

No. 35,717. Pulsating Current Motor.*(Moteur pour courant à pulsation.)*

Charles Joseph Van Depoele, Lynn, Massachusetts, U.S.A., 8th January, 1891; 5 years.

Claim.—1st. An electro-dynamic motor, or, having two circuits separately connected to the source of current, one circuit being connected at an intermediate point to the other, and separate means for directing current of constant polarity through one circuit, and of alternating polarity through the other. 2nd. An electro dynamic motor, having two circuits, one including the field magnet coils and the other including the coils of the armature, and means for placing one of the said circuits in shunt relation alternately with either half of the other circuit. 3rd. The combination, with an electric motor, having two circuits, one arranged to receive continuous currents and the other currents of alternating polarity, of a generator supplying both pulsatory and continuous currents, and circuit connections between the generator and motor, whereby currents of one polarity are supplied to one of the motor circuits, and currents of alternating polarity to the other of said circuits. 4th. The combination with an electro dynamic motor, having armature and field magnet circuits, a generator of the continuous current type, having stationary commutator brushes and circuit connections therefrom to one of the circuits of the motor, and a movable commutator brush rotated about the commutator, and circuit connections from the movable brush to the other of the motor circuits, whereby continuous currents are supplied to one motor circuit and alternating currents to the other. 5th. The combination, with an electro-dynamic motor, having two circuits thereon, one supplied with currents of continuous polarity, and the other with currents of alternating polarity, and means for preventing oscillation of the armature or rotating member of the motor at starting. 6th. The combination, with an electro-dynamic motor, having two circuits, one supplied with continuous current and the other with currents of alternating polarity, of means for preventing the backward movement of the armature at starting. 7th. The combination, with an electro-dynamic motor, having two circuits, one supplied with current of continuous polarity, and the other with currents of alternating polarity, whereby said motor is adapted to rotate in either direction, of a clutch mechanism adapted to engage the armature shaft to prevent rotation in one direction, whereby action of the reverse phase is prevented, and the armature free to move in the desired direction only. 8th. An electro-dynamic motor system, comprising a combined source of continuous and pulsating currents, two circuits upon the motor, one including the field magnets and the other the armature, and connections, whereby the current is divided and caused to flow always in the same direction in one circuit, and alternately in opposite directions in the other circuit. 9th. An electro-dynamic motor, having two circuits arranged to be operated by the flow of currents of continuous direction in one circuit, and of alternating direction in the other, and means for connecting the second circuit in shunt relation, first with one side and then with the other side of the said continuous current circuit. 10th. An electro-dynamic motor, having two circuits arranged to be operated by the flow of currents of continuous direction in one and of currents of alternating direction in the other, closed connections between the continuous circuit and the positive, and negative supply conductors, and connections to one terminal of the second circuit located midway of the continuous current circuit, means for placing the other terminal of said second circuit in circuit with first one, and then the other half of the continuous current circuit.

No. 35,718. Method of Expanding Hoops or Tires. *(Système d'expansion de cercles ou bandages.)*

Mark Wesley Deway, Syracuse, New York, U.S.A., 8th January, 1891; 5 years.

Claim.—1st. As a preliminary step in the process of setting hoops or tires, the within-described method of expanding said hoops or tires, consisting in suitably connecting the same between electric terminals, and then subjecting the hoop or tire to the heating effect of an electric current, as set forth. 2nd. The method of heating hoops or tires, consisting in bringing in contact therewith at points diametrically opposite each other, the terminals of a low-resistance supply-conductor, and passing an electric current of large volume through said conductor and hoop or tire, substantially as set forth. 3rd. The method of expanding a hoop or tire preparatory to setting the same, consisting in circulating uniformly or substantially uniformly, within the entire circumference thereof, of an electric current of large volume, as set forth.

No. 35,719. Drier for Bricks.*(Sécherie à brique.)*

Phineas Arnold, Canal Dover, Ohio, U.S.A., 8th January, 1891; 5 years.

Claim.—1st. The combination, with a chamber provided with a floor having openings therein, and an off take flue leading from said chamber, of air-ducts arranged beneath the floor and connected with the off-take flue, the said air-ducts having perforations formed therein, heating coils supported between the air-ducts and the floor, ceiling flues having openings in their sides and deflectors arranged between the said flue adjacent to the side openings therein, substantially as and for the purpose specified. 2nd. The combination, with a structure, containing a series of independent chambers, a main air duct extending from side to side of the structure branch, air-ducts having perforations therein, and leading from the main duct within each chamber, and having connection with the off-take flues in the structure, each of the chambers being provided with a perforated floor above the lower section of the branch air-ducts, of a main steam inlet and outlet pipe, independent supply and exhaust pipes carried from the main steam inlet and outlet pipes to each of the several

chambers, coils arranged independently within each of the chambers beneath the floor, and having connection with the branch steam supply and exhaust pipes located therein, ceiling flues in each chamber, open at their forward ends and having communication with the air-duct, and of take-flues at their rear-ends, the said flues being provided with openings in their sides, and deflectors arranged between the flues adjacent to the openings therein, substantially as shown and described and for the purpose specified. 3rd. In a tunnel drier, ceiling-flues, consisting of a central flue or channel, and an outer flue or channel at each side, which flues extend from the rear of the plate and terminate at a point approximating the forward end, the said flues being provided with openings in their inner walls, angled deflectors connecting the forward walls of the flues, and similar deflectors arranged between the flues, near the openings therein, substantially as shown and described.

No. 35,720. Artificial Bait for Fish.*(Appât artificiel.)*

Ernest F. Pflueger, Akron, Ohio, U.S.A., 8th January, 1891; 5 years.

Claim.—1st. The combination, with a trolling-hook, of an elastic or flexible shield or protector arranged in front of the hook and extending laterally beyond the point thereof to protect the same, and prevent fouling or catching on objects in the water, substantially as shown and described. 2nd. The combination of a trolling spoon, having hooks attached thereto, of an elastic or flexible shield or protector arranged in front of the spoon and hooks, and extending laterally beyond the points of the latter, as and for the purpose set forth. 3rd. The trolling device, herein shown and described, the same consisting of a hollow elastic shield B, and one or more hooks having their stems secured within the shield, the latter projecting laterally beyond the points of the hooks, as and for the purpose described. 4th. The trolling device, herein shown and described, the same consisting of a hollow elastic or flexible shield B, one or more hooks having their stems secured within the shield, the latter projecting laterally beyond the points of the hooks to protect the same, and feathers also secured within the shield and projecting therefrom around the stems of the hooks, substantially as shown and described.

No. 35,721. Pick. *(Pic.)*

Kenneth John Morrison and Michael MacLellan, both of Stellarton, Nova Scotia, Canada, 8th January, 1891; 5 years.

Claim.—1st. The method of making and securing the points C, C, in the body of the pick A, A, substantially as and for the purpose hereinbefore set forth. 2nd. The slots e, e, through body of pick A, A, substantially as and for the purpose hereinbefore set forth. 3rd. The flats f, on taper ends of points C, C, substantially as and for the purpose hereinbefore set forth. 4th. The pins X, on points C, C, substantially as and for the purpose hereinbefore set forth. 5th. The holes O, O, from slots e, e, to eye b, substantially as and for the purpose hereinbefore set forth.

No. 35,722. Method of Coating Exposed Wooden Structures. *(Composition pour couvrir le bois et le préserver des insectes, etc.)*

George Phillips, Key West, Florida, U.S.A., 8th January, 1891; 5 years.

Claim.—1st. A covering for piles, timbers and wooden surfaces generally, the covering consisting of asphaltum, having its exterior surface hardened by combination with lime, and either with or without the interposed fabric, all substantially as described. 2nd. The method of covering wood surfaces, consisting in first applying asphalt to the wood, and then applying to the surface of the asphaltum coating pulverized lime, and either with or without the interposed fabric, all substantially as described.

No. 35,723. Holder and Fastener for Sashes.*(Arrête croisée.)*

George Hopkins Spring, Lemars, Iowa, U.S.A., 9th January, 1891; 5 years.

Claim.—1st. A sash fastener to be attached to a sash in its casement, composed of a wedge, suspended at its narrow end and normally held from contact with the casement, whereby the sash can be moved up or down freely in its casement, said wedge being susceptible of lateral motion, whereby it can be brought in contact with the casement to hold the sash in the required position, and a stop for the wedge to bind against when fastening the sash, substantially as set forth. 2nd. The combination, with the pendent wedge, of the pendent locking brace adapted to engage with and limited in its inward movement by the said wedge, and adapted to be turned up against the window stop or casement, substantially as described. 3rd. A sash fastener and holder, comprising a metal holding case attached to a sash in its casement, near one of its side casings, having its top and sides open, and having an oblong wedging key suspended within it, so that its upper narrow end projects upwardly between a stop, and the side casing or window stop near it to press the wedging key against the side casing or window stop, when the sash is lowering, and having within it, on the opposite side from the wedging key a pendent pivoted locking brace, which can be turned above its pivot to touch bracingly against the near window stop, and a metal attachment thereon to lock the sash when down, to shield these fastening and locking parts from sight, and to strengthen and hold them in good working relation with each other, substantially as set forth and for the purposes described. 4th. A pendent oblong wedging device, adapted to fasten a sash up, and a pendent locking brace adapted to lock a sash down, attached to the side style of a sash in its casement, near each other, having an anti-friction roller