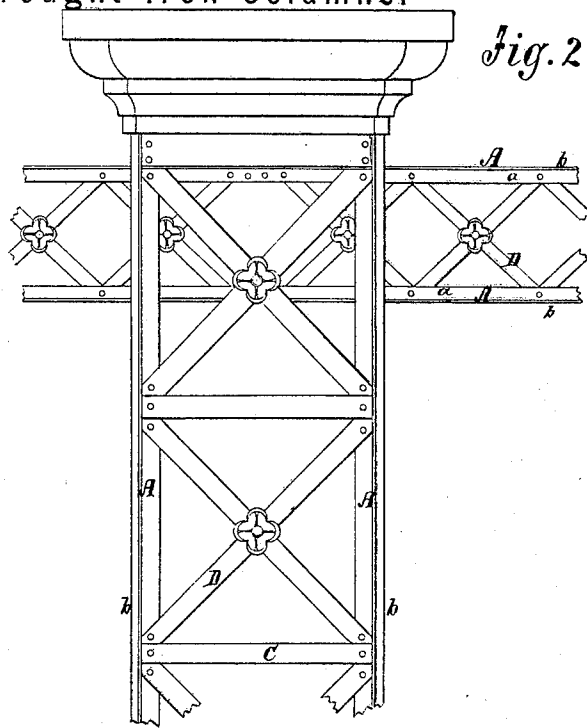
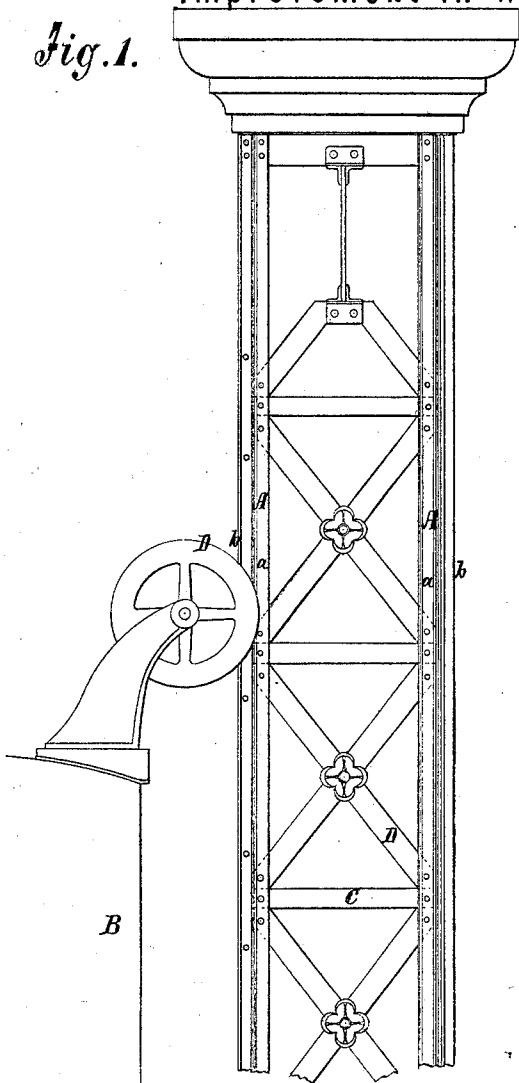


No. 118,948. J. P. KENNEDY. Patented Sep. 12, 1871.
Improvement in Wrought-Iron Columns.

Fig. 1.

Fig. 2.



B

Fig. 4.

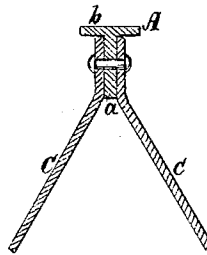


Fig. 3.

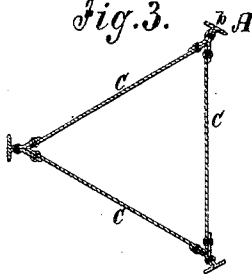
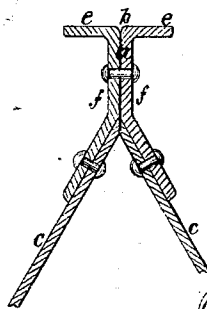


Fig. 5.



Witnesses:

A Notary of.
Francis McArdle.

Inventor:

J. P. Kennedy
PER *Wm. L. [Signature]*
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN P. KENNEDY, OF NEW YORK, N. Y.

IMPROVEMENT IN WROUGHT-IRON COLUMNS.

Specification forming part of Letters Patent No. 118,948, dated September 12, 1871.

To all whom it may concern:

Be it known that I, JOHN P. KENNEDY, of the city, county, and State of New York, have invented a new and useful Improvement in Wrought-Iron Columns; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention consists in constructing a wrought-iron column especially adapted to gas-holders.

I am aware that lattice-webs are old in themselves, and that curved T-bars have been used before. Therefore I do not desire to lay any claim to these, but simply to what is hereinafter clearly pointed out in the claim.

Figure 1 is a side elevation of part of a column constructed according to my invention, and showing the arrangement of it with the gas-holder. Fig. 2 is another partial side elevation, showing the employment of the column as girders; also for which they are applicable. Fig. 3 is a cross-section of the column. Fig. 4 is a partial cross-section on an enlarged scale, showing the arrangement when a single T-bar is used; and Fig. 5 is another partial cross-section, showing the arrangement when the said T-bars are formed of the angle-bars riveted together.

I propose to construct triangular columns, or girders of longitudinal bars connected together by cross-bars and diagonal braces, to obtain the greatest strength with the least weight of metal, and to provide an arrangement for the construction of large columns of great length, whereby they may be made up of sections, which, being prepared for riveting together, may be conveyed to the place where the columns are to be erected in pieces or packages of pieces, and there put together. I make said columns in triangular form in cross-section because it gives greater strength with a given weight of metal than any other form,

and as the best manner of combining the longitudinal and transverse bars and braces.

I propose to employ rolled T-bars A for the said longitudinal bars, having one at the apex of each angle, and placing them so that the vertical parts *a* of the T-bars are on radial lines of the axis of the column, while the head C of each bar is parallel with the side corresponding to the base of the triangle, in the apex of which the said bar is, and the cross-bars *c* and braces *d*, having the ends suitably bent to fit the sides of these parts *a*, are riveted thereto, as clearly shown. The head *b* of one of the bars A of a column being suitably arranged relatively to the cover B of a gas-holder, will serve for the guide for the wheel D of the said holder.

Instead of the ordinary T-bar I propose, in some cases, to construct it of two angle-bars, *e f*, by riveting them together so that the united flanges *e* form the head, while the plates *f*, which are considerably wider than said flanges *e*, form the vertical part *a* of the bar, and may be supported from the inner edges about half-way to the top of the T, and arranged on the angle of the sides of the column to receive the ends of the cross-bars and braces, as indicated in Fig. 5.

The columns will be provided with suitable cast-iron or granite bases, and may have cast metal or other ornamental capitals.

Columns constructed in this way may be extended in length indefinitely, the longitudinal bars being spliced at the ends and "breaking" joints.

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

A lattice-web, C D, combined with straight T-bars A, constructed and arranged as and for the purpose specified.

JOHN P. KENNEDY.

Witnesses:

WM. V. ARCHER,
WM. H. CLARKSON.