R. F. BRADLEY.

Station for Submarine Telegraph.

No. 163,915. Patented June 1, 1875.

Fig. 1.

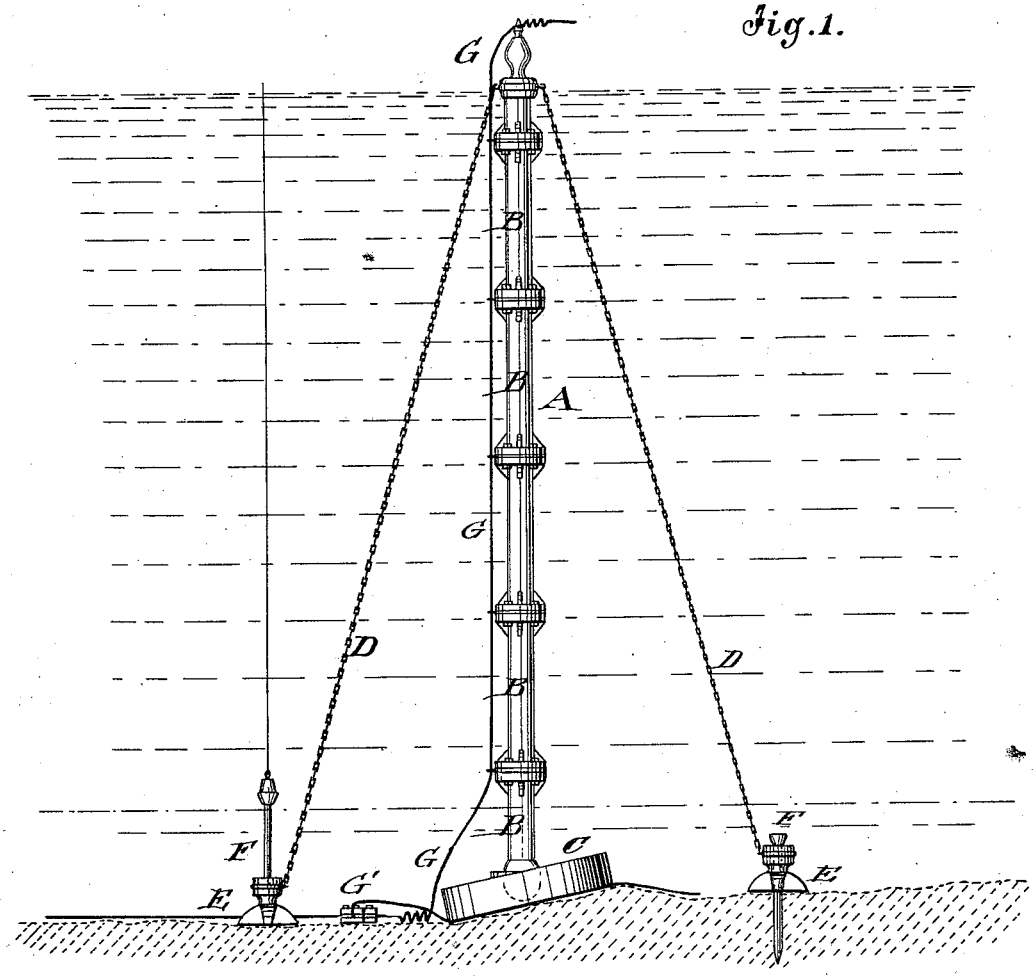
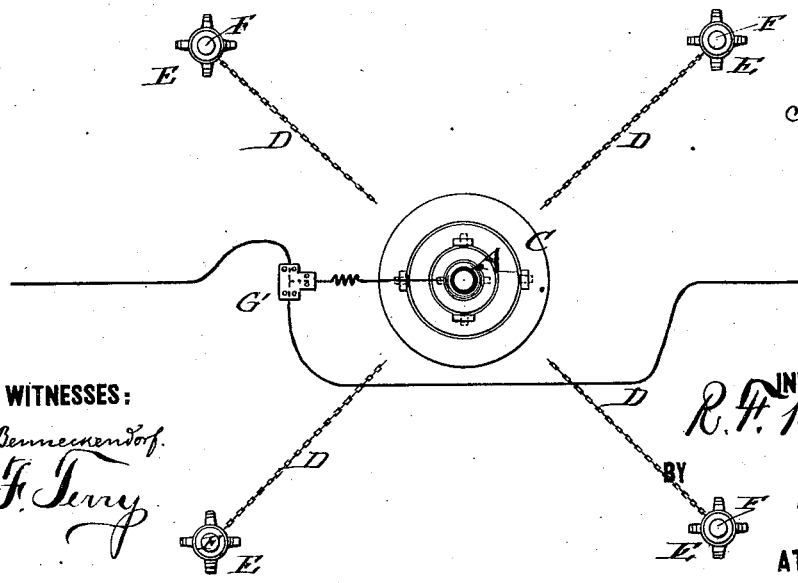


Fig. 2.



WITNESSES:

A Bennecendorf.

A. F. Terry

INVENTOR:

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BY

ATTORNEYS.

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UNITED STATES PATENT OFFICE.

ROBERT F. BRADLEY, OF MOFFETTSVILLE, SOUTH CAROLINA.

IMPROVEMENT IN STATIONS FOR SUBMARINE TELEGRAPHS.

Specification forming part of Letters Patent No. **163,915**, dated June 1, 1875; application filed March 29, 1875.

To all whom it may concern:

Be it known that I, ROBERT F. BRADLEY, of Moffettsville, in the county of Anderson and State of South Carolina, have invented a new and Improved Station for Ocean-Telegraphing, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation, and Fig. 2 a plan view, of my improved station for ocean-telegraphing.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved system of telegraph-stations in mid-ocean, by which messages can be sent from any point of the ocean, along the line of the cable, to the terminal points, and vice versa, so that communication with vessels and passengers during the voyage may be established.

The invention consists of a hollow sectional column with a base-plate attached by ball-and-socket joint, which column is lowered into the water and anchored rigidly to the ground. The branch cable is coupled to the main cable, and carried along the column to the surface of the water, to be there placed in connection with the instruments on board of the vessels.

In the drawing, A represents the vertical cable-supporting column, which is made of a number of sections, B, according to the depth of the ocean at the point where the station is to be established. The sections are connected by rubber-packed flanged and bolted joints, the lower section being seated by means of a ball-and-socket joint in a base-plate, C, of sufficient size, which adjusts itself readily to the inclination of the bottom, while retaining the vertical position of the column. The column is anchored at four or more points, by means of stay-chains or cables D and stay-plates E, to the bottom of the ocean, the upper end of the chains being attached to a collar or ring at the top of the column, the lower ends to collars of the stays. The stays E are rigidly secured to the bottom by means of long iron stakes F, which are guided by means of rubber rings in the central tubular parts of the stay-plates and driven into the ground by a charge of powder in the head of the stakes, the powder being ignited by an electric spark of a wire connecting the stake with a battery at the surface of the water. The ignition of the charge or cartridge detaches the wire from the stakes, which is then hauled in for being applied to drive in the next stake. The branch or station cable G is attached to main cable by a coupling, G′, of suitable construction, and carried up along the column A to a point above the surface of the water, to be there placed in contact with instruments of the vessels, or with a fixed stationary vessel for taking and delivering the messages. The branch rope causes no strain on the main cable, as it is supported independently of the same, and serves, moreover, to increase the working power of the main cable, as the surcharge of electricity may be equalized by finding an outlet into the branch cable.

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

In ocean-telegraphy, a station for placing intermediate points in communication with the land termini, constructed of a hollow sectional column, which is supported on a universally-jointed base-plate, and anchored, by stay-chains or cables, to bottom stay-plates secured by stakes, for carrying the branch cable from the main cable to the surface, substantially as and for the purpose set forth.

ROBERT FOSTER BRADLEY.

Witnesses:
THOS. A. SHERARD,
S. W. SHERARD.