

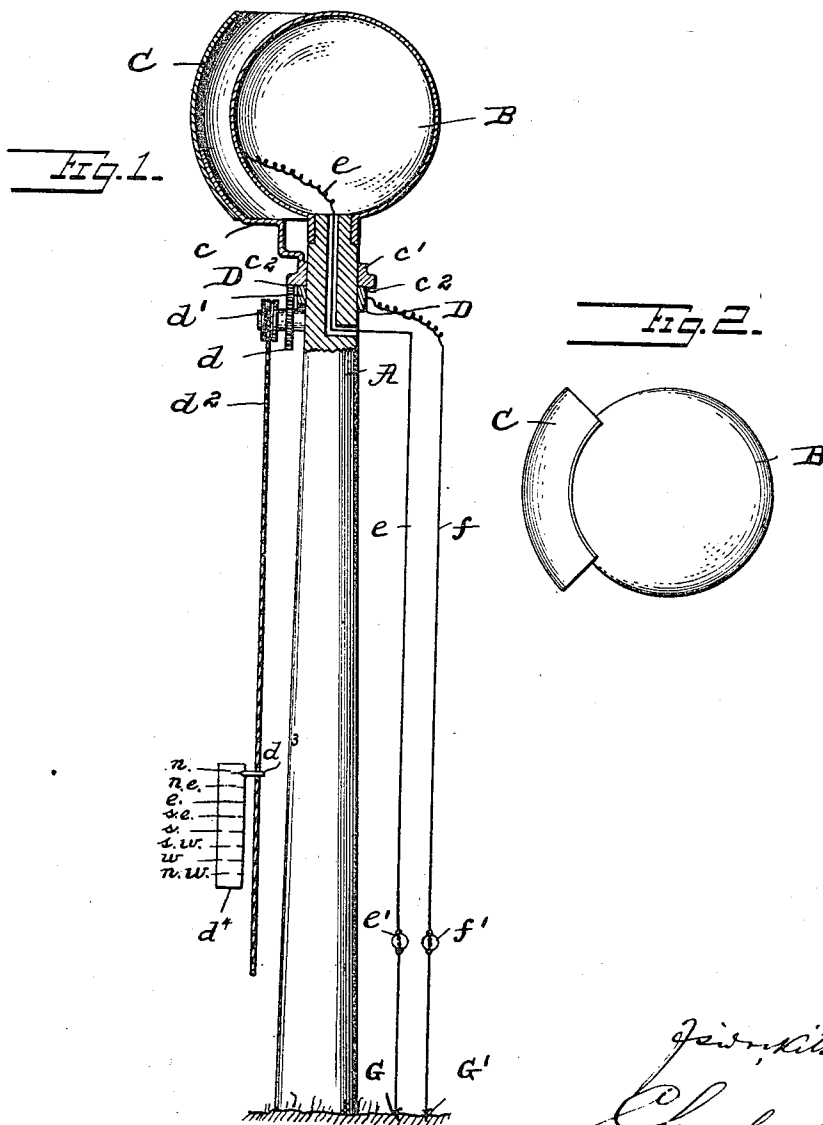
No. 651,014.

I. KITSEE & C. E. WILSON.
SPACE TELEGRAPHY.

Patented June 5, 1900.

(Application filed May 26, 1899.)

(No Model.)



WITNESSES:

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ISIDOR KITSEE AND CHARLES E. WILSON, OF PHILADELPHIA, PENNSYLVANIA; SAID KITSEE ASSIGNOR TO SAID WILSON.

SPACE TELEGRAPHY.

SPECIFICATION forming part of Letters Patent No. 651,014, dated June 5, 1900.

Application filed May 26, 1899. Serial No. 718,461. (No model.)

To all whom it may concern:

Be it known that we, ISIDOR KITSEE and CHARLES E. WILSON, of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Space Telegraphy, of which the following is a specification.

Our invention relates to an improvement in space telegraphy.

The object of our invention is to ascertain the path or direction from which a message is sent.

In space telegraphy as it is practiced to-day messages may be received without the aid of wire where the sending and receiving stations are apart from each other for a number of miles; but it is impossible with the arrangements of to-day to ascertain from what direction the messages are sent. This point is of great importance, especially if messages should be interchanged between vessels at sea in foggy weather; and to provide the receiving-stations with a device with the aid of which the sending direction can be ascertained is the aim of our invention.

Referring to the drawings, similar letters indicate similar parts.

Figure 1 is a side elevation, partially in section. Fig. 2 is a plan view of the sphere and shield.

A is a mast or pole; B, the sphere secured to said pole; C, the shield secured to bracket c, projecting from collar c'. c² is the rack on collar c'. This collar rests and is capable of rotating on the collar D, having the pinions d journaled thereto. d' is the pulley secured to the pinions d. d² is the operating-rope.

To the sphere B is connected the wire e, which is connected also to the ground G, with interposition of the receiving device e'. To the shield C is connected the wire f, connected also with interposition of the receiving instrument f' to the ground G'. Attached to the rope is the finger d³, and in juxtaposition to such finger is the indicating-board d⁴.

The *modus operandi* is as follows: If the operator is called up—that is, if messages are sent to the receiving-station—the receiving instrument will answer. The operator to ascertain from what direction the messages are sent will manipulate the rope, with the aid of which the shield can be carried around the whole circumference of the sphere. In

the drawings it is supposed that the shield covers or shields that part of the sphere that lies due north. If the message is sent from a different direction, then the incoming electric waves will be received by that part of the globe which lies due to the sending direction and is not covered by the shield. The instrument connected to the sphere will answer, whereas the instrument connected to the shield will remain unaffected. To ascertain now the direction, the operator will pull the rope, thereby revolving the shield around the globe. If in the act of revolving the shield will come between the path of the incoming waves and the sphere, then the waves will be received by the shield and will affect the instrument placed in the circuit of said shield. The instrument connected to the circuit of the sphere will remain unaffected. The position of the finger will show the operator the position of the shield. He can thereby easily ascertain at what compass-point the shield is affected.

We have described the mechanism as consisting of collars and racks; but any other movable mechanism, either entirely mechanical or electromechanical, may be employed without departing from the scope of our invention.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In space telegraphy the arrangement consisting of a stationary receiving globe or sphere provided with a receiving device and a movable shield in proximity to said stationary globe, said shield being also provided with a receiving device, and means for revolving said shield around said globe.

2. A receiving-station for space telegraphy provided with a path-finder consisting of a stationary receiving-globe and movable shield, in combination with means for revolving said shield around said globe, said shield and globe being each provided with a receiving device.

In testimony whereof we sign our names, in the presence of two subscribing witnesses, this 12th day of May, A. D. 1899.

ISIDOR KITSEE.
CHARLES E. WILSON.

Witnesses:

E. R. STILLEY,
WALLACE B. ELDRIDGE.