

No. 3586. JOHN BROKENSHIRE, Kingston, Ont., 18th June, 1874, for 5 years: "Improvement on Capstans." (Perfectionnement des cabestans.)

Claim—1st. The cavity A. B. between the body of the capstan *f*, and the apron C, D, and the connection of the main gear up within the cavity A, B; 2nd. The covering or apron C, D, thrown over pawls c, c, for protection from ice, &c., &c., with the combination of all other parts of the capstan as described.

No. 3587. JULIUS HOCK, Vienna, Austria, 18th June, 1874, for 5 years: "Improvements on Motor Engines Worked by the Combustion of Petroleum or other Hydro-carbons." (Perfectionnements aux machines de propulsion consommant le pétrole ou autres hydro-carbures.)

Claim—1st. The combination of the supply vessel A, and its pipe E, check valve E¹, and nozzle E², with the air valve F¹, and nozzle E, whereby a stream of combustible liquid is broken into spray and mingled with air as it enters the working cylinder Z, as described; 2nd. The combination with the supply vessel A, of an adjustable plunger B, for altering the level of the combustible liquid in the vessel, so as to regulate the stream thereof supplied to the cylinder, as described; 3rd. The combination of the bellows or air pump R, with the vessel H, gasometer M, nozzles N, and J, and the aperture and valve J¹, for effecting the ignition of the combustible charge in the cylinder, as described; 4th. The combination of the governor *f*, with the valve D, through an adjustable spring, connecting rod *d*, and lever R¹, whereby the speed of the engine can be regulated by the admission of more or less air to the working cylinder, as described; 5th. The combination of a working cylinder Z, provided with the several apparatus referred to in the preceding claims with a connecting rod, crank shaft and fly wheel, constituting a petroleum motor engine, as described.

No. 3588. WILLIAM GOWEN, Wausau, Wis., U. S., 18th June, 1874, for 5 years: "Improvements on Head Blocks and Setworks for Saw-mills." (Perfectionnements aux poupées et aux mouttes de scieries.)

Claim—1st. The frame D, shaft E, friction gears F, G, and shaft H, in combination with the set rod B, and carriage A, for receding the jack head by the motion of the carriage, as described; 2nd. The lever I, pivoted to the carriage A, and receiving the shaft E, for bringing the friction wheels F, G, into contact for the purpose of set forth; 3rd. The construction of the double balance pawl J, operating as set forth for reversing the ratchet and gear wheel J¹, by the lever J¹; 4th. The combination of the double balance pawl J, coiled spring K, and quadrants, each L: 5th. The frame C, bolted to the carriage A, the projecting arms supporting the set rod B, and ratchet quadrant M, bolted thereto and bearing the shaft N, hanging the lever J¹, and gear ratchet wheel J¹; 6th. Providing the frame C, with lugs O, for hanging the eccentrics P, and shifting rods Q, by the axial pins; 7th. The application of eccentrics P, for operating the shifting rods Q; 8th. The shifting rods Q, and shifting frame R, for operating the sliding gears R¹; 9th. The shifting frame R, in combination with the gears R¹, and set rod B; 10th. The combination of sliding gears R¹, and set rod B, for operating one or more jack heads independently or simultaneously together at the option of the operator; 11th. The scale plates U, having a one inch scale or series of graduated scales, the figures and lines being raised or in the face for the purpose set forth; 12th. The scale U, 1, 2, 3, 4 and 5 inch, each graduated to allow for the thickness of kerf and side boards applied and used as set forth; 13th. The application of the indicator or pointer V, operated by the set rod U, in combination with a scale U; 14th. Constructing the jack head A¹, in two parts *a*, *b*, bolted together as set forth; 15th. The dogs B¹, having a cam movement; 16th. The cam slotted grooves C¹, and dogs B¹, constructed and operating as described; 17th. The application of the cam lever movement to the dog bar B¹, for operating the dogs B¹; 18th. The combination of the dog bar B¹, having a cam slotted rejection D¹, and cam lever E¹, having a pivotal connection with the jack head as set forth; 19th. The combination of the segment ratchet F², cam lever E¹, and pawl G¹, with the dog bar and jack head as set forth; 20th. The recess H¹, formed in the jack heads.

No. 3589. THOMAS D. JONES, Syracuse, N. Y., U. S., 26th June, 1874, for 5 years: "Wash-Board." (Planche à savonner.)

Claim—1st. The rubbing face, or board C, of an ordinary corrugated wash-board perforated with holes of any size or shape; 2nd. The combination of the perforated rubbing board C, with the movable back-board D, having channels E, cut therein and a slot in the lower rail B, as specified.

No. 3590. JOSEPH CORBETT, Hartford, Ct., U. S., 3rd July, 1874, for 5 years: "Registering Ticket Punch." (Emporte-pièce pour le contrôle des billets.)

Claim—1st. The combination with a ticket punch of the series of ratchets *n*, shifting cam *n*¹, and spring detent pawl *o*, or their equivalents; 2nd. The combination with a ticket punch of the ratchets

n, *n*¹, intermediate shifting cam *n*², reversible detent pawl *o*, and spring *p*; 3rd. The combination with the bell-hammer and handles of a registering ticket punch of the cam *h*, provided with the tooth *h*¹, and shoulder *h*², for raising the bell-hammer; 4th. The combination in a registering ticket punch of the bell hammer *h*, cam *h*¹, provided with tooth *h*², and reversible pawl *o*, having a tooth *o*¹, for returning the cam *h*, to its normal position; 5th. The combination with the cover D, D¹, provided with toothed hasps *q*, *q*¹, of the spring dog *s*, for locking the same; 6th. The combination with the spring locking dog *s*, and covers D, D¹, provided with notched hasps *q*, *q*¹, of the key *w*, key holes *w*¹, and seat *t*; 7th. The combination with the receptacle *k*, and cover of the bell or registering mechanism of the locking pin *b*, retained in place by said cover; 8th. The combination with the unit registering wheel E, and actuating pawl *p*, of the secondary registering wheel E¹, provided with the space *e*¹, formed by cutting away one of its ratchets or teeth.

No. 3591. ALBERT JEFFERY, Guelph, Ont., 6th July, 1874, for 5 years: "Improvements in Looking-Glass Holders." (Perfectionnements aux porte-miroirs.)

Claim—The holder C, with pivoted socket C¹, bar or rod B, spiral spring D, with projecting ends *d*, in combination with the looking-glass A, arranged and operating as described.

No. 3592. PIERRE TRUDEAU, Ottawa, Ont., 6th July, 1874, for 5 years: "Joiner's Bench." (Etabli de menuisier.)

Résumé—Un établi pour permettre de tailler le bois en équerre ou à fausse équerre, composés de cet *s* A, et B, de la pièce mobile D, des plans inclinés E, et F, et des supports c, tel que décrit.
A joiner's bench to allow of wood being formed square or bevelled composed of the sides A, B, of the moveable piece D, inclined planes, E, F, and supports c, as described.

No. 3593. ROYAL B. UNDERHILL, Corinth, Mis., 6th July, 1874, for 5 years: "Apparatus for Extracting Coffee." (Appareil à infuser le Café.)

Claim—The conical case A, with compartments C, D, E, and F, partition plate B, solid lids K, and L, and perforated lids N, and O, as set forth.

No. 3594. JOHN YOUNG, Goderich, Ont., 6th July, 1874, for 5 years: "Shaft Coupling for Threshing and other Machines." (Ajustage des axes des machines à battre et autres.)

Claim—1st. The connecting hooks D, D¹; 2nd. The combination of the connecting hooks D, D¹, and coupling ring A, by means of the links c, c, c, and the four staples or loops B, as set forth.

No. 3595. JOSEPH E. LANDERS, New Bedford, Mass., U. S., 6th July, 1874, for 5 years: "Improvements in Flower Pots." (Perfectionnements dans les pots à fleurs.)

Claim—The inner pot C, with holes *a*, and *b* and annular space *f*, in combination with the outer pot A, provided with stand B, as set forth.

No. 3596. JONATHAN DAVIS, St. Paul, Minn., U. S., 6th July, 1874, for 5 years: "Pipe Stem." (Tuyau de pipe.)

Claim—In combination with the outer cylindrical tube A, the stem B, having ascending spiral grooves *a*, and descending spiral grooves *b*, in its periphery as set forth.

No. 3597. MELANCTON BRYANT, Northport, N. Y., U. S., 6th July, 1874, for 5 years: "Improvements on Windlasses for Presses." (Perfectionnements aux vindas pour les presses.)

Claim—The combination of the ratchet wheel, having grooves D, in the side and the lever B, having stud pin K, and loosely pivoted part E, of the pivoted detent pawl, made in two parts and pivoted together as specified.

No. 3598. LUCIUS B. BISHOP, Horton, N. S., 6th July, 1874, for 5 years: "Spinning Wheel." (Rouet.)

Claim—The combination and construction of the frame B, B, and the standard K, with the pulleys O, and P, and the driving wheel W, and the belt No. 1, as set forth.

No. 3599. JOHN H. STEINER, Albany, N. Y., U. S., 6th July, 1874, for 5 years: "Fire Extinguisher." (Extincteur d'incendie.)

Claim—1st. A "Fire Extinguisher" provided with separate and independent acid tubes C, and valves *f*, or their equivalents, allowing the introduction of successive charges of acid as set forth; 2nd. In combination with the extinguisher having the acid tubes