P. J. HARDY.

Application of Marble to Building Purposes.

No. 163,990. Patented June 1, 1875.

Fig. 1.

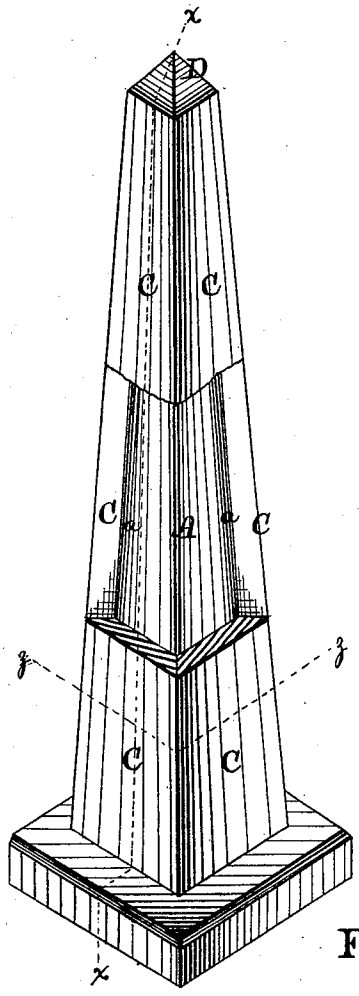


Fig. 2.

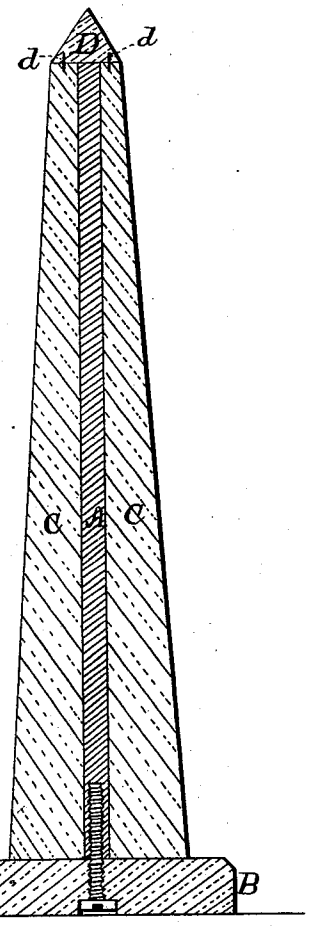
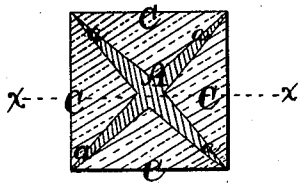


Fig. 3.



Witnesses:

Jas. E. Hutchinson

John R. Young

Inventor.

P. J. Hardy, by

Prindle and Lay his Attys

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UNITED STATES PATENT OFFICE.

PIERRE J. HARDY, OF NEW YORK, N. Y.

IMPROVEMENT IN THE APPLICATION OF MARBLE TO BUILDING PURPOSES.

Specification forming part of Letters Patent No. **163,990**, dated June 1, 1875; application filed March 31, 1875.

CASE B.

To all whom it may concern:

Be it known that I, PIERRE J. HARDY, of New York city, in the county of New York and in the State of New York, have invented certain new and useful Improvements in the Application of Marble or other Stone to Building Purposes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view of a column constructed after my improved method, a portion of its exterior being broken away so as to show the metal core or frame; and Figs. 2 and 3 are, respectively, vertical and horizontal sections of the same.

Letters of like name and kind refer to like parts in each of the figures.

In the construction of marble or stone monuments the expense increases with great rapidity as the proportions are enlarged, the difficulties experienced in quarrying, transportation, and cutting of large stones rendering their cost out of all proportion to that of stones of smaller size. Another disadvantage and source of increased expense arises from the difficulty experienced in procuring stones of much size which are perfect at all points, a flaw or discoloration at one point (often discoverable only after the stone is rough dressed) rendering the same useless for the purpose intended, while, if said stone was cut into slabs, such flaw or discoloration could be brought upon the back side of a slab and not lessen its value.

To obviate these difficulties is the design of my invention, which consists in combining, with a metal supporting-frame or core, a covering composed of slabs of marble or other stone united together so as to conceal said metal and present the appearance of solidity, substantially as is hereinafter specified.

In the annexed drawing, A represents a metal bar, constructed, preferably, in horizontal section, in the form of a four-pointed star, and having regularly-decreasing dimensions from its lower to its upper end. The bar or frame A is secured at its base to or within a stone base, B, and extends vertically upward from the same, after which a marble slab, C, is fitted into each angle formed by the radial ribs *a a*, &c., and secured in place by cement or other suitable means. The outer face of each slab C is plane, and forms one side of the square, while its edges are mitered with the contiguous edges of the adjacent slabs, care being taken to produce a perfectly-close joint between said edges. The upper end of the monument is now finished by means of a stone cap, D, which may, if desired, be provided with dowel-pins *d d*, &c., upon its lower side, one of which pins may fit into a corresponding recess, *e*, formed in the upper end of each slab C.

For monuments of large size the metal core has an open or skeleton form, so as to increase its bulk and strength and lessen its weight, and, at the same time, enable thinner slabs of stone to be used.

A monument constructed in the manner described has much less weight in proportion to size, and is stronger than those composed of solid stone, while the comparative cost of material and the labor necessary for its production are materially less.

While my method has been illustrated only in the construction of monuments, it is equally applicable wherever it is economical to substitute such work for solid stone.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

For architectural purposes, the combination of an interior frame or core, of metal, with an exterior covering of stone which conceals the same, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of March, 1875.

PIERRE J. HARDY.

Witnesses:

ADOLPH SCHLEICHER,

WM. H. DUSENBERRY.