

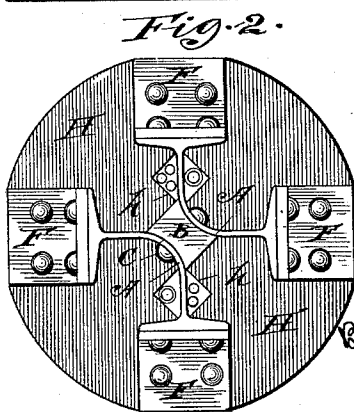
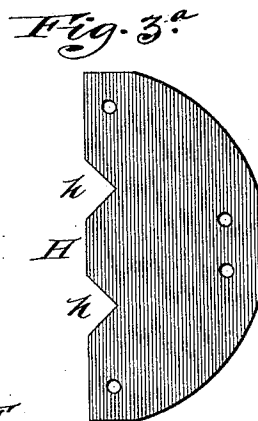
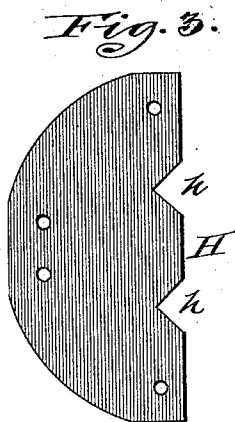
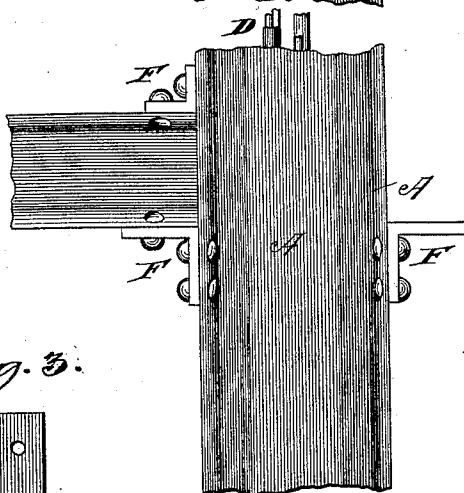
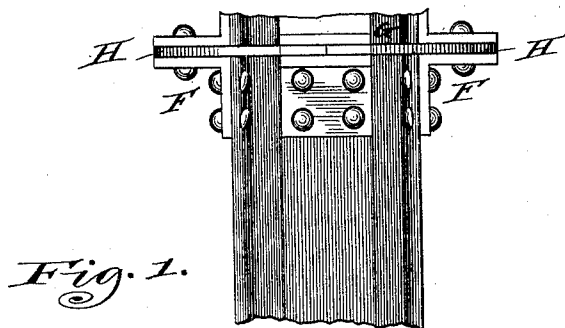
(No Model.)

2 Sheets—Sheet 1.

J. M. LARIMER.
ARCHITECTURAL COLUMN.

No. 463,318.

Patented Nov. 17, 1891.



Witnesses,
J. J. Mann,
F. B. Goodwin

Inventor,
Joseph M. Larimer,
By Alfred D. Smith & Co.
Attys.

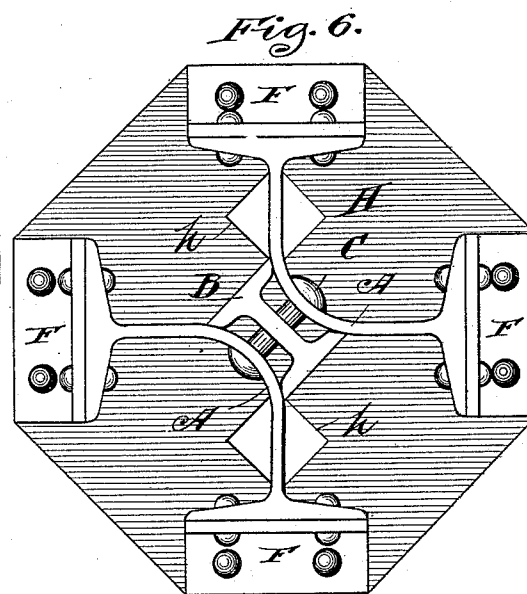
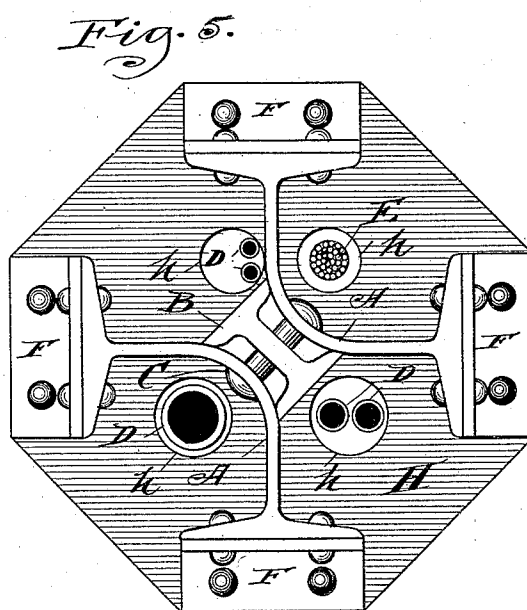
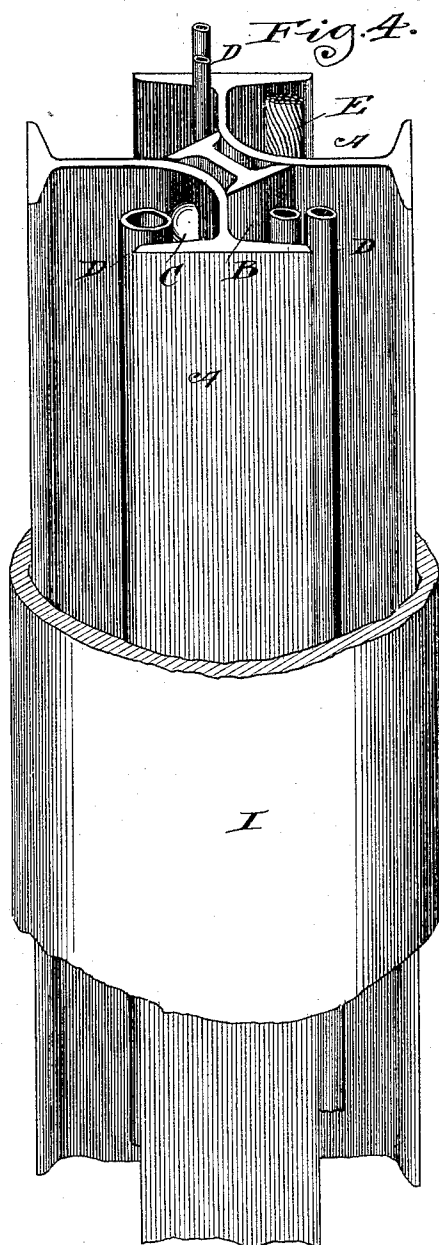
(No Model.)

2 Sheets—Sheet 2.

J. M. LABIMER.
ARCHITECTURAL COLUMN.

No. 463,318.

Patented Nov. 17, 1891.



Witnesses,
J. E. Mann,
J. B. Goodwin

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UNITED STATES PATENT OFFICE

JOSEPH M. LARIMER, OF CHICAGO, ILLINOIS.

ARCHITECTURAL COLUMN.

SPECIFICATION forming part of Letters Patent No. 463,318, dated November 17, 1891.

Application filed August 10, 1891. Serial No. 402,235. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. LARIMER, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Architectural Columns, of which the following is a specification.

In the construction of high buildings it is now quite common to erect the frame of the building from metal columns which are connected end to end by cap-plates and are joined laterally by girders, forming the supports for the several floors and ceilings. As heretofore constructed these cap-plates have been solid—that is, imperforate—except where provided with bolt-holes for securing the knee-braces or angle-plates, whereby the columns are secured end to end.

In modern structures numerous lines of pipe for supplying water and heat to the upper floors and for carrying away waste of various kinds are employed, as well as electric wires, speaking-tubes, and the like. In previous constructions these pipes, tubes, and wires have usually been carried up through the floors in the corners of the rooms and exterior to the walls. They are unsightly when so disposed, and, besides, openings must be made in the floors through which they pass. The modern forms of columns have externally-opening spaces which may be used to contain these pipes, and it is the object of my invention to adapt these columns to receive the various pipes and wires between their flanges and projecting angles, and also to adapt the cap-plates of the columns for the passage of the various lines of pipes, wires, tubes, &c.

One form of column of the general kind I have mentioned is shown in my patent, No. 453,341, of June 2, 1891, which column consists of metal beams having their webs bent on curved lines and centrally connected together through an interposed fillet. The heads of these beams present outwardly, and between said heads sufficient space is provided to receive the various pipes and wires, and I provide the cap-pieces with openings in line with the interstitial spaces of the columns, through which openings the pipes, &c., pass. In the accompanying drawings, Figure 1 is a broken elevation of one of my patented columns, the base of a superposed column be-

ing also shown. Fig. 2 is a plan view thereof. Figs. 3 and 3^a show the two parts of a divided plate which is interposed between the columns, said parts having their adjoining margins notched to permit the passage of the pipes. Fig. 4 is a perspective view of the column, showing the arrangement of pipes and electric wires therein and showing also a section of an external covering or fireproofing for the column; and Figs. 5 and 6 are plan views of columns of like construction with perforated plates applied between the columns, the perforations permitting the passage of the wires and pipes.

In the drawings, the column shown is composed of the beams A, which are of the form technically known as "I-beams," and which beams have their webs bent upon curved lines and centrally connected together through an interposed fillet B by means of the rivets C. The interstitial spaces between the webs or behind the heads of these beams form suitable passage-ways for lines of pipes, electric wires, &c., and to adapt them for such use I provide the plates H, which are interposed between the columns, as seen in Fig. 1, with apertures *h*, through which the pipes D or wires E may pass. These plates may be constructed in two parts, as shown in Figs. 3 and 3^a, or integral, as shown in Fig. 5. In the former construction their meeting edges may be notched to provide the apertures, while with the integral plate the apertures will be formed through the body thereof.

F represents flanged metal brackets which are employed as a base, as a support for the girder, or as a part of the top connection for the superposed column G. The exteriors of these posts are usually covered with a fire-proof material, of which I represents a section.

These columns need not all be provided with the perforated plates between them; but any column in a building may be so provided, and thus be made to afford convenient means for carrying up the pipes, electric wires, speaking-tubes, and the like to the several floors of the building without being exposed to view within the rooms and without the necessity of puncturing the several floors for their passage.

I do not, of course, limit my invention to the particular column specified, although it

affords exceptional advantages for utilizing my said invention, because of the large interstitial spaces between the heads of the beams. My invention is well adapted to steel
5 columns, which are now extensively used and of the character known as "Z-columns."

I claim—

1. The combination, in a building, with the metal columns thereof having interstitial
10 spaces, of plates for connecting the abutting ends of said columns, and said plates having

apertures therein for the passage of pipes, &c., substantially as described.

2. In building construction, the combination, with columns, of interposed metal connecting-plates, said plates having apertures
15 for the passage of pipes, wires, and the like, substantially as described.

JOSEPH M. LARIMER.

Witnesses:

C. C. LINTHICUM,
FREDERICK C. GOODWIN.