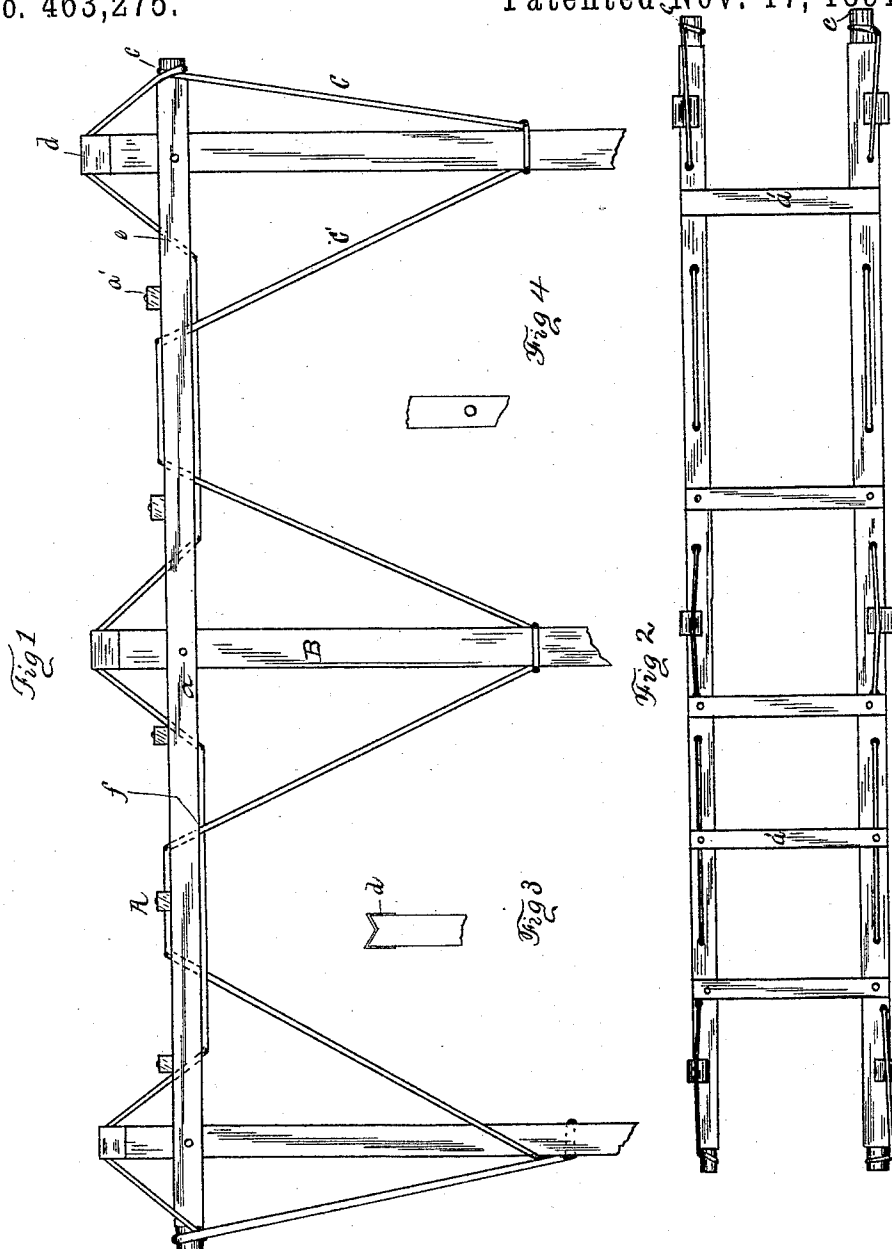


(No Model.)

H. V. HARDWICK, Sr.
TRUSSED STRUCTURE.

No. 463,275.

Patented Nov. 17, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

HOMER V. HARDWICK, SR., OF CONYERS, GEORGIA.

TRUSSED STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 463,275, dated November 17, 1891.

Application filed June 24, 1891. Serial No. 397,388. (No model.)

To all whom it may concern:

Be it known that I, HOMER V. HARDWICK, Sr., a citizen of the United States of America, residing at Conyers, in the county of Rockdale and State of Georgia, have invented certain new and useful Improvements in Cable or Wire Bracing for Telegraph Poles or Posts, Pillars, Benches, Trestles, &c., of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain improvements in bridges, more particularly railroad-bridges, and telegraph and other poles, having for its object to promote strength and durability and economy of construction; and it consists in the novel combination and arrangement of parts, as hereinafter set forth, and illustrated in the accompanying drawings, and pointed out in the claim.

In the drawings, Figure 1 is a side elevation of a section of a bridge. Fig. 2 is a plan view thereof, and Figs. 3 and 4 are detail views thereof.

In the organization of my invention I suitably construct the railroad or track bed A of longitudinal pieces or sleepers *a*, and transverse pieces or ties *a'*, secured upon the latter, and support the same upon piles or posts B, driven into the earth or bed of the river, or otherwise suitably anchored in place. These several parts are all firmly braced together by cables or wire ropes C C', rove or passed through openings in the piles or posts B and secured around them. The cable or rope C is then passed upward and around shouldered ends of the sleepers or longitudinal pieces *a*, and next through the grooves or notches *d* in the upper ends of the piles or posts B, and then passed downward and rove through oblique passages or openings *e* in the longitudinal

pieces or sleepers passing along the under side thereof and again upward through other openings of said passages or openings *e*, and again in like manner, as above, passing through notches or grooves in the upper ends of other posts or piles, and so on throughout the entire structure or bridge.

The cable or rope C' is passed upward and rove through oblique passages or openings *f* in the longitudinal pieces or sleepers *a*, reversely to the passage of the cable or rope C therethrough, it being secured in like manner to the succeeding piles or posts through the structure as to the aforesaid posts or piles.

Thus I have produced by the aforesaid combination and arrangement of parts a structure whose braces or stays are so interconnected therewith as to secure the greatest possible firmness and stability.

Having thus fully described my invention, I claim—

The bridge or structure having the cable-braces C C', the braces or cables C being roved or passed through openings in the piles of the superstructure, around shouldered ends of the sleepers or longitudinal pieces thereof, through grooves or notches in the upper ends of the piles, and roved through oblique passages in said sleepers or longitudinal pieces downward and upward, respectively, and the braces C' being passed or roved reversely to the passage of the cables or braces C and fastened in common with the latter to said piles, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HOMER V. HARDWICK, SR.

Witnesses:

J. H. TAYLOR,
A. M. HELMS.