

(No Model.)

H. F. STUHR.
BUILDING COLUMN.

No. 476,905.

Patented June 14, 1892.

Fig. 1.

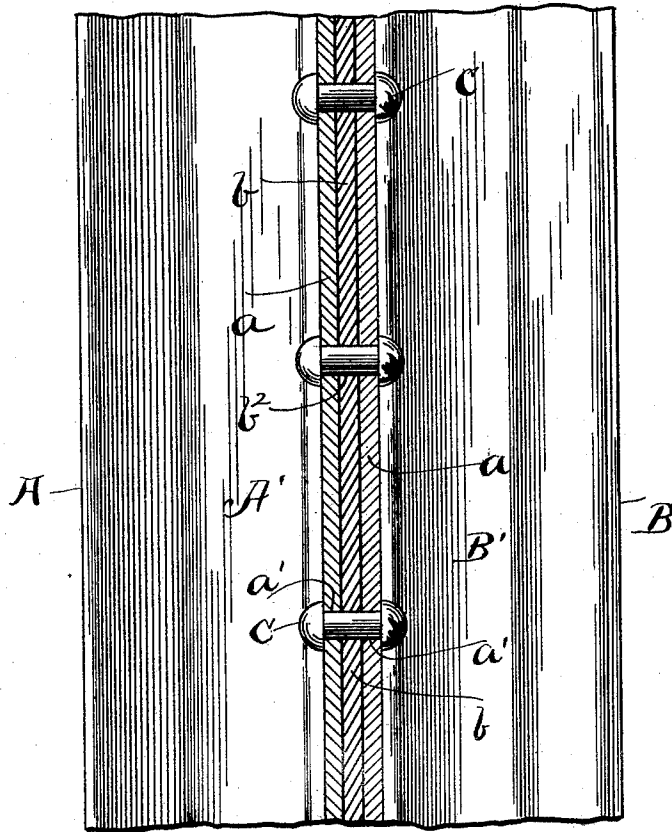
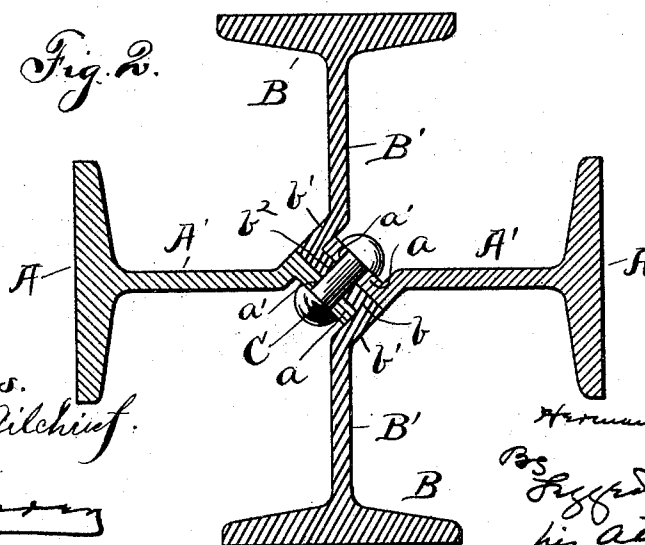


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

HERMAN F. STUHR, OF CLEVELAND, OHIO.

BUILDING-COLUMN.

SPECIFICATION forming part of Letters Patent No. 476,905, dated June 14, 1892.

Application filed December 26, 1891. Serial No. 416,167. (No model.)

To all whom it may concern:

Be it known that I, HERMAN F. STUHR, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and
5 useful Improvements in Building-Columns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the
10 same.

My invention relates to improvements in columns for building purposes, composed of metallic beams or bars.

Columns have heretofore been made of metallic beams or bars having heads or flanges with their webs bent to convex form and with an interposed core to provide bearings for the bent portion of said webs and with bolts or rivets connecting the beams through the
15 core. The necessity of bending the beams or bars of such columns to the proper convexity in addition to the initial operation of rolling said beams or bars, together with the construction of the core and the care that had
20 necessarily to be exercised to render the concavity of the core and convexity of the web of the beams or bars to correspond with each other, rendered the proper and accurate construction of such columns quite expensive. I
25 have therefore devised the construction of column hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal central section of my improved
35 column, the section being taken lengthwise through the bolts or rivets that secure the parts together. Fig. 2 is a transverse section of the column, also taken longitudinally through one of the securing devices.

40 My improved column comprises three rolled metallic beams or bars—viz., two single-headed beams, that are the same in construction, and a double-headed beam.

A represents the head of the single-headed
45 beams, and A' the web of the beams. Webs A' at the inner end, respectively, terminate in an L-shaped portion α , with the base of the L at an obtuse angle to the body of the web.

B represents the heads of the double-head-

ed beam, and B' represents the web of the
50 beam. The central portion of the web, of the beam is oblique to the body of the web, but parallel with the larger portion of the L-shaped extremity of the web of the single-headed beams, member b of web B' extend-
55 ing to either side of the body of the web, b' representing the portion of the web intervening between the ends of member b and the body of the web and making an obtuse angle with the body of the web substantially
60 corresponding with the obtuse angle formed by the base of the L and body of the web of the single-headed beams.

In assembling the parts the beams are placed in position with the body of webs A'
65 of the single-headed beams at a right angle to the body of the web B' of the double-headed beam, so that the opposing surfaces of the L-shaped portion of webs A' and central member b of web B' abut each other. Members
70 a a and b of the webs of the respective beams are perforated, as at a' a' b^3 , for the passage of bolts or rivets C, by means of which the beams are firmly secured together.

With my improved construction the beams
75 are used as they come from the rolls, no subsequent operation being necessary, except the punching of the bolt or rivet holes, no cores are required, the columns can be made with great facility, and this, too, with infallible ac-
80 curacy and greater firmness and stability.

What I claim is—

1. A column composed of two single-headed beams and a double-headed beam, the single-headed beams having a web respectively
85 terminating in an L-shaped portion and the central portion of the web of the double-headed beam being oblique to the body of the web of said double-headed beam, the L-shaped portion of the single-headed beams
90 abutting the central oblique portion of the double-headed beam and the beams being secured together by bolts or rivets, substantially as set forth.

2. A column composed of three metallic
95 beams or bars, two single-headed beams A and a double-headed beam B, the central portion of the web of the double-headed beam being

shaped as at *b b'* and the adjacent portion
of the web of the single-headed beams being
shaped as at *a*, portion *a* of the web of single-
headed beams abutting portions *b b'* of the web
5 of the double-headed beams and the beams
being secured together by bolts or rivets, sub-
stantially as set forth.

In testimony whereof I sign this specifica-
tion, in the presence of two witnesses, this
25th day of November, 1891.

HERMAN F. STUHR.

Witnesses:

C. H. DORER,
WARD HOOVER.