15. [17. [7. [7.]], Fire-Proof Building. Patented Feb.5, 1856. Nº4208. Lig:1 Tig: D Tig:3. Tig:4. Tig: 5.

UNITED STATES PATENT OFFICE.

HARRIET V. TERRY, OF BOSTON, MASSACHUSETTS, ADMINISTRATRIX OF THE ESTATE OF WILLIAM D. TERRY, DECEASED.

MODE OF CONSTRUCTING CAST-IRON BUILDINGS.

Specification of Letters Patent No. 14,208, dated February 5, 1856.

To all whom it may concern:

Be it known that WILLIAM D. TERRY, deceased, did in his lifetime invent certain new and useful Improvements in the Con-5 struction of Cast-Iron Houses; and that I, HARRIET V. TERRY, of Boston, in the county of Suffolk and State of Massachusetts, administratrix of the estate of the said Wil-LIAM D. Terry, do hereby declare the fol-10 lowing to be a full, clear, and exact description of the aforesaid invention, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1, represents in perspective, sev-15 eral of the sections placed together, or laid up. Fig. 2, represents a top view on a reduced, and Fig. 3, a similar top view on an enlarged scale, of the manner in which the sections are joined, or locked together. Fig. 20 4, represents in perspective, a modification of the general plan, and Fig. 5, a top view

of said modification.

several figures denote like parts.

To enable others skilled in the art to make and use the invention, I will proceed to describe the same with reference to the drawings.

A, A, and B, B, represent rectangular 30 cast iron sections, the former being much higher than the latter to show that, the size of the sections, is limited only to the facility of molding and casting them. These sections are in the form of oblong 35 boxes, open at both ends, which open ends, when the sections are laid up, are at the top and bottom thereof. The outer sides of these sections, project beyond the ends sufficiently far to form a rib a, and on the 40 said ends, parallel, or as nearly so as prac-

tical, to the ribs a, are formed other ribs b, the two ribs being far enough apart to form a groove or rabbet c, between them.

C, C, are metal plates, having an 45 L-shaped tongue d formed at each of their ends, which tongue slides into the rabbet c, formed in the ends of said boxes, the tongues and rabbets being so placed as to admit of the outside of the sections, and of 50 the plates being flush with each other as shown in the drawings, and thus by alternate boxes and plates, the walls are formed | all be on the outsides of the ribs, and then will of course be hollow, and the open either of the cases, the castings are pro-

spaces between them may be used for flues 55 of any kind.

To bind the sections and plates together, a tie piece D, may be used, which has two sets of rabbets, into which, the tongues may be slipped as shown in Figs. 1, 2, and these 60 tie pieces may be introduced into the walls, as often as may be deemed necessary, to properly tie them together.

To make the joints between the boxes and plates perfectly tight, an additional rib e, 65 Fig. 1, may be formed on the plates, over which the box-sections may pass, and white lead, or any other cement, may be introduced at the joints, as the walls are laid up, to make them perfectly tight.

For making the corners, or cross walls of the building, some of the boxes are formed with ribs f, f, on their sides, with a rabbet i, between them similar in all respects to the ribs and rabbets on the ends 75 of the said boxes, and the plates are slid Similar letters where they occur in the into these side rabbets, and thus form a right angle in the wall, as seen in Fig. 2.

Figs. 4 and 5, represent a modification of the above described plan, in which, instead 80 of casting the box, and plates separate, as shown, one half of the box, and one plate, are cast together or in one piece, forming as it were a double right angled piece. When two of these double right angled 85 pieces, are laid together, as shown in Fig. 4, they form precisely the same figure, that the box and two plates, would form if similarly laid together, and are consequently but modifications of each other. The dou- 90 ble right angled pieces, may have but a single rib, as shown, or they may be like those on the boxes, in which latter case however the L-shaped tongue would have to be introduced also, to make the joints smooth 95 and even. In molding these sections, it will be necessary to make the ribs slightly tapering or wedge formed, so that the patterns will draw from the sand. This, when the taper is on the contiguous sides of the 100 ribs, will make the rabbet wedge shaped also. By giving the same taper to the tongues that fit into these rabbets, the joints will be equally tight, as though there was no taper on either. The inclination may 105 by piling one set upon another. The walls | the rabbet and tongue may be straight. In

vided with the devices which serve as the fastenings to hold them firmly together in the wall, without the aid of rods, bolts, keys, or any other separate fastening.

In forming doors or windows any suitable number of the boxes or plates may be left out. And to make the building entirely of iron, and fire proof, the partitions, floors, and roof, may be of iron also.

Having thus fully described the invention of the said William D. Terry, deceased, I would state that I do not claim the boxes and ties, when used separately as this has been done before, but

What is claimed herein as new, and de- 15 sired to be secured by Letters Patent is,

The forming of cast iron, hollow walls for buildings, by means of the combined use of the boxes, plates, and tie pieces, provided with rabbets and tongues, for firmly uniting them together, substantially in the manner described and represented.

HARRIET V. TERRY,

Administratrix of the estate of William D.

Terry, deceased.

Witnesses:

SAM W. BATES, CHAUNCY SMITH.