

**No. 11,625. Improvements in the Method of Making Railway Rails.** (*Perfectionnement dans la méthode de fabriquer les lisses des chemins de fer.*)

Horace H. C. Sintzenich, Toronto, Ont., 11th August, 1880; for 5 years.

*Claim.*—1st. The process of rolling, grooving or chamfered rails by bending ridges of metal. 2nd. The combination with a train of rail rolls, of the rolls. 3rd. A rolled railway rail with ridges formed by rolling and bent into position.

**No. 11,626. Improvements in Cackle Separators.** (*Perfectionnements aux séparateurs de l'avoine.*)

Henry Stevens, (Assignee of Herman Kurth,) Hamilton, Ont., 11th August, 1880; for 5 years.

*Claim.*—1st. In a cackle separator, a perforated revolving metallic cylinder B in combination with an endless belt G, for the purpose of forming a consolidated jacket in the lower part of said cylinder, so as to form cavities, pockets or cells from said perforations on lower part of said revolving cylinder. 2nd. A perforated revolving cylinder being supported by an endless belt on two or more rollers for the purpose of receiving single kernels of cackle and carry them up to the upper part of said rollers, and discharging the cackle to the outside of said cylinder B. 3rd. A perforated revolving cylinder which has, at the bottom, cavities, cells or pockets, and perforated holes at top, in combination with a brush N, endless belt G, guide rollers D E F, said cylinder, &c., also may be used in combination with a suction draft and oat separator constituting a complete grain cleaner.

**No. 11,627. Steam Drill.** (*Drille à vapeur.*)

Addison C. Rand, (Assignee of George E. Nutting and Joseph C. Gibbens,) New York, U. S., 11th August 1880; (Extension of Patent No. 5,001.)

**No. 11,628. Improvements in Curtain Rollers.** (*Perfectionnements aux rouleaux des rideaux.*)

Walter B. Noyes, Boston, Mass., U. S., 11th August, 1880; for 5 years.

*Claim.*—1st. The combination, with a hollow curtain roller, of the spindle A cut away at one end, the hollow plug G having the end of the spindle free to move endwise therein but locked from rotating movement by the pin f and stop h, the springs D E and the tube F interposed between the springs, so that one will be entirely inclosed thereby and the other pass over the outside of the tube. 2nd. The arrangement and combination of the roller H, journal piece c, spool a having the pivot b<sub>1</sub>, dogs m and bracket C having the bearing d<sub>1</sub>.

**No. 11,629. Improvements on Grinding Mills.**

(*Perfectionnements aux moulins à moulin.*)

John Stevens, Neenah, Wis., U. S., 11th August, 1880; for 5 years.

*Claim.*—1st. A dress for cylinder and concave consisting of a series of parallel rounded flutes with rounded dividing ridges. 2nd. The combination of a cylinder having a dress composed of a series of parallel rounded flutes, with rounded dividing ridges and a concave having a similar dress.

**No. 11,630. Improvements on Printing Ink.**

(*Perfectionnements à l'encre d'imprimerie.*)

LeRoy Hooker, Quebec, Que., 11th August, 1880; for 5 years.

*Claim.*—1st. Printers' ink composed of coal tar, or the residuum of distillation of coal and lampblack. 2nd. Printing ink composed of coal tar and lampblack, deodorized, or the odor of which is masked by the incorporation of gun camphor, in a liquid or pulverized state.

**No. 11,631. Improvements on Apparatus for Generating and Applying Electricity.** (*Perfectionnements aux Appareils à produire et appliquer l'électricité.*)

Charles F. Brush, Cleveland, Ohio, U. S., 11th August, 1880; for 5 years.

*Claim.*—1st. The wire or helix E, having a comparatively high resistance and kept constantly in close circuit while the machine is running, in combination with the magnet wire or helix F, as commonly employed. 2nd. A dynamo-electric machine in which the coils around the field of force electro-magnets are included in the main or operative circuits, the combination of such main circuit with a constantly closed differential circuit of prescribed resistance, for the purpose of maintaining the flow of the current through the coils surrounding the electro-magnets in the machine, when the main or operative (external) circuit is broken. 3rd. A dynamo-electric machine constructed or combined with suitable device for primarily varying the strength of the current exciting its field of force electro-magnets. 4th. The combination, with one or more of its inducing or field of force electro-magnets, of an adjustable resistance, whereby the strength of the current applied to said magnets may be determined and governed, and varied. 5th. The combination with one or more of its inducing or field of force electro-magnets, of a shunt circuit, within which is included an adjustable resistance for varying the strength of the current applied to said magnets. 6th. The combination, in a single circuit, of two or more electric lights, each of which is provided with an upper carbon point, having mechanism connected therewith for releasing the carbon holder and allowing it to be fed by gravity, and a lower carbon, the position of which is regulated by the resultant force of axial magnetism caused by the passage of electricity through a helix on the main circuit, and a helix on a shunt circuit. 7th. The combination with a carbon holder, of a magnet surrounded by two helices, one helix located in the main circuit, and the other in a shunt circuit, the main and subsidiary currents passing through said helices in opposite directions. 8th. The combination with a movable core supporting a carbon point and upheld by suitable springs, of a helix surrounding the core and connected with the main circuit and a supposed subsidiary helix also surrounding the movable core and connected with a shunt circuit. 9th. The combination with a movable core supporting one of the carbon points and a main and

subsidiary helix surrounding said core and respectively connected with a main and shunt circuit, of the upper carbon point and suitable intervening mechanism, whereby the upper carbon point is fed downward by the action of the lower carbon point. 10th. The combination with the upper and lower carbon points thereof, of a helix in the main circuit and a helix in a shunt circuit, both of said helices surrounding a movable core with which one of the carbon points is connected, and clamping mechanism connected with the upper and lower carbon points. 11th. In an electric lamp, the combination with a moving carbon holder, of a tube C<sub>6</sub>, said tube constituting the body of cylinder and a moving element of the dash pot. 12th. In an electric lamp, two or more pairs or sets of carbon, in combination with mechanism constructed to separate said pairs dissimultaneously or successively. 13th. In an electric lamp two or more pairs or sets of carbons, in combination with mechanism constructed to separate said pairs dissimultaneously or successively and establish the electric lig<sup>t</sup> between the members of but one pair (preferably the pair last separated) while the members of the remaining pair or pairs are maintained in a separated relation. 14th. In an electric lamp having more than one pair or set of carbons, the combination with said carbon sets or pairs of mechanism constructed to impart to them independent and dissimultaneous separating and feeding movements, whereby the electric light will be established between the members of but one of said pairs or sets at a time, while the members of the remaining pair or pairs are maintained in a separated relation. 15th. In a single electric lamp, two or more pairs or sets of carbons all placed in circuit, so that when their members are in contact the current may pass freely through all said pairs alike, in combination with mechanism constructed to separate said pairs dissimultaneously or successively. 16th. In an electric lamp wherein more than one set or pair of carbons are employed, the lifter D<sub>6</sub>, or its equivalent, moved by any suitable means, and constructed to act upon said carbons or carbon holders dissimultaneously or successively. 17th. In an electric lamp wherein more than one pair or set of carbons are employed, a clamp C<sub>7</sub>, or its equivalent, for each said pair or set, said clamps C<sub>7</sub> adapted to grasp and move said carbons or carbon holders dissimultaneously or successively. 18th. In an electric lamp, the combination with a carbon holder and the mechanism moving said carbon holder, of a lifter or support K<sub>3</sub>, or its equivalent constructed to operate in compelling the said moving mechanism to sustain the weight of the carbon holder after its carbon is sufficiently consumed or removed. 19th. In an electric lamp, a carbon having a jointed or flexible connection with said lamp, and one or more guides partially or completely surrounding said carbon for the purpose of directing it to a proper position with its fellow or opposite carbon. 20th. In an electric lamp, a carbon provided with the described inclosed conductor made of pliable material and projecting beyond the end of the carbon, said conductor being adapted to serve as a universal joint for centering the carbon in the regulator. 21st. The combination of one or more guides A<sub>7</sub>, adapted to impinge against or to surround a carbon of an electric lamp, with a flexible or jointed connecting or attaching device between said carbon and electric lamp.

**No. 11,632. Improvements on Pianofortes.**

(*Perfectionnements aux Piano-fortes.*)

Caroline Carothers, Toronto, (Assignee of Thomas Kater, Hamilton, Ont., 13th August 1880; (extension of Patent No. 5,050.)

**No. 11,633. Window Blind Fasteners.** (*Arrête persiennes.*)

Henry M. Wells, Toronto, Ont., 13th August, 1880; (Extension of Patent No. 5,052.)

**No. 11,634. Machines for Clamping Window Sashes.** (*Machines à embotter les croisées des fenêtres.*)

William Abercrombie, Hamilton, Ont., 13th August, 1880; (Extension of Patent No. 5055.)

**No. 11,635. Improvements on Refrigerators.**

(*Perfectionnements aux garde-manger.*)

Joseph Sissons, Montreal, Que., 14th August, 1880; for 5 years.

*Claim.*—1st. A refrigerator constructed with its sides formed completely of sheets of glass H I having space K, between them, with frame G. 2nd. A refrigerator constructed with its sides formed of sheets of glass H I, and having space K, with frame G, in combination with the ice cage D. 3rd. A refrigerator constructed with its sides formed completely of sheets of glass H I, and space K, with frame G, in combination with thermometer M.

**No. 11,636. Improvements on Furniture Castors.** (*Perfectionnements aux roulettes des meubles.*)

Charles T. Schoen and Charles Soott, Philadelphia, Penn., U. S., 14th August, 1880; for 5 years.

*Claim.*—A castor composed of a bearing spring, a ball, or roller and fastenings to which the ends of the spring are attached, said fastenings forming, respectively, the socket for the bill or roller and the medium of attachment to the piece of furniture or its socket, and said spring being the sole connection between said fastenings.

**No. 11,637. Improvements on Reaping Machines.** (*Perfectionnements aux moissonneuses.*)

John Watson, Ayr, Ont., 14th August, 1880; for 5 years.

*Claim.*—1st. A pivoted plate C, with a cam-shaped slot a cut in it, in combination with the shank b. 2nd. A pivoted plate C, with a cam-shaped groove a cut in it and operated by a rod B, in combination with a pivoted sticking block F. 3rd. A pivoted plate C, with a cam-shaped groove a cut in it and provided with a spring G, in combination with a pivoted sticking block F, and tripping lever E, provided with a spring H. 4th. A pivoted plate C, with a cam-shaped groove a cut in it and operated by a foot lever a, and rod B, in combination with a tripping device. 5th. In a reaping machine having a single driving wheel and only one pair of bevel gear used to impart motion to the knife, a frame I, supporting an axle box K, and adjust-