

six gallons, mixed with a syrup composed of three and one half pounds of granulated sugar, eight ounces tincture of prickly ash berries, and three pints of Rye whiskey, substantially in the proportions and for the purposes set forth.

**No. 41,803. Electric Railway.**

(*Chemin de fer électrique.*)

The Universal Electric Company of the City of New York, assignee of Granville Taylor Woods, New York, all of the State of New York, U.S.A., 4th February, 1893; 6 years.

*Claim.*—1st In an electric railroad system, the combination of the insulated lead or leads of the main circuit, a series of boxes having interior contact devices with which the main circuit is connected, each box being charged with oil or other insulating fluid in which the contacts are immersed and having a porous medium or portion through which the oil exudes and coats the exterior of the box and its connections, and a switch arm carried by the box and controlling the enclosed main circuit contacts, and adapted to be operated by a contact brush or device carried by the passing car. 2nd. In an electric railroad system, the combination of the lead or leads of the main circuit, a conduit, a series of boxes arranged therein, insulated connections from the lead or leads leading to contact devices within the boxes, the switch or contact arms of the boxes adapted to be operated by the brush of the passing car to complete the main circuit through the motor thereon, a pipe system for distributing oil or other insulating fluid under pressure and connections between said system and the interior of the boxes. 3rd. In an electric railroad system, the combination of the lead or leads of the main circuit, a conduit, a series of boxes arranged therein, insulated connections from the lead or leads leading to contact devices within the boxes, the switch or contact arms of the boxes adapted to be operated by the brush of the passing car to complete the main circuit through the motor thereon, a pipe system for distributing oil or other insulating fluid under pressure, and connections between said system and the interior of the boxes, each box having a porous medium or portion through which the oil filtrates and coats the exterior of the boxes and their connections. 4th. In an electric railroad system, the combination with the conduit of a series of boxes located therein and containing oil or other insulating fluid therein under pressure, the insulated lead or leads of the main circuit having insulated branches leading to contact devices within the boxes submerged in the oil, and contact controlling devices adapted to be actuated by the brush or contact device on the passing car to complete the circuit through the motor thereon, each box having a porous medium or portion through which the oil filtrates and coats the exterior of the box and its connections. 5th. In an electric railroad system, the combination of the lead or leads of the main circuit, the conduit, a series of closed boxes arranged therein having interior contact devices connected with the lead or leads, laterally projecting yielding switch arms, and the brush carried by the car, the brush having contact face or faces against which the switch arms work and insulation extending beyond the ends of the contact faces for the purpose set forth. 6th. In an electric railroad system, the combination of the lead or leads of the main circuit, the conduit, a series of closed boxes arranged therein having interior contact devices connected with the lead or leads, laterally projecting yielding switch arms, and the brush carried by the car, the brush having contact face or faces against which the switch arms work, and insulation extending beyond the ends of the contact faces, and the boxes being filled with oil, for the purpose set forth. 7th. In an electric railroad system, the combination of the lead or leads of the main circuit, the conduit, a series of closed boxes arranged therein, having interior contact devices connected with the lead or leads, laterally projecting yielding arms, and the brush carried by the car, the brush having contact face or faces against which the switch arm works, and insulation extending beyond the ends of the contact faces, and the boxes filled with oil, and having a porous medium or portion through which the oil filtrates and coats the exterior of the boxes and their connections, for the purpose set forth. 8th. The combination, substantially as arms D, and the brush to be carried by the car having a contact plate  $b^1$ , which works against and makes contact with the switch arms, and insulation extending beyond the ends of the contact plate. 9th. The combination, substantially as set forth, of a conduit, the boxes therein having the yielding switch arms D, and the brush to be carried by the car having a contact plate  $b^1$ , which works against and makes contact with the switch arms, and insulation extending beyond the ends of the contact plate, the insulation extending being below or inside of the plane of the surface of the contact. 10th. The combination of the shell of the box having two projections or coupling connections, one  $p^2$ , for the connection of an oil supply pipe, and one  $g^1$ , for the leading in of a circuit conductor, the contact plate connected with the end of the conductor within the box, the contact arm working against said plate, the shaft or rod to which it is attached, its bearing, the porous packing surrounding the bearing and closing the end of the box, and the switch arm D carried by the shaft. 11th. The combination, substantially as set forth, of the box shell, the inwardly projecting flange  $c$ , the plates of insulating material and porous packing, the flanged sleeve, the shaft therein, the interior contact arm carried by the shaft, the switch arm carried by its outer end, the clamp nut on the screw and the spring connected with the switch arm and the clamp nut. 12th. The

combination of the shell of the box, means for maintaining a supply of oil therein, the shaft or rod, its bearing and the switch arm, the edge of the box being extended up beyond the bearing of the shaft to form an oil receptacle. 13th. The combination of the box, the spring switch arm, its rod or shaft, the spring that holds the shaft in normal position, the contact arm carried by the shaft within the box, and the contact plate within the box to which the insulated circuit wire is connected. 14th. In an electrical railroad, a brush adapted to be carried by a car, consisting of insulating material having a contact plate on one or both sides, beyond the ends of which the insulation extends.

**No. 41,804. Process of Making Scythes and Similar Tools.** (*Procédé de fabrication des faux et autres outils semblables.*)

Joseph Reesman Mann, Pittsburg, Pennsylvania, U.S.A., 4th February, 1893; 6 years.

*Claim.*—1st. The herein described process of forming a pattern for a scythe or similar tool, which consists in employing two solid bars, only of metal of different grades, and inserting one bar in the other in such manner that one edge of the harder metal will be exposed, substantially as and for the purpose specified. 2nd. The herein described process of forming a pattern for scythes or other tools, which consists in employing two solid bars only of metal of different grades, a body stock and an edge stock, and inserting the edge stock into the body stock when the latter is in a heated state, substantially as described. 3rd. The herein described process of forming a pattern for scythes or kindred tools, which consists in introducing in a solid bar of body stock a solid wedge bar of edge stock, substantially as specified. 4th. The herein described process of forming a pattern for a scythe or similar tool, which consists in employing as a body stock a solid bar of metal of one grade, and as an edge stock a solid metal bar of another grade, and forcing the body stock in a heated state upon and over the edge stock, the latter being in a cool state, substantially as and for the purpose set forth. 5th. As an improved article of manufacture, a pattern for scythes and similar tools, comprising as a body stock a transversely solid bar of one grade of metal, and as an edge stock a solid bar of a different grade of metal, the edge stock being embedded in the body stock, substantially as and for the purpose set forth. 6th. As an improved article of manufacture, a pattern for scythes and similar tools, comprising as a body stock a transversely solid bar of one grade of metal, and as an edge stock a transversely solid bar of a different grade of metal, essentially wedge shaped in cross section, which edge stock is embedded in the body stock, one longitudinal edge being exposed, as and for the purpose set forth.

**No. 41,805. Apparatus for Making Peat Fuel.**

(*Fabrication de combustible végétale.*)

The Ontario Peat Fuel Company, Toronto, Ontario, assignee of Archibald Anderson Dickson, Cote St. Antoine, Quebec, Canada, 4th February, 1893; 6 years. (Re-issue).

*Claim.*—1st. In an apparatus for manufacturing peat fuel, the combination, with mechanism for depriving the peat of foreign substances and extra moisture, of a heated chamber, into which the peat is fed continuously, a carrier within said chamber, and a hot air blast arranged to pass through said heated chamber, substantially as and for the purpose specified. 2nd. A press for forming blocks of peat fuel, consisting of an outer steam jacket, a cylinder or tube surrounded thereby, and a transverse passage through which the peat is fed to the interior of the cylinder, a plunger working therein, and a yielding resistance block inserted therein at the beginning of operation, all substantially as herein described. 3rd. In an apparatus for the manufacture of peat fuel, a drying chamber through which the peat is conveyed, and means for creating a suction through such chamber, for the purpose described. 4th. In an apparatus for the manufacture of peat fuel, a drying chamber, a hot air conductor communicating with said chamber, and a suction fan for exhausting such hot air, all combined and operating as and for the purpose described. 5th. In a peat machine, a hollow cylinder with means for conveying the peat through said cylinder, an air draft communicating therewith whereby the air is conveyed through said hollow cylinder, substantially as and for the purpose specified. 6th. In an apparatus for converting peat into fuel, a press for forming blocks consisting of a hollow cylinder or former having a plunger working therein, means for feeding the peat to the hollow cylinder or former and a resistance block fitted to the hollow cylinder or former, substantially as and for the purpose specified.

**No. 41,806. Box or Case for Containing Jewellery or other Articles.** (*Boîte ou étui pour contenir des bijoux ou autres objets.*)

The Detector Patent Safety Postal Box Syndicate, assignee of William Heatley, of 55 Curtain Road, London, England, 4th February, 1893; 6 years.

*Claim.*—1st. The construction and use of a wooden box or case having spring locking bar lid, as and for the purposes set forth. 2nd. A wooden box lid having bevelled edges, a cross bar with locking tongues and undercut grooves, substantially as set forth. 3rd. A wooden box having bevelled edges to the opening to be closed by a lid, internal side grooves to receive locking projections of a lid and