

and adapted to lock at desired angle with same, all as herein set forth and for the purposes described. 2nd. In a collar stiffener, the combination of the base or plate A, rod B carried on same, and arm C constructed as described, all as and for the purposes set forth.

No. 34,024. Printing Machine.

(Machine à imprimer.)

James L. Morrison, (in trust,) Toronto, Ont., (assignee of Thomas McDowell, Niagara Falls, N.Y., U.S.) 1st April, 1890; 5 years.

Claim.—1st. In a machine designed to print an endless web of paper, a type or embossing die suitably supported by mechanism caused to operate so that the die or type shall travel alternately between its inking roller and the platen arranged to press the paper against the said type or die. 2nd. In a machine designed to print an endless web of paper, a type or embossing die suitably supported by mechanism caused to operate so that the die or type shall travel alternately between its inking roller and the platen arranged to press the paper against the said type or die, in combination with a plate located between the paper and the travel of the type or die a hole being made in the plate immediately below the platen so as to permit the impression of the type or die made upon the paper, substantially as and for the purpose specified. 3rd. The number wheel A having a type or embossing die plate C inserted in the rim, and a plate c extending around a portion of the said rim, in combination with the rod D arranged to connect the wheel A to the cam wheel E, so that the revolving of the said cam wheel shall impart a rocking movement to the wheel A, substantially as and for the purpose specified. 4th. The number wheel A, having a type or embossing die plate C inserted in its rim, a plate c suspended over the said rim, and having a hole b cut in it, in combination with the rod D arranged to connect the wheel A to the cam wheel E, so that the revolving of the said cam wheel shall impart a rocking motion to the wheel A, substantially as and for the purpose specified. 5th. The number wheel A, having a type or embossing die plate C, inserted in its rim, a plate c suspended over the said rim and having a hole b cut in it, in combination with the rod D arranged to connect the wheel A to the cam wheel E, so that the revolving of the said cam wheel shall impart a rocking movement to the wheel A, the arm Q carried by the shaft N so as to support the platen X immediately over the hole b connected to and deriving motion from the eccentric M, which is arranged to cause the platen X to come in contact with the die plate C every time that the said die plate is brought below the hole b, substantially as and for the purpose specified. 6th. A number wheel A having a type or embossing die plate C on its rim, and deriving a rocking movement as described, in combination with the inking roller G, and distributing roller P, substantially as and for the purpose specified. 7th. A number wheel A deriving a rocking movement, as described, and having a type or embossing die plate C on its rim, and a plate c connected to the rim in combination with the inking roller G and distributing roller P, substantially as and for the purpose specified. 8th. The platen arm Q, having pivoted upon it the extension piece W in combination with platen X pivoted on the extension piece W, substantially as and for the purpose specified. 9th. The platen composed of a rubber piece W detachably connected to the block U, substantially as and for the purpose specified.

No. 34,025. Dynamo Machine.

(Machine à dynamo.)

Walter Thompson, Toronto, Ont., (assignee of Albion Carr, Dresden, Germany,) 1st April, 1890; 5 years.

Claim.—1st. The improved dynamo, combining therein a revolving armature consisting of 4 or more elect magnets, and two or more oscillating field magnets, as shown and described, and for the purpose set forth. 2nd. The improved dynamo, combining therein an armature revolving on a shaft with insulated metallic plugs corresponding cones on metallic springs oscillating field magnets, as shown and described and for the purpose set forth. 3rd. The improved dynamo, combining therein an armature revolving on a shaft carrying a gear wheel which transmits its movement to a second gear wheel connected by an arm with the field magnets and by which motion the fields are made to oscillate, as described and for the purpose set forth.

No. 34,026. Malting Machine.

(Machine à malt.)

Andrew Wiggin, Boston, Mass., and Michael A. Barber, Norwich, Conn., U.S., 1st April, 1890; 5 years.

Claim.—1st. In combination, with an agitator shaft and mechanism as set forth, for driving the same, a series of reversible buckets journaled and concentric with said shaft and geared together, as described, the said buckets being provided with rigid reversing ribs, substantially as and for the purpose specified. 2nd. A reciprocating agitator for malting machines provided with a central shaft and mechanism, substantially as described, for rotating the same and having a series of reversible approximately semi-cylindrical buckets journaled concentric with said shaft and adapted in either position to bear at one edge against the shaft, said buckets being provided with rigid longitudinal ribs to engage in the grain to reverse the buckets, substantially as specified. 3rd. In a malting machine, the combination, with parallel ways of journal frames F, having at each end laterally projecting slotted plates d', e', parallel shafts P, M, journaled in said frames geared together, and bearing respectively a scored pulley, and an agitating device consisting of a series of reversible buckets journaled concentric with said latter shaft frames d' e' bearing rollers d' e', and having plates that confront and engage the plates d', e', above referred to, clamping bolts h passing through said confronting plates and adjusting screws f tapped into the ends of frames F and abutting the roller frames d', e', all being as and for the purpose specified.

No. 34,027. Washing Machine.

(Machine à blanchir.)

John B. Reinhart, Berlin, Ont., 1st April, 1890; 5 years.

Claim.—1st. In a washing machine, the combination of a tub a, having slats V, and provided with a frame A, with horizontal pieces B, cross piece C, and the metal plates H and J, substantially as and for the purpose hereinbefore set forth. 2nd. In a washing machine, the tub A, with slats V, the lid O, with slats O', a frame A, having horizontal pieces B, and cross piece C, the lever K, the connecting rods M and N, and the crank P, substantially as and for the purpose hereinbefore set forth. 3rd. The combination in a washing machine, of a metal plate J, provided with a pin I, fastened to the under surface of the slatted tub a, a metal plate H, fastened to the horizontal piece B, the slatted lid o, on the upright spindle e, the lever K, connecting rods m and n, the crank P, hook and eye E, hinge D, the catch bolt F, with the principal frame A, substantially as and for the purpose hereinbefore set forth.

No. 34,028. Sash Fastener. (Arrête-croisée.)

George M. Griswold, New Haven, Conn., U.S., 1st April, 1890; 5 years.

Claim.—1st. In a lock for the meeting rails of sashes, the combination, with a vertically projecting post fast upon one sash, of a housing upon the rail of the other sash, said housing, having an opening therein in line with said post, and a roll arranged within said housing and adapted to engage the post, substantially as set forth. 2nd. In a lock for the meeting rails of sashes, the combination, with the stationary and vertically projecting post arranged upon the rear rail, of a housing mounted upon the outer rail, a vertical opening in said housing in the same plane with and adapted to admit the post, a rolling wedging element mounted within said housing and having a movement therein at an angle to the line of entrance of the post, and an operating lever or the like engaging said wedging element and accessible from without the housing, whereby the wedging element may be raised upward and backward out of its engagement with the post, substantially as specified. 3rd. The combination, with the vertically disposed post, of the recessed housing, into and out of which said post is adapted to slide, a roll mounted within said housing and adapted when in its normal position to engage the post upon one side and the wall of the housing upon the other side, a spring whereby said roll is impelled downward into engagement with said post, and means, as a knob or lever, arranged without the housing, whereby the roll may be lifted upward and backward out of engagement with the post, substantially as specified. 4th. In a lock, for the meeting rails of sashes, the combination, with the post secured to the rear rail and projecting upward vertically therefrom, of the housing mounted upon the outer rail and having a recess for the accommodation of the post, said recess increasing in cross section from bottom to top, a wedge roll arranged within said recess and lying against the inside wall thereof, and a spring actuated frame arranged about the roll, and whereby the latter may be raised and lowered in the recess, substantially as specified.

No. 34,029. Organic Acid Derived From Phenol, Especially Applicable to Explosives. (Acide organique tiré du phénol, applicable spécialement aux explosifs.)

Stephens H. Emmens, Emmens, Penn., U.S., 1st April, 1890; 5 years.

Claim.—The new crystalline acid compound, having the properties hereinbefore set forth produced by the action of heated concentrated or fuming nitric acid of specific gravity 1.52 or higher upon picric acid in excess and the crystallization of the resulting liquid.

No. 34,030. Rotary Engine. (Machine rotative.)

Ernst R. Malmberg, St. Louis, Mo., U.S., 1st April, 1890; 5 years.

Claim.—1st. The combination in a rotary engine of a shaft, an annular piston chamber concentric with the shaft and having a circumferentially slotted inner wall, a piston moving in said chamber and carried upon a plate projecting radially through the slot from the shaft, annular abutment chambers formed in the casing on diametrically opposite sides of the shaft in the plane of the piston chamber each to intersect the same, and each made larger in cross section than the piston chamber, supply and exhaust ports in the casing formed without and in proximity to, the two outer points of intersection of each abutment chamber with the piston chamber, and cylindrical valves revolving in said annular abutment chambers, having central peripheral openings therein, corresponding in width with the diameter of the piston and connected by a slot registering with the slot in the wall of the piston chamber, substantially in the manner and for the purpose herein set forth. 2nd. The combination in a rotary engine with a central shaft, an annular concentric piston chamber circular in cross section, diametrically opposed, annular abutment chambers of a larger cross section made to intersect and cross the piston chamber at two several points, annular cylindrical valves revolving in said abutment chambers, peripheral openings in each annular valve, connected by a central, circumferential slot registering with the slot for the piston arm, and a narrow connecting plate extending radially from the shaft to the piston through a circumferential slot in the intervening wall of the piston chamber in a plane transverse to the axis of the shaft, said plate being extended in length to enter the intersecting valves as the piston passes through them and thereby close the slots therein and overlap and close upon the proximate edge of each opening in the valve in the movement thereof, substantially in the manner and for the purpose herein set forth. 3rd. The combination in a rotary engine with its shaft, and an annular piston chamber concentric with said shaft, of