

No. 2039. GEORGE LITTLE, Rutherford Park, N. J., U. S., 9th February, 1873, for 5 years: "Electric Telegraph Apparatus and Circuit." (Appareil et circuit de télégraphe électrique.)

Relates to improvements in telegraphic appliances especially available with automatic telegraphs where perforated paper is employed to transmit the message by pulsations through the perforations.

Claim—1st. The circuit closer *b*, and lever *e*, in combination with the roller *c*, drum *d*, and connections for closing and breaking a circuit to the main line by the perforated paper; 2nd. The grooved drum *c*, stationary lifting blade *p*, and delivery slide *e*; 3rd. An oscillating armature *f*, and two helices *f*, *f*, connected to the main line, in combination with a constant circuit connected with one of the helices; 4th. An oscillating armature *f*, upon a fulcrum connected with the cores of two electro magnets *f*, *f*, in combination with two electric circuits connected with the helices of such magnets; 5th. Two electro magnets and a vibrating armature, in combination with a constant circuit connected with one of the electro-magnets and a switch for directing the main line current either through one electro-magnet or through both of the electro-magnets; 6th. Two transmitting rollers or disks *c*, arranged upon separate spring arms or levers so as to act in connection with a strip of paper having perforations in two lines; 7th. An electro-magnet introduced within a rheostat, 8th. In a rheostat made in two parts united at one end and provided with two adjusters; 9th. An armature made of thin sheet metal and vibrated to form a receiving sound instrument, 10th. A metallic connection between one pole and the other at the operative end of an electro-magnet to more rapidly disperse or neutralize the residual or induced magnetism; 11th. A metallic connection between the two operative poles of a magnet made adjustable for regulating the action of such connection in neutralizing the residual or induced magnetism; 12th. The connections arranged as shown in fig. 15, for the main line and constant circuits between the rheostats, the electro-magnets and the switch in combination with the vibrating armature; 13th. The battery *z*, and the receiving instrument figs. 15, and 26, connected to the binding screws of the instrument in combination with the vibrating armature, and connections to said binding screws; 14th. A telegraphic communication received upon chemical paper in lines running back and forth or zig-zag and connected at alternate ends; 15th. The conducting-plate *o*, and slotted plate *o*, between which the chemical paper is retained in combination with the stylus *i*, and flexible conductor connected therewith; 16th. The galvanometer indicating needle, in combination with an adjustable helix that can be moved with the helix *r*, and slides *r*, *r*, upon which the helix is movable; 17th. The base for the galvanometer made with the central projecting bearing and adjusting screws in combination with the movable helix *r*, slides *r*, *r*, and indicating needle; 18th. A needle suspended by a thread in liquid within a glass tube and contiguous to a helix; 19th. The glass tube made adjustable vertically and secured by clamps and containing a suspended indicating needle in combination with a helix; 20th. The solutions prepared of the materials and in about the proportions specified for saturating paper for chemical telegraphs; 21st. The mode specified of recovering and utilizing the chemical substances employed in telegraphic paper; 22nd. A fountain and pen constructed as set forth and vibrated upon centres by means of electric pulsations to mark telegraphic characters upon paper; 23rd. The automatic telegraph apparatus and circuits in combination with a condenser and operating by rise and fall of tension; 24th. The automatic telegraph apparatus in which a condenser or coil is applied with the helix in the main line; 25th. The mechanism shown in fig. 30, for employing the power of an electro-magnet in punching the paper.

No. 2040. THOMAS F. HENLEY, London, Eng., 12th February, 1873, for 5 years: "Process for the Preservation of Meat and Fish." (Procédé de conservation de la viande et du poisson.)

Claim—1st. The preservation of animal food from decay by expressing therefrom the juices which by their presence induce decomposition whether the pressure be applied with or without the aid of heat; 2nd. Applying the antiseptic properties of extract of meat, concentrated meat essence or concentrated beet-ten, and of dry gelatine to the preservation of the juices discharged from raw meat; 3rd. In utilizing the juices discharged from meat by hot pressure in the manner described.

No. 2041. AUGUSTIN J AMBLER, Washington, D. C., U. S., 12th February, 1873, for 15 years: "A Gas Generator." (Un générateur à gaz.)

For generating gas from petroleum and other hydro-carbon oils by the introduction of steam.

Claim—1st. A gas generator combining in its construction an oil and gas-chamber A, a steam-chamber B, and a surrounding gas-chamber D; 2nd. The combination of the vessel A, flues or tubes C, C, vessel B and E, steam-pipe I, and suitable valves I¹, I² and I³; 3rd. The combination of the oil-vessel A, and the indicator composed of the parts K, K and K¹; 4th. The combination of the pump H, pipes H² and H³, and vessel A; 5th. The combination in a gas generator of a gas receiving-chamber D, connecting pipe M, receiving-chamber 3, in a separate vessel, and a suitable pipe; 6th. For conducting the gas to the point where it is to be consumed.

No. 2042. JOHN W. BURTON, Leeds, England, 12th February, 1873, for 5 years: "Treatment of Oils and Fats for Lubricating and other purposes." (Traitement des corps gras pour le lubrifiage et autres fins.)

The invention consists in the manufacture of a new material called "Almond Oil," by subjecting petroleum or mineral oil to the action of the oil of mirbane, and in mixing the same with oils and fatty substances.

Claim—1st. In the manufacture of the almond oil, in the manner described. 2nd. In the treating or refining of oils and fats by the almond oil.

No. 2043. WILLIAM HAMILTON, Peterborough, Ont., & JOHN LUDGATE, Ashburnham, Ont., 12th February, 1873, for 5 years: "Machine for Raising Saw Logs on to the Mill Floor." (Machine à monter le bois de sciage sur le pavé des moulins.)

Claim—The endless chain D, arranged and operated by means of cogs or projections from the driving-wheel and the trucks E, attached to such chain for the carriage of the logs, etc., the running-gear of the same being the wheels attached to such trucks and the upper and lower trucks for the same and the toothed wheels *a*, *a*, *a* and *a*, together with the chain-wheel H, and the combination of the same.

No. 2044. BRIDGET FRENCH, wife of John French, Rochester, N. Y., U. S., 12th February, 1873, for 5 years: "A Lubricating Compound." (Une composition lubrifiante.)

Claim—1st. The combination of bees wax (either with or without alkali and tallow) with petroleum or other oil and plumbago, for holding the plumbago in suspension; 2nd. The combination with an oil having plumbago in solution, of alkali and unctuous oil or tallow (or soap) for the purpose of saponifying and solidifying the mass as described.

No. 2045. WILLIAM MURPHY, Sackville, N. B., Assignee of Charles H. Straffin, Boston, Mass., U. S., 12th February, 1873, for 5 years: "Improvements in Bracket Sheaves." (Perfectionnements aux poulies à consoles.)

Relates to the method of combining with an open sheave-block, a plate at right angles to the plane of the pulley, said plate being provided with screw or nail-holes by means of which the sheave may be fastened to the post or support.

Claim—The cast metallic sheave, as an article of manufacture, consisting of the parts A, B, E, as described.

No. 2046. SARAH MAHAN, Cleveland, Ohio, U. S., 12th February, 1873, for 5 years: "A Lap Board." (Table à ouvrage reposant en partie sur les genoux.)

Claim—1st. In the legs B, G, and spring-hook brace D, in combination with the board A. 2nd. The spring-hook brace D, constructed as described, with an angle C, in combination with the legs B, G, 3rd. The spring-hook brace D, constructed as described.

No. 2047. JOHN PARTINGTON, & ROBERT BLOOMFIELD, Montreal, Que., 12th February, 1873, for 5 years: "Steam Engine Packing." (Garniture de machine à vapeur.)

Relates to an improvement on the method now in vogue, of packing the glands of steam-engines with hemp and other fibrous substances, and provides a metal packing of a more durable character. Another feature of the invention is the reduction of friction on the working parts.

Claim—1st. The packing composed of a ring or rings *d*, with spring or springs *f*; 2nd. In the rings *d*, and ring or rings *f*, externally acted upon by steam etc., to give the necessary pressure on the rod *b*; and 3rd. The combination of the gland *a*, and cover *c*, ring or bush *p*, or *k*, angular-chamber *p*, steam way *h*, ring *d*, and springs *f*, with or without ring *i*, and supplementary packing *d*¹, with springs *f*, in combination with rod *b*.