W. E. & J. W. BUZBY.
Telegraph Key and Switch.

No. 215,093. **Patented May 6, 1879.**

Fig: 1.

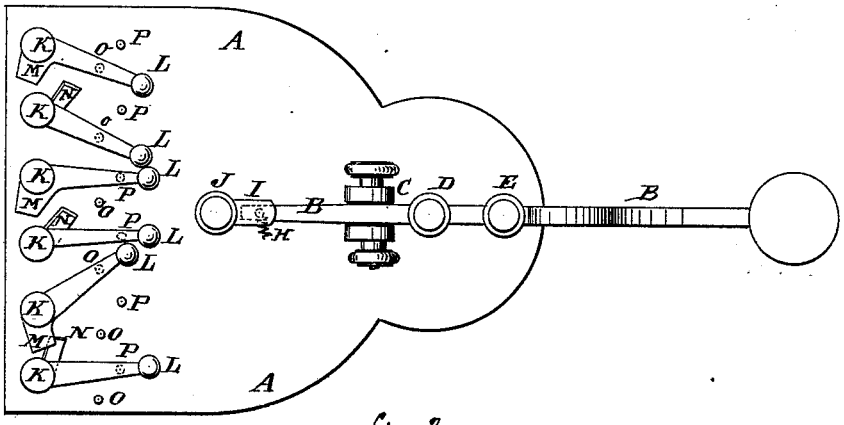


Fig: 2.

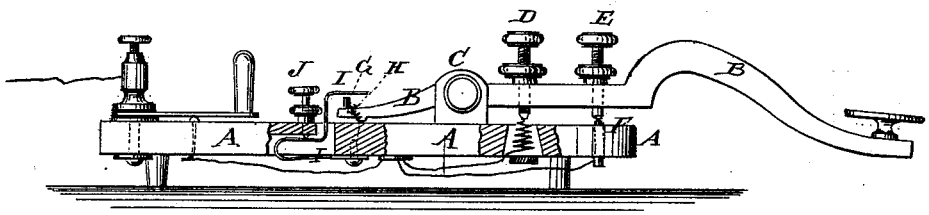
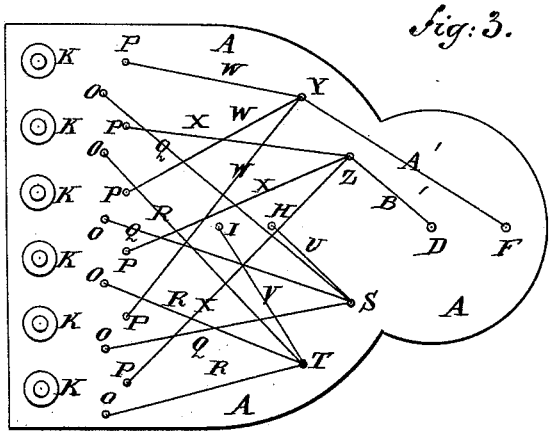


Fig: 3.



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UNITED STATES PATENT OFFICE.

WINSLOW E. BUZBY AND JOHN W. BUZBY, OF SHAMONG, NEW JERSEY.

IMPROVEMENT IN TELEGRAPH KEY AND SWITCH.

Specification forming part of Letters Patent No. **215,093**, dated May 6, 1879; application filed March 8, 1879.

To all whom it may concern:

Be it known that we, WINSLOW E. BUZBY and JOHN W. BUZBY, of Shamong, in the county of Burlington and State of New Jersey, have invented a new and useful Improvement in Telegraph-Instruments, of which the following is a specification.

Figure 1 is a top view of a switch-board to which our improvement has been applied. Fig. 2 is an edge view of the same, partly in section to show the construction. Fig. 3 is a plan view of the connecting-wires.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved switch-board, which shall be so arranged that any report or message may be transmitted simultaneously on any two wires, which will allow either wire to be worked separately and independently of the other, and which will allow three or more wires to be worked with a single key.

The invention consists in the combination of two sets of connecting-points and two sets of connecting-wires with the connectors, the binding posts, and the two connections of the same key-lever, and in the combination of the circuit-closing arms with the binding-posts and the connectors, as hereinafter fully described.

A represents the switch-board, and B the key-lever, which is pivoted to a support, C, attached to the said switch-board in such a way as to be insulated from it. The lever B is provided with two circuit-connections, the one in front being formed of the adjustable screw D and the points E F.

The point E is made adjustable, so that no lever-play-adjusting screw is necessary. The point F is attached to the switch-board A.

In case the points become gummed the point E can be detached and cleaned without the trouble of detaching the lever.

The back connection of the lever B is formed of the insulated point G, attached to the said lever, the small spring H under the lever, and the spring I, which passes over the lever and down through the switch-board A, and which is provided with an adjusting-screw, J. The back connection being a spring, it gives when the point G comes in contact with it, so that the connection will be made before the front connection, and will be the last to break. The dots and dashes will thus be formed firmer, and will go through several sets of repeaters.

The adjusting-screw J allows the tension of the spring I to be adjusted to make the writing firm or light, and even in wet weather, when all wires work hard, firm writing can be made without effort.

K are the binding-posts, which receive the circuit-wires. Three pairs of binding-posts K are represented as being applied to the switch-board A; but any desired number of pairs may be used.

To each binding-post K is pivoted a connector, L, one of each pair of which is provided with an extension-arm, M, which may be brought into contact with an arm, N, attached to the other binding-post of each pair. The arms M N serve as circuit-closers to pass the circuit through the binding-posts K when the wire is not in use.

To the switch-board A are attached two rows of connecting-points, O P, at different distances from the binding-posts K, and in such positions that the connectors L may be brought into contact with the points of both rows. The points of the row O nearest the binding-posts K are connected in pairs, by wires Q R, with two points, S T, which points are connected, by wires U V, with the back connection H I.

The points of the row P farthest from the binding-posts K are connected in pairs, by wires W X, with two points, Y Z, which are connected, by wires A′ B′, with the front connection F D.

The wire B′ is connected with the screw D of the front connection with a spring, so that it will not be affected by the movement of the key-lever B.

When it is desired to switch a wire upon the front connection, the two connectors L of that wire are turned upon the points P.

If it is desired to work a wire with the back connection, the two connectors of that wire are turned upon two points, O. By making these two adjustments at the same time the two wires may be worked simultaneously.

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

1. The combination of two sets of connecting-points, O and P, and two sets of connecting-wires, Q R V U and W X A′ B′, with the connectors L, the binding-posts K, and the two sets of connections G H I and D E F of the same key B, substantially as herein shown and described.

2. The combination of the circuit-closing arms M N with the binding-posts K and the connectors L, substantially as herein shown and described.

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JOHN W. BUZBY.

Witnesses:
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