

**No. 29,960. Manufacture of Merchantable Articles from the Refuse of Petroleum Gas.** (*Fabrication d'articles de commerce, des rebuts du gaz de pétrole.*)

John M. Sparrow and Joseph H. Farr, Toronto, Ont., 9th October, 1888; 5 years.

*Claim.*—The within described process for producing a merchantable article from the refuse of the petroleum used in the production of illuminating gas, the said process consisting in passing superheated steam through the petroleum refuse, substantially in the manner and for the purpose specified.

**No. 29,961. Vehicle Running Gear.**

(*Train de voiture.*)

John J. Black, Cleveland, Ohio, U. S., 10th October, 1888; 5 years.

*Claim.*—1st. The springs D, having their rear ends joined together by cross-bar F forming a continuous support, substantially as described. 2nd. In running gear for vehicles, the combination, with axle A and body B, of the springs E, D, joined by cross-bar F, and connected to body B by king-bolt H, substantially as described. 3rd. In combination, axle A having shafts C, C rigidly attached, and two springs D, D pivotally attached, substantially as described.

**No. 29,962. Lamps.** (*Lampe.*)

Thomas Walsh, Montreal, Que., 17th October, 1888; 5 years.

*Claim.*—1st. The combination in a coal oil lamp of the chamber d, pipe i having perforations l, cup or jacket e having perforations f, tube o forming space r, nozzle b having openings e formed in it, and the tube o, and having passages k, chamber s, ferrule f, flange a and burner g, the whole constructed and arranged substantially as and for the purposes set forth. 2nd. The combination in a coal-oil lamp of the chamber d, pipe i having perforations l, pipe a provided with a stop-valve, as described, cup or jacket e having perforations f, tube o, forming space r, nozzle b having openings e formed in it, and extending through the tube o, also having passages k, chamber s, ferrule f, flange a, and burner g, the whole constructed, arranged and operating substantially as described. 3rd. The combination in a coal-oil lamp of the pipe i having vent at its upper end, chamber d, openings e, nozzle b having passages k, tube o forming space r, and having openings e continued through it, ferrule f, flange a, and burner g, the whole constructed and arranged substantially as described.

**No. 29,963. Wearing Apparel.**

(*Support de jupon.*)

Fannie St. Clair, New York, N. Y., U. S., 10th October, 1888; 5 years.

*Claim.*—The combined skirt and protector consisting of a skirt or supporting bands A, having means by which it is supported from the waist, and the protector forming an extension to the skirt or bands, having means by which its lower edge is supported on the shirt or bands, and the sliding cord or buttons by which the protector is supported.

**No. 29,964. Waggon Spring.** (*Ressort de wagon.*)

Charles A. Howard, Pontiac, Mich., U. S., 10th October, 1888; 5 years.

*Claim.*—1st. In a vehicle bolster spring mechanism, the combination, with the bed plate or plates adapted to rest on the bolster, and the cross-bar adapted to receive the weight of the load, of spiral springs extending between said bed plates and cross-bar at their extremities, and a semi-elliptic spring adapted to be swung either on or off the bolster at will, substantially as described. 2nd. In a vehicle bolster spring mechanism, the combination, with the bed plates, and the cross-bar and spiral springs extending between the ends of the same, of a semi-elliptic spring pivoted with its convex face to the cross-bar, and adapted to be either swung off from the bolster and thus add to the support of the load, or swung off from the bolster and thus support none of the load, substantially as described. 3rd. In a vehicle bolster spring mechanism, the combination, with the bed plates, the cross-bar, and a semi-elliptic spring, pivoted to the said cross-bar, and adapted to be swung either on or off the bolster, of spiral springs extending between the said bed-plates e on the cross-bar and held in place by the bolts c, substantially as described. 4th. In a vehicle bolster spring mechanism, the combination, with the bed plates, the cross-bar, the spiral springs and the semi-elliptic spring pivoted on the cross-bar, and adapted to be swung either on or off the bolster, of means for locking the semi-elliptic spring in a position either on or off the bolster, substantially as described.

**No. 29,965. Baling of Hay, Straw, etc.** (*Presse d'emballage pour le foin, la paille, etc.*)

John H. and James H. Howard and Edward T. Bonsfield, Bedford, Eng., 10th October, 1888; 5 years.

*Claim.*—1st. An apparatus for baling hay, straw and other materials, wherein two endless platens a, a are employed, substantially in the manner hereinbefore described. 2nd. In apparatus for baling hay, straw and other materials, the combination, with two endless platens a, a, arranged to converge towards each other and to gradually compress the material between them, of a conveyor or moving platform h for transporting the materials to the platens, substantially as described. 3rd. In apparatus for baling hay, straw and other materials, the employment of a table i, substantially as hereinbefore described, for receiving the compressed material and supporting the same during the application of bands thereto. 4th. The employment of the retaining clamps j, substantially as and for the purpose described.

**No. 29,966. Cooking Vessel.**

(*Ustensile de cuisine.*)

Robert U. Irwin, Meadowvale, and William L. Hardy, Toronto, Ont., 17th October, 1888; 5 years.

*Claim.*—1st. A cooking vessel having a hinged bottom in two sections attached to a central cross-piece, each bottom section having a notch combined with a partition crossing the vessel in the line of the cross-piece, whereby either compartment of the vessel may be opened without disturbing the contents of the other compartment, substantially as described. 2nd. The combination, with a cooking vessel having hinged bottom sections, and catches therefor, and a removable partition, of an insertible vessel to fit in and fill the first mentioned vessel above the partition, the construction and arrangement being substantially as described. 3rd. The combination, with a cylindrical cooking vessel having holes in its sides, of a collar adjusted to slide over the sides, and a flange on said collar, the parts being and operating, substantially as described.

**No. 29,967. Wire Lathing.** (*Lattis en fil de fer.*)

Thomas Cockburn, Hamilton, Ont., 10th October, 1888; 5 years.

*Claim.*—1st. The combination of flat wire, woven to form square, diamond or oblong spaces a, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of flat wire, woven to form square, diamond or oblong spaces a, with projections b at certain distances, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the attachable projections B, with wire lathing, substantially as and for the purpose hereinbefore set forth.

**No. 29,968. Telephone Address Index and Advertizing Device.** (*Index d'adresses téléphonique et appareil de publicité.*)

John F. O'Brien, Quebec, Que., 10th October, 1888; 5 years.

*Claim.*—1st. The combination of the board A, the alphabetical index book C secured thereto briefly, and the springs E to hold up the leaves of said index when making reference, substantially as set forth. 2nd. The combination, with the board A having springs E, of the index book C secured briefly thereto, said book having a stab back D, and leaves F alphabetically arranged and attached removably to said back, substantially as set forth.

**No. 29,969. Combined Door Lock and Latch.**

(*Serrure et loquet de porte combinés.*)

Theodore Martin, Wallaceburg, Ont., 10th October, 1888; 5 years.

*Claim.*—1st. In a combination latch and lock, the combination of the latch provided with the shoulder a, and the interior key bolt F having the foot G adapted to engage with the shoulder a on the latch, substantially as described. 2nd. In a combined lock and latch, the combination of latch, the shoulder a formed thereon, the latch spring J operating against the shoulder a and secured in vertical position on the face of the case, and the interior key bolt F provided with the foot G, all combined to operate substantially as described. 3rd. In a combined lock and latch, the combination, of the latch T provided with the shoulders and c, the interior key bolt F provided with the foot G adapted to engage with the shoulder a, and the night latch provided with the wing N, adapted to engage with the shoulder O, all combined to operate substantially as described.

**No. 29,970. Car Brake.** (*Frein de char.*)

Jacob S. Storrett, Philadelphia, Penn., U. S., 10th October, 1888; 5 years.

*Claim.*—1st. In an automatic brake mechanism, the combination, of a shifting buffer, springs F and F', draw-bars D and D', frame E, sliding link G pinned to the rod D' and pivotally connected with rods H and H', lever I loosely mounted on a pin J, lugs K and K', adapted to be moved by the lever I to cause the pin J and levers M and N to be actuated for applying the brakes, substantially as described. 2nd. In an automatic brake mechanism, the combination, of a sliding link G pivotally connected with a rod D', a shifting buffer A, connected with said rod, bars H and H', lever I, lugs K and K', and a pin J for causing the brakes to be applied by either an inward push or forward thrust of the buffer, substantially as and for the purpose described. 3rd. In an automatic brake mechanism, the combination, of the movable buffer A, draw-bar D', cross-head C and supports F, attached to the bottom of the car, and provided with a tongue G adapted to receive a pin normally held in rear of the cross-head I for checking inward thrust of the buffer, substantially as and for the purposes described. 4th. In an automatic impact brake mechanism, the combination, of a cylinder provided with a piston adapted to be actuated pneumatically, to shift the parts of a brake mechanism whereby said mechanism may be controlled from the engine to cause the brakes to be applied either by a pull on or a push against the buffer, substantially as described. 5th. In an automatic impact brake mechanism, the combination, of a cylinder provided with a piston capable of actuation by compressed air, a brake mechanism actuated thereby to shift the parts thereof, and a spring bearing against said piston to drive it back to its place when the air pressure is released, substantially as and for the purposes described. 6th. In an automatic impact brake mechanism, the combination, of the buffer A, draw-bars D and D', frame E, sliding link G or guide G' pinned to the rod D', arms H and H', lever I, lugs K and K', pin J, span or bridge V attached to the link G, air cylinder Q, piston R with a stem R' pinned at one end to the span or bridge V, and air pipes U, all arranged substantially as and for the purposes described. 7th. In an automatic impact brake mechanism, the combination, of the arms H and H', lever I, guide G, cylinder Q, piston R with its stem, the slotted head R', the span or bridge V and the spring T operating to cause said piston to be returned to place when the pressure of the air is removed, substantially as described.