

Vol. XVIII.—No. 7.

JULY, 1890.

Price in Canada \$2.50 per An. United States - \$2.50

INVENTIONS PATENTED.

NOTE. Patents are granted for 15 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 34,598. Covering for Electric Cables.

(Enveloppe pour les cables.)

Eben F. Garland, Lynn, and Solomon H. Holbrook, Salem, Mass., U.S., 2nd July, 1890; 5 years.

U.S., 2nd July, 1890; 5 years.

Claim—lst. The combination of an electric cable and a metallic pipe inclosing said cable, said pipe being slit longitudinally, and its slit edges separated from each other by a water-proof strip of inametallic pipe inclosing said cable, said pipe being slit longitudinally, and its slit edges separated from each other by a water-proof rounding said each separated from each other by a water-proof rounding said pipe, and a second pipe of larger diameter inclosing said coated pipe, said second pipe being also slit and having its slit edges insulating material, a coating of insulating material sursaid coated pipe, said second pipe being also slit and having its slit edges insulated and an insulating covering surrounding said outer pipe.

No. 34,599. Apparatus for Heating or Cooling and Ventilating Cars. (Appareil pour chauffer ou rafraichir et ventiler les chars.)

Charles A. Kimpton, Malden, Josiah C. Bennett and Frederick R. White, Lynn, Mass., U.S., 2nd July, 1890; 5 years.

Claim.—let T.

Charles A. Kimpton, Malden, Josiah C. Bennett and Frederick R. White, Lynn, Mass., U.S., 2nd July, 1890; 5 years.

Claim.—1st. In a car heating and ventilating apparatus, the comport of a car, a heater and a blower therein, a system of pipes or conduits whereby external air is conducted through the heater to the blower, and from the latter to a succeeding car, said system in and a pipe to receive external air and conduct it to the heater, opened to the external air at either end of the car, so as to introduce cold air or air at its natural temperature from either end of the car its natural temperature from either end of the car its natural temperature from either end of the car its natural temperature, the combination of a car, a means for admitting apparatus, the combination of a car, a means for admitting apparatus, the combination of a car, a means for admitting fresh external air to the heater, a conduit for into the least of a minute from the heater to the blower, an air pipe extending pipe and the blower, valves in said pipe at opposite sides of said conend and the other the discharging end, and independent valved consides of the said blower connection, whereby either end of said pipe may be made the receiving nections between said pipe and the blower, valves in said pipe at opposite sides of said conend and the other the discharging end, and independent valved consides of the said blower connection, whereby either end of the heater and an air from the heater and the other air conduit, at opposite pipe may be connected with said conduit to supply fresh air thereto, combination, substantially as hereinbefore set forth, of a car, a ply conduits presenting air receiving ends in opposite directions, and piled to the heater from either end of the car, a hot air conduit, as heater by the cold air conduits is conducted after it is heated to the members at its ends, either end of the car and having coupling pipe section communicating with another car, the charges warm air, a connection, as pipe g, between the blo

receiving ends in opposite directions to the external air, whereby the motion of the car in either direction causes the entrance of cold air through said pipe, a coil or conduit in the heater connected with the pipe b, valves 1, 2 in said pipe b at opposite sides of the connection thereof with said coil, a hot air pipe or conduit, whereby heated air is conducted from the heater to the blower, an air pipe c extending through the car and presenting its ends in opposite directions to the external air, one of said ends constituting an air receiving and the other an air discharging end, a pipe connecting the receiving end of the pipe c with the hot air conduit within the car, another pipe connecting the blower with the discharge end of the pipe c, and valves, whereby the passage of cold air from the pipe c into the hot air conduit may be controlled, as set forth. 5th. The combination of a car, a heater and a blower therein, a pipe b presenting air receiving ends to the external air in opposite directions, a coil or conduit in the heater connected with the pipe b, the valves 1, 2 in said pipe, the pipes f, h whereby hot air is conducted from the heater to the blower, the cold air supply pipe c extending through the ear and having its ends outside the car, the pipe g connecting the blower with the pipe c, the pipes g' g' connecting the pipes c, with the receiving side of the blower at opposite sides of the pipe g, and the valves 4, 5, 6, 7 whereby the passage of air through the pipes g, gl, g' may be controlled, as set forth. 6th. A passenger car having a system of air distributing pipes, including a longitudinal pipe p extended through the ends of the car, combined with a heating car, a heater and a blower therein, a system of pipes or conduits, whereby external air is conducted through the heater to the blower and from the latter through the rear end of the heating car, said system including a pipe c which extends through the heating car and is adapted to be opened to the extends through the heating car, said system

No. 34,600. Pendulum Bar Treadle.

(Marche à pendule.)

Edward A. Cochran, William M. Hagadorn and Eliza J. Beach, Pasadena, Cal., U.S., 2nd July, 1890; 5 years.

adena, Cal., U.S., 2nd July, 1890: 5 years. Claim.—1st. The combination set forth of a pendulum treadle bar, anti-friction wheels journaled upon a pivoted cross-head and arranged one upon each side of the bar, to engage therewith as the bar, is vibrated, a driving wheel and the cross-head pivoted to such wheel between its periphery and hub. 2nd. The combination set forth of the pendulum treadle bar provided with the rib B having flanges b, b, at its outer edge, anti-friction wheels C, D, journaled upon cross-head E and arranged one upon each side of the rib. to engage therewith as the bar is vibrated, a driving wheel and the cross-head E pivoted to such wheel between its pheriphery and hub.

No. 34,601. Combination Press.

(Presse à combinaison.)

Lawrence H. Taylor, South Norridgewook, Me., U.S., 2nd July, 1890; 5 years.

Claim.—1st. The combination, with a standard provided with upwardly projecting lugs, of a removable cylinder provided with coincident perforations adapted to receive said lugs, substantially as set forth. 2nd. The combination, with a standard provided with upwardly projecting forwardly inclined lugs, and an arm projecting at right angles from said standard, of a removable cylinder having