P. B. WIGHT.

Fire-Proof Column.

No. 204,867. Patented June 11, 1878.

Fig 1.

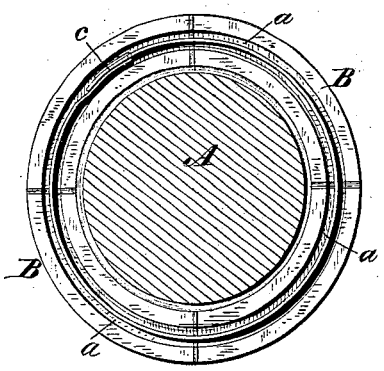
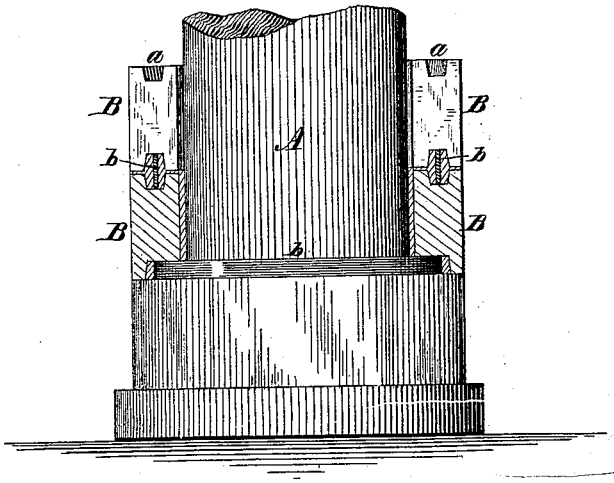


Fig 2.



Witnesses.

Harry King

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his Attys.

UNITED STATES PATENT OFFICE.

PETER B. WIGHT, OF CHICAGO, ILL., ASSIGNOR OF ONE-HALF HIS RIGHT TO HARVEY B. MERRILL AND THOMAS FERGUSON, OF DETROIT, MICH.

IMPROVEMENT IN FIRE-PROOF COLUMNS.

Specification forming part of Letters Patent No. **204,867**, dated June 11, 1878; application filed May 9, 1878.

To all whom it may concern:

Be it known that I, PETER B. WIGHT, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fire-Proof Columns; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a top-plan view, and Fig. 2 a side elevation, of a portion of a column, showing the surrounding fire-proof material in section.

The object of this invention is to fireproof round, square, octagonal, or other forms of iron columns; and consists in surrounding them with blocks of porous terra-cotta, concrete, fire-brick, or other incombustible and non-conducting material, made with grooves in top and bottom edges, and securing them with a hoop arranged in the groove, and there covered and protected with mortar or cement, as hereinafter explained.

In the drawings, A represents an iron column, cylindrical, as shown, or of any other desired form; and B, blocks of porous terra-cotta, concrete, fire-brick, or other incombustible and non-conducting material. These blocks B are made with a groove, *a*, in their top and bottom edges, and of the proper form to surround the column A, as clearly shown in Fig 2. They are built up around the column in courses divided by vertical joints into convenient sections, so that they may be handled and set in the best manner. As each course is laid, the groove in the upper edge of the block will form a continuous line, as shown in Fig 1. A hoop, *b*, formed of band-iron, of the proper size to stand in the groove, is made by binding the same about the column, and connecting its ends by passing the tapered end of one through an eye or hole in the other, and hooking them together, as shown at C in Fig. 1, or in any other convenient manner. The ring thus made is then arranged in the groove, and a thick bed of mortar or cement thrown in on both sides, sufficient in quantity not only to fill this groove, but also to fill the groove in the lower or under edges of the next course of blocks, as clearly shown in Fig. 2. As this next course of blocks is laid, the blocks are forced down on the mortar or cement, and the upper half of the hoop or ring is forced into its groove and the mortar into the space about it. In this way the ring becomes firmly bedded with solid material in the grooves of the adjoining courses of blocks, and thus secures them together, so that no one block can be removed or displaced.

The bands or rings in practice are from twelve to eighteen inches from centers, measured upward, and bind the fire-proof material so firmly to the iron column that none of the contingencies of conflagration can displace them and destroy the protection thus given to a column.

Having thus described my invention, what I claim is—

In combination with iron columns, incombustible and non-conducting blocks, grooved on their top and bottom edges, and secured in place by hoops of band-iron, covered and protected in the grooves or joints of the same, substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

PETER B. WIGHT.

Witnesses:

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JNO. S. MCKEOWN.