

apparatus for making gas, and consisting essentially of a receptacle divided into two or more chambers connected with one another by pipes, two of the chambers at least containing each a porous dome (to be charged respectively with hydro-carbon and with water) beneath which are the inlets to the respective chambers, and suitable inlets and outlets to and from the receptacle for air and gas, substantially as described. 4th. A portable gas lamp constructed and arranged substantially as described and shown.

### No. 37,524. Receiver for Telephones.

(Récepteur téléphonique.)

Frank Tiffin Tinning and William Kerr Sumner Tinning, both of Toronto, Ontario, Canada, 3rd October, 1891; 5 years.

*Claim.*—1st. A telephone receiver holder comprising a bracket A, having a friction disk B, formed on its end, thumb screw D, chain or cord *f*, connected at one end to the thumb screw D, and at the other end to the telephone hook, friction disk C, having sleeve J, formed integral, and extension arm F, secured in any position desired in the sleeve J, by the set screw K, all combined, substantially as and for the purpose hereinbefore set forth. 2nd. In a telephone receiver holder, the combination of extension arm F, having a socket in its outer end for holding spindle *g*, and cross bar G, having fingers for holding a receiver, and a spindle *g*, for holding the cross bar G, adjustable by set screw I, in its socket in arm F, substantially as and for the purpose hereinbefore set forth.

### No. 37,525. Electrically Heated Oven.

(Chauffage des fourneaux par l'électricité.)

Butterfield Mitchell Electric Heating Company, Boston (assignees of Willis Mitchell), Malden, both in Massachusetts, U. S. A., 5th October 1891; 5 years.

*Claim.*—1st. An oven or heater provided with successive layers of non-conducting material, and a wire which forms part of an electric circuit and is wound in successive layers between said non-conducting layers, for the purpose set forth. 2nd. An oven or heater provided with successive layers of non-conducting material and a wire which forms part of an electric circuit and is wound between said layers and embedded therein, substantially as set forth. 3rd. An oven or heater provided with successive layers of asbestos or other non-conducting material arranged about it and a wire forming part of an electric circuit and wound between said non-conducting layers about said oven so as to form successive layers of wire having each coil or spiral insulated and separated by the material in which it is embedded, substantially as set forth. 4th. An oven or heater provided with successive layers of wire surrounding it and forming part of an electric circuit, said wire being coiled in spirals, each of which is sufficiently separated from all the others to heat the interior of the oven without depending on the heat produced by the resistance of the wire, substantially as set forth. 5th. The combination of a wire wound spirally in layers and forming part of an electric circuit with layers of non-conducting material interposed between said layers of wire and holding the spirals thereof in place, an outer casing A, and an interior lining C, the whole constituting an electrically heated oven, substantially as set forth.

### No. 37,526. Electric Steam Generator and Heater. (Générateur de vapeur et calorifère électrique.)

Butterfield Mitchell Electric Heating Company, Boston (assignees of Willis Mitchell), Malden, both in Massachusetts, U. S. A., 5th October, 1891; 5 years.

*Claim.*—1st. In a steam generator, the combination of a water reservoir with a heating device consisting of a series of layers alternating with water spaces, a wire forming part of an electric circuit and wound on said layers within said spaces, and inlet and outlet pipes connecting said heating device and reservoir, substantially as and for the purpose set forth. 2nd. In combination with reservoir B, the concentric, hollow layers *c*, having water spaces between them which are closed at the ends, the wire D, wound on said layers within said spaces and forming part of an electric circuit, the inlet pipes E, extending from one end of said reservoir independently to said spaces at one end of the heating device, and the outlet pipe F, having branches *f*, whereby the water passes from the other end of said heating device to the said reservoir, substantially as set forth. 3rd. A heating device consisting of a core or successive layers and a wire wound thereon, forming part of an electric circuit, the winding being such that each wire coil or spiral is separated considerably from the others and is located in a space about ten times its own width, more or less, according to the service required, in order that said wire may generate a heat in excess of the heat of resistance, substantially as set forth.

### No. 37,527. Rack for Holding Pens, Pencils, etc. (Porte-plume, crayon, etc.)

Lambert John Dopping Hepenstal, Halifax, Nova Scotia, Canada, 5th October, 1891; 5 years.

*Claim.*—A rack for pen handles, pencils, and similar articles, formed of spring wire or its equivalent, bent and shaped so as to form a pair of jaws J, J, and a holder S', substantially as shown and described.

### No. 37,528. Tooth for Harrows.

(Dent de herse.)

George Monilaws and Neville J. Lindsay, both of Calgary, North West Territories, Canada, 5th October, 1891; 5 years.

*Claim.*—The spiral or curved tooth, as described above for the purposes hereinbefore set forth.

### No. 37,529. Cutter Bar for Harvesters.

(Porte-lames de moissonneuse.)

Isaac F. Bassford and Adolph Docter, both of Milwaukee, Wisconsin, U.S.A., 5th October, 1891; 5 years.

*Claim.*—1st. The bar A, having a raised web or rib 3, at the back edge, and provided with a dovetail groove 2, in combination with a series of knife sections B, each having a dovetail bar I, fitting into said groove, the rear edge of said sections abutting against the web or rib, whereby the cutter bar and knife sections are reinforced, as set forth. 2nd. The cutter bar A, provided with a dovetail groove 2, and having a raised web or rib 3, along the back edge, and a channel C, intersecting said groove near one end of the bar, in combination with knife sections B, having a bar I, fitting into said groove, and a key D, fitting into said channel, and held fixedly by a screw 5, or other fastenings, for locking the knife sections together, as set forth. 3rd. The knife sections B, having a bar I, and provided with a hole or indentation E, as and for the purpose set forth.

### No. 37,530. Clamp for Railway Tracks.

(Crampon pour voies de chemin de fer.)

John Fain Adams, Seddon, Alabama, U.S.A., 5th October, 1891; 5 years.

*Claim.*—A track clamp, consisting of two rods formed with fixed jaws having undercut recesses with flat upper bearing surface and separated screw-threads, both right and left hand, movable jaws movable upon one set of threads, set-nuts movable upon the same threads as the movable jaws, and a turn-buckle connecting the adjacent ends of the rods and movable upon the other set of threads, substantially as specified.

### No. 37,531. Damper for Stove Pipes.

(Clé de tuyaux de poêle.)

Charles Eager Stewart, Hamilton, Ontario, Canada, 5th October, 1891; 5 years.

*Claim.*—1st. In a stove pipe damper, the combination of the perforated disk, formed with loops, and a combined handle, spring and holder, constructed substantially as and for the purpose specified. 2nd. In a stove pipe damper, the combination of a disk A, having perforated holes B, raised cast loops *e, f, i*, and a combined handle, spring and holder C, formed and secured as shown to the disk, substantially as and for the purpose specified.

### No. 37,532. Manufacturing Steel and Iron.

(Fabrication de l'acier et du fer.)

James MacKintire, 27 Victoria Road, Broomhall Park, Sheffield, York, England, 5th October, 1891; 5 years.

*Claim.*—1st. The improvements in the manufacture of steel and iron, consisting in the manufacture and use of the combination of materials forming a powder composed of carbonate and phosphate of calcium, black oxide of manganese and tannic acid in the proportions referred to, substantially as set forth. 2nd. In the manufacture of steel and iron, the manufacture and use of a composition consisting of carbonate and phosphate of calcium, black oxide of manganese, tannic acid, tar and hot water, in the proportions specified, substantially as set forth. 3rd. The manufacture and use of the within-mentioned combination of materials in the form of an alloy, composed of pig-iron, carbonate and phosphate of calcium, black oxide of manganese, tannic acid, soot, animal charcoal tar and hot water, in the proportions as specified, substantially as set forth.

### No. 37,533. Stretcher for Lace Curtains.

(Métier à rideau de soie.)

James Gilray, Buffalo, New York, U.S.A., 5th October, 1891; 5 years.

*Claim.*—The herein described curtain-stretcher, consisting of the combination of the cross bars, the clamps, the side bars, each of the latter divided midway of its length, and having its two parts united by a hinge applied to one side, and by a flanged plate *f*, secured to the opposite side, pins *d*, formed with flat-shaped point, and hinged legs *m*, attached to the frame, all constructed substantially as and for the purpose specified.

### No. 37,534. Spark Arrester. (Arrête-etincelle.)

George R. Anderson, Roanoke, Virginia, U.S.A., 5th October, 1891; 5 years.

*Claim.*—1st. In a spark-arrester, the boiler, and adjustable diaphragm having a flange 21, and means whereby the said diaphragm may be adjusted longitudinally within the said boiler dividing the exhaust compartment from the cinder-box, the size of the exhaust compartment being regulated by the adjustment of said diaphragm, the smoke-stack communicating with both the exhaust compartment and the cinder-box, the deflector in the smoke-stack to deflect the cinders and sparks as they ascend the smoke stack from the exhaust compartment into the cinder-box, the pipe 33, arranged within the smoke-stack, the lower end of the said pipe opening into the cinder-box, and the upper end thereof being secured rigidly to the inner face of the smoke-stack and opening through the upper end of the same, so as to be inclosed by the latter, and to form an unobstructed outlet for all gases which may accumulate in the cinder-box, substantially as described. 2nd. In a spark-arrester, the boiler having an adjustable diaphragm dividing the exhaust compartment from the cinder-box, the smoke-stack communicating with the exhaust compartment and the cinder-box, the said smoke-stack