

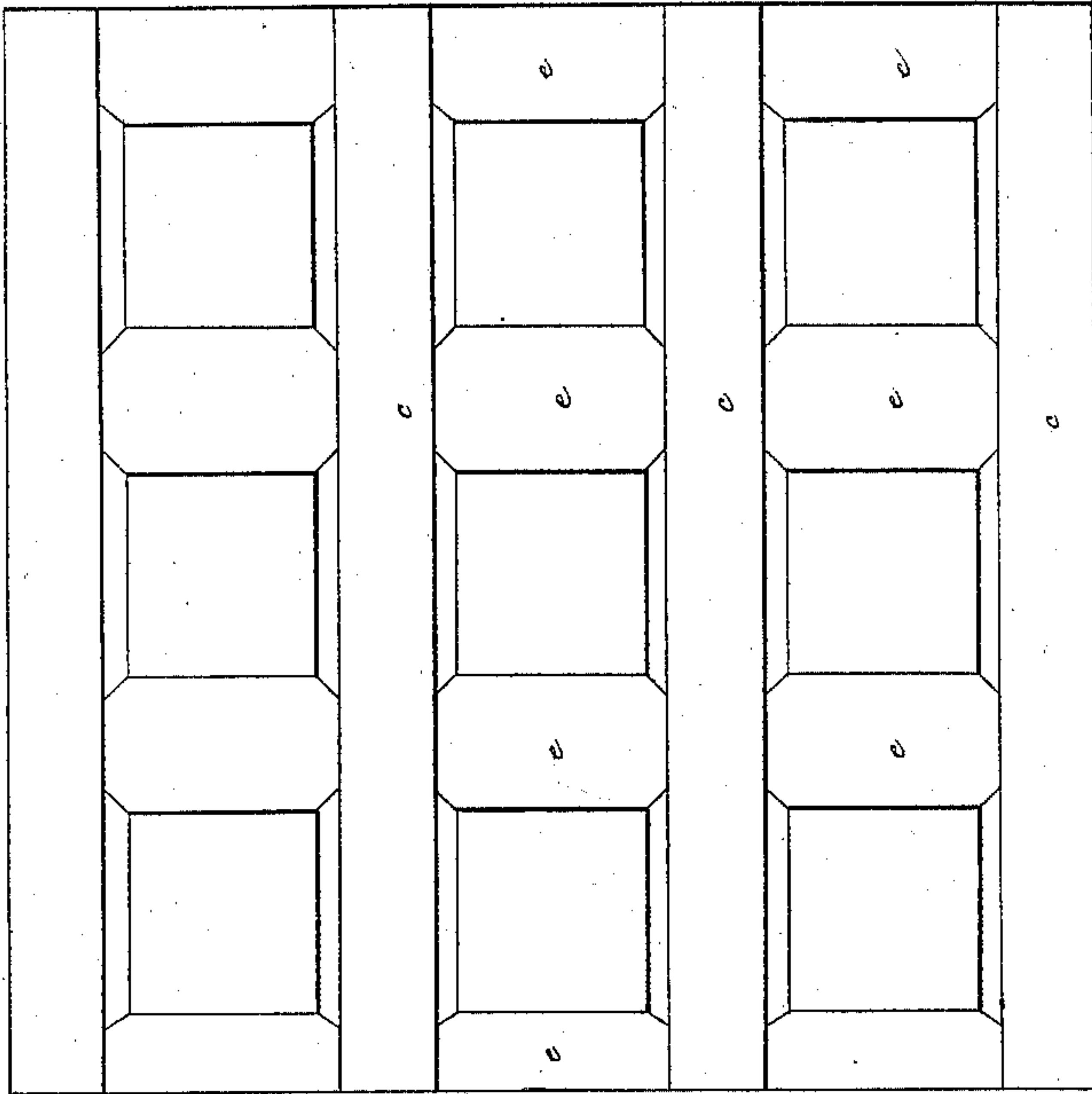
*J. B. Cornell.*

*Vault Cover.*

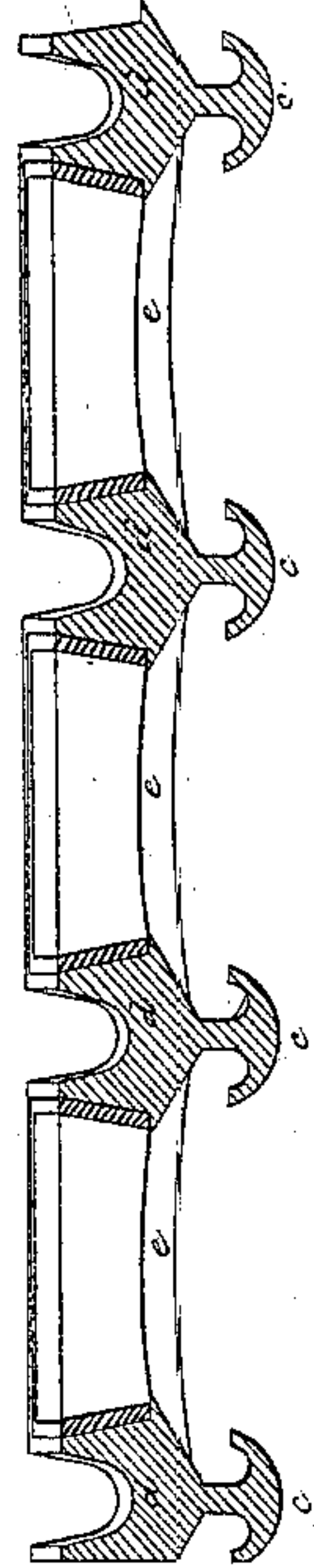
*No 17,199.*

*Patented May 5, 1857.*

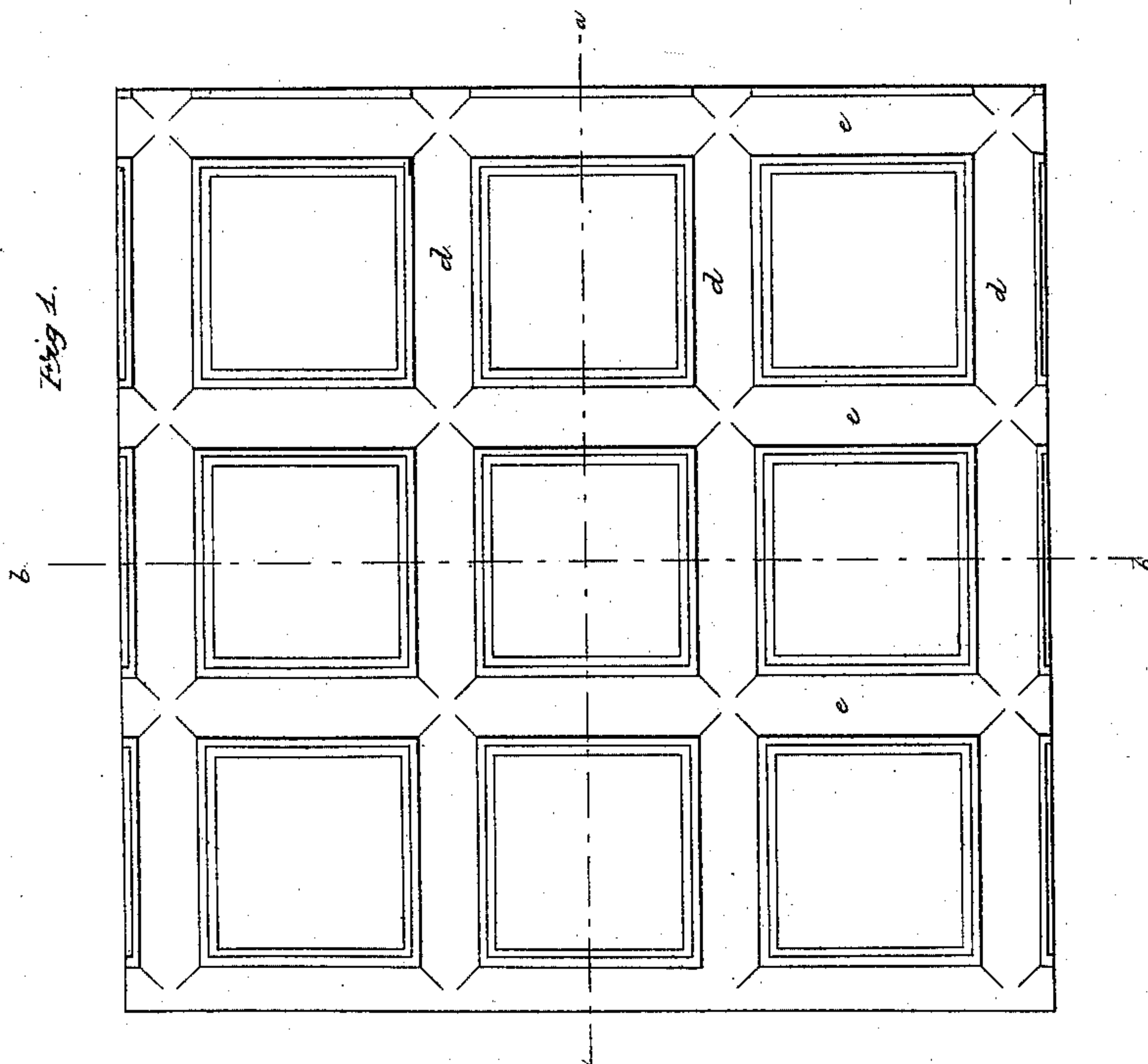
*Fig. 2.*



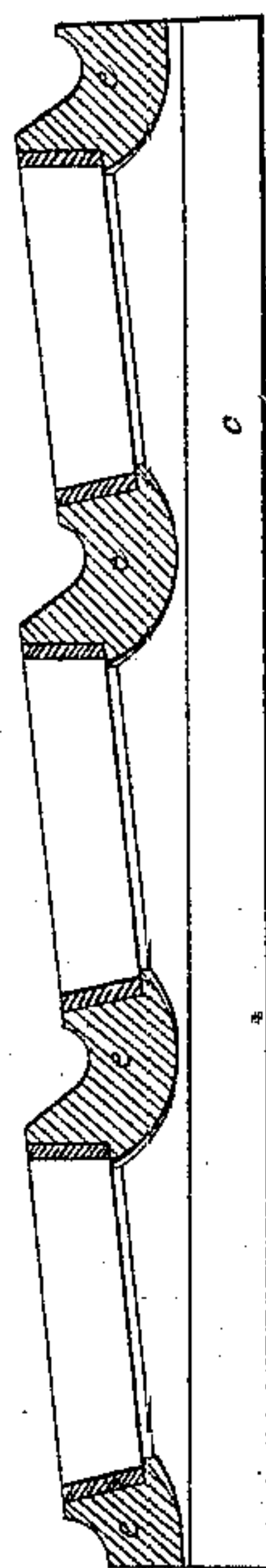
*Fig. 7.*



*Fig. 1.*



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

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

## VAULT-COVER.

Specification of Letters Patent No. 17,199, dated May 5, 1857.

*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 a new and useful Improvement in Illuminating Vault-Covers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figure 1, being a top view of my improved illuminating vault-cover; Fig. 2, a bottom view thereof; Fig. 3, a section in the line *a a* of Fig. 1, and Fig. 4 a section in the line *b b* of Fig. 1.

Similar letters indicate like parts in each drawing.

It is well known that moisture condenses upon the under surfaces of illuminating vault-covers and drips down upon whatever may happen to be placed beneath the same. To prevent this, is the object of my said improvement in vault-covers.

My improvement consists in combining a series of gutters *c, c*, with the under surface of a vault-cover, and in connection therewith, giving the respective portions of the under surface of said cover, such a shape that all the water condensed thereupon will be conducted into said gutters. This is accomplished by casting, or otherwise se-

curing, the said gutters *c, c*, to the under surfaces of the series of bars *d, d*, of a vault-cover, and then curving the under surfaces of the transverse bars *e, e*—between each pair of bars *d, d*—to such a degree that the water condensed upon them will run freely into the said gutters *c, c*.

A larger transverse gutter may be placed under one edge of the opening covered by said vault-cover, to receive the water from all the gutters *c, c*, and convey the same to a suitable place; or a receptacle may be suspended under the discharging ends of said gutters to receive the water discharged therefrom.

What I claim as my invention and desire to secure by Letters Patent, is—

Combining a series of gutters *c, c*, with the under surface of an illuminating vault cover, substantially in the manner and for the purpose herein set forth.

The above specification of my new and useful improvement in the illuminating covers, used for admitting light from above into apartments, signed and witnessed this 19th day of March 1857.

JOHN B. CORNELL.

Witnesses:

JOS. W. MANTERSTOCK,  
THOS. CROCKER.