

No. 8962. Improvement on Lamps.*(Perfectionnement aux lampes.)*

Charles F. Spencer, Rochester, N.Y., U. S., 27th June, 1878, for 5 years.

Claim.—A parlor stand A, provided with a fountain top C, or a hollow C, having one or more pipes D leading therefrom, with fixtures for the attachment of lamps.

No. 8963. Improvements on Air Guns.*(Perfectionnements aux fusils à air.)*

Asa Pettengill, Keene, and Frank H. Colony, Harrisville, N. H., U. S., 27th June, 1878, for 5 years.

Claim.—1st. The barrel as composed of the two concentric tubes *a b*, and their uniting rings *c d*; 2nd. The barrel provided with the locking stud *e*, in combination with the stock provided with the socket *g*, grooved and notched as set forth; 3rd. The barrel provided with the stud *e*, in combination with the stock A, provided with the socket *g*, having the groove *k* and notch *i*, as set forth, and with the perforated abutment *f*, and the air chamber and its plug piston operative spring or springs, catch lever and its spring and trigger; 4th. The barrel socket constructed with or having the opening *h*, the groove *k* and notch *i*, arranged in it to receive the barrel provided with the stud *e*.

No. 8964. Manufacture of Gas. (Fabrication du gaz.)

Silas C. Salisbury, New York, U. S., 3rd July, 1878, for 10 years.

Claim.—1st. In one or more boilers A, with the furnaces B combined with the bench C, of retorts for heating the blast, and superheating the steam, the blast injector D and blast pipe E L, extending from said retort in front of the furnace B; 2nd. The benches of ordinary retorts combined with an injector D, and pipe *p* extending nearly to the inner ends of the several retorts and pipe *q*, and connecting pipes for manufacturing fixed gas from liquid hydro-carbon in ordinary gas retorts; 3rd. A liquid or semi-liquid fuel compound, consisting of a mixture of coal tar, and the tar residuum from the distillation of petroleum, shale or rosin and in proportion as set forth.

No. 8965. Railway Rail Chair. (Coussinet de rail de railroute.)

John W. Close, St. Thomas, Ont., 4th July, 1878, (Extension of Patent No. 2514.) for 5 years.

No. 8966. Automatic Air Carburetter.*(Carburettur automatique à air.)*

Charles A. Howard, Pontiac, Mich., U. S., 6th July, 1878, for 5 years.

Claim.—1st. A chamber packed with alternate layers of cotton, wool and excelsior wood shavings, or other suitable materials, saturated with gasoline or other suitable carburetter, which chamber is provided with inlet and exit openings for air and elevated above the level of the burners in such manner that air entering at the top and passing through the carburetting chamber will increase in specific gravity by the absorption of the carburetting material and thus flow naturally down to, and supply the burners with an illuminant; 2nd. The cylinder A, with carburetting chamber F, packed with alternate layers of cotton, wool and excelsior wood shavings saturated with gasoline and having inlet and exit openings for the passage of air; 3rd. The combination of the perforated conductor C, with the packed carburetting chamber; 4th. The air and other openings into and from the carburetting chamber, covered with wire cloth for the purpose of preventing the passage of flame with said carburetting chamber; 5th. The receiving chamber E, in combination with the carburetting chamber F, and divided therefrom by the intermediate head B, having the connecting opening covered with wire cloth; 6th. A packing and absorbent for the carburetting chamber of air and gas carburetting machines, consisting of alternate layers of cotton, wool and excelsior or thread wood shavings.

No. 8967. Air Carburetter. (Carburettur à air.)

Charles A. Howard, Pontiac, Mich., U. S., 6th July, 1878, for 5 years.

Claim.—1st. A carburetting chamber divided into two sections by a partition at the bottom or lower part of which one or more openings are made from one section into the other for the purpose of causing the liquid carburetter necessary to supply combustion to be drawn from the bottom of the chamber; 2nd. The hinged or flexible section F of the air pipe provided with a float, and so arranged that the mouth of the air pipe is sustained below the surface of the carburetting liquid at all levels so as to form a seal; 3rd. The hollow cross-head G provided with a perforated drooping edge, in combination with the flexible or hinged and buoyed section F; 4th. The combination and arrangement of the filling pipe C, gas main D with the carburetting chamber A.

No. 8968. Velvet and Plush Mats and Robes.*(Nattes et robes de voitures en velours et en peluche.)*

Elam F. Austin, Rochester, N.Y., U. S., 6th July, 1878, (Extension of Patent No. 2510.) for 5 years.

No. 8969. Refrigerator Car. (Wagon frigorifique.)

Joel Tiffany, Chicago, Ill., U. S., 6th July, 1878, for 5 years.

Claim.—1st. A car having insulated air spaces *b* at the sides, top and bottom, an exterior jacket *a* covering the vertical sides and top, the intermediate space divided into air passages *a*, each having a door at the ends, to admit and stop circulation of air, to adapt the car for winter or summer use; 2nd. The ventilating passages E, connecting the chamber of the car with the air spaces *a* in the roof; 3rd. The perforated air flues E, passing horizontally through the car; 4th. The elevated ice chamber, located near the ceiling, supported on joists M and fed through doors in the roof; 5th. The ice chamber, composed of slats S at the sides, irregularly laid floor pipes X, floor N, inclines *t*, gutter *n* and waste pipes P.

No. 8970. Washing Machine. (Laveuse mécanique.)

Albert H. Randall and Edward Foster, Leamington, Ont., 6th July, 1878, for 5 years.

Claim.—1st. A rotating cylinder B, within which clothes are placed to be washed, in combination with a clothes boiler; 2nd. The rotating cylinder

B, consisting of the heads C C, provided with inwardly projecting cones E and connected together at or near their periphery by a series of cupped bars D, arranged with open intervals between; 3rd. The cylinder B, provided with the trunnions F and wheel G, in combination with boiler A, provided with suitable trunnion bearings and the detachable cover A, provided with the pinion G, by which the cylinder may be rotated; 4th. The detachable cover A, and attachments, in combination with the boiler and attachment and the cylinder B.

No. 8971. Broom Sewing Machine. (Machine à coudre les balais.)

Charles E. Lipe, Syracuse, Edward D. Bronson, Amsterdam, and Alphonso Walrath, Fort Blain, N.Y., U. S., 6th July, 1878, for 5 years.

Claim.—1st. A rocking broom-holding vise provided with alternating ratchet teeth on its sides, in combination with vertically and horizontally movable pawls; 2nd. A broom-holding vise, in combination with devices whereby the oscillation of said vise causes the same to climb upward, step by step; 3rd. A moving broom-holding vise, in combination with gear shifting mechanism, whereby, when the sewing is completed, the driving wheel is thrown out of gear; 4th. A broom-holding vise, in combination with a clutch shifting lever, having a pivoted pawl or arm; 5th. A shaft having two rotary take-up arms that operate alternately on each side of the broom; 6th. The combination of two needle drivers with a double pointed needle, each of said needle drivers being provided with a spur that catches into a perforation in said needle; 7th. The combination of a needle guide way and needle; 8th. The combination of a needle guide way, having an oblique stop-slot, and a needle driver provided with a suitable projection to engage with said slot; 9th. The combination of a sliding vibrating needle driver, and an operating yoke moved by the driving shaft; 10th. The combination of spring operated feed-pawls with the carriage moving lever C; 11th. The combination of a cam *c*, or its equivalent, with a lever and broom carriage, whereby an intermittent forward and backward motion is given to the broom; 12th. The combination of a broom carriage with a control *n* lever, either end of which may be made the fulcrum at will; 13th. A rocking broom vise, in combination with a sliding broom carriage; 14th. A broom holding vise, in combination with a broom rocker, an operating cam and suitable connection; 15th. A broom rocking device which automatically varies the angle of the broom with the sewing mechanism, on the different bands of stitching; 16th. In combination with a broom holding vise, a pair of pivoted levers, in combination with a treadle, whereby said vise can be closed at will; 17th. In a broom pressing vise, a pair of pressing levers which may be connected and disconnected at will; 18th. A broom holding vise, in combination with one or more band supporting bars; 19th. A broom vise, in combination with clasps for holding together its two parts or jaws when released from the pressure of the closing levers; 20th. In a broom sewing machine, a broom holding vise, in combination with the carriage, the two being connected by a universal joint; 21st. Devices for laying the stitches in consecutive bands on alternating radial lines; 22nd. A double pointed needle, provided with an inserted tension spring; 23rd. The combination of a driving shaft with a take-up shaft at right angles thereto, the two being connected by suitable gearing; 24th. The combination of a connecting yoke with two needle drivers, which alternately seize and release the needle; 25th. The combination of a connecting yoke with two needle drivers which are alternately moved inward and outward thereby; 26th. The combination of a broom carriage and controlling lever with a shifting plate provided with devices in the nature of inclined planes for shifting the position of the broom; 27th. The combination of a broom holding vise with two needle drivers and a needle; 27th. The combination of a shifting plate and feeding mechanism, whereby the broom and feed are quickly changed from the stopping to the starting point; 29th. The combination of an operating treadle with a system of slides and levers, for simultaneously shifting the broom and opening the tension for threading the needle.

No. 8972. Furniture Castor. (Roulette de meuble.)

William H. Tucker, Robert S. Dorsey, Indianapolis, Ind., Christian H. Sohn and George A. Rentschler, Hamilton, Ohio, (Assignees of Alexander C. Martin, Hamilton, Ohio.) U. S., 6th July, 1878, for 5 years.

Claim.—Floor wheels E E, anti-friction pivot-wheel F, housing B, elliptical-housing opening, or its mechanical equivalent, and rocker-formed collar-bearing, or its mechanical equivalent, all combined so as to allow the floor wheel axis to oscillate horizontally.

No. 8973. Machine for Manufacturing Floor, Oil and Leather Cloth and Paper.*(Machine à fabriquer le prélat-cuir et le carton-cuir pour les parquets.)*

William A. Scott, London, Ont., 6th July, 1878, for 5 years.

Claim.—1st. The apparatus for feeding the material to the machine and carrying the same through the machine composed of travelling stand J, having flanged wheels *d*, check roller J, spreader rollers K L, brush M, upper rollers N O, endless rubber band P, polishing roller *b* and turning off roller or drum H, operated by means of cog-wheels E F, to which motion is communicated by pinion D on end of driving shaft; 2nd. The devices for painting the cloth or paper, composed of the knife G and carrying block R, standards S S, screw rod T, regulator bevel wheel V and pinton U, connected by shaft X and adjusted by wheel W; 3rd. The apparatus for printing the cloth, &c., with various patterns composed of standards Y Y, paint distributing rollers Z Z, and pattern roller Z.

No. 8974. Plotting Instrument. (Rapporteur.)

Daniel F. Hitt, Ottawa, Ill., U. S., 6th July, 1878, for 5 years.

Claim.—The combination of the square frame A having guide slots *b*, in parallel sides with hypotenuse scale C and a sliding lateral scale D, both having verniers at the ends and fastening clamp screw.

No. 8975. Lightning Rod. (Paratonnerre.)

Thomas C. Hewitt, Brantford, Ont., (Assignee of Charles H. Smith, Chicago, Ill., U. S.,) 6th July, 1878, for 5 years.

Claim.—A glass ornament for lightning rods or weathervanes, having exterior or interior reflecting surfaces.