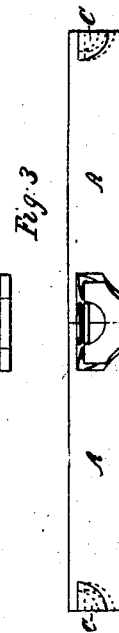
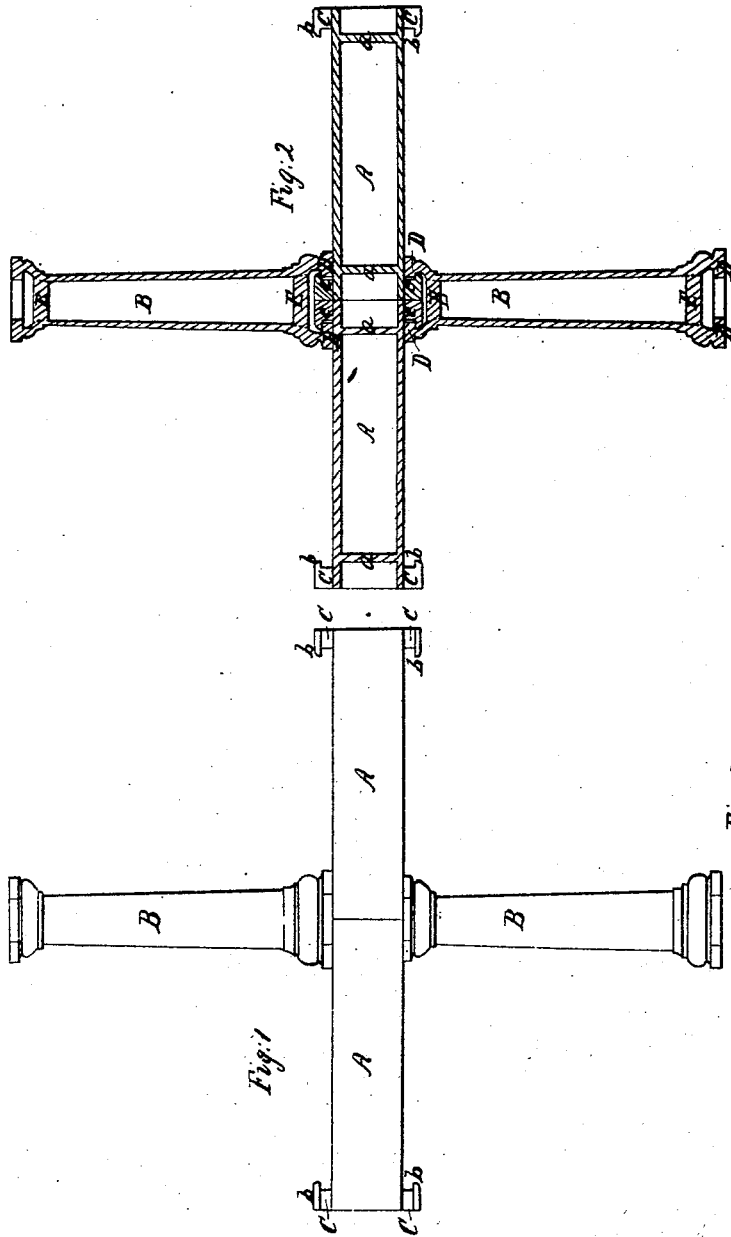


*J. Banks.*  
*Column.*

*No. 7,951.*

*Patented Feb. 25, 1851.*



# UNITED STATES PATENT OFFICE.

JOSEPH BANKS, OF NEW YORK, N. Y.

## CONNECTION FOR THE BEAMS AND COLUMNS OF IRON BUILDINGS.

Specification of Letters Patent No. 7,951, dated February 25, 1851.

*To all whom it may concern:*

Be it known that I, JOSEPH BANKS, of the city, county, and State of New York, have invented a new and Improved Manner of  
5 Connecting the Beams and Columns of Cast-Iron Fronts for Houses; and I do hereby declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, making part of  
10 the same, in which—

Figure 1 represents a front view, Fig. 2 represents a rear view, Fig. 3 represents a top view.

Similar letters of reference in the several  
15 figures represent the same parts.

The nature of my invention consists, in obviating the difficulties which exist, in the present manner of connecting the beams and columns of cast iron fronts of houses by the  
20 use of screw bolts, passing through flanges cast on said beams and columns. It is with great difficulty that these screw bolts can be got at with a wrench, so as to bring the joints close up, and to get at them at all the  
25 braces in the beams cannot extend the whole depth of the beam, thus taking away from the beam, the strength required, where the whole superincumbent weight rests. By my device, I entirely do away with the screw  
30 bolts, and have the entire space in the beam between the columns for bracing the beam.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the draw-  
35 ings.

The beams A, are cast box-shaped, open in the rear, the top and bottom being firmly supported by the braces *a, a*, which extend the whole depth of the beam, and are cast  
40 with it. On the ends of these beams are

cast the lugs *c, c*, which have a flange *b*, on them, made to correspond with, and catch over projections D, cast on the inside of, and at the top and base of the columns B, thus making the beams hold the columns to-  
45 gether, and the columns hold the beams together, and preventing either of the four pieces from yielding in any direction whatever. On the columns B, are also cast the braces E Fig. 2, for the purpose of giving  
50 strength to the column.

*e, e*, Fig. 2, are wedges which may be driven between the edge of the projection on the inside of the base and top of the columns, and the lug, for drawing the beams  
55 together when found necessary; or, the wedge may be used between the projections of the column, and the underside of the flange of the lug, to draw the column and beams together. But these wedges are only  
60 used when the joints are imperfect, which may happen by the yielding of the machinery in which they are turned and planed.

Having thus fully described my invention  
65 what I claim therein as new and desire to secure by Letters Patent is—

The method herein described, of securing together the beams and columns of cast iron fronts for houses, by means of the lugs with  
70 their flanges on the upper and under sides of the ends of the beam, and the projections on the inside at the top and base of the columns, as herein fully shown and represented.

JOSEPH BANKS.

Witnesses:

EDWIN F. COREY,  
THOS. BOESÉ.