No. 5916. Improvements on Looms for Weaving Suspenders, &c.

(Perfectionnements aux métiers à tisser les bretelles, &c.)

Charles H. Chapman, Shirley, Mass., U. S., 6th April, 1876, for 5 years.

Claim.—1st. The combination of the auxiliary needle E, with the main needle D, the lay B, and the shuttle H, all being provided with mechanism for operating them; 2nd. The combination of the harnesses M, formed with two eyes in each heddle, with the main and auxiliary needles D, E, the lay B, and the shuttle H; 3rd. The combination of the shuttle thread guide L, with the needle or needles, the shuttle and the lay provided with mechanism for operating them; 4th. The combination of the shuttle presser K, with the shuttle H, and its race G, and carrier I; 5th. The stop motion; 6th. The shuttle carrier I, provided with the bearing horn q, and with the spring p, to draw the carrier toward the shuttle; 7th. The shuttle carrier actuating lever n, provided with the spring t, to extend from it into the notch o, in the shuttle carrier I, for the reception of said lever; 8th. The tension apparatus composed of the rod $z1$, slide guide k_2, and spring m_2; 9th. The combination of the extra arm C_2, and the spring d_2, with the lever F, and the crank wheel for operating said lever, the said arm C_2, being pivoted to the said lever; 10th. The lever n^2, and its spring o_2, in combination with the shuttle carrier and with its race provided with the cam or recess p_2, 11th. The combination of the rubber or elastic warp n_2, with the two needles D, E, the harness M, lay B, and shuttle H; 12th. A loom provided with main and auxiliary needles D, E, and a shuttle and main harness r_1, s_1, and threads t_1, u_1, arranged therein to effect the closing of the two salvages on the needle edge of the webbing; 13th. In combination with the two needles D, E, the tension mechanism.

No. 5917. Machine for Planting Corn and Beans and Sowing Land Plaster.

(Machine à semer le blé-d'inde, les fèves et le plâtre à engrais.)

Charles D. Oakes, Yarmouth, Ont., 6th April, 1876, for 5 years.

Claim.—1st. The combination of the corn Box B, with the feeder D, and gauge spring G, also the form and construction of feeder D, and gauge spring G; 2nd. The plaster box C, as well as its combination with the feeder I, and the gauge spring H, and the form and construction of the feeder I, and spring H; 3rd. The manner of hinging the sides O. O, by the jaws L, L, and the form of the jaws, 4th. Putting in the handles A, A, with screws and glue; 5th. Manner and construction of corn feed regulator F.

No. 5918. Improvements on the Manufacture of Rattan and Rattan Ware.

(Perfectionnements dans la fabrication du rotang et des objets en rotang.)

Sullivan H. Penley, Rialdo Dorman, Brooklyn, N.Y., and Annie J. Dorman, Plainfield, N. J., U S., 6th April, 1876, for 5 years.

Claim.— 1st. The veneer described, consisting of rattan pith secured by adhesive material to a backing of fibrous or textile material; 2nd. A carriage or phaeton body or other similar article composed of a series of strips or pieces of rattan pith laid side by side and held together by a coating of glue or other adhesive material; 3rd. The combination of the stiff base H, braces I, J, K, and body L, composed of sections or lengths of rattan pith; 4th. A carriage or phaeton body or similar article composed of strips or sections of rattan pith shaped on a form and held together by adhesive substance and provided with a lining of fibrous or textile material.

No. 5919 Improvements on Churn Powers.

(Perfectionnements aux moteurs de barattes.)

Charles Edwards and Francis D. Lisson, Merrickville, Ont., 6th April, 1876, for 5 years.

Claim.—The angular working beam B, pivotally connected through its angle to a frame A, and operated by a revolving cylinder E, having a peripheral cam groove D.

No. 5920. Type Setting Machine.

(Machine à poser les caractères.)

William D. C. Pattyson, Sherbrooke, Que., 6th April, 1876, or 5 years.

Claim.—1st. The combination of the spouts x, discs o, provided with teeth p, guide plate c_1, and funnel plate g, 2nd. The combination of the keys w, lever u, rods r, ratchet wheel q, and discs o; 3rd. The combination of the levers g_1, z_1, and n_1, and magnet l_1; 4th. The combination of the inclined table y, angle plates b_1, c_1, gap k_1, levers g_1, z_1, and n_1, and magnet l_1: 5th. The combination of the lever g_1, z_1, magnet l_1, spring u_1, and stop t_1; 6th. The combination of the type, resting on the extremity of, the lever n_1, with the lever n_1, extension p_1, and pole r_1.

No. 5921. Type Distributing Machine.

(Machine de distribution des caractères.)

William D. C. Pattyson, Sherbrooke, Que., 6th April, 1876, for 5 years.

Claim. — 1st. The combination of the inclined table s, with pusher v_3, and spout d_1; 2nd. The combination of the pusher v_3, inclined table s, and separator d_4; 3rd. The combination of the separator d_4, and cushion b_4; 4th. The combination of the table s, with angle plates x_3, and w_3, pawl y_3, slide bar z_3, and cam projection of the collar r_4; 5th. The combination of the wheel s_4, with the rack teeth t_4, of pusher v_3, and spring a_7; 6th. The combination of the worm wheel n_4, worm gear o_4, cam projection of collar r_4, wheel s_4, for operating the slide bar z_4, and pusher v_3; 7th. The combination of the cushion b_4, separator d_4, lever g_4, and cam h_4; 8th. The combination of the inclined table s, with angle plate w_3, made to be secured in place when required or to slide when required in case of the type being leaded; 9th. The combination of the pusher v_3, table s, spout d_1, and the distributor barrel m_2, teeth n_2; 10th. The distributor barrel m_2, the groove o^2, in combination with the rack n_2; 11th. The distributor barrel m_2, the combination of the drop bottoms q_2, with pins s_2; 12th. The combination of the grooves o_2, drop bottoms q_2, and pins s_2; 13th. The combination of distributor barrel m_2, pawl w_2, lever v_2, connecting rod r_3, and crank s_3; 14th. The combination of the drop bottoms q_2, pins s_2, and cam k_2; 15th. The combination of the grooves o_2 drop bottoms q_2, and projections u_2; 16th. The combination of the grooves o_2, with type therein deposited, and lever m_5; 17th. The combination of the distributor barrel m_2, with passages i_2, in guide plate i; 18th. The combination of the drop bottoms q_2, pins s_2, and pins q_3; 19th. The selectors c_3, the combination of the projections n_3, head g_3, and pins q_3; 20th. The selectors c_3, the combination of the bolt k_3, sprir g l_3, and spring i_3; 21st. The combination of the ring b_3, with the selectors c_3; 22nd. The combination of the projection m_3, with bolt k_3, of the selector c_3, 23rd. The combination of the projections n_3, of the selector c_3, with nicks o_3, of type p_3; 24th The combination of the selector rings a_3, and b_3, selectors c_3, and cam ring l; 25th. The combination of the cam ring l, lever c_2, pawl y_2, connecting rod v_3, and crank s_3; 26th. The combination of the projections n_3, of the selector c_3, with the spring u_1; 27th. The combination of the distributor barrel m_2, passages i_2, of guide plate i, and receptacles g; 28th. The combination of the receptacles g, bolts c_2, and rest e_2; 29th. The combination of the receptacles g, bolts c_2, and wheel b_2, 30th. The combination of the electro magnetic poles o_5, m_5, b_5, c_5, and magnet a_2, 31st. The combination of the lever m_5, magnets a_2, armature z, and pivoted arm y, with friction cone x; 32nd. The combination of the loose pulley w, friction cone x, and discs v, and u, 33rd. The combination of the disc u, with poles b_5, and c_5; 34th. The combination of the disc v, stop g_5, and armature z; 35th. The combination of the magnets a_2 armature z, pivoted arm y, and spring h_5; 36th. The combination of the pulley t_5, pulley w, cone x, arm y, armature z, and magnets a_2.

No. 5922. Rivet Setting Machine.

(Machine à poser les rivets.)

Mellen Bray, Newton, Mass., U. S., 6th April, 1876, for 5 years.

Claim.—1st. In combination with setting tools and an inclined chute for conveying the rivets thereto, a hopper provided with a slot in its bottom, of suitable width to receive the body of the rivet and an opening through one end for the passage of the head of the rivet with the hopper pivoted at one end to the upper end of the chute and adapted to be vibrated around the pivots; 2nd. A hopper for receiving, separating and arranging rivets pivoted and slotted, having that portion of its bottom farthest from its pivoted end and beyond the end of the slot made at an angle to the other portion; 3rd. The hopper G, G1, made in two parts, hinged together and adapted for adjustment at different angles relative to each other, 4th. In combination with a hopper, an inclined chute leading therefrom, and a plunger for moving the lower rivet in the chute to the setting tools, the pivoted wedge cam L, operating bar D, and spring m, 5th. The combination of the chute F, guide channel K, provided with the spring l, plunger J, and receiver N, whether said receiver is mounted upon the setting plunger or the anvil; 6th. The receiver N, adapted to hold the rivet in position to be acted upon by the setting tools, and to move vertically or in line with the movement of the setting plunger for the purpose of guiding the rivet to the work, whether said receiver is mounted upon the setting plunger or the anvil; 7th. The rivet receiver N, provided with the springs r, and r_1, mounted upon the setting plunger B; 8th. The combination of the receiver N, setting plunger B, and special anvil O, u, provided with slit w.

No. 5923. Drilling Machine for Tubular Rivets. *(Machine à forer les rivets en tube.)*

Mellen Bray, Eewton, Mass., U. S., 6th April, 1876, for 5 years.

Claim.—1st. In combination with an automatically-operated drill, a hopper, into which solid rivets may be placed in bulk and from which they are discharged in regular order with their heads all in one direction, an inclined chute down which the rivets slide to the drilling tools, and a pair of clamping-dies arranged to seize the rivet, hold it while it is being drilled, and release it again when the drilling is completed; 2nd. An apparatus for separating rivets, the combination of the fixed inclined chute Q, the curved shield r, the vibratory chute R, having a semi-circular end concentric with the axis about which it vibrates, and with the curved shield r, and a hopper attached to, and arranged to vibrate with the chute R, 3rd. In combination with an automatically operated drill, a hopper for separating the rivets and an inclined chute leading therefrom, an intermittently rotating wheel or disc, provided with a series of pockets in its periphery, each adapted to receive a rivet from the chute and convey it into position to be drilled; 4th. The combination of the carrier wheel m, and a pair of annular shields o, o; 5th. The combination of the inclined chute Q, carrier wheel m, a pair of annular shields o, o, and the reciprocating plunger u_1; 6th. The combination of an intermittently rotating carrier-wheel provided with a series of pockets in its periphery, a pair of fixed or stationary shields, placed one upon either side of the said carrier-wheel, and a reciprocating plunger arranged to discharge the drill rivet from the carrier-wheel, 7th. In combination with an automatically operated drill and a pair of clamping dies mounted upon the main frame A; The supplementary movable frame M, having mounted thereon the rivet separating and feeding devices; 8th. In combination with an automatically operated drill, a pair of clamping dies and an intermittently rotated carrier-wheel having a series of pockets in its periphery, the detent-wheel N, and detent-spring or lever N_1, 9th. In combination with a hopper for separating rivets and an inclined chute leading therefrom, the lever t, provided with the hammer-head t_1, the cam T, provided with a series of lifter-toes, and the spring t_2; 10th. The combination with an automatically-operated drill, of a pair of movable clamping-dies g, g, a pair of vibrating levers J, J, and the two edge cylinder-cams a, and a_1; 11th. The saddles or frames J_1, pivoted to the levers J, J, and adjustable thereon by means of the set screws h_1, h_1, and having mounted therein the trucks h_2, h_2.

No. 5924. Rock and Stump Elevator.

(Arrache-souche).

Joseph McBatchelor and Cyrus Hill, Foxcroft, Me., U. S., 6th April, 1876, for 5 years.

Claim.—The combination of the drum d, attached gear e, fulcrum link g, hanging lever f, pinion i, and pawl j, slot t, with brake r, connecting pinion k, pinion P, with c, and lip u, and raising pawl j, when P, intersects with gear e, an arrangement in a suspended strap A.