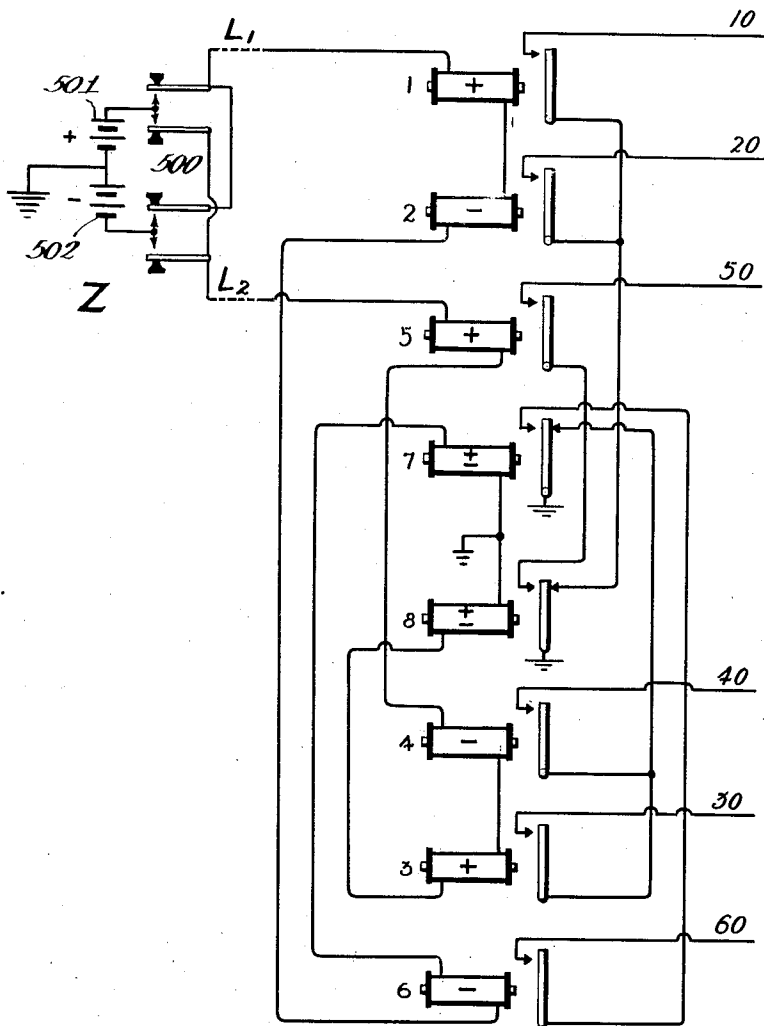


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Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES E. SCRIBNER, OF JERICHO, VERMONT, AND ARTHUR H. ADAMS, OF SPARKILL,
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SELECTING APPARATUS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, CHARLES E. SCRIBNER, citizen of the United States, residing at Jericho, in the county of Chittenden and State of Vermont, and ARTHUR H. ADAMS, citizen of the United States, residing at Sparkill, in the county of Rockland and State of New York, have invented a certain new and useful Improvement in Selecting Apparatus, of which the following is a full, clear, concise, and exact description.

This invention relates to printing telegraphs, and more particularly to a selecting apparatus for a printing telegraph receiver.

The principal object of this invention is to provide a selecting apparatus of the above type which is simple in construction and reliable and efficient in operation.

To the above end a plurality of polarized and neutral relays are arranged in a novel manner whereby any one of a plurality of line conductors of a selecting circuit may be selected upon the receipt of a combination of impulses from a distant transmitting station.

This invention will be fully understood from the following description taken in connection with the accompanying drawing in which the selecting apparatus is shown diagrammatically.

The current impulse sending apparatus at a distant transmitting station comprises key 500 and two grounded sources of energy 501 and 502. By the proper manipulation of the levers of the key 500 the desired combination of positive or negative impulses over either one or both of the main line conductors L^1 and L^2 may be transmitted. The two main line conductors L^1 and L^2 connect the selecting apparatus at the receiving station with the distant transmitting station and are preferably grounded through a plurality of polarized relays 1, 2, 3, 4, 5, 6 and neutral relays 7 and 8. Combinations of polarized and neutral relays operated over either one or both of the main line conductors L^1 and L^2 control the selection of any one of a plurality of conductors 10, 20, 30, 40, 50 and 60 which are connected to groups of type magnets to form a plurality of selecting circuit branches. It will be

readily understood that an impulse of a particular polarity arriving over either one or both of the main line conductors L^1 and L^2 will operate only those relays which are polarized to a like polarity, together with the neutral relays.

A sufficient description of the details of the circuit will appear from a description of the operation of receiving a combination of impulses over the main line conductors L^1 and L^2 .

Let it be assumed that a combination of impulses is received from the distant station consisting of a positive impulse over line L^1 followed after a brief interval of time by a negative impulse received simultaneously over lines L^1 and L^2 .

A positive impulse arriving over L^1 will pass through positively polarized relay 1, negatively polarized relays 2 and 6 and neutral relay 7 to ground. Positively polarized relay 1 and neutral relay 7 will pull up their armatures the former closing a ground connection including the armature of the neutral relay 8, for the branch 10 of the selecting circuit. At the cessation of the impulse the relays return to normal in condition to receive the second impulse of the combination. The second impulse operates negatively polarized relays 2, 4 and 6 and neutral relays 7 and 8 closing a ground connection, at the armature of neutral relay 7, for the branch 60 of the selecting circuit.

We claim:

1. In a selecting apparatus, the combination with a plurality of selecting circuit branches, of a plurality of polarized and neutral relays arranged in two series groups, a main line conductor connected respectively to each said group, the relays of each group being selectively operated in response to characteristic impulses received over the main line conductors, and contacts controlled by said selected relays for closing one of said branches.

2. In a selecting apparatus for a printing telegraph receiver, the combination with a plurality of branch selecting circuits, of a plurality of relays arranged in two series groups, each group containing positively and

negatively polarized relays and a neutral relay, and each group connected to a main line conductor, and contacts controlled by said group of relays in response to impulses received over one or both of the main line conductors for closing one of said branches.

5 In witness whereof, we, hereunto subscribe

our names this 21st day of November A. D. 1911.

CHARLES E. SCRIBNER.
ARTHUR H. ADAMS.

Witnesses:

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