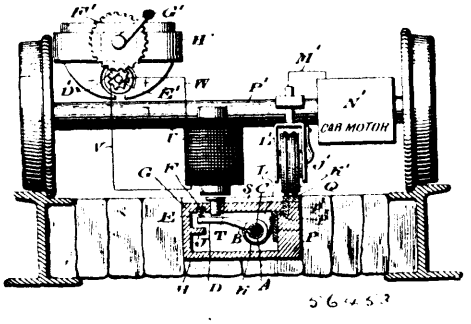
ing the paint, a discharge pipe for leading the said paint from the holder to the paint nozzle, an air inlet for enabling compressed air to enter the holder and force the paint through the discharge tube, and a valve for controlling the exit of the paint. 2nd. In apparatus for spraying paint or similar substance, the combination with the nozzle head of a detachable cylindrical holder containing a number of paint vessels, a series of discharge tubes leading from the said paint vessels and communicating in the nozzle head with passages that meet at a common outlet terminating in the nozzle, a series of valves carried by the nozzle head and capable of being individually or simultaneously operated by the user, and an air inlet for admitting compressed air to the paint vessels, substantially as and for the purpose specified. 3rd. In apparatus for spraying paint or similar substance, the combination with the nozzle head of a detachable holder containing a number of paint vessels, a series of discharge pipes extending to nearly the bottom of the said paint vessels and communicating in the nozzle head with passages leading to a common outlet terminating in the nozzle, an air inlet at the lower end of the said holder through which the compressed air passes from an air compressor and enters the mouths of the said paint vessels by passing through an annular space surrounding the said vessels, and valves for regulating the exit of the paint substantially as described and for the purpose specified. 4th. The combination with the nozzle head and the detachable holder containing the paint vessels, of a series of independent valves each controlling one of the passages from the paint vessels to the nozzle, and of spring controlled lever handles for enabling the operator to actuate the valves separately or simultaneously substantially as described and for the purpose specified. 5th. The combination with the nozzle head and the detachable holder containing the series of paint vessels, of a series of independent taper plug valves mounted in a taper recess in the nozzle head and each having a transverse hole, of handles carried by the said plug valves for bringing the said holes in position to open the paint exit passages to the nozzle, of springs for normally keeping the plug valves in a closed position, and of a detachable plug for retaining the plug valves in position and for permitting of their removal when desired, all substantially as described.

**No. 56,453. Electric Railway.**

(*Chemin de fer électrique.*)




Harry C. Reagan, jr., Philadelphia, Pennsylvania, U.S.A., 2nd July, 1897; 6 years. (Filed 25th November, 1896.)

*Claim.*—1st. In an electric railway, a feed wire, a conduit, a conductor supported therein, a contact movably mounted on said feed wire, said contact having a suitable body portion, a sleeve surrounding the feed wire and engaged by said body portion, said sleeve having a resilient arm extending therefrom, and adapted to complete the circuit between said feed wire and conductor at proper intervals. 2nd. In an electric railway, a feed wire, an oscillatory contact mounted on the latter and provided with a magnetic arm or armature, and a resilient non-magnetic arm also attached to said contact. 3rd. In an electric railway, a conduit of non-conducting material, a feed wire suitably supported therein, a conductor passing through the top of said conduit, an oscillatory contact mounted on said feed wire, and having an arm or armature of magnetic material, a resilient non-magnetic arm also mounted on said contact, and a spring for actuating said armature so as to break the contact between said resilient arm and the conductor. 4th. In an electric railway, a feed wire, an oscillatory contact mounted thereupon, and provided with a magnetic arm or armature, a resilient non-magnetic arm also attached to the said contact, a conductor located in the path of said resilient arm, means for causing a contact between said resilient arm and conductor, and means for conveying the electricity from said feed wire to the car motor. 5th. In an electric railway, a collector wheel composed of a plurality of rings, a hub on which said rings are mounted, and springs intermediate said hub and rings. 6th. In an electric railway, a collector wheel composed of a plurality of rings, a hub on which said rings are mounted, sockets in the latter and said rings, and yielding devices seated in said sockets and adapted to form yielding spokes. 7th. In an electric railway, a closed conduit of non-conducting material, a conductor supported therein, a feed wire located in said conduit, oscillatory contacts mounted on said food wire, and having washers of insulating material therebetween, one arm of said contacts being of magnetic material, and the other arm being of resilient and non-magnetic material, in combination with a collector wheel, and connections therefrom to a car motor. 8th. In an electric railway, a conduit of non-conducting material, a feed wire suitably supported therein, an oscillatory contact mounted thereupon, and having a resilient arm, an angular-shaped conductor located in said conduit, and having depending portions adapted to complete the circuit when the contact is made, and a stop for said contacts. 9th. In an electric railway, a car, a car motor, a feed wire, a conduit therefor, an oscillatory contact thereon having a resilient arm, a conductor wheel, and a magnet mounted on said car, connections from said conductor wheel to said car motor, an auxiliary charging motor, and connections therefrom to said magnet. 10th. In an electric railway, a closed conduit, a feed wire supported therein, oscillatory contacts mounted on said feed wire, and having a resilient arm, a magnet adapted to be supported on the car, a conductor, means for making a circuit between said conductor and the car motor, a charging motor, a battery, and connections intermediate said battery, motor and magnet. 11th. In an electric railway, a magnet, a non-conducting conduit, a feed wire supported therein, an oscillatory contact mounted thereupon, and having an armature and a resilient arm attached thereto, an angular shaped conductor located in said conduit, means for holding said conductor in position, and a pin of magnetic material located in said conduit for the purpose of producing a short magnetic path between said magnet and armature, in combination with means for oscillating said contact. 12th. In an electric railway, a car, a magnet carried thereby, a conduit, a conductor located in the side of said conduit, a feed wire supported therein, a contact device mounted thereon and provided with a resilient arm and an armature, and pins of suitable magnetic material projecting into the interior of said conduit in proximity to said armature, for the purpose of producing a short magnetic path between said magnet and armature. 13th. In an electric railway, a car, a car motor, a conduit, a conductor located partially within and partially without the same, a feed wire supported within said conduit, an oscillatory contact mounted upon said feed wire, and provided with a resilient arm, a magnet supported on said car, means for conveying the electricity from said conductor to said car motor, an auxiliary motor and connections from the latter to said magnet, in combination with pins of suitable magnetic material located in proximity to said contact, for the purpose of producing a short magnetic path between said contact and the exterior of said conduit. 14th. In an electric railway, a collector wheel composed of a plurality of rings separated from each other, and a hub therefor, each ring having spokes composed of springs common to said rings and hubs. 15th. In an electric railway, a car, a car motor, a conduit, a feed wire located within said conduit, an oscillatory contact mounted on said feed wire, and having a resilient arm, means for conducting electricity from said conductor to the car motor, a magnet carried by said car, an auxiliary charging motor and connections from the latter to said magnet whereby the latter can be energized when desired. 16th. In an electric railway, a car, a magnet carried thereby, a car motor, a conduit, a conductor located in a side thereof, means for conveying electricity from said conductor to said car motor, a feed wire supported in said conduit, an oscillatory contact device mounted on said feed wire and provided with a resilient arm and an armature, and pins of suitable magnetic material projecting into the interior of said conduit, in proximity to said armature for the purpose of producing a short magnetic path between said magnet and armature, in combination with an auxiliary charging motor and connections therefrom to said magnet. 17th. In an electric railway, a conduit, a conductor located in a side of said conduit, a feed wire supported in said conduit, an oscillatory contact device mounted on said feed wire and provided with a magnetic armature and a resilient non-magnetic arm, pins of suitable magnetic material located in proximity to said armature for the purpose of producing a short magnetic path between said magnet and armature, a magnet carried by the car, means for conveying electricity from the feed wire to the car motor, an auxiliary charging motor and connections therefrom to said magnet. 18th. In an electric railway, a car, a car motor, a feed wire, a conduit therefor, an oscillatory contact mounted on said wire and having a resilient arm, a conductor located adjacent to said conduit, means for conveying electricity from said conductor to the car motor, a magnet carried by said car, an auxiliary charging motor and connections from the latter to said magnet. 19th. In an electric railway, a conduit, a feed wire supported therein, an oscillatory contact mounted on said feed wire and having a resilient arm, a conductor located in proximity to said conduit, against which said arm is adapted to contact, and means for conveying electricity from said conductor to a car motor, in combination with a magnet, a battery, an auxiliary charging motor, and conductors common to the latter and to said battery and magnet. 20th. In an undergound railway, a conduit containing a plurality of contacting devices, suitable protecting or paving material adapted to cover the top of said conduit, a series of independent magnetic paths separated from each other and embedded in said material and extending from the surface thereof towards but not into the interior of said conduit and over said contacting devices, and said magnetic paths being out of electrical connection with the interior of the conduit. 21st. In an underground railway, a closed non-conducting conduit and a series of blocks above the same, and embedded in the top of