

### No. 9860. Improvements on Broad Cast Sowers. (*Perfectionnements aux semoirs à la volée*)

John Whelan, Woodhouse, Ont., 17th April, 1879, for 5 years.

**Claim.**—The combination of the levers A A with the wheels B B, attached thereto worked by the spokes C of the main wheel, with the rod G, passing through the cylinder H, supporting J by brackets.

### No. 9861. Station Indicator (*Indicateur des stations*.)

David C. Morency, Charles W. Carrier, Levis, and John M. Mackay, Quebec, Que., 17th April, 1879, for 5 years.

**Claim.**—1° L'emploi d'un ressort pour faire mouvoir les rouleaux R R en sens contraire et, par conséquent, tenir la toile constamment tendue, et permettre d'employer une bande de papier ou de toile d'une longueur considérable. 2° La disposition de la roue C, de la canne D, de l'aiguille N, des ressorts E et des goupilles F F qui aient que par un mouvement toujours semblable de la pièce H, on obtient, par un simple demi-tour de l'aiguille N, un mouvement sûr et régulier de la toile, soit dans un sens ou dans l'autre, les goupilles F F rendant le rouleau A parfaitement stationnaire.

### No. 9862. Process and Apparatus for Amalgamating Ores. (*Procédé et appareil pour amalgamer les minerais*.)

Charles E. Ball, Philadelphia, Pa., U. S., 17th April, 1879, for 5 years.

**Claim.**—1st. The method or process of amalgamation, consisting in mingling mercury and ore, travelling together in a chamber or tube, in vacuo or under exhaust, and. The method or process of amalgamation, consisting in mingling the mercury and ore in a chamber or tube, in vacuo or under exhaust, while the amalgam is detained in said chamber, and causing the ore to be drawn by suction through such detained amalgam; 3rd. The method for effecting amalgamation by drawing ores through a body of mercury held in suspension, by means of suction exerted above said body of mercury, the ore being admitted on the under side of said body on the side opposite to that in which the suction is produced; 4th. The combination, with a chamber or tube A, mercury holder B and ore hopper C, of a steam nozzle I, or equivalent exhaust apparatus, located between said hopper and the discharge end of said tube or chamber A; 5th. The amalgamating apparatus consisting of chambers composed of tubes A E G, mercury holder B, ore hopper C and steam nozzle or suction appliance I.

### No. 9863. Machine for Testing Eggs. (*Machine pour mirer les œufs*.)

Asel Williams and Henry S. Dustan, St. John, N. B., 17th April, 1879, for 5 years.

**Claim.**—The combination of the pint O O, tube J, opening K, mirror or reflector M, wires W W, clevis C C and handle H.

### No. 9864. Improvements on Gas Retorts. (*Perfectionnements aux cornues à gaz*.)

Edwin M. Moore, London, Ont., 17th April, 1879, for 5 years.

**Claim.**—In a gas retort, the combination of chambers F F, vapourizing pan C, rim I, cover J, loose bottom H, rods P P and lead joints T T.

### No. 9865. Improvements in Portable Boats. (*Perfectionnements aux canots portatifs*.)

James B. Luckerhoff, Trois-Rivières, Que., 17th April, 1879, for 5 years.

**Claim.**—The combination, with the central compartment A and the end compartments B B, of a portable sectional boat, air tight bulk heads C C, water tight spaces c c, eyes d d, connecting bolts or rods e e and slip or sliding bolts f f.

### No. 9866. Improvements in Oil Bearings. (*Perfectionnements aux coussinets à huile*.)

George Bradford, Toronto, Ont., 22nd April, 1879, (Extension of Patent, No. 3374) for 5 years.

### No. 9867. Machine for Cutting Metal. (*Machine pour tailler les métaux*.)

Frederick Cook and Hugh Campbell, Exeter, Ont., 22nd April, 1879, for 5 years.

**Claim.**—1st. A metal cutting machine, consisting substantially of standard B, with broad flat head C, broad guide piece D, lever handle E and flat draw arms F in combination with knives A I; 2nd. In combination with the above described parts, the block J having recesses K L; 3rd. In combination with the above, the adjustable holder G and bolts and nuts H.

### No. 9868. Improvements on Curd Agitators. (*Perfectionnements aux méneoles*.)

Edward Tyhurst, Chatham, Ont., 22nd April, 1879, for 5 years.

**Claim.**—1st. The vat A fitted with blocks B, at both ends, to conform to the peripheral sweep of the cylinder agitating arms d; 2nd. The combination of the vat A, having strainer B, and the rotary and traveling cylinder D, having agitator arms d for breaking the curd; 3rd. The wheels G and H having cog pinions E E meshing with a horizontal rack F, on opposite sides of the vat A, for operating the cylinder D; 4th. The tan wheel J, casing K, with doors L enclosing a cylinder D having arms d for discharging a current of air from the curd; 5th. The combination of the screw L, tan shaft N, movable journal bearing O, for effecting the engagement and disengagement of the pinion I and cog wheel H; 6th. The reinforcing strip a, bent and nailed to the rabbeted edge of the bottom of vat A and secured to the strainer B by soldering.

### No. 9869. Improvements on Railway Jacks. (*Perfectionnements aux crics des rail-outes*.)

James Gifford and John P. Donnelly, Moore, Ont., 22nd April, 1879, for 5 years.

**Claim.**—The combination of the column A, jack screw D, nut E and lever K.

### No. 9870. Improvements on Bee Hives. (*Perfectionnements aux ruches*.)

Peter Fisher and Robert B. Scott, Colborne, Ont., 22nd April, 1879, for 5 years.

**Claim.**—1st. A hive having one, two or more entrances, subdivided between the honey frame G by glass partition J, removably inserted for dividing the hive into working and non working sections of any desired capacity; 2nd. The removably supplementary boxing C C attached to the hive, to preserve uniformity of heat during the spring months, to afford protection during the winter months and to allow of the employment of saw dust or other suitable packing; 3rd. The provision, to the entrance of the hive, of regularly placed boards D D to direct the bees to the entrance.

### No. 9871. Process for Clarifying the Juices of Sorghum Maize. (*Procédé pour clarifier le jus du Sorgo*.)

Francis L. Stewart, Marysville, Penn., U. S., 22nd April, 1879, for 5 years.

**Claim.**—1st. The final depurating process applied to maize and sorghum juice, additional to and directly following decoloration by the action of lime and heat, and neutralization of the excess of lime by sulphurous oxide and consisting, first: in the reduction of the temperature of the previously heated juice to 140° Fahrenheit, second, the admixture, with it, of sulphurous oxide, in sufficient quantity to make it strongly acidulous, third, the addition of albumen to the juice, in sufficient quantity, fourth, the rapid heating of the juice to the boiling point and the immediate removal of the scum, and fifth: the subsequent addition, at intervals, to the sirup boiling at the atmospheric pressure of sulphurous oxide, in sufficient quantity to preserve it in an acid condition to the close of the evaporation; 2nd. A compound for decolorating anachrome liquids, consisting of a solution of tannic acid united with liquid sulphurous acid, and with hydrate of alumina.

### No. 9872. Improvements on Saw Guards. (*Perfectionnements aux garde-series*.)

Isaac N. Kendall, Buckingham, and Richard Hall, Gattineau-Mills, Que., 22nd April, 1879, for 5 years.

**Claim.**—1st. The metallic liners and slab guards applied to saws, for the purpose of preventing them, when in motion, from deviating from a straight line; 2nd. In combination with the metallic liners and slab guards I and P, the metallic or glass slips f f; 3rd. The combination of the metallic liners and slab guards with the slips f f and backings g g.

### No. 9873. Improvements on Hydro-Carbon Lamps. (*Perfectionnements aux lampes à hydro-carbure*.)

Thomas Walsh, Montreal, Que., 22nd April, 1879, for 5 years.

**Claim.**—1st. The combination of the supply pipe D and air or steam pipe B, with the pipe H, provided with the burner I, whereby the pipe H becomes a combined retort and duct; 2nd. The combination of the pipe D having cocks E and F, pipe B having cock C, pipe H and burner I; 3rd. The burner I composed of a pipe having a lip or plate L at its bottom extremity, turned in an upward direction, and having the opening K arranged to deliver the gas, &c., upon the plate L.

### No. 9874. Process of Purifying Illuminating Gas. (*Procédé pour purifier le gaz d'éclairage*.)

Onazio Lugo, Flushing, N. Y., U. S., 22nd April, 1879, for 5 years.

**Claim.**—1st. The process of purifying gas, which consists in passing the same through animal charcoal or bone black wet with water; 2nd. The process of purifying and enriching gas at a single operation, which consists in passing the same through animal charcoal or bone black, which has been impregnated or saturated with a suitable hydro-carbon; 3rd. The process of purifying illuminating gas by passing the same, mixed with air, through animal charcoal; 4th. The purification of illuminating gas by animal charcoal, the process of preventing absorption of illuminants of the gas by charging the gas with a suitable correlative of such illuminants; 5th. The composition to be used in the purification of gas, consisting of animal black, bone black, or char and coal tar.

### No. 9875. Improvements on Printing Presses. (*Perfectionnements aux presses d'imprimeries*.)

Charles Ellery, Albany, N. Y., U. S., 22nd April, 1879, for 5 years.

**Claim.**—1st. The sliding head C, having an adjustable cross-bar D carrying the sliding tubes E provided with elastic cushions e and springs e', and connected by the flexible tubes f, to the suction pipe F, in combination with a paper holder H, having a vertically vibrating motion; 2nd. The combination, with the paper holder H and shaft L provided with the arm I and wiper l, of the sliding rod K, hub K', with pin K<sub>2</sub> and springs K<sub>3</sub> K<sub>5</sub>; 3rd. The combination, with a paper holder H, having a vertically vibrating movement, and provided with spring fingers h arranged at the side of said holder, of the sliding head C, provided with the sliding tubes E, connected to an exhausting device for producing a vacuum in said tubes; 4th. In a paper feeding device, the combination, with the sliding head C, provided with the sliding tubes E, having the elastic cushions e and springs e', of the vibratory paper holder H, shaft L, provided with arm I and wiper l, and the sliding rod K provided with the hub K<sub>2</sub> and springs K<sub>3</sub> K<sub>5</sub>.