

after their imprint or registration is effected, and the electro-mechanical means, such as described, for operating a local circuit without effecting an impression of a type-lever upon the travelling paper roll, as described. 4th. The combination of a series of adjustably fulcrumed type-levers flexibly connected at their upper ends by link-rods with a correspondingly pivoted armature, an electro-magnet operating said armature, whereby said type-levers are forced upwardly by the closing of an electrical circuit, a local circuit and a circuit changer included in said circuit, and operated by the type-levers, as shown and described. 5th. The combination of the electro-mechanical means for effecting the imprint of symbols, comprising a series of fulcrumed type-levers, electro-magnets for severally actuating said levers, a local electrical circuit and circuit-changer therein operated by any of said type-levers, with means, as shown, for gradually advancing and inking an endless ribbon by which the type-levers record their imprint upon the paper, and a travelling paper-roll for automatically feeding said paper, substantially as described. 6th. The combination of a series of fulcrumed type-levers radially supported around a central point, with electro-mechanical means for actuating said type-levers, and an automatic device for operating a local electrical circuit by the descent of any one of said levers, as specified. 7th. The combination of a suitable transmitter for printing telegraphs, having a series of circuit-closing keys electrically connected with a series of corresponding electro-magnets circularly arranged in a receiver with said magnets, each having a pivoted armature adapted to be attracted by both poles of its respective magnets, and the conducting circuit-ring electrically connected with a suitable battery and with each magnet, substantially as described. 8th. The combination of a suitable transmitter for printing telegraphs, having a series of circuit-closing keys, each electrically connected with a respective electro-magnet in a receiver with the receiver, such as described, for automatically printing each letter indicated by the depression of key of transmitter upon a travelling paper roll, by the upward stroke of one of a series of fulcrumed type-levers actuated by the closing of a circuit by said key of transmitter, and at a determinate instant thereafter operating a local electrical circuit, by the descent of the same type-lever, which made the impression upon the said paper-roll. 9th. In a combined transmitter and receiver for an electrical type-writer, a transmitting instrument having a series of circuit-closing keys, each electrically connected to one of a series of corresponding electro-magnets in a receiver, the receiver comprising a series of fulcrumed type-levers and electro-magnets provided with armatures for actuating said type-levers, in combination with a local electrical circuit, including a circuit changer, spacing mechanism in said circuit, and means, such as shown and described, for cutting the receiver out of circuit with its respective transmitter, as shown and described. 10th. The combination of the receiver for an electrical type-writer, with the shunt plug-switch having a removable plug for making a dual electrical contact, both with the series of switch segments and the perforated circular battery plate cutting said receiver in or out of circuit with its respective transmitter, and for shunting the transmitter in the circuit, the electrical connections and the circuit, as set forth. 11th. In an electrical type-writer, the combination of a series of electro-magnets, each having a lower extended pole-piece and circularly arranged, as shown, a series of armatures corresponding in number and relative situation with the said magnets, and acted upon severally by both poles of their respective magnets, a series of type-levers actuated by said armatures, a circuit-ring electrically connected with each magnet, the circuit, the electrical connections and the transmitter, as specified. 12th. The combination of a series of electro-magnets, each having an extended lower pole-piece, the circuit-ring electrically connected respectively with the electro-magnets, the electrical connections, the transmitter, the pivoted armatures acted upon by both pole-pieces of each magnet, and the adjustable supports for said armatures, as set forth. 13th. The combination, with the transmitter, having each key thereof electrically connected to its corresponding magnet, the electro-magnets, arranged as shown, the circuit, the parallel ring having a binding-post for each magnet, the pivoted armatures, the adjustable supports therefor, and the slotted ring carrying said supports, substantially as specified. 14th. The combination of the series of circularly-arranged electro-magnets, connected electrically with their respective keys of transmitter, and each having a lower extended pole-piece, the pivoted armatures, the adjustable supports, the fulcrumed type-levers and the connections between each armature and type-lever, substantially as described. 15th. The combination of electro-magnets, arranged as shown, and having their lower poles converted and brought up in proximity to lower arm of pivoted armature, the pivoted elbow-shaped armature, the adjustable supports and slotted ring therefor, the link-rods and links connecting the forward end of each armature with upper end of its respective type-lever, the fulcrumed type-levers and their supporting ring provided with transverse central slot, as described. 16th. The combination of the ring, carrying the adjustable type-lever supports, and having a central transverse slot, the adjustable type-lever supports, and having a central transverse slot, the adjustable type-lever supports and the type-levers, whereby the said levers may be adjusted at any desired intervals apart and in an inclined position, as shown. 17th. The combination of levers L, I, with ring K, strip *l*, finger *u*, and the electrical wires connecting respectively ring K and strip *l* with secondary circuit. 18th. The means, such as shown, for cutting the receiver out of circuit with its respective transmitter, which consists of a plug switch having a series of segments corresponding in number both to keys of transmitter and magnets of receiver, which are each electrically connected to their respective keys of transmitter, a metal plate in circuit with battery of receiver, and a removable conducting plug of suitable shape to simultaneously make contact with segments and battery plate when inserted, substantially as described. 19th. The means, such as shown, for cutting the receiver out of circuit with its respective transmitter, which consists of a plug switch having a series of segments corresponding in number to the keys of a transmitter, which are each electrically connected to their respective keys of the transmitter, a metal plate in circuit with a battery of a receiver, and removable conducting plug of suitable shape to simultaneously make contact with segments and battery plate when inserted, substantially as described. 20th. The combination of the transmitter and the re-

ceiver with the plug switch, consisting of a series of segments corresponding in number to keys of transmitter, and connected by wires *ax* and *ay* to said keys, the insulating ring P, plug P, and plates R and O, and the battery of the receiver electrically in circuit with plate R, as described. 21st. The combination of the curved parallel levers *t*, keys U, U, arranged as shown, the cushion stops W and W', shaft *u*, bearing *u*, connections V, V, armatures *d*, *d*, and the base C<sub>1</sub> having perforations *v*, *w*, as described. 22nd. An electro-mechanical type-writer comprising a series of fulcrumed type-levers carrying respectively the desired types or symbols, electro-magnets for actuating said levers, circuit closing mechanism for directing the current through a particular magnet, the main circuit, a local circuit, a local circuit including spacing mechanism, and a suitable circuit changer in said local circuit operated separately by each of said type-levers, all arranged to operate, as specified. 23rd. In an electrical type-writer, a series of fulcrumed type-levers, electro-mechanical means for actuating said type-levers, a travelling carriage, a local circuit, an electro-magnetic motor in said circuit for advancing the carriage step by step, and a circuit changer, also included in the local circuit, operated by the type-levers, substantially as described. 24th. In an electrical type-writer, circuit-closing mechanism for directing the current severally through a series of magnets, a magnet provided with a circuit changing armature, a circuit operated by said armature, electro-magnetic spacing mechanism in said circuit, and a travelling carriage, all arranged to operate as set forth.

### No. 27,689. Clothes-Drier. (*Séchoir à linge.*)

Jesse Stimden, Gananoque, Ont., 1st October, 1887; 5 years.

*Claim.*—A clothes-drier consisting of bars A, B, pivoted at lower end to bar C, and at top hinged to bars F, I, connected together by notches and studs K, side bars G, J pivoted to the outer ends of bars F, E, and to bottom bar L provided with a pivoted brace M, notched to engage stud N on bar G and lines P, stretched across from bar A to bar B, and from bar G to bar J, as set forth.

### No. 27,690. Motor. (*Moteur.*)

Jérôme Latour, North Winchester, Ont., 1st October, 1887; 5 years.

*Claim.*—1st. The combination of the eccentric gear wheels F on the shaft A, and meshing into the eccentric gear wheels G on the shaft B, and the fly wheels D attached to the wheels F with the frame C. 2nd. The combination of the weighted fly wheels D and spur gear wheels F and G, with the grooved brake wheels H on the shaft I, the springs *n* connecting the shaft bearings with the sliding frame J and the shaft I, bevel gears *m* and screws *k*, arranged to move said sliding frame, all substantially as herein shown and described.

### No. 27,691. Saw Mill Dog. (*Clameau de scierie.*)

William Gowen, Wausau, Wis., U.S., 1st October, 1887; 5 years.

*Claim.*—1st. The combination of the standard A provided on opposite sides with oblique slots, the dogs a, a, arranged to work in opposite directions in said slots, dog bars B, B, lever C pivoted to one of said dog bars and provided with an arm E, by which it is connected to the other, substantially as and for the purposes set forth. 2nd. The combination of the standard A provided on opposite sides with oblique grooves or guides, dogs a, a, arranged to work in said grooves, dog bars B, B, to one of which each set of said dogs is pivoted, lever C pivoted to one of said dog bars and provided with an arm E, and rod F connecting the said arm E with the other dog bar, substantially as and for the purposes set forth. 3rd. The combination of the standard A having oblique grooves or guides in its opposite sides, two sets of dogs arranged to work in opposite directions in said grooves, dog bars B, B, lever C pivoted to one of said dog bars and provided with an arm E, by which it is connected with the other spring O, gib d and adjusting bolt d', substantially as and for the purpose set forth. 4th. The combination of the standard A, dogs a, a, arranged to work in opposite directions, dog bars B, B, connected therewith and having notches g, g, catches H, H, and the spring bail G arranged to operate said catches and retain them in place, substantially as and for the purposes set forth. 5th. The combination of standard A, oppositely working dogs a and a', dog bars B, B, connected therewith, lever C pivoted to one of said dog bars and provided with an arm E, by which it is connected with the other, and spring I arranged to retain said lever in its upper position, substantially as and for the purposes set forth. 6th. The combination, with the standard and two sets of dogs, one working upwardly and the other downwardly, and each connected by a dog bar, of a lever fulcrumed to, and movable with one dog bar and connected with the other, and provided with a projection, which bears against one side of said standard, and thereby holds the dog bar and its dogs on the opposite side thereof in their proper working position, substantially as and for the purposes set forth. 7th. The combination, in a saw-mill dog, of the standard having oblique grooves and dogs working therein, and formed with abrupt shoulders at the commencement of the bevel forming their cutting edges, whereby said grooves are cleared and kept free from dust, etc., substantially as and for the purposes set forth.

### No. 27,692. Car-Coupling. (*Attelage de chars.*)

George W. Lewton, Eldora, Iowa, U.S., 1st October, 1887; 5 years.

*Claim.*—The combination, in a car-coupler, of the draw-head having the vertical opening therein, shaft C having a crank-arm D, pin G secured on the said shaft lever K, connected with the said crank-arm and the adjustable weight L sliding on the said lever, all arranged and operated substantially as specified.

### No. 27,693. Seat for Railway Cars.

(*Siège pour chars de chemin de fer.*)

James L. Wiseman, Montreal, Que., 1st October, 1887; 5 years.

*Claim.*—1st. In a car seat, the combination, with the ends provided with pivot pins, of the turnover back and slotted connections turning