

A. BONZANO.

Improvement in Turn-Tables for Pivot-Bridges.

No. 127,018.

Patented May 21, 1872.

FIG. 1.

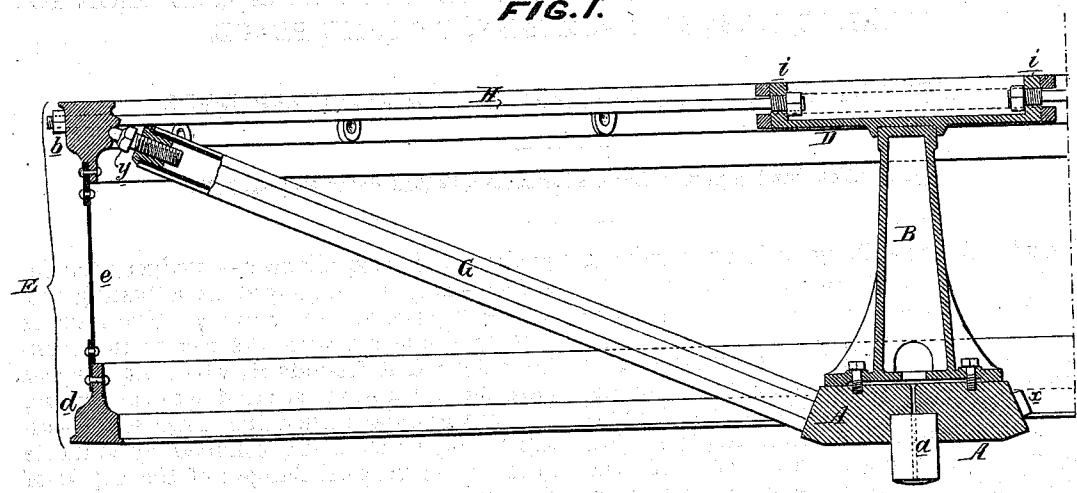
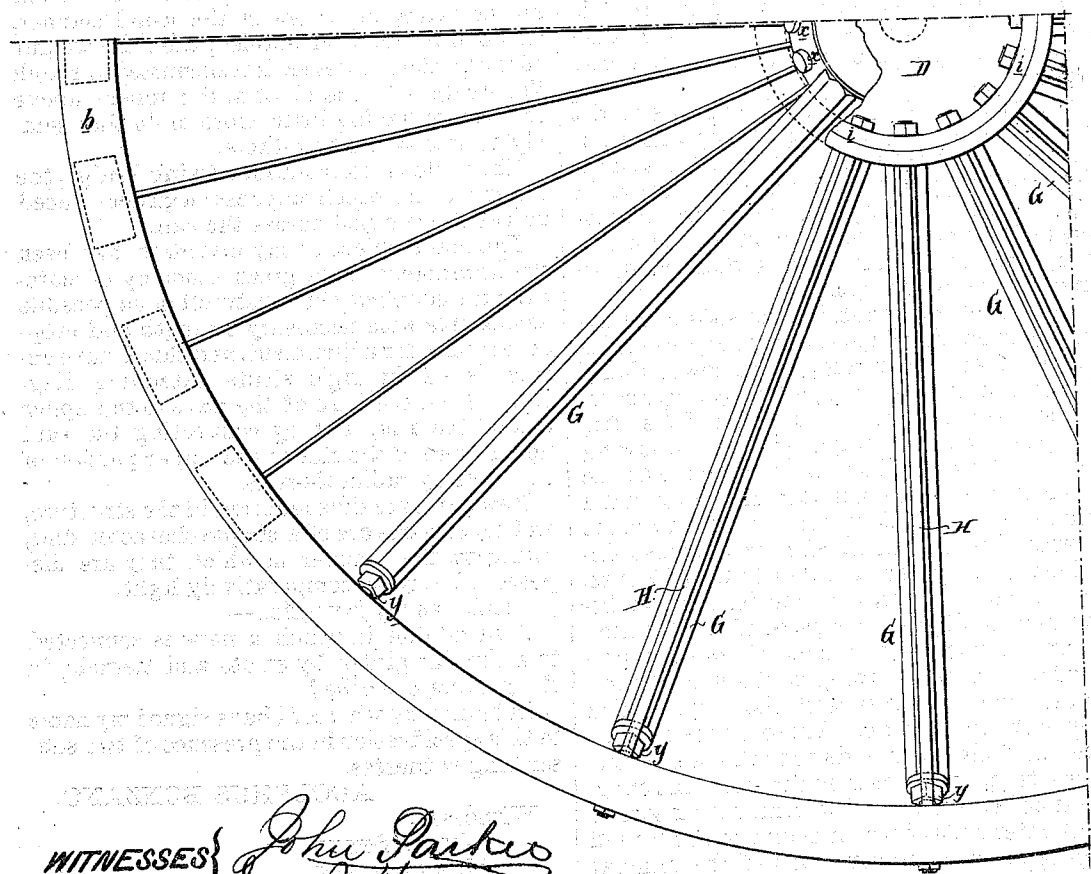


FIG. 2.



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UNITED STATES PATENT OFFICE.

ADOLPHUS BONZANO, OF PHOENIXVILLE, PENNSYLVANIA, ASSIGNOR TO
CLARKE, REEVES & COMPANY, OF SAME PLACE.

IMPROVEMENT IN TURN-TABLES FOR PIVOT-BRIDGES.

Specification forming part of Letters Patent No. 127,018, dated May 21, 1872.

Specification describing an Improvement in Turn-Tables for Pivot-Bridges, invented by ADOLPHUS BONZANO, of Phoenixville, Chester county, Pennsylvania.

My invention consists of a turn-table, in which a central nave is connected to an annular girder by means of struts and tie-rods in the manner described hereafter, the object of my invention being the attainment of economy and simplicity in construction, appropriate strength, and facilities for adjustment.

In the accompanying drawing, Figure 1 is a vertical section of part of a turn-table made according to my invention, and Fig. 2 a plan view of Fig. 1.

The nave of the turn-table consists of the base A, column B, and cap D, the whole being made of cast-iron, and being fitted and secured together in the manner illustrated in the drawing, or in any other appropriate manner, and the base being provided with a pivot, *a*, arranged to turn in a suitable step, secured to the foundation.

The rim of the turn-table consists of an annular girder, E, composed, in the present instance, of an upper ring, *b*, and lower ring *d* of cast-iron, connected together by a cylinder, *e*, of sheet-iron. The nave and rim of the turn-table are connected together in the following manner: From the base A of the nave to the upper ring *b* of the annular girder extend a number of struts, G, which I prefer to make of wrought-iron tubes, similar to those described in the patent granted to S. J. Reeves. The struts, however, may consist of wrought-iron bars, of different forms, or of combination of bars, or they may be made of cast-iron, provided in all cases that they be of a strength and rigidity commensurate with the duties which they have to perform. These struts may be fitted at their lower ends to the base A of the nave over projections *x* on the same, the opposite ends being provided with adjusting-screws *y*, the outer ends of which fit and can be turned in pockets in the upper ring *b* of the annular

girder. Other appliances—wedges, for instance—may be employed as adjusting mediums in place of the screws *y*. The nave is further connected with the rim of the turn-table by radial tie-rods H, which at one end pass through and are secured to the upper ring *b* of the annular girder, the inner ends passing through and being confined by suitable nuts to the vertical flange *i* of the cap D of the nave.

It should be understood that the circular girder bears on rollers in the usual manner, common to other turn-tables; the main weight of the girder, however, is transmitted through the struts G to the pivot *a*, the rollers above referred to having little more to do than simply to steady the turn-table.

The table is intended for a swing bridge, the lower chord of which may rest on girders placed across the rim and across the cap.

The main object of my invention has been the attainment of as great economy of material and simplicity in construction as possible compatible with necessary strength and proper facilities for adjustment, and this I have accomplished by rigid struts extending diagonally from the base of the nave to the upper end of the rim, and by connecting the said upper edge of the rim to the upper portion of the nave by radial tie-rods.

Few parts are thus required in the structure, and these parts are of a simple character, and, owing to the manner in which they are disposed of, may be comparatively light.

I claim as my invention—

A turn-table in which a nave is connected to a circular girder by struts and tie-rods, in the manner described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADOLPHUS BONZANO.

Witnesses:

WM. A. STEEL,
HARRY SMITH.