

913,183.

Fig. 1.

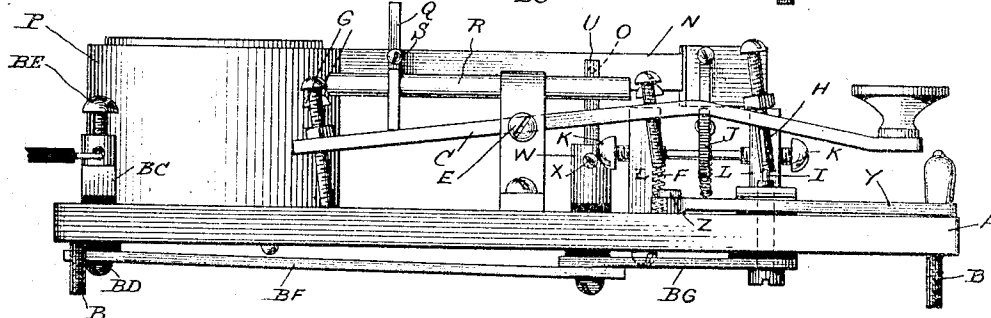
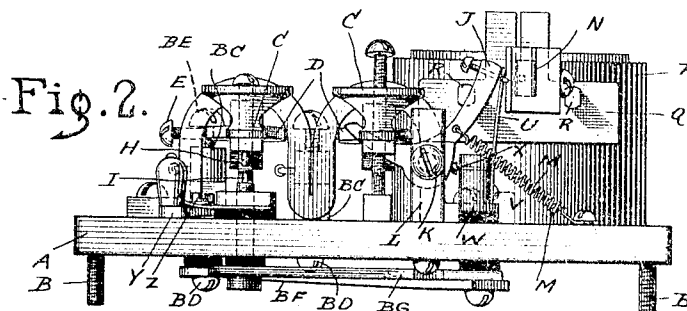
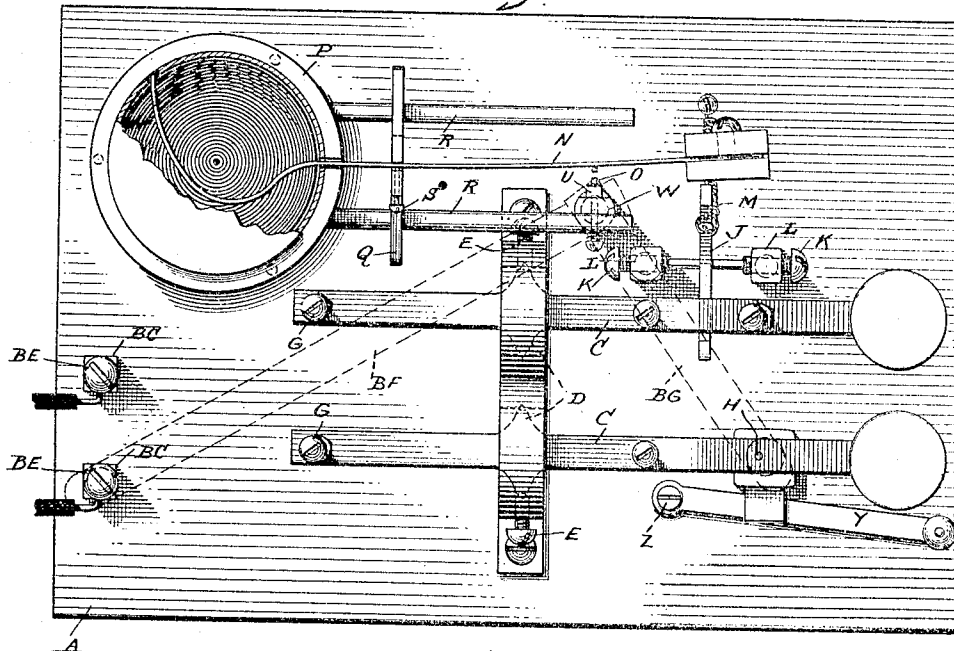


Fig. 3.

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UNITED STATES PATENT OFFICE.

JOHN CHRISTOPHER JAMES ALDERSON, OF EL CASCO, CALIFORNIA.

TELEGRAPH TRANSMITTING-MACHINE.

No. 913,183.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed September 4, 1906. Serial No. 333,360.

To all whom it may concern:

Be it known that I, J. C. J. ALDERSON, a citizen of the United States, residing at El Casco, in the county of Riverside and State of California, have invented a new and useful Telegraph Transmitting-Machine, of which the following is a specification.

My invention relates to an improved telegraph transmitter in which a mechanical device is utilized to assist the operator in sending messages, and the prime object of my invention is to provide a transmitter by which messages may be sent at a high rate of speed.

A further object is to provide an instrument which may be operated without any great amount of skill on the part of the operator.

A further object is to provide a device which will eliminate the individual peculiarities of the operator and render the transmission of messages more nearly uniform.

A still further object is to provide a transmitter which requires a small amount of physical exertion for its operation.

I accomplish these objects by means of the device described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved transmitter; Fig. 2 is an end elevation of the same; and Fig. 3 is a side elevation of the same.

The salient feature of my improved transmitter consists of the use of two sending keys C, one of which I will hereinafter designate as the dash key, being the left hand key in Fig. 2, and the other of which I will hereinafter designate the dot key. The dash key operates in the manner common to telegraph keys while the dot key is connected to and operates the mechanism which is adapted to mechanically send over the wires any number of dots desired in rapid succession.

A base plate A is provided for the instrument, being preferably made of metal so as to form one side of the electric circuit, as will be hereinafter described. Upon base plate A are mounted two sending keys C provided with pivots D resting in set screws E. Screws G are provided at the rear ends of keys C to limit their movements and springs F at their front end hold them in their normal positions. The dash key is provided with a contact H which is adapted on its downward movement to touch an insulated contact I on base plate A and thereby establish connection from

binding post BC through strip BF, strip BG, contact I, contact H, key C, screws E and base plate A back to binding post BC attached to the base plate. Binding posts BC are provided with screws BE for the purpose of holding the line wires.

A bell crank lever J is pivotally mounted in set screws K attached to studs L and is provided with an upwardly extending arm with an adjusting screw at its upper end. A spiral spring M holds the horizontal arm of bell crank lever J in contact with dot key C. The screw in the upper end of bell crank lever J normally contacts with and presses to one side an adjustable weight mounted on the end of a flat spring N whose other end is secured in a circular boss P mounted on base plate A. Projecting from boss P are two rods R upon which is slidably mounted a plate Q provided with a slot for the reception of flat spring N. A set screw S is adapted to bear against flat spring N and hold plate Q at any desired point on the spring, and the position of plate Q will determine the rapidity of vibration of spring N which may be adjusted to suit the needs of the individual operator. Spring N is provided with a contact adapted to touch contact O mounted on a flat vertical spring U secured to a stud W on base plate A. Spring U is secured to the stud W by screw V and is adjustable by an adjusting screw X which bears against its inner face.

The contact on spring N is normally held out of engagement with contact O by the upper end of bell crank lever J, but when the dot key C is depressed bell crank lever J is moved away from spring N and the spring is allowed to vibrate freely until dot key C is released. During the vibrations of spring N its contact engages with contact O as often as spring N completes a vibration, and by depressing dot key C a sufficient length of time any number of engagements of those two contacts may be effected. Contact O is connected by strip BF to binding post BC and upon engagement with the contact on spring N a circuit is set up from binding post BC through strip BF, contact O, spring N, boss P and base plate A back to the other binding post BC. The speed at which the dots succeed each other may be regulated by the adjustment of the position of plate Q on spring N to suit the length of line and the speed at which the operator wishes to send.

In the operation of my device the operator

depresses the dash and dot keys to form the letters comprising the message which he wishes to send. To depress these keys only one hand need be used, the dot key being depressed by one finger and the dash key by another. A switch *Y* pivoted at *Z* to base plate *A* is provided to close the circuit at the termination of the use of the keys.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

In a telegraph instrument, the combination of a vibrator constituting one terminal of an electric circuit, rods, a plate slidably

mounted on the rods and adjustably connected to the vibrator for regulating the vibration thereof, a stationary contact cooperating with the said vibrator, a spring-controlled lever normally in engagement with the vibrator, and a key adapted to actuate the lever for releasing the vibrator.

Signed at Redlands, in the county of San Bernardino and State of California, this 17th day of July, 1906.

JOHN CHRISTOPHER JAMES ALDERSON.

Witnesses:

JOHN P. HIGHT, Jr.,
C. E. HARPER.