

J. JOHNSON.
Combined Capital and Base for Metallic Columns.

No. 225,060.

Patented Mar. 2, 1880.

Fig. 1.

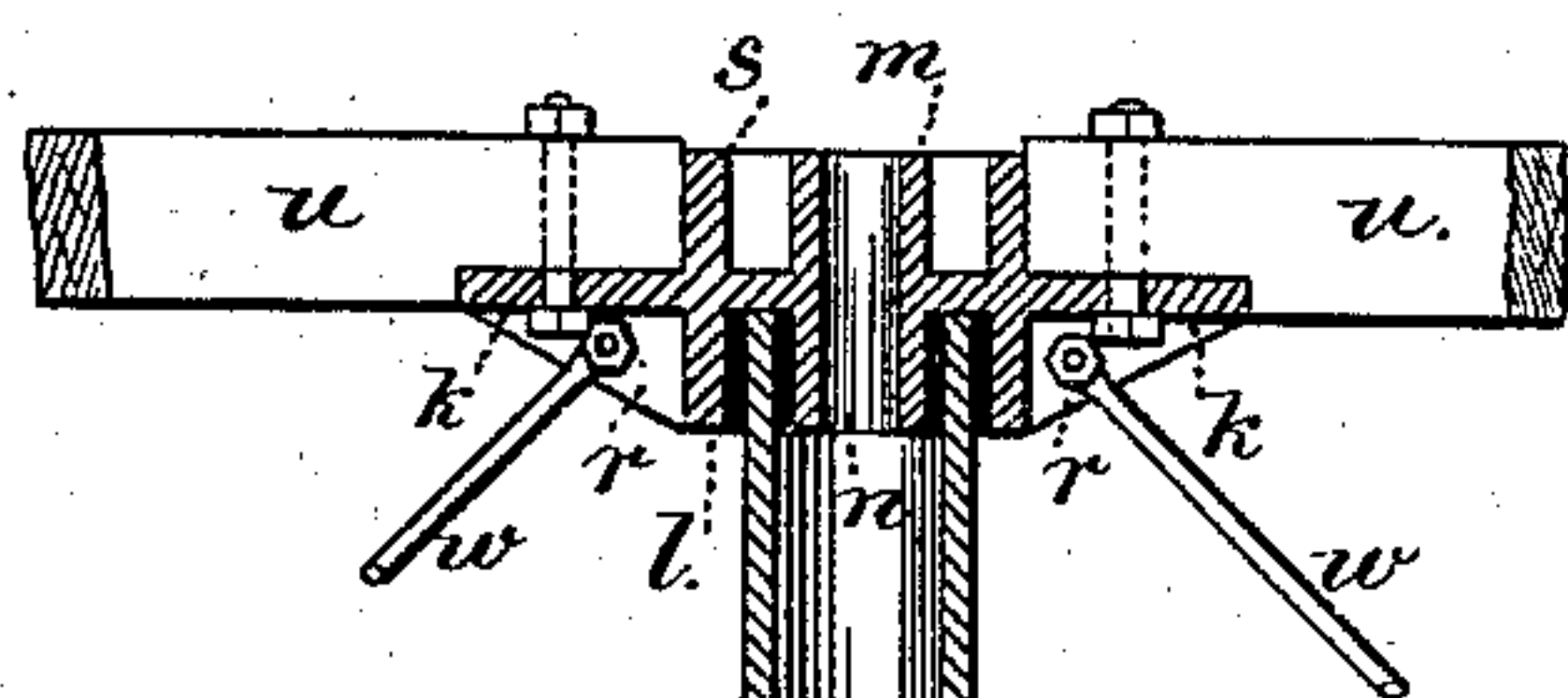
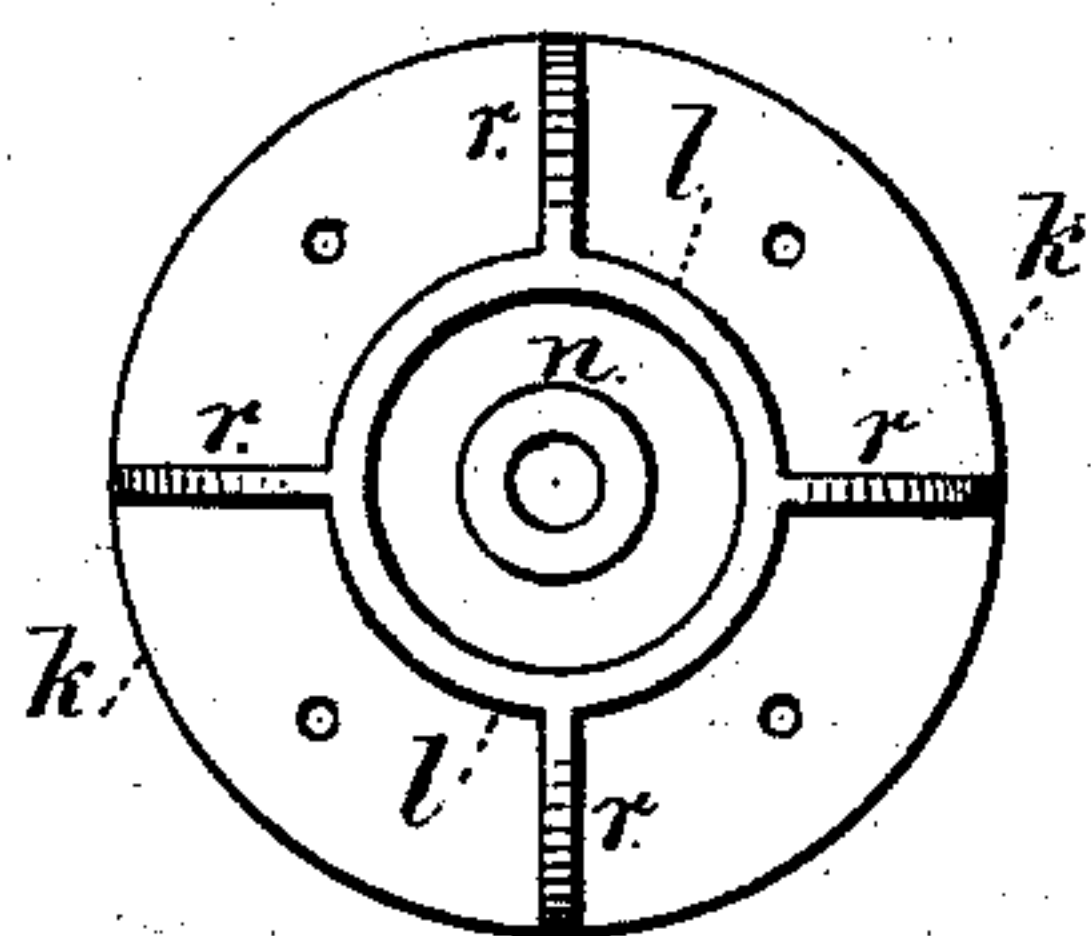


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOB JOHNSON, OF BROOKLYN, NEW YORK.

COMBINED CAPITAL AND BASE FOR METALLIC COLUMNS.

SPECIFICATION forming part of Letters Patent No. 225,060, dated March 2, 1880.

Application filed October 2, 1879.

To all whom it may concern:

Be it known that I, JOB JOHNSON, of Brooklyn, in the State of New York, have invented an Improvement in Combined Capital and Base for Metallic Columns, of which the following is a specification.

Metallic columns have been made of wrought-iron tubes set into annular sockets at both the upper and the lower ends, and secured by melted lead poured into the socket, as seen in Letters Patent No. 176,000, granted to me. Structures, such as elevated railways and piers, have been made of these tubular columns.

My present invention relates to a combined capital and base, the same being adapted to rest upon and be secured to the upper end of the tubular column, and to receive the lower end of a second column, of the same or a smaller size, resting within an annular socket upon the said combined capital and base. This combined capital and base is also adapted to the reception of braces and beams for floors, roofs, or other parts of the structure.

In the drawings, Figure 1 is a vertical section of two columns united by the combined capital and base, and Fig. 2 is an inverted plan of the base.

The foundation *a* is of stone, brick, or other suitable material. To this the base-plate *b* is attached by bolts *c*, or other suitable means, and it is preferable to introduce a sheet of lead, *d*, between the foundation and said base-plate *b*, in order that the said base-plate *b* may be evenly supported, because the lead will yield to inequalities of pressure. The lower end of the column *f* is received into the annular socket formed between the cylindrical hubs *h* *i* of the plate *b*, and the same is secured by lead, as at *o*, the same as in my aforesaid patent.

My combined capital and base is made of a plate, *k*, with the cylindrical hubs *n* and *l* on the lower surface, and the cylindrical hubs *m* and *s* upon the upper surface, and with the brackets *r*.

The upper end of the column *f* passes into the annular socket between the cylindrical hubs *l* *n*, and the same is leaded in, preferably, while the column and plate *k* are in an inverted position, and the second column, *t*, is introduced into the annular socket between the hubs *m* and *s*, and secured by lead poured into the crevice. The second column, *t*, may be the same size as the column *f*, the annular socket being of the proper size, or the column may be smaller, as represented.

The beams or timbers *u* *u* are represented as resting at their ends upon the plate *k*, and secured thereto by bolts, and the brackets *r*, between the hub *l* and plate *k*, allow for bolts or braces *w* being introduced in the structure between the capital of one column and the base of the next, or other place of attachment for the lower end of the brace.

I have represented upon the top of the column *f* a second combined capital and base, the same as that between the first and second columns. Numerous columns may be erected, one upon another, as before described, so as to form a structure of any desired height.

The center of the combined capital and base should be tubular, so that water or gas pipes may pass through the same; or drain-pipes or ventilating-tubes may be formed by or inserted into the tubular column and combined capital and base.

I claim as my invention—

The combined capital and base for tubular metallic columns, consisting of the plate *k*, the hubs *n* *l* on the lower side, the hubs *m* *s* upon the upper side, and the brackets *r* between the plate *k* and the hub *l*, substantially as set forth.

Signed by me this 29th day of September, A. D. 1879.

JOB JOHNSON.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.