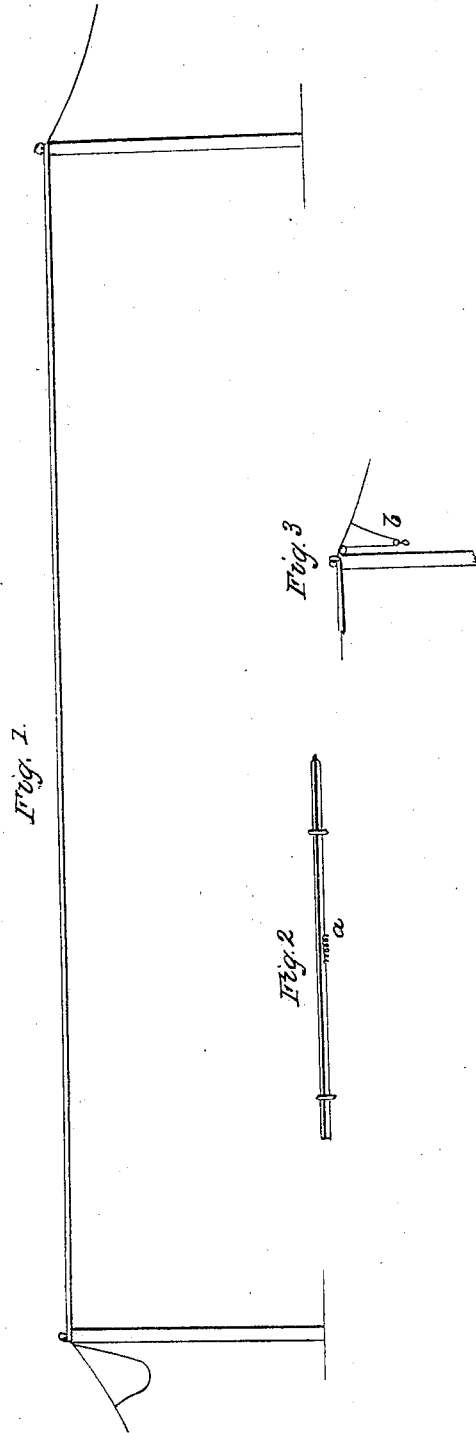


PRATT & GRAVEREND.  
Suspending Telegraph Wires.

No. 6,149.

Patented Feb. 27, 1849.



# UNITED STATES PATENT OFFICE.

ELIJAH PRATT AND RAYMOND GRAVEREND, OF NEW YORK, N. Y.

## IMPROVEMENT IN SUSPENDING TELEGRAPH-WIRES.

Specification forming part of Letters Patent No. **6,149**, dated February 27, 1849.

### *To all whom it may concern:*

Be it known that we, ELIJAH PRATT and RAYMOND GRAVEREND, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Suspending Telegraph-Wires for Great Distances; and we do hereby declare that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known, and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the suspension-posts and gum-elastic support. Fig. 2 is a method of taking up the slack of the wire. Fig. 3 is a modification of the same.

The nature of our invention consists in suspending a stretched gum-elastic band, cord, or tube on posts or other suitable permanent fixtures, on or through which a wire is suspended in the air for distances of great length for the passage of telegraph-wires across rivers, and in other similar situations.

By experiment we have found that a gum-elastic tube or cord stretched to five times its length when in its normal state will suspend a greater weight than any metallic or other substance according to its weight with which we are acquainted, and that a tube or cord stretched to the degree above named, when sustained on posts in a horizontal line, will, in consequence of its contractile power, remain

in a straight line, or nearly so, and be capable of sustaining a small wire, sufficient to convey the current for telegraphic purposes, which passes through it if it is hollow, or is fastened to its outside in any convenient way. This elastic band will, of course, be subject to be somewhat stretched out and swayed by the wind, and consequently if the wire was made rigid, it would be liable to be broken.

To obviate this difficulty we either coil a portion of the wire into a spiral form at certain intervals, as shown at *a*, Fig. 2, or we extend it down in a loop at either end, as represented at *b*, Fig. 3, in which latter case we suspend a sufficient weight to it to enable it to recover position when the elastic cord comes back to place.

Having thus fully described our improvement and its modification, what we claim therein as new, and for which we desire to secure Letters Patent, is—

Suspending telegraphic wires across rivers by means of a stretched gum-elastic band or tube, substantially in the manner and for the purpose set forth.

ELIJAH PRATT.

RAYMOND GRAVEREND.

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