

*Claim.*—The stand A, stack B, stars C, C, having arms D, and brackets or rods E, the spool-holders F, and vase G, in combination with a pin-cushion H.

No. 4889. JACOB E. BUERK, Boston, Mass., U. S., 24th June, 1875, for 5 years: "Watchman's Time Detector." (*Indicateur de quart.*)

*Claim.*—The combination of a series of spring-points *d*, with a stationary index D, dial E, and clock-movement A.

No. 4890. WATSON P. WIDFIELD, Siloam, Ont., 24th June, 1875, for 5 years: "Improvements in Circular Saw Carriages." (*Perfectionnements aux tables mobiles de scieries à scies rondes.*)

*Claim.*—1st. The head-block A, having an upper-movable sub-block A'; 2nd. The dog or hook F, pivoted to the sliding-head D, in combination with the inclined plane G; 3rd. The friction pulleys I, in combination with the rail or girder H, and head-blocks A.

No. 4891. EMELINE SEAMAN, Andover, N. Y., U. S., (widow and administratrix of John Seaman, deceased), 24th June, 1875, for 5 years: "Window Blind." (*Jalousie.*)

*Claim.*—1st. The combination with the head-bearing A, slats B, and tapes C, C, provided with a series of openings *d*, of the hoisting cords *c*, *c*, and hooks *c*, whereby any desired lower portion of the blind may be closed while the remaining upper-portion is left open; 2nd. The combination with the tapes C, C, and connecting-band *c*, of the slats B, provided with recesses; 3rd. The combination with the slats B, of the endless tapes C, C, and connecting-band *c*, secured together by eyelets *d*.

No. 4892. JOHN S. WALLACE and EDWARD TUCKER, Belfast, Ireland, 24th June, 1875, for 5 years: "Fire Extinguisher." (*Extincteur d'incendie.*)

*Claim.*—1st. Protecting buildings, ships, iron-safes, and other places and receptacles from fire, by apparatus which on the outbreak of fire will be caused by the consequent elevation of the temperature to effect the combination of the materials named or other suitable materials, and thereby liberate or evolve carbonic acid-gas; 2nd. The employment of a connection or apparatus consisting of the parts *f*, *g*, *h*, or their equivalents, or other devices which by a slight elevation of the surrounding temperature is fused, broken, or otherwise caused to release a portion of the said apparatus, and thereby effect the liberation or evolution of the carbonic acid-gas; 3rd. An apparatus consisting of two vessels *a*, *b*, each of which vessels contains one of the materials or ingredients required for generating the carbonic acid-gas and one of which is suspended or supported above the other, and broken by the fall of the weight *c*, or otherwise caused to mingle its contents with those of the other vessel by the fusing or breaking of the connection *c*; 4th. The modification of the said apparatus consisting of the parts *a*, *b*, *h*, or their equivalents; 5th. The modification of the invention consisting of the parts *h*, *c*, *i*, *b*, *k*, *h*, or their equivalents; 6th. The apparatus of compounds consisting of charcoal or other suitable carbonaceous matter and nitrate of potash or the equivalent thereof with or without lime or sulphur formed into blocks or pieces and provided with means whereby the same will be ignited by the elevation of the temperature or otherwise; 7th. The arrangement of the apparatus or compound in combination with a string-cord or other connection which may be separated or destroyed either by a rise of temperature, or by actual contact of the fire or flame; 8th. The employment of electricity for causing the combination of combustion of the gas generating-materials; 9th. The employment of a fuse for igniting or combining the gas generating materials; 10th. The employment of springs, levers, triggers or other devices to be operated by hand for causing the combustion or ignition of the gas generating-materials; 11th. The employment of springs, levers, triggers or other devices to be operated by hand for causing the combustion or ignition of the gas-generating-materials.

No. 4893. LYMAN B. STILSON, Minneapolis, Min., U. S., 24th June, 1875, for 5 years: "Car-Truck." (*Train de wagon.*)

*Claim.*—1st. The bars G, G, having flanges K, arranged and applied to a car-truck; 2nd. The runners M, M, connecting the

bars G, G; 3rd. The longitudinal-bands I, J, secured to the front and rear ends of the truck for bearing the end of the bars G, G; 4th. The slotted-standards H, bolted to the car-truck and to the bands I, J, for supporting the ends of the bars G, G; 5th. The rods O, O, bolted to the car-truck and to the bars G, G, centrally for staying the said bars; 6th. The bars N, N, bifurcated at the ends and bent around the axle, and under and between the bars G, G.

No. 4894. EDWARD F. CHAPIN, and EDWIN O. PRESBY, Boston, Mass., (Assignees of H. J. Warren) 24th June, 1875, for 5 years: "Lamp Extinguisher." (*Eteignoir de lampe.*)

*Claim.*—The weight B, with its vertical-rod *d*, in combination with the sleeve *c*, sliding upon the wick-tube; The weight B, with its vertical rod *d*, in combination with the lever *e*, for operating the sleeve *c*, upon the wick-tube.

No. 4895. ORESTES PAGAN, THOMAS L. RICART, and MIGUEL A. MONTEJO, Philadelphia, Pa., U. S., 24th June, 1875, for 5 years: "Improvements on Boiler Tube Expanders." (*Perfectionnements aux appareils à dilater les tubes des chaudières à vapeur.*)

*Claim.*—1st. The combination of the stock A, threaded-mandrel B, and sliding-clutch F; 2nd. The solid roller head G, having slots *g*, for the reception of the rollers H, from its inner end and for plugs to retain the same in place; 3rd. In combination with the head G, the rollers H, working in the slots *g*, therein, and the plugs *h*, for holding said rollers in place; 4th. In combination with the stock A, having the graduated grooves *g*, *g*, *g*, the band I, provided with a stud *i*, and operating to govern the exposure of the expanding-rollers; 5th. The mandrel B, of a boiler tube expander, made in two parts *b* and *b*, so as to permit the removal of the tapered part; 6th. A screw threaded mandrel of a boiler expanding tool having its smooth part connected with the threaded part by a swivel or equivalent connection so as to present an anti-friction surface to the expanding rollers; 7th. The novel combination of the stock A, mandrel B, clutch F, head G, rollers H and band I.

No. 4896. JOHN M. MUNRO, and ARTHUR P. JOHNSON, Ottawa, Ont., 26th June, 1875, for 5 years: "Improvements on Horse Hoes." (*Perfectionnements aux Houes à cheval.*)

*Claim.*—1st. The mould-boards A, secured adjustably to the tongue C, by cross-bars B, and rods E. 2nd. The auxiliary-rods G, adjustably connected to the boards A, and tongue C; 3rd. Providing the boards A, with tail-pieces I; 4th. The handles J, fixed to the draft-tongue C, for governing the machine.

No. 4897. FRANCIS ROURK, Montreal, Que., 28th June, 1875, for 5 years: "Apparatus for the Ventilation of Sewers." (*Appareil de ventilation des égouts.*)

*Claim.*—The combination of the exhaustor A, connected to the sewer B, and to the furnace C.

No. 4898. NATHAN CAMPBELL, Rochester, N. Y., U. S., 26th June, 1875, for 5 years: "Curtain Fixture." (*Ajustage de rideaux.*)

*Claim.*—1st. The bracket A, and detachable-lever B, the latter located between the foot *a*, and socket-bearing *b*, of the bracket, and provided with the loose joint connection *m*, *n*, whereby the lever retains its place against end thrust, and lateral displacement, and is made effective in its connection with the ratchet-wheel; 2nd. The bracket A, constructed with the foot *a*, and socket-bearing *b*, and the lever B, constructed with the arm *c*, pawl F, and arm K, the connection between said parts being made by the bit *m*, and key-hole *p*, located between the foot and socket-bearing of the bracket; 3rd. The bracket A, with key-hole *p*, constructed with the sharp edge-bearing *u*, and projection *v*, and with the bosses *r*, *s*, having their seats *r*, *s*, situated in the same plane with the face of the bracket, for the connection and proper working of the bit of the lever; 4th. The lever B, constructed with the stop *h*, on one side and curved-end *g*, with shield *q*, for protecting the ratchet on the other side; 5th. The bosses *z*, *z*, formed upon the back-side of the bracket for the purpose of preventing contact of the bit *m*, with the wood in its turning movements; 6th. The ratchet-wheel C, having its teeth constructed with the rounded-corners *e*, and flattened edges *j*.