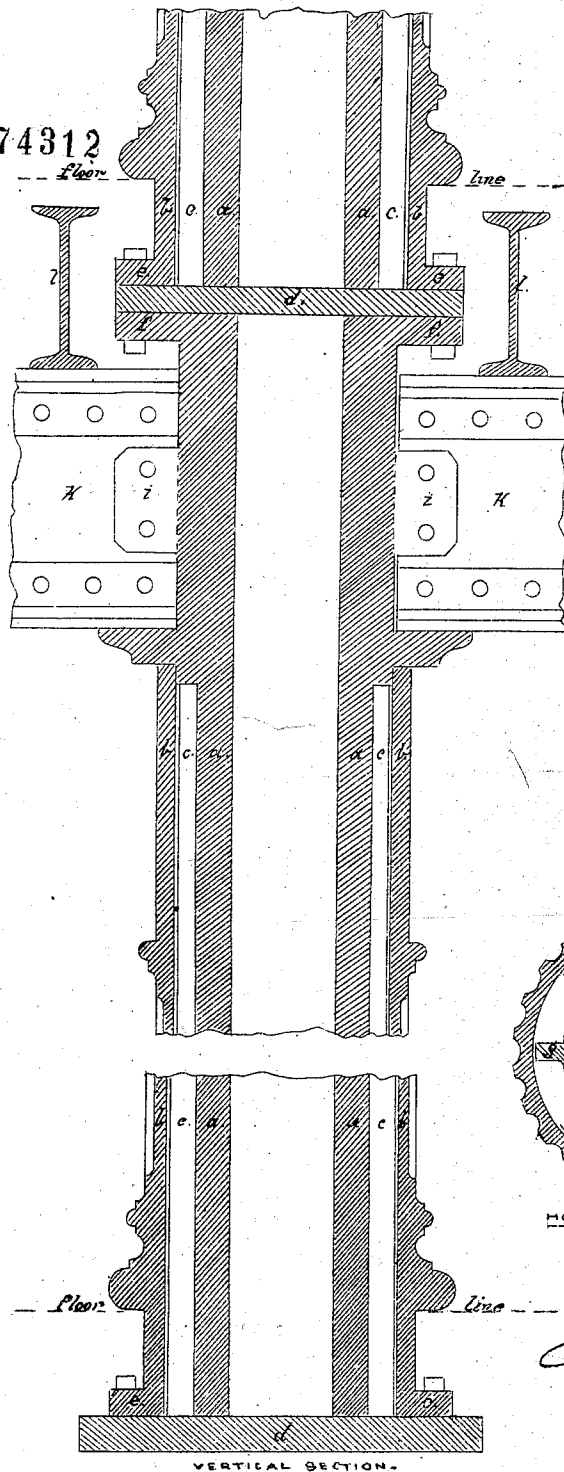


JOHN B. CORNELL'S
 Improved Double Cylinder
 FIRE-PROOF COLUMN.

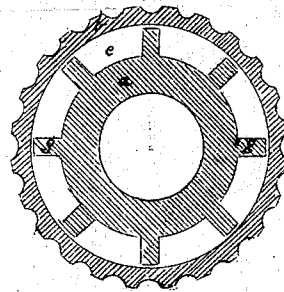
Scale 2 inch. per foot.

74312



- a. Inner shaft.
- b. Outer shaft.
- c. Air space between shafts.
- d. Plates.
- e. Flange for bolting outer shaft to plates.
- f. Flange for bolting inner shaft to plate.
- g. Stays.
- h. Brackets to support girders.
- i. Flange to fasten girder to column.
- k. Girders.
- l. Floorbeams.

PATENTED
 FEB 11 1868



HORIZONTAL SECTION.

Witnesses
 C. H. Wilson
 A. M. Stout

John B. Cornell
 By his Attorney
 J. C. Robbins

United States Patent Office.

JOHN B. CORNELL, OF NEW YORK, N. Y.

Letters Patent No. 74,312, dated February 11, 1868.

IMPROVED METALLIC COLUMN.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN B. CORNELL, of the city, county, and State of New York, have invented an Improved Fire-Proof Column for architectural purposes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form a portion of this specification.

My improved fire-proof column is composed of a strong interior metallic tube, *a*, and a thinner exterior metallic tube, *b*, the said tubes being combined with each other, substantially in the manner represented in the accompanying drawings. The inner tube *a* must be sufficiently strong to safely bear whatever weight may be placed upon my said improved fire-proof column, of which it forms a part, and should be of sufficient length, and be supplied with the requisite flanges, stays, and brackets, to enable said tube to be combined with the plates *d*, the girders *k*, and also with the thinner and shorter exterior tube *b*. The desired architectural shape is given to the exterior surface of the exterior tube *b*, and there must be a sufficient width of open space between the outer surface of the inner tube *a* and the inner surface of the tube *b*, to protect the said inner tube from any of the injurious effects resulting from heating and sudden cooling, in case the building in which my improved column may be placed should be injured by fire; the said exterior tube *b* being intended to perform the function of giving exterior architectural comeliness to the column, and also of protecting the interior or supporting tube or shaft *a* from the injurious effects of heating and sudden cooling during a conflagration of the premises where it may be located, and, therefore, it may be made quite thin, and, if preferred, may be made up of sections. This outer tube *b* may be extensively cracked by the effects of fire and water, and yet furnish an ample protection to the inner or supporting tube *a*, of my improved fire-proof column. Should the said outer tube at any time be extensively cracked by the effects of fire and water, it may be removed from the interior tube *a*, and its place be supplied by a new exterior casing formed of sections.

Having thus fully described my improved fire-proof architectural column, what I claim therein as my invention, and desire to secure by Letters Patent, is—

The construction and arrangement with each other of the interior flanged supporting portion *a* and the exterior protecting and ornamental casing *b*, substantially in the manner herein set forth.

JOHN B. CORNELL.

Witnesses:

J. H. PORTER,
A. S. MEGGUIER.