNESSES.

Villette Anderson.
C. R. Ferguson.

INVENTOR.

Edward E. Hiatt,
by E. W. Anderson.

Attorney.

UNITED STATES PATENT OFFICE.

ELWOOD E. HIATT, OF NOBLESVILLE, INDIANA, ASSIGNOR OF ONE-HALF
TO RALPH E. VANZANT, OF SAME PLACE.

BUILDING WALLS.

SPECIFICATION forming part of Letters Patent No. 378,838, dated February 28, 1888.

Application filed December 3, 1887. Serial No. 256,940. (No model.)

To all whom it may concern:

Be it known that I, ELWOOD E. HIATT, a citizen of the United States, and a resident of Noblesville, in the county of Hamilton and State of Indiana, have invented certain new and useful Improvements in Building Walls; and I do declare the following to be a full, clear, and exact description of the invention, 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, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a perspective view. Fig. 2 is a detail and a front view of a tie-partition. Fig. 3 is a side view showing several case-sections joined together. Figs. 4 and 5 are corner and curved case-sections, Fig. 4 being a perspective view, and Fig. 5 a top view. Fig. 6 is a vertical transverse section of a wall constructed according to my invention.

The object of this invention is to facilitate the erection of walls for houses, piers, and other structures; and it consists in the construction and novel combination of devices, all as hereinafter set forth.

In the accompanying drawings, the letter A designates one of the metallic case-sections of which the frame-work of the wall is built. Each case-section, being without top or bottom walls, consists of parallel side walls or cheeks, B B, which are rigidly connected by the interior transverse tie-partitions, C C, arranged in series along the case-sections. The sides and partitions of each case-section have their upper edges in the same plane, as indicated at *d d*, and the lower edges of the sides B B are parallel to their upper edges. The lower portions of the tie-partitions C C are cut out in the middle, or made in arched form, as shown at *e*, the ends of the tie-partitions projecting downward, as at *g*, below the level of the lower edges of the sides B B, to form lugs adapted to engage the inner faces of the sides of a case-section below. The outer edge of each lug *g* therefore stands just within the plane of the inner face of the adjacent side C. In building a wall these case-sections are laid in such a manner as to break joints, as indi-

cated in the drawings, the case-sections of the lower ties receiving the lugs *g* of the case-sections placed thereon, while the lower edges of the upper case-sections rest directly on the upper edges of the sides of the ties below. In this manner the hollow frame-work of a wall can be built in any desired form, suitably-shaped case-sections being provided for rounded and angular portions of the wall, and such wall-framing will have great strength owing to the form of the case-sections and the manner in which they engage each other by the lugs *g* of the arched ties or braces.

As each course of case-sections is laid, the hollow thereof is designed to be filled with concrete or cement mixture, such as will attain a stony hardness; and this cement mixture filling the vertical chamber of the wall-framing of case-sections will form the interior wall, extending under and over the bracing-ties and firmly binding the case-sections in position. The wall so constructed is in fact a solid concrete iron-bound wall, and is designed to be readily and cheaply built.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The metallic case-section for building walls, consisting of the parallel sides B, having the rigid tie-partitions or transverse braces C arched below, and having the ends of the arched portion projecting downward below the level of the lower edges of said sides to form bracing-lugs *g*, the outer edges of which stand just within the planes of the inner faces of said sides, substantially as specified.

2. In a wall, the combination, with the hollow metallic parallel-sided case-sections A, arranged in courses and having the interior transverse tie-partitions, and the downwardly-projecting brace-lugs *g*, of the cement filling binding the case-sections together and forming the interior wall, substantially as specified.

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

ELWOOD E. HIATT.

Witnesses:

JOSEPH R. GRAY,
WELLINGTON HIATT.