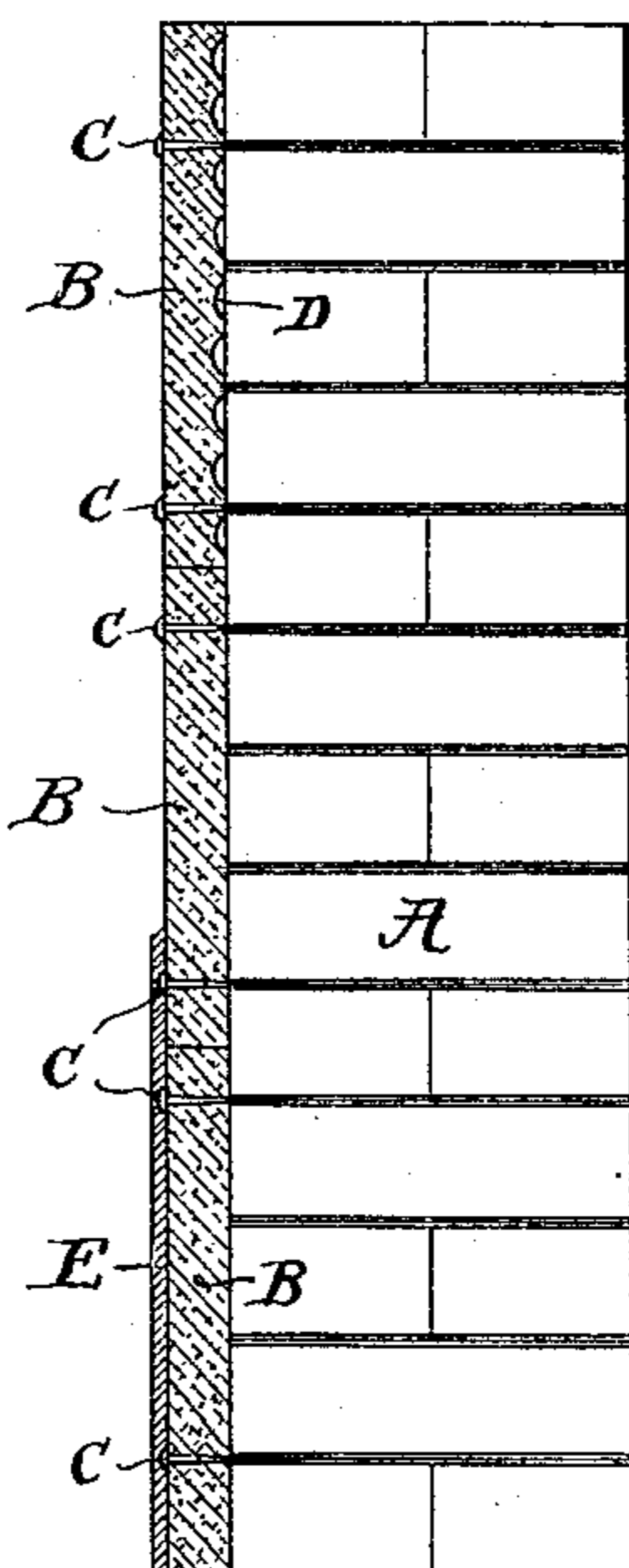


(No Model.)

C. C. GILMAN.
OUTER WALL OF BUILDINGS.

No. 338,514.

Patented Mar. 23, 1886.



Attest:

Geo. H. Graham
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Inventor:

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per
Wm. C. Dehrend.
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UNITED STATES PATENT OFFICE.

CHARLES CARROLL GILMAN, OF ELDORA, IOWA.

OUTER WALL OF BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 338,514, dated March 23, 1886.

Application filed August 4, 1885. Serial No. 173,517. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CARROLL GILMAN, a citizen of the United States, residing at Eldora, Hardin county, Iowa, have invented a new and useful Improvement in Outer Walls of Buildings, (Case D,) of which the following is a specification.

The object of my invention is to prevent the penetration of external heat and cold through the outer brick walls of a building; and to this end my invention consists in securing to the inside surface of an ordinary brick wall fluted slabs or sheets of terra-cotta lumber or a similar porous burned-brick material, as herein-
after described and claimed.

The accompanying drawing represents a vertical transverse section of a wall constructed in accordance with my invention. The bricks A, forming the body of the wall, are laid up in the ordinary well-known manner. A brick wall of average thickness does not prevent, however, the penetration of external heat and cold, because bricks are good conductors of heat and cold.

To overcome this objection is the object of my invention, and I attain this object by securing to the inside surface of the brick wall a layer of terra-cotta lumber or its equivalent.

Terra-cotta lumber, as is well known, is to a very high degree a non-conductor of heat and cold, said property being due largely to its porous character or structure, formed by the combustion of sawdust mingled with the clay in its manufacture. It is also a non-combustible material which more effectually resists the action of fire than brick, is easily sawed or wrought with edged tools—such as used by carpenters—and will receive and hold nails or spikes.

I do not desire to limit myself strictly to “terra-cotta lumber,” so called, as any porous burned-brick material possessing substantially the same properties is within the scope of my invention. The slabs or sheets B, of terra-cotta lumber, are preferably twelve inches square, or more, and two inches thick. They are laid against the inside surface of the brick wall, and secured to the same by nails or spikes C, passing through said slabs into the mortar joints between said bricks. I flute the sheets, as shown at D, and place said fluted side against the brick wall, so as to form a series of dead-air spaces, which will aid in preventing the penetration of external heat and cold. The exposed surface of the slabs of terra-cotta lumber is covered with a coating of plaster, E, which firmly adheres thereto, by reason of the porous structure thereof, and which coating may be thinner than that necessary where laths are used.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the outer brick wall of a building, of fluted sheets of terra-cotta lumber or its equivalent, secured with the fluted side against the bricks to the inside surface of said wall, so as to form a series of dead-air spaces, substantially as described.

In testimony whereof I have signed my name in the presence of two witnesses.

CHARLES CARROLL GILMAN.

Witnesses:

EDMUND RICE,
R. B. GALUSHA.