

No. 4564. WILLIAM H. W. SHEPPARD, Newmarket, Ont., 5th April, 1875, for 5 years: "Improvements on Heating Stoves." (Perfectionnements aux calorifères.)

*Claim.*—1st The combination in a stove of the air heating chamber P, and drum heating attachment, having ascending and descending air and smoke passages; 2nd. The internal plate C, having upward flanged mouth D, downward projecting smoke pipe L, both above the fire chamber, whereby an air current discharging in the chamber P, through the duct O, passes into the smoke-flues; 3rd. The annular water reservoir arranged within chamber P, and receiving the air current passing through the drum; 4th. In combination with a stove, having an air heating chamber P, a drum having an arrangement of pipes for conducting the smoke upward and downward, and double walls and top perforated to admit and discharge air circulating downwardly and upwardly.

No. 4565. JOSEPH W. BEAUMONT, Petrolia, Ont., 5th April, 1875, for 5 years: "Artificial Coal." (Charbon factice.)

*Claim.*—The solid form of a compound of crude petroleum oil, tar or refuse of the oil, with clay and saw dust or chopped straw, grass, leaves or other absorbents in the proportions set forth.

No. 4566. FRANK P. PEACE, Marysville, and JAMES W. D. WILLIAMS, Knoxville, Ten., U. S., 5th April, 1875, for 5 years: "Improvements on Breech-loading Fire-arms." (Perfectionnements aux armes à feu chargeant par la culasse.)

*Claim.*—1st. The combination of two chambers a, a transferring block B, and mechanism for actuating the latter through the medium of the trigger so that the loading and firing will be accomplished merely by the pulling of the trigger; 2nd. The combination of discharging block I, and spring p, with the reciprocating block E, for discharging the shells; 3rd. The combination and arrangement of the trigger with the hammer and the mechanism for actuating the transferring block.

No. 4567. LOUIS M. E. RAVEAUD, and VINCENT MARTY, New Orleans, La., U. S., 5th April, 1875, for 5 years: "Improvements on Heating Stoves." (Perfectionnements des calorifères.)

*Claim.*—The fire clay back E, provided with an oval faced concave in combination with the outer casing A, cover B, and bottom C, and irons D, D, and grate bottom a, ash damper b, and smoke pipe F.

No. 4568. WILLIAM J. WILSON, Chicago, Ill., U. S., 5th April, 1875, for 5 years: "Process for Preserving and Packing Cooked Meats." (Procédé de conservation et empaquetage des viandes cuites.)

*Claim.*—1st. The process for packing cooked meats for transportation by compressing the same while heated with cooking into an air tight package, so as to preserve the meat in its integrity and retain all the natural juices and nutritious qualities of the meat; 2nd. Cooked meat put up in solid form, in its natural package, without disintegrating or desiccation, in hermetically sealed packages.

No. 4569. LOUIS COTÉ, St. Hyacinthe, Que., 5th April, 1875, for 5 years: "Heel Stiffener Shaping Machine." (Machine à former les contrelorts de chaussures.)

*Claim.*—The combination of the conoidal rotary counter body turner A, not only with the conoidal case C, extending around it as shown and provided with the receiving and discharging mouth a, but also with the counter lip turner E, fixed to the head or cap D, of such case; the case C, provided with the counter-body and lip receiving mouths a, k, arranged therein and with the counter body and lip turners A, E; the adjustable gauge F, and its screw G, with the case C, and the counter body and lip turners.

No. 4570. GEORGE W. MCCREADY, Petitediac, N. B., 5th April, 1875, for 5 years: "Perpetual Calendar and Penholder." (Porte-plume calendrier perpétuel.)

*Claim.*—1st. The construction and use of the tubes A, B, and C, made of any suitable material, in connection with the stem D; 2nd. The arrangement of the numbers of the centuries or figures representing them, the names of the days of the week; the names of the months and numbers representing the days of the month, and the years from 10 to 99, to be stamped, engraved or otherwise marked upon the tubes A, B, and C; 3rd. The use of the pressure springs a, a, and b, b, or equivalent device.

No. 4571. FREDERICK M. WILLSON, and WILLIAM VASSIE, Hamilton, Ont., 5th April, 1875, for 5 years: "Lamp Holding Attachment for Sewing Machines." (Ajutage des lampes aux machines à coudre.)

*Claim.*—1st. The hollow socket A, hollow pillar B, and stem C; 2nd. The arm G fitting into the lug F, having a joint H, holding the reflector L; 3rd. The combination of the several parts A, B, and C, which with the bracket form a simple, effective and complete arrangement for holding a lamp for lighting the operator and which is so arranged as to enable the operator to place the lamp in any position required; 4th. The combination of the several parts E, G, and H, forming an effective arrangement for holding the reflector at any angle required to throw the light directly upon the work at any point required.

No. 4572. ARTHUR WOODS and THOMAS T. STEVENS, Liverpool, Eng., 5th April, 1875, for 5 years: "Life-saving Appliances." (Appareils de sauvetage.)

*Claim.*—1st. The buoyant pieces a, a, with connections b, c, and e; 2nd. The buoyant pieces a, a, with connections b, c, and d; 3rd. The buoyant pieces a, a, with connections f, f, and g.

No. 4573. JOHN FORSYTH, Dundas, Ont., 5th April, 1875, for 5 years: "Improvements on Mowing and Reaping Machines." (Perfectionnements aux faucheuses-moissonneuses.)

*Claim.*—1st. Connecting the clutch couplings A, and B, by lever C; 2nd. The raising and lowering of cutter bar I, and holding same in any position by the combination of lever L, joint-lever E, and foot or stop on end of connecting bar H.

No. 4574. ISAAC R. HAYES, and JOHN SOMMERSET, Manchester, Eng., 5th April, 1875, for 5 years: "Improvements on Umbrellas." (Perfectionnements aux parapluies.)

*Claim.*—1st. The combination of the hooked ends a, a, of the ribs b, b, with the holes in the flanges on the notches c, c, or with the wire ring q, q, or with the ordinary wire on the notch; 2nd. The combination of the similarly hooked ends a, a, of the stretchers d, d, with similar holes or a ring q, q, secured to the flange of the runner e, e, or with the ordinary wire of the runner; 3rd. The construction of the spring-fork g, g, with its slide i, i, either applied to the ribs or stretchers or to both whether connected thereto by means of a barrel f, f, or fixed directly to the end of the rib or stretcher; 4th. The combination of the spring forks g, g, with the nebs l, l, on the notches c, c, and runners e, e, whether the joint pins h, h, are fixed in the spring-forks or in the nebs l, l; 5th. Construction of the upper ends of the ribs b, b, and the lower end of the stretchers d, d, with balls or spherical ends m, m, in combination with circular recesses and slots in the notches c, c, and runners e, e; 6th. The combination with the balls or spherical ends m, m, and the circular recesses of the loose ring n, n, with its notches o, o, and the fixed pin p, p, for the purpose of keeping the balls or spherical ends in their places in the circular recesses.

No. 4575. SAMUEL S. ARNOLD, Dresden, Ont., 5th April, 1875, for 5 years: "Improvement in Lounges." (Perfectionnement des causeuses.)

*Claim.*—The combination of hinged end rails C, and front rail B, in such a manner that there is no rail in centre of bed when opened out, the arrangement being such as to leave the bed of uniform elasticity throughout, also the arrangement of the springs and ribbons E, E, in such a manner that the springs in the back part of the bed serve as a support to the spring in the lounge seat when used as a lounge, and thereby making a very elastic and substantial seat.

No. 4576. HENRY TAYLOR, Richmond-Hill, Ont., 4th April, 1875, for 5 years: "Improvements in Lamps." (Perfectionnements aux lampes.)

*Claim.*—1st. The oil reservoir A, with collar a, wick tube plate B, with studs b, and wick tube C, in combination with the burner deck plate D; 2nd. The burner F, constructed of glass, mica or other transparent or semi-transparent material in combination with the wick tube C, wick C, and burner deck plate D, with clips f, f.

No. 4577. CHARLES D. BIGELOW, Brooklyn, N. Y., U. S., (Assignee of C. Tyson), 6th April, 1875, for 15 years: "Machine for Screwing the Soles of Boots and Shoes." (Machine à visser les semelles de chaussures.)

*Claim.*—1st. The method of automatically severing the proper lengths of the screws formed upon and out from a continuous wire while under the action of being inserted to the varying and differ-