

**Lamp Chimneys.** (Perfectionnement des cheminées de lampes.)

*Claim.*—A lamp chimney constructed in two or more longitudinal parts A, B, to fit together and held by springs or other suitable fastening.

No. 5348. EARNSHAW BRADLEY, St. Leonard, Que., 8th November, 1875, for 5 years: "Improvements in the Manufacture of Extract of Hemlock Bark." (Perfectionnements dans la fabrication de l'extraît d'écorce de pruche.)

*Claim.*—The treatment of the ooze or liquor of hemlock bark with sulphurous acid.

No. 5349. JAMES O. BYRNS, Detroit, Mich., U. S., 8th November, 1875, for 5 years: "Advertising Indices." (Index d'annonces.)

*Claim.*—An index having inscribed upon it the name of the department of an hotel to which it serves as a guide and an advertisement.

No. 5350. JOHN FAIRBURN, Upton Station, Que., 9th November, 1875, for 5 years: "Improvements in Vacuum-Pans." (Perfectionnements aux chaudières à vide.)

*Claim.*—A vacuum pan V, constructed with a dome B, middle section or belt E, in combination with the lower section or bottom F, the three forming a pan in shape somewhat similar to an ellipse.

No. 5351. CYRUS W. BALDWIN, Chicago, Ill., U. S., 9th November, 1875, for 5 years: "Improvements on Hydraulic Elevators." (Perfectionnements aux éleveurs hydrauliques.)

*Claim.*—1st. The combination with the two communicating upright cylinders A, B, of the lifting piston E, in the one cylinder and the water escape Y, in the other cylinder, located with respect to the lifting piston; 2nd. The combination with the main cylinder A, and graduating cylinder B, of the lifting piston E, water escape Y, and graduating valve piston K, for joint operation; 3rd. The combination with the graduating cylinder B, the escape Y, the escape-cock Y, and the graduating valve piston K; 4th. The graduating piston K, and its valve in combination with the escape-cock Y, and the valve-cock N, and intermediate mechanism by which said valve and cock are connected and operated; 5th. The combination with the water supply reservoir C, the main cylinder A, the lifting piston, and the elevator-car of the escape, the escape-cock, the graduating piston and its valve for joint operation; 6th. In combination with the main and graduating cylinders elevator-car, and lifting piston E, the graduating piston K, provided with a valve opening upward, and arranged to rise in the graduating cylinder when the car rises; 7th. In a hydraulic elevator a steam and water piston of different diameters mounted upon the same stem, within separate cylinders which are connected respectively with the steam boiler and piston tube of the car, the area of pressure being greater upon the steam piston than upon the water piston, so that the pressure of steam shall be concentrated by the water piston upon a small column of water under the car, to move the latter from the bottom to the top of a building or to any point between the bottom and top, at one stroke of the combined pistons for the purpose of preventing any jarring or jerking motion of the car; 8th. Counterbalancing the weight of the elevator car J, and its pistons by means of a column of water communicating with the water cylinder above the water pistons; 9th. A graduating water valve X, and valve chamber W, interposed in the connecting pipe between the water cylinder and tube of the car piston for the purpose of regulating the descending speed of the elevator without impeding the flow of water to the tube when the car ascends; 10th. The counterbalancing column of water combined with the connected steam and water pistons, to assist the steam pressure in raising the elevator car; 11th. The steam and water valves operated from the shipper rope Q, through the medium of the bell crank lever M, the connecting rod N, and the sheave O; 12th. The combination of the compound cylinders E, and G, of different diameters, the compound pistons H, and I, contained therein the counterbalancing column of water and the graduating valve with the tube A, or piston B, of the elevator car; 13th. The combination of the compound cylinders E, and G, of different diameters, the compound pistons H, I, contained therein with the tube A, or piston B, and an elevator car; 14th. The independent water and steam cylinders E, G, and pistons H, I, mounted on the same rod, combined with an elevator to produce a long continued motion of the elevator car at one stroke of pistons; 15th. The method of decreasing the height of the cylinder A, and increasing in proper ratio the speed of the car, J; 16th. The employment of a single lifting cylinder A, and one or more pistons for great heights and low pressure of water; 17th. The employment of two or more pistons connected together; 18th. The safety device explained, consisting of the wedge shaped sliding bar C, the latches L, pivoted within them and formed with the inclined ledges e, or their equivalents and the tilting lever F, suspended from the carriage bottom, the wedges being suspended from the hoisting ropes by the eye bolts D, and the whole operating in such manner that upon failure of one of the hoisting ropes the opposite wedge is caused to gripe the post or guide A, very powerfully while the latch takes into such post.

No. 5352. JOSEPH BLAKELEY, Toronto, Ont., 9th November, 1875, for 5 years: "Car-Axle Bearing." (Coussinet d'essieu de wagon.)

*Claim.*—1st. The friction wheels C, having their bearings in slotted standard D of a frame B, secured to the car-track outside the wheels and arranged vertically to the axle journals to diminish the frictional contact; 2nd. The lateral friction-bearings G, boxed to the standard D, to receive the forward and rearward thrust of the axle journals.

No. 5353. RICHARD V. DE GUINON, Jersey City, N. J., U. S., 9th November, 1875, for 5 years: "Mode of Lighting Streets and Buildings." (Système d'éclairage des rues et des bâtiments.)

*Claim.*—1st. The combination with one or more street lamp posts or one or more building (each of said lamp posts having a burner) of one or more cisterns containing petroleum or other burning fluid and having discharge pipes emanating from the oil, petroleum, fluid or vapour space of the same, and leading to the burner or burners, said cistern or cisterns being connected by an air supply pipe having a stop-cock, said pipe extending from an air chamber for holding compressed air located at a suitable distance from the cistern or cisterns, the compressed air being releasable at will from its chamber into the cistern or cisterns containing the oil, petroleum, burning fluid or vapour and serving to force the oil, fluid or vapour to the burner or burners; 2nd. The arrangement of supplying compressed air from one central reservoir to all or any of the cisterns containing oil or other burning-fluid in the whole or any portion of any city, town, village, or neighbourhood, and controlling and extinguishing almost instantaneously the lights of the whole or of any desired part of the same, from such central point or reservoir, by withdrawing the air pressure.

No. 5354. FREDERIC A. GLANZ and PETER C. GLANZ, (Assignees of H. Glanz) Buffalo, N. Y., U. S., 9th November, 1875, for 5 years: "Rope Moulding Machine." (Machine à mouler les câbles.)

*Claim.*—1st. The combination with the revolving cutter-head H, of the internally threaded feed bushing N, and a double set of adjustable yielding friction sheaves G; 2nd. The combination with the sides A, A', having the bearings, for the cutter-head H, and for the main shaft of the shaft B, bevel wheels D, worm and pinions E, worm wheels D', shaft G, and the rollers G'; 3rd. The combination with the cutter-head H, of the spur wheel F, in intermediate reversing gearing F', pinion E, and the main shaft B; 4th. The combination with the cutter head H, of the rod machine L, attached to the side A', with its axial line coinciding with that of the said-cutter head; 5th. The cutter K, made of two longitudinal pieces, each having a single curved cutting edge, the said pieces being jointed longitudinally in a line with the intersection of the two curves by a screw and steady pin-passing transversely through the adjacent pieces; 6th. The internally threaded feed bushing N, when removably arranged within the cutter-head H.

No. 5355. ROBERT WILSON, Ithaca, N. Y., U. S., 9th November, 1875, for 5 years: "Horse Rake." (Râteau à cheval.)

*Claim.*—1st. The three pronged lever D, pivoted to the frame of a rake and adapted for use in connection with a draft-rod R, and the device for raising the teeth; 2nd. The holding down bar L, and the adjustable lifting-bar E, in combination with the raking teeth I, whereby the raking ends of the teeth can be adjusted and set at any desired height from the ground; 3rd. The eye brackets g, formed with hollow slotted bases g'.

No. 5356. LYMAN D. GREEN, Watertown, N. Y., U. S., 9th November, 1875, for 5 years: "Rotary Pump." (Pompe rotatoire.)

*Claim.*—1st. The combination of the casing A, with valve chest C, the piston plate H, with eccentric ring G, and the horizontally reciprocating valve D, with auxiliary rocking valves a, a'; 2nd. In combination with the casing A, and ring B, the piston plate H, with one or more apertures z, and the shaft I, with collar f, resting against the side of the casing whereby water is admitted back of the piston plate, to pack the plate and hub against their respective seats; 3rd. The water-groove K, sunk in the seat e, and connected to the suction port d, by a drilled channel K', the said groove acting as a reservoir for a self retaining water packing against the admission of air and water.

No. 5357. HUGH F. MCKERVEY, ANGUS MCKAY, CHARLES S. RAMSAY and PETER MCRAE, Cheboygan, Mich., U. S., 9th November, 1875, for 5 years: "Car-Coupler." (Attelage de wagons.)

*Claim.*—1st. An improved self-acting car-coupler in which the jaws A' opening vertically in combination with the coupling bar B, having at one end a spiral shaped spear-head b, and at the other fitting into a swinging block C; 2nd. The draw bar B, fitting into the swinging block C, in combination with the push bar D, and lever E.

No. 5358. JAMES W. BROOKS, Boston, Mass., U. S., (Assignee of C. W. Glidden and S. V. Simmons) 11th November, 1875, for 5 years: "Heel Trimming Machine." (Machine à finir les talons.)

*Claim.*—1st. The heel support box and drivers, in combination with a loose plate for retaining the drivers in position; 2nd. The heel-support