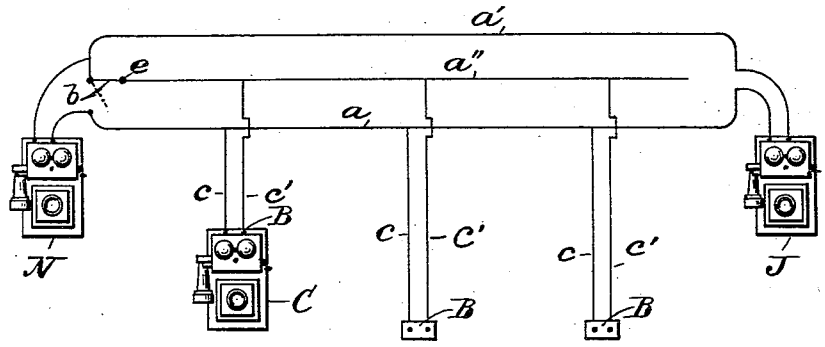
(No Model.)

W. H. NIXON.

RAILWAY TELEPHONE SYSTEM.

No. 555,222. Patented Feb. 25, 1896.



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RAILWAY TELEPHONE SYSTEM.

SPECIFICATION forming part of Letters Patent No. 555,222, dated February 25, 1896.

Application filed January 28, 1895. Serial No. 536,437. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. NIXON, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Railway Telephone Systems; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to railway telephoning, and especially to that part of such telephoning designed to expedite the unblocking or clearing of the track of a railway in case of an accident or when a train is delayed for any reason, and has for its immediate object to facilitate on railways prompt communication between the conductor of a delayed or derailed train and the superintendent or train-dispatcher, and also between such conductor and the conductor of a train that may be waiting on the next switch, in case of a street-railway, and the system also provides means for communicating from the station at one end of a division with the station at the other end with the portable telephone connecting arrangement cut out of the circuit.

It is fully described and illustrated in this specification and accompanying drawing.

The construction and arrangement of the system are as follows:

Two wires *a a'* represent the wires of a railway signal and telephoning connection having a metallic circuit through the telephones at each end between the superintendent's office N and the train-dispatcher's office J. *a''* represents a third wire having no connection with the wires *a a'*, except when the switch *b* is turned to point *e* at the end of wire *a''*. A series of pairs of wires *c c'* are connected, the wires *c* of each pair to the wire *a*, and the wires *c'* to the wire *a''*. By connecting a portable telephone C to any one of these pairs of wires *c c* with the switch *b* at point *e*, it will be put into connection with the offices N and J and with a portable telephone connected in like manner with it at any other pair *c c'* on wires *a''*.

When the two offices N J wish to communicate with each other without having their messages liable to be short-circuited or taken off by a portable telephone inserted between the wires of some one of the pairs *c c'*, the switch can be turned off, as shown by the dotted line, which will cut the wire *a''* and all the portable telephone connection *c c'* out of the circuit between the two offices N and J, and leave the main line for through messages only.

The advantage of this system of communication between conductors and their superintendent and train-dispatcher will be readily understood, as no matter at what point upon the system the train may be stopped the portable telephone enables a conductor in one minute's time to enter into oral communication with the superintendent or train-dispatcher, and upon a street-railway the conductors can communicate with each other, thereby saving a blockade of the road for a considerable length of time.

Upon a street-railway, in case of a blockade from any cause whatever, the conductor of a car who arrives upon a switch upon which he is supposed to meet another car makes a connection by means of the flexible wire cord with the cutting-in device upon the pole nearest to line and waits for a call from the conductor of the car he was to have met. The conductor of the delayed car, knowing the time at which the other conductor will be waiting for him, makes connection described above, telling him of the cause of the delay, thereby enabling him to run his car to the obstruction, where they exchange passengers and proceed to their respective destinations.

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

A railway telephone system consisting of a metallic conductor, as *a*, two telephones one at each end of said conductor, means for completing the circuit between said telephones,

a second metallic conductor, as a'', normally electrically connected to the opposite pole of one of said telephones to that to which is connected the other metallic conductor, a switch normally closed to make the connection of the second metallic conductor and telephone but capable of being opened, and a series of pairs of branch wires, as c and c', from the metallic conductors normally open but capable of being electrically connected together by a portable telephone, substantially as described.

WILLIAM H. NIXON.

Witnesses:
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