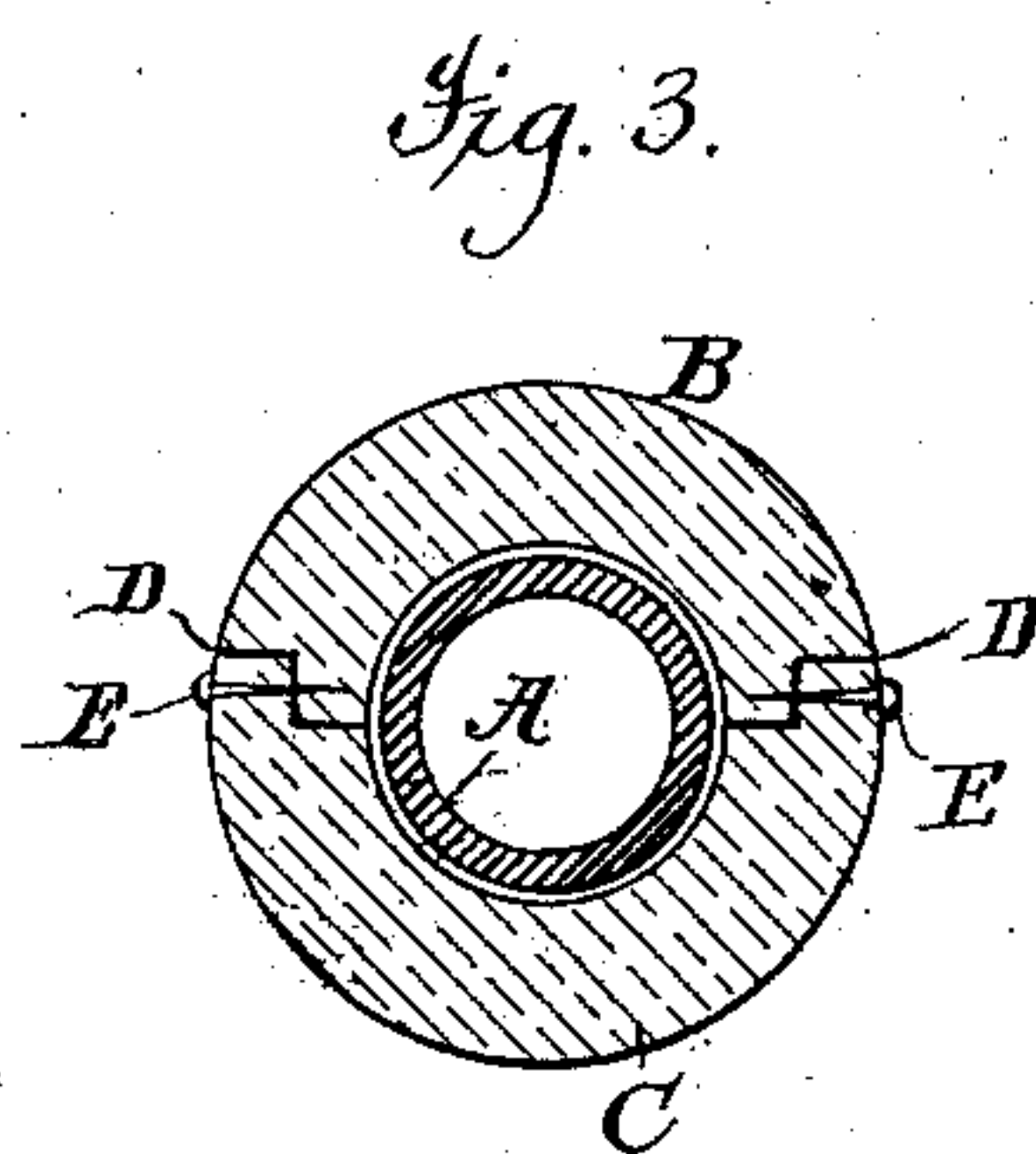
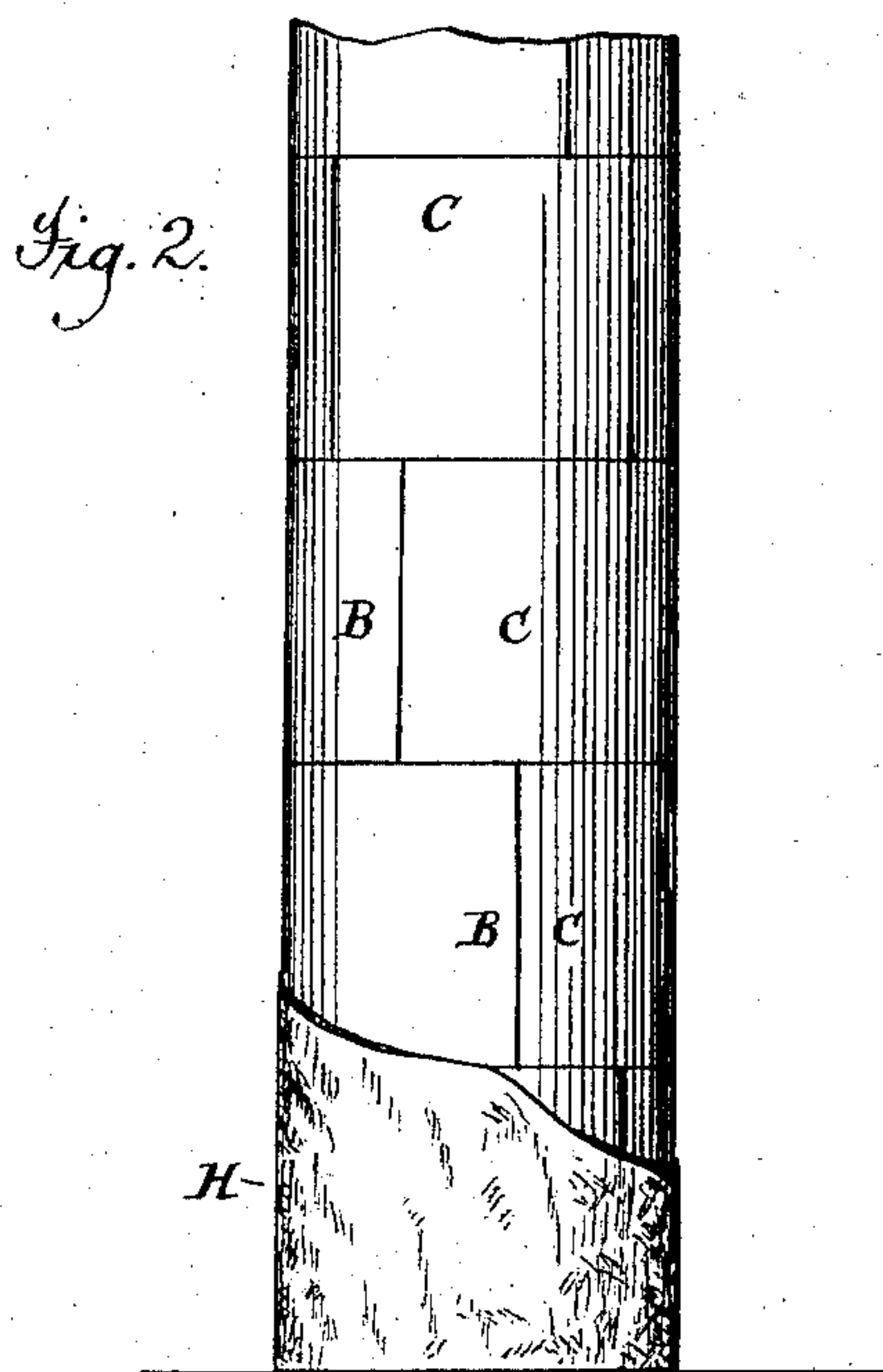
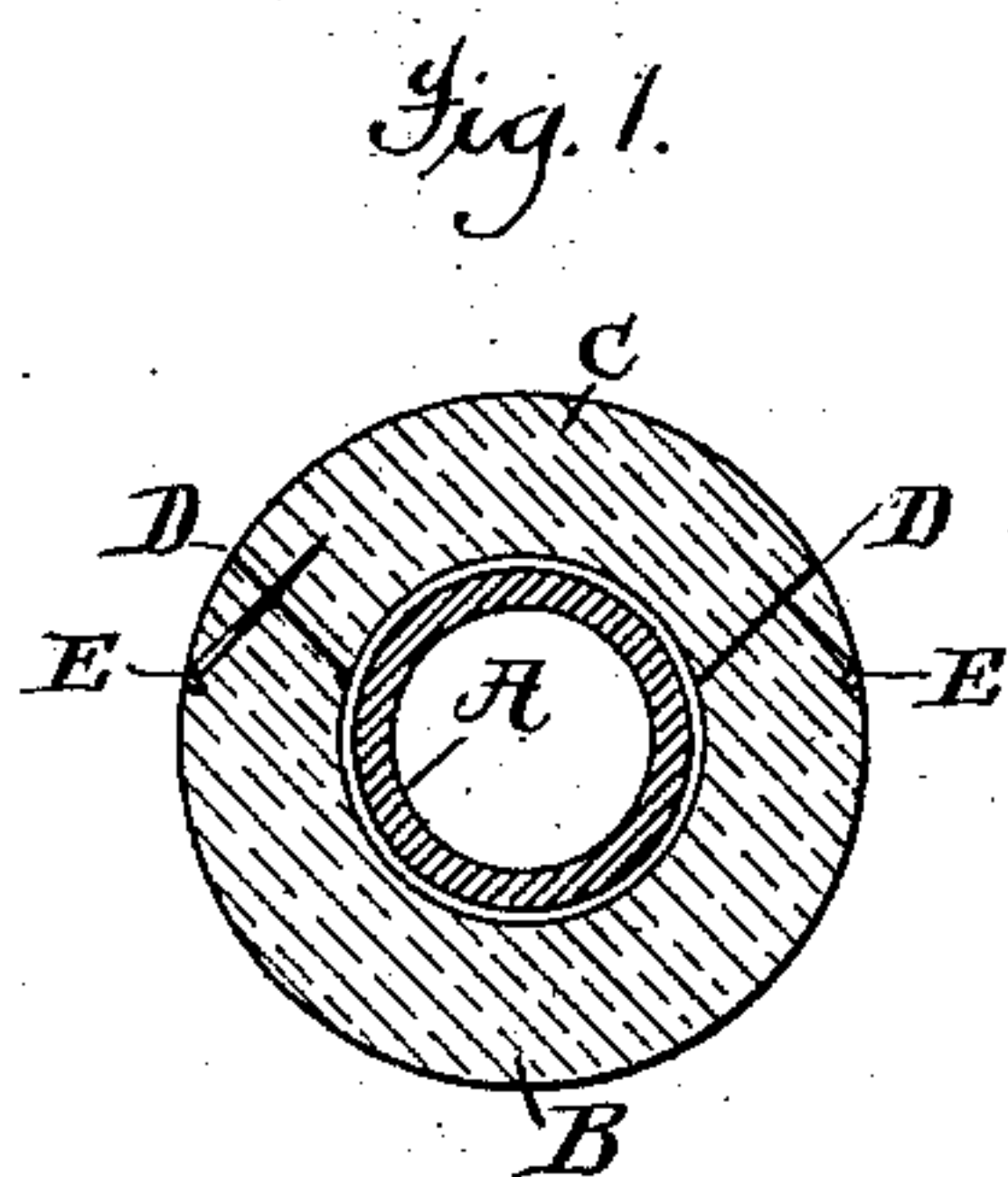


(No Model.)

C. C. GILMAN.  
FIRE PROOF POST AND COLUMN.

No. 338,512.

Patented Mar. 23, 1886.



Attest:

Geo. H. Graham  
Geo. H. Botts.

Inventor:

Chas. C. Gilman,  
per Wm. C. Behrens,  
Atty.

# UNITED STATES PATENT OFFICE.

CHARLES CARROLL GILMAN, OF ELDORA, IOWA.

## FIRE-PROOF POST AND COLUMN.

SPECIFICATION forming part of Letters Patent No. 338,512, dated March 23, 1886.

Application filed July 13, 1885. Serial No. 171,458. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES CARROLL GILMAN, a citizen of the United States, and a resident of Eldora, Hardin county, Iowa, have invented a new and useful Improvement in Fire-Proof Posts and Columns, of which the following is a specification.

The object of my invention is to render the wooden or iron posts and columns of buildings and other structures fire-proof in a cheap, durable, and effective manner; and to this end my invention consists in surrounding or incasing the same with a cover or jacket of terra-cotta lumber or a porous burned-brick material constructed as hereinafter described and claimed.

In the accompanying drawings, which form a part of this specification, Figure 1 represents a cross-section of a tubular iron post or column incased in accordance with my invention. Fig. 2 is an elevation of a column, such as shown in Fig. 1; and Fig. 3 illustrates a modification of my invention.

The terra-cotta lumber which I employ as a casing for the posts and columns is made in accordance with the specifications of United States Reissue Letters Patent Nos. 10,419 and 10,420, heretofore granted to me. This material, by reason of its cellular structure, has been found to be an excellent non-conductor of heat, and to remain unharmed or intact when subjected while hot to the action of water. I do not, however, desire to limit myself strictly to the use of said material, as any porous burned-brick material possessing substantially the same characteristics is within the scope of my invention. The material is preferably worked into the forms desired by the use of edged tools; but said forms may also be produced by molding the material, instead of by cutting or sawing.

In the drawings, Fig. 1, is shown a tubular iron post or column, as A, incased by a covering or jacket of terra-cotta lumber composed of two parts, B C. This covering is from one and one-half to three or four inches in thickness, according to the circumstances of the particular case. The said two parts are produced from a tubular molded piece of the material of any convenient length by sawing the same on the lines indicated in the drawings.

The inner ends of said lines, if the casing is to fit closely, or nearly so, to the post or column, are at or near the ends of a diameter of said tubular piece, and from these points the lines or cuts extend outwardly at an angle to each other, substantially as shown, so that the smaller piece, C, shall have a wedge-like form and fit the inclined sides of the larger piece, B. If the casing is to stand at some distance from the post or column, the cuts may be nearer together, relatively considered, but must be at such distance from each other that the larger piece may be passed around the column. As the casing is placed around posts and columns after the same have been erected, it is essential in all cases that the opening in the larger piece be equal to or larger than the external diameter of the post or column.

In covering a post with the blocks B C, a block, B, is passed around the post at the base thereof, and a block, C, laid in place against block B, and united thereto by mortar-joints D and nails E, and this operation is repeated for the succeeding courses of blocks until the post or column is entirely covered. The heads of the nails or spikes are preferably countersunk into the material, and a finish of stucco, H, is subsequently applied to the latter, which will also serve to conceal the nails. It is preferred to make mortar-joints, for said joints replace the material lost in cutting or sawing, and thus said joints serve to secure an even outer surface; but they are not essential to hold the blocks in place, as the nails or spikes will suffice for that purpose.

The blocks B C may be molded in the form shown; but this does not give as satisfactory results as sawing the same from a piece in cylindrical form.

In the modification illustrated in Fig. 3 the casing is likewise composed of two parts, the said parts B C being rabbeted at their adjoining portions on the outside and inside, respectively, so as to fit together, as shown. The parts are separately molded in this form, and then fastened together before being dried and placed in the kiln, so as to prevent warping of the parts, which are united by mortar-joints and nails, as in Fig. 1. By these constructions a post or column may be quickly incased with a



fire-proof covering consisting of a few pieces, the whole of which is held in place by a few nails and a few mortar-joints.

5 The fire-proof covering or jacket herein described may also be used to incase steam and other pipes, as well as posts and columns.

I am aware that it is not broadly new to incase a column by a porous terra-cotta material, and this I do not claim; but

10 What I desire to claim and secure by Letters Patent is—

1. A post or column surrounded by a covering of terra-cotta lumber or its equivalent, constructed of two parts, of the form substantially as described, and united by nails passing from one part into the other, substantially as described.

2. A post or column surrounded by a covering of terra-cotta lumber or its equivalent, constructed of two parts, of the form substantially as described, united by nails passing from one part into the other, and a covering of stucco over all, substantially as described.

3. A post or column surrounded by a covering of terra-cotta lumber or its equivalent, constructed of two parts, one of which has a wedge-like form and is secured to the other, substantially as described.

4. A post or column surrounded by a covering of terra-cotta lumber or its equivalent,

constructed of two parts, the smaller of which has a wedge-like form, and the larger an opening sufficiently large to permit it to be passed around a post and fitted to receive the smaller part, the said parts being nailed together, substantially as described. 35

5. A post or column surrounded by a covering of terra-cotta lumber or its equivalent, constructed of two parts, one of which has a wedge-like form and is nailed to the other, and a finish of stucco over all, substantially as described. 40

6. A sectional fire-proof covering for posts and columns, consisting of two pieces of terra-cotta lumber or its equivalent, one of which has a wedge-like form and the other a form to fit therewith, substantially as described. 45

7. A sectional fire-proof covering for posts and columns, consisting of two pieces of terra-cotta lumber or its equivalent, the smaller of which has a wedge-like form and the larger a form to correspond therewith, substantially as described. 50

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

CHARLES CARROLL GILMAN.

Witnesses:

F. CODMAN FORD,  
W. G. WHEELER.