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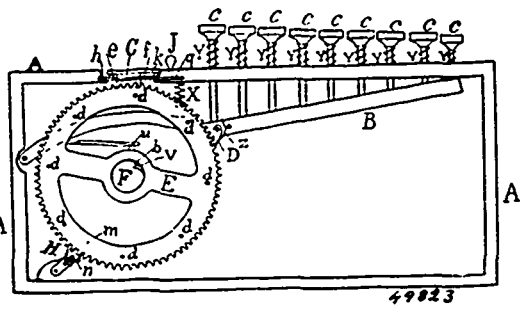
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No. 49,823. Calculating Machine. (*Machine à calculer.*)

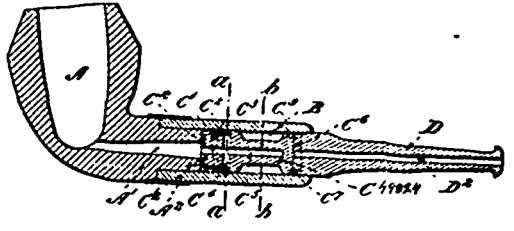


Edgar Troyer, Toronto, and Joshua Snider, Drysdale, both of Ontario, Canada, 3rd September, 1895; 6 years.

Claim.—1st. In a calculating machine, the combination of wheels loosely arranged on a shaft and having ten or any multiple of ten cogs on their face, and having a pin at the side of every tenth cog, levers designed to be raised by the said pin and having a dog or pawl engaging the cogs of the next wheel, substantially as specified. 2nd. In a calculating machine, the combination of a box or a frame, an axle or shaft arranged in the frame and having a portion of its periphery removed so as to form a free groove on one side, and a shoulder on the other, and clogged or toothed wheels having a spring pressed detent *u* designed to engage the same, substantially as specified and for the purpose indicated. 3rd. In a calculating machine, the combination of a plurality of clogged or toothed wheels having any multiple of ten cogs, and arranged on an axle or shaft, levers designed to rotate said wheels by means of a pawl, levers designed to transmit motion from one wheel to another by means of a pawl, and crown pinions having cogs or teeth engaging the said wheels and arranged in an adjustable frame or plate carrying the said pinion, substantially as set forth. 4th. In a calculating machine, the combination of a frame provided its top wall with a slot *s*, and having off-sets *s*, *t*, a plurality of toothed or clogged wheels arranged on an axle or shaft, levers designed to rotate said wheels and levers designed to transmit motion from one to another by means specified, crown pinions having cogs engaging those of the said wheels and arranged in an adjustable frame or plate carrying said pinions, and a handle *u* connected therewith for

changing directions of rotations, substantially as specified. 5th. In a calculating machine, the combination of a frame having a slot *r*, with off-sets *s*, *t*, on its top wall, a plurality of clogged or toothed wheels arranged on a shaft and having lateral pins or projections, levers designed to be engaged by said projections, and having pawls designed to engage the teeth of the next wheel, key levers having pawls for engaging in the teeth of said wheels, crown pinions with cogs engaging those of the said wheels, an adjustable plate holding said pinions and a handle connected with said plate and designed to change the direction of rotation of said pinions, substantially as specified.

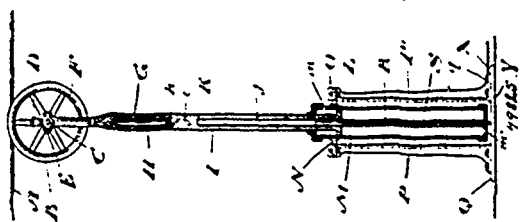
No. 49,824. Tobacco Pipe. (*Pipe.*)



Hugh Dixon, Sydney, assignee of Frederick William Schroeder, Newton, both of New South Wales, 3rd September, 1895; 6 years.

Claim.—In smoking pipes, the combination and arrangement with the bowl of a condensing and deposit chamber formed around a plug having piston heads thereon, and having independent connections with the bowl orifice and with the mouthpiece orifice in the manner, and for the purposes herein described, and explained and as illustrated in the drawings.

No. 49,825. Trolley for Electric Railways.
(*Trolley pour chemin de fer électrique.*)

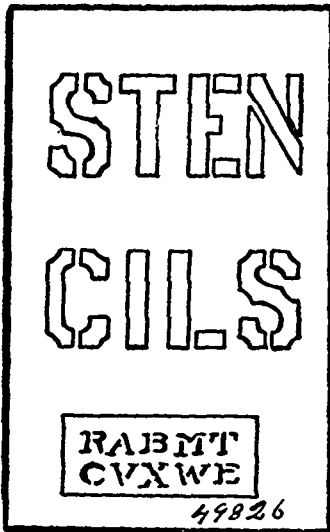


Cecil Hepburn Burns, Toronto, Ontario, Canada, 3rd September, 1895; 6 years.

Claim.—1st. A trolley wheel in combination with a vertical trolley pole, provided with a collapsible section held normally in position by spring pressure, and trunioned on standards fixed to the top of the car, substantially as described and specified. 2nd. A trolley wheel journalled on a standard, in combination with a vertical trolley pole on which said standard is swivelled, and provided with a collapsible section held normally in position by spring pressure and trunioned on standards centrally fixed to the top of the car, substantially as described and specified. 3rd. A trolley wheel journalled on a standard, swivelled on the end of a vertical hollow trolley pole and provided with a piston head, in combination with an oscillating

cylinder, journalled on standards fixed centrally lengthwise on the top of the car, air outlets for the hollow trolley pole and oscillating cylinder, an extension spring and a guide for the same, which is adapted to enter the hollow portion of the trolley pole when the spring is compressed and the trolley wheel lowered, substantially as described and specified. 4th. A trolley wheel journalled on a standard swivelled on the end of a vertical trolley pole and provided with a piston head, in combination with an oscillating frame or cylinder journalled on standards fixed centrally lengthwise on top of the car, an extension spring and a guide for the same which is adapted to enter the hollow portion of the trolley when the spring is compressed and the trolley pole lowered, substantially as described and specified. 5th. A trolley wheel journalled on a standard swivelled on the end of a vertical hollow trolley pole and provided with a piston head, in combination with a cylinder and a piston head formed on the end of said cylinder, a coil extension spring within this cylinder bearing against the piston head of the trolley pole, and the piston head of the cylinder, and a guide for the same, which is adapted to enter the hollow portion of the trolley pole when the spring is compressed, air outlets for the cylinder and hollow trolley pole, an oscillating frame or cylinder journalled on standards fixed centrally lengthwise on the top of the car, air outlets for the oscillating cylinder, a plurality of coil springs, and guides for the same which pass through the piston head, substantially as described and specified. 6th. A trolley, comprising the following elements, B, trolley wheel C, trolley axle E, journals D, oil cups F, fixed standard G, hollow shank H, spindle on trolley pole h, shoulders on trolley pole I, vertical trolley pole j, hollowed portion of vertical trolley pole K, air outlet m hollow trolley pole L, piston head on trolley pole M, oscillating cylinder N, trunnions n, m', air outlets O, journals for trunnions P, P', standards for oscillating cylinder rigidly attached centrally to the top of the car R, guide rod for coil extension spring, and S-extension spring, and adjustable pins Y, substantially as described and specified.

No. 49,826. Process of Manufacturing Metal Letters, by Electro-deposition. (*Procédé de fabrication de lettres métalliques, au moyen d'ouvrage galvanoplastique.*)



John James Callow, Cleveland, Ohio, U.S.A., 3rd September, 1895; 6 years.

Claim.—The herein described process of producing letters, &c., consisting, first, in etching on plates or sheets of glass the required letters, second, coating the etched surface with graphite to render it conductive, and third, submerging the glass plates in the solution of a battery for the deposition of metal thereon, substantially as described.

No. 49,827. Manufacture of Magnesium. (*Fabrication d'hydrate de magnésium.*)

Michel Nicholas D. Andria, Stratford, England, 3rd September, 1895; 6 years.

Claim.—1st. The hereinbefore described process for and method of manufacture or production of magnesium hydrate and which consists in treating slaked calcined dolomite with the natural flow of a large quantity of water, substantially as and by the means set forth. 2nd. The method and process for obtaining the magnesium from sea water by means of calcined dolomite, substantially as hereinbefore described.

No. 49,828. Digestive Compound. (*Composé digestif.*)

John Carnrick, New York, State of New York, U.S.A., 3rd September, 1895; 6 years.

Claim.—1st. The process of preparing digestive ferments or enzymes and zymogen which consists in removing the tissue or portions of the glands containing the digestive secreting cells, and the active enzymes, from the muscular tissue and fat, drying said cell tissue, at a temperature below that which would coagulate the albuminous matter, then reducing it to a powder and separating the cells containing enzyme and zymogen from the epidermal scales and muscular fibres as by sieving or equivalent means. 2nd. The process of preparing digestive ferments or enzymes and zymogen which consists in removing the portion of the glands containing the digestive secreting cells and the active enzyme, from the muscular tissue and fat, and drying said cell tissue at a comparatively low temperature of about 100° F. to 110° F. then reducing it to a powder and separating the contained enzyme and zymogen from the epidermal and muscular scales or fibres by sieving or equivalent means, then treating the digestive powder with a solution of gum benzoin for protecting and preserving it. 3rd. The process of preparing digestive ferments or enzymes and zymogen which consists in dissecting from the fresh digestive organs or glands the tissues or portions which contain the digestive secreting cells so as to remove them from the muscular tissue and fat which are rejected, drying the cellular substance at a temperature not exceeding 100° F. to 110° F. and then reducing it to a powder, treating said powder with a solvent to remove the fat, then again drying it at a low temperature and reducing to a fine powder, sieving it to remove scales or films of muscular tissue and then treating the resulting powder with a solution of gum benzoin for protecting and preserving the enzyme and zymogen. 4th. The process of preparing digestive enzymes from spleen or liver which consists in finely comminuting the organ and then drying at a low temperature and reducing to powder, then making an alcoholic solution and evaporating the alcohol to form a stiff extract. 5th. The process of preparing digestive enzymes from spleen or liver which consists in finely comminuting the organ and then drying at a low temperature and reducing to a powder, then making an alcoholic solution and evaporating the alcohol to form a stiff extract, then rubbing up such extract with a suitable proportion of milk sugar to form a granular powder, then moistening such powder with a solution of gum benzoin and allowing it to dry. 6th. An artificial digestive preparation containing the enzymes capable of digesting and preparing for assimilation three different kinds of food substance, such as proteids or nitrogenous food, fatty food and starchy food. 7th. An artificial digestive preparation containing mother-ferment or zymogen, possessing its natural function and property of developing and forming an active digestive enzyme under the influence of the productive and vital forces in the digestive track of the living subject. 8th. An artificial digestive preparation containing the active digestive enzyme and the mother-ferment or zymogen, the latter being in the various stages of development and possessing the natural properties and functions which it had when taken from the animal, of developing and forming, by internal change, active digestive enzyme, under the influence of the productive and vital forces in the digestive track of the living subject. 9th. A digestive preparation or composition containing a digestive extract of spleen and of liver capable of digesting and emulsifying fats. 10th. An artificial digestive preparation containing an enzyme extract of spleen adapted for emulsifying and digesting fats. 11th. A digestive compound or composition containing in a form capable of preservation, extracts or enzymes of the salivary peptic, pancreatic, hepatic and Brunner's glands, Lieberkuhn's follicles and the spleen mixed in suitable proportions. 12th. A digestive compound or composition containing the active ferment or enzyme and the mother-ferment or zymogen, of the salivary, peptic, pancreatic hepatic and Brunner's glands, Lieberkuhn's follicles and the spleen mixed in suitable proportions. 13th. A digestive compound or composition containing the active enzyme and the mother-ferment or zymogen of the peptic and pancreatic glands combined with one or more of the enzymes of the salivary, Brunner's and hepatic glands Lieberkuhn's follicles and spleen. 14th. A digestive preparation or composition containing enzyme and zymogen separated from one or more of the digestive organs and in the dry powdered form, the grains or particles thereof having a protective coating of gum benzoin or equivalent material. 15th. A digestive preparation or composition in the dry form and containing digestive enzymes, the grains or particles of which are coated with gum benzoin for preserving the enzymes and a suitable proportion of milk-sugar.

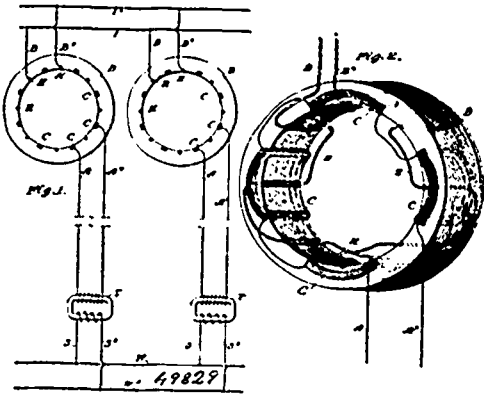
No. 49,829. System of Electrical Distribution.

(*Système de distribution électrique.*)

William Stanley, Pittsfield, Massachusetts, U.S.A., 3rd September, 1895; 6 years.

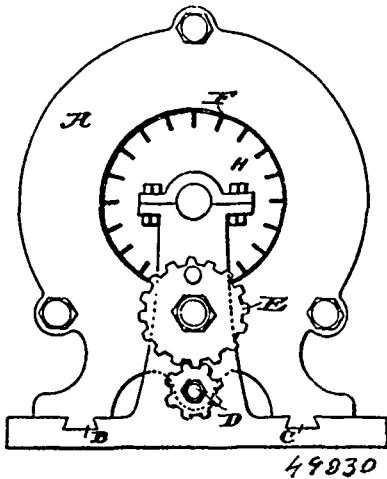
Claim.—1st. In a system of electrical distribution the combination of several alternators having synchronizing coils upon their armatures separate and distinct from the coils supplying energy to the line wires, said synchronizing coils being connected in parallel, substantially as described. 2nd. In a system of electrical distribution the combination of several alternators having means for maintaining the same in phase, with separate transformers for each alternator, the

secondaries of said transformers being connected in parallel to the working circuit, substantially as described. 3rd. In a system of



electrical distribution the combination of several alternators each having an armature coil supplying the current for the working circuit, and independent armature coils connected together in parallel, with separate transformers for each alternator having their secondaries connected in parallel to the working circuit of the system, substantially as described. 4th. The method of distributing electrical energy from several alternators which consists in running the alternators so as to generate currents of like phase, transforming the separate currents into currents of a different potential, and combining such transformed currents so as to produce in the working circuit a combined current of a potential like to that of the transformed currents, substantially as described.

No. 49,830. Alternating Current Electric Motor.
(Moteur de courant alternatif.)



Charles S. Bradley, Avon, New York, U.S.A., 3rd September, 1895; 6 years.

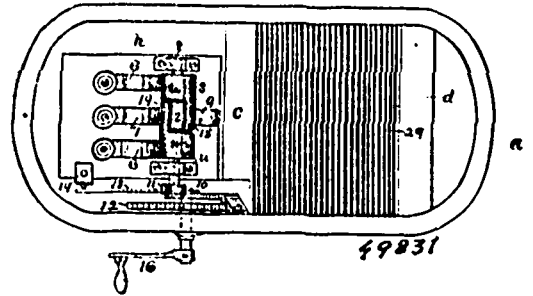
Claim.—1st. An alternating current motor having a primary element, two secondary elements, one of high and the other of low resistance, and means for shifting the elements relatively so that the primary may co-operate with either secondary. 2nd. An alternating current motor having a primary element and two closed secondary circuits on the other elements, one of high and the other of low resistance, and means for shifting the elements relatively so that the primary may co-operate with either or both secondary circuits.

No. 49,831. De-Magnetizing Apparatus.
(Appareil démagnétisant.)

Charles Houlgrave, Richmond, Virginia, U.S.A., 3rd September, 1895; 6 years.

Claim.—1st. A device of the class described, comprising an electro-magnet, means whereby the polarity of said magnet may be reversed, a switch for cutting the reversing means into or out of circuit, and means for short circuiting from the source of electricity through said electro-magnet. 2nd. A device of the class described, comprising a solenoid whose inclosure is free from all paramagnetic substance, pole pieces arranged entirely without the solenoid, means for reversing the polarities of said pole pieces, means normally disengaged from the reversing means for operating it, and a switch operated by

the engagement of the reversing means with its operating means to cut the reversing means into circuit during its operation. 3rd. A



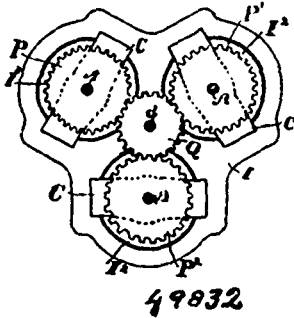
device of the class described, comprising a solenoid, pole pieces therefor formed of paramagnetic laminals arranged at an angle to the bore of the solenoid, means for bringing the article to be treated within the enclosure of the solenoid, and means for reversing the polarities of the pole pieces. 4th. A device of the class described comprising a solenoid, pole pieces therefor formed of paramagnetic laminals arranged at an angle to the bore of the solenoid, means for bringing the article to be treated within the enclosure of the solenoid, and means for reversing the polarities of the pole pieces irrespective of the nature of the inducing current. 5th. In a device of the class described, the combination with a solenoid provided with externally arranged pole pieces of a commutator having connections with said solenoid, a source of electricity in circuit with said solenoid and means for cutting said solenoid successively into and out of circuit with the source of electricity and for short-circuiting said source through an equivalent resistance at such times as the solenoid is cut from circuit therewith. 6th. In a device of the class described the combination with a source of electricity, of an electro-magnet in circuit therewith, a commutator also in circuit with said source of electricity, an artificial resistance in circuit with certain segments of the commutator, and means for operating the commutator to reverse the polarity of the electro-magnet and to short-circuit the current from the source of electricity through the artificial resistance at times intermediate of the said reversals of polarity of the electro-magnet. 7th. A device of the class described comprising a solenoid whose inclosure is free from all paramagnetic substance, pole pieces arranged entirely without the solenoid, means whereby the polarities of said pole pieces may be reversed, a switch for cutting the reversing means into and out of circuit, and means for short-circuiting from the source of electricity through the said solenoid. 8th. The combination with a source of electricity and an electro-magnet arranged to be brought into circuit therewith, of a commutator comprising an insulating body having segments arranged thereon and provided with connections whereby it may be caused to reverse the polarity of said magnet, said commutator having also segments in electrical connection with an artificial resistance within the body of the commutator, and means independent of the source of electricity for operating the commutator to reverse the flow of current through the electro-magnet and to short-circuit said current through the artificial resistance intermediate of said reversals. 9th. An electro-magnet comprising a solenoid having externally arranged laminated pole pieces, the laminals of said poles extending longitudinally of the windings of the solenoid. 10th. An electro-magnet comprising a solenoid and externally arranged laminated pole pieces, the laminals of said pole pieces lying at an angle to the bore of the solenoid. 11th. An electro-magnet comprising a solenoid having paramagnetic portions arranged externally thereof, said paramagnetic portions being formed of laminals, slab shaped, set on edge and extending longitudinally of the solenoid windings. 12th. An electro-magnet comprising a solenoid having paramagnetic portions arranged externally thereof, said paramagnetic portions consisting of two poles arranged diametrically opposite each other and formed of laminals set on edge and arranged longitudinally of the solenoid windings. 13th. A device of the class described, comprising an electro-magnet consisting of a solenoid having externally arranged pole pieces, a slide adapted to enter said solenoid and having clips to receive and retain the article to be operated upon, and means for reversing the polarities of the pole pieces irrespective of the nature of the inducing current. 14th. A device of the class described, comprising a frame adapted to receive a solenoid winding, said frame having portions cut away to normally expose portions of the interior of the solenoid, protective coverings for the said exposed portions, paramagnetic portions arranged externally of the solenoid and adjacent to said exposed portions, and means for reversing the polarities of the resultant fields irrespective of the nature of the inducing current.

No. 49,832. Reactive Coll. (Fil réactif.)

The Canadian General Electric Company, Toronto, Ontario, Canada, assignees of Elihu Thompson, Swampscott, Massachusetts, U.S.A., 3rd September, 1895; 6 years.

Claim.—1st. The combination of a reactive coil or device comprising two or more coils adjustable angularly with relation to one another, to vary the intensity of a resultant magnetic field, with a

switch arranged to cut from circuit, or short circuit, said coils automatically when placed in the position of minimum reactive effect, as



set forth. 2nd. The combination of a regulable reactive coil or device in each branch of a multiphase circuit, with means for varying simultaneously, and to a like amount, the reactive effects of such different coils, and a switch for cutting from circuit or short-circuiting said coils when adjusted to give substantially the minimum reactive effect, as set forth. 3rd. An alternating current regulating device, consisting of two or more coils inductively related to a common magnetic core or mass, means for adjusting such coils angularly with reference to one another to vary the reactive effect, and a switch for automatically cutting from circuit or shunting said coils, when placed in the position of minimum reaction, as described.

No. 49,833. Method of Treating Garbage.
(*Méthode de traiter les tripailles.*)

Archibald Anderson Dickson, Toronto, Ontario, Canada, 3rd September, 1895; 6 years.

Claim.—1st. The method of treating city garbage, which consists in mixing therewith peat moss in the form of moss-litter, for the purpose of taking up or absorbing the viscid liquids and noxious gasses, substantially as set forth. 2nd. The method of treating city garbage, which consists in mixing therewith peat moss, in the form of moss-litter, for absorbing the viscid liquids, and then drying the whole together before finally disposing of the mass, whereby the dissemination of noxious odours and gases is prevented, substantially as set forth. 3rd. The method of treating garbage composed of vegetable and animal matters, which consists in mixing the same with peat-moss in the form of dry moss-litter, crushing the mass so as to liberate the liquids in the garbage and cause them to be absorbed by the moss-litter, then drying out the desired amount of moisture, and grinding or pulverizing the resultant mixture, substantially as and for the purposes set forth. 4th. The improved product herein described, the same being a base for fertilizers and consisting of vegetable and animal matters derived from garbage and dry moss litter, mixed in substantially the proportions specified and dried together, and ground or pulverized, as set forth.

No. 49,834. Manufacture of Fertilizers.
(*Fabrication d'engrais.*)

Archibald Anderson Dickson, Toronto, Ontario, Canada, 3rd September, 1895; 6 years.

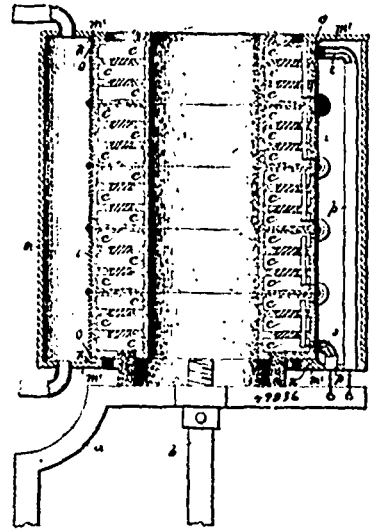
Claim.—1st. An improved fertilizer consisting of peat moss and slaughter-house tankage combined in substantially the proportions specified and dried together, as set forth. 2nd. The improved fertilizer herein described, the same consisting of peat moss in the form of moss litter, and slaughter-house tankage, combined in substantially the proportions specified, and dried and pulverized, as set forth. 3rd. The method of manufacturing slaughter-house tankage into a fertilizer, which consists in mixing the same with peat moss in the form of moss litter for the purpose of taking up or absorbing the liquids and gases, then drying the whole together so as to eliminate the surplus moisture, and finally pulverizing or grinding the resultant dried material, substantially as set forth.

No. 49,835. Reduction of Metallic Sands and Pulverized Ores.
(*Réduction de sable métallique et minerais pulvérisés.*)

Archibald Anderson Dickson, Toronto, Ontario, Canada, 3rd September, 1895; 6 years.

Claim.—The improved method or process of reducing metallic sands, or pulverized ores, which consists essentially in mixing the sand or ore with dry peat, then compressing the combined materials while cold into blocks in a forming tube or mould, in such manner that a yielding resistance in the direction of its discharge is offered to each block, whereby a uniform pressure is applied to each charge of peat and ore, and the blocks are condensed into hard compact and durable form while preserving the fibre and volatile elements intact, and then subjecting such blocks to the action of fire in a reducing furnace, substantially as set forth.

No. 49,836. Thermo-Electric Generator.
(*Générateur thermo-électrique.*)



Harry Barringer Cox, Hartford, Connecticut, U.S.A., 3rd September, 1895; 6 years.

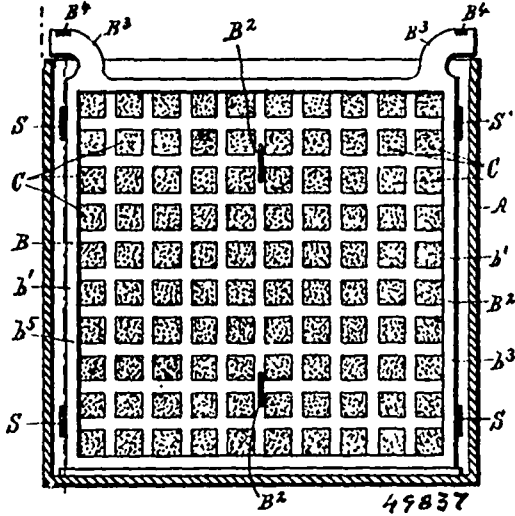
Claim.—1st. A thermo electric generator coated with refractory material to form a hard rigid mass, entirely covering and closing the thermo couples, and the internal connections between said couples, and entirely inclosed within said covering, and a sheet metal jacket surrounding the covering. 2nd. A thermo electric generator built up of removable interchangeable sections, the sections electrically connected, each section built up of series of thermo couples covered and held within a body of hard refractory material, having a sheet metal covering on its outer side and internal electrical connections between the series of couples entirely within said body of refractory material, substantially as described. 3rd. As an article of manufacture, a thermo electric pile having its series of couples covered and inclosed by a hard refractory body with the electrical connections within said body, and the take off connections extending through the same, and the metal covering, substantially as described. 4th. The thermo electric generator built up of interchangeable sections secured together by a surrounding metal jacket, each section being suitably coated and provided with its own metal jacket, the jackets of the various sections being united. 5th. The herein described method of making thermo electric generators which consists in forming a thermo electric pile, then inclosing the pile with refractory material, and hardening the same, and then wrapping the refractory material with sheet metal, and cementing or otherwise securing the same intimately thereto, substantially as described. 6th. The thermo electric pile having a metallic jacket cemented or otherwise intimately secured around the same, substantially as described. 7th. The thermo electric pile having the sheet metal jacket projecting beyond the ends of the pile, substantially as described. 8th. The thermo electric pile having the exterior sheet metal jacket projecting beyond the ends of the pile, the heads having the rings fitting in said projecting edges of the jacket, and a casing surrounding said heads to form the water jacket, substantially as described. 9th. A thermo electric pile built up of sections of thermo couples and provided with an exterior covering, the sections being electrically connected in circuit by internal electrical connections within said coating and the wall of the pile, substantially as described. 10th. The thermo electric pile having the exterior coating, the metallic jacket, the end heads surrounded by a casing to form a water space, the tubes extending through said water jacket, water space, and a head, and the insulated take-off wires extending from the poles of the pile and through said tubes, substantially as described. 11th. A thermo electric pile built up of a series of separate rings, each ring composed of thermo couples of large and small members, the large end member of each ring located one above the other, one end member having a conducting tail piece and the other end member of each ring having the elongated head piece electrically connected with the tail piece of the next adjoining ring, substantially as described.

No. 49,837. Storage Battery. (*Accumulateur électrique.*)

The Hess Storage Battery Company, Springfield, Ohio, assignee of Henry Kasper Hess, Syracuse, New York, U.S.A., 3rd September, 1895; 6 years.

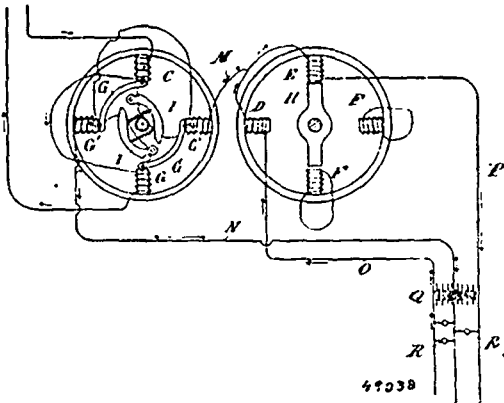
Claim.—1st. In a storage battery, the combination of a body of active material, a perforated electric conductor inclosing the body

of active material and electrically connected thereto, and a non electric conducting material, arranged in the perforations of the



electric conductor for supporting the active material and conducting the electrolyte thereto, substantially as and for the purpose described. 2nd. In a storage battery, the combination of a body of active material, an electric conductor inclosing said body of active material and consisting of opposite separable sections, each section being perforated and having its inner face in electrical contact with the active material, and a non-electric conducting material arranged in the perforations of the sections of the electric conductor for supporting the active material and conducting the electrolyte thereto, substantially as and for the purpose specified. 3rd. In a battery, the combination of the active material, and a layer of quartz sand imposed against the face of the active material, and having its separate grains or particles held together by non electric conducting adhesive material, substantially as and for the purpose set forth. 4th. In a storage battery, the combination of a pair of electrodes insulated from each other and each composed of a body of active material, an electric conductor inclosing said body of active material and consisting of separable sections, each section being perforated and having its inner face in electrical contact with the active material, and quartz sand arranged with the perforations of the sections of the electric conductors for supporting the active material and conducting the electrolyte thereto said sand having its separate particles or grains held together by non-electric conducting adhesive material, substantially as and for the purpose described.

No. 49,838. Dynamo Electric Machine. (Machine dynamo électrique.)

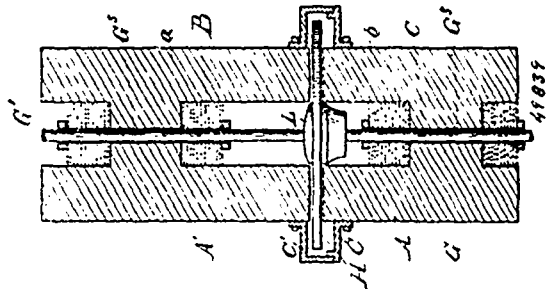


James F. McElroy and The Consolidated Car Heating Company, both of Albany, New York, U.S.A., 3rd September, 1895; 6 years.

Claim.—1st. In a dynamo electric generator, the combination of a circular range of fixed electro-magnets alternately included in the field and generating circuits of the generator with the field magnets alternately of opposite polarity, a revolving armature shaft and a series of unwound armatures, one for each pair of coils peripherally secured to a supporting body on the armature shaft and magnetically insulated from each other, substantially as described. 2nd. In a

dynamo electric generator, the combination of a circular range of fixed electro magnets alternately included in the field and generating circuits of the generator with the field magnets alternately of opposite polarity, and outer cylindrical casing to which said magnets are secured and forming a magnetic circuit therefor, a revolving armature shaft, a series of unwound armatures, one for each pair of magnets, a hollow supporting body upon the armature shaft to which said armatures are peripherally secured, and centrifugal governor weights included within said hollow body, substantially as described. 3rd. In a dynamo electric generator, the combination of a circular range of fixed electro-magnets alternately included in the field and generating circuits of the dynamo with the field magnets alternately of opposite polarity, and outer cylindrical casing to which said magnets are secured and forming a magnetic circuit for the same, a revolving armature shaft, a series of unwound armatures, one for each pair of magnets, a hollow supporting body to which said armatures are peripherally secured and adapted to magnetically bridge the gaps between the armatures, substantially as described. 4th. In a dynamo electric generator, the combination with a circular range of alternate generating magnets and field magnets of alternate positive and negative polarity and secure to an outer casing magnetically connecting said magnets, a revolving armature consisting of an armature shaft, two heads or discs secured upon the armature shaft, a series of armatures, one for each pair of magnets, peripherally secured to said discs and forming open gaps between their adjacent edges, lugged governor weights secured below said gaps and adapted to magnetically bridge the same, and springs arranged to counteract the centrifugal force of said governor weights, substantially as described. 5th. In a dynamo electric generator, the combination of the circular range of field and generating magnets C, C', the outer casing B, the armature shaft A, the discs H², H³ of non-magnetic material secured upon said shaft, the armatures G adapted to connect adjacent pairs of magnets, the governor weights I, the shafts J by which they are lugged, the cranks K secured to these shafts, the links K' connecting them, and the springs L arranged upon these links to control the weights, substantially as described. 6th. In a dynamo electric generator, the combination of a circular range of alternate generating magnets and alternate positive and negative field magnets, and outer casing magnetically connecting said magnets, a revolving armature shaft, a series of unwound armatures, one for each adjacent pair of magnets, peripherally secured upon a supporting armature core, alternating current leads from the generating magnets, a second circular range of electro-magnets within the same casing and comprising resistance coils included in branches of one or both leads from the generating coils and choke coils in independent circuits, and armatures for said second range of electro magnets, whereby synchronously with the generation of the current in the generating coils, its passage through one of the two branches of the lead or leads is blocked by the formation of a magnetic circuit between a resistance coil and choke coil, thereby directing the current, substantially as described. 7th. In an alternating current generator and current director combined, the combination of a circular range of alternate generating magnets and alternate positive and negative field magnets, a second range of alternate pairs of magnetic resistance coils included in branches of two leads from the generating coils, and choke coils in independent circuits, an outer casing inclosing the two ranges of coils and forming a magnetic circuit therefor, a revolving armature shaft and two series of unwound armatures secured to said shaft and respectively adapted to synchronously connect the adjacent field and generator coil, whereby the current in one of the two branches of each lead from the generator becomes blocked to direct the current into working conductors connected to these branches, substantially as described.

No. 49,839. Dynamo. (Dynamo.)

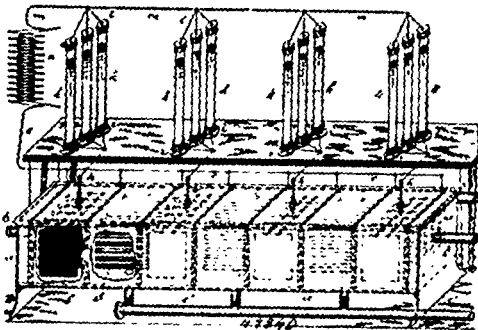


The Consolidated Car Heating Company, assignee of James Finney McElroy, both of Albany, New York, U.S.A., 3rd September, 1895; 6 years.

Claim. 1st. A disc armature having generating windings crossing diametrically and returning peripherally, substantially as described. 2nd. A disc armature having generating windings crossing diametrically and peripherally on opposite sides of the centre of the disc, substantially as described. 3rd. In a dynamo, the combina-

tion with a disc armature revolving between poles of opposite sign, of windings upon said armature crossing diametrically and returning peripherally outside the circle of the poles, substantially as described. 4th. A disc armature composed of segments, conductors wound around said segments, and forming with the same complementary parts of the disc, substantially as described. 5th. A disc armature comprising separate segments, conductors separately wound upon said segments and a peripheral band securing the segments together, substantially as described. 6th. A disc armature comprising the segments I, the conductor and insulating ribbons J and J' wound around said segments, and the peripheral securing band K comprising the flanges K' and ring K'', substantially as described. 7th. The combination with a disc armature comprising the segments I the conductor and insulating ribbons J and J' wound around said magnets and a peripheral band securing the parts together, of a clamping hub consisting of the member L provided with the flange f and prongs c, the member M and the member N having corresponding flange f, substantially as described. 8th. In a dynamo the combination with two field magnets the poles of each forming opposite segments of a segments circle and the unlike poles of the two magnets opposite each other, of a disc armature revolving in the magnetic field between the magnets and arranged concentrically therewith, said armature having generating windings crossing the disc diametrically, and returning peripherally outside the circle of the poles. 9th. In a dynamo the combination with two field magnets arranged with unlike poles opposite each other, of an armature revolving in the magnetic field between the two magnets and an armature shaft journaled in bearings outside the magnets, substantially as described. 10th. In a dynamo the combination with field magnets formed of two diametrically slotted iron cylinders arranged in axial line having segmental poles of unlike sign opposite each other, of a disc armature revolving in the magnetic field formed between the two magnets, the armature shaft passing through the axis of the magnet and journaled in bearings outside the magnet. 11th. In a dynamo, the combination with the cylindrical field magnets arranged in axial line and diametrically slotted to form the pole pieces $a a'$ of an armature revolving in the magnetic field between the two magnets, the armature shaft passing centrally through the axis of the magnet and journaled in bearings outside the same, and brushes located in the slot between the poles of one of the magnets, substantially as described. 12th. In a dynamo, the combination with a collector ring of the brush P having a bearing upon opposite sides of said ring, substantially as described.

No. 49,840. Method of and Apparatus for Decomposing Gases. (*Méthode et appareil pour décomposer les gaz.*)

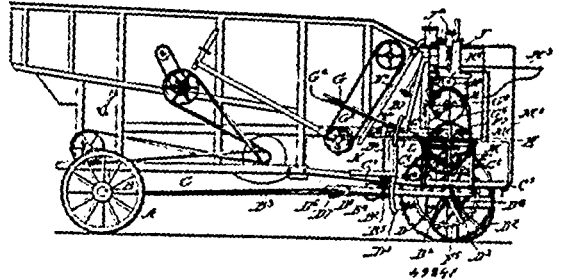


Henry Tindal, of 12 Sarphatikade, Amsterdam, assignee of Nicolaas Vander Sleen and August Schmeller, both of Alfen-Ond-hoorn, Kingdom of Holland, 4th September, 1895; 6 years.

Claim. -1st. The method of causing chemical changes of gases, or mixture of gases, by dark or silent electric discharges, consisting in subjecting the gas two or more times to the electrical treatment, and in cooling the gas between each two consecutive electrical treatments, substantially as and for the purpose hereinbefore set forth. 2nd. As a means for causing chemical changes of gases, or mixture of gases, by dark or silent electric discharges, the combination with two or more electrical discharging apparatus, of cooling devices arranged so as to alternate with said electrical discharging apparatus, for substantially as and for the purpose hereinbefore set forth. 3rd. In an apparatus for causing chemical changes of gases, or mixture of gases, by dark or silent electric discharges, the combination with two or more electrical discharging chambers, of cooling chambers arranged so as to alternate with said electrical discharging-chambers, substantially as and for the purpose hereinbefore set forth. 4th. As a means for causing chemical changes of gases, or mixture of gases, by dark or silent electric discharges, the combination with two or more electrical discharging apparatus containing each a number of separated plates connected each to a separate specific resistance formed by liquor, of cooling devices arranged so as to alternate with said electrical discharging apparatus, substantially as and for the purpose hereinbefore set forth. 5th. As a means of causing chemical changes of gases, or mixture of gases,

by dark or silent electric discharges, the combination with two or more electrical discharging apparatus, of cooling devices arranged so as to alternate with said electrical discharging apparatus, and containing each a number of pipes adapted to lead the gas from one of the said apparatus to the next following one, substantially as and for the purpose hereinbefore set forth. 6th. As a means for causing chemical changes of gases, or mixture of gases, by dark or silent electric discharges, the combination with two or more electrical discharging apparatus containing each a number of separated plates connected each to a separate specific resistance, formed by liquor, of cooling devices containing each a number of pipes adapted to lead the gas from one of the said apparatus to the next following one, substantially as and for the purpose hereinbefore set forth. 7th. In an apparatus for causing chemical changes of gases, or mixture of gases, by dark or silent electric discharges, the combination with two or more electrical discharging-chambers $c^1, c^2, c^3, c^4, c^5, c^6, c^7$, containing each a number of separated discharging-plates f connected each to a separate specific resistance k formed by liquor, of cooling chambers c^2, c^4, c^6 , arranged so as to alternate with said electrical discharging-chambers, and containing each a number of pipes d adapted to lead the gas from one of the said discharging-chambers to the next following one, substantially as and for the purpose hereinbefore set forth.

No. 49,841. Threshing Machine. (*Machine à battre.*)

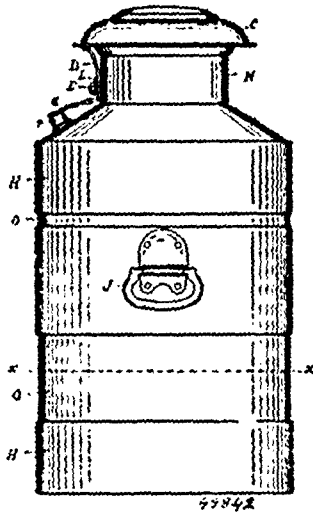


Richard Love Duvall, assignee of Charles Franklin Goddard, all of Chicago, Illinois, U.S.A., 4th September, 1895; 6 years.

Claim. -1st. The combination of a threshing machine proper with a traction wheel D, at one end of one axle D', and a driving engine placed substantially over such traction wheel as and for the purpose specified. 2nd. The combination of a threshing machine proper with a traction wheel D, at one end of one axle D', and a driving engine placed substantially over such traction wheel, and piston rods G^1 , reciprocating along a line through the axis of the wheel, substantially as and for the purpose specified. 3rd. The combination of a threshing machine proper with a cylinder and shaft H², a supporting frame, a traction wheel D, an engine supported upon said frame, connections from the cylinder to the engine so that the latter acts as a fly-wheel and connections from the traction wheel to the engine, substantially as and for the purpose specified. 4th. The combination of a threshing machine proper with an engine and traction wheel D, at one end thereof, the engine piston rods G^1 , placed so that the thrust is substantially in a vertical line through the axis of the traction wheel D, and an axle B, with supporting wheels A, A, pivoted at the other end, substantially as and for the purpose specified. 5th. In a self-contained threshing machine the combination upon a single common frame of a separator with a traction wheel D, an engine, a power supplying source KLM, for such engine, connections from the engine to the traction wheel D, and connections from the engine directly to the cylinder shaft H², of the separator mechanism, all constructed as and for the purpose specified. 6th. In a threshing machine the combination of the separator with a forward axle D¹, having a crank D², at one end, a traction wheel D, at the other end, a smaller wheel D³, on the crank, and a handle for turning the axle, and a spring D⁴, between the crank and the frame tending to force the crank downwardly, as and for the purpose specified. 7th. In a self-contained threshing machine the combination upon a single common frame of the separator, an engine, a power supplying source KLM, for such engine, and connections from the engine directly to the cylinder shaft H², of the separator mechanism, all constructed as and for the purpose specified. 8th. The combination of a threshing machine proper with a forward axle D¹, having the usual supporting wheel D², at one end and a broad tread supporting wheel D at the other, and an engine and cylinder at the forward end and over the forward supporting wheels D and D², the size, weight and arrangement of engine and cylinder being such that the forward supporting wheel sustains an amount of such total weight equal to the normal burden of such supporting wheel, the centre of gravity of the remaining portion of such total weight being substantially over the broad tread supporting wheel, and a power supply or source of energy KLM located on the common supporting frame and connected with the engine, all as and for the purpose specified. 9th. In a threshing machine the combination of the separator with a supporting traction wheel D, a driving engine, and a power transmitting device from the engine to the traction wheel embracing two friction wheels H⁴ H⁵ and a belt H³ and the idler

H² whereby the power is transmitted from one to the other, either by frictional contact of the two wheels or by a belt about the two wheels, substantially as and for the purpose specified. 10th. In a self-contained threshing machine, the combination upon a common frame of a separator with an engine in the nature of a gas engine but without a balance wheel, a traction wheel D, a carburetor K, L, M and water tank, and connections from the carburetor and water tank to the engine, and driving connections from the engine to the separator cylinder shaft H² and to the traction wheel D, all substantially as and for the purpose specified. 11th. A self-contained threshing machine substantially as shown and described and for the purpose indicated.

No. 49,843. Vacuum Can. (Bidon à vide.)



Charles Ferguson, assignee of William H. Ferguson and Joseph Nicholson, all of London, Ontario, Canada, 4th September, 1895; 6 years.

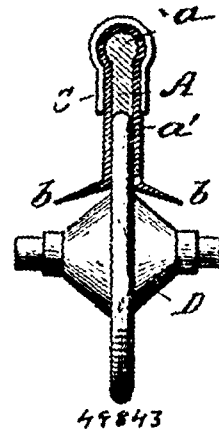
Claim.—1st. A case I, for holding merchandise, formed with an opening for the insertion or removal of the contents, and with a portion *a*, surrounding said opening, said portion *a*, being secured to and in combination with a jacket O, the latter being formed larger in cross-section than said case, and provided with the valve *c*, a vacuum chamber A, between said case and said jacket, feet F, for supporting said case centrally in said jacket and a stopper S, substantially as and for the purpose set forth. 2nd. A case I, for holding merchandise, formed with an opening for the insertion or removal of the contents, and with a portion *a*, surrounding said opening, said portion *a*, being secured to and in combination with a jacket O, the latter being formed larger in cross-section than said case, and provided with a neck N, and valve *c*, a vacuum chamber A, between said case and said jacket, feet F, for supporting the case centrally in said jacket, and a hollow stopper S, substantially as and for the purpose set forth. 3rd. A case I, for holding merchandise, formed with an opening for the insertion or removal of the contents, and with a portion *a*, surrounding said opening, said portion *a*, being secured to and in combination with a jacket O, the latter being formed larger in cross-section than said case, and provided with neck N, and valve *c*, a vacuum chamber A, between said case and said jacket, feet F, for supporting said case centrally in said jacket, and a hollow stopper S, provided with a hood C, substantially as and for the purpose set forth. 4th. A case I, for holding merchandise, formed with an opening for the insertion or removal of the contents, and with a portion *a*, surrounding said opening, said portion *a*, being secured to and in combination with a jacket O, the latter being formed larger in cross-section than said case, and provided with a neck N, funnel B, and valve *c*, a vacuum chamber A, between said case and said jacket, feet F, for supporting said case centrally in said jacket, and a hollow stopper S, provided with a hood C, substantially as and for the purpose set forth. 5th. A case I, for holding merchandise, formed with an opening for the insertion or removal of the contents, a jacket O, provided with a neck N, to which a staple E, is secured, a valve *c*, secured to said jacket and provided with a cover *r*, and an eye L, secured to said cover by a chain G, in combination with a hollow stopper S, provided with a hood C, a hasp D, secured to said hood, and means for locking said eye L, and hasp D, to the staple E, to prevent the wrongful or accidental displacement of said stopper or valve, substantially as and for the purpose set forth.

No. 49,843. Electrical Conductor.

(Conducteur électrique)

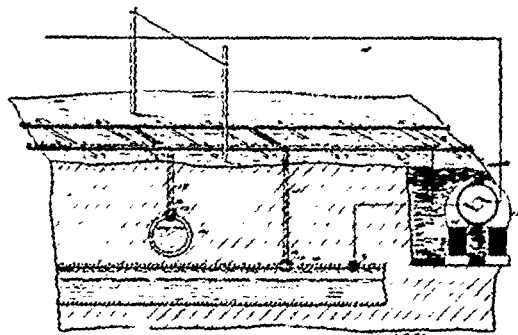
Edward D. Lewis, Savona, New York, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. An electrical conductor oblong in cross-section and grooved in one side to receive a contact wheel, substantially as described.



scribed. 2nd. An electrical conductor oblong in cross-section, having a head at one edge, the other edge being grooved to receive the contact wheel, substantially as described. 3rd. An electrical conductor having a flexible insulating strip embracing and hugging it on three sides, the fourth side being exposed to make electrical contact with the contact wheel, substantially as described. 4th. An electrical conductor having a flexible insulating strip embracing and hugging closely its three sides, the fourth side being exposed and protected by edge extensions of the said insulating strip, substantially as described. 5th. An electrical conductor having a flexible strip of insulating material folded around three of its sides, the edge portions projecting in parallel relation beyond the fourth side, substantially as set forth. 6th. An electrical conductor having a flexible strip of insulating material folded around three of its sides, the edge portions projecting in parallel relation beyond the fourth side and having the outwardly diverging lower ends, substantially as and for the purpose set forth. 7th. The combination with an electrical conductor the lower side of which is adapted for electrical contact with the contact wheel, of the insulating strip folded over the top and sides of said conductor and formed with the parallel downwardly extending side portions having their lower edges extended out at an angle to said parallel side portions, substantially as and for the purpose set forth. 8th. An electrical conductor oblong in cross-section and having side extensions, a flexible strip of insulating material folded closely around three sides of the conductor and having edge portions extending in parallel relation beyond the fourth side, and clips constructed to spring over the lateral enlargements of the conductor and retain the insulating strip in place, substantially as described. 9th. The combination with an electrical conductor oblong in cross-section and having side enlargements, of a holder composed of approximately right angled brackets bolted together against the sides of the conductor, and having deflected portions to receive the side enlargements of the conductor, substantially as described.

No. 49,844. Method of Preventing Electrolysis of Street Sewer Pipes. (Méthode d'empêcher l'électrolyse des tuyaux d'égouts.)

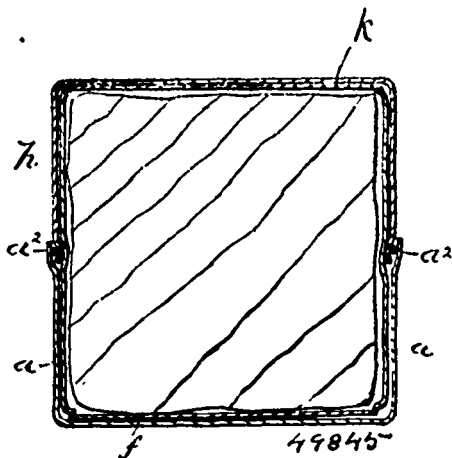


Richard Watkins, Sacramento, California, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. The method herein described of preventing electrolysis of metal street pipes located adjacent to electric railways, which consists in connecting the said pipes with the return conductor proper by means of metallic conductors, and also connecting

said pipes with the generator forming a part of the electric circuit, whereby the said pipes receive and conduct the surplus electricity, which would otherwise indirectly charge the earth adjacent to or surrounding the pipes, thereby preventing electrolytic action, as specified. 2nd. The combination, with the generator, the rails and the street pipe and the trolley line, of an electrical connection between one pole of the generator and the trolley line, connections between the rails and the street pipe, and connections between the street pipe and the other pole of the generator, substantially as described. 3rd. The combination, with the street pipe, having a connection with a source of electrical supply, and the rails, of conductors connected to the rails, plugs screwed into the pipe and connections between the plugs and conductors, substantially as described.

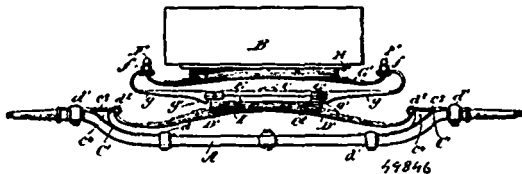
No. 49,845. Metal Box or Packing Vessel.
(Boite métallique ou vaisseau d'emballage.)



Arthur Lockhart Howard, Brownsburg, Quebec, Canada, 4th September, 1895; 6 years.

Claim.—1st. A metal packing box or vessel composed of two parts, each a single integral piece of approximately cup or dish form and adapted to be united at their edges for the purpose set forth. 2nd. A metal packing box or vessel composed of two parts, each a single integral piece of approximately cup or dish form of like depth and adapted to be united at their edges so as to locate the joint midway of the depth of the vessel for the purpose set forth. 3rd. A metal packing box or vessel composed of two parts each a single integral piece of approximately cup or dish form and one part of increased diameter at its edge to form a seat for the edge of the other part as set forth. 4th. A metal packing box or vessel composed of two parts, each a single integral piece of approximately cup or dish form and one part of increased diameter at its edge to form a seat for the edge of the other part having an encircling bead or indentation as set forth. 5th. A metal packing box or vessel composed of two enclosing parts united by a soldered joint and containing an interior lining or covering extending across such joint for the purpose set forth. 6th. In the process of filling or packing boxes or vessels composed of two enclosing parts as described, inserting a guide or retainer in one of said parts before introducing the contents for the purpose set forth. 7th. In the process of filling or packing boxes or vessels composed of two enclosing parts as described, inserting a temporary guide or retainer in one of said parts and an interior lining before introducing the contents and afterwards removing the guide, for the purpose set forth.

No. 49,846. Vehicle Running Gear. (Train de voiture.)

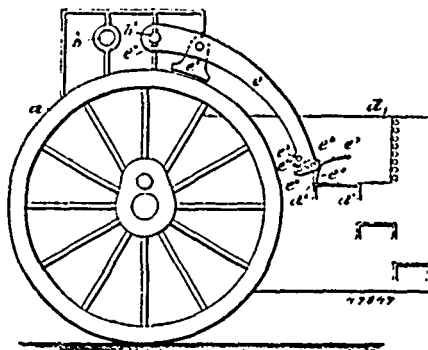


Louis Francis Robare, Au Sable Forks, New York, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. A vehicle running gear, consisting of the front and rear cranked axles having spring supporting brackets on their cranked portions, the axle springs connected to said brackets, bolsters mounted on said axle springs and supporting the side bars at an ele-

vation which permits the vehicle body to swing between them and extend over both axles, and springs that support said body from the side bars and adapted to allow it to have a flexibility of movement independent of the side bars and bolsters, substantially as described. 2nd. In a vehicle running gear, the axles having cranked portions provided with attached brackets (C), having laterally curved arms (c), reversely deflected to opposite sides of the axle and connected with the ends of the body supporting springs (D), substantially as described. 3rd. In a vehicle running gear, the axles having cranked portions provided with attached brackets (C'), to which the body supporting springs (D), are attached, the pivotal bolster mounted on the axle spring and having its opposite ends bent upward and backward the wear plates (c', c''), and the ribs (g), formed on the under side of the bolster and terminating in tongues (g'), engaging the under side of the lower wear plates, substantially as described.

No. 49,847. Brake for Road Engines.
(Frein pour machines à vapeur.)



The O. S. Kelly Company, assignee of Edward T. Wright, both of Springfield, Ohio, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. In a road engine, in combination with its driving wheel, of a pivoted frame having a brake shoe pivoted therein, a pivoted foot lever at the outer or free end of said frame, said foot lever having a projection adapted to rest in contact with a stationary support to hold said frame in an elevated position, said foot lever being further capable of a limited movement which will disengage said projection and cause said lever to operate said frame, substantially as specified. 2nd. In a road engine, the combination with a driving wheel, of a frame having a pivoted brake shoe therein and a shaft above said driving wheel forming a part of the connection between said driving wheel and the motive power, said shaft being extended over the driving wheel to form a journal or trunnion for said brake frame, substantially as specified. 3rd. In a road engine, the combination with a driving wheel, and a shaft forming part of the driving connects, for said driving wheel, of a brake frame journaled on said shaft, a pivoted brake shoe in said frame, and a pivoted foot lever having a limited movement also connected to said frame, and a projection on said foot lever to normally support said frame, substantially as specified. 4th. In a road engine, the combination with a pivoted frame, and a driving wheel, a pivoted brake shoe in said frame, and a pivoted foot lever also connected to said frame, a foot board in proximity to said brake frame, and a projection on said foot lever to engage said foot board, stop projections on said frame to limit the movement of said lever whereby said lever is caused to operate said frame after it is disengaged from said foot board, substantially as specified. 5th. In a road engine, the combination with a main driving wheel, and a shaft forming part of the driving mechanism thereof, said shaft being extended over said driving wheel, of a frame journaled on the end of said shaft, a pivoted brake shoe in said frame in proximity to said journal, and a pivoted foot lever in the outer or free end of said frame, a projection on said foot lever to engage a stationary part and hold said frame in an elevated position, stops on said frame to limit the movement of said foot lever and cause said lever to operate said frame after the projection thereon has been removed from the stationary support by the limited movement of said foot lever, substantially as specified.

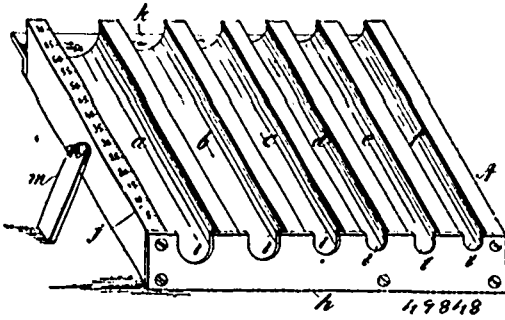
No. 49,848. Coin Adder and Rack.

(Machine à additionner la monnaie et ratelier.)

Samuel Chittick, New York, State of New York, assignee of Henry Arthur Hayden, Jersey City, New Jersey, both in the U.S.A., 4th September, 1895; 6 years.

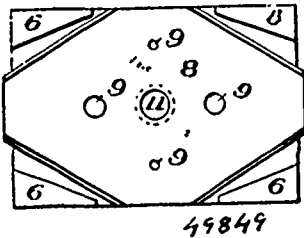
Claim.—In a coin adder and rack, the combination with a block having in one of its faces a series of open-ended semi-cylindrical coin grooves, of a bottom plate (h), adapted to form a rest for the coins arranged in the coin grooves, said bottom plate being arranged to partially close one end of each of said coin grooves and being provided with a series of thumb recesses (i), arranged opposite to the respective coin grooves, graduations extending along the said grooves and adapted to indicate the sum of the coins contained therein,

folding legs *m*, arranged on opposite sides of said body and adapted to support the same in an inclined position, and a marking plate



having an angular cross section, said marking plate being arranged adjacent to the open upper ends of the coin grooves, substantially as set forth.

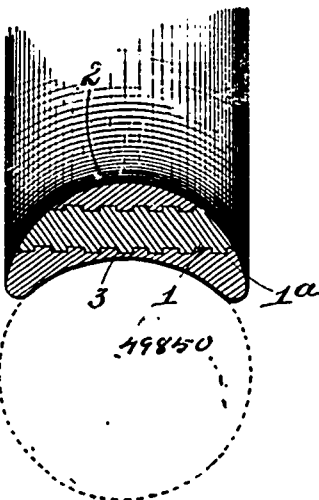
No. 49,849. Whiffletree Plate. (Plaque de palonnier.)



John M. Lane, Ovid, Adolphus Carrette and Marcus W. Robinson, both of Jackson, all in Michigan, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. The combination of a pair of whiffletree plates, composed of a lower or base plate provided with the under-cut raised portions, and an upper plate working on the lower or base plate and provided with bevelled edges which bear against and lock with the under-cut flanges on the lower plate, substantially as and for the purpose set forth. 2nd. The combination, in whiffletree plates, of a lower base plate provided with the four raised flanges substantially wedge-shape, arranged in pairs upon the front and back edges of the plate to leave openings at the edges thereof, and an upper plate working on said lower plate and formed with the reduced ends which fit between the flanges at the ends of the lower or base plate, and as the plate is oscillated to have the tapering sides of the plate bear against the tapering sides of the flanges, substantially as and for the purpose set forth.

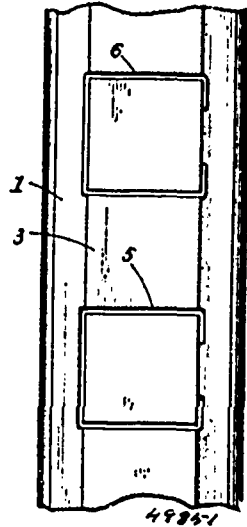
No. 49,850. Vehicle Wheel Rim. (Jante de roue de voiture.)



Robert Albert Gibson, Buffalo, New York, U.S.A., 4th September, 1895; 6 years.

Claim.—A vehicle wheel rim, consisting of a series of strips of wood, each strip having a parallel series of longitudinal tongues and grooves on its face so that when forced together and glued, the tongues and grooves alternately inter-lock with each other and form a solid vehicle wheel rim, the several layers of which are rigidly secured together by glue and the interlocking tongues and grooves, substantially as described.

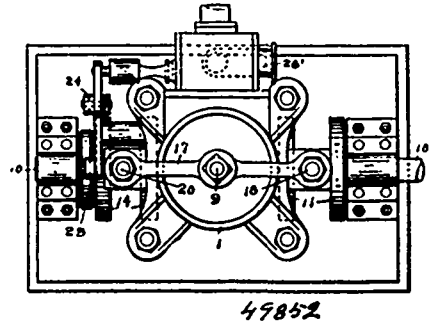
No. 49,851. Wooden Rim for Bicycle Wheels. (Jante de bois pour roue de bicyclette.)



Robert Albert Gibson, Buffalo, New York, U.S.A., 4th September, 1895; 6 years.

Claim. 1st. A wooden rim for bicycle wheels composed of longitudinally tongued and grooved layers of wood, having a series of separated transverse holding wires embedded therein between the tongued and grooved layers, and the whole cemented together, substantially as described. 2nd. A wooden rim for vehicle wheels, composed of layers of wood having a series of independent transverse holding wires embedded therein between the layers of wood at suitable distance apart, substantially as described. 3rd. The herein described mode of constructing a bicycle wheel rim, composed of layers of wood having transverse holding wires embedded therein between the layers of wood, which consists in cutting a longitudinal tongue in one layer and a corresponding longitudinal groove in one layer and a corresponding longitudinal groove in the other layer, then forming or cutting in one layer a series of transverse grooves adapted to receive the wires, then securing the wires therein, then uniting the two by cement and forming them into a wheel rim, substantially as described. 4th. The combination in a wooden rim for vehicle wheels, of two longitudinally tongued and grooved layers of wood cemented together, a series of cross grooves between the layers of wood and transverse holding wires secured in said cross grooves, substantially as described.

No. 49,852. Steam Engine. (Machine à vapeur.)



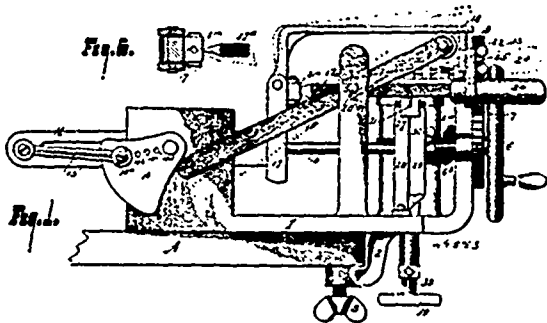
Edward Gschwind and Joseph K. Boland, both of New Orleans, Louisiana, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. In an engine, the headless cylinder for applying power by fluid pressure in combination with four pistons the alternate pistons being fixed to each other by rods passing freely through the inner piston of each pair respectively, and a valve and valve

port between the innermost piston adapted to admit steam to separate them and to cause the end pistons both to move inwardly and ports for admitting steam to move said end pistons outwardly, substantially as set forth. 2nd. In an engine, the headless cylinder for applying power by fluid pressure in combination with four pistons the alternate pistons being fixed to each other in pairs by rods passing freely through the inner piston of each pair respectively and valves for admitting live steam alternately between the inner pistons and between each of them and an outer piston for working under high pressure and moving a member of each pair alternately toward and from the corresponding member of the other pair, substantially as set forth. 3rd. In an engine, the headless cylinder for applying power by fluid pressure in combination with four pistons the alternate pistons being connected in pairs by rods passing through the inner piston of each pair respectively and valves for admitting live steam between the inner pistons and exhausting from thence to and between each of them and an outer piston to work the steam expansively, substantially as set forth. 4th. In an engine, the headless cylinder for applying power by fluid pressure in combination with four pistons the alternate pistons being connected in pairs by rods passing through the inner piston of each pair respectively, valves for either admitting live steam alternately between the inner pistons and between each of them and an outer piston or for admitting live steam between the inner pistons and exhausting from thence to and between each of them and an outer piston, substantially as set forth. 5th. In combination, the headless cylinder having the four pistons, the alternate pistons being fixed to each other in pairs, the shaft provided with crank arms, the intermediate devices connecting the alternate pistons to independent crank arms, said arms being arranged on directly opposite sides of the shaft, substantially as set forth. 6th. In combination, a cylinder having no fixed heads and provided with three ports each adapted to admit steam to or exhaust it from the same, valves to control such alternative operations and four pistons, the alternate pistons being fixed to each other in pairs by rods passing freely through the inner piston of the other pair, substantially as set forth.

No. 49,853. Saw Filing Machine.

(Machine à limer les scies.)

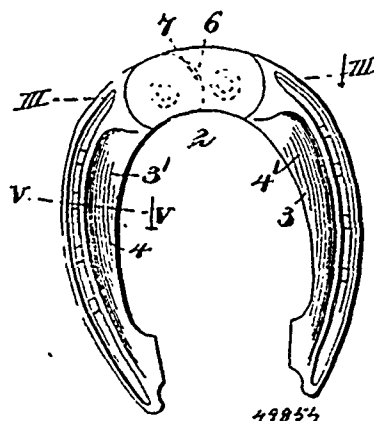


John C. Ballew, Evansville, Indiana, and Frontier Iron Works, Detroit, Michigan, both in the U.S.A., 4th September, 1895; 6 years.

Claim.—1st. In a saw filing machine, the combination of a guide in which the saw moves freely, a file and means for adjusting the file to cut raking, a vice provided with jaws spaced to permit the reception there between the saw guide, friction rollers terminating the ends of the vice jaws, having their axes of rotation in the path of the file, and adapted to hold the saw from vibration but to permit easy movement along the guide, substantially as described. 2nd. In a saw filing machine, the combination of a reciprocating file carrying frame, and means for holding the file therein, means whereby the file may be adjusted to cut raking, a saw guide in which the saw moves freely, a vice provided with jaws spaced to receive the saw guide, friction rollers terminating the ends of the vice jaws and adapted to hold the saw from vibration, said vice being adjustable along the bed plate whereby the gripping points of the jaws may be set to accord with the position and rake of the file, substantially as described. 3rd. In a saw filing machine, the combination of a reciprocating file carrying frame, a saw guide, a vice provided with jaws placed to permit the insertion between them of said guide, friction rollers terminating the ends of the vice jaws and adapted to hold the saw from vibration, vertically movable standards supporting said saw guide whereby the guide can be adjusted with respect to the roller terminals of the vice jaws, substantially as specified. 4th. In a saw filing machine, the combination of a reciprocating file carrying frame, a file set therein to engage the saw, a saw guide, a vice adapted to hold the saw guide, rollers terminating the vice jaws having their axes of rotation in the path of the file and adapted to engage the saw to move readily along the guide, substantially as described. 5th. In a saw filing machine, a one-toothed wheel adapted to mesh with the saw as a rack and having its tooth adjustable radially, a driving pinion meshing with the main driving pinion, means for shifting the shaft of the feed wheel both vertically and

horizontally, whereby it is lifted while its driving pinion is continued in mesh with the main driving wheel, substantially as described.

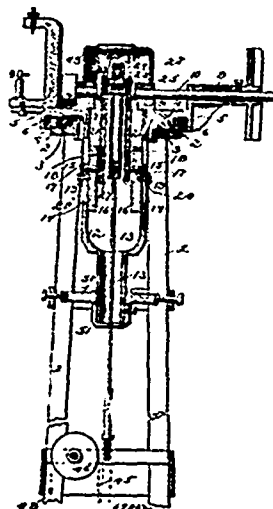
No. 49,854. Jointed Horse-Shoe. (Fer à cheval jointé.)



James B. Hague, Horseheads, New York, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. In an expansible horseshoe, formed of two half sections, the meeting ends being reduced in thickness, a concavity formed in the meeting end of one of said sections, and a convex end portion upon the other, a coupling piece having integral pins or projections registering with perforations formed in the meeting ends of said half sections and rivetted therein, the surface of said coupling piece being flush with the surface of the half sections of the shoe, the under side of the half sections having a perpendicular outer side, and an inclined inner side forcing said half sections apart and expanding said shoe under pressure, substantially as described. 2nd. In an expansible horseshoe, formed of two half sections, the meeting ends being reduced in thickness, a concavity formed in the meeting end of one of said sections, and a convex end portion upon the other, a coupling piece having integral pins or projections registering with perforations formed in the meeting ends of said half sections and rivetted therein, the surface of said coupling pin being flush with the surface of the half sections of the shoe, each half section having a heel calk having a perpendicular outer side, and bevelled inwardly forming a knife edge, the bevelled sides of the calks being opposed to each other and expanding the shoe under pressure, said calks being substantially parallel to each other when the shoe is spread, and clips formed upon the upper side of the shoe and adapted to bear against the inside of the hoof so as to spread the same, substantially as described.

No. 49,855. Windmill. (Moulin à vent.)

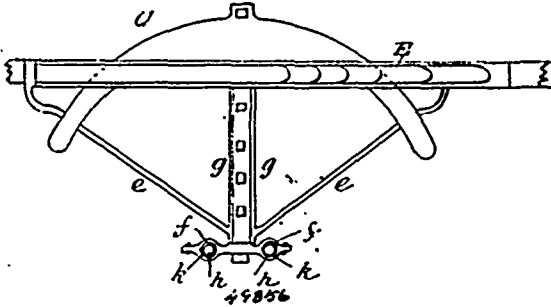


Charles H. Paget, Oxford, Indiana, U.S.A., 4th September, 1895; 6 years.

Claim.—1st. The combination with the driving shaft, the upper sprocket wheels, the sprocket chains, lower sprocket wheels, and the wrist pin, of the pitman head having intersecting vertical and horizontal slots, substantially as and for the purpose specified. 2nd.

The combination with the driving shaft, upper sprocket wheels, the sprocket chains, the lower vertically adjustable sprocket wheels and the wrist pin, of the pitman head formed with intersecting vertical and horizontal slots, substantially as and for the purpose specified. 3rd. In a windmill the combination with the cap plate provided with a downwardly depending box or casing, formed with slots and the driving shaft and the sprocket wheels secured thereto, of the blocks seated in said slots, the vertically moving plates having studs, the sprocket wheels journaled on said studs, the sprocket chains and wrist pin, the set screws and washers, the pitman head having intersecting vertical and horizontal slots, substantially as and for the purpose specified. 4th. The combination with the driving shaft, the sprocket wheels secured thereto, the sprocket chains, the lower sprocket wheels and the wrist pin, of the pitman head consisting of the rectangular plates formed with intersecting vertical and horizontal slots, the horizontally movable bridges, the bell crank levers the upper ends of which are connected with said bridges and the horizontal arms connected by a pin and slot connection and the spring engaging with said levers, substantially as and for the purpose specified. 5th. In a windmill the combination with the cap plate, the downwardly depending bar or casing having diametric slots, the blocks seated in said slots, the vertically movable plates connected therewith, the set screws and washers, the studs carried by said plates, the sprocket wheels journaled thereon, the driving shaft, the sprocket wheels secured thereto, the sprocket chains and the wrist pin, of the pitman head consisting of the rectangular plates formed with intersecting vertical and horizontal slots, the horizontally movable bridges having overlapping inner ends and downwardly depending lugs, the bell crank levers pivoted to said head, the upper arms of which are provided with pins engaging with said lugs, and the horizontal arms connected together by pin and slot connection and the springs secured to the pitman head and engaging with lugs on said levers, substantially as described.

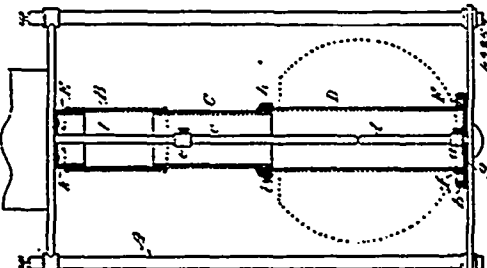
No. 49,856. Four-Wheeled Vehicle.
(Voiture à quatre-roues.)



Andrew Ross, Hamilton, Ontario, Canada, 4th September, 1895; 6 years.

Claim.—1st. In a low down body four-wheeled vehicle, a short reach attached to the fore running gear, and its rear end having one or more sockets attached thereto, the said sockets made to slide on one or more vertical bars secured to the body of the wagon, and packing, as leather, or rawhide, etc., placed in the sockets, all constructed substantially as and for the purpose specified. 2nd. In a four-wheeled vehicle with a low down body, a short reach F, secured to the headblock D, duly braced, and having attached to the rear end of the reach one or more sockets f, and one or more vertical bars n, made to pass through the sockets f, and be fastened to the body of the wagon, so that the sockets can slide on the vertical bars, with packing, as leather, or rawhide, etc., between them, all constructed substantially as and for the purpose specified.

No. 49,857. Electric Arc Lamp. (Lampe électrique à arc.)

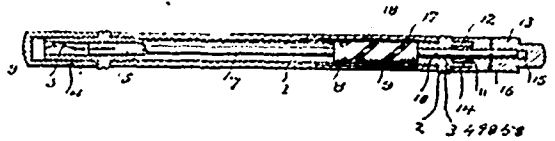


George Gale Stout, Parkersburg, West Virginia, U.S.A., 4th September, 1895; 6 years.

Claim.—An inclosure for the carbons of an electric arc lamp, consisting of a stationary tubular section of transparent material, a tubular section detachably connected thereto by means of a suitable

coupling, and a tubular section slidable thereon, and a tapering tubular coupling for holding suspended the slidable section, substantially as and for the purpose set forth.

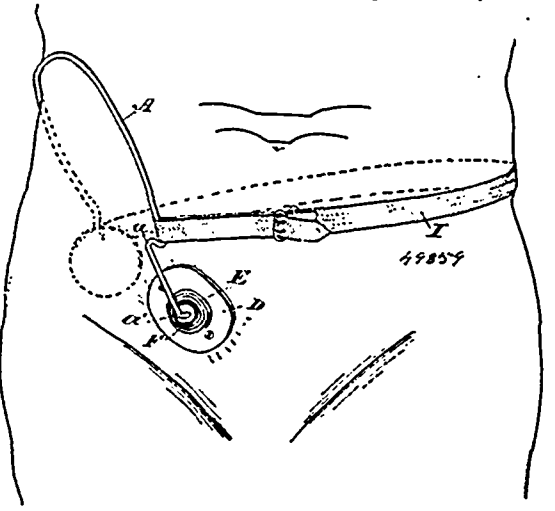
No. 49,858. Fountain Pen. (Plume-fontaine.)



The Horton Pen Company, New Haven, assignee of Edward G. Peck and Frederick O'Meara, both of Seymour, all in Connecticut, U.S.A., 5th September, 1895; 6 years.

Claim. The combination, with a holder for a pen, having a rod 7 with a pin 17, a reservoir having slots engaged by said pin, and a plug at its base, of a barrel within the reservoir having spiral slots through which pin 17 passes, a rod 10 which passes through the plug and a hand piece fixed to rod 10 so that rotation of the hand piece, rod 10 and the barrel will move the pen holder and pen longitudinally without rotation.

No. 49,859. Hernia Truss. (Bandage herniaire.)



Amelia Cluthe, assignee of Charles Cluthe, both of Toronto, Ontario, Canada, 5th September, 1895; 6 years.

Claim.—1st. In a hernia truss, the combination with the wire hoop, pads and belt of an off-set in the hoop beneath the front attaching portion of the belt, as and for the purpose specified. 2nd. In a hernia truss, the combination with the wire hoop, having the bent front end and the pad having a socket in the back, of a stem securely connected to the end of the wire and having a ball shaped end fitting into the socket at the back and a helical spring surrounding the stem and secured at one end in the wire hoop and at the other end in the back, as and for the purpose specified. 3rd. In a hernia truss, the combination with the wire hoop having the bent front end, and the ball cup secured thereto, of a stem C provided with a ball end e fitting into the cup on the end of the wire, and the ball end e fitting into the socket in the back and the helical spring secured at one end to the end of the wire hoop and at the other end in the back and surrounding the stem, as and for the purpose specified. 4th. In a hernia truss, the combination with the wire hoop having the bent front end threaded as specified, and the ball cup secured thereto, of the helical spring secured at one end in the back and having the other end extending to the outside of the cup, and the nut F securing this end to the cup, as and for the purpose specified. 5th. The combination, with the wire hoop, of the back pad G provided with a boss g through which the wire extends, a plug sleeve through which the wire also passes having a hemi-spherical end fitting into corresponding recess in the back pad and a set-screw h', all arranged as and for the purpose specified. 6th. The combination, with the wire hoop, of the back pad G provided with a boss g through which the wire extends, and means for securing the wire from moving longitudinally within the boss and yet allowing of a limited turning therein, as and for the purpose specified.

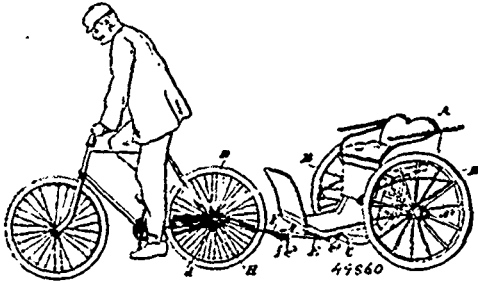
No. 49,860. Bicycle and Vehicle Combined.

(Bicycle et voiture combinée.)

Jean Tranelé Arnaud, Toronto, Ontario, Canada, 5th September, 1895; 6 years.

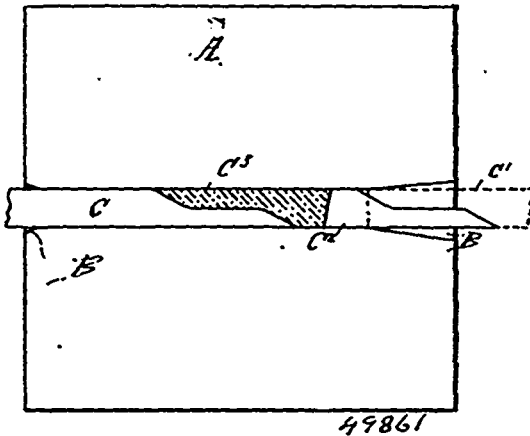
Claim.—1st. The combination with a vehicle having a forked bracket secured beneath the vehicle, of a bicycle having a forked

reach pivotally swung at its forward end on the axle of the drive wheel and pivotally connected at its rear end to the forked bracket



extending outwardly from the front of the vehicle, as and for the purpose specified. 2nd. The combination with a two-wheeled cart having the body evenly balanced over the axle and the front forked bracket secured beneath the front portion of the vehicle and having a disc-shaped outer end, of a bicycle having a forked reach connected at the front end to the rear axle of the bicycle and having a rear disc-shaped end extending through the disc-shaped jaws at the front of the forked bracket and a pivotal bolt extending through the jaws and disc-shaped end, as and for the purpose specified. 3rd. The combination with a vehicle having a forked bracket secured beneath the vehicle, of a bicycle having the double brackets H, with tubular upper and lower ends H¹, and H², and the forked bracket F, having the threaded ends extending through the tubular ends H¹, of the bracket, nuts h, to hold the forward ends of the forked reach in position, the forked reach being connected at the rear to the front bracket of the bicycle, as and for the purpose specified. 4th. The combination with a two-wheeled cart having the body evenly balanced over the axle and a front forked bracket secured beneath the front portion of the vehicle and having a disc-shaped outer end, of a whistle-tree pivotally swung within the members c¹, c², of the disc-shaped forward end and having the disc-shaped end jaws and the reaches having the disc-shaped rear ends pivotally secured within the jaws by bolts J, and the forward ends secured to the axles of the bicycle as shown and for the purpose specified.

No. 49,861. Method of and Apparatus for Cutting Nail Blanks. (*Méthode et appareil pour couper des blancs de clous.*)

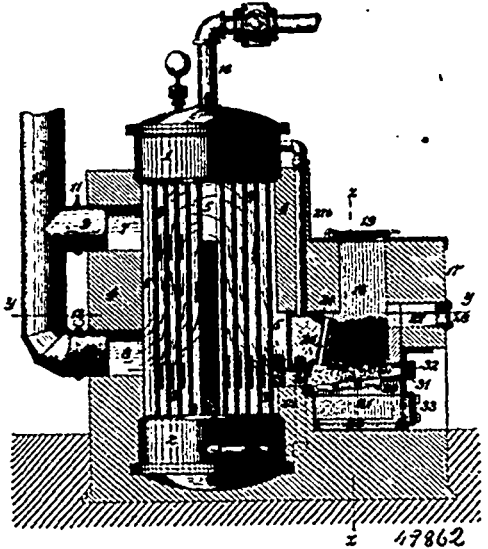


George Albion Coombs, Gothenburg, Sweden, 5th September, 1895; 6 years.

Claim.—1st. The method of cutting nail blanks from a rod of metal which consists firstly in cutting or punching blanks from the rod through a line passing obliquely and longitudinally from one edge to the other thereof, and secondly, at the same time or subsequently cutting off transversely from the rod the blank partly formed thereon by the previous cutting or punching operation, substantially as described. 2nd. The method of cutting nail blanks from a rod of metal which consists in cutting or punching blanks from one side of the rod while the same is contained in a groove or channel of the die, and at the same time cutting off from the end of the rod the partly formed blank left on the other side thereof by the previous cutting or punching operation, substantially as described. 3rd. The method of cutting nail blanks from two or more rods of metal at once, which consists in cutting or punching blanks from one side of each rod while such two or more rods are contained in a groove or channel of the die, and at the same time cutting off from the ends of the several rods the partly formed blanks left on the other sides thereof by the previous cutting or punching operation, substantially as described. 4th. Apparatus for cutting nail

blanks from one or more rods of metal in accordance with the first and second claiming clauses hereof, which consists of a die provided with a groove or channel for receiving, holding and guiding the rod or rods, the said groove or channel having one or more openings or matrices in the bottom thereof, corresponding to the shape of the blanks to be produced, and a punch or punches corresponding to the matrix or matrices in the die, combined, arranged and operating substantially as described.

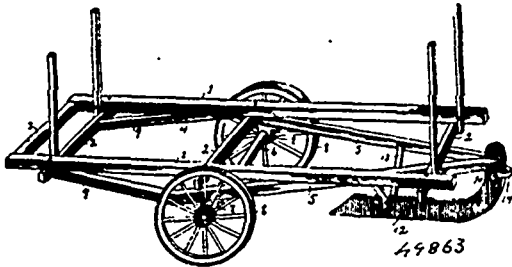
No. 49,862. Roller Furnaces. (*Foyer de chaudière.*)



Edwin Powell, Pittsburg, Pennsylvania, U.S.A., 5th September, 1895; 6 years.

Claim.—1st. The combination, substantially as set forth, of a boiler, a combustion chamber located in position to impart heat thereto, a fire chamber, a lower firebed, a water back bridge wall interposed between the fire chamber and the combustion chamber and located above an exit throat, or passage adjacent to the firebed, circulating tubes connecting the water back bridge wall with the upper and lower portions of the boiler, a tubular gas conduit passing through the water back bridge wall, its lower end being located adjacent to the exit throat and its upper end being open to the fire chamber near the top of the water back bridge wall, and an air supply passage leading into the fire chamber adjacent to the upper end of the gas conduit. 2nd. The combination, substantially as set forth, of a boiler, a combustion chamber in a setting enclosing the heating surfaces of said boiler, a fire chamber in a lateral extension of said setting, a lower firebed in said fire chamber, a water back bridge wall abutting on its upper face against the setting wall which separates the fire chamber from the combustion chamber, and forming the upper boundary of an exit throat or passage adjacent to the firebed, circulating tubes connecting the water back bridge wall with the upper and lower portions of the boiler, a series of tubular gas conduits passing through the water back bridge wall, their lower ends being located adjacent to the exit throat and their upper ends being open to the fire chamber near the top of the water back bridge wall, and an air supply passage leading into the fire chamber, adjacent to the upper ends of the gas conduits. 3rd. The combination, substantially as set forth, of a boiler composed of an upper and lower drum and a series of connecting water tubes, a combustion chamber in a setting enclosing the heating surfaces of said boiler, a central partition extending upwardly in the combustion chamber from the lower drum of the boiler to a level below the upper drum thereof, valve controlled exit flue passages in the upper and lower portions of the combustion chamber, a lateral fire chamber, a lower firebed therein, a water back bridge wall interposed between the fire chamber and the combustion chamber above an exit throat or passage adjacent to the firebed, circulating tubes connecting the water back bridge wall with the upper and lower drums of the boiler, a tubular gas conduit passing through the water back bridge wall and open at its ends to the exit throat and to the fire chamber respectively, and an air supply passage leading into the fire chamber adjacent to the upper end of the gas conduit. 4th. A water back bridge wall for boiler furnaces having a plane surface on its top for a portion of its width, adapted to make a joint with the wall of a boiler setting, and recessed or shouldered below said plane surface for the remainder of its width, connections for circulating pipes on the plane surface of its top and on its bottom, and one or more tubular gas conduits extending from the shouldered portion of its top to its bottom, substantially as set forth.

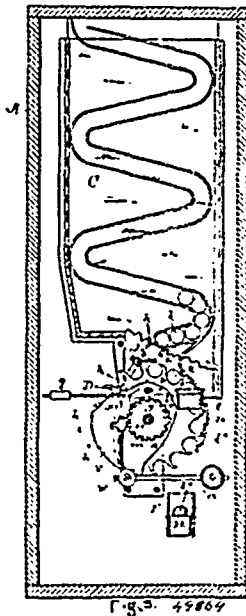
No. 49,863. Farm Truck or Waggon Nled.
(*Patin pour wagons.*)



Justus L. H. Baker, Jamestown, Ohio, U.S.A., 5th September, 1895; 6 years.

Claim.—In a farm truck or waggon of the character set forth the combination of a frame mounted upon an axle and comprising upper beams arranged longitudinally and connected near opposite ends by cross-strips, lower beams attached to the upper beams and converging toward the front and rear and a runner secured in the front portions of the bed frame having braces attached to the converging under beams, the said axle being located about midway of the frame, the said runner having secured thereto a tongue, substantially as and for the purposes specified.

No. 49,864. Coin-Operated Dispensing Machine.
(*Machine à débiter actionnée par une pièce de monnaie.*)

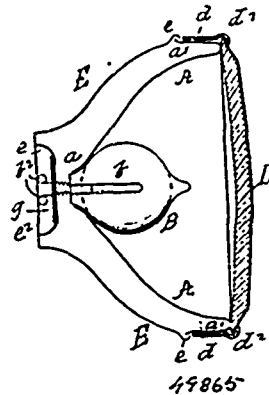


George Franklin Gale, Winthrop, and Arnold Boone Holmes, Newton, both of Massachusetts, U.S.A., 5th September, 1895; 6 years.

Claim.—1st. In a coin operated dispensing machine, a wheel provided with devices for receiving the article to be dispensed in combination with a coin-released locking mechanism for said wheel whereby the wheel may be rotated automatically by the weight of said article and discharge the same, substantially as set forth. 2nd. In a coin-operated dispensing machine, a dispensing wheel provided with a receptacle for receiving the article to be dispensed, a chute for said article adapted to register with said receptacle and a coin-released locking mechanism for said wheel and arranged to operate substantially as specified. 3rd. In a coin-operated dispensing machine, a wheel provided with a receptacle for receiving the article to be dispensed in combination with a chute discharging into said receptacle, the coin-released locking mechanism for said wheel and a chute disposed in position to receive said article when discharged from said wheel. 4th. In a coin-operated dispensing machine, a wheel adapted to receive the article to be dispensed in combination with a chute for delivering the article to said wheel, a stop for said chute, and a locking mechanism for said wheel, said stop and locking mechanism being conjointly actuated by the impact of a coin. 5th. In a machine of the class described a coin chute provided with an opening in its bottom and

a boss or projection on said bottom adjacent the outer end of said opening. 6th. In a coin-operated dispensing machine the chute H, provided with the partitions 30, and boss 35, substantially as and for the purpose set forth. 7th. In a coin-operated dispensing machine the combination with a coin-chute, of a rotary disc provided with pockets for receiving a coin from said chute, said pockets being adapted to be consecutively displayed through the casing of the machine. 8th. In a coin-operated dispensing machine the combination with a coin-chute of a coin-released rotary dispensing mechanism, a disc having coin pockets and rotating conjointly with said mechanism, a case opening for consecutively exposing said pockets substantially as described. 9th. In a coin-operated dispensing machine the combination with the coin chute and case having the glazed opening 76, of the rotary disc 75, provided with coin pockets consecutively displayed in said opening and devices for conducting a coin from the chute to said pockets, substantially as described. 10th. In a coin-operated dispensing machine the combination with case and a coin-operated dispensing mechanism of the vertically arranged serpentine supply chute for delivering the articles to said mechanism. 11th. In a coin-operated dispensing machine the gravity dispensing wheel D, having peripheral pockets h, for receiving the articles to be dispensed from a supply chute in combination with a coin-released locking mechanism for said wheel, substantially as set forth. 12th. In a coin operated dispensing machine the wheel D, and chute C, discharging into said wheel in combination with the coin-actuated ratchet engaging a ratchet wheel on the shaft of said wheel D, and a stop for said chute actuated by the rotation of said shaft, substantially as set forth.

No. 49,865. Reflector for Lamps. (*Réfecteur de lampes.*)



Ernest Tilmann and Charles K. Lexow, both of New York, State of New York, U.S.A., 5th September, 1895; 6 years.

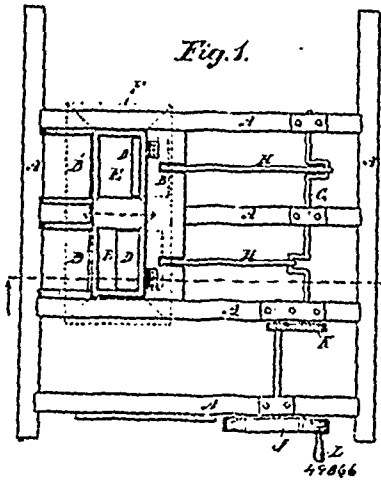
Claim.—1st. The combination, with a reflector formed of a parabolic main-portion and a parabolic socket-portion at the centre of the main-portion, of a source of light located within the paraboloid, so that the foci thereof are located within the source of light, the rays from each focus extending in parallel lines from the corresponding paraboloid, substantially as set forth. 2nd. The combination, with a reflector formed of a parabolic main-portion and a parabolic socket-portion at the centre of the main-portion, of an incandescent electric lamp so situated in the socket-portion that the foci of both parabolas are located within the bulb of said lamp, and that the rays issuing from each focus are reflected in parallel lines from the corresponding paraboloid, substantially as set forth. 3rd. The combination, with a reflector formed of a parabolic main-portion, and a parabolic socket-portion at the centre of the same, of a lamp located in said socket-portion, a glass-cover, an exterior sheet metal casing provided with a contracted rear-portion, and means located at the rear-portion of the casing for supporting said lamp in position in the socket-portion, substantially as set forth. 4th. The combination of a reflector formed of a parabolic main portion, a lamp located at the centre of said parabolic main-portion, a glass-cover, an exterior sheet metal casing provided with a contracted rear-portion, a non-metallic disc resting against the rear-portion of the casing, conducting-wires passing through said disc, and means for holding the lamp, disc and conducting wires in position, substantially as set forth. 5th. A reflector for cycle and other lamps, formed of parabolic shape, the vertex and focus of which are located in a plane at right angles to the axis of the reflector in front of the light-giving body, substantially as set forth.

No. 49,866. Card Cutter. (*Machine à couper le lait caillé.*)

James B. Harris, Antwerp, assignee of Dwight A. Goodrich, South Champlain, both in New York, U.S.A., 5th September, 1895; 6 years.

Claim.—In a card cutter, the combination with the skeleton floor A, of two parallel tubes B, B', each having intersecting knives or

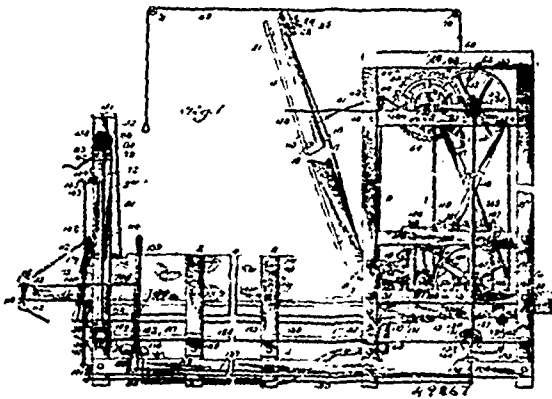
crossed wires C, at one end, a plunger D, in the other end and a vertical feed E, intermediately of said knives and plunger, a



hopper F, common to both throats, a two-throw crank shaft G, and rods H, connecting the cranks of said shaft to the respective plungers, and a driving-wheel J, or crank handle L, or other suitable gear K, to rotate said shaft, to effect cutting of the curd, as set forth.

No. 49,867. Machine for Stuffing Mattresses.

(Machine pour bourrer les matelas.)



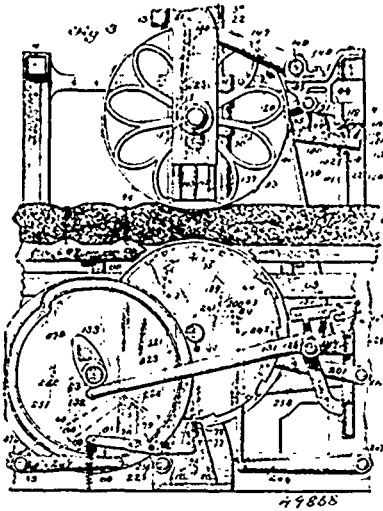
Edwin Napier Stephenson, Waco, Texas, and David Hunt, Boston, Massachusetts, U.S.A., 5th September, 1895; 6 years.

Claim.—1st. In a machine for stuffing mattresses, the combination with a press-box, of a hinged top, a rope and rope-drum to raise and lower the same, a clutch on the shaft of the rope-drum, a plunger movable in the press-box, means for operating said plunger by power derived from the shaft of the rope-drum, two independent belt-shifters acting upon a straight and a crossed belt which connect pulleys on said drum-shaft with similar pulleys on a shaft between it and the plunger-bar devices for operating said belt shifters, and a lever and cam-lug, the former actuated by an automatically adjusted part of the machine, and the latter by a cam-lug on the plunger-bar, substantially as described. 2nd. In a machine for stuffing mattresses, the combination with a press-box, of a hinged top, means for lowering and raising the same, a presser-bar vertically adjustable over the end of the lowered top, threaded shafts to effect said adjustment, a power-shaft, a shaft having pulleys belted thereto by a straight and a crossed belt, two separate belt shifters to shift either belt from its loose pulley to a central tight pulley, a plunger movable in the press-box, a lever operated by a cam-finger on the presser-bar to shift one belt to the tight pulley, and cam lugs on the bar of the plunger to return said belt to its loose pulley and to throw the other belt upon the tight pulley, substantially as described. 3rd. In a machine for stuffing mattresses, the combination with a press-box, of a hinged cover, raising and lowering mechanism, a power-

shaft operating the same, a plunger and plunger-bar, the latter having a rack-bar thereon, a shaft carrying a gear meshing with said rack, a shaft belted to the power-shaft by a straight and a crossed belt, independent belt-shifters to shift said belts from loose pulleys to a tight pulley, a presser-bar, a lever operated by a cam-lug on said presser-bar to throw one of the belts on the tight pulley, a gate normally closing the mouth of the press-box, a weighted lever connected to said gate, an angular cam to operate the latter lever, a cam-rib on the plunger-bar to operate the angular cam, and cam-lugs to operate the belt-shifters and reverse the movement of the plunger, substantially as described. 4th. In a machine for stuffing mattresses, the combination with a press-box, of a hinged top, a drum loose on a power-shaft to raise and lower said top, a clutch to lock said drum to the shaft, and a lever operated by the hinged top to release said clutch when the top is raised to its highest point, substantially as described. 5th. In a machine for stuffing mattresses, the combination with a press-box, of a plunger movable therein, mechanism for operating said plunger, a rising and falling gate to close the mouth of the press-box, means for operating said gate, a plunger-bar having a lateral cam-rib terminating short of its forward end, and an angular cam and a lever operated thereby, said cam having an arm lying in the path of the rib on the plunger-bar, substantially as described. 6th. In a machine for stuffing mattresses, the combination with a press-box, of a hinged top, a presser-bar vertically movable over the end of said top when lowered, mechanism for raising and lowering said presser-bar, a shaft operating said mechanism, a shaft belted to the power-shaft by a straight and a crossed belt, a clutch on the shaft operating the presser-bar, a belt-shifter controlling one of said belts, a plunger movable in the press-box and provided with means for operating said belt-shifter, and a lever operated by a cam-finger on the presser-bar to actuate the clutch on the presser-bar-shaft, substantially as described. 7th. In a machine for stuffing mattresses, the combination with a press-box, of a plunger movable therein and having a plunger-bar provided with a lateral cam-rib terminating short at its forward end, a gate normally closing the mouth of the press-box, a weighted lever partly balancing the gate, a lever connected to said weighted lever, and an angular cam having one arm lying in the path of the lateral cam-rib on the plunger-bar and the other arm acting upon the end of the lever which operates the weighted lever; substantially as described. 8th. In a mattress-stuffing machine, the combination with a press-box, of a hinged cover, a plunger and plunger-bar, a gate normally closing the mouth of the box and opened by a weighted lever, a lever connected to said weighted lever to open the gate, and an angular cam operating said lever by a lateral cam-rib on the plunger-bar, the forward end of said rib being located in rear of the forward end of the plunger-bar, whereby the latter may compress the stuffing material in the press-box before the gate is opened, substantially as described. 9th. In a mattress-stuffing machine, the combination with a press-box, of a hinged cover, a presser-bar to fasten its free end, threaded shafts to raise and lower said presser-bar, a series of shafts geared to each other to operate the threaded shafts, one of the series being provided with a bevelled gear, two bevelled gears permanently meshed therewith, both being loose on another shaft, a clutch splined on the latter shaft between the loose bevel-gears, a clutch-operating lever, and disengaging lever fulcrumed upon the front end of the machine in the path of the lug on the end of the presser-bar, substantially as described. 10th. In a mattress-stuffing machine, the combination with a press-box, of a gate normally closed by its own gravity at the mouth of the box, a plunger movable in said box the plunger bar having a cam-rib on one side, and levers connected to the gate and adapted to be operated to lift said gate by means of the cam-rib, which makes its operative engagement after the plunger has advanced far enough in the box to suitably compress and shape the stuffing material, substantially as described. 11th. In a mattress-stuffing machine, the combination with a press-box, of a gate normally closing the mouth of said box by its own gravity, a plunger movable in the box the plunger-bar being provided with a cam-rib extending from the rearward end of said bar to a point between the centre and forward end of the same, gate-levers adapted to lift the gate and open the mouth of the press-box, and a series of levers connected to said gate-levers and to each other, the last lever of the series being so arranged as to be operated by the cam rib to lift the gate after the plunger has effected a suitable compression of the stuffing material, substantially as described. 12th. In a mattress-stuffing machine, the combination with a press-box, of a gate movable vertically and normally closing the front end of the press-box, a plunger movable in said box, a pair of gate-levers connected to the ends of the gate and to one arm of a bell-crank lever, a second lever connected at one end to the other arm of said bell-crank lever, and an angular cam adapted to operate said second lever and to be itself operated by a cam-rib on the plunger-bar extending from its rearward end to a point between its centre and forward end, whereby the gate remains closed until the forward movement of the plunger shall have compressed and shaped the stuffing material in the press-box, substantially as described. 13th. In a mattress-stuffing machine, the combination with a press-box, of a hinged top or cover, a presser-bar, screw-shafts to raise and lower the same, a driving shaft geared to the power-shaft, a clutch on one of the shafts, and a lever connected to said clutch, the end of said lever lying in the path of a lug on one end of the presser-bar to arrest the downward movement of the latter, substantially as described.

No. 49,868. Machine for Tufting Mattresses.

(Machine pour bourrer les matelas.)



Edwin Napier Stephenson, Waco, Texas, U.S.A., 5th September, 1895; 6 years.

Claim.—1st. In a mattress-tufting machine, the combination with an upper and a lower series of feed-wheels and with gearing driving the same in unison, of two series of tuft-carrying devices, and means for vibrating the same toward and from the feed-wheels, the latter being provided, at suitable intervals, with tuft retaining devices, substantially as described. 2nd. The combination with an upper and a lower series of feed-wheels each provided upon its periphery with tuft-retaining devices, arranged at intervals, of an upper and lower series of tuft carrying devices, tuft-feeding devices automatically co-operating therewith, and mechanism for intermittently vibrating the tuft-carrying devices toward and from said feed-wheels, substantially as described. 3rd. The combination with an upper and a lower series of feed-wheels, each provided upon its periphery with tuft-retaining devices arranged at suitable intervals, of an upper and lower series of tuft-carrying devices each consisting of a barrel adapted to contain a number of tufts, automatically operated feed-bars for advancing the tufts in said barrels, and mechanism for vibrating the two series of tuft-carrying devices toward and from said feed-wheels at proper intervals, substantially as described. 4th. The combination with an upper and a lower series of feed-wheels, each having tuft-retaining devices arranged at suitable intervals upon its periphery, of an upper and lower series of tuft-carrying devices each consisting of a barrel adapted to contain a number of tufts, a series of toothed feed-bars arranged in said barrels and meshing with said toothed feed-bars, a series of arms loosely mounted on the pinion shafts, pawls mounted on said arms and meshing with ratchets on said shafts, and mechanism for vibrating the tuft-carrying devices toward and from the feed-wheels at intervals whereby the pawl-carrying arms are vibrated, substantially as described. 5th. The combination with an upper and a lower series of feed-wheels, each provided on its periphery with tuft retaining devices arranged at intervals, of an upper and lower series of tuft carrying devices each comprising a barrel and an automatically operated feed-bar, an upper and a lower rock-shaft upon which the two series of tuft-carrying devices are mounted, means for intermittently operating one of said rock-shafts to vibrate its tuft carrying devices toward and from one series of feed-wheels, and a connecting-rod by which simultaneous action is communicated from one rock-shaft to the other, substantially as described. 6th. The combination with a feed-wheel provided at suitable intervals on its periphery with tuft-retaining spurs, or points, of a tuft-feeding device, consisting of a barrel adapted to contain a number of tufts, a toothed feed-bar lying in said barrel, a pinion engaging said bar and carried by a shaft journaled on the barrel, a ratchet fixed on said shaft, an arm loosely mounted thereon and carrying a pawl engaging the ratchet, a screw-threaded spindle pivoted on a fixed support and passing through a sleeve on the end of said arm, said spindle being provided with stop-nuts above and below said sleeve, a rock-shaft on which is mounted the barrel-supporting arms, and means for operating said rock-shaft at intervals to vibrate the tuft-feeding device toward and from the feed-wheel, substantially as described. 7th. The combination with an upper and a lower series of feed-wheels, each provided at intervals upon its periphery with tuft-retaining spurs, or points, of an upper and lower series of tuft-carrying devices, automatic tuft-feeding devices, an upper and a lower rock-shaft upon the two series of tuft-carrying devices are rigidly mounted, an actuating lever-arm rigid upon one of said rock-shafts,

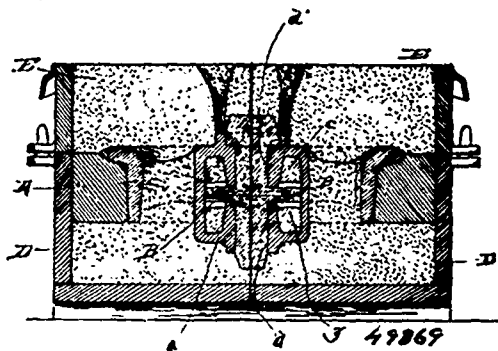
and a connecting-rod uniting arms upon the upper and lower rock-shafts said arms extending in opposite directions from the shafts, substantially as described. 8th. The combination with an upper and a lower series of feed-wheels, between which the mattress is advanced and compressed, of a vertically adjustable support for the shaft carrying the upper series, spur-gears mounted on both upper and lower shafts, a gear mounted on a fixed axis and meshing with the spur-gear on the shaft carrying the lower series of feed-wheels, and an intermediate gear meshing with the gear on said fixed axis and with the spur-gear on the shaft carrying the upper series of feed-wheels, said intermediate gear being mounted on an arm which is loose on said fixed axis, substantially as described. 9th. The combination with an upper and a lower series of feed-wheels carried by a vertically adjustable and a non-adjustable shaft respectively, of spur-gears mounted on said shafts, a gear mounted on a fixed axis lying in the same vertical line with said upper and lower shafts, an intermediate gear meshing with both the gear on said fixed axis and the spur gear on the adjustable upper shaft, and carrier plate loosely mounted on the fixed axis and carrying a bearing for the intermediate gear, said carrier-plate being provided with an arm having a slot curved on a line struck from the fixed axis, as a center, and receiving a set screw which is tapped into the machine frame, substantially as described. 10th. The combination with an upper and a lower series of feed-wheels and with mechanism for imparting intermittent rotary motion thereto, of a series of tufting needles, a series of needle-gates carrying said tufting needles and movable in brackets which lie adjacent to the feed wheels of the upper series, and mechanism for reciprocating said needle-gates in unison, substantially as described. 11th. The combination with an upper and a lower series of feed-wheels and with mechanism for imparting intermittent rotary motion thereto, of a series of tufting needles, a series of needle-gates carrying said needles and movable in brackets which lie adjacent to the feed-wheels of the upper series, means for reciprocating the needle-gates in unison, and a series of knotters to knot the tufting-time on the under side of the mattress, substantially as described. 12th. The combination with an upper and a lower series of feed wheels, each provided, at intervals, upon its periphery, with tuft-retaining devices, of a series of tufting needles carried by needle-gates which move vertically in brackets arranged adjacent to the feed-wheels of the upper series, means for reciprocating said needle-gates at intervals, and mechanism for giving, between two successive reciprocations of said needle-gates, a limited lateral movement to the support for the mattress and to both series of feed wheels, between which the mattress is compressed, substantially as described. 13th. The combination with an upper and with a lower series of feed-wheels, each having at intervals upon its periphery, suitable tuft retaining devices, of an upper and lower series of tuft carrying devices, rock-shafts on which said tuft carrying devices are mounted, means for operating said rock shafts at intervals, to cause both series of tuft-carrying devices to approach and recede from the feed wheel in unison, series of tufting needles and needle-gates movable in brackets which lie adjacent to the feed wheels of the upper series, means for reciprocating said needle-gates at intervals, and mechanism for moving the mattress support and both series of feed wheels laterally, between two successive reciprocations of the tufting-needles, substantially as described. 14th. The combination with an upper and a lower series of feed wheels, each provided with tuft retaining devices arranged at intervals on the periphery, of an upper and lower series of tuft-carrying devices, means for vibrating the same, at intervals, toward and from the feed-wheels, a series of tufting-needles carried by needle-gates which move in brackets lying adjacent to the feed-wheels of the upper series, means for reciprocating said needle-gates at intervals, a series of knotters lying beneath the peripheries of the feed wheels of the lower series, means for operating said knotters, and mechanism for giving a limited lateral movement to the mattress support and to both series of feed-wheels, simultaneously, between two successive reciprocations of the needle-gates, substantially as described. 15th. The combination with an upper and lower series of feed wheels, each provided with tuft-retaining devices arranged at intervals on its periphery, of longitudinally movable shafts carrying the upper and lower series of feed-wheels, and mechanism for imparting a limited longitudinal movement to both shafts simultaneously, at suitable intervals, substantially as described. 16th. The combination with an upper and a lower series of feed-wheels mounted on shafts which are movable longitudinally, of mechanism for imparting a limited, longitudinal movement to said shafts simultaneously, substantially as described. 17th. The combination with an upper and a lower series of feed wheels mounted on shafts which are movable longitudinally, of a rock shaft having rigid arms linked to both of the feed-wheel shafts, and means for operating said rock-shaft at intervals, substantially as described. 18th. The combination with an upper and a lower series of feed-wheels mounted on shafts which are longitudinally movable, of a vertical rock shaft having rigid arms which extend immediately above and beneath each of the feed wheel shafts, to which said arms are linked, said rock shaft being also provided with a lever-arm, and means for operating said lever arm at suitable intervals to give a limited longitudinal movement to both the feed-wheel shafts simultaneously, substantially as described. 19th. The combination with an upper and a lower series of feed-wheels mounted on shafts which are longitudinally movable, each feed-wheel being pro-

vided with tuft-retaining devices arranged at intervals on its periphery, of an upper and lower series of automatic tuft-carrying devices, a series of tufting-needles carried by a series of needle-gates which move in brackets adjacent to the feed-wheels of the upper series, a series of operating levers linked to the needle-gates, a rock-shaft carrying said levers, means for operating said rock-shaft, a rock-shaft having arms linked to the shafts of the feed-wheels, means for operating said rock-shaft at intervals, and a series of knotters arranged within the peripheries of the feed-wheels of the lower series, substantially as described. 20th. The combination, with an upper and a lower series of feed-wheels mounted on longitudinally movable shafts, each feed-wheel being provided at intervals upon its periphery with tuft-retaining devices, of an upper and lower series of tuft-carrying devices each consisting of a barrel adapted to contain a number of tufts, a series of automatically operated feed-bars arranged in said barrels, an upper and lower rock-shaft carrying the two series of tuft-carrying devices, said rock-shafts having oppositely extending arms connected by a rod, a cam-actuated lever-arm mounted on one of said shafts, a series of tufting-needles, a series of needle-gates movable in brackets arranged adjacent to the feed-wheels of the upper series, a series of lever arms linked to the gates, a rock-shaft carrying said lever-arms, a rock-shaft having rigid arms which are linked to both the feed-wheel shafts, means for operating both of said rock-shafts at different times, and a series of knotters arranged within the peripheries of the feed-wheels of the lower series, substantially as described. 21st. The combination, with an upper and lower set of feed-wheels for advancing the mattress intermittently, of a series of needles, a series of intermittently rotating knotter-heads having looper-arms, an upper series of twine clamping devices upon the shells inclosing the knotter-heads, a lower series of twine clamping devices and means for automatically operating said parts in relation to each other, substantially as described. 22nd. The combination, with automatic means for advancing the mattress, of a series of tufting-needles, an upper series of twine-clamping devices, a series of knotter-heads having looper-arms, vertically movable stems arranged in and adapted to rise at intervals above said knotter-heads, a pair of twine-clamping jaws mounted on an annulus surrounding each knotter-head, means for swivelling said annuli at intervals and for operating the jaws, mechanism for rotating the knotter-heads, and a series of twine-clamping and knot-drawing devices arranged below the knotter-heads, substantially as described. 23rd. The combination with a series of tufting-needles of a corresponding series of knotter-heads arranged beneath the mattress, each head comprising a looper-arm and having a metallic section capable of a limited rotary movement between an upper and lower section, the upper section of the looper-arm projecting beyond the others and having a hooked end with a hanging barb, a spring normally pressing the end of the middle section against the edge of the barb, stems adapted to rise periodically above the knotter-heads, mechanism for revolving the latter, means for catching and holding the cut ends of the twine as the needles descend the first time, and a series of twine-clamping and knot-drawing devices to catch the twine-loops as the needles descend the second time, substantially as described. 24th. The combination with a series of tufting needles of an upper and lower series of feed-wheels, a series of needles and needle-gates arranged within the peripheries of the upper series of feed-wheels, means for moving the shafts of both series longitudinally between two successive strokes of the needles, a series of knotter-heads having looper-arms arranged within the peripheries of the lower series of feed wheels, means for rotating said knotter-heads at suitable intervals, a series of vertically movable stems lying in said knotter-heads, means for projecting the same upward, a series of pairs of jaws mounted on annuli surrounding the knotter-heads, means for giving rotary movement to said annuli, cutters mounted upon the movable jaws, means for operating the jaws and cutters, and a series of twine-clamping and knot-drawing devices arranged below the knotter heads, substantially as described. 25th. In a mattress-tufting machine, a revoluble knotter-head having a stem, and a looper arm, the head and looper-arm being formed in three sections, the upper and lower thereof rigid with the stem and the middle section capable of a limited rotary movement between them, the upper section of the looper-arm being prolonged beyond the others and provided with a hanging barb, against the edge of which the end of the middle section is held by a spring, substantially as described. 26th. In a mattress-tufting machine, a revoluble knotter-head having a looper-arm, the whole being formed in three sections, the middle section capable of a limited rotary movement, the upper section of the looper-arm extending beyond the other sections and being provided at its end with a hook having a hanging barb, the bevelled extremity of the lower section lying near the point of said barb, and a spring normally pressing the end of the middle section against the edge of said barb, substantially as described. 27th. In a mattress-tufting machine, a knotter-head having a looper-arm, the whole formed in three sections, the middle section being capable of a limited rotary movement, a spring by which the end of the middle section of the looper-arm is normally pressed against the edge of a hanging barb on the prolonged end of the upper section, a circular shell in which said knotter-head revolves, an inwardly pressed stop adapted to engage a lip on the outer face of the middle section, which overhangs a release-cam on the lower section, an annulus mounted on an outer shoulder on said shell and having a rigid jaw, a movable jaw having a curved lever, a cutter mounted on the same axis and

having a similarly curved lever the end of which has a lug hanging against the outer face of the jaw lever and connected to the end of the latter lever by a spring, a frame inclosing a curved slot adapted to receive a friction-roll on a stud hanging from the lug on the cutter-lever, a bracket supporting said frame, means for moving said bracket toward and from the circular shell, and mechanism for swivelling the annulus and revolving the knotter-head, substantially as described. 28th. In a mattress-tufting machine, a device for catching and holding the twine and drawing the knot, consisting of a jaw-plate pivoted upon a vertically movable support, a jaw pivoted to the upper, curved end of said jaw-plate, near its point, a jaw operating plate mounted on the same pivot with the jaw-plate the latter having a straight slot in the portion below its pivot, and the former having a straight-edged continuation below and upon one side of the pivot, the lower extremity being bevelled off, an angular cutter-blade pivoted on the rear face of the jaw-plate, behind the jaw, a cutter-operating plate pivoted on the jaw-plate and having an angular lower end, a lever having a friction-roll lying in the slot in the lower part of the jaw-plate and adapted to engage the edges of the cutter and jaw-operating plates, and means for raising and lowering the movable support and for operating the lever carrying the friction-roll, substantially as described. 29th. In a machine for tufting mattresses, a mattress support, a series of tufting-needles, and means for shifting said support automatically between two successive strokes of the needles, to carry the twine over the tufts, substantially as described. 30th. In a machine for tufting mattresses the combination with a movable support for the mattress, of an upper and lower series of wheels between which said mattress lies and by which it is compressed and the tufts held against its opposite surface, a series of needles, and means for moving both series of wheels and the mattress support to one side in unison between the first and second strokes of the needles, substantially as described.

No. 49,869. Means for Oiling Loose Wheels, etc.

(*Moyen d'huiler les roues, etc.*)



Meredith Leitch, Covington, Virginia, U.S.A., 5th September 1895; 6 years.

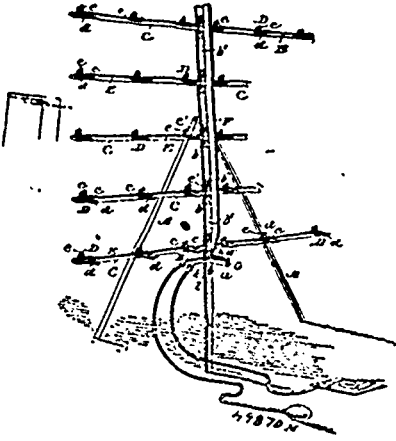
Claim.—1st. The combination, with a stationary axle or shaft, of a revolving wheel or loose pulley having a chambered oil or lubricant holding hub with annularly spaced bearing portions and one or more non-absorbent revolving oil or lubricant conveying rigid rings arranged within the hub of the wheel or pulley and between said bearing portions and adapted to come in contact with the hub itself and be revolved by frictional contact with the hub, substantially as and for the purpose described. 2nd. A revolving cast metal wheel or loose pulley in one piece and having a hub formed with an oil or lubricant holding chamber, internal circular bearing portions, and spaced confining arms, in combination with one or more loose revolving oil or lubricant conveying rigid rings, located and confined between said arms, and arranged to come in contact with the hub itself and be revolved thereby, substantially as described. 3rd. A loose pulley or wheel for stationary axles or shafts, comprising in its construction a hub formed with an oil or lubricant holding chamber having internal circular bearing portions, and spaced confining arms, and one or more loose revolving oil or lubricant conveying rigid rings located and confined between the arms so that when the pulley or wheel is in use on a fixed axle or shaft, the ring or rings will come in contact with the hub itself and be revolved thereby, substantially as described.

No. 49,870. Flash Light Mechanism for Photographic Apparatus. (*Mécanisme de feu à éclat pour appareil photographique.*)

Marion Warner Newcomb, Salt Lake, Utah, U.S.A., 5th September, 1895; 6 years.

Claim.—1st. A flash light mechanism comprising a support, flashing devices upon said support, said flashing devices comprising a member for supporting the flashing material and an igniting member, one of said members being movable to co-operate with the other to produce a flash, a connection between said movable members, a pro

jection upon said support, and a plate hinged upon said projection and above the same, said plate being adapted to support the connec-

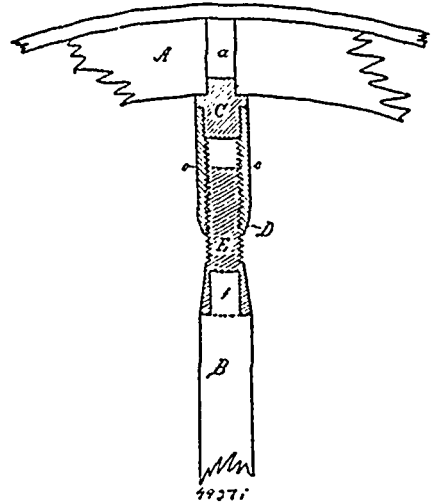


tion between the movable members, substantially as described. 2nd. A flash light mechanism comprising a support, flashing devices upon said support, said flashing devices comprising a member for supporting the flashing material and an igniting member, one of said members being movable to co-operate with the other to produce a flash, a bar connected with said movable members, a shoulder upon the lower end of said bar, a projection from the support below and in the path of said shoulder, and a plate hinged to said projection to swing above the same, said plate being adapted to support the end of the bar, substantially as described. 3rd. A flash light mechanism comprising a support, flashing devices upon said support, means for operating said flashing devices, a cylinder, a piston head in said cylinder, connection between said piston head and the operating means, a camera, shutter-operating mechanism upon said camera, a passage from said cylinder to said shutter operating mechanism, and means for supplying a fluid under pressure against said piston head, substantially as described. 4th. A flash light mechanism comprising a support, a supporting plate, bolts passing through said support and the supporting plate, angle plates upon said supporting plate, arms detachably fitting in said angle plates, angle plates fitting over said bolts and bearing upon the arms thus serving to hold them in place, nuts upon said bolts bearing upon said last mentioned angle plates, and flashing devices upon said arms, substantially as described. 5th. A flash light mechanism comprising a supporting plate, arms removably held upon said plate, flashing devices upon said arms, said flashing devices comprising a member for supporting the flashing material and an igniting member, rods pivoted upon said arms and having attached thereto one of the members of the flashing devices, said rods having loops formed thereon, a bar, and spring clamps upon said bar connecting the same with said loops, substantially as described. 6th. A flash light mechanism comprising a support, a central supporting plate thereon, arms extending from said plate, receptacles for the flashing material upon said arms, heating devices also upon said arms, rods pivoted upon said arms, said rods having loops therein at the points at which they cross the central supporting plate, wires upon said rods so placed that they may be swung from a position in which they are subjected to the influence of the heating devices to a position upon the receptacles for the flashing material, a bar connected with said loops, a shoulder upon the bottom of said bar, a projection from the central support below said bar in the path of said shoulder, a plate hinged upon and above said projection, said plate being adapted to support said bar in a position to hold the wires out of operative connection with the flashing material, a cylinder, a piston head in said cylinder, connection between said piston head and the hinged plate, and means for forcing a fluid under pressure against the piston head, substantially as described.

No. 49,871. Machine for Repairing Wagon Spokes.
(Machine pour réparer les rais de wagon.)

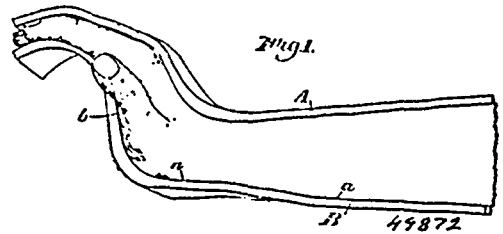
George H. Fraser, Upper Musquodoboit, Nova Scotia, Canada, 5th September, 1895; 6 years.

Claim.—The combination of the socket-screw E, with the socket-



nut D, and the cap C, substantially as and for the purpose hereinbefore described.

No. 49,872. Flexed Splint. (Eclisse flexible.)



William Dickey Kearns, Pittsburg, Pennsylvania, U. S. A., 5th September, 1895; 6 years.

Claim.—1st. A flexed palmar splint for treating fracture of the forearm or wrist, having a longitudinal brachial surface and a metacarpal palmar surface at a somewhat obtuse angle to each other, the metacarpal portion being retroflexed or turned upwards at the wrist, and also having a slight relative outward inclination in a side-wise direction, substantially as described. 2nd. A flexed palmar splint for treating fracture of the forearm or wrist, having a longitudinal surface, and a palmar metacarpal surface flexed relatively to each other at an angle of from about 100 to 105 degrees, the brachial portion having a slight transverse upward projection extending from the wrist just beyond the point of flexure so as to form a cavity at the base of the palmar metacarpal portion for the reception of the ball of the thumb of the patient, substantially as described. 3rd. A pair of flexed splints for treatment of the forearm or wrist, consisting of a palmar splint and a dorsal splint, the palmar splint having a palmar metacarpal portion slightly inclined outwardly relatively to the brachial portion and abruptly flexed relatively to the brachial portion at the wrist, at an angle of about 100 degrees in an upward direction, and the brachial portion having just beyond such point of flexure a slight projection on its inner surface extending the whole width of the splint, and the dorsal splint being so shaped as to form for the back of the hand, wrist and forearm a counterpart of the palmar splint so as to fit the back of the hand and forearm when they are resting on the palmar splint, substantially as described.

No. 49,873. Water Gauge. (Robinet-jauge.)

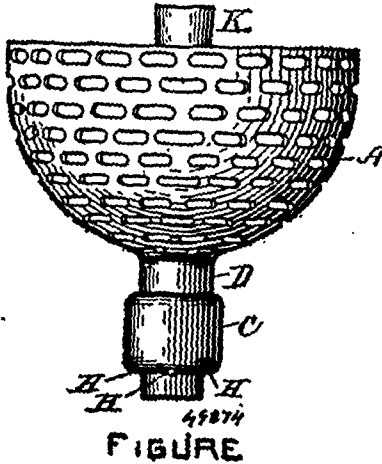


Henry Brockton, St. Louis, Missouri, U.S.A., 5th September, 1895; 6 years.

Claim.—A water gauge composed of a suitable opaque hollow frame pipe connections at either end and leading to the boiler, continuous

flanges around the front and rear faces of the frame, sunken continuous grooves adjacent to the flanges, a glass of suitable thickness fitted within each of said grooves, plates similar in form to said flanges and located on opposite sides of the frame, continuous grooves in said plates corresponding to the grooves of the frame and also embracing the said glass, registering openings in the frame and plates, suitable packing interposed on either side of the glass within the grooves, and suitable bolts or screws passing from opposite sides of the plates into the frame, substantially as set forth.

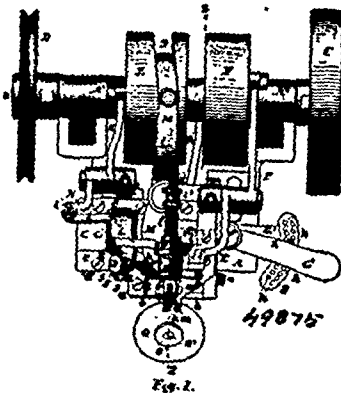
No. 49,874. Torch. (Torch.)



John Graham, Boston, Massachusetts, U.S.A., 5th September, 1895; 6 years.

Claim.—In a torch, a perforated receptacle adapted to hold an absorbent material, an air supply tube penetrating the said absorbent material and adapted to supply air to the same, and an auxiliary air tube adapted to supply air to the central part of the flame, substantially as and for the purpose set forth.

No. 49,875. Stitch Separating and Indenting Machine. (Machine à séparer les mailles et denteler.)

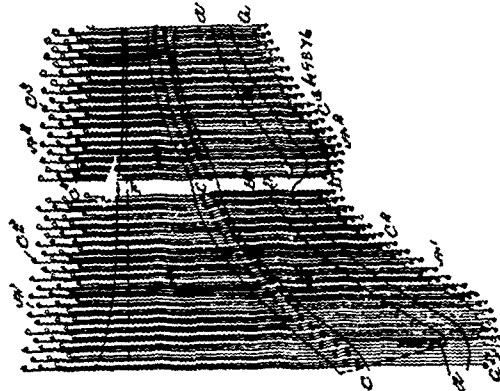


John Benjamin Hadaway, Brockton, Massachusetts, U.S.A., 5th September, 1895; 6 years.

Claim.—1st. In a machine for separating or picking up the stitches on boot and shoe soles, the combination of a work support, a vertically and laterally movable separator for locating the intervals between the stitches whether of uniform or varying lengths, means for imparting to said tool a plurality of lateral movements to locate the interval between the stitches, and another lateral movement to feed the work, and means for frictionally holding said separator in the position to which it is vibrated in either direction till moved by a resistance applied to its working end. 2nd. In a machine for separating the stitches on boot and shoe soles the combination of a work support, a vertically and laterally movable separator for locating the intervals between the stitches whether of uniform or varying lengths, means for imparting to said tool a plurality of lateral vibratory movements to locate the intervals between the stitches, and another lateral movement to feed the work, means for frictionally holding said separator in the position to which it is vibrated in either direction till moved from said position by a resistance applied to its working end, and means for forcing said separator between the

stitches when the point of said separator has located itself between two stitches. 3rd. In a machine for separating the stitches on a boot or shoe sole, the combination of a work support, a horizontally reciprocating slide, a separating tool carried by said slide and movable vertically relative thereto, a cylinder cam provided with the path *g* having the throw and stand-stills as set forth, a cam lever operated by said path and connected to said slide, whereby said separator is moved toward the right a distance equal to the length of the standard stitch, then towards the left a distance equal to one-third of the length of the said standard stitch, then towards the right a distance equal to two-thirds the length of the standard stitch and then towards the left a distance equal to one-third the length of said standard stitch to locate the interval between the stitches, and then towards the left a distance equal to the length of the standard stitch to feed the work, means for frictionally holding said separator in the position to which it is vibrated in either direction till moved from said position by a resistance applied to its working end, means for depressing said separator to cause it to rest lightly upon the work, after the first movement thereof towards the right, and means for forcing said separator between the stitch, when its point has been located between two stitches, and just preceding the movement towards the left for feeding the work. 4th. In a machine for separating the stitches on boot and shoe soles, the combination of the feed slide, the tool stock carrying lever provided with truck *j*, the tool stock provided with the arm *O* and the truck *j*², the separating tool *k*, a spring for depressing the tool stock, a lever connected at one end to said slide, the cylinder cam path *g* having the throws and rests as set forth and arranged to act upon and vibrate said lever, a lever and cam for raising said tool stock and tool, the lever *P* provided with the plate *f* on its front end with the cam-shaped lug *j*², constructed and arranged to act upon the trucks *j* and *j*², as set forth, and a cam for vibrating said lever *P*. 5th. In a machine for separating the stitches on boot and shoe soles, the combination of a horizontally reciprocating slide, a vibrating lever carried by said slide, a tool stock pivoted to said lever, means for frictionally holding said separator in the position to which it is vibrated in either direction till moved from said position by a resistance applied to its working end, a separating tool for locating the intervals between the stitches, whether of uniform or varying lengths, carried by said stock. 6th. In a machine for separating the stitches on boot and shoe soles, the combination of a horizontally reciprocating slide, the lever *L* pivoted thereto and provided with the slotted ear *i*², the tool stock *O* pivoted thereto and carrying the separating tool *k*, and provided with the friction pad or upward extension *k*¹, the rod *k*² set in said pad, and extending through the slotted ear *i*², of the lever *L*, the frictional washer *L*¹, the spring *l*², and the thumb nut *l*². 7th. In a machine for separating the stitches on boot and shoe soles, the combination of a revoluble main lower work support having a frusto-conical upper surface provided with a plurality of annular grooves formed in said conical upper surface near its peripheral edge, said support being mounted upon an inclined axis, a fixed upper work support to bear upon the welt of the boot or shoe, and a gauge to bear against the sole edge. 8th. In a machine for separating the stitches on boot and shoe soles, the combination of a main lower work support as *A*, having a frusto-conical upper surface and mounted upon an inclined axis, and an auxiliary support as *o*¹ revolubly mounted upon a bearing in axial line with the main support and adjustable to and from said main support. 9th. The combination in a stitching separating machine of a vertically movable bar having an outwardly and downwardly projecting arm or ear, a tubular stud set in said inclined ear, a frusto-conical disc mounted upon and revoluble about said tubular stud, a threaded bolt fitted to and adjustable endwise in said tubular stud, a screw stud set in the upper end of said bolt, and an auxiliary supporting disc mounted upon and revoluble about said screw stud.

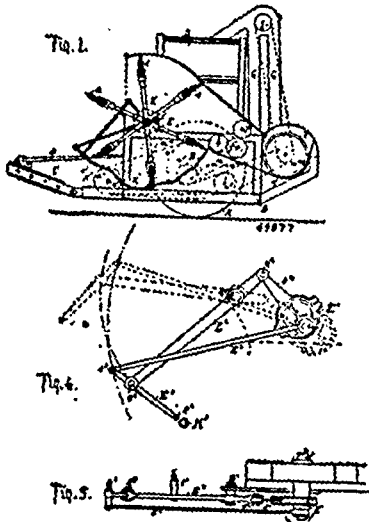
No. 49,876. Piano Harmonic Scale. (Gamme harmonique pour pianos.)



Julius Ebel, Jamestown, New York, U.S.A., 5th September, 1895; 6 years.

Claim.—1st. In piano-fortes, the bridge secured to the sounding board and having a long rear extension to receive an extra agraffe or cut-off, substantially as shown and for the purpose set forth. 2nd. In piano-fortes, the bridge secured to the sounding board of the piano, having usual bearing on the sounding and adapted to receive the strings in the usual way at one end, said bridge having a long rear extension above the sounding board to receive an extra agraffe or cut-off for the strings, substantially as shown and for the purpose set forth. 3rd. In piano-fortes, a harmonic string scale consisting of the strings in combination with the sounding board bridge, having a long rear extension provided with the usual string bearings and additional agraffe cut-offs, whereby the strings are divided into proportional lengths, substantially as shown and for the purpose set forth.

No. 49,877. Harvesting Machine. (Moissonneuse.)



Martin Schaffter, Hermandarias, Entre Rios, Argentine Republic, 5th September, 1895; 6 years.

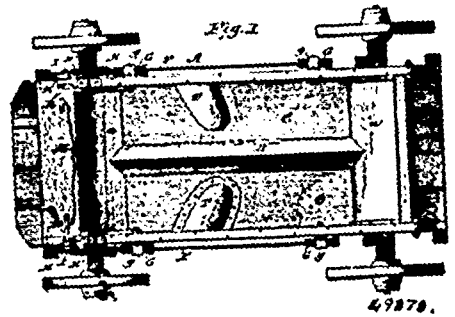
Claim.—1st. In a harvesting machine, the combination with rotatable beaters, of an ear catching bar suitably operated, and a breastwork, substantially as described and for the purpose specified. 2nd. In a harvesting machine, the combination with an ear catching and threshing apparatus on one side of the machine with a fan mill on the other side of the machine, the driving gear between them and a worm and elevator to transport the grain from the first named apparatus to the fan mill, substantially as described and for the purpose specified. 3rd. In a harvesting machine, an ear catcher consisting of a transverse catching bar connected at each extremity with the connecting bar of an oscillating crank mechanism, substantially as described. 4th. In a harvesting machine, the eccentric E^1 in combination with the shaft f , rod e^2 , oscillating arm E^2 , pivot e^4 , and connecting rod E^3 adapted to carry the catching bar c^1 , substantially as described and for the purpose specified. 5th. In a harvesting machine of the kind described, the combination of three unhusking rollers J^1, J^2, J^3 situated at the end of the breastwork K and operated substantially as described and specified. 6th. In a harvesting machine of the kind described, elastic beaters e , consisting of several overlapping layers of elastic material, in combination with beater arms E , on shaft and the breastwork K , substantially as described and for the purpose specified. 7th. In a harvesting machine of the kind described, beater arms E provided with elastic beaters e , in combination with breastwork K , the shaft f suitably operated, eccentrics E^1 , rods e^2 , pivoted oscillating arms E^2 and E^3 , connecting rods E^4 , and catching bar c^1 , substantially as described and specified. 8th. In a harvesting machine of the kind described, beater arms E , provided with elastic beaters e , in combination with breastwork K , front lip K^1 , the shaft f , eccentrics E^1 , rods e^2 , pivoted oscillating arms E^2 , and E^3 , connecting rods E^4 , catching bar c^1 , unhusking rollers J^1, J^2 and J^3 , the worm F , in trough T , the elevator G , and fan D , the whole being operated from the driving shaft a^1 , substantially as described and for the purpose specified.

No. 49,878. Dumping Wagon. (Wagon à bascule.)

William H. Kauffman and Mathew Spellacy, both of Columbus, Ohio, U.S.A., 6th September, 1895; 6 years.

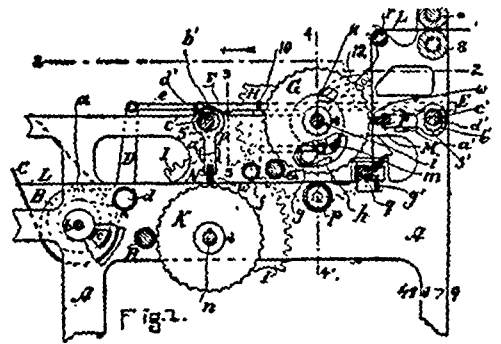
Claim.—1st. A dumping wagon, the bottom of which has an opening therein, a longitudinal beam dividing said opening, and a truss rod arranged beneath the said beam, and connected at its end with said beam, substantially as shown and described. 2nd. In a dumping wagon, the combination with the bottom and longitudinal beam of the truss rod, the bridge, between the rod and beam, and the tension nut upon the end of the truss rod, all arranged substan-

tially as shown and described. 3rd. In a dumping wagon, the dumping section having an arched portion adapted to permit the



wheel of the wagon to pass thereunder, substantially as shown and described. 4th. In a dumping wagon, the combination with the dumping section, of the cables, for raising the same, the levers to which said cables are connected, and carrying pawls, the levers for operating said pawl lever, the catch and spring actuated elbow levers for holding said catch in place, substantially as shown and described. 5th. In a dumping wagon, the combination with the dumping sections, and cables, of the pawls and operating levers, the catches and elbow levers, for engaging said catches, and the chain connecting said elbow levers to disengage them from the catches and permit the sections to drop, substantially as shown and described. 6th. In a dumping wagon, the running gear, composed of a reach and the front and rear axletrees and bolster, and the strap irons upon the reach, and the brace irons at the rear, and connecting the rear with the rear axletrees and bolster, substantially as shown and described.

No. 49,879. Numbering Machine. (Machine à numéroter.)

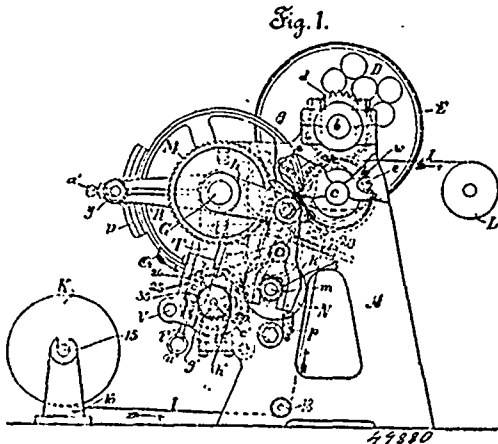


The Carter-Crumo Company, Niagara Falls, New York, assignee of John Robert Carter, Boston, Massachusetts, all in the U.S.A., 6th September, 1895; 6 years.

Claim.—1st. In a numbering machine, the combination with the intermittently rotated printing-wheels, of the reciprocating platens working in planes at an angle to each other to press the paper against the respective wheels, means for operating the platens, and an adjustable guide-and-web-adjusting roller below the upper platen and under which the paper passes from the first printing-wheel and platen upwardly to the upper platen, substantially as described. 2nd. In a numbering machine, the combination, with the intermittently rotated printing-wheels, of intermittently reciprocating platens arranged with their faces at an angle to each other to move the paper against the respective wheels, one of the platens being above and in advance of the other, and guides over which the paper passes with one run extending upwardly to expose the impression from the first wheel to the operator prior to the impression by the second wheel, substantially as set forth. 3rd. In a numbering machine, the combination with the intermittently rotated printing-wheels, of the reciprocating platens working in approximately vertical and horizontal planes respectively to press the paper against the respective wheels, means for operating the platens, and an adjustable guide-and-web-adjusting roller below the upper horizontally working platen and under which the lateral run of the paper passes from the first printing-wheel and platen upwardly to the second wheel and upper platen, substantially as described. 4th. In a numbering machine, the combination, with the intermittently moving printing-wheels G, K , mounted upon shafts i, n , extending across the machine and connected by gears H, I, L , whereby said shafts are revolved together at the same speed, of two movable co-operating platens having their faces arranged in planes at an angle to each other and acting upon opposite sides of the web or sheet to bring the same into contact with the types, shafts geared to the rack and provided with cams or eccentrics engaging the said

platens, the ratchet-wheel *k* on the shaft *i*, the pawl *m* mounted upon the swinging arm *h*, the rack-bar *E*, and means for reciprocating the same, and suitable connections between the rack-bar and the pawl-carrying arm *h*, all operating substantially as described. 5th. In a numbering machine, the combination, with the intermittently moving printing-wheels *G*, *K*, mounted upon shafts *i*, *n*, extending across the machine and connected by gears *H*, *I*, whereby said shafts are revolved together at the same speed, of the two movable co-operating platens *M*, *N*, having their faces arranged in planes at an angle to each other and acting upon opposite sides of the web or sheet to bring the same into contact with the types, the sliding platen, carriers *P* moving in planes at an angle to each other, the shafts *d*¹ provided with the eccentrics *e*¹ for actuating the carriers *P*, and with the pinions *f*¹, the rack-bar *E* engaging said pinions, and means for reciprocating the rack-bar, all constructed to operate, substantially as set forth. 6th. In a numbering machine, the combination with the intermittently moving printing wheels *G*, *K*, mounted upon shafts *i*, *n*, extending across the machine and connected by gears *H*, *I*, whereby said shafts are revolved together at the same speed of the two movable co-operating platens *M*, *N*, having their faces arranged in planes at an angle to each other and acting upon opposite sides of the web or sheet to bring the same into contact with the types, the sliding platen carriers *P* moving in planes at an angle to each other, the shafts *d*¹ provided with the eccentrics *e*¹ for actuating the carriers *P*, and with pinions *f*¹, the rack-bar *E* engaging said pinions and means for reciprocating the rack-bar, the ratchet-wheel *k* on the shaft *i*, the pawl *m* mounted upon the swinging arm *h*, the rod *g*, the lever *l* connected with the rack-bar, the retaining pawl *l*, the guide-rolls *q*, *r*, and means for drawing the web or sheet through the machine, all constructed to operate, substantially as and for the purpose set forth. 7th. In a numbering machine, the combination with the rotatable printing wheels, of intermittently reciprocating platens to move the paper against the respective wheels, one of the platens being in advance of the other with relation to the strip to be numbered, and guides over which the paper passes with one run extending upwardly to expose the impression from the first wheel to the operation prior to the impression by the second wheel, substantially as set forth.

No. 49,880. Numbering Machine. (Machine à numérotor.)

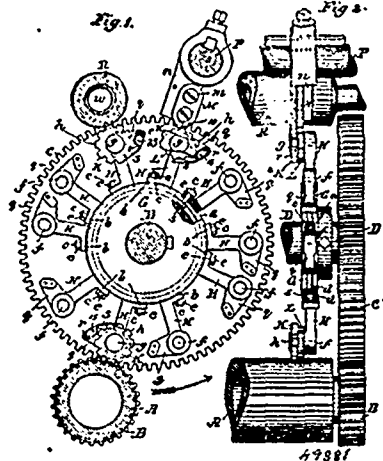


The Carter-Crumo Company, Niagara Falls, New York, assignee of John Robert Carter, Boston, Massachusetts, U.S.A., 6th September, 1895; 6 years.

Claim.—1st. The combination with a numbering or printing-wheel, of a form-roller mounted to rotate freely in a movable bearing in a vibrating frame, mechanism for swinging said frame, wheels for driving the form-roller from the axis of said numbering-wheel and at the same surface velocity therewith, means for actuating the form-roller bearings to throw the form-roller into and out of operative connection with the numbering-wheel when the frame is vibrated, and a driven ink supplying cylinder with which said form-roller contacts and by which it is rotated when out of contact with the numbering-wheel, substantially as set forth. 2nd. In a cylinder printing-machine, the combination with the impression cylinder having a continuous rotary motion, of an intermittently rotated numbering-wheel, parallel and co-operating therewith and having the same surface velocity as the impression cylinder during the time that it is printing the numbers on the paper in contact with said cylinder, a ratchet and a pawl mechanism for intermittently rotating the numbering-wheel, and a rotary cam for actuating the ratchet and pawl mechanism, substantially as set forth. 3rd. In a cylinder printing machine, the combination, with the impression cylinder having a continuous rotary motion, of an intermittently rotated numbering-wheel mounted on a shaft, provided with fixed bearings, said wheel having projections provided on their faces with numbering types, said numbering-wheel having the same surface velocity as the impression cylinder during the time that it is print-

ing the numbers on the paper, a ratchet and pawl mechanism for intermittently rotating numbering-wheel, and a cam and spring for actuating the ratchet and pawl mechanism, said cam being mounted on a shaft connected by gears with the shafts of the impression cylinder, substantially as described. 4th. In a cylinder printing-machine, the combination with the impression cylinder having a continuous rotary motion, and an intermittently rotated numbering-wheel co-operating therewith and having the same surface velocity as said cylinder during the time it is printing the numbers on the paper, of a form-roller supported in a vibrating frame, means for alternately throwing the form-roller into and out of contact with the numbering-wheel, and driving it from said numbering-wheel and at the same surface velocity therewith, and a driven ink supplying cylinder, into contact with which said form-roller is thrown, and by which it is rotated when not in contact with said numbering-wheel, substantially as set forth. 5th. In a cylinder printing-machine, the combination, with the impression cylinder and an intermittently rotated numbering-wheel co-operating therewith, of the form-roller *s*, mounted in a vibrating frame and having its shaft provided with friction wheels *b*¹, the bearer wheels *Q*, *W*, on the shaft of the numbering-wheel adapted to rotate the form-roller with the same surface velocity as the numbering-wheel, by frictional contact with said wheels *b*¹, means for vibrating the form-roller supporting frame, and the cams *q*¹, and springs *s*¹, whereby the form-roller is alternately brought into contact with the numbering-wheel and the ink supplying cylinder *X*, as the form-roller frame is vibrated, substantially as set forth. 6th. In a cylinder printing-machine, the combination of the impression cylinder, an intermittently rotated numbering-wheel, a form-roller mounted in a vibrating supporting frame and adapted to be brought into contact with the numbering wheel, means for rotating the form-roller with the same surface velocity as the numbering-wheel, the ink supplying cylinder *X*, adapted to rotate the form-roller at an increased speed by frictional contact therewith, when said form-roller is not in contact with the numbering-wheel, the cams *q*¹, springs *s*¹, and the mechanism for vibrating the form-roller frame consisting of the cam *B*¹, lever *A*¹, link *30*, and spring *i*, all constructed to operate substantially as set forth.

No. 49,881. Numbering Machine. (Machine à numérotor.)

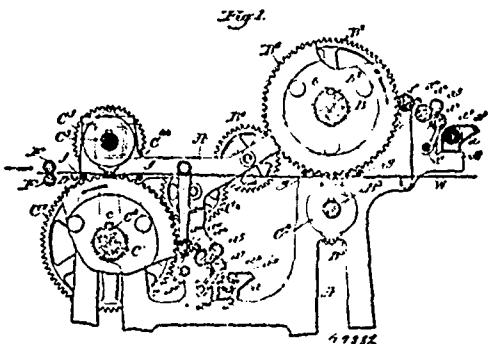


The Carter-Crumo Company, Niagara Falls, assignee of John Robert Carter, Boston, Massachusetts, both in the U.S.A., 6th September, 1895; 6 years.

Claim.—1st. In a printing machine, the combination, with a rotating wheel or disc, of a series of intermittently rotating printing-wheels mounted upon brackets or supports adjustably secured to said rotating wheel around its periphery, whereby the distance or spaces between the characters printed by said printing-wheels may be varied as desired, and means for intermittently rotating the printing-wheels to bring the types or characters thereon into their printing positions, substantially as set forth. 2nd. In a printing machine, the combination, with a rotating wheel or disc, of a series of printing-wheels mounted thereon, each printing-wheel having around its periphery a series of types or characters, a star-wheel connected with each of said printing-wheels and rotating therewith, a single stationary tappet-arm arranged to engage the teeth of the several star-wheels and turn the same as each wheel passes said tappet-arm, and retaining pawls adapted to enter the notches between the teeth of the star-wheels to hold the printing-wheels in position to print, substantially as described. 3rd. In a printing machine, the combination, with the rotating wheel or disc *G*, of a series of printing-wheels *E*, mounted upon brackets *N*, having studs or spindles *g* projecting therefrom, each printing-wheel having around its periphery a series of types or characters and being provided with a star-wheel *L* connected therewith, the stationary tappet arm *M* adapted to engage the teeth of the several star-wheels and turn the same as

each wheel passes said tappet-arm, and the retaining pawls, adapted to enter the notches between the teeth of said star-wheels to hold the printing-wheels in their printing positions, substantially as described.

No. 49,882. Numbering Machine. (Machine à numérotier)



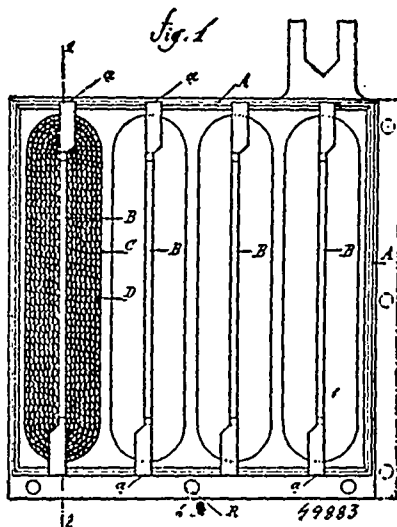
The Carter-Crume Company, Niagara Falls, assignee of John Robert Carter, Boston, Massachusetts, both in the U.S.A., 6th September, 1895; 6 years.

Claim.—1st. A revoluble printing-wheel having figures or characters rigidly secured thereto, means to rotate said wheel continuously, a platen, and means to move the platen toward and from the printing point to print successive figures or characters on a strip passed between the wheel and the platen, as set forth. 2nd. A revoluble printing-wheel having figures or characters rigidly secured thereto, means to rotate said wheel, a platen, and means to move the platen toward and from the printing point intermittently and also in the direction corresponding to and with the movement of the printing-wheel, as set forth. 3rd. A series of revoluble printing-wheels arranged side by side and having a common axis of rotation, a series of platens, each movable toward and from the printing point of one of said wheels, and means to rotate the wheels continuously and move the platens successively toward and from their respective wheels, substantially as and for the purpose described. 4th. In an apparatus for printing a series of figures or characters in regular sequence upon opposite sides of a continuous web, a revoluble printing-wheel located at each side of the path, of the web, a platen for each wheel on opposite sides of the web, means to rotate said wheels, and means to move said platens toward and from their respective printing-wheels in circular paths and in the same direction as the movement of the adjacent portions of the said wheels, as set forth. 5th. A revoluble printing-wheel having a series of successive figures or characters secured thereto in a non-adjacent manner, or out of regular sequence, as described, and moving in a circular path, and a platen to intermittently approach the printing point, and to pass by it in unison with the movement of the character being printed, combined with means to rotate said wheel through an arc greater than the distance between two adjacent figures or characters, and equal to the interval between two successive ones, whereby the successive figures or characters are brought into printing position opposite the platen, and thereby printed in regular sequence, and means to actuate the platen, substantially as described. 6th. A revoluble printing-wheel having a series of successive non-adjacent figures or characters secured thereto and moving in a circular path, whereby the entire series may be printed in regular sequence by rotation of the wheel in the same direction, combined with a platen movable in a path externally tangent to the path of the characters at the printing point, and means to move said wheel and platen, to bring the platen into position at the printing point simultaneously with the character to be printed, to cause the figure or characters to be printed singly in their proper sequence during simultaneous movement of the wheel and platen, substantially as described. 7th. A revoluble printing-wheel having a series of successive non-adjacent figures or characters secured thereto and moving in a circular path, whereby the entire series will be printed in regular sequence by rotation of the wheel in the same direction prior to the repetition of the first, and an inking mechanism for said printing-wheel, combined with a plurality of separate platens movable about a common centre in a circular path externally tangent at the printing point to the path of the characters secured to said printing wheel, and means to move said wheel and platens to bring the latter one after another into printing position with one after another of the non-adjacent characters or figures on the wheel, to cause the numbers to be printed in their proper sequence, substantially as described. 8th. A series of revoluble printing-wheels, each having a series of successive non-adjacent figures secured thereto and moving in a circular path, a common axis of rotation for said wheels, and an inking mechanism for the wheels, combined with a series of separate platens each movable towards and from the printing point of one of said wheels, means to adjust the relative position of said wheels upon their common axis, and to adjust said platens correspondingly, and an actuating

mechanism to move the wheels and platens to bring the latter into position to cause the figures or characters on each wheel to be printed singly in their proper sequence by its co-operating platen, substantially as described. 9th. A revoluble shaft, a series of independent printing-wheels laterally and rotably adjustable thereon, each wheel bearing a series of successive figures or characters secured thereto in a non-adjacent manner, or out of regular sequence, as described, and moving in a circular path, and a series of separate platens laterally and rotably adjustable on a common support, and movable towards and from the printing point of their co-operating printing-wheels, combined with means to rotate said wheels in the same direction and to move the platens in paths externally tangent at the printing point to the paths of the figures or characters, whereby the consecutive figures or characters on each wheel are caused to approach their respective platens in regular sequence to be so printed, the intervals between the printed figures or characters in two or more sets being regulated by the adjustment of the printing-wheels, substantially as described. 10th. In an apparatus for printing series of figures or characters in regular sequence upon opposite sides of a continuous web, a revoluble printing-wheel located at each side of the path of the web, each wheel having rigidly secured upon its periphery a series of successive non-adjacent figures or characters, a platen to intermittently co-operate with each printing wheel, and of sufficient width to act upon but one character at a time, and guide rolls adjacent to each wheel and between it and the web, combined with feed rolls for the web, and means to move said printing wheels and their platens, to bring the latter into position to press the web against one figure after another fixed on the wheel and to move past the printing point in unison with the figure being printed, to thereby cause them to be printed singly in their proper sequence, substantially as described.

No. 49,883. Accumulator Plate.

(Plaque d'accumulateur.)



Georges René Blot, Paris, France, 6 septembre 1895; 18 ans.

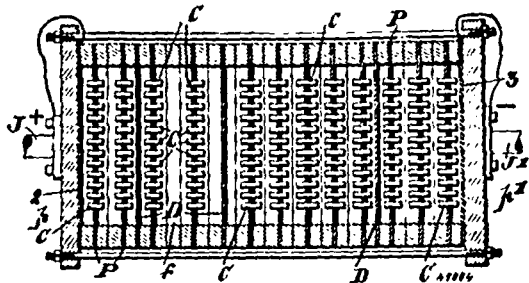
Résumé.—1°. Une nouvelle plaque d'accumulateur genre, planté que je dénomme plaque d'accumulateur à navettes, caractérisée par la combinaison d'éléments en forme de navettes obtenues en enroulant, sur un support relié au cadre, et constitué comme lui en plomb antimonié ou autre métal non susceptible de se former sous l'action du courant, des bandes ou rubans respectivement gaufrés, diamantés ou striés, et alternativement ondulés et constitués en métal pouvant être formé ou non pour l'accumulation, la formation étant effectuée antérieurement à l'enroulement de façon à donner à ces éléments l'expansion maxima qu'ils sont susceptibles de prendre, les bandes ou rubans étant respectivement soudés au support, au moyen de soudures autogènes et les navettes étant ou non coupées à une de leurs extrémités, substantiellement, comme décrit ci-dessus au présent mémoire, et représenté à titre d'exemple, au dessin annexé. 2°. Me réservant la faculté d'en faire varier les formes, dimensions, proportions et parties accessoires, et d'employer à leur construction tels matériaux que je jugerai convenables.

No. 49,884. Electrolytical Apparatus and Electric Generator. (Appareil et générateur électrique.)

Dr. Carl Hoepfner, Gies-sen, Germany, 6th September, 1895; 6 years.

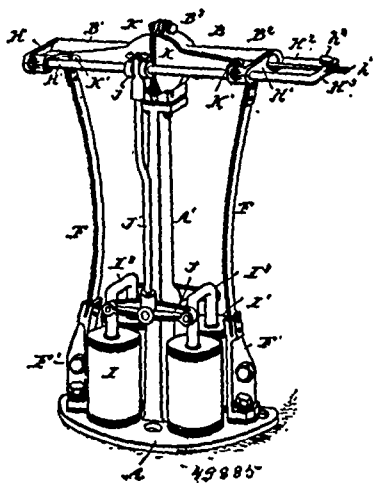
Claim.—1st. A double electrode for electrolytical apparatuses or electric generators, substantially as described. 2nd. A double electrode consisting of a series of carbon bodies set in a framing so as to present carbon surfaces on opposite sides of said framing. 3rd. A

double electrode consisting of a perforated plate, carbon rods secured in the perforations so as to project from opposite sides of the plate,



and a framing for said plate, for the purpose set forth. 4th. A double electrode consisting of a perforated plate, tubular carbons secured in the perforations so as to project from the opposite faces of the plate, and a framing for said plate, for the purpose set forth. 5th. A double electrode consisting of a perforated plate, carbon rods secured in the perforations so as to project from opposite faces of said plate, a framing for the latter, and an active agent applied in the spaces between the projecting carbons, for the purpose set forth. 6th. A double electrode consisting of a perforated plate of metal, having one of its faces insulated, carbon rods secured in the perforations so as to project from opposite faces of said plate, and a framing for the latter, for the purpose set forth. 7th. In an electrolytical apparatus, a series of double electrodes consisting of a perforated framed plate and carbon rods secured in the perforations and projecting from opposite sides of said plate, in combination with head plates each provided with a journal, and a metallic conducting plate interposed between each head plate, and the adjacent double electrode, said metallic plates electrically connected with said journals, for the purpose set forth. 8th. The combination, with a series of double electrodes comprising a framed perforated plate, and carbon rods secured in the perforations and projecting from the opposite faces of said plate, of metallic conducting plates, as plates of copper interposed between two double electrodes, for the purpose set forth.

No. 49,885. Electric Light. (Lumière électrique.)

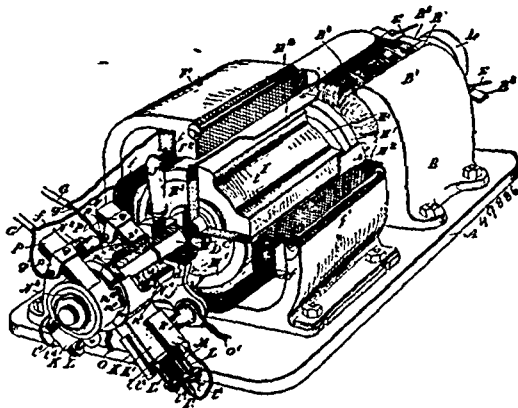


Edgar Ambrose Edwards, Cincinnati, Ohio, and Charles W. Adams, Chicago, Illinois, both in the U.S.A., 6th September, 1895; 6 years.

Claim.—1st. In an electric lamp, a housing having a central recess for the reception of a block of refractory material, and tubular lateral extensions for the reception of the carbons, the extensions being provided with longitudinal slots, substantially as described. 2nd. In an electric arc lamp, the combination with the housing having a central recess and tubular lateral extensions provided with longitudinal slots, of a refractory block, and the carbon-holders arranged in the tubular extensions, and means for feeding the carbons and maintaining them in contact with the block, substantially as described. 3rd. In an electric lamp, the combination with the housing having a recess for the reception of a refractory block, of the covers for closing said recess, substantially as described. 4th. In an electric lamp, the combination with the housing having a recess for the reception of the refractory block, of the covers pivotally mounted on the housing and serving to retain the block in position in the recess, substantially as described. 5th. In an electric lamp, the combination with the housing supporting the refractory

block and carbons, of a re-lighter, a sliding and rocking rod supported by the housing and connected to the re-lighter, and means for moving the rod to adjust the re-lighter, substantially as described. 6th. In an electric lamp, the combination with the housing supporting the refractory block and carbons, of a re-lighter, a bent sliding and rocking rod, the bent end of which is flattened, and means for moving the rod, substantially as described. 7th. In an electric arc lamp, the combination with the housing having a central recess for the refractory material and tubular lateral extensions for the carbons, of brackets, a sliding and rocking rod mounted in said brackets, the end of the rod being flattened and resting on a projection on the housing, a re-lighter attached to the rod, and means for operating the rod, substantially as described. 8th. In an electric arc lamp, the combination with the housing having a central recess for the refractory material, and adjustable covers therefor and having tubular lateral extensions provided with slots for the reception of the carbon-holders, of a re-lighter, a sliding rod connected to the re-lighter for operating the same, means for operating the rod, and springs connected to the carbon holders for feeding the carbons, substantially as described. 9th. In an electric lamp, the combination with the base and standard, of a housing mounted thereon and carrying the refractory block, the carbons and re-lighter, springs connected to the base and arranged to feed the carbons, and electro-magnets mounted on the base and arranged to operate the re-lighter, substantially as described. 10th. In an electric lamp for head-light purposes, the combination with the reflector and with the reflector and with the base, of a standard presenting a narrow surface to the front, a housing extending transversely to the standard and supporting the refractory material and carbons and presenting a relatively small surface to the front, springs for feeding the carbons also presenting a narrow surface to the front, a re-lighter, and a lever for operating the same normally in the plane of the standard, whereby the lamp structure presents the least possible surface to the projection of the light-rays, substantially as described. 11th. The combination with a shunt-wound generator, of an electric light provided with two electro-magnets, the one being of relatively high resistance in a shunt around the lamp and continuously in the circuit of the generator, and the other of relatively low resistance arranged in the main circuit of the lamp including the carbons, and a re-lighter operated by said electro-magnets, substantially as described. 12th. In an electric lamp, the combination with the housing supporting the refractory block, the carbons, and a re-lighter device, of a lever for operating said re-lighter, two electro-magnets for operating the lever and connected in branches of the main circuit, one being of relatively high resistance, and the other of relatively low resistance, and a stop connected with the latter magnet, substantially as described. 13th. In an electric arc lamp, the combination with the base and standard, of a housing for the refractory block and carbons mounted on the standard and insulated therefrom, springs for feeding the carbons mounted on stand supports connected to the base but insulated therefrom, a re-lighter connected to the housing, a sliding arm for operating the re-lighter and insulated from the housing, and electro-magnets mounted on the base and connected to operate the re-lighter, substantially as described.

No. 49,886. Rectifier for Electrical Currents. (Rectificateur pour courants électriques.)

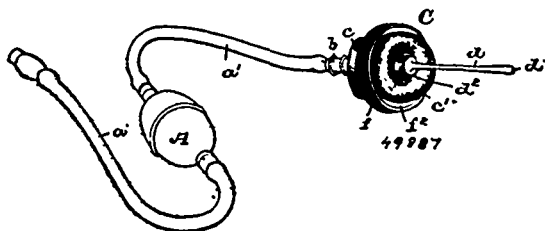


William Burrowes Close, assignee of William Joseph Still, both of Toronto, Ontario, Canada, 6th September, 1895; 6 years.

Claim.—1st. In a rectifier for alternating currents, the combination with the shaft driven by a suitable motor so that it will have a tendency to revolve slightly in excess as to number of commutations than the number of alternations of the current in the same time and a commutator suitably formed and secured on the common shaft connected by brushes to the alternating current wires and having co-acting brushes to lead off the constant current, of a dynamo

having a strong alternating field deriving its current from the main alternating current wires, and having a short-circuited armature secured to the common shaft whereby the rotation of such shaft is continuously and varyingly retarded to bring down the commutations at all periods into unison with the alterations of the current so that the continuous cycle of undulations are practically cut at the zero points, as and for the purpose specified. 2nd. The combination, with the shaft driven by an electric motor deriving current from independent source and having the armature secured on the shaft and a commutator insulated from the shaft and having an equal number of metallic sections connected to one brush of the alternating current wire and an equal number connected to the other brush and two brushes located on sections of different polarity to carry off the constant current, of a dynamo having the field magnets connected in series and forming a shunt field from the alternating current wires and an armature having end rings connected together by conducting bars, corresponding to the number of field magnets, and insulated and supported upon the common shaft by end discs and an interior core maintained stationary on the shaft, the speed of the shaft being continually retarded by the short-circuited armature of the dynamo, as and for the purpose specified. 3rd. The combination, with the shaft, the motor B, having the armature B² secured on the shaft, and the commutator insulated from the shaft and provided with metallic sections in the central portion, end rings having tongues extending into recesses in the sections diametrically opposite each other, brushes held in contact with the end rings and connected by wires to the main alternating current wires and two carbon brushes located upon sections of opposite polarity and carrying off the constant current from the commutator, of a dynamo the field magnets of which derive current from a shunt from the main alternating current wires and a short-circuited armature comprised of metallic end rings insulated and supported on the common shaft and connected together by conducting bars, and a cylindrical core loose on the shaft and having recesses made across it between the field magnets whereby the lines of force maintain such core from rotating, all the parts being arranged to co-act, as and for the purpose specified. 4th. The combination, with the commutator of carbon brushes K¹, each of which is supported in brush holders K, and has a metallic end I, with an outwardly extending spindle I², pins extending outwardly from the brush holder K, a cross bar through which the pins and spindle pass, thumb nuts on the threaded ends of the pins and a spiral spring located between the end of the brush and the cross-bar, as and for the purpose specified. 5th. The combination, with the commutator and brushes, each of which is held in a suitable brush holder, of a continuous flexible conductor leading from the brush to the holder, as and for the purpose specified. 6th. The combination, with the commutator and brushes, each of which is supported in brush holders as specified, of means situated directly behind the brush and between it and portion of the brush holder, to flexibly hold the brush against the commutator, as and for the purpose specified.

No. 49,887. Syringe, etc. (Seringue, etc.)



The Riverside Rubber Company, Belleville, assignee of Henry Doramus Smith, Newark, both of New Jersey, U.S.A., 6th September, 1895; 6 years.

Claim.—1st. The combination, in a syringe, atomizer of the like, of the compression bulb and its discharge tubing, and an expansion bulb or pump connected with said tubing, comprising therein two separable half-sections, flexible and expansible and with a normal tendency to force themselves inwardly to exert pressure, said half-sections having a annular flanges adapted to be placed upon each other, and means for securing said half-sections together, substantially as and for the purposes set forth. 2nd. A syringe, atomizer or the like, comprising therein a compression bulb, discharge tube, and an expansion bulb or pump in said tube, consisting of two flexible half-sections *c* and *c*¹, having the curved portions *c*² and *c*² respectively, and each section having a re-enforced portion forming a sleeve, said sections being adapted to be expanded and exert an inward pressure, substantially as and for the purposes set forth. 3rd. A syringe, atomizer or the like, comprising therein a compression bulb, discharge tube, and an expansion bulb or pump in said tube, consisting of two flexible half-sections *c* and *c*¹, having the curved portions *c*² and *c*² respectively, and each section having a re-enforced portion forming a sleeve, said sections being adapted to be expanded and exert an inward pressure, annular flanges *e*² and *e*² on said half-sections *c* and *c*¹ respectively, and screw-threaded rings *f* and *f*² for securing said

sections together, substantially as set forth. 4th. An expansion bulb or pump for a continuous flow syringe, or the like, comprising the two flexible half-sections *c* and *c*¹ having inwardly extending re-enforced portions *e*² and *e*² respectively, adapted to exert inward pressure, and re-enforced portions forming sleeves, a discharge nozzle in one of said re-enforced portions, annular flanges *e*² and *e*² on said half-sections *c* and *c*¹ respectively, and screw threaded rings fitted over said flanges for securing said half-sections together, substantially as and for the purposes set forth. 5th. A syringe, atomizer, or the like, comprising therein a bulb discharge tube, and expansion bulb or pump in said tube, consisting of two flexible half-sections, and an enlarged or re-enforced portion on one or both of said half-sections, forming a sleeve for a valve fitting, and the surrounding portion of the bulb being curved, substantially as set forth, to cause said re-enforced portion to exert a normal inward pressure, substantially as and for the purposes set forth.

No. 49,888. Process of Extracting Precious Metals from Ores. (Procédé pour extraire les métaux des minerais.)

The Firm of Siemens & Halske, assignee of Oscar Frolich, all of Berlin, Germany, 6th September, 1895; 6 years.

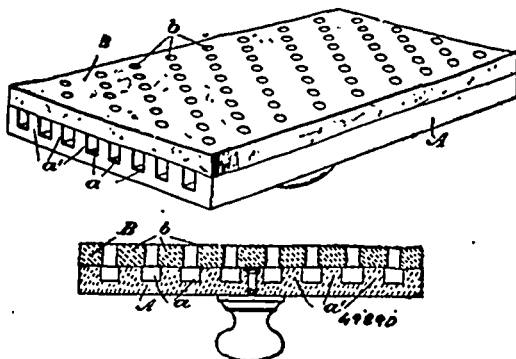
Claim. In the process of extracting by electrolysis the precious metals from a lye containing besides these metals, inferior metals, the application of so low an electric tension in the decomposing cell that only or nearly only the precious metals are deposited.

No. 49,889. Artificial Fuel. (Combustible artificiel.)

Charles Weygang, Romsey, England, 6th September, 1895; 6 years.

Claim.—The herein described manufacture of artificial fuel by combining petroleum with saponified rosin and gypsum with or without addition of carbonaceous matters.

No. 49,890. Brush for Black Boards. (Pinceau pour tableaux.)



George Orth, Brampton, Ontario, Canada, 6th September, 1895; 6 years.

Claim.—1st. A black board brush comprising a brush having the interstices leading into a hollow back to which the brush is fastened, as and for the purpose specified. 2nd. A black board brush comprising a perforated felt brush suitably supported upon the hollow back, as and for the purpose specified. 3rd. A black board brush comprising a back provided with a series of channels, and a perforated felt brush with perforations arranged opposite the channels, as and for the purpose specified. 4th. The combination with the back provided with longitudinal channels and cross-channels, of a perforated felt brush secured thereto, as and for the purpose specified. 5th. The combination with the back provided with longitudinal channels extending throughout the length of the back and cross-channels extending across the entire width of the longitudinal channels, of a wire cloth secured on top of the back, and a perforated felt brush secured on top of the wire cloth, as and for the purpose specified. 6th. The combination with the back provided with channels, and a strip for closing such channels at one end a perforated felt brush secured to the back, and a spring held hinged plate to normally close the opposite ends of the channels, as and for the purpose specified.

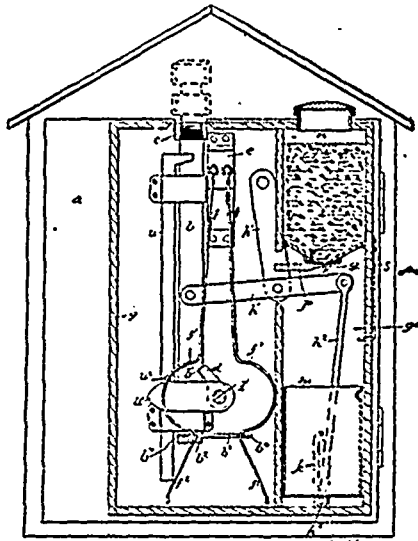
No. 49,891. Fire Alarm Box.

(Boîte d'avertisseur d'incendie.)

Thomas Walsh, Montreal, Quebec, Canada, 7th September, 1895; 6 years.

Claim.—1st. In combination with the locking mechanism of a fire alarm box, an automatically operated grip or handcuff adapted to open and close, and connections between same and said locking mechanism, whereby upon the movement of the latter to unlock the box the handcuff will be closed together with means for opening the handcuff, for the purpose set forth. 2nd. In combination with the

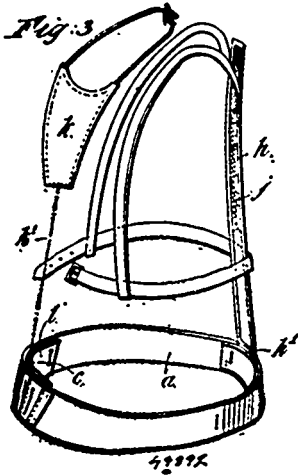
locking mechanism of a fire alarm box, an automatically operated grip or handcuff adapted to open and close, and connections between



same and said locking mechanism, whereby upon the movement of the latter to unlock the box, the handcuff will be closed together with means for automatically opening the handcuff, for the purpose set forth. 3rd. In combination with the door of a fire alarm box, of a locking bolt, a pair of rods forming a handcuff, a yoke piece connected with such locking bolt and adapted upon the movement in one direction of such bolt to close such handcuff, and means for operating such locking bolt, for the purpose set forth. 4th. In combination with the door of a fire alarm box, of a locking bolt, a pair of rods forming a handcuff, and each having an inclined portion, a yoke piece connected with such locking bolt and having slots to receive the inclined portions of such rods, and means for operating such locking bolt, for the purpose set forth. 5th. In combination with the door of a fire alarm box, of a locking bolt, a pair of rods forming a handcuff and each having an inclined portion, a yoke piece pivotally connected with such locking bolt, and having slots to receive the inclined portions of such rods, and means for operating such locking bolt, for the purpose set forth. 6th. In combination with a fire alarm box and locking mechanism therefor, a secondary box or casing carried by the box proper, a secondary box or casing carried by the box proper and enclosing the locking mechanism, a hand hole through said secondary casing, a handcuff or gripping device within said casing, means connected with said locking mechanism and said gripping device, whereby upon movement of the locking mechanism the gripping device is caused to close and means for opening same, for the purpose set forth. 7th. In combination with a fire alarm box and locking mechanism therefor, an automatically operated grip or handcuff adapted to open and close, and connections between same and said locking mechanism to secure the simultaneous closing of the handcuff with the unlocking of the box, and an automatically operating time release serving to open said handcuff, for the purpose set forth. 8th. In combination with a fire alarm box, a gravity hook carried by the frame thereof so as to overhang the upper edge of the door, a sliding bolt carried by the door, and a rotary handle with connections between it said bolt for raising same to operate said gravity hook, and an enclosing casing carried by the door having an opening therethrough in line with said handle, for the purpose set forth. 9th. In combination with the door of a fire alarm box, of a vertically sliding locking bolt supported by an engaging detent, a pair of rods forming a handcuff normally open, a yoke piece connected with such locking bolt and adapted upon the disengagement of such detent from the locking bolt and the consequent fall of same, to close locking bolt and the consequent fall of same, to close such handcuff, and means for operating such detent for the purpose set forth. 10th. The combination of the secondary enclosing casing, the locking bolt, the rod forming the handcuff, connections between said bolt and rods, an operating handle with detent engaging said bolt, and an automatic time release comprising a lever, a movable supply of sand, a hopper for same and a receptacle into which such sand flows from the hopper, a finger controlling the flow operated by said lever, and means for supporting said receptacles until filled with sand so as to depress said lever, for the purpose set forth. 11th. In combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom, of a locking bolt, a detaining device capable of being opened and closed, operative connection between same and the locking bolt, a device adapted to be moved in one direction by the closing of the detaining device and to open such detaining device by its return movement to its normal position, and means for operating such locking bolt, for the purpose set forth. 12th. In combination with the door of a fire alarm box carrying a hopper, with an outlet opening in its bottom, of a locking bolt, a detaining device capable of being opened and closed, operative connection between same and the locking bolt, a device, and adapted upon the closing of the detaining device to uncover the outlet opening in the hopper, and to move such open top receptacle to a position in close proximity to such uncovered outlet opening, for the purpose set forth. 13th. In a fire alarm box, the combination with the door carrying a hopper provided with a temporarily covered outlet opening in its bottom, of a locking bolt, a detaining device capable of being opened and closed, operative connection between same and the locking bolt, a device, and adapted upon the closing of the detaining device to uncover the outlet opening in the hopper, and to move such open top receptacle to a position in close proximity to such uncovered outlet opening, for the purpose set forth. 14th. In a fire alarm box, the combination with the door and its locking bolt, an automatically operated grip or handcuff adapted to open and close, connections between same and said locking bolt and means for operating such locking bolt, of a latch adapted to engage such locking bolt, and a secondary bolt adapted to disengage such latch, with means for operating same for the purpose set forth. 15th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom, of the vertically sliding locking bolt, the rods forming the handcuff pivotally connected to the door of the box, and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent engaging and supporting such vertically sliding bolt, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt, and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism, with a hand opening in line with the operating handle, all for the purpose set forth. 16th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom, of the vertically sliding locking bolt, the latch and its operating bolt, the rods forming the handcuff connected to the door of the box and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent and finger for engaging and supporting such vertically sliding bolt and operating such latch operating bolt respectively, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt, and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism with a hand opening in line with the operating handle, all for the purpose set forth. 17th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom forming the handcuff pivotally connected to the door of the box, and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent engaging and supporting such vertically sliding bolt, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a retaining spring carried by the side of the casing, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism with a hand opening in line with the operating handle, all for the purpose set forth. 18th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom, of the vertically sliding locking bolt, the latch and its operating bolt, the rods forming the handcuff pivotally connected to the door of the box and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent and finger for engaging and supporting such vertically sliding bolt and operating such latch operating bolt respectively, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a retaining spring carried by the side of the casing, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism with a hand opening in line with the operating handle, all for the purpose set forth.

with the door of a fire alarm box carrying a hopper, with an outlet opening in its bottom, of a locking bolt, a detaining device capable of being opened and closed, operative connection between same and the locking bolt adapted to be moved in one direction by the closing of the detaining device and to open such detaining device by its return movement to its normal position, and means for returning such device to its normal position and for operating such locking bolt, for the purpose set forth. 13th. In a fire alarm box, the combination with the door carrying a hopper provided with a temporarily covered outlet opening in its bottom, of a locking bolt, a detaining device capable of being opened and closed, operative connection between same and the locking bolt, a device, and adapted upon the closing of the detaining device to uncover the outlet opening in the hopper, and to move such open top receptacle to a position in close proximity to such uncovered outlet opening, for the purpose set forth. 14th. In a fire alarm box, the combination with the door and its locking bolt, an automatically operated grip or handcuff adapted to open and close, connections between same and said locking bolt and means for operating such locking bolt, of a latch adapted to engage such locking bolt, and a secondary bolt adapted to disengage such latch, with means for operating same for the purpose set forth. 15th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom, of the vertically sliding locking bolt, the rods forming the handcuff pivotally connected to the door of the box, and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent engaging and supporting such vertically sliding bolt, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt, and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism, with a hand opening in line with the operating handle, all for the purpose set forth. 16th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom, of the vertically sliding locking bolt, the latch and its operating bolt, the rods forming the handcuff connected to the door of the box and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent and finger for engaging and supporting such vertically sliding bolt and operating such latch operating bolt respectively, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt, and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism with a hand opening in line with the operating handle, all for the purpose set forth. 17th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom forming the handcuff pivotally connected to the door of the box, and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent engaging and supporting such vertically sliding bolt, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a retaining spring carried by the side of the casing, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism with a hand opening in line with the operating handle, all for the purpose set forth. 18th. The combination with the door of a fire alarm box carrying a hopper with an outlet opening in its bottom, of the vertically sliding locking bolt, the latch and its operating bolt, the rods forming the handcuff pivotally connected to the door of the box and each having an inclined portion, a yoke piece pivotally connected with such locking bolt and having slots to receive the inclined portions of such rods, an operating handle with detent and finger for engaging and supporting such vertically sliding bolt and operating such latch operating bolt respectively, an automatic time release comprising a swinging bar pivoted to the door of the box, a lever fulcrumed to such swinging bar and having one arm pivotally connected to the locking bolt and the other arm pivotally connected to a sliding carrier supporting an open topped receptacle beneath the hopper, a retaining spring carried by the side of the casing, a finger projecting from such swinging lever across and closing the outlet opening in the bottom of the hopper, a movable supply of sand carried by such hopper and an enclosing casing for such locking bolt, handcuff and releasing mechanism with a hand opening in line with the operating handle, all for the purpose set forth.

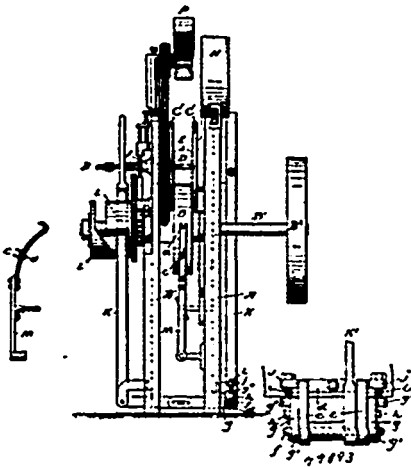
No. 49,892. Electric Belt. (Ceinture électrique.)



Walter Joseph James Purbrook and Herbert de Carle Hudson, all of Wellington, New Zealand, 7th September, 1895; 6 years.

Claim.—1st. In combination with the belt, the battery, the electrodes connected therewith, the spiral band *h*, arranged to contact with one electrode and cut the same out and having a contact surface to bear on the body above the plane of the electrode, substantially as described. 2nd. In combination with the belt, the battery the electrodes connected therewith and arranged at different points on the belt, the breast piece *k*, having the contact surface to bear on the body, the cut out piece for one electrode and connection from said electrode to the breast piece, substantially as described. 3rd. In combination, the belt, the battery carried thereby, the electrodes connected with the battery, the spiral band *h*, and the breast piece *k*, said band and breast piece being connected with the electrode, substantially as described.

No. 49,893. Balling Machine. (Peloutuse.)

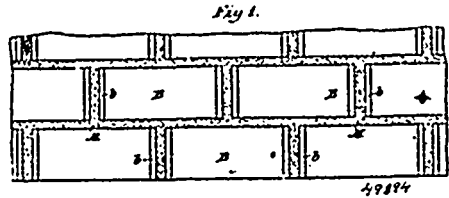


George James Torrance, Kearney, New Jersey, U.S.A., 7th September, 1895; 6 years.

Claim.—1st. The balling machine, substantially as herein set forth, having a drum *d*, flanges *e, e*, a spindle *c*, adapted to receive the spool and to be withdrawn therefrom, and a device for pushing the empty spool in position upon said drum, levers *K, K'*, for operating said spindle and pushing device, the said levers being fulcrumed one on the frame and the other on an adjustable bracket, having supplemental adjustable cars and adjusting screws for regulating the movement of the said lever *K'*, substantially as set forth. 2nd. The combination in a balling machine, with the drum, flange, spindle, bat, spreader, pushing head and means for operating the said parts of an adjustable tension device arranged upon said spreader and adapted to increase or reduce the tension upon the silver as it enters the balling machine, substantially as set forth. 3rd. The combination with the drum, flanges, spindle and spreader, and means for operating the same, of a forked tension device pivotally adjustable upon the said spreader, substantially as set forth. 4th. The combination with the drum, flanges, spindle, bat, spreader and means for operating the same, of a tension device consisting of a fork and a clamp-

ing screw serving as a pivot for said fork, the said spreader being provided with an open guide aperture, substantially as set forth. 5th. The combination with the drum, flanges, spindle *d*, and lever *k*, for withdrawing the said spindle from the spool, of nuts and lock nuts arranged on the outer threaded extremity of the spindle on opposite sides of the slotted end of the lever, whereby the said lever may be adjusted in its relation to the spindle, substantially as set forth.

No. 49,894. Fire Proof Floor. (Plancher à l'épreuve du feu.)



Thomas A. Lee, New York, State of New York, U.S.A., 7th September, 1895; 6 years.

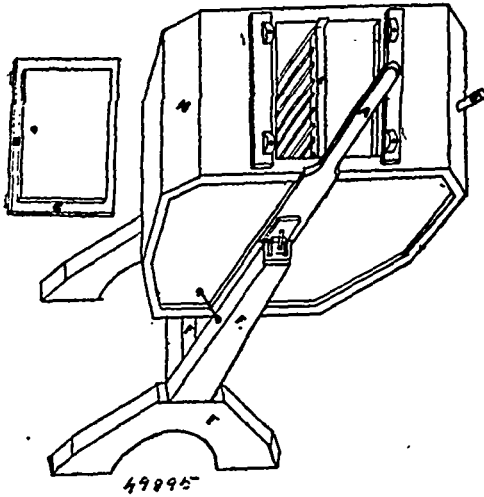
Claim.—1st. A floor or like block consisting of a hollow portion *B* with a tension rod channel near the base of the block, ribs *b¹¹* in the upper portion of the block, and end slabs *b* closing the ends of the hollows, substantially as and for the purposes set forth. 2nd. A floor or like block consisting of a hollow portion *B* provided with strengthening ribs *b¹¹* near its upper face, substantially as and for the purposes set forth. 3rd. A floor or like block for the purposes described provided with a projecting base, whereby spaces or channels for cement may be formed between adjacent blocks when placed base-to-base, and provided with tension rod channels *b'* near the base of the block, substantially as set forth. 4th. A floor or like block consisting of a hollow portion *B* provided with a tension rod channel *b'* near the base and end slabs *b* closing the ends of the hollows, the walls of the said block projecting at the base, whereby spaces or channels for the cement may be formed between adjacent blocks when placed base-to-base, substantially as and for the purposes set forth. 5th. In combination in a floor, roof or like structure, blocks provided with hollow slabs *b*, closing the said hollows, and projecting bases leaving spaces or channels between adjacent blocks, tension rods laid in the said channels, and mortar or other cement filling the said spaces or channels, substantially as and for the purposes set forth. 6th. In combination in a floor, roof, or like structure, blocks provided with projecting bases and laid base-to-base leaving spaces or channels between them, tension rods laid in the said spaces or channels, and mortar or other cement filling the said spaces or channels, substantially as and for the purposes set forth. 7th. In combination in a floor, roof, or like structure, blocks provided with hollows and slabs *b* closing the said hollows, and laid with spaces or channels between adjacent blocks, tension rods laid in the said spaces or channels, and ribs of mortar or other cement filling the said spaces or channels, substantially as and for the purposes set forth. 8th. In combination in a floor, roof, or like structure, hollow blocks provided with strengthening ribs *b¹¹*, in their upper portions and laid with spaces or channels between adjacent blocks, tension rods in the said spaces or channels, and mortar or other cement filling the said spaces or channels, uniting the whole floor, and forming strengthening ribs parallel with the said tension rods, substantially as and for the purposes set forth. 9th. The method of forming a floor or like structure by first laying blocks with spaces between the walls of adjacent blocks, placing tension rods in the said spaces or channels, and thereafter filling the said spaces or channels with mortar or other cement, substantially as and for the purposes set forth. 10th. In combination in a floor or like structure, blocks laid with spaces or channels between courses, and tension rods consisting of an axial spacing piece *r¹*, and two spiral wires or small rods *r* twisted or laid in grooves in the said spacing piece, the said tension rods being laid in cement or mortar between the said blocks, substantially as and for the purposes set forth. 11th. A tension rod for the purposes described consisting of an axial spacing piece *r¹*, and two small rods or wires *r* laid or twisted spirally about the said spacing piece in grooves or channels therein, substantially as set forth. 12th. A tension rod for the purposes described in the form of a flat twisted band or bar consisting of two small rods or wires *r*, and an intermediate axial spacing piece *r¹*, provided with grooves upon opposite sides within which the said small rods or wires rest, substantially as set forth. 13th. A tension rod for the purpose described in the form of a flat twisted band or bar consisting of two small rods or wires *r*, and an intermediate axial spacing piece *r¹*, substantially as set forth.

No. 49,895. Churn. (Barratte.)

George Ayers, Markham, Ontario, Canada, 7th September, 1895; 6 years.

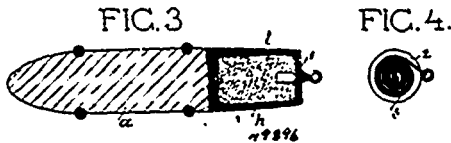
Claim. A churn comprising a frame *F*, body *H*, having a detachable cover *D*, on which is secured a rubber washer *e*, aperture and plug *C*, in one of the upper sides, journals and plates *B*, attached to the centre of the sides, tilting lever *A*, secured to one

side of the churn body, sliding rack E, having bars K, in a frame which slides in grooves into or out of position in the vertical centre



of the body of the churn and between which bars the milk or cream passes while the churn is in operation, all formed, arranged and combined, as and for the purposes hereinbefore set forth.

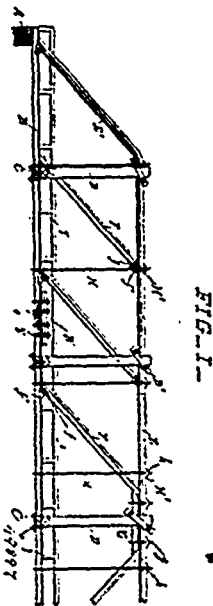
No. 49,896. Firearm. (Armes à feu.)



Otokar Rozvoda, Prague, Bohemia, Austria, 7th September, 1895; 6 years.

Claim.—A projectile provided with a chamber in the rear thereof, containing a highly explosive compound, means for imparting the initial velocity to said projectile, and means for igniting the compound after the initial velocity has been given the projectile, substantially as described.

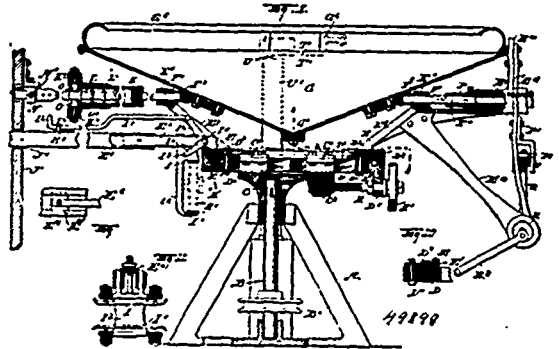
No. 49,897. Bridge. (Pont.)



Walter Nobert, Ste. Geneviève de Batiscan, Quebec, Canada, 7th September, 1895; 6 years.

Claim.—1st. In a bridge, the combination, with the lower rails B and C, having the tread of the rail arranged downward, of the upper rails E, and the struts F having the tread of the rail arranged upward, the angle-shaped rails D, the looped tie braces, and the clips and fish-plates securing the said parts together, substantially as set forth. 2nd. In a bridge, the combination, with the lower rails B, the upper rails E, and the diagonally arranged struts, all formed of railroad rails, of the looped tie braces, and the flanged washer plates and bolts engaging with the flanges of the said rails and securing the said parts together, substantially as set forth.

No. 49,898. Concentrator for Ores. (Concentrateur de minerais.)



Walter John Hammonds, London, England, and John Gordon, Rio Janeiro, Brazil, South America, 7th September, 1895; 6 years.

Claim.—1st. A concentrator, comprising a revoluble shaft, a disc or wheel eccentrically mounted thereon, and a vessel-carrying ring mounted to turn on the said wheel, and provided with an extension or handle having guided movement in a fixed bearing, substantially as described. 2nd. A concentrator, comprising a revoluble shaft, a disc or wheel eccentrically mounted thereon, a vessel-carrying ring mounted on the disc to turn relatively thereto, and provided with an extension or handle, and a fixed bearing in which the said extension has guided movement, to impart to the ring and vessel a gyrating motion about the centre of the shaft, and an oscillating motion about the vessel's own centre, substantially as described. 3rd. A concentrator, comprising a revoluble shaft carrying bearings, a wheel fitted to slide in said bearings, a ring mounted to turn on the said wheel, a vessel carried by the said ring, and means for causing the ring to oscillate relatively to the wheel, substantially as described. 4th. A concentrator comprising a revoluble shaft, a ring mounted on the shaft and constructed to slide towards and from the centre thereof, a vessel carried by the said ring, means for causing the vessel to oscillate relatively to the wheel, and means for adjusting the said ring to vary its eccentricity and the range of its gyratory motion, substantially as described. 5th. A concentrator comprising a revoluble shaft, a ring mounted on the shaft and constructed to slide toward and from the centre thereof, a vessel carried by the said ring, means for causing the vessel to oscillate relatively to the wheel, an adjusting screw for moving the said ring to vary the eccentricity thereof, said screw being provided with a wheel, and a shoe arranged to engage the said wheel as the screw revolves with the shaft to rotate the screw and move the vessel-carrying ring in an essentially radial direction, substantially as described. 6th. The combination of a revoluble shaft, a vessel carrying ring mounted on the shaft and constructed to slide toward and from the centre thereof, a vessel carried by the said ring, means for causing the vessel to oscillate relatively to the wheel, an adjusting screw for moving the said ring to vary the eccentricity thereof, said screw being provided with a wheel, and a movable frame provided with shoes adapted to engage the said wheel as the screw revolves with the shaft to rotate the screw and move the vessel carrying ring inward or outward, substantially as described. 7th. A concentrator comprising a vessel provided with trunnions, a ring or support provided with bearings to receive the said trunnions, and means for imparting a gyratory motion to the ring, substantially as described. 8th. A concentrator, comprising a vessel having trunnions mounted to slide in suitable bearings, a sleeve in which one of the trunnions has sliding movement and with which the said trunnion is held to turn, and means for turning the sleeve to tilt the vessel, substantially as described. 9th. A concentrator comprising a revoluble shaft carrying a socket having bearings, a wheel fitted to slide horizontally in said bearings, a ring mounted to turn on the rim of the said wheel, and a vessel having trunnions journaled in bearings supported on the said ring, substantially as shown and described. 10th. A concentrator, comprising a revoluble shaft carrying a socket having bearings, a wheel fitted to slide horizontally in the said bearings, a ring mounted to turn on the rim of the said wheel, a vessel having trunnions journaled in bearings supported on the said ring, and a handle extending from the said ring and guided in fixed bearings,

substantially as described. 11th. A concentrator comprising a revoluble shaft carrying a socket having bearings, a wheel fitted to slide horizontally in the said bearings, a ring mounted to turn on the rim of the said wheel, a vessel having trunnions journaled in bearings supported on the said ring, a handle extending from the said ring and guided on fixed bearings, a screw rod screwing in the said wheel and engaging a nut in the said socket, a wheel held on said screw rod, and a frame fitted to slide and carrying two shoes adapted to engage the top and bottom of the said wheel, substantially as shown and described. 12th. A concentrator, comprising a revoluble shaft carrying a socket having bearings, a wheel fitted to slide horizontally in the said bearings, a ring mounted to turn on the rim of the said wheel, a vessel having trunnions journaled in bearings supported on said ring, and a handle extending from the said ring and guided in fixed bearings, a screw rod screwing in the said wheel and engaging a nut in the said socket, a wheel held on said screw rod, a frame fitted to slide and carrying two shoes adapted to engage the top and bottom of the said wheel, and a mechanism for imparting a sliding motion to the said frame, as set forth. 13th. A concentrator, comprising a vessel having trunnions mounted to slide in suitable bearings, a sleeve turning with one of the said trunnions, and permitting the latter to slide in the sleeve, an arm secured on the said sleeve, a nut mounted to turn in the said arm, and a screw rod screwing in the said nut and journaled in fixed bearings substantially as shown and described. 14th. A concentrator, comprising a vessel having trunnions, a ring having bearings engaged by the said trunnions, a tube extending from one of the said trunnions and carrying spring-pressed plungers, a rod having ridges extending into the said tube and adapted to engage or be engaged by the said plungers, and a fixed support with which the said rod is adapted to be connected, the vessel being adapted to move toward and from the said support, substantially as shown and described. 15th. A concentrator, comprising a vessel having trunnions, a ring having bearings engaged by the said trunnions, a tube extending from one of the said trunnions and carrying spring-pressed plungers, a rod having ridges and extending into the said tube and adapted to engage or be engaged by the said plungers, a stationary universal joint for carrying the outer end of the said rod, the vessel having movement toward and from the said joint, and means for preventing longitudinal movement of the rod in the said joint, substantially as shown and described. 16th. A concentrator, comprising a revoluble shaft, a vessel-carrying ring eccentrically mounted on the shaft to turn relatively thereto, and provided with an extension or handle, and a fixed bearing in which the said extension has guided movement, to impart to the ring and vessel a gyrating motion about the centre of the shaft, and an oscillating motion about the vessel's own centre, substantially as described. 17th. A concentrator, comprising a suitable vessel, means for imparting a gyrating motion thereto, and an extension or handle connected to the vessel and having guided movement in a fixed bearing to cause the vessel to oscillate about its centre, as and for the purpose set forth. 18th. A concentrator, comprising a revoluble shaft carrying bearings, a wheel fitted to slide in said bearings, and a vessel-carrying ring mounted to turn on the said wheel, substantially as described. 19th. A concentrator, comprising a revoluble shaft, a vessel-carrying ring mounted on the shaft and constructed to slide toward and from the centre thereof, and means for adjusting the said ring to vary its eccentricity and the range of its gyratory motion, substantially as described. 20th. A concentrator, comprising a revoluble shaft, a vessel-carrying ring mounted on the shaft and constructed to slide toward and from the centre thereof, and adjusting screw for moving the said ring to vary the eccentricity thereof, said screw being provided with a wheel, and a shoe arranged to engage the said wheel, as the screw revolves with the shaft, to rotate the screw and move the vessel-carrying ring in an essentially radial direction, substantially as described. 21st. The hereinbefore described construction and arrangement of parts constitute our improved concentrator, substantially as set forth with reference to the accompanying drawings.

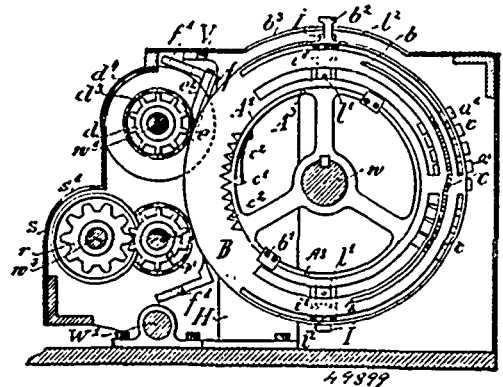
No. 49,899. Mechanical Calculator.

(*Calculateur mécanique.*)

Wilhelm Kuttner, Burgk, Saxony, Germany, 7th September, 1895; 6 years.

Claim.—1st. In a calculating machine an arrangement for the compulsory turning of the number-drums characterized by a click-lever *c*, swinging between the number-drum *d*², and the ratchet-wheels *A*, and holds stopped the respective number-drum by the gear of its pin *e*¹, with the ten-toothed rim *d*³, and permits a turning of the same for so many numbers as ratchet-teeth are put in and cutting-outs *A*², for the click lever *c* become free for stepping aside, substantially as set forth. 2nd. In a calculating machine, the compulsory transferring of the tens till to the highest places characterized by the levers *h*, which are actuated by the number-drums after every rotation in the described manner and by pressing down the pin *l*, cause an erection of the ten-tooth *l* for coming into gear with the appurtenant drift of the next superior unity and at the before-named mechanism the use of the under *I* described arrangement effecting the compulsory movement, substantially as set forth. 3rd. The arrangement for the transferring of the tens in the rotation-counting-apparatus characterized by the levers *q*, which are actuated by the drums *p*, after every rotation and which cause by

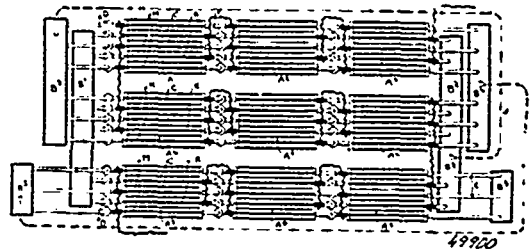
pressing down the pin *n*¹, an erection of the ten-tooth *N*, for the gearing with the appurtenant drift of the next superior unity, sub-



stantially as set forth. 4th. The reversing of the number-course in the rotation-counting-apparatus for right turning respectively, left turning of the machine-crank, characterized by the number-drums *r*¹, *r*², which are given to the drift *r*, and provided with numbers, whereby the two number-ranks run in contrarious course and the one rank is displaced by one number toward the other rank and with the sector *s*², enveloping these drums and having respectively displaced show-holes, substantially as set forth.

No. 49,900. Process of Treating Zinc Bearing Ores.

(*Procédé pour le traitement de minerais contenant du zinc.*)



Edgar Arthur Ashcroft, Himalaya, Broken Hill Colony, New South Wales, 7th September, 1895; 6 years.

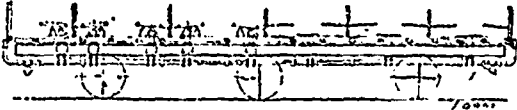
Claim.—1st. The herein described process for the treatment of zinc bearing ores and zinc bearing products consisting essentially in first oxidizing such ores or products as require it, secondly leaching the oxidized ore or product with a solution containing a ferric salt, thirdly electrolyzing the resulting zinc solution by first passing it around the metallic cathodes and then around the iron anodes, and subsequently around the carbon or other insoluble anodes of an electrolytic system of vats (or otherwise raising the ferrous salts to the ferric state), substantially as and for the purposes specified. 2nd. In the treatment of zinc bearing ores and zinc bearing products passing a zinc bearing solution first around the zinc cathodes, then around the iron anodes, and subsequently around the carbon or other insoluble anodes of an electrolytic system of vats, substantially as specified. 3rd. In the treatment of zinc bearing ores and zinc bearing products passing a zinc bearing solution, first around the zinc cathodes then around the iron anodes, and subsequently oxidizing the solution by means of chemical reagents, substantially as and for the purposes specified. 4th. In the treatment of zinc bearing ores and zinc bearing products, the herein described method of supplying ferrous salts to an electrolyte consisting of a solution more or less depleted of its zinc by means of iron anodes, substantially as and for the purposes specified. 5th. In the treatment of zinc bearing ores and zinc bearing products the herein described method of simultaneously raising a ferrous salt solution to a ferric salt solution and depositing zinc from a catholyte free from iron by means of electrolysis with carbon or other insoluble anodes and metallic cathodes, substantially as and for the purposes specified.

No. 49,901. Heating and Ventilating Apparatus for Railway Trains. (*Appareil pour chauffer et ventiler les chars de chemins de fer.*)

Jules Dery, Brussels, Belgium, 7th September, 1895; 6 years.

Claim.—1st. A heating and ventilating apparatus for railway trains, having a main pipe provided at its lowest point with an escape valve and fitted with branch-pipes rising to a certain height in the heaters, these heaters each having at their lower end an escape pipe for waste steam and condensed water, all of the escape pipes of one

car running into a single one, which is provided with an escape valve at its lowest point. 2nd. In combination with the heating and ven-



tilating apparatus claimed in No. 1, a coupling for the main pipe fastened by wedge-shaped clamps C of unequal length, and cast in a single piece with the rings A, being locked into each other by pressure on levers L, the levers being secured in their position either by being weighted, and having a chain M put on to them, or by a locking bar R fitted on one of the clamps C of one car, engaging with teeth D on the coupling of the next car, the packing rings being secured within the coupling by screw rings pressing on an inner collar with which the packing rings are provided. 3rd. In combination with the heating and ventilating apparatus claimed in No. 1, an iron box W in which each heater is enclosed, this box being provided with a lid V, to which are attached counter-weights P moving up and down in two casings Y situated one on each side of the car, or in a single partitioned casing situated inside of the car so as to shut or leave open as may be required, two apertures P¹ and P², the latter opening into the compartment, the lower ones connected with pipes C admitting the air and having each two inlets, a regulating door K being provided on each inlet, the pipes C being partitioned in the case of a single casing Y being used.

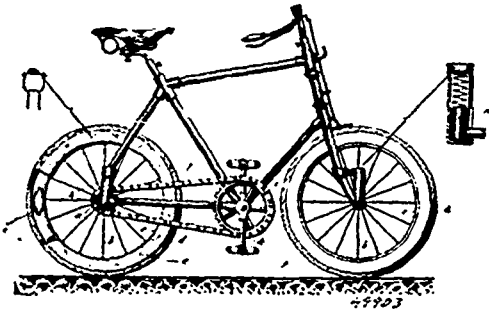
No. 49,902. Clothes Beater. (Baltoir pour vêtements.)



Matthew Fitzpatrick, Omaha, Nebraska, U.S.A., 7th September, 1895; 6 years.

Claim.—1st. In a beater, the combination of a handle having a longitudinal opening, beating wires fixed within the handle and extending beyond said opening, said beating wires being re-curved, all substantially as and for the purpose set forth. 2nd. In a switch or beater of the kind described, the combination of wire woven together near their fixed ends to form a long body, a handle having a long aperture larger in diameter than the said twisted body, a means of separating said wires at their ends and fixing them within said handle, all substantially as and for the purpose set forth.

No. 49,903. Bicycle. (Bicycle.)



Carl Ruffert, Hanover, Prussia, Germany, 7th September, 1895; 6 years.

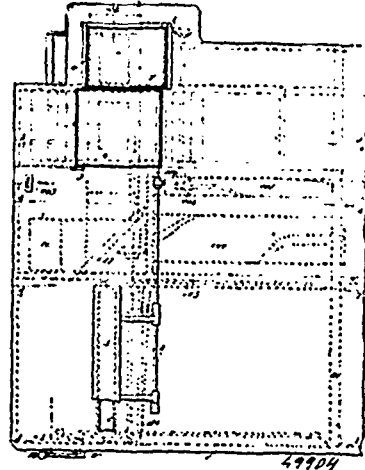
Claim.—1st. A velocipede having its wheel provided with two concentric rims c and d, connected by interposed cushion springs e, constructed and arranged substantially as herebefore described. 2nd. A velocipede having its wheel provided with two concentric rims c, d, connected by interposed cushion springs e and a spring cushioned bearing for the axle of the wheel, constructed and arranged substantially as herebefore described.

No. 49,904. Coin Controlled Registering Machine. (Machine d'enregistrement actionnée par une pièce de monnaie.)

Detalmo di Brazza Savorgnan, Rome, Italy, 7th September, 1895; 6 years.

Claim.—1st. In a registering machine, the combination with a writing and printing surface, of printing mechanism, a cover and locking device for rendering the writing and printing surface inaccessible, a coin-operated unlocking device for releasing the cover, and locking mechanism operatively connected with the cover for unlocking the printing mechanism when the cover is open, substantially as specified. 2nd. In a registering machine, the combination of a writing table and date and number-printing mechanism, a paper strip extending over the writing table and printing types for receiv-

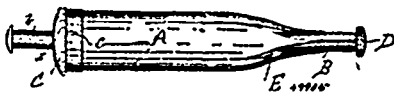
ing a record, a reel for receiving the paper strip, mechanism inter-operating the reel, a cover and locking device provided with a coin-



operated releaser for rendering the writing and printing surface inaccessible except at times when the lock is released by a coin, and locking mechanism operatively connected with the cover, for locking the printing mechanism when the cover is open, substantially as specified. 3rd. In a registering machine, the combination of an apertured table adapted for receiving a paper strip for writing or printing, date and numbered wheels having figured or lettered faces projecting through the table, platens for pressing the paper down on the date and number wheels, and a double lever for operating the platens simultaneously, substantially as specified. 4th. In a registering machine, the combination of a writing table, two paper strips extending over the table, devices for producing impressions simultaneously on the two strips of paper, feeding mechanism for carrying the two strips of paper forward, a cutter punch for cutting the impressed portion of one strip out of the strip, leaving the strip perforated but continuous, and means for storing the strips, substantially as specified. 5th. In a registering machine, the combination with the book-forming reel provided with paper-holding arms having slotted ends, of the movable knife for cutting the paper on the reel, substantially as specified. 6th. In a registering machine, the combination with the letter box, of a weighing scale provided with a narrow, deep letter receptacle having parallel sides and furnished with a hinged bottom constructed to discharge the weighed letter into the letter box, substantially as specified. 7th. The combination with the beam of the letter weighing scale, of a rolling weight, and a yielding adjusting arm for moving the weight along the scale beam, substantially as specified. 8th. The combination of a scale, a letter receptacle suspended from the shorter arm of the scale beam, a rolling weight adapted to roll on the scale beam, a wheel provided with figures for printing, and means for moving the weight and turning the printing wheel simultaneously, substantially as specified. 9th. In a registering machine, the combination with the scale, and the weight-moving and printing wheel-turning devices, of a positive stop formed of a cylinder having deep and shallow grooves, and a dog fitted to the deep grooves and provided with teeth for entering the shallow grooves, for stopping and holding the printing wheel as the scale beam drops, substantially as specified. 10th. In a registering machine, the combination with the scale provided with a letter receptacle, of printing mechanism constructed to print on the letter while it is in the letter receptacle, substantially as specified. 11th. In a registering machine, the combination with the letter receptacle and receipt-delivering chute, of mechanism for preventing the delivery of the receipt in the absence of a letter in the letter receptacle, substantially as specified. 11th. In a registering machine, the combination with the registering and weighing mechanism, of two sets of numbering wheels, and mechanism for setting both sets simultaneously; one set being constructed for printing on the record strip and receipt, the other set being for printing upon the letter, substantially as specified. 13th. In a registering machine, the combination, with the covers of the writing table, letter receptacle and shaft carrying the covers, of the cam carried by the cover shaft, an operating lever, and locking mechanism operated by the cam on the cover shaft, whereby the operating mechanism is locked while the covers are open, substantially as specified. 14th. In a registering machine, the combination, with the operating shaft, of a check comprising two fixed ratchet bars oppositely arranged with respect to each other, and an arm carried by the shaft and provided with pawls for engaging the ratchet bars, and tripping devices for shifting the pawls, for compelling the complete movement of the operating shaft in either direction, substantially as specified. 15th. The combination, with the operating shaft, of a signal for indicating the complete movement of the shaft in either direction, substantially as specified. 16th. In a registering machine, the combination, with the coin chute

and record strip, of a spring-pressed coin chute-closing lever resting on and controlled by the record strip, substantially as specified. 17th. In a registering machine, the combination, with the slotted coin-receiving pan, of a sliding coin discharging rod provided with a fork for forcing the coin out of the pan and delivering it to the coin receptacle, substantially as specified. 18th. The combination, with the coin discharging fork, of a trip lever carried by the locking bar of the operating shaft, and adapted to move forward and release the fork-carrying rod, substantially as specified. 19th. In a registering machine, the combination, with a movable letter receptacle having apertured sides, of printing mechanism provided with number wheels, and a yielding platen constructed to print consecutive numbers on packages of different thicknesses contained in the receptacle, substantially as specified. 20th. The combination, with the devices for printing on a letter, of a surface for receiving the impressions of the number wheels in the absence of a letter, substantially as specified. 21st. The combination, with a letter box and weighing scales connected with the box, of a letter receptacle having vertical parallel sides and ends supported by the weighing scales and having a hinged bottom, and mechanism for opening the said hinged bottom, substantially as specified. 22nd. The combination, with letter-weighing scales, of a letter receptacle suspended from the scale beam and having a cover and locking device for the same, a hinged bottom for retaining the letter temporarily, printing mechanism for printing on the letter, and mechanism for opening the hinged bottom and discharging the contents of the letter receptacle after printing, substantially as specified. 23rd. The combination, in a registering machine, of letter-numbering mechanism, printing mechanism for recording the numbers of the letters, a paper strip for receiving the record of the numbers of the letters, mechanism for moving the paper strip forward with a step-by-step motion, an automatic storage reel for receiving the paper strip after it is printed, and mechanism for operating the automatic reel, substantially as specified. 24th. The combination, with the paper record strip, of a take-up for maintaining the strip under tension and winding it on a storage spool, substantially as specified. 25th. The combination, with the suspended letter receptacle and letter-numbering mechanism, of a yielding platen for adapting the mechanism to letters and packages of different thicknesses, substantially as specified. 26th. In a registering machine, the combination of the scale having an adjustable weight, a spirally grooved cylinder provided with straight longitudinal grooves, a dog movable with the scale weight and adapted to engage the spiral or straight grooves of the cylinder, and figure wheels connected with the cylinder, substantially as specified. 27th. The combination, with a reel having a transversely grooved extension arm for receiving the record strip, of a movable knife constructed to project into and slide through the grooves of the arms, and a knife-carrying guide, substantially as specified. 28th. The combination, with the number wheels, of a spirally grooved cylinder provided with a straight longitudinal groove connecting the ends of the spiral groove, an actuating slide provided with a stud projecting into the spiral groove, and latches for compelling the stud to pass from the spiral groove to the longitudinal groove at one end of the cylinder, and compelling the stud to pass from the longitudinal groove to the spiral groove at the opposite end of the cylinder, substantially as specified. 29th. In a registering machine, the combination with the record-forming devices, of an enclosed cutter and die or cutting the receipt from the record strip, leaving the strip perforated but continuous, mechanism for carrying the strip between the cutter and die with a step-by-step motion, and a chute for receiving and hold the receipt, substantially as specified. 30th. In a registering machine, the combination, with the operating shaft, of an arm carrying a double pawl, a double acting spring for compelling the throw of the pawl in either direction, and a curved ratchet bar provided with two sets of ratchet teeth oppositely arranged with respect to each other and furnished with two pawl-tripping fingers, substantially as specified. 31st. The combination, with the operating shaft, of an arm carried by the shaft, pawl and ratchet mechanism, two spring bell hammers provided with dogs for engagement with the arm after the arm has completed its stroke in either of the two directions in which it moves, and a bell placed between the hammers, for giving notice of the completion of the stroke of the operating shaft in either direction, substantially as specified. 33rd. The combination, with the operating shaft of the registering mechanism, of an air check cylinder for preventing rapid oscillations of the shaft, substantially as specified.

No. 49,905. Tool for Repairing Pneumatic Tires.
(*Outil pour réparer les bandages pneumatiques.*)



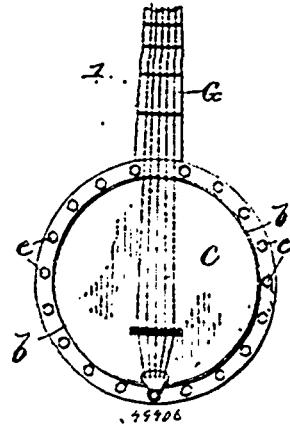
Marius Edward Griswold, Chicago, Illinois, U.S.A., 7th September, 1895; 6 years.

Claim.—1st. The herein described tool for repairing pneumatic tires, consisting of the combination of the outer tube A having the expandible, tapered end E, and the inner plunger B, by which the plug is carried into the tire, having the compressible end F, having the longitudinal, tapered sections, all substantially as shown and

described. 2nd. The herein described tool for repairing pneumatic tires, consisting of the combination of the outer tube A, having the expandible, tapered end E, the inner plunger B by which the plug is carried into the tire, having the compressible end F, having the longitudinal tapered sections, and the cap C forming a guide by which A and B are prevented from turning upon one another, and thereby caused to break joints, all substantially as shown and described. 3rd. The herein described tool for repairing pneumatic tires, consisting of the combination of the outer tube A having the expandible, tapered end E, and the groove a, the plunger B by which the plug is inserted, having the feather b, and the cap C having the tongue c and the way d, all substantially as shown and described.

No. 49,906. Musical Instrument.

(*Instrument de musique.*)

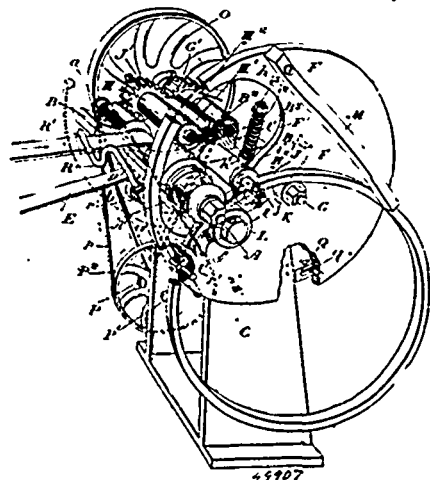


Neil Merrill, Oshkosh, Wisconsin, U.S.A., 7th September, 1895; 6 years.

Claim.—1st. As an improved article of manufacture, a head for a musical instrument comprising a horizontal diaphragm constructed of thin sounding metal and having a downwardly extending homogeneous rim portion, which latter is provided with an annular projection which forms a permanent part of the rim, substantially as described. 2nd. As an improved article of manufacture, a banjo-head made of thin sounding metal having a downwardly extending rim or side portion, which latter is provided with a flesh hoop which forms a permanent part of the same, substantially as described. 3rd. A banjo comprising in its construction a head formed of thin sounding metal, and a downwardly extending rim or side portion provided with a flesh hoop which forms a permanent part of the same, a rim proper provided with a horizontally extended perforated flange, an outer rim formed with an inwardly and upwardly extending flange forming a strainer hoop, said rim also being provided with bolt holes, and bolts and nuts for uniting the several parts, substantially as described.

No. 49,907. Turning Machine for Wheel Rims.

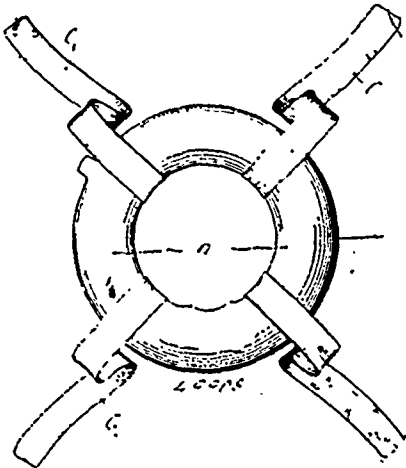
(*Machine à tourner les jantes de roues.*)



George Frederick Bishobrick, Toronto, Ontario, Canada, 7th September, 1895; 6 years.

Claim.—1st. A wood turning machine for bicycle rims, comprising cutter heads suitably driven, a supporting roller situated radially opposite the cutter heads, a feeding roller suitably journaled and driven and flexibly held to the rim and a supplemental roller for the rim, all arranged as and for the purpose specified. 2nd. The combination, with the cutter head suitably journaled and driven, of a disc provided with an opening through which the cutter spindle extends, a supporting roller journaled on a stud in the disc radially opposite the cutter head, a feed roller secured on the end of a spindle extending through the opening in the disc and a supplemental supporting roller secured on the end of the spindle upon which the disc is supported, as and for the purpose specified. 3rd. The combination, with the cutter head suitably journaled and driven, of a disc provided with an opening through which the cutter spindle extends, a supporting roller journaled on a stud in the disc radially opposite the cutter head, a feed roller secured on the end of a spindle extending through the opening in the disc, a sleeve H having arms swung on a spindle G, and forming a journal for the spindle h^2 , and a supplemental supporting roller secured on the end of the spindle upon which the disc is supported, as and for the purpose specified. 4th. The combination, with the cutter heads suitably journaled and driven, of a disc provided with an opening through which the cutter spindle extends, a supporting roller journaled on a stud in the disc radially opposite the cutter head, a feed roller secured on the end of a spindle extending through the opening in the disc, a sleeve H provided with a flange h^1 , and end arms h^2 , pivotally swung upon the spindle G, the set screw h resting the top of the cross-bar B^2 , and the supplemental supporting roller secured on the end of the spindle upon which the disc is supported, as and for the purpose specified. 5th. The combination, with the cutter heads suitably journaled and driven, of a disc provided with an opening through which the cutter spindle extends, a supporting roller journaled on a stud in the disc radially opposite the cutter head, a feed roller secured on the end of a spindle extending through the opening in the disc, a swinging sleeve for supporting the spindle, a rod extending up through the flange of the sleeve provided with a spiral spring held from extension upwardly, and a supplemental supporting roller secured on the end of the spindle upon which the disc is supported, as and for the purpose specified. 6th. The combination, with the cutter head driven as specified, of the disc F, supporting roller L, feed roller J, and supporting roller G, having their spindles geared together and driven, as shown and for the purpose specified. 7th. The combination, with the cutter head suitably journaled and driven, the disc pivoted upon the spindle G, and having an opening F^1 through which the cutter head extends, and the roller L journaled on the stud l as specified, of the stop Q, secured to the disc F, and designed to abut against the standard C, as and for the purpose specified. 8th. The combination, with the cutter head suitably journaled and driven, the disc pivoted upon the spindle G, and having an opening F^1 through which the cutter head extends, and the roller L journaled on the stud l as specified, of the spindle R extending through the swivel collar B, and screwed into the collar it^1 swivelled on the inner face of the disc, as and for the purpose specified. 9th. The combination, with the cutter head supporting rollers and feeding spindle and disc, of the swinging retaining arm M, arranged as and for the purpose specified.

No. 49,908. Shield for Wounds, etc.
(*Protecteur pour plaies, etc.*)



Alexander Cole, Dublin, Ireland, 7th September, 1895; 6 years.

Claim.—1st. A shield or protector for wounds, vaccination sores, corns, bunions and the like, consisting of an inflated tubular ring or cushion of elastic material preferably india rubber. 2nd. In shields or protectors for wounds, vaccination sores, corns, bunions and the like, the use of a hollow ring or cushion of elastic material, preferably

india-rubber, inflated with air or other like yielding medium and provided with suitable ribbon-like or adhesive fastenings, as herein described and illustrated.

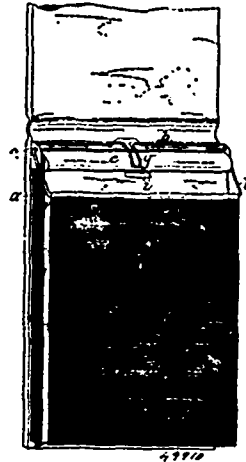
No. 49,909. Bark Cutter. (Coupe-corse.)



Jeremiah Daigneau, Salem, Massachusetts, U.S.A., 7th September 1895; 6 years.

Claim.—1st. The improved bark cutter herein described, having the handle E, the holder C, the knife A, the rollers B, and the gauge D, as and for the purposes described. 2nd. In a bark cutter, the knife A, having the sharp point a , and the rollers B carried thereby, as and for the purposes described. 3rd. The combination, in a bark cutter of the knife A, the plates b^2 , the screw b^3 , the studs b_1 , and the rollers B, as and for the purposes described. 4th. In a bark cutter, the gauge D, as and for the purposes described. 5th. The combination, in a bark cutter, of the holder C¹, carrying the rollers B¹, on the studs b^1 , and split at its end to receive the knife A¹, which is secured in place by the set screw a^2 , and the gauge D¹, as and for the purposes described.

No. 49,910. Clip for Books, etc. (Lien pour livres, etc.)



Eli Hambleton Hillborn, Toronto, Ontario, Canada, 7th September, 1895; 6 years.

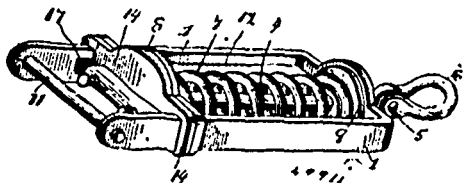
Claim.—1st. The combination of a base-plate, having a hollow roll on one edge and ears at each end extending at right angles to the plate, a curved grip-plate pivoted between said ears and having one of its edges rolled, a bale connected to said ears, and a spring bearing upon the grip-plate and having its end portions lying in the hollow roll on the base-plate, substantially as described and shown. 2nd. The combination, with the base-plate provided with ears at each end extending outward from one side and at right angles to the plate, and a hollow roll on one side of the plate, a curved grip-plate between said ears, having one of its edges rolled, a bale having its ends extending through the said ears and within the ends of the roll on the grip-plate, and a spring bearing upon the grip-plate to force its free edge toward the base, and having its free end portions lying in the hollow roll in the base-plate, substantially as described and shown. 3rd. The combination, with the base-plate provided with ears at each end extending outward from one side and at right angles to the plate, and a hollow roll on one side of the plate, a curved grip-plate between said ears, having one of its edges rolled and having a lip thereon, a rectangular wire bale having its ends extending through the said ears and within the ends of the roll on the grip-plate, and a spring formed of wire and having a central loop bearing upon the grip-plate to force its free edge toward the base, and having its end portions lying in the hollow roll on the base-plate, substantially as described and shown.

No. 49,911. Spring Cockeye. (Crochet d'attelage à ressort.)

William Finter, Pleasant Hill, Missouri, U.S.A., 9th September, 1895; 6 years.

Claim.—A cockeye comprising a frame I, a draft rod 4, mounted thereon a cross bar 8, slidingly mounted on the frame and connected with the draft rod, a spring 7 disposed on the draft rod and

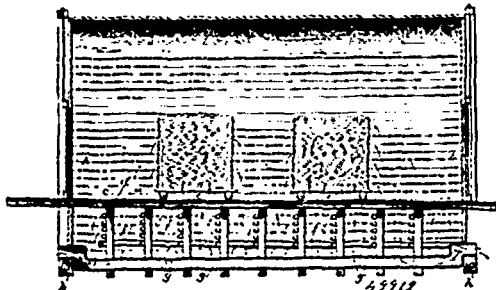
interposed between the sliding cross bar and the frame, and an adjustable cross bar 14, located on the frame, and locking devices as



16, for securing the ends of the adjustable cross bar to the frame, and limiting the inward movement of the draft rod, substantially as described.

No. 49,912. Kiln for Drying Lumber.

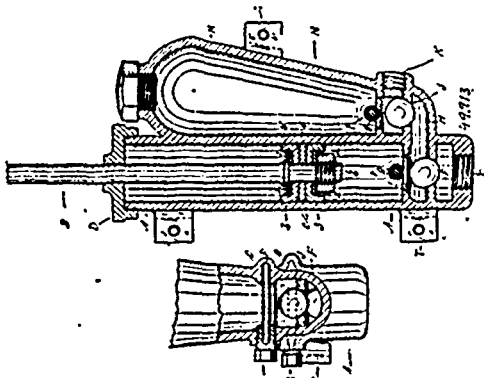
(Etuve pour le bois de construction.)



La Fayette Moore, Cordele, Georgia, U.S.A., 9th September, 1895; 6 years.

Claim.—1st. The herein described method of curing lumber which consists in subjecting it to a confined current of heated air in a substantially air-tight inclosure, whereby the moisture is sweated out from the lumber and taken up by the heated air, precipitating the excess of moisture from the saturated air at the bottom of the inclosure before it again rises and passes through the inclosure, and disposing of the precipitated moisture by absorption, substantially as described. 2nd. A lumber drying kiln consisting of an inclosure having permanently closed side walls and roof, in combination with heaters located within the inclosure, and air-ducts located below the heaters, and having permanently open ends for the reception of outside air, in the manner and for the purpose set forth. 3rd. A lumber drying kiln comprising the combination of an inclosure having permanently closed side-walls and top, whereby the heat and vapour from within are prevented from escaping at points above the base of the inclosure, heating devices located within the inclosure, air-ducts located at the lower portion thereof and below the heating appliances, whereby ingress of outside air is permitted only at the base of the inclosure during the drying process, as and for the purpose set forth. 4th. The combination in a lumber drying kiln, of a floorless inclosure normally closed at the top and sides, heating devices located within the inclosure, air-ducts extending across the bottom of the inclosure and embedded in the ground which forms the bottom of the inclosure, said air-ducts being provided with perforations throughout their upper portion, in the manner and for the purpose set forth. 5th. A floorless lumber drying kiln having closed side-walls and top and provided with air ingress openings at the base only, as and for the purpose set forth.

No. 49,913. Force Pump. (Pompe foulante.)



Thomas Reid, Hamilton, Ontario, Canada, 9th September, 1895; 6 years.

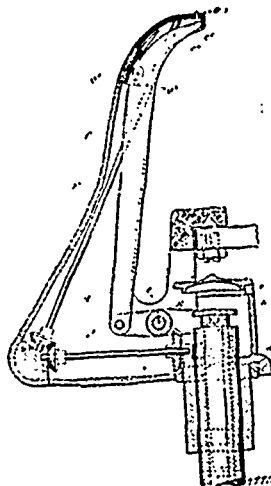
Claim.—1st. In a force pump, the cylinder with open top and air chamber located side by side, and provided with ball valve seatings in their lower parts, in comparative close proximity, and sockets for the inner ends of stop pins, said sockets located immediately above and in vertical line to said valve seatings, the water inlet and outlet and the feet for attaching said pump to position all made in one piece of metal, substantially as described and set forth. 2nd. In a force pump, the cylinder and air chamber with caps, the piston rod and piston as described, the water inlet of cylinder and water outlets of air chamber, and their attaching feet in combination with the ball valves, and the stop pins in their sockets and held in position above the said valves by means of their respective and adjustable nuts, substantially as described and set forth.

No. 49,914. Soft Metal Tube. (Tube en métal.)

William Droeser, London, England, 9th September, 1895; 6 years.

Claim.—In combination, a lead or other soft metal pipe or tube, and a helically coiled wire, rod, bar, band or ribbon of steel or other metal of a higher melting point than that of the soft metal tube and of a greater toughness and tenacity, the wire or ribbon of the tougher metal being incorporated with the soft metal tube within the substance thereof at the time of manufacture.

No. 49,915. Machine for Uniting Soles and Uppers of Boots and Shoes. (Machine pour réunir les semelles et empeignes des chaussures.)



William Carey, Montreal, Quebec, Canada, 9th September, 1895; 6 years.

Claim.—1st. In a machine for uniting soles and uppers of boots and shoes, a solid needle bar having a deep groove in its back and two guide shoulders formed at its upper extremity where the head to carry the needle is made, substantially as described and for the purposes set forth. 2nd. In a machine for uniting soles and uppers of boots and shoes, a mechanism for transmitting a reciprocating motion to the needle bar, consisting in a lever of the first order joined at one end to the needle bar and at the other to a screw that rises and falls, substantially as described and for the purposes set forth. 3rd. In a machine for uniting soles and uppers of boots and shoes, the combination of a solid needle bar having a deep groove in its back, and two guide shoulders formed at its upper extremity where the head to carry the needle is made, a mechanism for transmitting a reciprocating motion to the above needle bar, consisting in a lever of the first order joined at one end to the needle bar, and at the other to a screw that rises and falls, with a screw B, horn A having the guide shoulders a¹ and guide block a², substantially as described and for the purposes set forth.

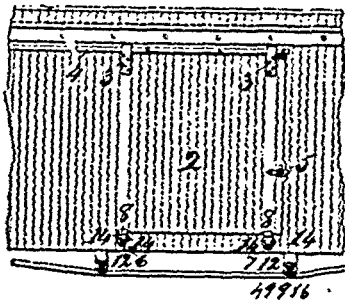
No. 49,916. Bracket for Car Doors.

(Console pour portes de chars.)

Edward A. Hill, James L. Mallory, and Edgar A. Hill, all of Chicago, Illinois, U.S.A., 9th September, 1895; 6 years.

Claim.—1st. The combination with a sliding door, of a bracket and an attaching-screw or bolt having non-rotative engagement with the bracket, said bracket having movable contact with a part of the structure in such manner as to prevent rotation of the bracket,

substantially as set forth. 2nd. The combination with a sliding-door, of a guide-bracket engaged, and held against rotation by the

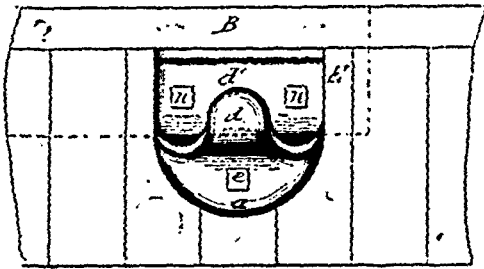


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door, and a retaining-screw or bolt having non-rotatable engagement with the bracket, substantially as and for the purpose described.

No. 49,917. Bracket for Car Doors.

(Console pour portes de chars.)



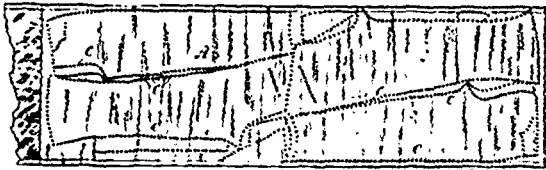
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Edward A. Hill, James L. Mallory, and Edgar A. Hill, all of Chicago, Illinois, U.S.A., 9th September, 1895; 6 years.

Claim.—1st. A device for preventing the outward movement of a car-door, comprising an extension or arm normally in front of the door, and an extension in the rear of the door firmly secured to the car-body above the lower edge of the door, said rear extension being secured in such relation to the door as to conceal the securing bolts behind the same, substantially as described. 2nd. A bracket for car-doors provided with a base portion, an outwardly and upwardly projecting portion, and an inwardly and upwardly extending portion, the latter being fitted and secured in a recess or niche in the side or sheathing of the car above the lower edge of the door, substantially as described.

No. 49,918. Pattern for Garments.

(Patron pour vêtements.)



49918

Robert John Smith, Ottawa, Ontario, Canada, 9th September, 1895; 6 years.

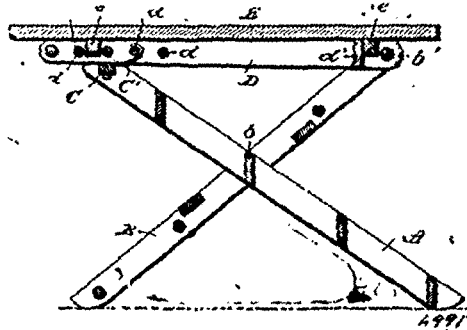
Claim.—A pattern sheet A, on which is delineated by holes or perforations C, the outline of one or more garments, for transferring the outline of the pattern to the material to be cut by stencilling, substantially as set forth.

No. 49,919. Wash Benches. (Banc à laver.)

David Boyd, Washburn, Atkinson, Maine, U.S.A., 9th September, 1895; 6 years.

Claim.—1st. The herein described bench consisting of crossed legs A and B, a top pivoted to one pair of said legs and having cross-bars d, and a cross-piece C pivoted to the upper ends of the other pair of legs and provided with hooks which are adapted to be thrown in engagement with one of the cross-bars d, when the side pieces of the top are brought in engagement with said cross-piece, for the purpose set forth. 2nd. In a bench, the combination, with crossed legs pivotally connected to each other, of a top pivoted at one end and provided with one or more cross-bars d, and a pivotally supported cross-piece C, having a flat portion with which the sides of the top engage, and hooks C', substantially as shown and for the

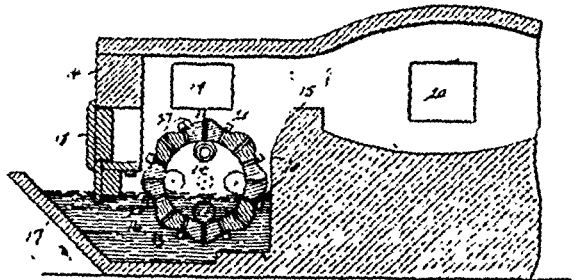
purpose set forth. 3rd. In a bench, the combination, of a cross-piece having pivots pins c to one side of the centre thereof, flat



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bearing surfaces adjacent to said pivot pins and hooks having up-turned ends, together with a pivoted top having a cross-bar, and having side pieces adapted to engage with the flat bearing surfaces of the pivoted cross-piece, so as to turn the same and throw the hooks carried thereby in engagement with the cross-bar of the pivoted top, substantially as described.

No. 49,920. Furnace. (Fournaise.)



49920

Alfred Metcalf Howlett, Kewanee, Illinois, U.S.A., 9th September, 1895; 6 years.

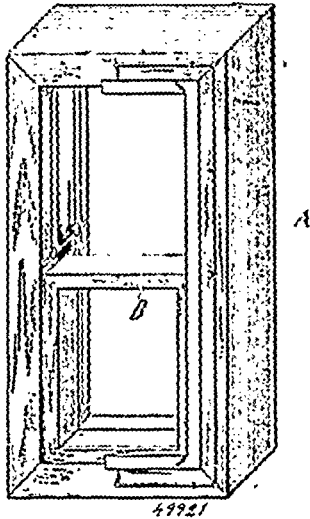
Claim.—1st. In a furnace, the combination with a water-sealed ash-pit, of a rotary grate, and means for introducing a blast into the furnace below the active surface of the grate, said blast having communication with the water in the ash-pit, whereby the steam generated from such water will be carried through the bed of fuel with the blast, substantially as described. 2nd. In a furnace, the combination with a water-sealed ash-pit, of a cylindrical rotary grate partly submerged in the water in the ash-pit, said grate being provided with perforations, and means for introducing a blast of air into said grate and in communication with the water in the ash-pit, whereby the steam generated by the heated grate will be carried with the blast through said grate, substantially as described. 3rd. In a furnace, the combination with a rotary grate, of a water-sealed ash-pit arranged thereunder, said ash-pit having an external opening whereby the ashes may be removed without interrupting the operation of the furnace, and means for introducing a blast into the space between the upper surface of the grate and the water in the fire-box, such blast having access to such water, whereby the steam generated by the heated grate will be carried with the blast through said grate, substantially as described. 4th. In a furnace, the combination with a bridge wall, and a front wall forming a fire-box, of a rotary cylindrical grate in said fire-box, said grate having perforations in its surface, a water-sealed ash-pit under said grate, said ash-pit having an external opening, and means for introducing a blast into said grate, said blast having access to the water in the ash-pit, substantially as described. 5th. In a furnace, the combination with a water-sealed ash-pit, of a grate, and means for introducing a blast into the furnace below said grate, said blast having communication with the water in the ash-pit, whereby the steam generated from such water will be carried through the bed of fuel with the blast, substantially as described.

No. 49,921. Window. (Fenêtre.)

Christian Lenz and Johannes Stumpf, both of Berlin, Prussia, 9th September, 1895; 6 years.

Claim.—1st. A window frame having at its vertical inner surface, two, three or more parallel, longitudinal or vertical grooves, said grooves being at the upper and lower ends and at their middle connected by horizontal cross grooves in which vertical grooves the sashes, consisting of one or more parts are kept in place by means of laterally projecting bolts in the manner described and illustrated. 2nd. In window frames as described, the construction of the horizontal grooves E, E', E" to pass through the entire width of the

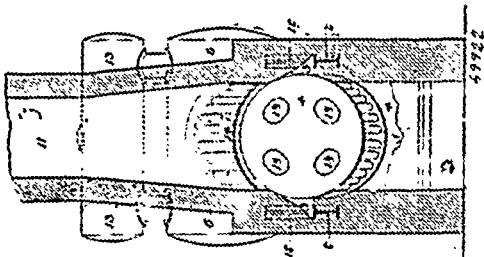
frame, as described and illustrated. 3rd. In window frames, as described, the construction of the vertical and horizontal grooves in



the front surface of metallic layers which cover the inner vertical faces of the frame forming in their cross section, flattened tubes into which are passed or inserted bars crossed by the horizontal grooves, as described and illustrated. 4th. In window frames or their lateral attachments, as described, the construction at the meeting points of the vertical and horizontal grooves of recesses as described and illustrated. 5th. Sashes adapted to window frames, as described, having lateral cylindrical bolts on their vertical sides displaceable in a horizontal and lateral sense and fixed in their height and their distance from each other corresponding with the horizontal lower or upper cross grooves, or with one of the latter and the middle cross groove respectively, as described and illustrated. 6th. On a window sash having lateral, cylindrical horizontally displaceable bolts, as described, the construction of knobs at the extremities of said bolts, for the purpose described. 7th. On a sash, as described, comprising lateral cylindrical, horizontally displaceable bolts, the construction at the end of said bolts of an anti-friction ball bearing, as described and illustrated. 8th. In a window sash, as described, the bolts G^1 in plates H provided with lateral cheeks g , which plates have each a central longitudinal slot h , with two lateral extensions h^1, h^2 , to receive a pin on bolt G^2 , a spiral spring h^3 being arranged between the said cheeks g , presses against one of the latter and the pin h , and tending to press outwardly the bolt when the pin h^3 is not resting in h^1 or h^2 , as described and illustrated. 9th. In a window fitting, as described, the means for closing the joints between frame and sashes consisting of flat strips m, n , of which two opposite strips n with bevelled ends engage with the corresponding ends of the strips m , the strips n being attached to 2-armed levers o , the other ends of which are by means of rod p, p , secured to a double hand lever, as described and illustrated. 10th. The strips m and n engaging with each other at their bevelled ends, having slits n^1 along the ends of strips n , in which the pins n^2 secured to strips m engage, for the purpose set forth. 11th. The flat strips n and m , the strips n having bevelled fork-like ends which engage with the bevelled end of strip m especially adapted thereto, slits n^1 in both fork ends, said slits engaging with pins n^2 passing through the end of strip m , as described and illustrated.

No. 49,922. Water-Tube Boiler.

(Chaudière sectionnelle.)

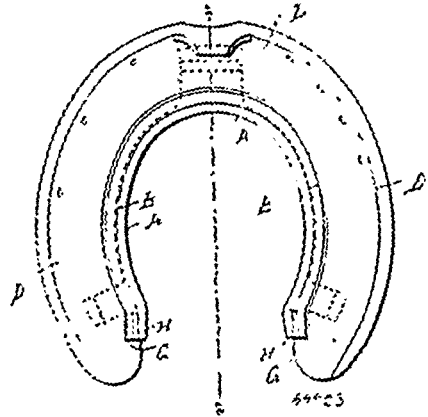


James McGregor and John Leonard Jackson, both of Saginaw, Michigan, U.S.A., 9th September, 1895; 6 years.

Claim.—1st. A water-tube boiler comprising end shells having inner heads whose lower portions are substantially parallel and are

connected by water-tubes, while their upper portions extend at opposite angles, an upper drum, and tubes connecting the angled portion of each head therewith, substantially as described. 2nd. A water-tube boiler having end shells provided with inner heads, the upper parts of which are inclined at an angle, while the lower substantially parallel portions are connected by water-tubes, a horizontal baffle wall above these water-tubes, a steam and water drum having its sides substantially parallel with the angled portions of the heads, and tubes connecting the said angled portions of the heads therein, substantially as described. 3rd. A water-tube boiler having end shells supported upon longitudinal I-beams extending along the sides of the boiler, said shells having their inner heads connected with each other by water-tubes, an intermediate steam and water drum, and tubes connecting the same with the end shells, substantially as described.

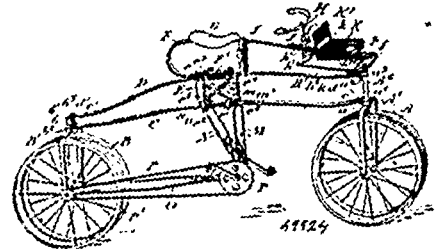
No. 49,923. Device for Preventing Horses from Slipping. (Appareil pour empêcher les chevaux de glisser.)



Robert Abell, Derby, England, 9th September, 1895; 6 years.

Claim.—1st. The improved means or device for preventing horses slipping consisting of studs, projections or calkings E, E^1 , carried by and forming part of a plate spring ring or other suitably formed piece of metal A , the whole length of whose inner edge B , is turned upwards and adapted to engage or clip on to the splayed or bevelled inside edge C , of the shoe D , when spring upwards and released, substantially as described and illustrated. 2nd. The improved means or device for preventing horses slipping consisting of studs, projections or calkings E, E^1 , carried by and forming part of a plate spring ring or other suitably formed piece of metal A , whose inner edge B is turned upwards and backwards or outwards as shown, in combination with a horse-shoe having a splayed or bevelled inner edge C and joggles, recesses or stops G , substantially as and for the purposes described and illustrated.

No. 49,924. Bicycle. (Bicycle.)



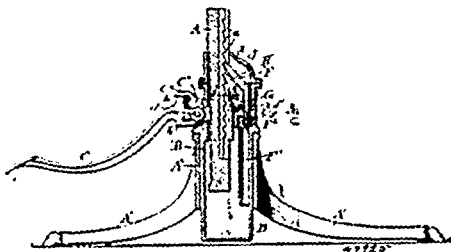
Archibald H. Brintnell, Toronto, Ontario, Canada, 9th September, 1895; 6 years.

Claim.—1st. In a bicycle the combination with the front forked standard provided with an upper tubular portion and the spring reaches C and D , pivotally connected to the tubular portion, of the rear forked standard connected to the rear end of the reaches C and D , as and for the purpose specified. 2nd. In a bicycle, the combination with the front forked standard provided with an upper tubular portion and the spring reaches C and D , pivotally connected to the tubular portion, of the rear forked standard connected to the rear end of the reaches C and D , and the bowed spring F , connected at the rear to the spring reach D , and at the front to the elliptical spring I , secured on the top of the tubular portion A^2 , of the standard as and for the purpose specified. 3rd. In a bicycle the combination with the front forked standard, provided with an upper tubular portion and the spring reaches C and D , pivotally connected to the tubular portion, of the rear forked standard connected to the rear

end of the reaches C and D, and the bowed spring F, connected at the rear to the spring reach D, and at the front to the top of the standard A¹, and the seat G, and handles H, secured on the bowed spring F, as and for the purpose specified. 4th. In a bicycle the combination with the front forked standard provided with an upper tubular portion and the spring reaches C and D, pivotally connected to the tubular portion, of the rear forked standard provided with lugs at the top having a double link pivoted between them and pins extending through the links, lugs and rear ends of the spring reaches as and for the purpose specified. 5th. The combination with the spring reaches C and D, connected to the rear and front forked standards as specified, and the bowed spring F, secured thereon as specified, of the strap J, connecting the bowed spring and reach as and for the purpose specified. 6th. The combination with the spring reaches C and D, connected to the rear and front forked standards as specified, of the handles H, having their standard journalled intermediate of the length of the bowed spring, a cross-bar at the bottom of the standard pivotally connected by rods h², to the ends of the elliptical spring I, supporting the front end F¹, of the bowed spring F, upon the top of the tubular portion A², of the front forked standard as and for the purpose specified. 8th. The combination with the bicycle frame constructed as specified, of a basket K, provided with front opening k, and hinged flap K¹, the basket being located centrally upon the bowed spring as and for the purpose specified. 9th. In a bicycle the combination with the front and rear forks and reaches C and D, connected thereto as specified, of the rectangular frame E, provided with side holes e¹, e², and secured to the reaches C and D, by clips, the pedal axle journal sleeve L¹, adjustably connected by the brackets M and N, to the rectangular frame E, the frame O, having its front ends connected to the rear extensions I², of the sleeve L¹, and at the rear to the axle of the drive wheel as and for the purpose specified. 10th. In a bicycle the combination with the front and rear forks and reaches C and D, connected thereto as specified, of the rectangular frame E, provided with side holes e¹ and e², and secured to the reaches C and D, by clips, the pedal axle journal sleeve L¹, adjustably connected by the brackets M and N, to rectangular frame E, the frame O, having the side bars at the front connected by bolts through slots I², to the rearward extensions I², and the rear end of the frame supported on the drive axle as and for the purpose specified. 11th. In a bicycle the combination with the broad rim having the peripheral groove a¹, of the ribbed flexible tire A², fitting within the groove a¹, as and for the purpose specified. 12th. In a bicycle the combination with the broad rim having the peripheral groove a¹, of the ribbed flexible tire A², fitting within the groove a¹ and having bridges a², throughout, the hollow ribs on the inside as and for the purpose specified. 13th. The combination with the bicycle having the front and rear forks with an upper reach and a lower reach comprising a rigid truss frame formed and connected to the front and rear forks as shown and for the purpose specified.

No. 49,925. Dental Chair.

(Chaise pour opérations dentaires.)

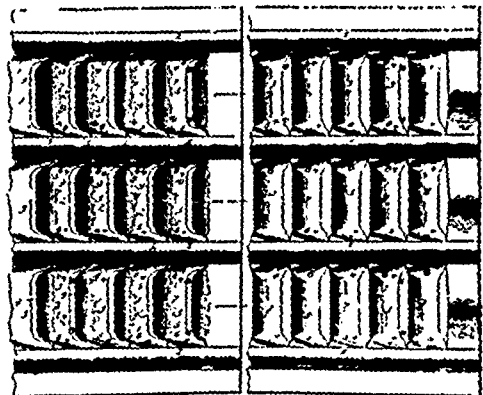


The S. S. White Manufacturing Company, Philadelphia, Pennsylvania, assignee of Arthur William Browne, Prince's Bay, New York, all in the U.S.A., 9th September, 1895; 6 years.

Claim.—1st. The combination of the vertically adjustable chain body support provided with the vertically extending groove or recess, the carrier for the support, the lever composed of jointed sections pivoted to the carrier, and provided with the cam at the inner end of its main section, and the sectional clamping shoe mounted to slide in the carrier and the inner section of the lever actuated by the said cam and engaging said groove or recess in the support when the lever is swung sidewise, substantially as set forth. 2nd. The combination of the vertically adjustable toothed support, its carrier, the raising and lowering lever jointed to the carrier, the lever pawl for engaging the toothed support, provided with the guideway, the support upholding pawl supported by the carrier, the controlling link pivoted to the upholding pawl at one end and at its opposite end engaged by the guideway on the lever pawl, and means for

maintaining a yielding pressure upon the controlling link to actuate the pawls, substantially as set forth. 3rd. The combination of the raising and lowering lever, its pawl provided with the guideway, the carrier to which the lever is pivoted provided with the stops acting upon said pawl and serving to limit the movements of the lever, the vertically adjustable toothed support mounted in the carrier and with which said pawl is adapted to be engaged, the support upholding pawl supported by the carrier and against which the lever pawl is adapted to strike, the controlling link pivoted to the upholding pawl at one end, and at its opposite end engaged by the guideway on the lever pawl, and means for maintaining a yielding pressure upon the controlling link to actuate the pawls, substantially as set forth. 4th. The combination of the vertically adjustable toothed support, its carrier, the raising and lowering lever jointed to the carrier, the lever pawl for engaging the toothed support provided with the guideway, the support-upholding pawl supported by the carrier, the controlling link pivoted to the upholding pawl at one end and at its opposite end engaged by the guideway on the lever pawl, the rock shaft provided with a crank having a pin engaging a slot in said link and supported by the carrier, the crank or lever loosely mounted on the rock shaft, provided with an extension or short crank, and adapted to be rocked on the rock shaft and be engaged therewith in two positions of adjustment, and the spring acting on the short crank or extension of the crank lever, substantially as set forth.

No. 49,926. Grain Screen. (Tamis.)



The Closs and Howard Manufacturing Company, assignee of Charles Closs, both of Webster City, Iowa, U.S.A., 9th September, 1895; 6 years.

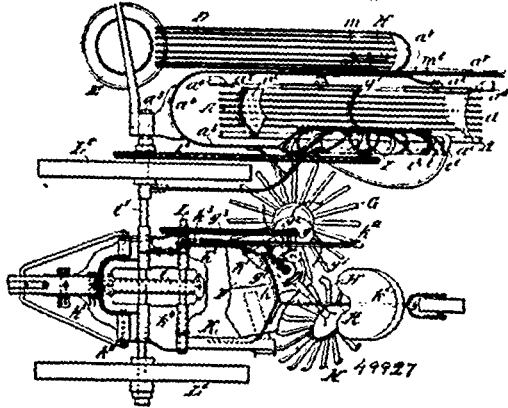
Claim.—1st. A sheet metal grain separating platform or screen having parallel corrugations and between them rows of transverse openings one edge of which is raised directly above the other, the surfaces between the openings forming a sloping concave bounded at each end by an inward standing oblique ridge making a scoop-like depression within said edges and ridges, substantially as described. 2nd. A sheet metal platform or screen for separating grain, having parallel corrugations and between them rows of transverse openings, one edge of which is raised directly above the other, the surfaces between the openings forming a scoop-like depression sloping to the rear and terminating at the upper edge in a lip extension adapted for adjustment to raise or to lower its upper edge in relation to and without changing the contour of the scoop-like surface, substantially as described. 3rd. A corrugated sheet metal platform or screen for separating grain, having rows of transverse openings, between the corrugations, one edge of each opening being directly above the other, ridges between the openings extending from the ends of one opening obliquely inward terminating at the raised edge, the surface having a scoop-like depression between the ridges sloping to the rear and having a lip extension rising from the upper ends of said oblique ridges, for the purpose stated.

No. 49,927. Potato Digger. (Scarificateur à patates.)

Joseph North Cocker, West Devenport, Tasmania, 9th September, 1895; 6 years.

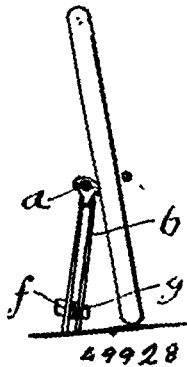
Claim.—1st. In a potato harvester, an elevator-wheel (such as A), working around and supported by anti-friction rollers (such as a¹), substantially as and for the purposes herein described and explained and as illustrated in the accompanying drawings. 2nd. In a potato harvester, a spider (such as I), having a number of curved bars, and a number of curved feeder blades all constructed and arranged and operating substantially as and for the purposes specified and as

illustrated in the accompanying drawings. 3rd. In a potato harvester, a shallow curved trough (such as *i*²), between a rotating



spider (such as *G*), and an elevator-wheel (such as *A*), substantially as and for the purposes specified and as illustrated in the accompanying drawings.

No. 49,928. Bicycle Support. (Support de bicyclette.)

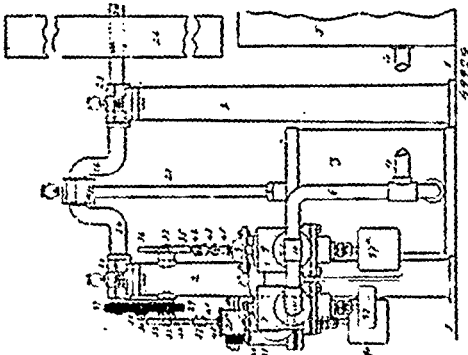


William Job White, Montreal, Quebec, Canada, 9th September, 1895; 6 years.

Claim.—1st. A bicycle support having a swivelling connection with the lower longitudinal frame bar of the bicycle and adapted to be lowered to rest on the ground, with means for retaining same in a raised position, when not in use, for the purpose set forth. 2nd. A bicycle support comprising a pair of legs pivoted at one end to a ring encircling the lower longitudinal frame bar of the bicycle, a connecting link for holding the legs in a distended position, and a retaining device for holding them when raised from their acting position, for the purpose set forth. 3rd. In a bicycle support, the combination with the bicycle frame, of the connecting ring or collar the legs pivoted thereto, and the connecting link between the legs, for the purpose set forth. 4th. In a bicycle support, the combination with the bicycle frame, of the connecting device or collar *e*, *e*¹, *c*², legs *b*, *b*¹, and link *g*, with or without the retaining device or collar *k*, *k*¹, *k*².

No. 49,929. Milking Machine.

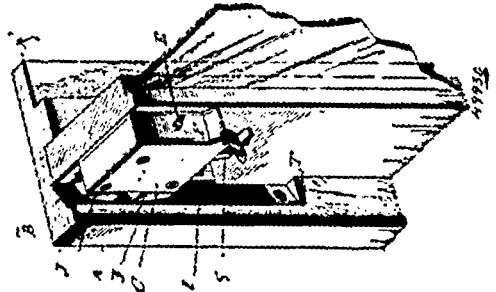
(Machine à traire les vaches.)



Alexander Shels, Glasgow, Scotland, 9th September, 1895; 6 years.

Claim.—1st. The milking machine, as a whole, constructed, arranged, and operating substantially as hereinbefore described, with reference to the drawings annexed. 2nd. In milking machines, a pulsator constructed and operating, substantially as hereinbefore described, with reference to fig. 11 of the drawings annexed. 3rd. In milking machines, a pulsator constructed and operating substantially as hereinbefore described, with reference to fig. 12 of the drawings annexed. 4th. In milking machines, a pulsator constructed and operating, substantially as hereinbefore described, with reference to fig. 20 of the drawings annexed. 5th. In combination, the main shaft 24, the secondary shaft 32 driven by gearing from the main shaft, the cams 33 and 35 on the secondary shaft, and the air admission valve and pulsator valve operated by said cams, substantially as hereinbefore described, and shown on the drawings annexed. 6th. The improved construction of teat cup, substantially as hereinbefore described, with reference to figs. 15 and 16 of the drawings annexed.

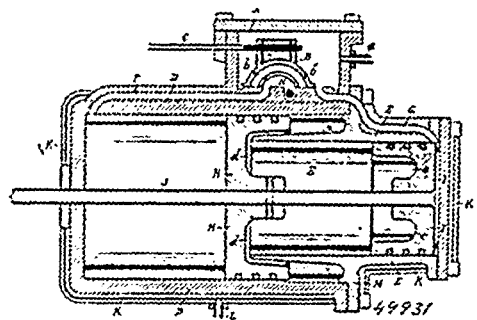
No. 49,930. Sash Fastener. (Arrête-croisite.)



John Lutz and George K. Neher, both of the City of Albuquerque, New Mexico, 10th September, 1895; 6 years.

Claim.—1st. In a sash fastener, the combination of the bevelled rack-bar secured to the window casing, the bevelled segmental pinion pivoted within a casing held to the window sash, and means for withdrawing the said segmental pinions from engagement with the said rack-bar, substantially as shown and described. 2nd. In a sash fastener, the combination, with the bevelled rack-bar, the two segmental pinions bevelled and pivoted near their rear ends to the end of a spring actuated post, and a lever for depressing said post, substantially as shown and described. 3rd. In a sash fastener, the combination of the bevelled rack-bar, the segmental pinions bevelled, and pivoted to the bifurcated end of a spring actuated post held within a suitable casing, a lever *I* having one end pivoted to a portion of the said casing, fulcrumed on the pivot carrying the segment arms and having its free end extended without the casing, substantially as shown and described. 4th. In a sash fastener, the combination of the rack bevelled as described, the segmental pinions pivoted to the upper bifurcated ends of a post which is spring actuated, the lever *I*, the lug *N* thereon, and the rack post *O* designed to engage with its teeth the said lug, and means for turning said rack post. 5th. In combination, in a sash fastener, the segmental pinions pivoted as described, the rack secured to the window frame, the lever *I* pivoted at one end to a pin carried by the casing fulcrumed on the post between the ends of the segmental pinions, the lug *N* on the said lever *I*, the vertically pivoted rack post, the integral lug carried thereby, the hook engaging in an aperture in said lug, the spring bearing against said rack, and a pivoted lever designed to press against said hook to cause the said rack post to be disengaged from the lug *N*, all substantially as shown and described.

No. 49,931. Compound Engine. (Machine composite.)

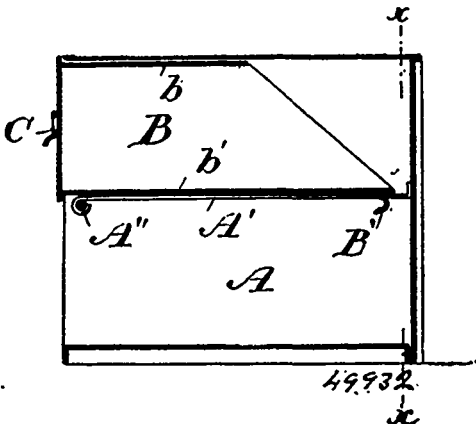


John Wand and William D. Edy, London, Ontario, Canada, 10th September, 1895; 6 years.

Claim.—1st. The compound cylinder *D*, and the high pressure cylinder *E*, in which the passages *F* and *G*, and exhaust outlet *N*, are formed, and the piston heads *H* and *I*, rigidly secured to the

piston rod J, in combination with the steam chest A, and valve B, or its equivalent, provided with the recess *b*, and passage *b'*, and means for supplying steam to said chest and for operating the valve B, substantially as and for the purpose set forth. 2nd. The compound cylinder D, and the high pressure cylinder E, in which the passages F and G, and exhaust outlet N, are formed, the piston heads H and I, rigidly secured to the piston rod J, and steam jacket K, provided with an outlet L, in combination with the steam chest A, and valve B, or its equivalent, provided with the recess *b* and passage *b'*, and means for supplying steam to said steam chest and for operating the valve B, substantially as and for the purpose set forth. 3rd. The high pressure cylinder E, provided with the encircling flange M, and the compound cylinder D, said flange bridging the space between the cylinders E and D, and closing the end of the latter, the passages F and G, and exhaust outlet N, formed in said cylinders, and piston heads H and I, rigidly secured to the piston rod J, in combination with the steam chest A, and a valve B, or its equivalent, provided with the recess *b*, and passage *b'*, and means for supplying steam to said steam chest and for operating the valve B, substantially as and for the purpose set forth. 4th. The high pressure cylinder E, provided with the encircling flange M, and the compound cylinder D, said flange bridging the space between the cylinders E and D, and closing the end of the latter, the portion E' of the cylinder E, projecting into the cylinder D, the passages F and G, and exhaust outlet N, formed in said cylinders, and piston heads H and I, rigidly secured to the piston rod J, in combination with the steam chest A, and a valve B, or its equivalent, provided with the recess *b*, and passage *b'*, and means for supplying steam to said steam chest and for operating the valve B, substantially as and for the purpose set forth. 5th. The high pressure cylinder E, provided with the encircling flange M, and the compound cylinder D, said flange bridging the space between the cylinders E and D, and closing the end of the latter, the portion E' of the cylinder E, projecting into the cylinder D, the passages F and G, and exhaust outlet N, formed in said cylinders, and piston heads H and I, rigidly secured to the piston rod J, in combination with the steam chest A, and a valve B, or its equivalent, provided with the recess *b*, and passage *b'*, and means for supplying steam to said steam chest and for operating the valve B, substantially as and for the purpose set forth. 6th. The high pressure cylinder E, provided with the encircling flange M, and the compound cylinder D, said flange bridging the space between the cylinders E and D, and closing the end of the latter, the portion E' of the cylinder E, projecting into the cylinder D, the passages F and G, and exhaust outlet N, formed in said cylinders, and piston heads H and I, rigidly secured to the piston rod J, in which piston heads H and I, recesses *d* are formed, in combination with the steam chest A, and a valve B, or its equivalent, provided with the recess *b*, and passage *b'*, and means for supplying steam to said steam chest and for operating the valve B, substantially as and for the purpose set forth. 7th. A compound cylinder and a high pressure cylinder, and passages leading to both ends of both cylinders, and to an exhaust outlet, and a piston head working in each cylinder secured to the one piston rod, in combination with the one valve or its equivalent, provided with a recess *b* and passage *b'*, for regulating the admission of steam to both ends of both cylinders from one steam chest, substantially as and for the purpose set forth.

No. 49,932. Document File. (Serre-papier.)

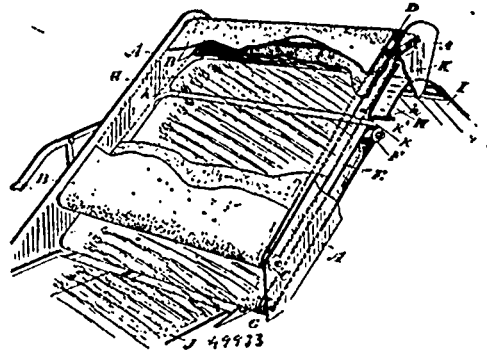


Sarah Ann Morden, assignee of Walter Henry Morden, both of Toronto, Ontario, Canada, 10th September, 1895; 6 years.

Claim.—In a document file, the combination of a box or drawer B having its rear end open, a hook or hooks B' secured to the bottom of said drawer at the rear end and a casing or cabinet having compartments each adapted to receive one of said drawers and having a bottom secured at the front to a cross wire and being of such width as to allow sliding room for the hook or hooks at the bottom of the drawer, substantially as set forth.

No. 49,933. Elevator Attachment for Grain Binders.

(Attache d'élevateur de lieuse à grain.)

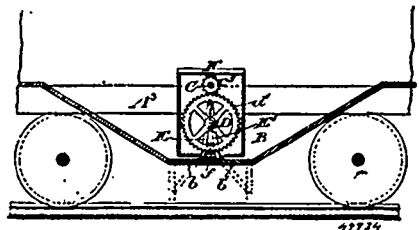


The Massey-Harris Company, assignee of Lyman Melven Jones, William F. Johnston and William John Clokey, all of Toronto, Ontario, Canada, 10th September, 1895; 6 years.

Claim.—1st. In a harvester, the combination, with the elevating aprons of an upper extension or carrier situated towards the front and discharge end of the aprons and narrowing the opening at this point, as and for the purpose specified. 2nd. In a harvester, the combination, with the elevating aprons and the bridge extending from the lower apron over to the binder deck, of an upper spring extension or carrier situated towards the front and discharge end of the aprons and narrowing the opening at this point, as and for the purpose specified. 3rd. In a harvester, the combination, with the elevating aprons and the bridge extending from the lower apron over the binder deck, of a spring carrier fixed or secured to the bridge and extending forwardly into proximity with the upper canvas and roller at the discharge end of the upper apron, as and for the purpose specified.

No. 49,934. Dumping Car or Wagon.

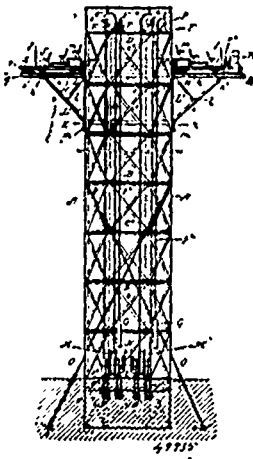
(Char ou wagon à bascule.)



Nathan Barney, Brooklyn, New York, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. The combination, with a car or wagon having a pair of swinging doors in its bottom, of a main shaft extending through the car or wagon body, a pinion carried by said shaft, a crank shaft, a gear-wheel on the crank shaft intermeshing with the said pinion, and branch rods connecting the crank shaft with the doors whereby the turning of the main shaft operates the doors, substantially as set forth. 2nd. The combination, in a car or wagon, having a pair of swinging doors in its bottom, of a frame comprising side and centre longitudinally extending timbers, a main shaft extending transversely across the body of the car or wagon and mounted in bearings on the centre timbers, a pinion on said shaft, a crank shaft mounted in bearings on the centre timbers, a gear-wheel thereon intermeshing with the pinion on the main shaft, and branch rods connecting the crank shaft with the swinging doors whereby as the main shaft is rotated the doors are opened or closed, substantially as set forth. 3rd. The combination, in a car or wagon having a pair of swinging doors in its bottom, of centre timbers extending lengthwise through the car, a main shaft extending transversely through the body of the car or wagon, a crank shaft mounted in bearings on the centre timbers and geared to the main shaft, branch rods extending from the crank shaft to each of the said swinging doors for opening and closing them as the crank shaft is operated and a casing secured to the centre timbers inclosing the crank shaft, branch rods and gearing, substantially as set forth.

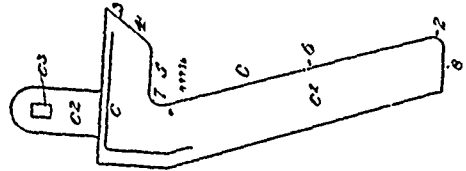
No. 49,935. Observation Tower. (Tour pour observation.)



Morris Ford Smith, Philadelphia, Pennsylvania, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. In combination, a tower, a platform encircling the same with mechanism for raising and lowering and revolving said platform, substantially as specified. 2nd. In combination, a tower, a hoisting platform encircling the same, mechanism for elevating and lowering the said platform, a passenger platform supported upon the hoisting platform, a passenger platform supported upon the hoisting platform and mechanism for revolving said passenger platform, substantially as specified. 3rd. In combination, a tower, a hoisting platform encircling said tower and having supporting tracks, mechanism for elevating and lowering said platform, a passenger platform having rollers or wheels adapted to said tracks, with mechanism for revolving said passenger platform, substantially as specified. 4th. The combination of the tower, the hoisting platform, mechanism for raising and lowering said platform, supporting tracks on said platform, guiding tracks also carried by said platform, and a passenger platform having supporting and guiding wheels adapted to the tracks of the hoisting platform, with mechanism for revolving said passenger platform, substantially as specified. 5th. In combination, a tower having vertical guides, a hoisting platform encircling said tower and having wheels adapted to said guides, a passenger platform mounted upon the hoisting platform and mechanism for revolving said passenger platform, substantially as specified. 6th. In combination, the tower having vertical guides, a hoisting platform encircling said tower and having wheels adapted to said guides, an engine or motor carried by said hoisting platform, a passenger platform mounted upon the hoisting platform, said passenger platform being operatively connected to and revolved by said engine or motor, substantially as specified. 7th. The combination of the tower, a hoisting platform encircling said tower, a lower supporting ring beneath said platform, and also encircling said tower, bracing bars extending from said ring to the underside of the platform, guiding wheels carried by said platform and ring adapted to vertical guides on or forming part of the tower, supporting tracks as *h* on said hoisting platform, a circular guiding track *P*, carried by the hoisting platform, a passenger platform having supporting wheels adapted to travel on the tracks *h*, and guiding wheels *p*, adapted to the circular track *P*, with mechanism for revolving said passenger platform, substantially as specified. 8th. The combination of the tower, a hoisting platform encircling the same, hoisting mechanism, an electric motor supported upon said hoisting platform, a passenger platform mounted upon the hoisting platform and adapted to be revolved by said electric motor, an electric conductor or trolley extending from the bottom to the top of the tower, and a trolley arm carried by the hoisting platform and adapted to conduct the current from the trolley to the electric motor, substantially as specified. 9th. An observation tower of the same diameter from its base to its top, vertical guides formed on the exterior of such tower, a platform encircling said tower and adapted to such guides, mechanism for raising and lowering said platform, and a passenger platform mounted upon the hoisting platform with mechanism for revolving said passenger platform, substantially as specified. 10th. The combination of the tower, angle bars, as *A*, forming vertical guides, a hoisting platform, as *H*, a supporting frame therefore comprising angle bars *L*¹, arranged at the angles of the tower, encircling rings *K* and *L*, secured to said angle bars *L*¹, bracing bars connecting the rings and platform, guiding wheels as *m*, secured to the angle bars *L*¹, and guided upon the bars *A*, a circular guiding track as *P*, carried by the angle bars *L*¹, a passenger platform mounted upon the hoisting platform, guiding rollers on the passenger platform, adapted to said track *P*, and mechanism for revolving said passenger platform, substantially as specified.

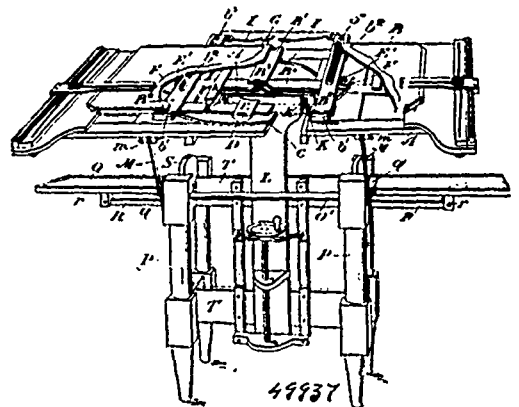
No. 49,936. Harrow. (Herse.)



John C. Freeman, Richmond, Virginia, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. A cutter blade for harrows and the like of angular form, having all of its edges except the back and upper horizontal edge formed into cutting edges, for the purpose set forth. 2nd. A cutter blade for harrows and the like of angular form, having all of its edges except the back and upper horizontal edge formed into cutting edges, the said edges being connected by suitable curvilinear cutting edges, for the purpose set forth. 3rd. A cutter blade for harrows and the like of angular form, having two reversely inclined cutting edges, the initial of one of said edges and the terminal of the other lying in the same plane, substantially as set forth. 4th. A cutter blade for harrows and the like, having two reversely inclined cutting edges, the beginning of one of said edges and the ending of the other lying in the same plane, and a horizontal cutting edge connecting the terminal of one of the reversely inclined edges with the initial of the other, substantially as set forth. 5th. A cutter blade for harrows and the like having two reversely inclined cutting edges, the initial of one of said edges and the terminal of the other lying in the same plane, and two horizontal cutting edges respectively connecting the reversely inclined cutting edges and one of said cutting edges and the back edge, substantially as set forth. 6th. A cutter blade for harrows and the like, having two reversely inclined cutting edges, the initial of one of said edges and the terminal of the other lying in the same plane, and two horizontal cutting edges in combination with suitable curvilinear cutting edges respectively connecting one of the horizontal edges with the terminal and the beginning of the reversely inclined cutting edges and the terminal of one of said reversely inclined edges with the back edge, substantially as set forth. 7th. A cutter blade for harrows and the like, consisting of a head and a shank or body projecting at an angle therefrom, said shank being of a general tapering compound curved form in cross section and limited by a cutting edge and an enlarged back respectively, substantially as set forth. 8th. A cutter blade for harrows and the like, consisting of a shank and a blade having an enlarged back and comparatively thin body part, the sides of which body part are of a compound curved contour, the concave curve of which extends gradually from said back to and merges with the convex curves, which latter gradually converge into a cutting edge, substantially as described. 9th. The combination with a harrow frame, of runners on top of said frame, substantially as and for the purpose set forth. 10th. The combination with a harrow frame of runners on top of said frame, said runners provided with handles at their rear ends, substantially as and for the purpose set forth.

No. 49,937. Drawing Table. (Table de dessin.)

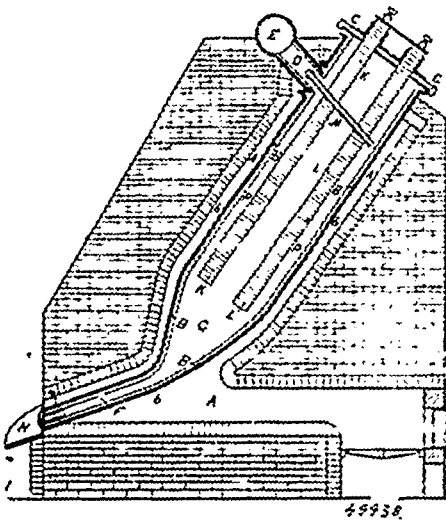


The Laughlin-Hough Drawing Table Company, assignee of Samuel John Laughlin and James Hough, all of Guelph, Ontario, Canada, 10th September, 1895; 6 years.

Claim.—1st. In a drawing table, the combination, with the top and a rectangular board rotatably supported thereon, of a protractor secured in position in the top of the table and extending forwardly from the front edge of the board and a pointer on the front side of the board extending downwardly into proximity with the protractor, as and for the purpose specified. 2nd. The combination, with the top and a rectangular board rotatably supported thereon, of blocks *E*,

and rollers *c* secured beneath the drawing board, the catches *F* and *G* secured to the board, and a spring wire rod *I*, provided with end blocks *J*, having central notches *j* all arranged, as and for the purpose specified. 3rd. The combination, with the drawing board and catches, of the spring rods *I*, provided with end blocks *J*, with notches *j*, and nuts *i* on the threaded end of the rod abutting the block, as and for the purpose specified. 4th. The combination, with the drawing board and catches, of the spring rod *I*, provided with end blocks *J*, with notches *j*, and set screws *i'*, extending through the block *J* to the rods, as and for the purpose specified. 5th. The combination, with the top and the drawing board swung upon the top of the standard as shown, of the arms *M* pivotally connected beneath the drawing board at the front thereof, the plates *N* and means for clamping such plates against the supporting bars *M*, as and for the purpose specified. 6th. The combination, with the top, and the drawing board swung upon the top of the standard as shown, of the arms *M* pivotally connected beneath the drawing board at the front thereof, the plate *N*, and pins *n*¹, and screws *n*², rod *O*, and thumb nuts *o*¹, all arranged as and for the purpose specified. 7th. The combination, with the drawing table and supporting legs and frame, of the standard *L*, provided with rear strips *l* and *l'*, fitting within the T-shaped groove in the blocks *U*, secured to the connecting rails *T*, as and for the purpose specified. 8th. In a drawing table, the combination with the legs and frame, of holding trays *Q*, hinged at their inner ends upon the cross pieces *q*, the rods *R* provided with supporting blocks *r*, and having their inner ends extending through slots *s*, in the cross bars *S*, into grooves *t*, and stop pins *r*¹, secured at the inner ends of the bars *R*, and extending into the short grooves *t*, as and for the purpose specified. 9th. The combination, with the top of the table and jaws *k* fastened to the cross bars, of the standard with the T-shaped head and end pins *K* over which the jaws *k* fit, as and for the purpose specified. 10th. The combination, with the frame *B*¹ rotatably supported on the top of the table, of the drawing board *B*, and means upon such frame for holding *z* the board rigidly thereto, as and for the purpose specified. 11th. The combination, with the frame *B*¹ rotatably supported on the top of the table, of the drawing board *B*, and blocks *b*¹, secured at one end of the cross bars *B*², and adjustable brackets *b*² at the opposite end of the cross bars, both blocks and brackets being designed to clamp the board rigidly to the frame, as shown and for the purpose specified.

No. 49,938. Process of and Apparatus for the Production of Zinc and Lead by Electrolysis of the Melted Chlorides. (*Procédé et appareil pour la production de zinc et pl^m nb par l'électrolyse de chlorure fondue.*)



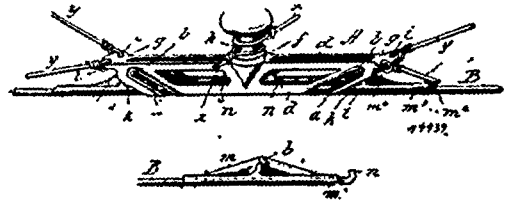
Dr. Richard O. Lorenz, Göttingen, Germany, 10th September, 1895; 18 years.

Claim.—1st. The process for obtaining metallic zinc and lead by subjecting the chlorides thereof to fractional electrolysis at a temperature of from 450° to 700° C. 2nd. In the process referred to, the addition of small quantities of litharge, red lead, superoxide of lead, zinc oxide, or other metallic oxides or superoxides, or of common salt, potassium chloride, magnesium chloride, calcium chloride, calcium fluoride, sodium fluoride, or similar fluxes for preventing frothing, and for regulating the temperature, conductivity and volatilization of the molten mass during the electrolysis, substantially as described. 3rd. In the process referred to, the production of the chlorides to be subjected to electrolysis by the lixiviation of ores or residues of all kinds containing zinc and lead by means of hydro-

chloric acid or acetic acid, with precipitation, if required, of the lead and silver chlorides by the addition of concentrated hydrochloric acid or introduction of hydrochloric acid gas. 4th. Apparatus for carrying out the process referred to, consisting of an inclined retort or vessel such as *B* of porcelain, fire-clay or other suitable material provided with a suitable charging device *M*, a discharging device *D*, *E*, for the gases generated, as also at the lower end a discharging device *H*, and preferably provided with an iron casing *b*, the said retort or vessel being furthermore provided with a cover *C*, closing the same, and any desired number of electrodes *K*, *K*¹, *K*², *L*, *L*¹, *L*², fitted air-tight into the cover, substantially as described. 5th. In combination with the apparatus substantially described, a pair of electrodes having the shape of a fire-grate or network or being shaped in such a way as to prevent the products of electrolysis precipitated on them to accumulate on the surfaces looking towards each other. 6th. The production of hydrochloric acid from chlorine by passing the chlorine together with steam through vessels filled with coke, charcoal or anthracite heated to a low red heat, the resulting hydrochloric acid being then separated from the other resulting gases by condensation, substantially as described.

No. 49,939. Trolley Wire and Support.

(*Support de fil de trolley.*)



Herbert Horton Ashley, Springfield, Massachusetts, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. The improved trolley wire support which consists of the two parallel opposing longitudinally ranging cheek-plates suitably united at, and between, their upper portions whereby there is left clear between their opposite portions, at each end of the support, downwardly and endwise opening spaces, and having, near such ends, the slots *a, a*, which incline in directions downwardly and towards the middle of, and which open to the lower edge of, the cheek plates, and said cheek plates having their lower edge portions continuous and unobstructed between the said slots, in combination with the trolley wires having provided at their end portions and above the longitudinal line thereof the lateral oppositely extending projections *b, b*, which are adapted to have engagements in said inclined slots, all whereby the trolley wires will be detachably supported to lie along the level of the lower edges of the said cheek-plates, substantially as and for the purpose set forth. 2nd. The improved trolley-wire support consisting of the two parallel cheek-plates suitably united so as to have at their end portions clear, downwardly, and endwise opening spaces, and having at such end portions the rearwardly and downwardly inclined slots *a, a*, in combination with the trolley-wire having at its extremity the bar *m*, with the upstanding longitudinal web which is provided with the laterally extending projections *b, b*, all substantially as and for the purpose set forth. 3rd. The improved trolley-wire support consisting of the two parallel united cheek-plates having the endwise and downwardly opening spaces therebetween, and having the inclined slots, *a, a*, in combination with the trolley-wire having the upset end, and the bar which is longitudinally channeled and provided with the wire-embracing lips *m*¹, *m*², and which has a rising member supporting the lateral projections *b, b*, substantially as and for the purpose set forth. 4th. The trolley support herein described, the same consisting of the opposing cheek-members *d, d*, having the downwardly and rearwardly inclined slots *a, a*, and the end inclines *k*, the central uniting web *f*, and the webs *g, g*, at and uniting the upper end portions of said cheek-members, substantially as described. 5th. The trolley support herein shown and described which consists of the opposing cheek-members *d, d*, having the downwardly and rearwardly inclined slots *a, a*, and the end inclines *k*, the central uniting web *f*, provided with the upward support member *h*, the webs *g, g*, uniting the upper end portions of said cheek members, and having at such upper end portions the eyes, *i, i*, for the purposes set forth.

No. 49,940. Portable Electric Pump.

(*Pompe électrique portative.*)



The Thomson-Houston International Electric Company, Portland, Maine, assignees of Charles A. Coffin, Boston, Massachusetts, and Albert Wahl, Chicago, Illinois, executors of Charles J. Van Depue, late of Lynn, Massachusetts, all in the U.S.A., 10th September, 1895; 6 years.

Claim.—1st. A electric pumping engine system comprising a reciprocating electric engine having an exterior waterproof metallic casing provided with an insulated waterproof terminal box, a reciprocating pump also enclosed within a metallic casing, the casings of the engines and pump being fitted and joined together to form one integral apparatus, a piston rod extending from the moving part of the electric engine and joined to the piston rod of the pump, a protected insulated cable formed of conductors corresponding in number with those of the electric engine, said conductors terminating in a detachable waterproof socket, adapted to fit the terminal box of the engine, and connections from the other end of the cable to a suitable supply circuit. 2nd. A electric pumping engine system comprising a reciprocating electric engine having an exterior waterproof metallic casing provided with an insulated waterproof terminal box, a reciprocating pump, also enclosed within a metallic casing, the casings of the engines and pump being fitted and joined together to form one integral apparatus, a piston rod extending from the moving part of the electric engine and joined to the piston rod of the pump, an insulated protected cable provided with detachable waterproof terminal sockets at each end, said sockets adapted to fit the terminal box on the electric engine, and a switch-board located near the engine and connected to a suitable supply circuit, and having insulated terminals adapted to connect with the other end of the cable. 3rd. An electric engine having motor coils actuated by currents applied through main conductors, in combination with an intermediate conductor of different length and detachable circuit connections, whereby the circuit of the intermediate conductor is ruptured before opening the circuit of the main conductors. 4th. The combination with a reciprocating electric engine, of a supply circuit comprising multiple conductors, said conductors including main conductors of a substantially equal length, and an intermediate conductor or conductors of a different length whereby on opening the circuit of all the conductors the circuit of the intermediate conductor is ruptured first.

No. 49,941. Carbon for Electric Lamps.
(*Carbone pour lampes électriques.*)

Edward Goodrich Acheson, Mongahela, Pennsylvania, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. An illuminating body for electric lamps, comprising carbon associated with carbide of silicon, substantially as described. 2nd. A carbon rod, point or filament for electric lamps, comprising carbide of silicon as an illuminating body, associated with a body of relatively high electrical conductivity, as carbon, substantially as described. 3rd. A carbon rod or point for electric lamps, comprising an outer body of carbon and a core of carbide of silicon, substantially as described.

No. 49,942. Insulating Compound and Method of Manufacturing. (*Composé isolateur et méthode de fabrication.*)

The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Joseph Hoffman, Schenectady, New York, U.S.A., 19th September, 1895; 6 years.

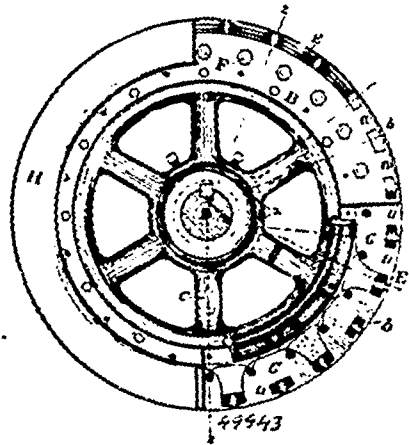
Claim.—1st. The compound substantially as herein described consisting of asbestos fibre with a binding material consisting of asphaltum, beeswax and shellac. 2nd. The compound above described consisting of asbestos and a binding material composed of asphaltum and beeswax and a hardening substance such as shellac and albumen with suitable colouring material. 3rd. The method of manufacturing the moulded material herein described consisting of applying binding material to the asbestos by spraying it with a mixture of beeswax and asphaltum with a suitable solvent, then drying it and after mixing powdered shellac with the mealy substance thus formed moulding the same under heat and pressure. 4th. The method of manufacturing the moulded material herein described which consists in mixing powdered asbestos with asbestos fibre, spraying the mixture with a solution of asphaltum and beeswax, drying it to expel the solvent, then mixing therewith powdered shellac and albumen, and finally moulding the mealy substance thus produced under heat and pressure.

No. 49,943. Armature for Dynamos.
(*Armature pour dynamos.*)

The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of James J. Wood, Fort Wayne, Indiana, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. A multipolar armature core in the form of a laminated ring having polar projections for receiving the coils, constructed with ventilating channels or spaces extending outwardly along the polar projections for the circulation of air between these projections and the coils. 2nd. A multipolar armature core in the form of a laminated ring having polar projections for receiving the coils, constructed with the polar projections built up solidly of superposed laminae arranged out of coincidence with one another along the sides of the projections to form ventilating channels or spaces extending outwardly along the polar projections for the circulation of air between these projections and the coils. 3rd. A multipolar armature core in the form of a laminated ring having polar projections for receiving the coils and heads or pole-pieces on

said projections overhanging the coils, and constructed with the laminae of said polar projections, and heads arranged at intervals

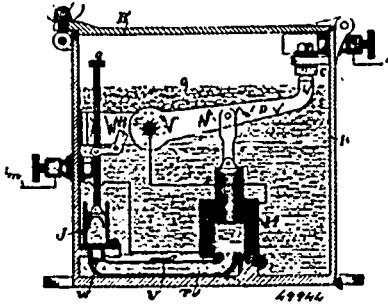


out of coincidence with one another at their edges on the sides of the polar projections and beneath the overhanging heads to form continuous ventilating channels extending outwardly between the polar projections and heads and the coils. 4th. A multipolar armature core built up of U-shaped punchings of sheet-iron with their legs superposed to form the polar projections and their intermediate portions alternated to form the body of the core with ventilating spaces through it between the punchings, and said punchings formed with projecting flanges on opposite sides of their legs to form the overhanging heads or pole-pieces. 5th. A multipolar armature core built up of U-shaped punchings of steel or iron with their legs superposed to form the polar projections and their intermediate portions alternated to form the body of the core, and the alternated legs of the punchings formed of different shape so that when superposed their edges do not coincide, and thereby ventilating channels are formed along the sides of the polar projections. 6th. A multipolar armature core built up of U-shaped punchings of sheet iron with their legs superposed to form the polar projections, and their intermediate portions alternated to form the body of the core, with their superposed legs arranged out of coincidence along their side edges to form ventilating channels along the sides of the polar projections, and with opposite overhanging flanges on the punchings formed of different thicknesses so that when superposed they form continuations of said ventilating channels along the inner sides of the overhanging heads or pole pieces. 7th. A multipolar armature core built up of U-shaped punchings of sheet iron with their legs a, a , superposed to form the polar projections, and their intermediate portions c formed of greater width and alternated to constitute the body of the core and form ventilating spaces extending through the core between the polar projections, and bolts for binding the core together passing through holes formed in the punchings in the line with the polar projections, but so remote therefrom as to avoid the path of the intense lines of force, whereby the heating of said bolts is prevented. 8th. An armature consisting of a laminated iron core A , non magnetic rings $B B$, embracing its opposite ends, with bolts $F F$ for drawing them together, and spiders $C C$ fastened to and supporting said rings, and having hubs mounted on the armature shaft. 9th. An armature consisting of the laminated iron core A , non-magnetic rings $B B$ embracing it, bolts $F F$ for drawing them together, coils $E E$ embracing polar projections of the core, and shields $H H$ fastened against the outer sides of said rings to enclose and conceal the projecting ends of the coils and bolts, and formed with ventilating openings $i i$ for permitting a circulation of air around the ends of the coils and into spaces on the periphery between the coils. 10th. An iron-clad armature for a self-exciting alternating dynamo consisting of a laminated core A , having polar projections $a a$, armature coils $E E$ inclosing said projections, and a field exciting winding J , wound as flat coils between the polar projections in the shallow spaces between the inner ends of the armature coils $E E$, and the outer side of the annular portion of the armature core. 11th. An iron-clad armature for a self-exciting alternating dynamo consisting of a laminated core A , having polar projections $a a$, non magnetic rings $B B$, embracing said core and having radial grooves $u u$, armature coils $E E$ inclosing said polar projections, and a field exciting winding J , encircling the annular core between the polar projections and passing through the grooves $u u$, in said rings.

No. 49,944. Electric Cut-Out. (*Interrupteur électrique.*)

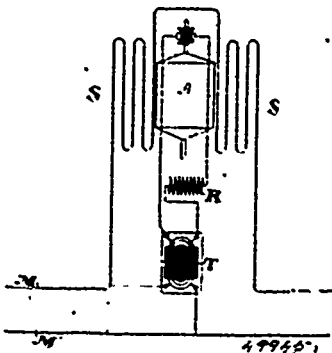
The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Elihu Thomson, Swampscott, Massachusetts, U.S.A., 10th September, 1895; 6 years.

Claim. 1st. A device for rupturing arcs between terminals, consisting of a body of non-conducting liquid, terminals arranged



normally above said liquid and means for immersing at least one of them in said liquid when they are separated, substantially as described. 2nd. The combination with a closed box, of a body of non-conducting liquid partially filling the same, a terminal of an electric circuit arranged above the surface of said liquid, and a second terminal in contact therewith and arranged to move below the surface of the liquid when separated therefrom, substantially as set forth. 3rd. The combination with a closed box, of a body of non-conducting liquid partially filling the same, a terminal of an electric circuit arranged above the surface of the liquid, a lever forming a second terminal in contact with the first, and an electro-magnetic device operating to separate said terminals and immerse the lever in the liquid, substantially as described. 4th. An electric switch having a fixed and a movable terminal, and a body of non-conducting liquid below such fixed terminal and in the path of such movable terminal. 5th. A device for rupturing arcs between electric terminals consisting of a body of non-conducting liquid below such terminals, and means for immersing one of such terminals in such liquid, consisting of an electro-responsive device connected to such terminals. 6th. A device for rupturing arcs between terminals consisting of a body of non-conducting liquid below such terminals, and an electro-magnetic device connected mechanically and electrically to such terminals, and acting to immerse at least one of them in such liquid on the passage of a current therethrough. 7th. A switch included in and protecting an electric circuit and having an electro-magnetic device controlling and separating its contacts, an automatic locking device for holding such contacts apart, and means for throwing said detent automatically into locking position only by the repeated separation of the contacts. 8th. A switch included in and protecting an electric circuit and having an electro-magnetic separating device for its contacts, a restoring device for the same, and a locking device for locking the contacts apart and connected to the electro-magnetic devices, so as to be operated only by the repeated action thereof. 9th. A switch included in and protecting an electric circuit, and having an electro-magnetic separating device for its contacts, a restoring device for the same, and a retarded locking device for locking the contacts apart and tending to an un-locking position, and connected to the electro-magnetic devices by a slowly yielding connection, allowing return into un-locking position of the locking devices between widely separated impulses of the electro-magnetic devices, and bringing the locking devices into operation when such impulses are in rapid succession. 10th. The combination, with two separable terminals, of a submerged solenoid, and a movable core connected with one of said terminals, whereby said solenoid and core form a dash pot to regulate the movements of said terminals, substantially as described.

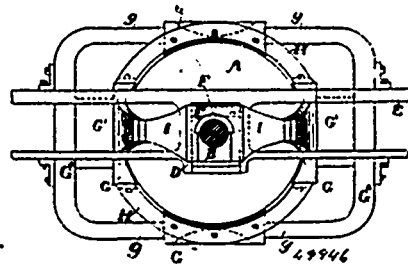
No. 49,945. Electric Meter. (Electromètre.)



The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Elihu Thomson, Swampscott, Massachusetts, U.S.A., 10th September, 1895; 6 years.

Claim. 1st. The combination, in an electric meter, of series field coils, an armature induced thereby, and a transformer having a primary in shunt to the mains and a secondary in local circuit with the armature. 2nd. The combination, in an electric meter, of field coils in series in the main circuit, an armature induced thereby and included in a local circuit with a secondary of a transformer the primary of which is in shunt to the main circuit, and a non-inductive resistance in the armature circuit. 3rd. The combination of the field coils, the armature and the transformer, substantially as described herein, with a non-inductive resistance of greater amount than the resistance of the armature. 4th. The combination, in a watt meter for measuring alternating electric currents of high potential, of stationary field coils traversed directly by the current flowing in the main conductor, and a revolving armature embraced by said field coils or influenced thereby traversed by currents induced in the secondary coil of a transformer whose primary is connected in shunt across said mains. 5th. In an electric meter, the combination of the field coils, the armature, the transformer, and a non-inductive resistance of from three to twenty times the armature resistance, substantially as described.

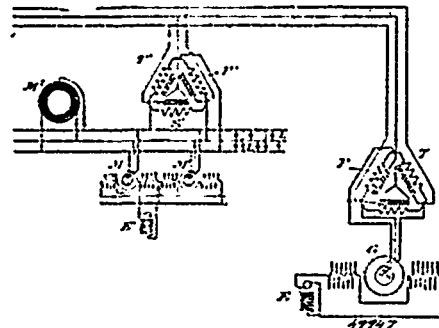
No. 49,946. Electric Railway Motor. (Moteur électrique.)



The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Edward D. Priest, Schenectady, New York, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. An electric motor having its pole pieces loose and separate from the remainder of its field magnet, substantially as described. 2nd. An electric motor having its pole pieces arranged in substantially fixed relation to its armature and the remainder of its field magnet movable with relation to said pole pieces, substantially as set forth. 3rd. An electric motor having its pole pieces rigidly mounted in fixed relation to its armature, and the remainder of its field magnet elastically mounted, substantially as described. 4th. An electric motor having fixed pole pieces, the remaining parts of the field magnet being movable, and the adjacent relatively movable surfaces being in parallel planes, substantially as set forth. 5th. The combination with an electric motor having fixed pole pieces, the remaining parts of the field magnet being movable, of means for preventing contact of the pole pieces with the adjacent parts of the field magnet, substantially as described. 6th. The combination with an electric motor having fixed pole pieces, the remaining parts of the field magnets being movable, of rollers interposed between the pole pieces and the adjacent movable parts of the field magnet, substantially as set forth.

No. 49,947. System of Electric Distribution. (Système de distribution électrique.)

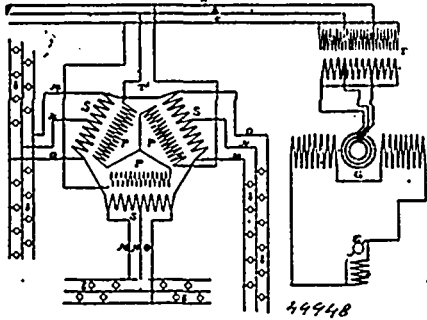


The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Walter S. Moody, Lynn, Massachusetts, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. In a system of electric distribution, a generator of multiphase currents, a step-up transformer, having its low-potential coils wound upon the Y or mesh system and its high-potential coils wound upon the Y or star system, and line connections from such transformer to a step-down transformer similarly wound and having its low-potential coils connected to mains which include translating

devices. 2nd. The method of winding transformers for use in multiphase systems of electric distribution which consists in connecting the low-potential coils by the Δ or mesh system, and connecting the high-potential coils by the Y or star system, substantially as described herein. 3rd. A transformer for multiphase systems of electric distribution, having its low-potential coils wound on the Δ or mesh system, and its high-potential coils wound upon the Y or star system.

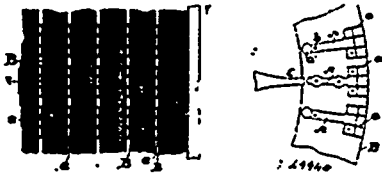
No. 49,948. System of Electric Distribution.
(*Système de distribution électrique*)



The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Edwin W. Rice, jr., Schenectady, New York, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. A multiphase transformer supplying separate translating devices from each coil of its secondaries. 2nd. A multiphase transformer supplying a group of translating devices from each of its secondary coils by the three-wire or series multiple system. 3rd. A generator of multiphase currents, a step-up transformer adapted to such currents, lines leading therefrom to a similar step-down transformer, and translating devices fed from a single secondary coil of such transformer. 4th. A generator of multiphase currents, a step-up transformer adapted to such currents, lines leading therefrom to a similar step-down transformer, and groups of translating devices fed from each secondary coil of such transformer. 5th. A generator of multiphase currents, a step-up transformer, lines leading therefrom to a step-down transformer, and translating devices taking current from a coil of such step-down transformer by the three-wire or series multiple system. 6th. A generator of multiphase currents, a step-up transformer taking such currents therefrom, multiphase connections leading to a step-down transformer, and translating devices taking current from each secondary coil of such step-down transformer by the three-wire or series multiple system.

No. 49,949. Construction of Armature Cores.
(*Construction de noyau d'armature.*)

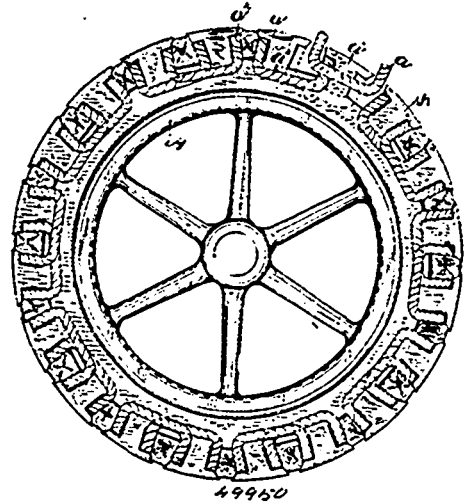


The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Henry G. Reist, Schenectady, New York, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. A laminated armature core built up in sections, and separators attached to the laminae between two consecutive sections, as and for the purpose described. 2nd. In an armature core, the combination with sections built up of laminae, of separators consisting of ribs of metal between said sections, and in contact with adjacent laminae whereby ventilating space is afforded between the inner and outer surfaces of said core, as described. 3rd. In a laminated armature core built up in sections, a separator comprising a flat portion riveted to the outer laminae of one of said sections, and ribs extending outwardly therefrom to the adjacent sections and radial to the centre of the core, whereby air passages are afforded between the inner and outer surfaces of the said core, as described. 4th. In a toothed armature core built up of laminated sections, separators consisting of ribs extending outwardly from the teeth on one of said sections to the corresponding teeth on the adjacent section, whereby said sections are mutually supported and the purpose specified. 5th. An armature core consisting of air passages radial to the centre of said core afforded, as and for laminae arranged side by side and separators attached to certain of the laminae to form a ventilating space or spaces in the core. 6th. An armature core consisting of layers of laminae built up in sections

or bundles, and pronged or skeleton separators attached to an outside lamina of each of said sections, whereby ventilating space is provided between adjacent sections, as described. 7th. In a laminated armature-core, a laminae of soft iron having attached thereto a pronged or skeleton separator, as and for the purpose described. 8th. In an armature, a sheet or laminae having teeth or projections for the reception of the armature coils or armature conductors, and metal separators riveted or otherwise secured thereto, said separators extending toward the points or free ends of said teeth or projections.

No. 49,950. Armature for Dynamo Electric Machines.
(*Armature pour machine dynamo électrique.*)



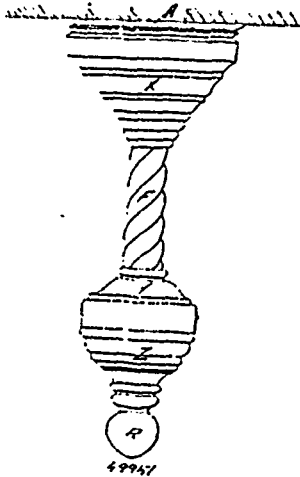
The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Edwin Willbur Rice, Schenectady, New York, U.S.A., 10th September, 1895; 6 years.

Claim.—1st. An armature, comprising a core having transverse undercut notches in the surface thereof, separately wound coils of such size as to be inserted through the narrow openings of such notches into the undercut recesses thereon, and keys or plugs holding said coils in said recesses, as set forth. 2nd. An armature, comprising a core having undercut notches in the surface thereof thus forming teeth or projections with overhanging or spreading surfaces, separately wound coils surrounding one or more of said teeth, said coils being of such size as to pass through the narrow openings of said notches, into engagement with corresponding sides of two of said teeth under the overhanging portions thereof, and removable keys or plugs of insulating material in said notches to keep said coils in place under said overhanging portions, as set forth. 3rd. A separately wound coil adapted to surround one or more teeth of an armature core, and of such size in cross-section as will admit of its insertion through a narrow opening between said teeth and into a larger space formed by the overhanging or spreading surfaces thereof, and means for retaining said coil in engagement with the sides of said teeth under the overhanging surfaces thereof, whereby said coil is retained in place. 4th. In an armature, the combination with a toothed core, of separately wound coils surrounding each tooth and extending to the adjacent side of the next tooth, said coils being of such size in cross-section as will admit of their passage between the spreading surfaces of adjacent teeth, and of such shape that adjacent coils overlap, and plugs or wedges inserted between said teeth after said coils are in place to keep them in engagement with the sides of said teeth, as set forth. 5th. The method of applying separately constructed coils or windings to an armature core having overhanging or spreading teeth on the surface thereof, which consists in passing said coils through the narrow openings between said teeth, moving them into the recesses under the overhanging portions thereof, and inserting plugs or keys of insulating material to keep said coils in said recesses, as set forth.

No. 49,951. Rotary Fan. (*Éventail rotatoire mécanique.*)
Ovide Parent, Montréal, Québec, 15 septembre, 1895; 6 ans.

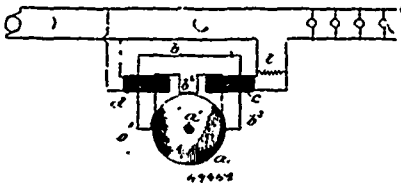
Résumé.—1° Dans un éventail rotatoire la combinaison d'une tige fixe terminée par un disque faisant corps avec celle-ci et munie d'un manchon fixé à la tige tel que décrit et pour les fins indiquées. 2° Dans un éventail rotatoire la combinaison d'une roue à courroie et d'un tambour d'une forme spéciale faisant corps avec elle et pouvant tourner librement autour de la tige fixée, tel que décrit et pour les fins indiquées. 3° Dans un éventail rotatoire la combinaison

d'un cylindre rotateur muni de deux bras à angle droit servant à viser les ailettes et terminé à son extrémité supérieure par un frein



à ressort agissant sur le tambour de la roue tel que décrit et pour les fins indiquées. 4° Dans un éventail rotatoire la combinaison d'une pièce spéciale servant à retourner en place la pièce cylindrique et ses accessoires, laquelle pièce spéciale est munie de deux rainures à angle droit dans lesquelles s'engage le bout d'une vis qui sert aussi à retenir en place une pièce à crochet qui permet à un collet terminant la partie inférieure de la pièce cylindrique qui porte le frein à ressort et les ailettes tel que décrit et pour les fins indiquées. 5° Dans un éventail rotatoire un réservoir servant de récipient à l'huile qui a servi à lubrifier la machine, tel que décrit et pour les fins indiquées. 6° Dans un éventail rotatoire la combinaison à l'une des extrémités des ailettes d'une tige à pas de vis munie d'un écrou servant à fixer l'ailette dans une position inclinée voulue tel que décrit et pour les fins indiquées.

No. 49,952. Electric Meter. (Electromètre.)



The Diamond Electric Company, assignee of Gustave A. Scheffer, both of Peoria, Illinois, U.S.A., 11th September, 1895; 18 years

Claim.—1st. In a meter, the combination with an element mounted to rotate under the influence of two magnetic fields, of a coil in series with the working circuit for exciting one of said fields, and a coil in parallel with the working circuit and carrying a displaced current for exciting the second field, substantially as described. 2nd. In a meter, the combination with an element mounted to rotate under the influence of two magnetic fields, of a coil in series with the working circuit for exciting one of said fields, a coil in parallel with the working circuit, and carrying a lagging current for exciting the second field, and a short circuit about the series coil to neutralize the effects of friction, substantially as described. 3rd. In a meter, the combination with a rotatable element adapted to be rotated under the influence of the current to be measured, of a coil connected in parallel with the working circuit, a second coil in inductive relation thereto, said coils being adapted to co-act to neutralize the effects of friction, substantially as described. 4th. In a meter, the combination with magnetic poles, of a drum of aluminium mounted upon a vertical shaft and adapted to rotate in front of said poles, a shunt coil and a series coil for producing two fields of displaced phase to effect the rotation of said drum, a retarding disc of aluminium mounted upon said shaft, a permanent magnet past the poles of which said disc is adapted to be rotated, and a short circuit about said series coil, adjusted to neutralize the effects of friction, substantially as described. 5th. In an electric meter, the combination with a metallic cylinder free to rotate, of the multi-polar magnet *b*, provided with the centrally disposed leg *b*², or polar surface that approaches in close proximity to the revolving face of the cylinder, the said multi-polar magnet being built up of laminated iron or magnetic metal. 6th. In an electric meter, the combination of a stationary multi-polar magnet, provided with three polar or magnetic surfaces and a metallic cylindrical rotating armature magnetized thereby.

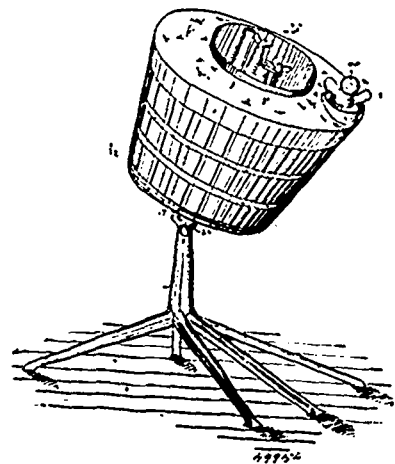
7th. In an electric meter, the combination with a metallic cylinder or armature, of the multi-polar magnet *b*, provided with the intermediate or central leg *b*², approaching in close proximity to the surface of the revolving cylinder or armature. 8th. In an electric meter, the combination of a rotating cylindrical armature, the stationary multi-polar magnet *b*, provided with the central leg *b*² thereof approaching in close proximity to the surface of the revolving disc armature, and the retarding face *a*². 9th. In an electric meter, a multi-polar magnet formed of laminated iron and provided with three polar projections or magnetic surfaces, the two outside poles wound, one with a coil in series with the load, and the other with a fine wire in shunt with the load, the third pole or magnetic surface located between the said outside poles and without any coil, in combination with a metallic cylinder adjusted at right angles with the said poles or polar surfaces and free to rotate.

No. 49,953. Process of Desulphurizing Mineral Oils. (Procédé de désulfuration d'huile minérale.)

Adolph Sommer, Cambridge, Massachusetts, U.S.A., 11th September, 1895; 6 years.

Claim.—1st. The herein described improvement in the process of desulphurizing mineral oils, consisting in digesting them with dry sulphate of copper, substantially as described. 2nd. The herein described improvement in the process of desulphurizing mineral oils, which consists in digesting the oil under pressure with dry sulphate of copper at a temperature of about or above 130° C, substantially as described. 3rd. The herein described improvement in the process of desulphurizing mineral oils, consisting in first digesting them with dry sulphate of copper or other desulphurizing agent at an elevated temperature and under pressure until the volatile portion is desulphurized, and then distilling the oil from the copper salt or other desulphurizing agent employed, substantially as described. 4th. The herein described improvement in the process of desulphurizing mineral oils, consisting in volatilizing the same and passing their vapours through a body of dry sulphate of copper, heated to a temperature of about or above 130° C, substantially as described. 5th. The herein described improvement in the process of desulphurizing mineral oils, consisting in distilling them from dry sulphate of copper, and desulphurizing the vapour of that portion which comes off below 150° C, by passing the same through a body of dry sulphate of copper heated to a temperature of about or above 130° C, substantially as described.

No. 49,954. Machine for Making Ice. (Machine à faire la glace.)



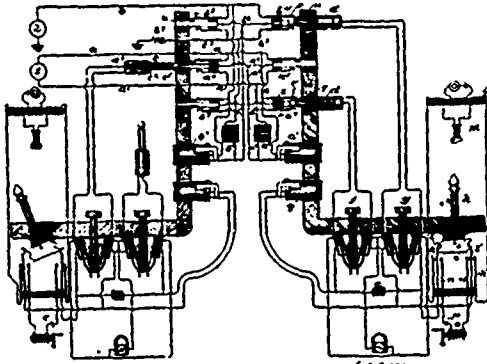
Josiah P. Perkins, Omer M. Perkins and Henry Seyfried, all of Indianapolis, Indiana, U.S.A., 11th September, 1895; 18 years.

Claim.—1st. A suitable support, a freezer mounted thereon by a joint that permits the inclination of the freezer, and any well known means for fastening the joint to retain the freezer in the desired position. 2nd. In a device for making ices, receptacles for the freezing material and for the material to be frozen, and a tubular bearing extending up through the bottom of such receptacles, substantially as set forth. 3rd. In a device for making ices, an inner and an outer receptacle, and a tubular bearing extending up through the bottom of such receptacles provided with collars separated from each other, one secured to the bottom of the inner receptacle and the other to the bottom of the outer one. 4th. In a device for making ices, an inner and an outer receptacle, a tubular bearing extending up through the bottom of both and provided with outwardly extending lugs at its lower end and with collars separated from each other, one of which is secured to the bottom of the inner receptacle and one to the bottom of the outer one, and a washer having cam faces and

notches, as shown, for clamping the bottom of the outer receptacle to the lower cellar, substantially as set forth. 5th. In a device for making ices, an inner and an outer receptacle, and a distributor in the outer one for removing the freezing material from the bottom and depositing it on the upper portion of the inner receptacle, substantially as set forth. 6th. In a device for making ices, the inner receptacle 3, the outer receptacle 2, and the distributor 4, all combined substantially as set forth. 7th. In a device for making ices, a receptacle for the material to be frozen, and a scraper that contacts with the inner side and bottom of the receptacle, substantially as set forth. 8th. In a device for making ices, a receptacle for the material to be frozen, the tubular bearing 13, the main spindle 6, extending up therethrough, the bracket 27 and arm 28, the sleeve 29, the spindle 25, the scraper secured to such spindle, the spring 30, and any well known means for holding the scraper in any position, substantially as set forth. 9th. In a device for making ices, a receptacle for the material to be frozen, and a plate therein curved or inclined substantially as shown for forcing the material to the side of the receptacle. 10th. In a device for making ices, a receptacle for the material to be frozen, the plate 32, mounted therein, and any well known means for holding it in any position, substantially as set forth. 11th. In a device for making ices, a receptacle for the material to be frozen, a scraper therein for removing the frozen material from the side of the receptacle, and a plate curved or inclined, substantially as set forth, so it will tend to force the unfrozen material to the side of the receptacle. 12th. In a device for making ices, a receptacle for the material to be frozen, the tubular bearing 13, the spindle 6, extending therethrough, a scraper, and the plate 32 mounted on such spindle, substantially as set forth. 13th. In a device for making ices, a suitable support, a receptacle for the material to be frozen, and a plate mounted in the receptacle arranged in an inclined position towards the bottom so as to tend to force the material downward instead of upward, substantially as set forth.

No. 49,955. Multiple Switchboard System.

(Système de tableau d'aiguille multiple.)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles E. Scribner, Chicago, Illinois, U.S.A., 11th September, 1895; 6 years.

Claim.—1st. The combination of the spring jack having two line springs of different lengths, and a frame insulated from the line springs with a plug having two contact pieces, one adapted to make contact with one of the line springs, and the other to make contact with both the other line spring and the frame of the jack, substantially in the manner and for the purpose specified. 2nd. In combination telephone wires extending from a sub-station, connected together through a retardation coil and an annunciator and connected one line wire to corresponding line springs of several spring jacks, and the other line wire to the remaining line springs of the same spring jacks, a plug provided with two contact pieces, one of which is adapted to make contact with one of the line springs of a jack, and the other to make contact with both the other line spring and the frame of the jack, and a connection extending from the frames of the jacks to a point of the branch connection joining the two lines intermediate between the retardation coil and the annunciator, whereby the annunciator is short circuited when the plug is thrust into a jack, substantially in the manner and for the purpose specified. 3rd. In combination, two connecting plugs each having two contact pieces, corresponding contact pieces being electrically connected, one pair directly and the other pair through a condenser, keys adapted to disconnect both contact pieces of either plug from the corresponding contact pieces of the other and to connect them to the poles of a calling generator, an annunciator in a branch circuit between the two contact pieces of the plugs, a key capable of being placed in three positions, and provided with contacts adapted when in one of its positions to connect the telephone set in a branch circuit between the two pairs of corresponding contact pieces, and when in another position to connect the test battery and a low resistance electro-magnet signalling device in a similar branch circuit, and when in its intermediate position to disconnect both the

telephone set and battery and sounder from the pairs of corresponding contact pieces, substantially in the manner and for the purpose specified. 4th. In combination, telephone lines extending from two sub-stations, each pair of line wires being connected one to similar line springs of several spring jacks and the other to the remaining line springs of the same spring jacks, and being connected together through a retardation coil and an annunciator, and having a branch circuit extending from a point intermediate between the annunciator and the retardation coil to the frames of the several spring jacks of its own line, two connecting plugs one in a spring jack of each of the telephone lines, each plug being provided with two contacts, one of which engages with one of the line springs of the jack into which it is thrust, and the other of which engages with both the other line spring and the frame of the same jack, whereby a short circuit is completed around the annunciator of that line, conductors connecting corresponding contact pieces of the two plugs, and a clearing out annunciator in a branch circuit between the conductors, substantially in the manner and for the purpose specified. 5th. In combination, telephone lines extending from two sub-stations, each pair of line wires being connected, one to similar line springs of several spring jacks, and the other to the remaining line springs of the same spring jacks, and being connected together through a retardation coil and an annunciator, and having a branch circuit extending from a point intermediate between the annunciator and the retardation coil to the frames of the several spring jacks of its own line, two connecting plugs one in a spring jack of each of the telephone lines, each plug being provided with two contacts, one of which engages with one of the line springs of the jack into which it is thrust, and the other of which engages with both the other line spring and the frame of the same jack, whereby a short circuit is completed around the annunciator of that line, conductors connecting corresponding contact pieces of the two plugs, a test battery and an electro-magnet signalling device in the branch circuit between the two conductors joining the corresponding contact pieces of the loop plugs, and a key adapted to disconnect the branch circuit containing the signalling device and the test battery from the conductors, substantially in the manner and for the purpose specified. 6th. In a test circuit for multiple switch boards, in combination, a spring jack furnished with a line spring and a frame insulated therefrom, a plug provided with a contact piece, making contact with both the line spring and the frame of the jack, a second spring jack having a similar line spring electrically connected to the line spring of the first spring jack and a frame electrically connected to the frame of the first spring jack, a loop plug having two contact pieces, one of which makes contact with the line spring and the other with the frame of the second spring jack, and a test battery and an electro-magnetic signalling device included in a branch circuit between the two contact pieces of the second plug, substantially as and for the purpose specified. 7th. The combination, with a metallic circuit telephone line extending from a sub-station to a central station, of line terminals at the central station each having two contact pieces connected to the different sides of the line respectively, an electric indicator and a retardation coil included in a bridge between the two sides of the line and contact pieces adapted to short circuit the electric indicator when a connection is made to one of the line terminals, substantially as specified.

No. 49,956. Method of Preparing Decorating Mixtures. (Méthode de préparer un mélange pour ornementation.)

Melvin Batchlor Church, Grand Rapids, Michigan, U.S.A., 11th September, 1895; 6 years.

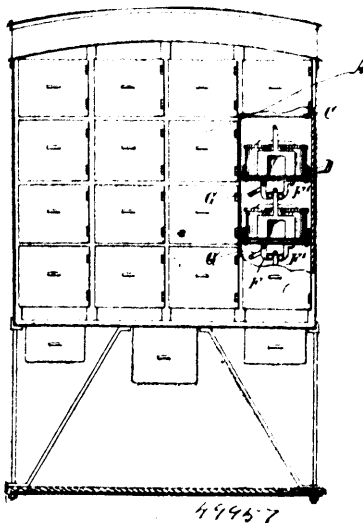
Claim.—1st. The herein described method of making an adhesive wall coating compound of animal glue and calcined gypsum, consisting in feeding the liquid animal glue into the pulverized gypsum in the proportions, substantially as described, mixing the same by stirring as the glue is fed, and subjecting the mixture to heat to dry the same, substantially as described. 2nd. The herein described method of making an adhesive wall coating compound of animal glue and calcined gypsum, consisting in mixing the liquid animal glue and pulverized gypsum together, driving off the water in the glue before being absorbed by the gypsum by heat, and consequently grinding the ingredients so mixed, substantially as described.

No. 49,957. Carriages Provided with Heating Apparatus for Transporting Food. (Voiture pour transporter les aliments chauds.)

Johann Lay, Essen on the Ruhr, Prussia, German Empire, 11th September, 1895; 6 years.

Claim.—1st. A device for conveying food and delivering the same hot at a distance from the place of its preparation, consisting of an enclosed vehicle provided with heaters and damper or valves by which the draft of said heaters is controllable by the driver, longitudinal guide rails within said vehicle adapted to receive and carry sliding shelves, sliding shelves supported by said guide rails and adapted to support food receptacles, substantially as set forth. 2nd. In a device for conveying food and delivering the same hot at a distance from the place of its preparation, the combination with an enclosed vehicle having suitable longitudinal guide rails, of shelves adapted to slide on said rails and being in sections longi-

tudinally and provided at the joints with means of engaging and connecting the adjacent section, substantially as set forth. 3rd. In



a device for conveying food and delivering the same hot at a distance from the place of its preparation, the combination with an enclosed vehicle having longitudinal guide rails and sliding shelves supported upon them, of a pair of parallel longitudinal guide rods centrally above each shelf side by side and a little distance apart, one being carried in a stationary pendant bracket and the other in a pivoted pendant bracket adapted to swing sideways, said rods adapted to receive the handle of a food receptacle between them and a latch adapted to lock said movable rod and cause it to impinge upon the object held between them, substantially as set forth. 4th. In a device for conveying food and delivering the same hot at a distance from the place of its preparation, the combination of a frame adapted to hold separate pails or bowls and provided with vertical grooves, bowls or pails provided with tongues or ridges adapted to engage said grooves, a top or cover for each pail having a rim with an elastic pecking ring, a bar extending over said tops or covers, and means of pressing down and securing said bar, substantially as set forth. 5th. In a food receptacle or pail, the combination of a frame adapted to hold separate pails or bowls and form a closed space between them, pails provided with means of securing them to said frame, a slide in the frame between the pails, and a lamp in the space between said pails and accessible through said slide, substantially as set forth. 6th. In a food receptacle, the combination of a frame adapted to carry separate bowls or pails and form a closed space between them, a slide in the frame between said pails, a lamp in the space between said pails and accessible through said slide and a wire gauze surrounding said lamp, substantially as set forth. 7th. In a food receptacle, the combination of a frame adapted to carry separate bowls or pails, separate pails adapted to be secured in said frame, covers having rims provided with elastic packing rings, a cross-bar extending over said covers, a bail having a lower cross-bar adapted to turn in said lugs and provided with a bend adapted to press upon said cross-bar and press it down upon said covers when turned in one position and relieving it when in another position, substantially as set forth.

No. 49,958. High Power Explosive. (Explosif.)

The Joveite Manufacturing Company, assignee of Jonas Emile Blomén, all of Washington, Columbia, U.S.A., 11th September, 1895; 6 years.

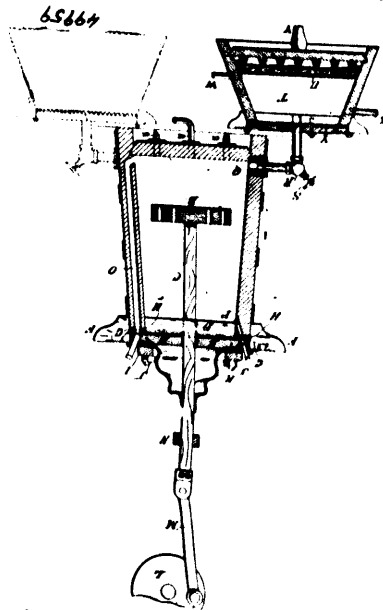
Claim.—1st. A high power explosive consisting of an oxidizing agent, a mixture of phenol derivatives and other hydrocarbon derivatives, charcoal and sulphur, substantially as described. 2nd. A high power explosive consisting of a mixture of nitro-naphthalenes, an oxidizing agent, and a mixture of nitro-phenols. 3rd. A high power explosive consisting of a mixture of nitro-naphthalenes, nitrate of soda, and a mixture of nitro-phenols, substantially as described. 4th. A high power explosive consisting of a mixture of nitro-naphthalenes, an oxidizing agent, a mixture of nitro-phenols and charcoal, substantially as described. 5th. A high power explosive consisting of a mixture of nitro-naphthalenes, an oxidizing agent, a mixture of nitro-phenols, sulphur and charcoal, substantially as described.

No. 49,959. Process of and Apparatus for Extracting Gold and Silver from their Ores. (Procédé et appareil pour extraire l'or et l'argent des minerais.)

John J. Crooke, New York, State of New York, U.S.A., 11th September, 1895; 6 years.

Claim.—1st. The hereinbefore described process of chlorinating gold producing ores, which consists in forming a plasma containing

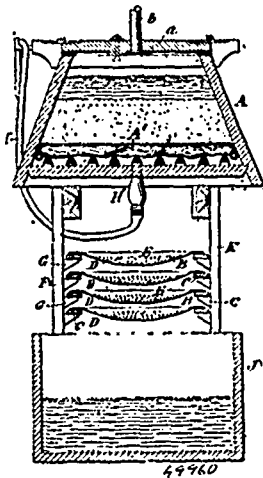
pulverized ores, an alkaline chloride and nitrate of copper, and subjecting the plasma to the action of a chlorine-liberating acid, for



the purpose set forth. 2nd. The hereinbefore described process of chlorinating gold producing ores, which consists in forming a plasma containing pulverized ores, an alkaline chloride and nitrate of copper, and subjecting the plasma while the same is under agitation to the action of a chlorine-liberating acid, for the purpose set forth. 3rd. The hereinbefore described process of chlorinating gold producing ores, which consists in forming a plasma containing pulverized ores, an alkaline chloride, oxide of manganese and nitrate of copper, and subjecting the same, while under agitation, to the action of a chlorine-liberating acid, for the purpose set forth. 4th. The hereinbefore described process of chlorinating gold and silver producing ores, which consists in mixing the pulverized ore with an alkaline chloride and oxide of manganese, and then introducing the mass into a hot acidulated solution of nitrate of copper and chloride of sodium, subjecting the plasma so formed to agitation, and introducing the chlorine-liberating acid, for the purpose set forth. 5th. The hereinbefore described process of chlorinating gold and silver producing ores, which consists in forming a plasma containing the pulverized ores, an alkaline chloride and nitrate of copper, and then liberating acid introduced at frequent intervals, for the purpose set forth. 6th. The hereinbefore described process of extracting gold from its ores, which consists in forming a plasma containing pulverized ores, an alkaline chloride and nitrate of copper, subjecting the plasma to the action of a chlorine-liberating acid, filtering the plasma, precipitating the gold from the filtrate and recovering the nitrate of copper for re-use in other charges of plasma, substantially as and for the purpose set forth. 7th. The hereinbefore described process of extracting gold and silver from their ores, which consists in forming a plasma containing the pulverized ores, an alkaline chloride and nitrate of copper, subjecting the plasma to the action of chlorine-liberating acid, filtering the plasma, precipitating the gold, silver and copper from the filtrate and recovering the nitrate of copper and silver in solution for re-use in other charges of plasma, and finally separating the silver from the copper solution when sufficiently enriched therewith, for the purpose set forth. 8th. In the process of converting gold and silver contained in ores into chlorides, the introduction of small charges of chlorine-liberating acid at frequent intervals at or near the bottom of a digester or vessel containing a pulp or plasma of ores and alkaline chlorides, whereby chlorine is liberated at intervals, and in such volume that as it rises through the plasma it will unite with the metals, and thereby unnecessary waste of chlorine by escape from the vessel is prevented. 9th. The hereinbefore described process of chlorinating gold and silver ores, which consists in treating a pulp or plasma containing pulverized ores, alkaline chlorides and a hot aqueous acidulated solution of chloride of sodium, in a suitable vessel under agitation, with a chlorine-liberating acid, whereby chlorine is liberated in the pulp and acts in its nascent condition to convert the gold and silver into chlorides. 10th. A digester for treating ores by chlorination, consisting of an upright vessel provided with side walls converging from the bottom upward for the purpose of concentrating the ascending volume of chlorine, a vertically reciprocating agitator, a channel for introducing acid at the bottom of the digester, a channel for introducing a channel near the top of the digester, a sluice door or exit way and chlorine, substantially as set forth. 11th. In a digester for treating ores by chlorination, the combination, substantially as described and shown, with an agitator consisting of a dasher attached to a shaft constructed and arranged to reciprocate vertically in the

ligger and passing through the top thereof, of a flexible hood whose lower or outer edge is secured to the top of the digester and its central portion is secured gas-tight to the shaft.

No. 49,960. Process of and Apparatus for Extracting Silver from Ores and Mattes. (Procédé et appareil pour extraire l'argent des minerais.)



John J. Crooke, New York, State of New York, U.S.A., 11th September, 1895; 6 years.

Claim.—1st. The herein described process of extracting silver from its ores or mattes, which consists in roasting the ores or mattes with chloride of sodium, treating the roasted mass with a hot aqueous solution containing chloride of sodium, nitrate of copper and sulphuric acid, and recovering the silver from the solution. 2nd. The herein described process of extracting silver from its ores, which consists in roasting the ores with chloride of sodium, leaching the roasted mass with a hot aqueous solution containing chloride of sodium, nitrate of copper and sulphuric acid, and exposing the solution to the action of metallic copper, whereby the silver contained in the ores is converted into a chloride, is dissolved by the solution and is deposited upon the copper. 3rd. The herein described process of extracting silver from ores containing lead, which consists in roasting the ores with chloride of sodium, leaching the roasted mass with a hot aqueous solution containing chloride of sodium, nitrate of copper and sulphuric acid, the quantity of the latter not being sufficient to precipitate the lead as sulphate, whereby the lead will be converted into chloride and pass the filter in that condition, and exposing the solution to the action of metallic copper to deposit the silver therefrom. 4th. The herein described process of extracting silver from ores containing lead, which consists in roasting the ores with chloride of sodium, leaching the roasted mass with a hot aqueous solution containing chloride of sodium, nitrate of copper and sulphuric acid, the quantity of the latter not being sufficient to precipitate the lead as sulphate, whereby the lead will be converted into chloride and pass the filter in that condition, and exposing the solution to the action of metallic copper to deposit the silver therefrom, and afterwards precipitating the lead from the solution to prepare it for re-use. 5th. In an apparatus for extracting silver from its chloride solution, a series of filters or holders carrying metallic copper removably and interchangeably arranged one above the other, in connection with a leaching tank and a receiving tank, whereby the solution will pass from the leaching tank directly through the series of filters and be discharged into the receiving tank, and the silver will be deposited upon the copper in the filters, and the lower filters of the series be easily removed and advanced upward, as set forth.

No. 49,961. Electric Accumulator.

(*Accumulateur électrique*)

Vicomte Gaston de Schrynmakers de Dormal, 34 Rue Montoyer, Brussels, Belgium, 11th September, 1895; 6 years.

Claim.—1st. In a secondary voltaic battery, arranging the depolarizing peroxide in direct contact with the negative material, substantially as and for the purposes set forth. 2nd. Enclosing the peroxide in a metallic sheath forming part of the negative material, substantially as described.

No. 49,962. Spoon for Administering Medicines to Horses, etc. (Cuiller pour administrer des remèdes aux chevaux ou autres animaux.)

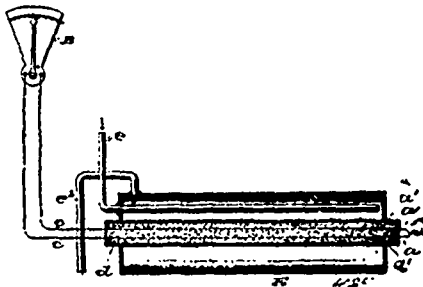
John D. Mauseau, New Bedford, Massachusetts, U.S.A., 11th September, 1895; 6 years.

Claim.—1st. A veterinary medicine spoon formed of two laterally opening lobes with a handle for operating the same, substantially as



and for the purpose set forth. 2nd. A veterinary medicine spoon formed of two lobes hinged along the upper edges thereof and adapted to open laterally each, lobe having a handle attached to the lower edge thereof and adapted to operate for opening the lobes by compression of the handles, substantially as set forth. 3rd. The combination in a veterinary medicine spoon of bowl formed of two hinged sections, with crossed handles connected therewith and having a spring for closing them, said handles having flat ends set obliquely with respect to each other and adapted when compressed to open the bowl, substantially as set forth.

No. 49,963. Pyrometer. (Pyromètre.)



Alvan Augustus Simonds, Dayton, Ohio, U.S.A., 11th September, 1895; 6 years.

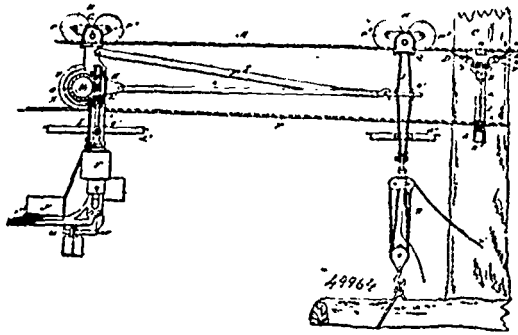
Claim.—1st. In an electrical pyrometer, the combination with thermo-electrical elements and an indicator, of electrical connections between said elements and the indicator and means for maintaining the said connections at a low temperature from a point near the said elements to a point substantially without the influence of the source of heat which it is desired to measure, whereby the connections are maintained at their normal conductive efficiency, substantially as described. 2nd. In an electrical pyrometer, the combination with the thermo-electrical elements, and an indicator, of electrical conductors connecting the said elements and indicator, a heat and electrical insulating material surrounding said conductors from a point near the said elements to a point without the influence of the source of heat and a water jacket for said insulation, whereby a rise in the temperature of the conductors to effect their conductive capacity is avoided, substantially as described. 3rd. In an electrical pyrometer, the combination with thermo-electrical elements and an indicator, of electric connections between them, a casing filled with plaster of Paris, said connections being embedded in said plaster of Paris, and insulated thereby, and a water jacket surrounding said casing whereby the injurious heating of the conductors is prevented, substantially as described. 4th. In an electrical pyrometer, the combination with the thermo-electrical elements, and an indicator, of electrical conductors extending from said elements to said indicator, each conductor being composed of a main portion consisting of copper or other good conductor, extending to within a short distance of the elements, and a short portion of platinum or like conductor connecting the main portion and the elements, and means for maintaining a comparatively low temperature at the point of junction and outward from the said elements, substantially as described. 5th. In an electrical pyrometer, the combination with the thermo-electrical elements, and an indicator, of electric conductors extending from said elements to the indicator, each consisting of a short portion of platinum or like material adjacent to said elements and the balance of copper, a heat and electric non-conducting insulating material surrounding said conductors at the point of junction of their parts and a water jacket for said material, substantially as described.

No. 49,964. Electric Cable Way. (Voie à câble électrique.)

Richard Lamb, New York, State of New York, U.S.A., 11th September, 1895; 6 years.

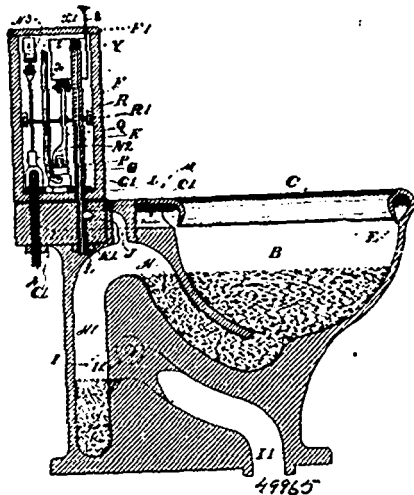
Claim.—1st. In a cable way, the combination of a supporting cable, a car supported on said cable, a motor carried by the car, a hauling cable anchored at both ends, and means independent of the weight of the apparatus for causing tractional friction between the car and the hauling cable to haul the car on the supporting cable, substantially as described. 2nd. In a cable way, the combination of a supporting cable, a car supported on and suspended from said cable, a motor carried by the car, a wheel revolved by the motor, a hauling cable anchored at its ends, and means independent of the weight of the apparatus for causing tractional friction between the wheel and hauling cable to haul the car on the supporting cable, substantially as described. 3rd. The combination, with an electric

locomotive suspended from a supporting cable, of an adjustable ballast, substantially as specified. 4th. The combination, with a trac-



tion cable, of a supporting column, a cable supporting bracket attached to the column and furnished with a V-shaped notch and having projections extending inwardly over the V-shaped notch, substantially as shown and described. 5th. In an electric cable way, the combination of a supporting cable forming one branch of the electric circuit, a car supported and suspended from the said cable, an electric motor carried by the car and insulated from the cable, a wheel revolved by the motor, a hauling cable anchored at its ends, and engaged about the wheel, said hauling cable forming the other branch of the electric circuit, and means independent of the weight of the apparatus for causing tractional friction with the hauling cable to haul the car over the supporting cable, substantially as described. 6th. The combination of a supporting cable, a suspended locomotive, a traction cable engaged by the locomotive, an auxiliary cable, and snatch blocks for changing the direction of the auxiliary cable, substantially as specified. 7th. In an electric cable way, the combination of a cable, a car supported and suspended from the cable, a motor carried by the car, a wheel operated by the motor, a hauling cable anchored at its ends and engaged about the wheel, means independent of the weight of the apparatus for causing tractional friction with the hauling cable to haul the motor on the supporting cable, and a tow line connected with the car and attached to a boat, said tow line carrying electrical conductors, substantially as described. 8th. In a cable way, the combination of a cable, a car supported and suspended from the said cable, a motor carried by the car, a sheave revolved by the motor, and a hauling cable passed one or more times around the sheave and having its ends anchored, substantially as described.

No. 49,965. Water Closets. (Latrines à l'eau.)



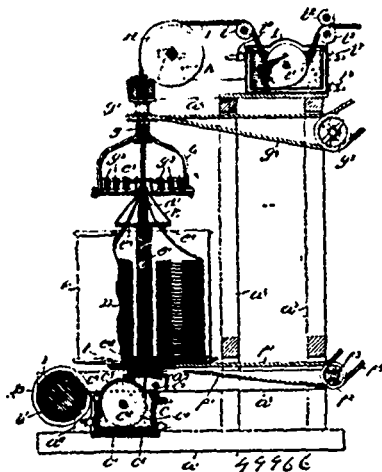
David Steel Wallace, Denver, Colorado, U.S.A., 11th September, 1895; 6 years.

Claim.—1st. A water closet having a flushing reservoir or tank secured to or cast integral with it, as specified. 2nd. A water closet having the reservoir or flushing tank secured to or cast integral with the closet, and a water passage in the closet's rim having an annular discharge opening in the same in proximity to the surface of the bowl, as herein set forth. 3rd. A siphon closet having the flushing tank or reservoir secured to or cast integral therewith, and an oval, hollow flushing rim in communication with

said tank or reservoir, as specified. 4th. A double trap siphon closet having the flushing tank or reservoir secured to or cast integral therewith, and a valve controlled flushing passage formed in the closet rim and connecting with the said reservoir, and means substantially as herein described for flushing said closet, as specified. 5th. A water closet having the flushing reservoir or tank secured to or forming an integral part thereof, an oval formed rim provided with a water passage, a valve controlled discharge passage in said reservoir and closet in communication with said rim passage, an annular opening in said rim adapted to flush evenly the surface of the bowl, and mechanism substantially as herein described for operating said valve controlled passage, as herein specified. 6th. A water closet having the reservoir or flushing tank secured to or formed integral therewith, a hollow flushing rim open continuously around the bowl, a water passage in said closet connecting with said rim and with said reservoir, a valve arranged to control said passage, a lever pivoted to said valve, a pivotal support in said reservoir for said lever, a box or water containing receptacle pivoted to the opposite end of said lever, means to enable a column or body of water to flow in and out of said box or receptacle whereby the said valve may be automatically closed in a predetermined period of time, and a manually operated push-rod for opening said valve, substantially as described. 7th. A siphon closet having the reservoir or flushing tank secured to or formed integral therewith, a hollow flushing rim open continuously around the bowl, a water passage in said closet connecting with said rim and with said reservoir, a valve arranged to control said passage, a lever pivoted to said valve, a pivotal support in said reservoir for said lever, a box or water receptacle pivoted to the opposite end of said lever, a water column flowing in and out of said receptacle intermittently, an inlet valve in the bottom of said box and an adjustable outlet valve whereby the outward flow of water from said box may be regulated or timed, a manually operated rod attached to said box and extending above said reservoir for opening said flushing valve, an air passage in said closet extending above the water level of said reservoir and connecting with the bowl trap, a valve arranged to control the outlet of said air passage, and an air-tight casing in said reservoir surrounding said air passage, substantially as described. 8th. A double siphon closet having the flushing reservoir or tank secured to or formed integral therewith, a bowl in said closet having a hollow rim or other flushing device, a valve controlled discharge passage connecting said bowl to said reservoir, a valve controlling said discharge passage, a tilting lever pivoted at one end to said valve, a box or water containing receptacle of any suitable form pivoted to the opposite end of said lever adapted to receive and retain independent of the water in the reservoir for a predetermined period of time, a portion of the flushing water, a valve controlled water inlet and an adjustable outlet in said box, and a weight attached to said valve whereby it may be closed when said box is empty, and a manually operated push-rod arranged to extend above the reservoir for tripping said valve, substantially as described. 9th. A double trap siphon closet having a discharge passage at its bottom curving backward from the front of the bowl and upward, also diverging obliquely to one side of the closet's longitudinal centre, then turning downward to the base of closet, then laterally across the centre and upward, and then toward the front of the closet and downward and out near the centre, a vent outlet at the top of the second trap, an air-passage from the top of the first turn of the discharge passage to the top of the reservoir, a hollow rim or other flushing device connected by a valve controlled passage to the reservoir, and mechanism substantially as herein shown and described for automatically flushing said closet, as specified. 10th. The combination, with a bowl, a siphon discharge passage extending upward and diverging obliquely from its centre, then turning vertically downward to the base and then across the centre and upward, and then downward to a soil pipe connection arranged on the bottom of the closet, a vent pipe at the top of the second trap, an air-duct leading from the first bend of the siphon passage to the reservoir, a pipe secured in said reservoir and closet provided with a side opening registering the said air-duct, and a valve controlled outlet to said pipe, substantially as described. 11th. The combination, in a siphon water closet, of a bowl provided with a hollow flushing rim, a double trap siphon discharge passage arranged substantially as herein shown, an air-duct communicating with the siphon passage in the air space between the two traps in the top of the closet, a pipe secured in said reservoir provided with an outlet registering with said air-duct having its lower end closed, and at its upper end a valve arranged in operative engagement with the outlet, a lever pivoted to said valve, a bracket supporting said lever, and attached to said pipe, a float secured to the opposite end of said valve lever by an intermediate rod operating to close said valve, a valve controlled flushing passage arranged in the closet and reservoir, a tilting lever pivoted at one end to said flushing valve, a box or water holding device pivoted to the opposite end of said valve lever, means substantially as herein described for filling said box with water and regulating its outflow, an overflow pipe connecting the top of said reservoir with the atmosphere through said rim and an air tight casing in said reservoir inclosing said air-duct pipe and valve and overflow pipe, all arranged substantially as herein described. 12th. The combination, with a reservoir and closet, of the flushing valve provided with two depending rods threaded at the ends and containing nuts adapted to secure said reservoir to said closet, as set forth. 13th. The combination, with the reservoir and closet, of a water inlet

pipe having an external threaded portion containing nuts arranged and adapted to secure said reservoir and closet together, as set forth. 14th. The combination, with the reservoir and closet, of an air-pipe extending through said reservoir and closet, having its lower end threaded and provided with nuts adapted to clamp the closet and reservoir together, having its lower end closed, a side opening in said pipe, an air-duct in said pipe registering therewith and communicating with the air space above the closet's first trap, and an automatically controlled valve arranged in operative engagement with the pipe's outlet in the reservoir, and a casing surrounding said air-pipe, substantially as described. 15th. The combination with a reservoir and closet secured together or cast integral, a valve controlling the flushing discharge passage, a tilting lever pivoted thereto, a water containing receptacle adapted to operate said valve to close the same automatically, a controllable flow of water into and out of said receptacle at each evolution of flushing, a clapper inlet valve in the bottom of said receptacle, an adjustable outlet in said receptacle consisting of a perforated plate adapted to move laterally on the bottom of the receptacle, a perforation through said plate registering with a like perforation through the bottom, a weight on said valve to close it when the water has discharged from the receptacle, a manual push-rod attached to said receptacle and extending through the cover of said reservoir, adapted to push the box under water and open the valve, all arranged substantially as herein set forth and described.

No. 49,966. Insulated Electric Conductors. (Fils électriques isolés.)

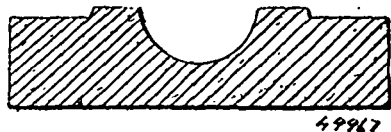


John Robinson, Germantown, and William Julian Chaninell, Philadelphia, both of Pennsylvania, U.S.A., 11th September, 1895; 6 years.

Claim—1st. An insulated electric conductor, composed of a wire provided with a coating of insulating material having a smooth surface covering of fibrous material, a binder of cord or thread wound around the same, and a coating of insulating material covering and permeating said covered and corded wire, substantially as and for the purposes set forth. 2nd. The method of producing an insulated electric conductor, which consists in continuously drawing a wire through a bath of insulating material, feeding under required tension and applying in regulated quantity cotton or the like to said wire, while said insulating material is still wet thereon, so that said cotton or the like may firmly adhere thereto and present a smooth and uniform surface, laying thread or cord over the covering of said wire, and conducting said wire through a bath of insulating material to thoroughly saturate the body of the conductor, substantially as and for the purposes set forth. 3rd. The method of producing an electric conductor, which consists in continuously rotating and drawing a wire through a bath of insulating material, applying and compacting fibrous material under required tension and in regulated quantity to said wire and winding threads around said covered wire, substantially as and for the purposes set forth. 4th. The method of producing an electric conductor, which consists in continuously drawing a rotated wire through a bath of insulating material and while still wet or sticky, applying and compacting fibrous material, such as cotton or the like to the wire, then cording the insulated and covered wire by applying threads in regular sequence around the same and laying up the product, substantially as and for the purposes set forth. 5th. An apparatus for producing an electric conductor, comprising a reel adapted to contain wire, means controlled from a main driving shaft for rotating said wire, a jacketed appliance adapted to contain fluid insulating material, a carding engine adapted to present fibrous material in the path of the moving wire, a whirler or flier and a device connected therewith for compacting said material to said wire, said whirler or flier adapted to lay cords

or threads in regular sequence onto said covered wire, mechanism for drawing said wire and actuated by means of gearing from said driving shaft, a delivery nozzle or tube, a rotatable laying up reel, and means for actuating said movable members, substantially as and for the purposes set forth. 6th. An apparatus for producing an electric conductor, comprising a rotatable reel adapted to support wire, a main driving shaft, means for actuating said controlled reel from said shaft, a wire rotating device, a tank adapted to contain material for application to said wire and provided with entrance and exit nozzles of different forms, a carding engine with a delivery appliance, a whirler or flier with a funnel-shaped nozzle for compacting fibrous material to said wire and prior to the cording of the same by means of said flier or whirler, a wire drawing mechanism controlled by means connected with said driving shaft, a delivery nozzle and winding up reel, substantially as and for the purposes set forth. 7th. An apparatus for producing an insulated electric conductor, comprising a reel, a jacketed tank provided with a rotatable roll with a removable cover having openings therein, means for feeding under required tension and applying in regulated quantity, fibrous material to a wire adapted to be moved continuously in the path thereof and caused to adhere thereto and present a smooth exterior surface, a whirler or flier, a traveler drum, a jacketed tank provided with an internal roll, a reel, and means for actuating said movable parts, substantially as and for the purposes set forth. 8th. An apparatus for producing an insulated electric conductor, comprising a carding engine with a wiper or roll, a rotatable cone-shaped device, a reel, a jacketed tank provided with a revoluble roll, a nozzle, a rotatable whirler, a tank for containing insulating material, and a winding reel, substantially as and for the purposes set forth. 9th. An apparatus for producing an insulated electric conductor, comprising a carding engine, a rotatable cone located adjacent thereto and provided with a hollow spindle, a funnel-shaped feeding device, a whirler, tanks adapted to contain insulating material and rotatable reels adapted to contain wire and resultant product, substantially as and for the purposes set forth. 10th. An apparatus for producing an insulated electric conductor, comprising a carding engine having a delivery roll or rolls, a rotatable cone located adjacent thereto, a funnel-shaped nozzle partially surrounding one portion of said cone, a rotatable whirler, a reel, tanks adapted to contain insulating material, and a rotatable reel, substantially as and for the purposes set forth.

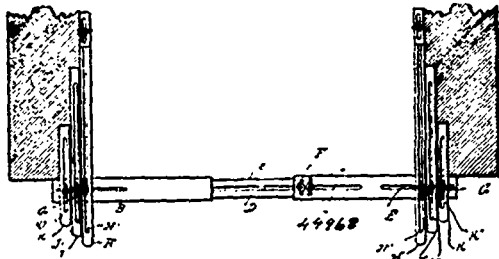
No. 49,967. Manufacture of Self-Lubricating Journal Bearings. (Fabrication de coussinet à graisseur automatique.)



The Mineral Antifriction Manufacturing Company, assignee of Alfred Melville Crooker and Richard Emil Weimhold, all of Memphis, Tennessee, U.S.A., 11th September, 1895; 6 years.

Claim—1st. The process or method herein described of manufacturing a self-lubricating journal bearing, which consists in first solidly compacting and shaping a body of asbestos fibre into the form desired, then saturating the compacted body with a heated mixture composed of paraffine and plumbago, and then moulding the saturated body and cooling the same, substantially as set forth. 2nd. As an improved article of manufacture, a self-lubricating journal bearing, consisting of a solidly compacted body of asbestos fibre saturated with a solution of paraffine and plumbago, substantially as and for the purpose described.

No. 49,968. Threshold Marker. (Marqueur de seuil.)



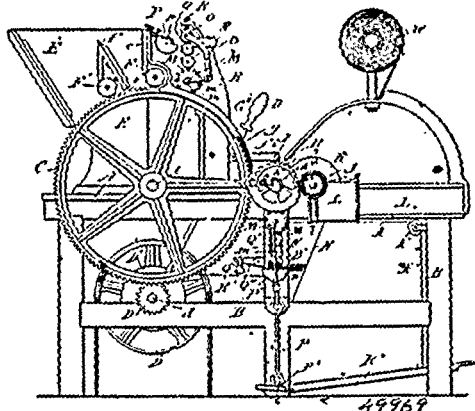
George S. Tozier and John T. Dilling, both of Sprague's Mills, Maine, U.S.A., 13th September, 1895; 6 years.

Claim—1st. A marking or measuring device, consisting of two main adjustable members or sections, and a series of sections arranged at a right angle to the main sections and adjustably connected thereto. 2nd. A marking or measuring device, consisting of the main adjustable sections, the adjustable sections connected

thereto at a right angle, and the short adjustable sections connected to one of the right angle sections. 3rd. A marking or measuring device, consisting of the two adjustable main sections, the series of adjustable main sections connected thereto at a right angle and of varying lengths. 4th. A marking or measuring device, consisting of the main sections fitting one upon the other, and laterally adjustable set screws engaging both sections to hold them at the proper adjustment, a series of sections of varying lengths connected to the outer ends of the main sections and adjustable on said main section, and short sections connected to one of the series of sections and adjustable with reference thereto.

No. 49,969. Match Printing and Coiling Machine.

(Machine pour imprimer et mettre en boîtes les allumettes.)



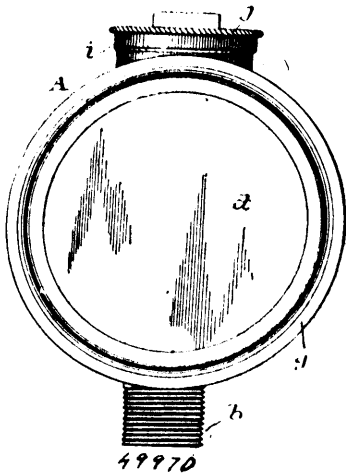
The E. B. Eddy Company, assignee of George Henry Millen and Narcisse Derouin, all of Hull, Quebec, Canada, 13th September, 1895; 6 years.

Claim.—1st. In a match splint printing and coiling machine, the combination, with a table and frame supporting the different parts of mechanism, of a driving shaft with pulley and clutch box, loose driving pinion upon said shaft adapted to be connected by means of said clutch, an axle journaled upon the table, a large spur wheel upon said axle gearing in said pinion, a large wheel cast integral with said spur wheel and having a rim of less width than the length of a splint and provided with notches at close and regular intervals adapted to receive and carry one of the splints, a smaller wheel of similar construction, but the central portion of its rim sunk and having its rim in contact with the large wheel and cast integrally with a spur wheel gearing with the spur wheel on the large notched wheel to cause the small notched wheel to rotate in uniform peripheral contact with the large notched wheel, an eccentric sleeve with crank upon which said small wheel is journaled and by means of which it may be thrown in and out of gear and means of locking it upon the stationary axle, a cover or race having its hub journaled upon said sleeve and inclosing the lower half of its rim, but being open in the centre and having one end curved outwardly and forked to straddle the rim of the large notched wheel at its point of contact with the small one, a slide rail secured to the table at the end of the small notched wheel, a carriage adapted to slide on said rail and carrying a journal bearing, a transverse axle journaled in said bearing carrying a driving pulley and having a square end adapted to receive a bobbin, in contact with the small notched wheel, a bobbin having a slotted eccentric shell and square eye adapted to take the square end of the axle heretofore referred to, a web carried upon a coil and having its end drawn in the race of said small notched wheel and over and under the same and secured in the said bobbin, means of driving said bobbin axle from the driving shaft, a hopper at the upper rear part of the large notched wheel of which the latter forms the bottom carried by a bracket secured to the table, a guard or cover over the rim of the large notched wheel extending from said hopper to the point of contact with the small notched wheel and open in the centre, a bracket secured to the table adapted to carry a set of printing mechanism in front of said hopper by means of a vertically adjustable slide block, an impression roller journaled in said slide block having transverse dovetailed slots of the same pitch as the notches in the notch wheels and geared to the spur wheel on the large notched wheel to have uniform peripheral contact with the latter, distributing rollers above said impression roller, a feed or dipping roller above said distributing rollers and carried in the fork of a lever pivoted to the bracket which carries said printing mechanism, a crank on the axle of the impression roller, a connecting rod connecting said crank with said lever, an ink fountain secured to the front of the hopper with the roller of which said dipping roller is adapted to make intermittent contact, a vertical guide under the small notched wheel having its upper end journaled upon the eccentric sleeve and its lower end pivoted adjustably to the frame of the table, a slide block in said guide carried adjustably by a weighted lever, an impression roller similar to the one referred to journaled in said

slide block, and adapted to make contact with the lower part of said small notched wheel, distributing rollers journaled in the same slide block under said impression roller, a slide block under the slide block last referred to connected to a foot lever and carrying an ink fountain, a crank on the axle of the impression roller last referred to and connecting rod connecting said crank to the ink fountain, and adapted to lift it and bring its roller into intermittent contact with the lower distributing roller, substantially as set forth. 2nd. In a match splint printing and coiling machine, the combination with a table and its frame of a driving shaft with pulley and pinion journaled upon the frame, an axle journaled upon the table, a spur wheel upon the overhanging end of said shaft and gearing into said pinion, a large wheel cast integrally with said spur wheel, having a rim of less width than the length of a match, and having notches at regular intervals each adapted to receive a match splint, a hopper at the upper rear part of said notched wheel supported by a bracket secured upon the table, a wheel guard or splint race secured to the front of the hopper and extending over part of the rim of said notched wheel and covering the angles of its rim but being open in the centre, a bracket secured to the table adapted to carry a set of printing mechanism, an adjustable slide on said bracket in which said mechanism is journaled, an impression roller journaled in said slide having notches of the same pitch as the notches in the notched wheel, adapted to carry type lines bearing upon the splints in the notches of said wheel and geared with the spur wheel on said notched wheel to have the same peripheral velocity, ink distributing rollers journaled in said slide above said impression roller and in contact therewith and with each other, and suitably geared with the wheel on the axle of said impression roller, a dipping roller in contact with the upper distributing roller and journaled in a lever, a lever pivoted to said bracket, a crank at the end of the axle of the impression roller, a connecting rod connecting said crank and lever carrying the dipping roller, and an ink fountain secured to the front of the hopper with the roller of which fountain said dipping roller is adapted to make contact intermittently, substantially as set forth. 3rd. In a match splint printing and coiling machine, the combination with a table and its frame, of a large wheel having a rim of less width than the length of a splint and having notches at regular intervals each adapted to receive a splint and cast integrally with a large spur wheel and secured upon the overhanging end of an axle journaled upon said table, of a small wheel similarly notched and cast integrally with a spur pinion adapted to gear into the large spur wheel so that the two notched wheels have a uniform peripheral velocity in contact with each other, a guard or splint race covering the angles of the large notched wheels and extending to the point of contact with the small notched wheel, a guard or splint race extending over the lower half of the small notched wheel and covering the angles of the rim and having the end at the point of contact with the large notched wheel curved forwardly and outwardly and straddling the rim of the large wheel, an eccentric sleeve upon which said small notched wheel is journaled, a stud or axle secured to the table upon which said eccentric sleeve is journaled, substantially as set forth. 4th. In a match splint printing and coiling machine, the combination with a table and its frame of a stud or axle secured to said table, an eccentric sleeve journaled upon said stud, a handle on said stud with locking handle and notches in the end of said stud, a notched wheel journaled upon said eccentric sleeve cast integrally with a spur wheel of approximately the same size, a wheel cover or splint race covering the angles of the lower half of the rim of said wheel and being provided with a transfer fork, a guide having its upper end journaled upon said eccentric sleeve and its lower end pivoted adjustably to the frame, a slide block carried adjustably thereon by a weighted lever, an ink fountain carried slidingly in the lower end of said slide block, a draw rod and foot lever for drawing down said slide blocks, an impression roller having notches adapted to hold type bars pitched to correspond with the notches in the notch wheel and in contact therewith and journaled in the upper end of the slide block, and its axle provided with gear wheel gearing into the gear wheel on the notched wheel and with a crank at the front end, a connecting rod connecting said crank with the ink fountain and distributing rollers below said impression roller and in contact therewith and journaled in said slide block and their axles provided with gear wheels gearing into the wheel on the impression roller, substantially as set forth. 5th. In a match splint printing and coiling machine, the combination with a table and its frame, of a shaft or axle journaled upon said table, a notched wheel and gear wheel cast integrally mounted upon said axle, said notched wheel having notches at regular intervals each adapted to carry a splint, a driving shaft journaled below said shaft or axle, a pinion loose upon said driving shaft gearing into said gear wheel, a driving pulley upon said driving shaft, a clutch connecting said driving pulley and pinion, a lever controlling said clutch, a small wheel in contact with the large notched wheel having notches corresponding to the notches in the large wheel and a pinion cast integrally therewith and gearing into the large gear wheel and the notched wheel, said small notched wheel having the central part of its rim sunk below the bottom of the notches to form a race for a web, an eccentric sleeve upon which said small notched wheel is journaled, a stud secured upon the table upon which said eccentric sleeve is journaled and adapted to be locked in certain positions, a wheel cover or splint race partly journaled upon said eccentric sleeve and covering

the lower half of said small notched wheel and having its forward end forked to extend on the rim of the large notched wheel, a bobbin adapted to make contact with a small notched wheel and to hold the end of a web, a shaft or axle carrying said bobbin and a driving pulley, a carriage upon which said shaft is journaled, a rail upon which said carriage slides, a pulley fast on the main driving pulley on the driving shaft, a belt running over said pulley and the pulley on the bobbin, a weighted block held slidingly in the frame of the table and suspended on a cord or chain running over friction pulleys, guide pulleys journaled in said block over which said belt runs, and a foot lever to which said cord or chain is connected which carries said slide block, substantially as set forth. 6th. In a match splint printing and coiling machine, the combination with the table and its frame, of a shaft or axle journaled upon said table, a large spur wheel and a wheel having notches at regular intervals each adapted to carry a splint and cast integrally with said spur wheel, a bracket secured upon said table, a hopper carried by said bracket over the upper rear part of said notched wheel, a roller within said hopper bearing upon said notched wheel and rotated in an opposite direction and covered by a dividing casing, a similar roller at the front end of said hopper, gear wheels upon the axles of said rollers, an axle or shaft having a gear wheel gearing into the large wheel on the axles of the rollers and having another wheel gearing into the large spur wheel on the notched wheel, a cover or guard secured to the front of the hopper and extending over said notched wheel and covering the angles of its rim, a bracket secured upon said table adapted to carry a vertical slide, a vertical slide carried adjustably on said bracket, an impression roller journaled in said slide and bearing upon the notched wheel as a platen and having upon its axle a wheel gearing into the spur wheel on said notched wheel, an ink fountain secured to the front of the hopper and means of distributing ink on said impression roller, substantially as set forth.

No. 49,970. Automatic Oiler. (Graisseur automatique.)

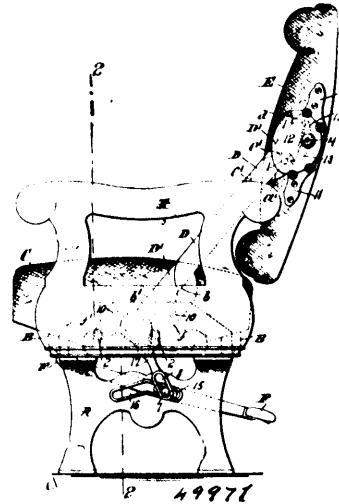


William John Ferguson, William Gilpin Harrison Slump and William Hall Whitridge, all of Baltimore, Maryland, U.S.A., 13th September, 1895; 6 years.

Claim.—1st. An automatic oiler comprising an exterior case having at its bottom a neck with a passage in it for discharging oil, an interior cup having a passage which connects with the said discharge passage of the case and said exterior case forming an oil-chamber which surrounds the cup, a perforated holder inside of the interior cup with a surrounding space between the two and said holder containing absorbent material, and a cap closing said interior cup and having an inlet hole. 2nd. An automatic oiler comprising said cap having a passage in it for an exterior case having at its bottom a neck with a passage in it for discharging oil, an interior cup having a passage which connects with the said discharge passage of the case and said exterior case forming an oil chamber which surrounds the cup, a cap closing said cup, and a plate with graduated holes to the cup, a cap closing said cup and holder. 3rd. An automatic oiler comprising an exterior case having at its bottom a neck with a passage in it for discharging oil, an interior cup having a passage which connects with the said discharge passage of the case and said exterior case forming an oil chamber which surrounds the cup, a cap closing said interior cup and having an inlet hole and provided with closing said interior cup and having an adjustable plate resting on said cap and provided with a series of holes of graduated size either one of which may register with said hole in the cap. 4th. An automatic oiler comprising an exterior case having at its bottom a neck with a passage in it for discharging oil, an interior cup having a passage which connects with the said discharge passage of the case and said exterior case forming an oil chamber which surrounds the cup, a cap

closing said interior cup and having an inlet hole and provided with an upward-projecting stem having a square base and a screw-threaded end, an adjustable plate resting on said cap and provided with a series of holes of graduated sizes either one of which may register with said inlet hole in the cap and said plate having a square hole to fit about the said square base, and a screw nut to take on the said stem and retain the adjustable plate in position. 5th. An automatic oiler comprising an exterior case having at its bottom a neck with a passage in it for discharging oil, an interior cup having a passage which connects with the said discharge passage of the case and said exterior case forming an oil-chamber which surrounds the cup, an oil inlet at the top of the said cup, a feed-hole direct from the oil-chamber to the oil-discharge passage below the cup, and a valve to open and close said feed-hole, the stem of said valve passing through the oil-chamber and the exterior case to the outside.

No. 49,971. Car Seat. (Siège de chars.)

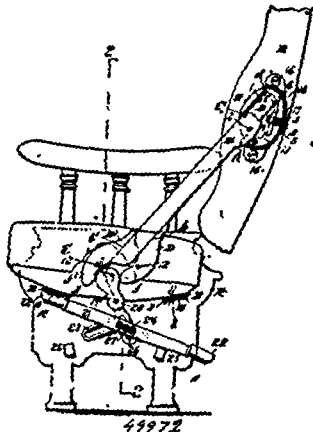


The Pottier and Stymus Company, assignee of William Piere Stymus, jr., and August Ferdinand Kreutzberg, all of New York, State of New York, U.S.A., 13th September, 1895; 6 years.

Claim. 1st. The combination with a seat frame A and back E, of reversing arms D, D¹, each pivoted to the seat frame and back on opposite sides of the vertical centre, the portions of said arms between the seat and back lying in parallel planes and overlapping each other and being of such width as to avoid separation at their inner edges during the reversing operation, substantially as described. 2nd. The combination with a seat frame A and back E, of reversing arms D, D¹, each pivoted to the seat frame and back on opposite sides of the vertical centre, the portions of said arms between the seat and back being of equal width and lying in parallel planes and one upon the other in the normal positions of separation at their inner edges during the reversing operation, substantially as described. 3rd. The combination with a seat frame A and back E, of reversing arms D, D¹, each pivoted to the seat frame and back on opposite sides of the vertical centre, said arms having straight portions extending from the seat to the back and bent outward at their lower ends opposite the seat for connection to the seat frame, the straight portions of said arms lying in parallel planes and overlapping and being of such width as to avoid separation at their inner edges during the reversing operation, substantially as described. 4th. The combination with a seat frame A and back E, of reversing arms D, D¹, each pivoted to the seat frame and back on opposite sides of the vertical centre, said arms having straight portions of equal width extending from the seat to the back and bent outward at their lower ends opposite the seat for connection to the seat frame, the straight portions of said arms lying in parallel planes one upon the other in the normal position of the seat, and being of such width as to avoid separation at their inner edges during the reversing operation, substantially as described. 5th. The combination with a seat frame A and back E, of reversing arms D, D¹, each pivoted to said frame and back on opposite sides of the vertical centre and having a stop a adapted to arrest the movement of and support the other arm, the portions of said arms between the seat and back lying in parallel planes and overlapping each other and being of such width as to avoid separation at their inner edges during the reversing operation, substantially as described. 6th. The combination with a seat frame A and back E, of reversing arms D, D¹, each pivoted to said frame and back on opposite sides of the vertical centre and having

stops *a, b*, thereon on opposite sides of the line of intersection with the other arm adapted to arrest the movement of and support the latter, the portions of said arms between the seat and back lying in parallel planes and overlapping each other and being of such width as to avoid separation at their inner edges during the reversing operation, substantially as described. 7th. The combination with a seat frame and back, of the reversing arms *D, D'*, having straight intersecting central portions lying in parallel planes and extending from the seat to the back, and each provided with stops *a, b*, at opposite ends for the other arm, substantially as described. 8th. The combination with a seat frame and back, of reversing arms *D, D'*, having straight intersecting central portions of equal width lying in parallel planes and extending from the seat to the back, and each provided with stops *a, b*, at opposite ends for the other arm in line with the opposite edges of said straight portions, substantially as described. 9th. The combination with a seat frame and back, of the reversing arms *D, D'*, having straight intersecting central portions of equal width lying in parallel planes and extending from the seat to the back, and pivoted to the back in line with the outer edges of said straight portions, each of said arms having stops *a, b*, at opposite ends for the other arm in line with the opposite edges of said straight portions, and notches *c, c'*, on their inner edges to receive the back pivot of the other arm, substantially as described. 10th. The combination with a seat frame and back, of the reversing arms *D, D'*, having straight intersecting central portions lying in parallel planes and reduced to form the levers *a, b*, and *a', b'*, at opposite ends in line with the opposite edges of said straight portions, substantially as described. 11th. The combination with a seat frame and back, of the reversing arms *D, D'*, having straight intersecting central portions lying in parallel planes and provided with stops at the opposite ends in line with the opposite edges of said straight portions, and having the end locking notches *d, e*, and *d', e'*, and locking devices engaging said notches and moving edgewise of the arms, substantially as described. 12th. The combination with a seat frame *A*, and back *B*, of reversing arms *D, D'*, having intersecting central portions, and each provided with stops *a, b*, on opposite sides of said intersecting portions and with edge locking notches at the ends at which said arms are attached to the seat back, and locking devices engaging said notches and moving edgewise of the arms for locking and unlocking the latter, substantially as described. 13th. The combination with a seat frame *A*, and back *B*, of reversing arms *D, D'*, having locking notches, spring-pressed catch levers *13*, pivoted to move edgewise of the arms and engaging said notches, substantially as described. 14th. The combination with a seat frame *A*, and back *B*, of the reversing arms *D, D'*, having straight intersecting central portions lying in parallel planes and stops at the opposite ends in line with the opposite edges of said straight portions, and having projections *f, f'*, for shifting the seat, substantially as described. 5th. The combination with a seat frame *A*, and back *B*, of the reversing arms *D, D'*, having straight intersecting central portions lying in parallel planes and stops at the opposite ends in line with the opposite edges of said straight portions, and having projections *f, f'*, for shifting the seat, a foot rest, and connections by which said foot rest is shifted by the projections *f, f'*, in reversing the seat, substantially as described. 16th. The combination with a seat frame and back, of the reversing arms *D, D'*, having straight intersecting central portions reduced to form the shoulders *a, b*, and *a', b'*, at opposite ends in line with the opposite edges of said straight portions, and having seat shifting projections *f, f'*, levers *17*, actuated by said projections, foot rest *E*, having bows *15*, inclined notches *16*, in the frame, and studs *7*, on the foot rest engaging levers *17*, substantially as described.

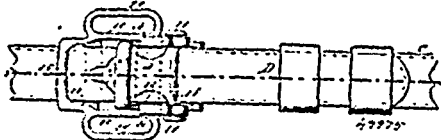
No. 49,972. Car Seat. (Siège de chars.)



Claim.—1st. The combination, with a seat frame and back, of reversing arms *D, D'* pivoted to the seat frame and back, and lying in parallel planes, the back pivot of the inner arm extending inwardly from said arm, and a cap *13* on the back outside the arms in which the outer arm is pivoted, substantially as described. 2nd. The combination, with a seat frame and back, of reversing arms *D, D'*, pivoted to the seat frame and back on opposite sides of the vertical centre and lying in parallel planes, the back pivot of the inner arm extending inwardly from said arm and a cap *13* on the back outside the arms in which the outer arm is pivoted, substantially as described. 3rd. The combination, with a seat frame and back, of reversing arms *D, D'*, pivoted to the seat frame and back, on opposite sides of the vertical centre, the portions of said arms between the seat and back lying in parallel planes and overlapping each other and being of such width as to avoid separation at their inner edges during reversing, the back pivot of the inner arm extending inwardly from said arm, and a cap *13* on the back outside the arms in which the outer arm is pivoted, substantially as described. 4th. The combination, with a seat frame and back, of reversing arms *D, D'*, pivoted to the seat frame and back on opposite sides of the vertical centre, the portions of said arms between the seat and back being of equal width and lying in parallel planes and one upon the other in the normal position of the back, the width of said portions being such as to avoid separation at their inner edges during reversing, the back pivot of the inner arm extending inwardly from said arm, and a cap *13* on the back outside the arms in which the outer arm is pivoted, substantially as described. 5th. The combination, with a seat frame and back, of reversing arms *D, D'*, pivoted to the seat frame and back on opposite sides of the vertical centre, each of said arms having stops on opposite sides of the line of intersection with the other arm adapted to arrest the movement of and support the latter, the portions of said arms between the seat and back lying in parallel planes and overlapping each other and being of such width as to avoid separation at their inner edges during reversing, the back pivot of the inner arm extending inwardly from said arm, and a cap *13* on the back outside the arms in which the outer arm is pivoted, substantially as described. 6th. The combination, with a shiftable seat back *E*, of a foot rest having rest bars *22* at the front and rear of the seat, and connections between the back and foot rest for moving said foot rest when the back is shifted, to carry the rest bar at the front of the seat out of the way of the occupant of the seat and carry the rest bar at the rear of the seat into position ready for use, substantially as described. 7th. The combination with a shiftable seat back *E*, of a foot rest having rest bars *22* at the front and rear of the seat, connections between the back and foot rest for moving said foot rest when the back is shifted to carry the rest bar at the front of the seat out of the way of the occupant of the seat and to carry the rest bar at the rear of the seat into position for use, and supports *25* on the frame for the rear side of the foot rest, substantially as described. 8th. The combination with a shiftable seat back *E*, of a foot rest having rest bars *22* at the front and rear of the seat, and connections between the back and foot rest for raising the rest bar at the front of the seat and lowering the rest bar at the rear of the seat when the back is shifted, substantially as described. 9th. The combination with a shiftable seat back *E*, of a foot rest having side bars *21* provided with a sliding connection with the seat frame and rest bars *22* at the front and rear of the seat, and connections between the back and foot rest for shifting the foot rest transversely to the seat when the back is shifted, substantially as described. 10th. The combination with a seat frame and back, of a foot rest having side bars *21* and rest bars *22* at the front and rear of the seat, said side bars having an inclined slot connection with the seat frame, and connections between the back and foot rest for shifting the foot rest transversely to the seat as the back is shifted, substantially as described. 11th. The combination with a seat frame and shiftable seat back *E*, of oscillating arms for shifting said back, a shiftable foot rest having rest bars *22* at the front and rear of the seat, and a lever *19* actuated by the arms and engaging the foot rest, for shifting the latter when the back is shifted, substantially as described. 12th. The combination with a seat frame and shiftable seat back *E*, of oscillating arms for shifting said back, a shiftable foot rest having rest bars *22* at the front and rear of the seat, a shiftable seat *C*, and a lever *19* actuated by the arms and engaging the foot rest and seat for shifting the seat and foot rest when the back is shifted, substantially as described. 13th. The combination with a seat frame and shiftable seat back *E*, of a pair of oscillating arms pivoted to the seat frame at one end of the back for shifting the latter, a shiftable seat *C*, and a lever engaging the seat for shifting the latter and actuated in one direction by one of the arms, and in the opposite direction by the other arm, substantially as described. 14th. The combination with a seat frame and back, of back shifting arms, a foot rest having side bars *21* and rest bars *22*, a sliding slotted connection between the foot rest and frame, and connections between said foot rest and the back shifting arms, substantially as described. 15th. The combination with a seat frame and back, of back shifting arms, a foot rest having side bars *21* and rest bars *22*, double inclined slots *23* and lugs *24* forming a sliding slotted connection between the foot rest and frame, and connections between said foot rest and back shifting arms, substantially as described. 16th. The combination with a seat frame and back, of back shifting arms, a foot rest having side bars *21* and rest bars *22*, double inclined slots *23* and lugs *24* forming a sliding

Claim.—1st. A potato digger comprising a frame, a plough pivoted to said frame, a catch extending upward from said plough, a rod pivoted to the body of the machine and passing through said catch, and means whereby the rod may be raised and lowered, thus correspondingly moving the plough, substantially as described. 2nd. A potato digger comprising a frame, a plough pivoted to said frame, a plate extending upward from said plough, a second plate upon said first plate, an opening in said second plate, a lever pivoted to the body of the machine, and a rod secured to said lever and passing through the opening in the second plate whereby the plough may be raised and lowered, substantially as described. 3rd. A potato digger comprising a frame, a plough pivoted thereto, a plate extending upward from said plough, a second plate upon said first plate, an opening in said second plate, a lever upon the body of the machine, and a rod pivoted to the body of the machine, one end of said rod being pivoted to the lever and the other end passing through the opening in the second plate whereby the plough may be raised and lowered, substantially as described. 4th. A potato digger comprising a frame, a plough secured thereto, a vine clearer carried by said plough, a counter shaft upon the body of the machine, means for imparting motion to said counter shaft, a second shaft having a universal joint with said counter shaft and supported near the vine clearer, and connections between the vine clearer and said second shaft, substantially as described. 5th. A potato digger comprising a frame, a plough secured thereto, plates extending upward from the plough, a cross-bar secured to said plates, a shaft journaled upon said cross-bar, tearing arms secured to said shaft, a bearing upon one of the plates extending from the plough, a counter shaft secured to the body of the machine, means for imparting motion to said counter shaft, and a second shaft in gear with the shaft upon the cross-bar, said second shaft rest at one end in the bearing upon the plate extending from the plough, and at the other end forming a universal joint with the counter shaft, substantially as described. 6th. A potato digger comprising a frame, a trough secured thereto, a plough attached to said trough, a cross-bar secured to the sides of said trough, a shaft journaled to said cross-bar, tearing arms upon said shaft, a bearing upon one side of the trough, a counter shaft supported upon the body of the machine, a plate upon said counter shaft, peripheral slots in said plate, a shaft journaled at one end in the bearing upon the trough, and at the other having lugs fitting in the peripheral slots in the plate, said shaft also carrying a gear connected to a corresponding gear upon the shaft secured to a cross bar, and means for imparting motion to the counter shaft, substantially as described.

No. 49,975. Tug Buckle. (Boucle de harnais.)



Julius C. Clauson, Hensall, Ontario, Canada, 13th September, 1895; 6 years.

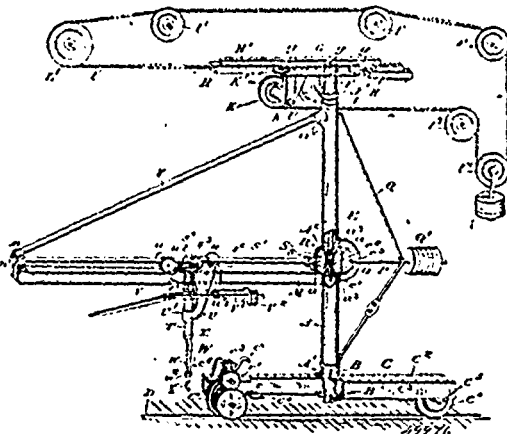
Claim.—A tug buckle, the same consisting of a frame, posts projected upward from the frame, a tongue pivoted in the said posts, and provided with a pin, adapted to enter an opening in a portion of a tug strap, the said tongue being adapted to rest upon the strap, and a locking yoke extending upward within the frame and crossing the tongue, the lower portion of the yoke extending rearward in substantially a lateral direction, being adapted for attachment to the attaching or under portion of the tug strap, substantially as and for the purpose set forth.

No. 49,976. Travelling Swing Drill. (Foret à bascule.)

William Hartill Law, Peterboro', Ontario, Canada, 13th September, 1895; 6 years.

Claim.—1st. A power drilling and reaming machine comprising a floor carriage, a column journaled at the bottom thereon a driving shaft extending through the centre of the column a carriage supported on the top of the driving shaft and running between guide rails suitably supported and means for communicating motion from the driving shaft to the drill spindle as and for the purpose specified. 2nd. A power drilling and reaming machine comprising a floor carriage, a column journaled at the bottom thereon, a driving shaft extending through the centre of the column a carriage supported on the top of the driving shaft and running between guide rails suitably supported and horizontally supported mechanism for the drill spindle deriving motion from the vertical shaft and capable of being swung around in a complete circle on the bearings of the column as and for the purpose specified. 3rd. A power drilling and reaming machine comprising a floor carriage, a column journaled at the bottom thereon a driving shaft extending through the centre of the column a carriage supported on the top of the driving shaft and running between guide rails suitably supported, a horizontal arm extending outwardly from the column and capable of being swung upon the bearings of the column and adjustable driving means on said arm deriving

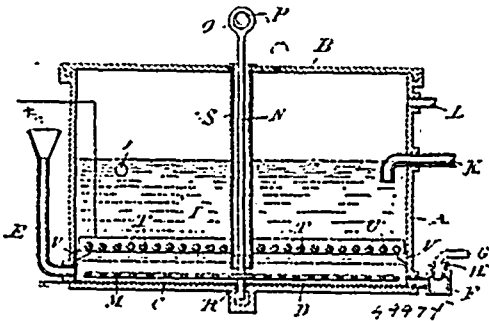
motion from the vertical shaft as and for the purpose specified. 4th. The combination with the column having the driving shaft extend-



ing centrally through the same and communicating motion to the horizontally supported and circularly swinging drill and the top and bottom carriages for the column, of the driven, driving, guiding and idle pulleys, and an endless rope passing over the same as and for the purpose specified. 5th. The combination with the column having the driving shaft extending centrally through the same and communicating motion to the horizontally supported and circularly swinging drill and the top and bottom carriages for the column, of the driven, driving, guiding and idle pulleys, the endless rope passing over the same and the weighted sheaf supported on such rope as and for the purpose specified. 6th. In a machine of the class described and in combination, a column, the carriage having top and bottom bearings for the support of and the journaling of the bottom of the column, the double flanged wheels, the track and the gear-wheels e , e^1 , and e^2 , and crank e^3 , all arranged as and for the purpose specified. 7th. In combination the column journaled at the bottom on a carriage running on a track, the carriage supported at the top of the column, and guide rails for same as and for the purpose specified. 8th. In a combination the column journaled at the bottom on a carriage running on a track, the driving shaft extending through the centre of the hollow column and journaled therein, the carriage supported upon the top of the vertical shaft and running between guide rails, and a following driving means between the main driving shaft and the vertical shaft as and for the purpose specified. 9th. The combination with the column supported on a carriage, the vertical shaft journaled in the upper portion of the column, a carriage provided with a central journal sleeve, the cap in the top of the shaft and the adjustable stop screwed into the top of the carriage, and revolving in the stop as and for the purpose specified. 10th. The combination with the column the vertical shaft extending through the centre of the same and having a spindle at the bottom revolving on an adjustable stop e^2 , fixed into the wheel chamber of the column, as and for the purpose specified. 11th. The combination with the column, the vertical shaft extending through the centre of the same and into the top carriage as specified, of the bevel pinions I and J, pulley J¹ and K, and driving and idler pulleys all supported and arranged, as and for the purpose specified. 12th. The combination, with the column and the vertical shaft driven therein as specified, of an outwardly extending arm, horizontal shaft journaled in said arm, a drill spindle extending downwardly from the said arm and driving means between the vertical shaft and horizontal shaft and drill spindle, as and for the purpose specified. 13th. The combination, with the column of the double arm secured to the column at one end and braced at the other end by the rod N to the column, as and for the purpose specified. 14th. The combination, with the column of the double channel bars secured at the inner end thereto connected together by the bracket m^1 , at the outer end to bracing rod N, the yoke O, rod P, and truss rods Q, all arranged as and for the purpose specified. 15th. The combination, with the column, the vertical driving shaft journaled therein, the wheel chamber formed intermediately of the length of the column, the bevel pinion at the lower end of the shaft, the horizontal shaft journaled on the horizontal arm and having a pinion meshing with the pinion on the inner end of the horizontal shaft and driving means connecting the horizontal shaft with the drill spindle, as and for the purpose specified. 16th. The combination, with the horizontal arm and shaft supported thereon and deriving motion from the vertical shaft extending centrally through the column as specified, of a bevel pinion provided with a key fitting in a key slot in the horizontal shaft and a bevel pinion on the end of the drill spindle meshing with the bevel pinion on the horizontal shaft, as and for the purpose specified. 17th. The combination, with the horizontal arm, and shaft supported and driven as specified, and the bevel pinion longitudinally adjustable upon the shaft and rotating with same, of the drill spindle and bevel wheel meshing with the bevel pinion on the horizontal shaft and a frame for supporting

the bevel pinions and the drill, as shown and for the purpose specified. 18th. The combination, with the drill spindle supported and driven as specified, of the lever V, having its fulcrum at r, and pivotally connected by the trunion t', to a spindle T, as and for the purpose specified. 19th. The combination, with the drill spindle supported and driven as specified, of the lever of the V, having the pivoted weighted ends V', having their fulcrum upon the links V, and the trunions t', on the sleeve t'', extending into sides of the level, as and for the purpose specified. 20th. In a drill, the combination with the bevel gear-wheel from which the drill is driven, the hollow spindle provided with a key slot, the key extending into the key slot and hollow hub, of means for raising the sleeve T, as and for the purpose specified. 21st. In a drill, in combination a hollow spindle, a spindle to hold the drill telescopically fitted therein and having a key slot, a chuck fitted on to the hollow spindle, and having a bevelled recess and a feather key having a corresponding bevel to fit between the bevelled end of the recess and the inner side of the key slot, as and for the purpose specified. 22nd. In a drill spindle, the combination with the holding spindle, the drill fitting into a recess in the end of such spindle, the slot in the drill, the chuck fitting on to the end of the spindle and having a recess with a bevelled outer end, and the feather key fitting between this end and the inside of the key slot, as and for the purpose specified. 23rd. The combination with the column, the vertical driving shaft journaled therein, the wheel chamber formed intermediate of the length, of the column and driving gear for the drill spindle situated within the wheel chamber and deriving motion from the lower end of the vertical driving shaft, as and for the purpose specified.

No. 49,977. Electrolysis and Apparatus therefor.
(Appareil electrolyse.)



Henrich Christian Frederik Stormer, Christiania, Norway, 13th September, 1895; 6 years.

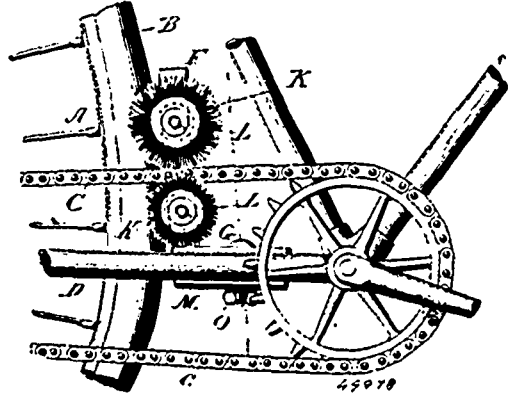
Claim.—1st. In the art of electrolysis the improvement, which consists in keeping the mercury cathode, being in contact with the salt solution to be decomposed, in a constant agitated state, so that the particles of mercury are intimately intermixed with each other, without disturbing the surface of mercury in direct contact with the salt solution, the same forming an amalgam skin on top of the mercury. 2nd. The process of electrolysis which consists in passing a current of mercury in a comparatively thin layer through an electrolytic cell containing a salt solution, connecting the mercury with the negative electrode of a source of electricity the positive electrode of same being connected with an anode or anodes, which are situated in the salt solution in close proximity to the mercury surface, and keeping the layer of mercury in an agitated state during the electrolysis. 3rd. In an electrolytic apparatus, the combination with the anodes and the mercury cathode of means, whereby the particles of the mercury below the surface skin may be kept in an agitated state. 4th. Means for keeping a layer of mercury serving as cathode in an electrolytic cell, in an agitated state consisting in a rifled or perforated plate, which is immersed in the mercury, or which serves as holder for the mercury, in combination with means for keeping the said plate in an oscillating motion.

No. 49,978. Device for Cleaning Bicycle Chains.
(Appareil à nettoyer les chaines de bicycles)

Charles George Polleys and John T. Reagan, both of Newport, Rhode Island, U.S.A., 13th September, 1895; 6 years.

Claim.—1st. A sprocket-chain cleaner for bicycles, the same consisting of spindles designed to contact with the tire of a bicycle wheel, combined with rotary brushes secured to said spindles and adapted to bear against the sprocket-chain, substantially as described. 2nd. A rotary brush for cleaning sprocket-chains of bicycles, the same consisting of two spindles having raised friction bands, a rack for holding said spindles secured to the frame of a bicycle, rotary brushes secured at corresponding ends of said spindles one below and the other above the chain, and adapted to bear against the same, combined with the tire of a wheel adapted to frictionally contact with the said raised portions of the spindles, substantially as described. 3rd. In combination with the tire of a bicycle wheel, the rack F secured by clamps to the forks D, D, of a

bicycle, the spindles J carried by said rack, the raised bands L on said spindles adapted to frictionally contact with the said tire, the



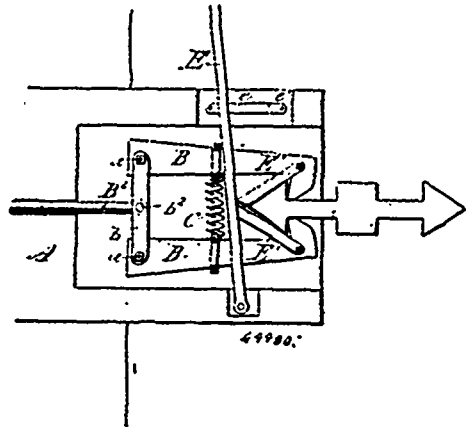
rotary brushes K secured to corresponding ends of said spindles and designed to bear against the upper and lower sides of the chain, whereby when the machine is in motion the brushes will make more rapid revolutions than the sprocket chain, substantially as described.

No. 49,979. Compound for Building, etc.
(Composé pour construire, etc.)

The Cheney Dry Mortar and Supply Co., assignee of George Washington Lytle, both of Troy, New York, U.S.A., 13th September, 1895; 6 years.

Claim.—The herein described composition of matter consisting of white lead, lime, sand, manganese, gypsum, ground marble, soda ash, iron ore and water in substantially the proportions specified.

No. 49,980. Car-Coupler. (Attelage de chars.)



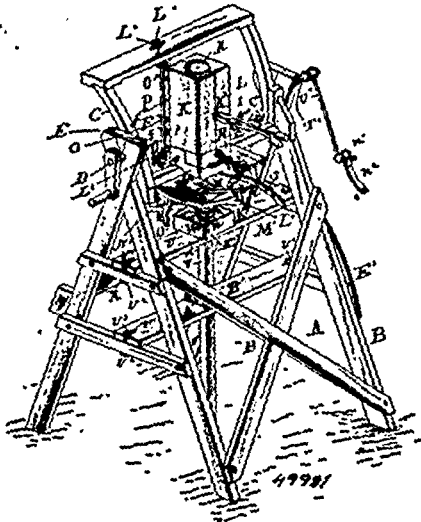
Edward Kiernan Ober and John Park Ober, both of Hooversville, Pennsylvania, U.S.A., 13th September, 1895; 6 years.

Claim.—1st. In a car-coupling, the combination of a draw-head having coupling jaws B, B pivotally connected to the draw-head, nails or clips d, connected to the jaws so that their lower connecting portions will bear upon the upper surface of the bottom of the draw-head, a spring C interposed between the jaws and connected thereto by the nails or clips, and a lever E pivoted to the draw-head at one end and connected to the forward ends of the jaws by means of links E', substantially as shown and for the purpose set forth. 2nd. In a car coupling, the combination of draw-head constructed substantially as shown, coupling jaws B, B, pivotally attached at their rear ends to the draw head, the pivot bolts being connected to each other above and below the jaws by plates or cross-bars b, b, the cross-bars being centrally connected to a rearwardly-projecting bar B', together with a spring C attached to the jaws to draw them toward each other, and a lever pivoted to the draw-head at one end and connected to the coupling jaws by links E', substantially as shown and for the purpose set forth. 3rd. In combination with a draw-head constructed substantially as shown and provided with a transverse bottom with bolt-holes, of coupling jaws B, B, pivotally connected to the draw-head at their rear ends, a spring located between the coupling jaws and connected thereto so as to draw said jaws toward each other, links E' connected to the forward ends of the coupling jaws and converging rearwardly, a lever E pivotally connected to the rear ends of the links, said lever being pivoted to one side of the draw-head, and a notched plate c, secured to the other side of the draw-head so as to engage the lever when it is moved for-

ward a sufficient distance, the parts being organized substantially as shown and adapted for use with a coupling-link of the arrow-head type.

No. 49,981. Mould for Making Glass Articles.

(*Moule pour faire des objets en verre.*)

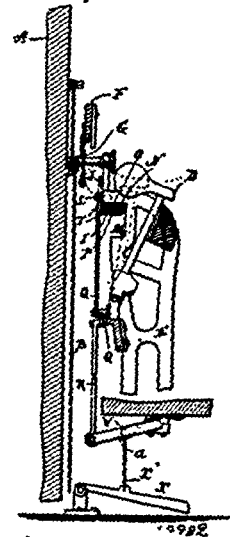


Jesse Davis Claypoole, Penn Grove, New Jersey, U.S.A., 14th September, 1895; 6 years.

Claim.—1st. The combination with a suitable support, of a frame provided with journals rotatably mounted in said support, a mould carried by said frame and comprising hinged sections adapted to swing horizontally, and a gaffer device carried by the said frame and comprising a plug adapted to be rotated to effect the gaffering of the interior and exterior surfaces of the upper end of the article, in the manner described. 2nd. The combination with a suitable support, of a frame provided with journals rotatably mounted in said support, a mould carried by said frame and comprising hinged sections adapted to swing horizontally, and a gaffer device carried by the said frame and comprising a plate, provided with a central annular opening, a lever pivotally secured to said plate, and a plug suspended from said lever and adapted to be reciprocated vertically thereby, said plate and plug being adapted to be rotated to gaffer the interior and exterior surfaces of the upper end of the article within the mould, as described. 3rd. The combination with a suitable support, of a frame provided with journals rotatably mounted in said frame a mould carried by said frame and comprising sections hinged together and adapted to swing horizontally, a block and a section hinged thereto and adapted to confine the lower portion of the neck of the bottle, a bottom or tamping section adapted to be vertically reciprocated, for the purpose stated, and to occupy a position against the lower end of the mould sections, and a gaffer device comprising a plug adapted to form the mouth of a bottle, and to be rotated to effect the gaffering of the interior and exterior surfaces of the upper end of the bottle, in the manner described. 4th. The combination with a suitable support, of a frame provided with journals rotatably mounted in said frame, a mould carried by said frame and comprising sections hinged together and adapted to swing horizontally, and a bottom or tamping section adapted to be vertically reciprocated, for the purpose stated, and to fit against the lower end of the mould sections, and a gaffer device comprising a plug adapted to be rotated, to effect the gaffering of the interior and exterior surfaces of the upper end of a bottle, a detachable nozzle carried by said plug and provided with air openings in communication with a suitable supply of air, as described. 5th. The combination with a suitable support, of a frame provided with journals rotatably mounted in said frame, a mould carried by said frame and comprising sections hinged together and adapted to swing horizontally, and a bottom or tamping section adapted to be vertically reciprocated, for the purpose stated, and to fit against the lower end of the mould sections, and a gaffer device comprising a plug adapted to be rotated to effect the gaffering of the interior and exterior surfaces of the upper end of a bottle, said plug being provided with an air passage in communication with the interior of the mould, an air supply pipe in communication with

said air passage, and passing through one of the journals of the frame, and a stationary air pipe rotatably connected with said first air pipe and provided with a stop-cock, as described. 7th. The combination with a suitable support, of a frame provided with journals rotatably mounted in said support, a mould carried by said frame and comprising hinged sections adapted to swing horizontally, a slotted standard, threaded bolts carried by the hinge pin and extending through the slot of the standard, and nuts carried by said threaded bolts, all arranged and adapted to permit of the vertical adjustment of the mould sections, as described. 8th. The combination with a suitable support, of a frame provided with journals rotatably mounted in said support, a mould carried by said frame and comprising hinged sections adapted to swing horizontally, and a gaffer device comprising a plug adapted to be rotated to effect the gaffering of the interior and exterior surfaces of the upper end of the bottle, said plug being provided in its interior with an air passage in communication with the interior of the mould sections, said air passage extending laterally through the plug and in communication with a supply of air. 9th. The combination with a suitable support, of a frame provided with journals rotatably mounted in said frame, a mould carried by said frame and comprising sections hinged together, a slotted standard, means for adjusting said standard laterally, threaded bolts carried by the hinge pin and extending through the slot of the standard, and nuts carried by said threaded bolts, substantially as described.

No. 49,982. Piano. (Piano.)



George Payne Bent, assignee of Martin Henry McChesney and Joseph Gerhard Kunze, all of Chicago, Illinois, U.S.A., 4th September, 1895; 6 years.

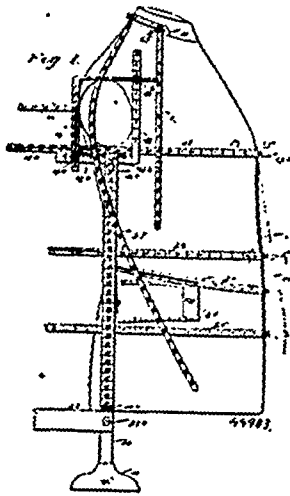
Claim.—1st. In a piano, a hammer-arrest supported on guide-ways on which it slides, a mechanism by which it is held firmly at any point on the guide-ways, and hammers having such relation to the hammer-arrest as to be arrested in their stroke thereby, substantially as shown and described. 2nd. In a piano, a hammer-arrest, an adjustable bracket which supports the hammer-arrest and in which it slides, the standards of the piano to which the brackets are attached, and hammers which the hammer-arrest may be adjusted to arrest, substantially as specified. 3rd. In a piano, the sliding hammer-arrest having diagonal slots, bracket irons supporting said hammer-arrest, provided with pins or upturned flanges operating in said slots in the hammer-arrest to move it forward and hold it firmly at any desired position, and mechanisms connected with the pedal of the piano by which said slide-bar is brought into the position desired by the operator. 4th. In a piano, in combination with the ordinary strings and hammers, flexible tongues carried by an adjustable bar, the lower end of said tongue being folded upon itself and inclosing a hard core, the leather tongue contacting with the strings and with the hammers on opposite sides of the core respectively when interposed between them, substantially as specified. 5th. In a piano, in combination with the ordinary strings and hammers, flexible tongue carried by an adjustable tongue bar, the lower end of said tongue being folded upon itself and inclosing a hard hollow core, the leather tongue contacting with the strings and with the hammers respectively on opposite sides of the core when interposed between them, substantially as specified.

No. 49,983. Device for Measuring Garments.

(*Appareil pour mesurer les vêtements.*)

Harrie Kantorowitz, Philadelphia, Pennsylvania, and George Retzer, Walla Walla, Washington, both in the U.S.A., 14th September, 1895; 6 years.

Claim.—1st. In a garment measuring device, the combination with standards adapted to project to and beneath the arm pits of



the person to be measured, of a sleeve hole measuring device carried by one of the standards, a measuring strip secured to and projecting horizontally from the sleeve hole measuring device, a neck plate, and a back measuring strip, secured to the neck plate and to the measuring strip carried by the sleeve hole measuring device, substantially as described. 2nd. In a garment measuring device, the combination with standards adapted to project beneath the arm pits of the person to be measured, of a sleeve hole measuring device, a measuring strip secured to and projecting horizontally from the sleeve hole measuring device, a breast measuring strip supported by the standards, a neck plate, and a back strip secured to the neck plate, breast strip and strip carried by the sleeve hole measuring device, substantially as described. 3rd. In a garment measuring device, the combination with standards adapted to project under the arm pits of the person to be measured, of a sleeve hole measuring device carried by one of the standards, a measuring strip projecting horizontally from the sleeve hole measuring device, a breast strip carried by the standards, a neck plate, a collar gauge strip secured to the neck plate and breast strip, a back strip secured to the neck plate, the breast strip and to the strip projecting from the sleeve hole device, and a shoulder tape secured to the breast strip at the front and rear, substantially as described. 4th. In a garment measuring device, the combination with standards adapted to project beneath the arm pits of the person to be measured, of a sleeve hole measuring device carried by one of the standards, a strip projecting horizontally from the sleeve hole measuring device, a breast strip supported by the standards, a neck plate, a back strip secured to the neck plate, breast strip and to the strip carried by the sleeve hole device, a shoulder tape secured to the breast strip at the front and rear, the attachment at the rear being at the point where the back strip unites with the breast strip, and a shoulder strip secured to the shoulder tape at the front and to the breast strip at the rear, substantially as described. 5th. In a garment measuring device, the combination with standards adapted to project beneath the arm pits of the person to be measured, of a sleeve hole measuring device, adjustably secured to one of the standards, and consisting of a right angle section having its horizontal member slotted and its vertical member apertured, and a similarly shaped section having its vertical member slotted and adjustably secured to the horizontal member of the first named section and its horizontal member adjustably secured to the vertical member of the said first section, substantially as described. 6th. In a garment measuring device, the combination with two standards, of a sleeve hole measuring device consisting of two right angle sections adjustably secured together, one of the sections being adjustably secured to the standard and the other provided with a horizontal measuring strip, substantially as described. 7th. In a garment measuring device, the combination with standards, and a collar gauge strip having one end adjustably secured to the neck plate and the other adjustably secured to the breast strip, substantially as shown and described. 8th. In a garment measuring device, the combination with standards, of graduated flexible strips having one end secured to the upper ends of the standard, encircling measuring strips engaging the flexible strips, and means for supporting said encircling strips, substantially as and for the purpose set forth. 9th. In a garment measuring instrument, the combination of a neck plate, a breast measuring strip, a collar gauge strip adjustably secured to the neck plate and to the breast strip, a back measuring strip pendant from the neck plate, a front measuring strip pendant from the breast strip and waist strips adjustably secured to the said front and back strips, substantially as described.

10th. In a garment measuring device, the combination of the standards, strips secured to the standards, a neck plate, a breast strip, a collar gauge strip secured to the neck plate and breast strip, a back strip secured to the neck plate, a front strip secured to the breast strip, waist strips secured to the front and back strips, a hip strip secured also to the front and back strips and a strip secured to the standards for indicating the length of the garment, substantially as described. 11th. In a garment measuring device, the combination with the standards, and a neck plate, of a sleeve length indicator comprising a graduated device secured to and projecting from one of the standards and a tape measure secured to the neck plate, substantially as described. 12th. A garment measuring device, comprising standards, a sleeve hole measuring device carried by one of the standards, and provided with a horizontally projecting strip, a breast strip supported by the standards, a neck plate, a back strip secured to the neck plate, breast strip and horizontal strip of the sleeve hole measuring device, a collar gauge strip adjustably secured to the neck plate and to the breast strip, a shoulder strip secured to the breast strip at front and rear, a second shoulder strip having its front end secured to the first named shoulder strip and its rear end to the breast strip, a front strip secured to the breast strip, strips having one end secured to the standards and waist strips encircling the strips secured to the standards, substantially as herein shown and described.

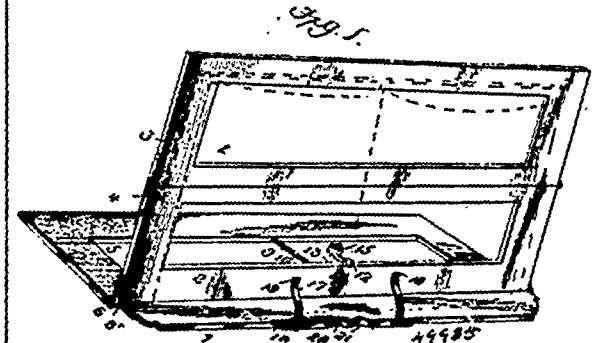
No. 49,984. Drawing Pen. (Plume à dessin.)



Emil Pongs, Gladbach, Prussia, German Empire, 14th September, 1895; 6 years.

Claim.—1st. A writing and drawing pen provided with a reservoir B, divided by some wedge shaped partitions into compartments, and the end Z of which reaches nearly up to the point of the pen. 2nd. A pen having a reservoir, the walls of which pass through the body of the pen between the parts of its point.

No. 49,985. Music Support. (Support à musique.)

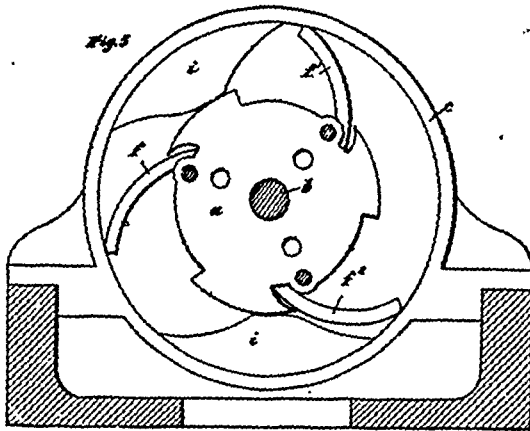


Amos Basset Buckland, Rochester, New York, U.S.A., 14th September, 1895; 6 years.

Claim.—1st. The combination, with the foot-piece 7, provided upon its front longitudinal edge with a metallic strip having depressions as described, of spring clamping fingers pivoted at one end to the said strip, and having their upper ends bent inwardly and adapted to clamp the material as described, and said fingers being adapted to be turned to cause them to lie against the said metallic strip with their bent ends within the depressions thereof, as set forth. 2nd. The combination, with the sections 2, 3, hinged together at their adjacent longitudinal edges and being of approximately the same width, said section 3 being adapted to fold down upon the front face of section 2, the foot-piece 7, curved links pivotally connected at one end to the outer or lateral edge of the section 2, and at the opposite end to the like edge of the foot-piece, the curvature of the links being such as to permit the foot-piece to fold up and against the rear face of section 3 when the latter is folded down on section 2, and pins projecting laterally from the section 2 and adapted to bear against the links, as specified. 3rd. The combination, with the sections 2, 3, hinged together at their adjacent longitudinal edges and being of approximately the same width, said section 3 being adapted to fold down upon the front face of section 2, the foot-piece 7 hinged to the section 2, curved links pivotally connected at one end to the outer or lateral edge of the section 2 and at the opposite end to the like edge of the foot-piece, the curvature of the links being such as to permit the foot-piece to fold up and against the rear face of section 3, when the latter is folded down on section 2, a rod 9 secured to section 5 and notched, a plate 11 having

a perforation at one end through which said rod 9 loosely passes and adapted to engage the notches, and the opposite end of the plate being bent over and having a projecting finger-operating portion 15, and a staple or loop secured to section 2 and engaging the bent portion of the plate, as described.

No. 49,986. Rotary Steam Engine. (Machine à vapeur rotatoire.)

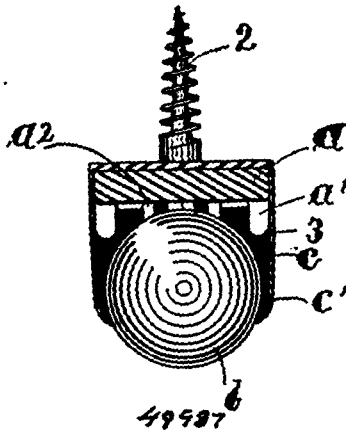


Béla Vilmos, Debreczin, Hungary, 4th September, 1895; 6 years

Claim.—1st. A rotary engine having revolving discs a, a', a'' , concentric to the cylinder and provided with rounded pistons f , pivotally connected to the same and curved according to the circumference of said disc, in combination with partitions i , with cycloidal surfaces arranged at suitable places of the inner cylindrical wall of the cylinder by which the pistons are closed. 2nd. A rotary motor having a cycloidal partition i , provided with a concentric surface in the rear on which the outer end of the pistons f under the pressure of the driving fluid can ride after the passage of the partition to open suddenly and completely, so that the driving fluid can act upon them with full power. 3rd. A rotary engine in which pistons f, f', f'' in their open state lean with projections k against the inner rotary body a, a', a'' so that the pressure acting upon them can only press them sufficiently against the wall of the cylinder as is necessary for a complete obturation, and with the production of little friction.

No. 49,987. Ball Castor. (Roulette de meuble.)

Fig. 2



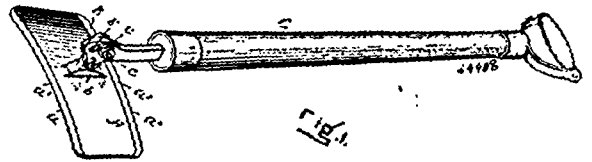
William Smith Bowie, Boston, Massachusetts, U.S.A., 14th September, 1895; 6 years.

Claim.—1st. The ball castor herein described, consisting of the plate a , having several projections a' , and also several ball seats a'' , the screw 2, ball b , and ferrule c , substantially as described. 2nd. The ball castor herein described, consisting of the plate a , having several projections a' , and also several ball seats a'' , the screw 2, ball b and ferrule c having a short portion with straight parallel

sides and a tapering end portion, substantially as described. 3rd. A ball castor having a retaining plate a , provided with several like projections a' arranged at equal distances apart, substantially as described. 4th. A ball castor having a retaining plate a provided with several like projections a' , arranged opposite each other, and the screw 2 cast into the plate, substantially as described.

No. 49,988. Tools for Rossing Bark, etc.

(Machine pour décortiquer l'écorce, etc.)

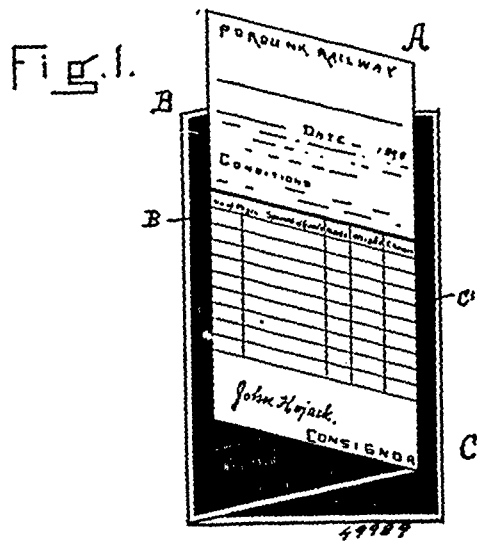


Jeremiah Daigneau, Salem, Massachusetts, U.S.A., 14th September, 1895; 6 years.

Claim.—1st. The bark rossing tool herein described, the same comprising a plate slightly curved and having the rossing edges a', a'' , and the operating handle C attached to the back of the plate. 2nd. In a rossing tool for bark, the combination of a plate slightly curved having one or more rossing edges, and an operating handle C connected with the plate, and devices for adjusting the angle of the plate in relation to the handle. 3rd. In a rossing tool, the combination of a plate slightly curved and having a rossing edge with a long handle, the end of which is attached to the plate.

No. 49,989. Shipping Bill and Bills of Lading.

(Billet de chargement et connaissance.)



James Edward, Lachine, Quebec, Canada, 14th September, 1895; 6 years.

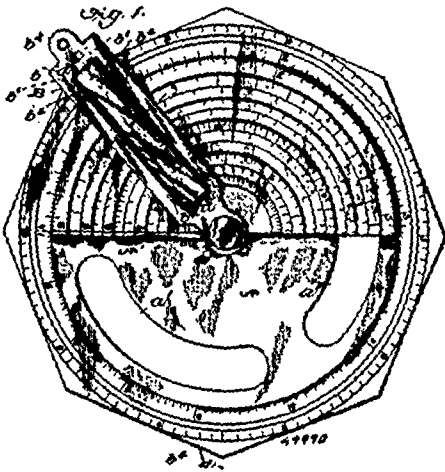
Claim.—The herein described shipping bill or bill of lading consisting of two or more lateral folds A, B , or A, B, C , of the said bill printed on the obverse side of the parts A, C , with the lines and marks to be filled in by the shipper with the incidents of a date, the description of the goods and the signatures, the same printed matter appearing on the reverse side of the other part, the parts being then folded laterally and a carbon sheet inserted between, so that on writing on the top sheet or part, will make a duplicate or a triplicate of the bill, substantially as described.

No. 49,990. Slide Rule. (Règle à calcul.)

Thaddeus Norris, Washington, Columbia, U.S.A., 14th September, 1895; 6 years.

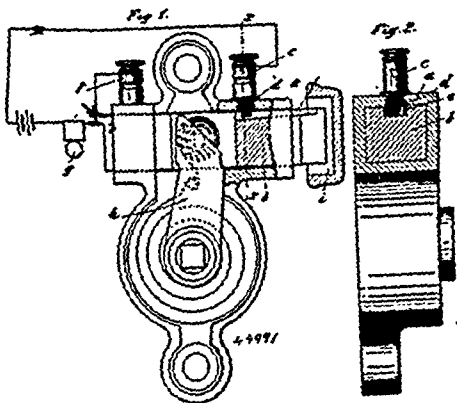
Claim.—1st. A marker or runner for graduated scales and the like, having a slot or opening, a translucent covering for said slot or opening, and a guide-line extending longitudinally across said slot or opening beneath said translucent covering, substantially as set forth. 2nd. A marker or runner for graduated scales and the like, having a longitudinal opening therein and a lens carried by said marker or runner and located over said opening, said lens being of semi cylindrical form in cross-section and flat on its underside, substantially as set forth. 3rd. A marker or runner for graduated scales and the like, having a slot or opening therein, a lens corresponding to but slightly larger than said slot or opening secured

over the latter, said lens being of semi-cylindrical form and having a flat side, and a guide-line extending longitudinally beneath said



lens, substantially as set forth. 4th. A marker or runner for graduated scales and the like, having a slot or opening therein, a lens corresponding to but slightly larger than said slot or opening secured over the latter, said lens being of semi-cylindrical form and having a flat side provided with a central longitudinal groove forming a guide-line, substantially as set forth. 5th. The combination with the two graduated discs pivotally connected together at their centres, of a marker or runner pivoted at its inner end to said discs and at its outer end overlapping the periphery of one of said discs, said marker or runner having a longitudinal opening therein, and a semi-cylindrical lens located over said opening, said lens being flat on its underside, substantially as set forth. 6th. A slide-rule composed of two concentrically mounted discs pivotally connected at their centres, one of said discs being of greater diameter than the other and provided with a series of circularly arranged disconnected finger-slots, substantially as and for the purpose set forth. 7th. The herein described improved slide-rule, consisting of the two discs pivotally connected together at their centres, one of said discs being of greater diameter than the other and provided with a series of circularly arranged disconnected finger-slots, the marker or runner pivoted at its inner end to the centre of said discs and having its outer end provided with fingers for overlapping the periphery of said larger disc, said marker or runner having a longitudinal opening therein, a semi-cylindrical lens, fitted directly over said longitudinal opening, and a guide-line extending longitudinally over said opening, substantially as set forth.

No. 49,991. Electric Alarm. (Sonnerie électrique.)

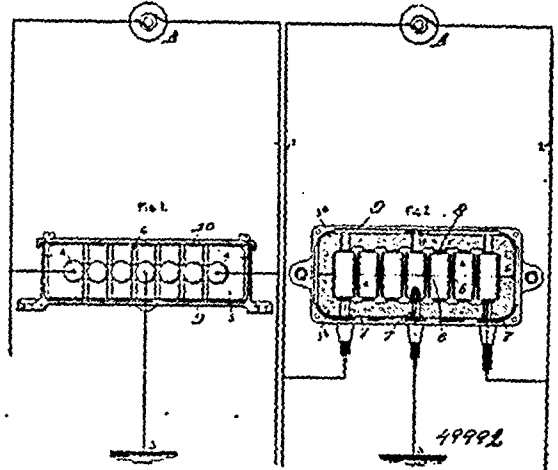


Adrien J. Moulart, Paris, France, 16th September, 1895; 6 years.

Claim.—1st. The combination with a lock case and locking bolt having a slot in it, an insulated binding post on the casing having a contact piece lying in the slot of the bolt and adapted to contact therewith when the bolt is retracted, an uninsulated binding post on the casing, wires connecting the respective binding posts with an electrical supply, and a bell interposed in the circuit, all arranged so that an alarm is sounded when the bolt is retracted, substantially as described. 2nd. A device for doors and the like, consisting of a lock casing *a*, a bolt *b* having a tapered groove *c*, an insulated binding post *e*, and an uninsulated binding post *f* on said casing, the screw *d* of said insulated binding post projecting into the groove

of the bolt so that the displacement of the bolt from its locking position brings it into contact with said binding posts *e*, thus closing an electric circuit and operating an alarm bell in said circuit, substantially as and for the purpose set forth.

No. 49,992. Lightning Arrester. (Paratonnerre.)



Alexander Wurts, Pittsburg, Pennsylvania, U.S.A., 16th September, 1895; 6 years.

Claim.—1st. An insulating holder having a plurality of substantially parallel sockets located side by side in the body thereof, combined with a plurality of non-arcng metal parts seated in said sockets, substantially as described. 2nd. An insulating holder having a series of substantially parallel communicating sockets formed therein, combined with a series of non-arcng metal parts seated in said sockets, substantially as described. 3rd. An insulating holder having a plurality of sockets formed therein and passages extending outward from between said sockets, combined with non-arcng metal parts seated in said sockets, substantially as described. 4th. The combination with a plurality of non-arcng metal parts, of a two-part insulating holder therefor having oppositely arranged aligned sockets in which said non-arcng metal parts are seated, and passages leading outwardly from between said sockets, substantially as described.

No. 49,993. Fruit Basket. (Panier à fruits.)

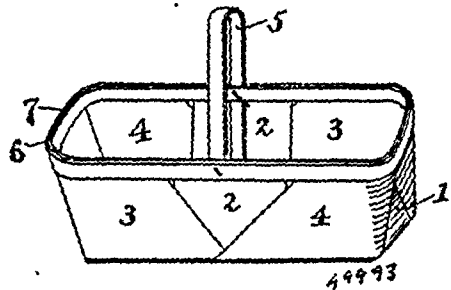


Fig. 2

Joseph E. Asan and Frank Mullenbeck, both of Saginaw, Michigan, U.S.A., 16th September, 1895; 6 years.

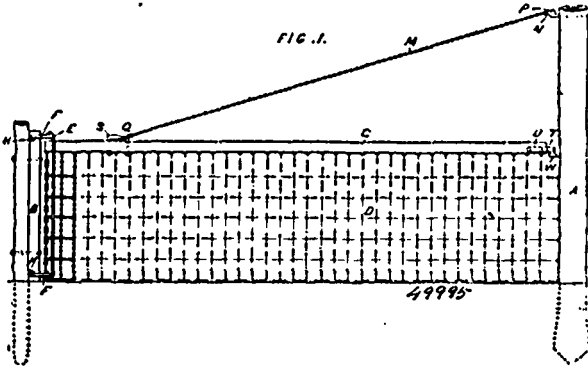
Claim.—A rectangular basket formed from a web composed of four thin slabs of the same width, but of irregular length, bent over a rectangular form, one slab forming a portion of the bottom and sides of the basket, another slab crossing the above mentioned slab at oblique angles, and forming, when bent over the form specified, part of the bottom and part of each side and each end of the basket, another slab crossing the last slab mentioned at right angles and forming when bent as specified, part of the bottom and part of each side and each end of the basket, another slab crossing the last mentioned slab at oblique angles and forming, when bent as specified, the outer bottom and ends of the basket, the band *7* surrounding the rectangular form inside of and at the edge of the basket, to which the ends of the slabs are secured when bent, the band *6*, around the outside edge of the basket and secured therein, the handle *5*, secured between the bands *6* and *7*, and to the slab forming the middle of the sides of the basket, and the strips *88* on the bottom of the basket, as and for the purpose set forth.

No. 49,994. Composition of Matter and Method of Making Same. (*Composition de matières et méthode de fabrication.*)

Albert P. McKean, Sunbury, Pennsylvania, U.S.A., 16th September, 1895; 6 years.

Claim.—1st. The herein described composition of matter consisting of rosin, oil, japan, chalk, sulphuric acid, and litharge substantially in the proportions specified. 2nd. The process of manufacturing the described composition consisting first in heating rosin in a vessel, second in adding oil and japan, previously mixed, to the oil, third adding pulverized chalk and agitating the mass, fourth adding litharge and finally distributing acid over the mass and agitating it thoroughly until it ceases to boil, substantially as described.

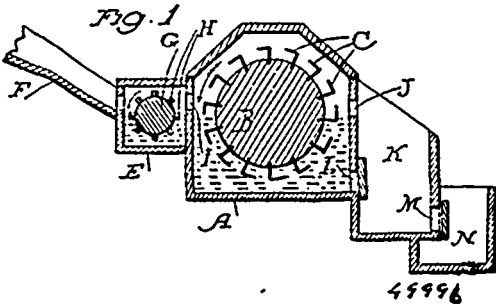
No. 49,995. Gate. (*Barrrière.*)



Edgar Howell Rex Evans, Melrose, Cape of Good Hope, 16th September, 1895; 6 years.

Claim.—1st. In a gate, the combination of a horizontal bar and a flexible gate body suspended from said bar, substantially as set forth. 2nd. In a gate, the combination of a horizontal bar and a flexible gate body suspended from said bar, consisting of a number of vertical and horizontal chains crossing each other and connected together at their crossing points, substantially as set forth. 3rd. In a gate, the combination with a horizontal bar and a flexible gate body suspended from said bar as set forth, of two vertical locking bars hinged respectively to opposite sides of the latch post and movable in a horizontal plane to lock the gate when they are in the closed position and to unlock the gate when they are in the open position substantially as set forth. 4th. In a gate, the combination with a horizontal bar and a flexible gate body suspended from said bar as set forth, of a chain for supporting the gate, said chain being connected at one end to the hinge post above the level of the gate and at the other to a regulating bar fixed to said horizontal bar near the latch post end of same, substantially as and for the purpose set forth.

No. 49,996. Amalgamator. (*Amalgamateur.*)

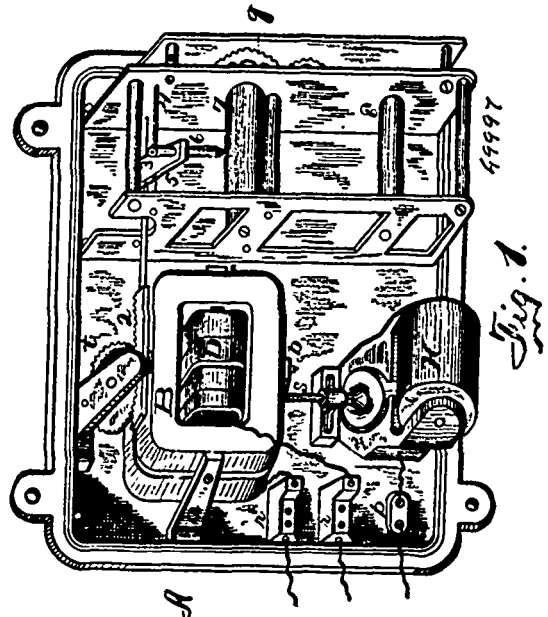


George Horatio Chick, San Francisco, California, U.S.A., 16th September, 1895; 6 years.

Claim.—1st. An amalgamator consisting of a containing chamber into which the pulp and valuable material is delivered, a cylinder, the shaft of which is journaled across the chamber so that the cylinder dips into the material contained therein, a series of silvered or amalgamated oppositely facing pockets fixed upon the periphery of the cylinder so as to be submerged in the material by the rotation of the cylinder, substantially as described. 2nd. An amalgamator consisting of a chamber, a cylinder, the shaft of which is journaled across the chamber, silvered or amalgamated pockets or cups secured upon the periphery of the cylinder in series which alternately face so as to present the open mouths of the cups in opposite directions

substantially as described. 3rd. An amalgamator consisting of a chamber, a cylinder provided with silvered or amalgamated cups fixed upon its periphery in series so that the cups open alternately in opposite directions, a preliminary receiving chamber into which the pulp to be treated is delivered, an agitating cylinder with arms rotating so as to stir up the material in the preliminary chamber, passages through which the material is delivered into the main chamber, other passages by which the waste discharges from said chamber, and a mechanism whereby the cylinders are constantly rotated, substantially as described. 4th. An amalgamator consisting of a wooden cylinder adapted to rotate in a pulp containing chamber, and having reversible amalgamated metallic cups or pockets attached to it.

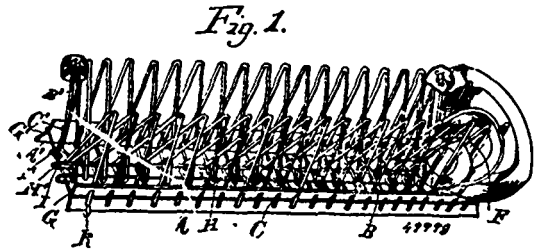
No. 49,997. Watt Meter. (*Mètre.*)



Jesse Harris, Lynn, Massachusetts, U.S.A., 16th September, 1895; 6 years.

Claim.—1st. The combination with a pressure coil and a motor, of a torsion spring connected to said coil and to said motor, whereby the torsion of the spring automatically balances the torque of the coil. 2nd. A pressure coil and its supporting shaft, in combination with a spring connected to said shaft and brought under tension by the torque of said coil. 3rd. A pressure coil mounted upon a shaft, a spring connected to said shaft and to a motor, and a motor in combination. 4th. A pressure coil mounted upon a shaft, a spring connected to said shaft and to a motor, a current coil and a motor, and means to record the current passing through the current and pressure coils.

No. 49,998. Dish Drainer. (*Egouttoir.*)

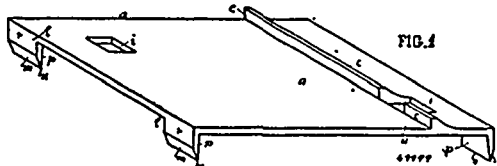


Charles N. Johnson, Vancouver, British Columbia, Canada, 16th September, 1895; 6 years.

Claim.—1st. In a dish drier, the combination of two or more metal strips A, A', and a series of arms of fingers secured to and extending upward from each strip, each series of fingers being formed of one continuous wire and means for securing said series of fingers together, substantially as and for the purposes hereinbefore set forth. 2nd. In a dish drier, the combination of the metal parallel strips A, A', and a series of arms or fingers secured to and extending upward from each of said strips, said fingers of each series being formed of one continuous wire and means for securing

said series of fingers together and at the same time permitting of their being folded together, substantially as and for the purposes hereinbefore set forth. 3d. In a dish drainer, the combination of two or more metal strips A, A', having a series of parallel slots punched therein, and a series of triangular-shaped arms extending upward from each strip, each series of fingers being formed of one continuous wire, the lower base of each of said triangular arms being bent inward or concave, said strips being so constructed as to permit of a portion of each of said triangular arms protruding through the slots therein, and a wire G, passing between said protruding portions and the outer surface of said strips, and means for securing said series of fingers together, substantially as and for the purposes hereinbefore set forth.

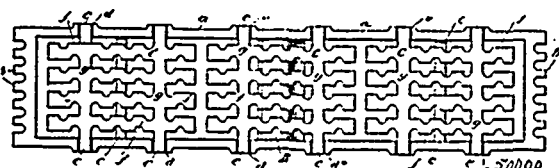
No. 49,909. Tie-Plate. (Plaque de traverse de chemin de fer.)



William Goldie, Pittsburgh, Pennsylvania, U.S.A., 16th September, 1895; 18 years.

Claim.—1st. A tie-plate having a body portion provided at intervals at its edges with downwardly projecting square claws extending parallel with the rail, and having the lower edges thereof bevelled to form sharp chisel cutting edges for the full width of the claws, substantially as set forth. 2nd. A tie-plate having a body portion provided at intervals at its edges with downwardly projecting square claws extending parallel with the rail and having tapering bodies, and having the edges thereof bevelled to form sharp chisel cutting edges for the full width of the claws, substantially as set forth. 3rd. A tie-plate having a body portion provided at intervals at its edges with downwardly projecting square claws extending parallel with the rail and having tapering bodies, and having the edges thereof bevelled on the outer surfaces to form sharp chisel cutting edges for the width of the claws, substantially as set forth. 4th. A tie-plate having a body portion provided at intervals at its edges with downwardly projecting square claws having the inner faces thereof tapering for the full length, and having the outer faces at right angles to the upper face of the body portion, and provided with bevels at the base thereof to form sharp chisel cutting edges for the full width of the claws, substantially as set forth. 5th. A tie-plate having a body portion having a slight depression under the rail tread, and provided at intervals beyond the tread of the rail with claws extending parallel with the rail, substantially as set forth.

No. 50,000. Grate-Bar. (Barreau de grille.)

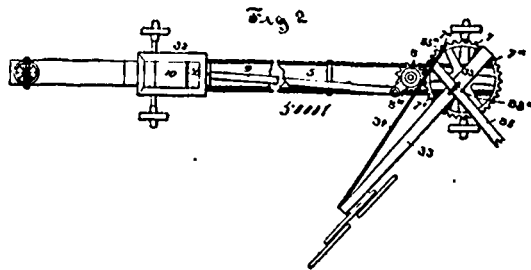


Charles T. Coe, New York, State of New York, U.S.A., 17th September, 1895; 6 years.

Claim.—1st. A furnace grate consisting of a rock-bar or bars, a frame or frames adapted to be supported thereon, and rock therein, and removable grate leaves or sections supported within said frame and stationary therewith, substantially as described. 2nd. In a furnace grate the combination with a rectangular frame adapted to be supported upon a rock-bar, removable therefrom and stationary with relation thereto, of grate leaves or sections adapted to be supported within and by said frame and detached therefrom, substantially as described. 3rd. In a furnace grate a frame of rectangular form, and consisting of side and end plates, and braces connecting said side plates, the latter being increased in width at their centres and decreasing in width towards their ends, substantially as described. In a furnace grate, a frame for supporting the grate proper, made in rectangular form and consisting of end and side plates, the latter being connected at their lower central edges by means of an U-shaped plate forming a bearing or socket for the reception of a rock-bar, substantially as described. 5th. A furnace grate consisting of a frame and two or more grate leaves or sections, each of the latter consisting of several longitudinal and transverse plates having intervening spaces between them for the passage of the air, and laterally extending lugs formed thereon for supporting said leaves in or on said frame, substantially as described. 6th. A grate leaf or section constructed with several longitudinal parallel plates, having intervening spaces between them, and two or more

transverse ribs or plates cast integrally with said longitudinal plates and extending laterally beyond the same to form supporting lugs or bearings for said leaf or section, substantially as described.

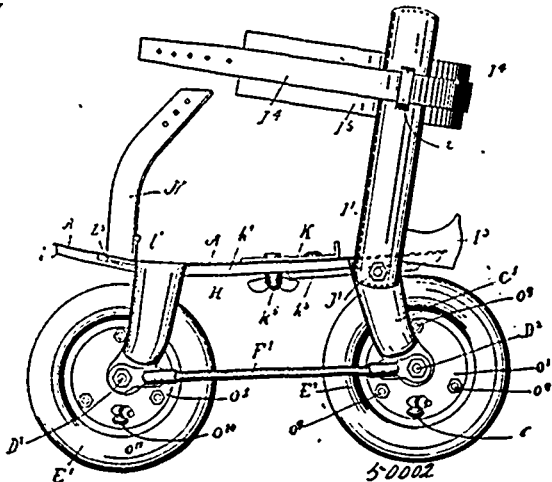
No. 50,001. Baling Press. (Presse d'empaquetage.)



Triton H. Thurmond, Denver, Colorado, U.S.A., 17th September, 1895; 6 years.

Claim.—1st. In a baling press, the combination with the bed plate, the baling chamber and the plunger head, of the horizontal gear, the bolster located beneath the gear and pivotally connected to the axle and having four arms carrying track wheels engaging the gear, levelling screws attached to two of the arms, a bearing plate located beneath the bolster and forming seats for the levelling screws, a small gear meshing with the large gear and having a crank arm, and a pitman connecting said crank arm with the plunger head, substantially as described. 2nd. In a baling press, the combination with the bed plate, of the bolster suitably connected with the bed plate and having arms carrying track wheels, a large gear mounted on the track wheels of a bolster, and journalled on a pin passing through the bed plate and projecting into a recess formed in the bolster, levelling screws attached to the bolster, a bearing bar located beneath the bolster and forming seats for the levelling screws, and another pin connecting the bolster and the bearing bar with the axle and projecting into a central recess formed in the bolster, substantially as described. 3rd. In a baling press, the combination with the bed plate, of the large gear wheel to which power is applied, the bolster having arms carrying track wheels engaging the under surface of the rim of the power wheel, and pivotally connected with the axle levelling screws passing through unthreaded apertures in the arms of the bolster, said arms having recesses surrounding said apertures, nuts located in said recesses and adapted to engage the levelling screws, said nuts being locked from rotation and a bearing bar located beneath the opening and forming seats for the levelling screws, substantially as described. 4th. In a baling press, the combination with the bed plate and axle, of the horizontal gear to which the power is applied, the bolster carrying track wheels engaging the power wheel and pivotally connected with the axle, levelling screws attached to the bolster arms, a bearing bar located beneath the bolster, and a divided king pin connecting the said parts in operative relation, substantially as described.

No. 50,002. Roller Skate. (Patin à roulettes.)

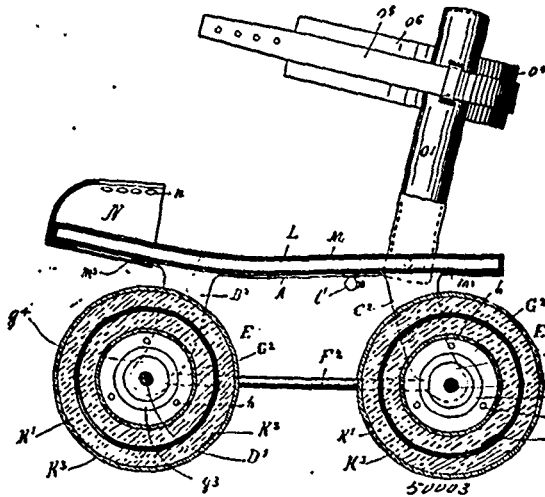


Frank Jorns Gibbs and William Wright, both of Birmingham, England, 17th September, 1895; 6 years.

Claim.—1st. In a roller skate of the kind herein referred to, provided with two rollers carried by cross-axes fixed to the pairs of downwardly projecting horns under the metallic foot-plate making the two pairs of horns of the improved inclosed hollow form fixed to

or formed with the foot-plate in any of the several ways substantially as herein set forth and illustrated by the accompanying drawing. 2nd. In a roller skate of the kind herein referred to, provided with two rollers carried by cross-axes fixed to two pairs of downwardly projecting horns under the metallic foot-plate, making the said metallic foot-plate and the two pairs of horns hollow and fixed or formed together in any of the several ways substantially as herein set forth and illustrated by the accompanying drawing. 3rd. In a roller skate of the kind herein referred to, provided with two rollers carried by cross-axes fixed to two pairs of downwardly projecting horns under the metallic foot-plate, making the two pairs of horns of the inclosed hollow form integral with the cross-stays F^1 , F^2 , and fixed to or formed with the foot-plate in any of the several ways substantially as set forth and illustrated by the accompanying drawing. 4th. In a roller skate of the kind herein referred to and in combination with the foot-plate thereon, the jointed leg support consisting of the two upwardly projecting side stays 1^1 , 1^2 , fixed together by the cross-bar I^3 , forming a back stop for the heel and with or without one or more other cross-bars higher up, the said upright side stays, 1^1 , 1^2 , being jointed at their lower ends to the skate frame and provided with fixing strap 1^4 , for securing the same to the skater's leg, all substantially as hereinbefore set forth. 5th. In a roller skate of the kind herein referred to, the combination of the foot-plate, the leg support 1^1 , 1^2 , jointed thereto as denoted under claim 4, and the adjustable stop K , for bearing against the front of the skater's boot heel, substantially as set forth. 6th. In a roller skate of the kind herein referred to, the combination of the hollow foot-plate A , with the two pairs of hollow horns B^1 , B^2 , C^1 , C^2 , carrying the cross-axes on the two rollers, the side stays F^1 , F^2 , connecting the lower ends of the horns together, the leg support 1^1 , 1^2 , jointed to the skate frame and provided with fixing strap and the two spring grippers L^1 , L^2 , all constructed and arranged substantially as hereinbefore described with reference to Figs. 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 of the accompanying drawings. 7th. In a roller skate of the kind herein referred to, the combination of the foot-plate, the leg support 1^1 , 1^2 , jointed thereto and the side grippers L^1 , L^2 , arranged in the foot-plate and operated by the spring m^1 , through the centre slide L^1 , and connecting links L^2 , L^3 , so as to grip the toe part of the skater's boot, substantially as hereinbefore set forth.

No. 50,003. Roller Skate. (Patin à roulettes.)



Frank Jorns Gibbs and William Wright, both of Birmingham, England, 17th September, 1895; 6 years.

Claim.—1st. In a roller skate of the kind herein referred to, the combination with the rollers of the same, made in halves, as set forth, of the improved tires made of a cork or felt ring inclosed in an India-rubber outer covering and strengthened and fitted on said wheels in the manner substantially as hereinbefore described with reference to figs. 1, 3 and 4 of the accompanying drawings. 2nd. In a roller skate of the kind herein referred to, the combination with the tread-plate of a pneumatic or inflatable pad or cushion to reduce vibration, said tread-plate and the pneumatic or inflatable pad or cushion being constructed and combined together in any of the several ways, substantially as herein set forth. 3rd. In a roller skate of the kind herein referred to, the combination with the metallic tread-plate A , made with cross-bars a^6 , of the inflatable India-rubber pad or cushion L , fitting in said tread-plate under between and above bars to form a pneumatic tread, substantially as hereinbefore described and illustrated by figs. 10, 11 and 12 of the accompanying drawings. 4th. In the roller skate of the kind herein referred to, the combination of the tread-plate A , made with cross bars a^5 , and two pairs of horns, the cross-axes carried by said horns, the rollers made with non-inflatable tires revolving on said axes, the inflated

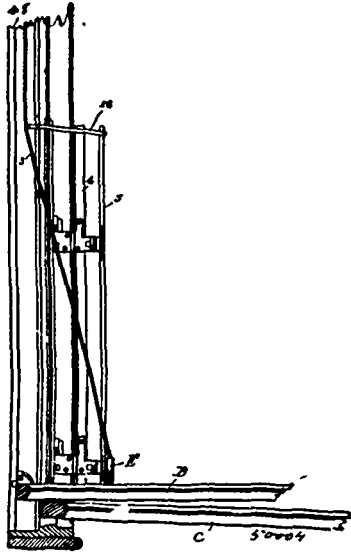
India-rubber pad or cushion L , fitting in said tread-plate under, between and above the cross-bars of the same, the cross-bars F^1 , F^2 connecting the lower ends of the horns together, the leg support O^1 , O^2 , jointed to the skate frame and provided with fixing strap, the whole forming a roller skate with a pneumatic foot-plate, substantially as hereinbefore described with reference to figs. 1, 2, 10, 11 and 12 of the accompanying drawings. 5th. In a roller skate of the kind herein referred to, the combination of metallic tread-plate A , the cover-plate M fitted thereto, means for preventing the plates A and M moving too far apart, and the air inflated bladder or pad L fitted between the plates A and M so as to form a pneumatic tread-plate, substantially as hereinbefore described and illustrated by figs. 8 and 9 of the accompanying drawings. 6th. In a roller skate of the kind herein referred to, the combination of the tread-plate A made with two pairs of horns, the cross-axes carried by said horns, the rollers made with non-inflatable tires revolving on said axes, the top plate M fitted to plate A , the air inflated bladder or pad L fitted between said plates, the leg support O^1 , O^2 jointed to the skate frame, and provided with fixing strap, the whole forming a roller skate with pneumatic foot-plate, substantially as hereinbefore described with reference to figs. 1, 2, 3, 4, 5, 6 and 7 of the accompanying drawings. 7th. In a roller skate of the kind herein referred to, the combination of the metallic tread-plate A , made with the upwardly inclined edges a^8 , a^9 , forming a channel round the top thereof, and the inflated India-rubber pad or cushion fitted thereto and formed of the outer covering L^1 , and the inner air tube L^2 constructed and connected to said tread-plate so as to form a pneumatic tread substantially as hereinbefore described and illustrated by figs. 13, 14 and 15 of the accompanying drawings. 8th. In a roller skate of the kind herein referred to, the combination of the tread-plate A , made with upwardly inclined edges a^8 , a^9 , forming a channel round the top and having two pairs of horns underneath the same, the cross-axes carried by said horns, the rollers made with non-inflatable tires revolving on said axes, the inflated India-rubber pad or cushion formed of the outer covering L^1 , and the inner air tube L^2 , constructed and connected to said tread-plate as set forth, the cross-bars F^1 , F^2 , connecting the lower ends of the horns together, the leg support O^1 , O^2 , jointed to the skate frame and provided with fixing strap, the whole forming a roller skate with a pneumatic foot-plate, substantially as hereinbefore described with reference to figs. 1, 2, 13, 14 and 15 of the accompanying drawings. 9th. In a roller skate of the kind herein referred to, the combination of the metallic tread-plate A , made with the channel a^{10} , and the tubular inflated pad fitted and fixed thereto, said pad consisting of the outer canvas covering L^4 , L^3 , containing the inner India-rubber air tube L^2 , the said parts being constructed and fitted together so as to form a pneumatic tread-plate, substantially as hereinbefore described and illustrated by figs. 16 and 17 of the accompanying drawings. 10th. In a roller skate of the kind herein referred to, the combination of the tread-plate A , made with channel a^{10} in its upper surface, the tubular inflated pad or cushion L^2 , L^3 , L^4 fixed in said channel, the two pairs of horns formed with or fixed to said tread-plate, the cross-axes carried by said horns, the rollers made with non-inflatable tires revolving on said axes, the cross-bars F^1 , F^2 , connecting the lower ends of the horns together, the leg support O^1 , O^2 , jointed to the skate frame and provided with fixing strap, the whole forming a roller skate with pneumatic foot-plate, substantially as hereinbefore described with reference to figs. 1, 2, 16 and 17, of the accompanying drawings. 11th. In a roller skate of the kind herein referred to, the combination of the metallic tread-plate A , made with upwardly turned edges a^{11} , forming a recess on the top of the tread-plate, and a pad of felt or cork or like substance fitted in said recess to reduce vibration, two pairs of hollow horns B^1 , B^2 , C^1 , C^2 , fixed to or formed with said tread-plate and carrying the axle D^1 , D^2 , of the two rollers E^1 , E^2 , the rollers revolving on said axes, and the leg support O^1 , O^2 , jointed to the skate frame and provided with fixing strap, the whole forming a roller skate, substantially as herein described.

No. 50,004. Window Frame and Sash Fittings therefor. (Cadre et croisée de fenêtre.)

George Henry Couch, Craydon, Surrey, England, 17th September, 1895; 6 years.

Claim.—1st. In a window, the combination of the independent, sliding counterweighted sashes, the hinged stops therefor permitting said sashes to be turned outward from the frames, and the gudgeon supports adapted to hold the bottom of said sashes from lateral or vertical displacement while being turned to horizontal position. 2nd. In a window, the combination with the sliding counterweighted sashes, of the hinged stop beads therefor, the gudgeon supports therefor fixed to the window frame, and the spurs upon said sash adapted to engage sockets fixed to said frame when the sash is turned upon said gudgeon stops. 3rd. In a window, the combination with the sliding sashes adapted also to be turned outward into horizontal position of the stop beads, the hinges therefor connecting them to the frame, and the locking device for holding them in normal position. 4th. In a window, the combination with the pair of overlapping, sliding sashes, of the stop bead and parting bead therefor, the hinges for rigidly connecting said beads together and supporting them upon the frame, the eyes upon the two members of said hinges adapted to overlap when closed, and the pin adapted to

pass through said eyes to lock the same in closed position. 5th. In a window, the combination with the overlapping, sliding sashes, of



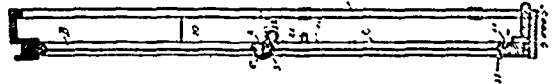
the series of sockets upon one sash, and the locking pins upon the other sash adapted to enter said socket so as to lock said sashes together in adjusted, partially open position. 6th. In a window, the combination of the overlapping, sliding sashes, of means for locking said sashes together in adjusted, partially open position, permitting the same to be slid together freely within the frame. 7th. In a window, the combination with the sliding counterweighted sashes, the sash cords connected to the same at or near its top, and the gudgeon supports for its bottom, of the hinged stop beads therefor, and the adjustable stop for engaging the supporting cords so as to prevent their displacement when said sash is turned upon said gudgeon supports. 8th. In a window, the sash cord clamp, comprising in combination the hinged jaws having their adjacent face channelled to receive the cord projecting upon said faces to engage said cord, the collar for engaging the ends of said jaws when closed, and the locking device for said collar. 9th. In a window having overlapping, sliding sashes, the combination therewith of the hinged parting and stop beads adapted to be swung outward from said frame to free said sashes, the stops for limiting the downward movement of the bottom sash when said beads are turned outward, and serving as a support on which to turn said sash, said stops being engaged by said beads when in normal position to throw them out of engaging position with said sash, and to permit said sash to slide freely past the same. 10th. In a window having overlapping, sliding sashes, the combination with the lower sash, of the removable stop beads therefor, the gudgeon studs and spurs arranged at the bottom of said sash and the plates channelled for said gudgeon-studs, and having lateral sockets for said spurs, whereby the sash when turned toward horizontal position is held from either vertical or lateral displacement. 11th. In a window, the combination with the sliding lower sash thereof, of the gudgeon studs upon the bottom of said sash, the channelled plates upon said frame to guide said studs, the spurs upon the bottom of said sash, the pivoted dogs for engaging said sash to limit its downward movement, the means for locking said dogs out of engaging position, and the lateral sockets to receive said spurs when the sash is turned toward horizontal position.

No. 50,005. Window Frame with Sliding Sashes and Fittings therefor. (Cadre de fenetre avec croisées, etc.)

George Henry Couch, Craydon, Surrey, England, 17th September, 1895; 6 years.

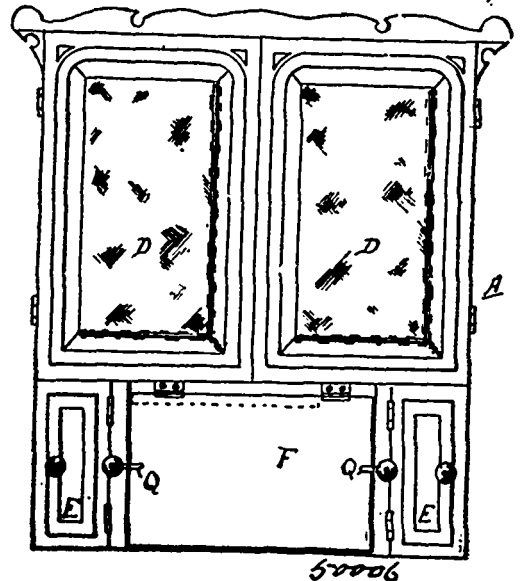
Claim.—1st. In a window, the combination of the mutually counterbalancing sashes standing normally in the same plane and abutting against each other, and the means for turning them to horizontal position within the window frame. 2nd. In a window, the combination with the mutually counterbalancing sashes standing normally in the same plane and resting one upon the other, of the pivot guide attachments permitting the lower sash to be turned and slid upward, and the upper sash to be similarly slid downward, and both to be turned into horizontal position. 3rd. In a window, the combination of the sashes standing normally in the same plane, one resting upon the other, of the pulley wheels, the sash cords running over said pulley wheels and having their ends adjustably connected respectively to the lower part of said sashes, whereby the sashes are mutually counterbalancing, the pivots and grooves for said sashes permitting them to be slid past each other, and also to

be turned into horizontal position. 4th. In a window, the combination of the pair of sashes standing normally in the same vertical



plane, the inclined way for receiving and guiding the lower sash upward and past the upper sash, the pulleys, the cords running over said pulleys and having their ends attached respectively to the lower part of said sashes, and means for adjusting the length of said cords. 5th. In a window, the combination with the frame having the vertical grooves in which the pair of sashes normally stand one upon the other, the inclined grooves communicating with the vertical groove at the bottom of the frame and adapted to direct the lower sash upward past the upper sash, the pulleys and the sash cords upon said pulleys with their ends connected respectively to said sashes, whereby said sashes are mutually counterbalancing. 6th. In a window, the combination of the sashes standing normally in a vertical plane, the top sash resting on the lower, the vertical grooves for the upper sash, the inclined grooves for the lower sash, the pulleys, the sash cords running over said pulleys having their ends connected respectively to said sashes, the pivots upon said sashes running in said grooves, the means for holding said sashes closed, and means for tilting the lower sash outward and carrying it upward, and the upper sash downward, and turning both sashes into horizontal position. 7th. In a window, the combination of the upper and lower sashes when in closed position standing in the same vertical plane and resting one upon the other, their connected sash cords, the supporting pulleys for said cords, whereby said sashes are mutually counterbalancing, the pivots upon said sashes, the vertical grooves for the upper sash pivots, the inclined grooves for the lower sash pivots, and the locking devices for independently limiting the sliding movement of the sashes.

No. 50,006. Convertible Furniture. (Lit pliant.)



John S. Shearer, Verona, Pennsylvania, U.S.A., 17th September, 1895; 6 years.

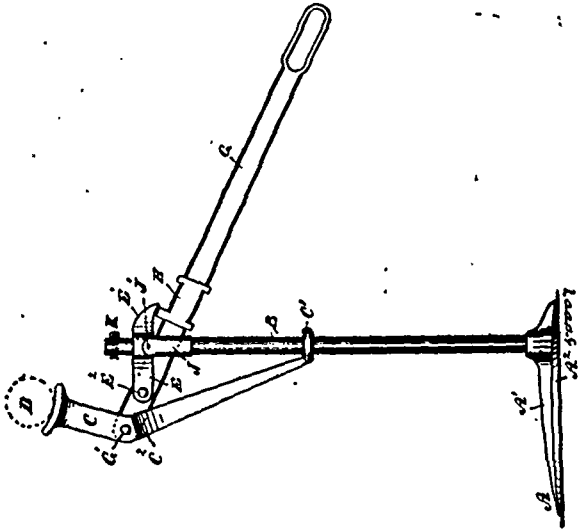
Claim.—The combination of a mattress holding upright casing, a bed support provided with an adjustable back, extension supports, means for securing said bed support to said casing, and means for securing said extension supports to said bed support.

No. 50,007. Carriage Jack. (Chèvre de carrosserie.)

James Davis, the younger, Gananoque, Ontario, Canada, 17th September, 1895; 6 years.

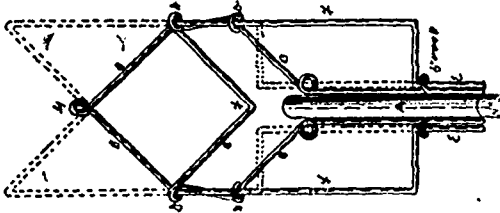
Claim.—1st. The combination with the foot A, and post B, of the arm C, having one end sleeved on said post, the fulcrum bracket E, adjustable on said post and pivoted to said arm, and the hand lever G, pivoted to said bracket and arm, and provided with a sliding

dog H, as set forth. 2nd. A carriage jack comprising the foot A, and post B, the lifting arm C, the fulcrum bracket E, gripping said



post and pivotally connected to said arm, the hand lever G, pivoted to said bracket and arm and a dog H, to lock the lever, substantially as set forth.

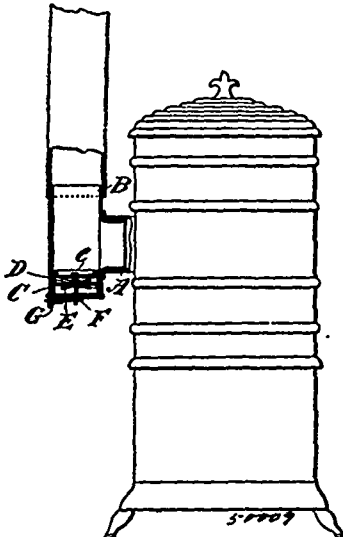
No. 50,008. Machine for Picking Fruit.
(Machine pour cueiller les fruits.)



George S. Kennedy, assignee of Ewing Buchan, both of Owen Sound, Ontario, Canada, 18th September, 1895; 6 years.

Claim.—In a fruit picker a sliding jaw running over a frame B, substantially as and for the purpose set forth.

No. 50,009. Ventilating Elbow Joint.
(Joint de coudes.)



Reinhold C. Doenitz, Gustav Fredrich, Alexander Quit and Joseph Kouwinski, all of Iron River, Michigan, U.S.A., 18th September, 1895; 6 years.

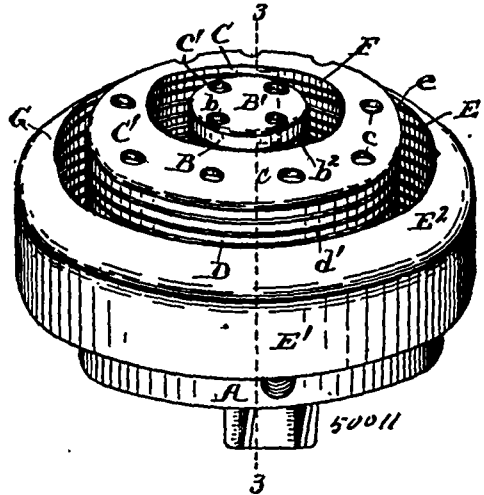
Claim.—An elbow joint composed of two sections arranged at right angles to each other, a detachable cap arranged in line with one section and at right angles to the other, a fan mounted in said cap, and means for operating said fan to cause a forced draft, substantially as shown and described.

No. 50,010. Illuminant Mantles for Bunsen Gas Burners.
(Manteau illuminé pour brûleurs de gaz.)

William Hooker and Lucy Hooker, both of North Fitzroy, Victoria, Australia, 18th September, 1895; 6 years.

Claim.—The hereinbefore described solution, consisting of sulphate of magnesium, extract of dry fallen blue gum tree leaves, acetate of magnesium, and chrome alum, with or without chromas potassi, all incorporated in the proportions hereinbefore described.

No. 50,011. Hydro-Carbon Burner.
(Foyer à hydro-carbures.)

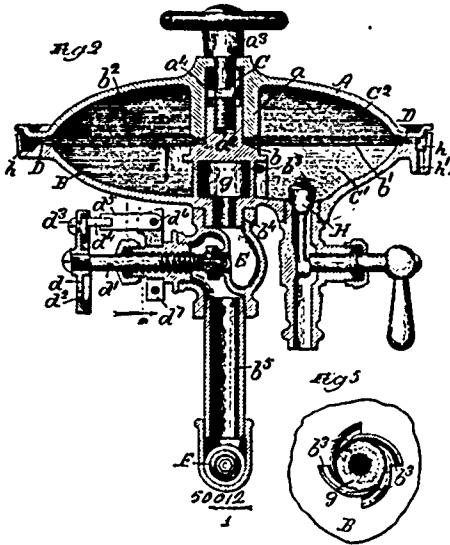


The Detroit Vapour Stove Company, assignee of Edwin G. Mumery, John S. Sherman, and George H. Harms, all of Detroit, Michigan, U.S.A., 18th September, 1895; 6 years.

Claim.—1st. In a hydro-carbon burner, an air inlet wall constructed of a casting provided with a series of kerfs forming a series of slots or orifices therein and with integral connecting partitions, substantially as set forth. 2nd. In a hydro-carbon burner, an air inlet wall constructed of a casting provided with a series of kerfs, forming a series of slots or orifices therein, with an integral hood, and with integral connecting partitions, substantially as set forth. 3rd. In a hydro-carbon burner, the combination of a base, a central kerfed air inlet wall provided with an integral perforated hood and forming a central air chamber therewith in open at the base thereof, partitions integrally connecting the inner sides of said walls, kerfed air inlet walls C, D, provided with an integral connecting perforated hood forming an air chamber therebetween open at the base thereof, partitions integrally connecting the walls C, D, a kerfed air inlet wall E, and a non-foraminous wall E', provided with an integrally connecting hood forming an air channel therebetween, partitions integrally connecting the walls E, E', the walls B, C, forming a combustion chamber F therebetween, and the walls D, E, forming a combustion chamber G therebetween, each of said combustion chambers supplied with air admitted thereto through the adjacent air inlet walls on the inner and outer circumference of the combustion chamber, substantially as set forth. 4th. In combination, a base A constructed with an interior channel A¹, having an opening A² therewithin, an exterior surrounding channel A³ communicating with the interior channel and spaced therefrom forming an opening A⁴, intermediate the said channels, upwardly projecting kerfed air inlet walls provided with interior integral connecting partitions located upon said base about the inner and outer circumference of each of said openings forming air chambers H and J above said openings, and concentric combustion chambers F and G above said interior and exterior channels, the walls about the inner and outer circumference of each of said openings formed with an integral perforated hood at the top of said walls above the corresponding opening, a non-foraminous wall outside the outer kerfed wall and spaced therefrom an air chamber therebetween open at the bottom and closed at the top, the outer kerfed wall and said non-foraminous wall having an integrally connecting hood and integral partitions connecting said walls, each of said combustion chamber supplied with air admitted thereinto through the adjacent air inlet walls on the inner and outer circumference of the combustion chambers, substantially as set forth. 5th. In a hydro-carbon burner, a hollow air inlet wall B

kerfed horizontally to form a series of horizontal annular orifices therein, having an integral perforated hood, and interior integral vertically extended partitions connecting the inner sides of said wall, air inlet walls C, D, kerfed horizontally to form a series of horizontal annular orifices therewithin having an integral perforated hood and vertically extended partitions therebetween integrally uniting the walls C, D, an air inlet wall E kerfed horizontally to form a series of horizontal annular orifices therein, a non-foramitous wall E', spaced from the wall E, a hood connecting the walls E and E', and intermediate partitions integrally connecting said walls E, E', each of said combustion chambers supplied with air admitted therinto through the adjacent air inlet walls on the inner and outer circumference of the combustion chamber, substantially as set forth.

No. 50,012. Liquid Filter. (Filtre.)



Harry John Richter, Chicago, Illinois, U.S.A., 18th September, 1895; 6 years.

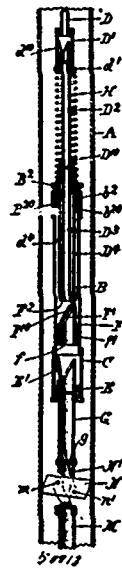
Claim.—1st. In a liquid-filter, a chambered body, consisting of two parts, the upper part being provided interiorly with a sleeve-extension, and the companion part with a hub extension, said hub having a screw-threaded recess and fitting into said sleeve, and a clamping bolt inserted through the upper body part and having a threaded engagement with said recesses hub, substantially as described. 2nd. A liquid-filter, consisting of two separable chambered parts, adapted to be clamped together, and a filtering diaphragm dividing said chamber into two compartments, substantially as described. 3rd. A liquid-filter, consisting of two separable chambered parts, adapted to be clamped together, of a filtering diaphragm, comprising a number of pads and perforated disc plates and clamped between the bearing surfaces of the body-parts, substantially as described. 4th. The combination with a filtering body, provided interiorly with a hub extension having a number of spirally arranged liquid passages therein, an inlet valve connecting therewith, and a flushing-valve, discharging outwardly from the receiving chamber, substantially as described. 5th. In a filter, the combination with the inlet-valve of a disc hand-grasp, mounted on the stem thereof and provided with one or more elongated slots, a screw inserted therethrough, a gauge-finger secured to said screw, and a stop lying in the pathway of said gauge-finger, substantially as described. 6th. In a filter, the body consisting of two separate parts, one part provided with a hub and the other with a central sleeve which embraces said hub, the clamping bolt passing through the sleeve and engaging a screw-thread in the hub, said bolt having a shoulder engaging the body section to which the sleeve is attached and being provided with a hand grasp, the pad having a central perforation to surround the hub, all combined substantially as described. 7th. The filter body in sections, and means for clamping these sections together, the diaphragm or pad having its edges clamped between the sections, and a drip-trough connected to the edge of one of the sections, all combined substantially as described.

No. 50,013. Double Acting Pump. (Pompe à double effet.)

Henry O. Thomas, Chicago, Illinois, U.S.A., 18th September, 1895; 6 years.

Claim.—1st. In combination, with the well-casing the pump tube and the pilot rod loosely connected at the lower end of the pump tube the connection comprising a clutch adapted to be set across the well-casing and grip the wall thereof by the arrest or upward

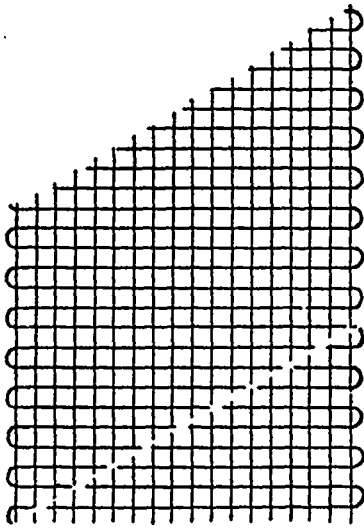
movement of the pilot, substantially as set forth. 2nd. In combination, with the well-casing, the pump tube adapted to be inserted



down therinto, the pilot rod and a link connecting said pilot rod with the pump tube, said link being adapted to pass freely down into the casing when in the position in which it is normally held by the weight of the pilot and to extend across and bind at its ends against the opposite sides of the casing when the pilot and well tube approach each other, substantially as set forth. 3rd. In combination, with the well-casing, the pump tube adapted to descend freely therein, the pilot M, the clutch link N pivoted to the pilot, the link N' pivotally connected to the pilot and to the pump tube at the lower end of the latter, substantially as and for the purpose set forth. 4th. In combination, with the well-casing, the pump tube adapted to descend freely therein, the pilot M, the clutch link N pivotally connected to the pilot, the link N' pivoted to the clutch link and having a loose connection with the pump tube adapted to permit said link longitudinal movement with respect to the latter, substantially as set forth. 5th. In combination, with the pump cylinder and suitable means for supporting it in the well, a piston head adapted to reciprocate in said cylinder and a tubular stem communicating at its lower end with the cylinder chamber above the piston head, said stem extending to the top of the well and constituting the discharge pipe, substantially as set forth. 6th. In combination, with the pump cylinder and suitable means for supporting it in a well, a piston adapted to reciprocate in said cylinder, a tubular stem for said piston having its tubular cavity open freely into the cylinder chamber above the piston head and constituting the discharge pipe, the displacement of said tubular stem being equal to substantially half the cubic capacity of the cylinder below the piston when the latter is at its upper limit, substantially as set forth. 7th. In combination, with the pump cylinder and suitable means for supporting it in the well, the piston reciprocating therein, the tubular stem constituting the discharge pipe from the cylinder having the portion which enters the cylinder and tends to displace the water therefrom provided with hollow walls whereby its displacement is increased relatively to its weight, substantially as set forth. 8th. In combination with the cylinder piston and piston rod springs reacting upon the piston rod, tending one to support the weight of the piston and rod, and the other tending to depress the same, said springs being proportioned to each other and to said weight to normally hold the piston at the middle of its stroke in its cylinder, substantially as set forth. 9th. In combination with the well-casing, the cylinder and suitable means for supporting it in the casing, the piston having a tubular stem constituting the discharge pipe, and having its walls which enter the cylinder chamber adapted to displace a portion of water therefrom at each downward stroke whereby the pump is adapted to elevate water at each stroke in each direction, a spring stopped at the lower end upon the cylinder and a stop on the stem there above against which said spring reacts upward, and a further spring stopped downward on the stem and upward against a stop fixed with respect to the well-casing, said springs being proportioned with respect to each other and to the weight of the entire piston, stem and discharge pipe, to normally hold the piston at the middle of its stroke in the cylinder, substantially as set forth. 10th. In combination with the cylinder, the piston F having the water inlet f, and cut away at the upper part obliquely to form a valve seat, the valve leather hinged at its lower end and provided with a stiffening bar extending longitudinal at the middle of the width, whereby said valve is adapted to yield at the lateral edges to permit it to conform to the curvature of the

cylinder and open a direct water passage the full capacity of the aperture in the piston, substantially as set forth.

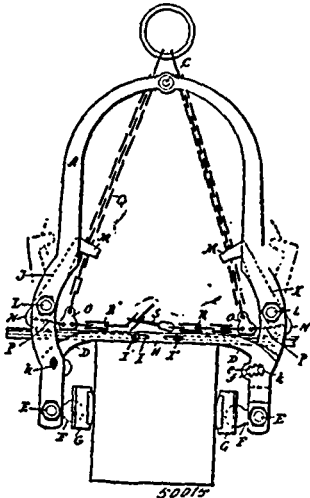
No. 50,014. Screen for Cleaning Grain, etc.
(Tamis à grain, etc.)



John Burwell Davis, Stoney Creek, Ontario, Canada, 18th September, 1895; 6 years.

Claim.—1st. A grain screen herein described consisting of a frame having a raised central bar, square mesh wire cloth cut with terminal points one-third of its width from the top and centre, and stapled to the cross-bar of the frame, and the sides or wings of the wire cloth forced up by clamps or otherwise into diamond shaped meshes, the same inclining from the centre of the screen to the sides of the frame for spreading the grain evenly over the surface of the screen with efficiency and dispatch, and inwardly bevel strips attached to the upper face of the frame, the whole constructed to operate in the manner and for the purpose specified. 2nd. A grain screen herein described, consisting of a frame A, having a raised central bar a above the face of the frame, square mesh wire cloth C cut with more or less terminal points g, g, c, b, d, e, at or about the angle of one-third of its width downwards from g, g to c, and at the bottom from b to d and c, and stapled to the cross bar a by staples h, the sides or wings g, d, g, c, of the wire cloth C forced up any by means until the horizontal wires of the screen are bent from the centre wire at an upward angle on both sides to form diamond meshes as shown at fig. 5, the said screen being constructed higher in the centre and inclining downwards to the sides, the diamond meshes running at an angle to cause wheat to spread evenly over the screen, and inwardly bevelled strips i secured to the face of the frame A, all constructed to operate in the manner and for the purpose specified.

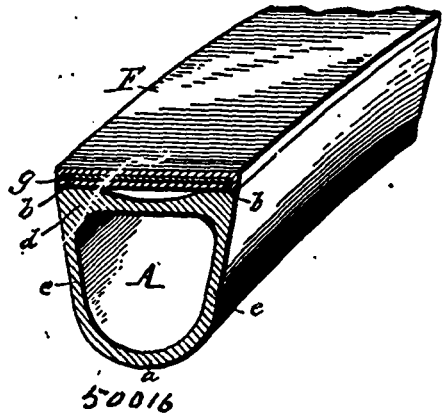
No. 50,015. Lifting Dog. (Appareil de relevage.)



Frank Beattie, Leets Island, Connecticut, U.S.A., 18th September, 1895; 6 years.

Claim.—1st. In a lifting apparatus, the combination of a pair of jaws D, D, bearing blocks G, G, swinging arms J, K, and chains, substantially as described. 2nd. In a lifting apparatus, the combination with a pair of tongs, jaws D, D, bearing blocks G, G, arms J, K, connections between the said jaws and arms, and lifting chains, substantially as described. 3rd. In a lifting apparatus the combination with a pair of jaws D, D, arms J, K, lifting chains, and bearing blocks G, G, secured to the jaws by universal joints below the transverse centers of the said blocks, substantially as described. 4th. In a lifting apparatus the combination with a pair of tongs, of bifurcated jaws D, D, bearing blocks G, G, a rod H, adjustably connected arms J, K, and a lifting chain, substantially as described.

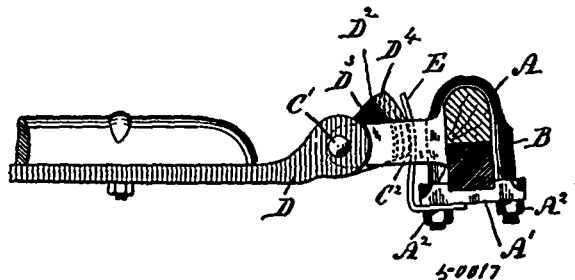
No. 50,016. Pneumatic Tire. (Bandage pneumatique.)



Martin Luther Watson and Edward Forbes Picket, both of Buffalo, New York, U.S.A., 18th September, 1895; 6 years.

Claim.—1st. A pneumatic tire provided with a flat tread having its central portion depressed, whereby said depressed portion is expanded substantially in line with the flat marginal portions of the tread, upon inflating the tire, substantially as set forth. 2nd. A pneumatic tire provided with a flat tread having practically non-expandable corners or marginal portions, and having its intermediate central portion made elastic and depressed below the surface of the flat marginal portions, substantially as set forth. 3rd. A pneumatic tire comprising an inflatable tube having a flat tread, receding side walls which converge from the tread toward the seating side of the tire and practically non-expandable corner portions arranged at the junction of the converging side walls and the tread, whereby only those portions of said side walls between the non-expandable corner portions and the seating side of the tire are permitted to expand upon inflating the tire, substantially as set forth. 4th. A pneumatic tire comprising an inflatable tube having a flat tread, receding side walls converging from the extreme edges of the flat tread toward the seating side of the tire, thickened corner portions arranged at the junction of the converging side walls with the flat tread, whereby only those portions of said side walls between the thickened corners and the seating side of the tire are permitted to expand upon inflating the tire, and a flat protecting band or shoe applied to the flat tread and extending from edge to edge thereof, substantially as set forth. 5th. A pneumatic tire having a flat tread and an annular series of flat transverse protecting strips applied to the tread, substantially as set forth. 6th. A protecting shoe for a pneumatic tire consisting of a flat band of rubber and an annular series of flat transverse protecting strips embedded in said band, substantially as set forth.

No. 50,017. Thill Coupling. (Arçon de limonière.)



Isaac Alonzo Welch, Stanbridge East, Quebec, Canada, 18th September, 1895; 6 years.

Claim.—A thill coupling, comprising a clip attachable to a carriage axle or sleigh runner, said clip having two ears or lugs C, C², lug C³, having pintle C⁴, and curved fin C⁵, and lug C², having the inturred end C³, in combination with the thill iron D, provided with pintle hole D¹, and having an extension D², provided with curved grooves D³, D⁴, substantially as and for the purpose set forth.

No. 50,018. Revolving Storm Door Structure.

(Construction de contre-porte tournante.)



Walter William Iffe, St. Paul, Minnesota, U.S.A., 18th September, 1895; 6 years.

Claim.—1st. In a revolving door structure of the class described, a casement for the doorway consisting of the opposite parallel panels or sections, and the inturred or converging panels or sections arranged on each side of said parallel sections. 2nd. In a revolving storm door structure of the class described, the polygonal casement provided with glass panels arranged flush within the face of said casement. 3rd. In a storm door structure of the class described, a polygonal casement made up of the fixed medial section, the sections hinged to each side of said fixed section, having glass panels flush with the face thereof, and the springs normally holding said hinged sections inturred. 4th. In a revolving storm door of the class described, the combination with its pivot, of the travelling connection therefor permitting the same to be unshipped by excessive pressure of persons against the wings of said door, and carried out of the casements. 5th. In a revolving storm door structure of the class described, a flexible extension strip for the door wings, comprising in combination the sheet metal springs projecting from the edge of the wing, the roll carried by said springs adapted to bear against the adjacent casement, and the flexible covering for said springs adapted to close the space between said roll and wing. 6th. In a revolving storm door structure, the combination with the door pivots, of travelling connections for said pivots permitting them to be unshipped and the door to be carried out of its casement. 7th. The combination, with the revolving door, of the concave but non-circular casement therefor, the extension strips upon the wings of said door, and means for holding said strips in constant bearing contact with the adjacent casement. 8th. The combination, with the revolving door and its casement, of the bar pivoted to said casement, and having a dovetail or enlarged end adapted to enter a corresponding socket in the wing of said door and means for locking it in said socket. 9th. The combination, with the radiating wing of a revolving door, of the spring extension upon the edge thereof, journal supports carried thereby, the roll turning in said journals, and the weather strip interposed between the periphery of said roll and the journal support.

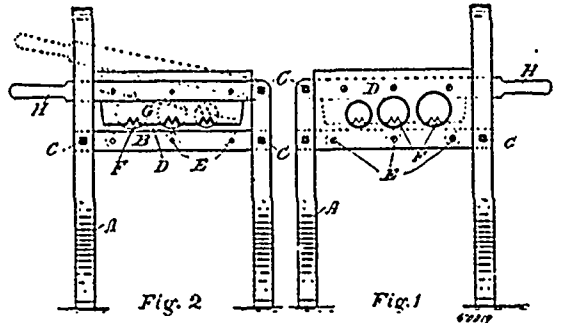
No. 50,019. Corn Husking Implement.

(Appareil pour éplucher le blé d'inde.)

Joseph Payment, Rigaud, Quebec, Canada, 18th September, 1895; 6 years.

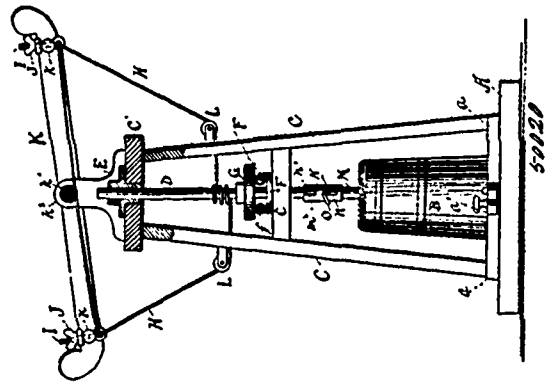
Claim.—1st. In a corn husking implement, a plate having a cutting edge and secured to a girt supported by legs, and a cutting blade rigidly secured to a hand lever pivoted to the legs or frame of

the implement. 2nd. An implement composed of the girt B, supported by the legs A, the holding plate D provided with cutting



edged openings, and secured rigidly to the girt B, and the cutting blade G, secured to a lever H pivoted to the legs of the implement.

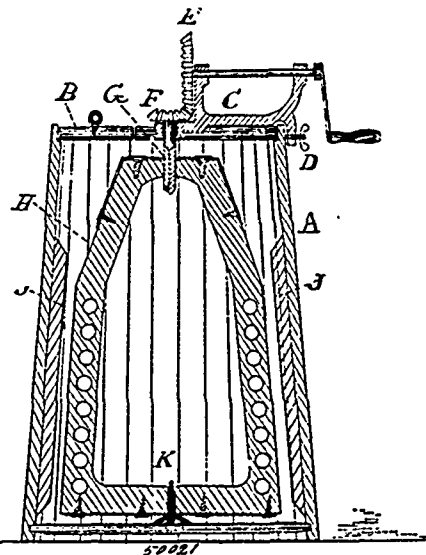
No. 50,020. Churn. (Baratte.)



Joseph A. Howard, Aberdeen, Ohio, U.S.A., 18th September, 1895; 6 years.

Claim. The combination with the standards C, C, having cross-bars c, c', with holes through the middle, of the vibrating shaft D having a bearing E in the upper cross-bar c, and passing through the lower cross-bar c', suitable means for vibrating said shaft, the disc F fast on cross bar c' and carrying in ears thereof on the upper side, the anti friction wheels f and the disc G fast to the vibrating shaft D and resting on said anti friction rolls, as and for the purpose set forth.

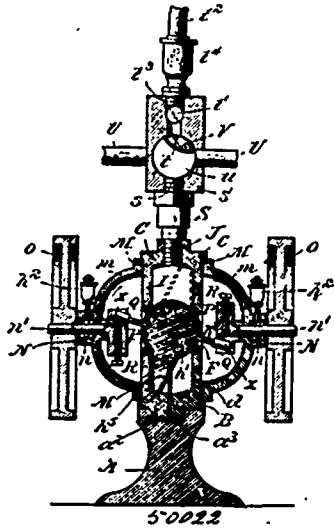
No. 50,021. Churn. (Baratte.)



George A. Poole, Brantford, Ontario, Canada, 18th September, 1895; 6 years.

Claim. - A churn comprising a barrel A, lid B, standard C, thumb screw D, gear wheels E and F, beater H, breakers J and J, plate K, all formed, arranged and combined substantially as and for the purpose hereinbefore set forth.

No. 50,022. Steam Engine. (Machine à vapeur.)



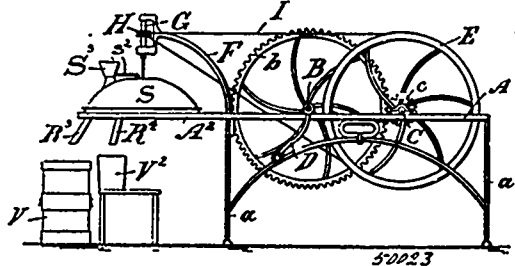
Stanyarne Wilson, William N. Christopher, and William D. Fowler, assignees of William N. Christopher and Calvin T. Christopher, all of Spartanburg, South Carolina, U.S.A., 18th September, 1895; 6 years.

Claim.—1st. In a steam engine, the combination of the cylinder having an interior annular steam chest, the opposite sides of which are provided with central bearing openings bevelled at their inner edges, a vertical partition abutment arranged in the top of and intersecting said steam chest, a wobbling disc piston rolling within said steam chest, and provided with a central bearing ball turning in said bevelled bearing openings, and a vertical slot loosely embracing said abutment, metallic wear cups removably fitted on the opposite portions of the piston ball at both sides of the disc thereof and working in contact with the bevelled edges of the central bearing opening, and rotary shaft connections for the shaft extremities of the said piston, substantially as set forth. 2nd. In a steam engine, the cylinder having an interior annular steam chest, the opposite inner sides of which are provided with central bearing openings bevelled at their inner edges and having notches in said edges, removable wear rings fitting said bevelled edges and having studs engaging the notches thereof, a wobbling disc piston rolling within said steam chest and having a central bearing ball turning in said bevelled bearing openings, and provided in its opposite portions with notches, removable metallic wear cups fitting the opposite portions of the ball, and having pins or studs engaging the notches thereof, removable wear plates attached to opposite faces of the piston disc, packing inserted in the periphery of said piston disc, and rotary shaft connections for the shaft extremities of said piston, substantially as set forth. 3rd. In a steam engine, the cylinder having exterior recessed sides, opposite side bearing openings, and an interior annular steam chest, a disc piston wobbling within said steam chest and having opposite shaft extremities swinging in a circle within said bearing openings, opposite cup bearing plates having inner flanged ends clamped to the opposite exterior recessed sides of the cylinder, and outer bearing collars, drive shafts mounted within said bearing collars and carrying at their inner ends inside of the plates shaft heads provided at one side with bearing notches or openings loosely receiving the piston shaft ends, substantially as set forth. 4th. In a steam engine, the cylinder having an interior annular steam chest, the disc piston wobbling in said steam chest and having shaft extremities moving in a circle in the opposite sides of the cylinder, cup bearings clamped to opposite sides of the cylinder over the piston shaft extremities, drive shafts journaled in said cup bearings and having at their inner ends shaft heads, bearing boxes adjustably mounted in one edge of said heads and provided with rounded inclined bearing notches or openings adapted to receive the piston shaft ends, substantially as set forth. 5th. In a steam engine, the cylinder having an interior annular steam chest and opposite recessed outer sides, flanged cup bearing plates removably clamped to the recessed outer side of the cylinder, and having outer bearing collars provided with ball bearings, the wobbling piston rolling in said steam chest and having shaft extremities moving in a circle inside of said cup bearing plates, the short drive shafts journaled in the bearing collars of said plates and having at their inner ends shaft heads provided in one edge with squared slots and bearing

boxes adjustably mounted in said squared slots of the shaft heads and provided with rounded inclined bearing notches or openings loosely receiving the piston shaft ends, substantially as set forth. 6th. In a rotary steam engine, the combination of the cylinder having inner straight side walls disposed in parallel vertical planes to each other, and a wobbling or gyrating piston rolling within the cylinder and consisting of a central ball, and an integral disc or flange peripherally surrounding the ball, said disc or flange being tapered and having its opposite bevelled sides converging toward the periphery of the disc or flange whereby the latter will be thickened at the point of junction therebetween and the ball, substantially as set forth.

No. 50,023. Centrifugal Separator.

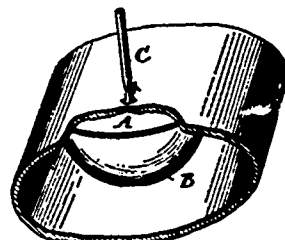
(Séparateur centrifuge.)



Francois Xavier Nadon, River Desert, Quebec, Canada, 18th September, 1895; 6 years.

Claim.—1st. In a separator, a vertical spindle suitably journaled, a pulley journaled on the said spindle, a spring pawl on the said pulley engaging ratchet teeth, a forked rod secured to the said spindle, a vessel in which the milk is to be separated suspended from a hook at the lower end of the said rod, and means for driving the said pulley, substantially as set forth. 2nd. In a milk separator the combination with the spindle G, journaled in the bearings, g and g^2 , a pulley H, journaled on the said spindle, the pawl I, and ratchet teeth h^2 , connecting the said pulley and spindle, a rod P, secured by a pin p^2 , to the said spindle and a vessel J, secured to the lower end of the said rod, of the pulley E, cord I, connecting the pulleys E, and H, the pinion c, the axle C, carrying the said pulley E, and pinion c, the spur wheel b , gearing into the said pinion c, the axle B, carrying the said spur wheel b , and the crank handles B, substantially as set forth. 3rd. In a milk separator, the combination with the vessel J, having apertures K, and L, in its side walls, the tube K^2 , on the inside reaching from the bottom and connected with the aperture K, and aperture K^4 , at the bottom of the said tube, the sliding plate k , regulating the said aperture K, the pocket I^2 , of the cylinder M, having an aperture m , formed at its lower edge, the sliding portion M^2 , the radial wall N, secured to the bottom j , by a flange n , and the bar O, passing through the upper portion of the vessel J, and the sliding portion M^2 , of the cylinder M, the said bar O, having a central perforation o , by which the said vessel is suspended and revolved, substantially as set forth. 4th. In a milk separator, the combination with the vessel J, adapted to be revolved and throw out the milk through a perforation K, near the top of the said vessel, and the cream through a perforation L, lower than the said perforation K, of the stationary disc R, having a vertical wall r , round its periphery, a wall r^2 , inside the said wall r and concentric thereto, a cover S, fitting into the wall r , and open at the top and covering the vessel J, a funnel S^2 , secured near the top of the said cover S, a spout extending from the said funnel and discharging into the vessel J, and inner cover T, fitting the wall r^2 , and having a flange t , resting on the top of the said wall, the said cover T, is open at the top and reaches above the perforation L, but not as high as the perforation K, and spouts R^2 , and R^4 , secured in the said disc, substantially as set forth.

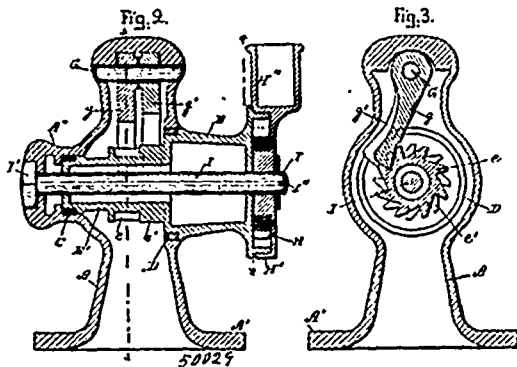
No. 50,024. Patch for Pneumatic Tires and method of applying the same. (Bandage pneumatique et méthode de les assujétir.)



Robert Johnston, Wilkesbarre, Pennsylvania, U.S.A., 20th September, 1895; 6 years.

relative rotation, a coupling have differential threads pitched in the same direction and corresponding with the threads of the two parts aforesaid, a nut for locking the coupling, and a power transmitting device carried by the coupling, substantially as set forth. 2nd. The combination with a shaft, of a tube, means uniting them separably but so that while united they turn as a single member, a power transmitting device carried by the tube and means for sustaining the tube in place when the shaft is separated therefrom, substantially as set forth. 3rd. The combination with the crank axle hanger, of a tube supported thereby and having upon its interior differential threads pitched in the same direction, a power transmitting device carried by said tube, a two-part crank shaft, said parts having differential threads engaging the threads of the tube and having also non-rotative engagement with each other, and a nut locking the tube and shaft together, substantially as set forth. 4th. The combination of a two-part shaft, said parts having non-rotative engagement with each other, and having also differential threads pitched in the same direction, a coupling having differential threads corresponding with and engaging the threads of the two-part shaft, a lock-nut engaging the coupling, a power-transmitting device carried by the coupling, journal bearings carried by the coupling and means for sustaining the coupling when the two parts of the shafts are separated therefrom, substantially as set forth.

No. 50,029. Combined Sheet Holder and Winch.
(*Porte-draps et manivelle combinés.*)



Elbridge Gerry Kelley, Peabody, Massachusetts, U.S.A., 20th September, 1895; 6 years.

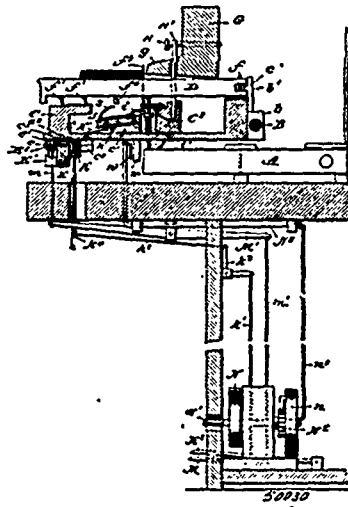
Claim.—1st. A sheet holder and winch consisting of a hollow post, a horizontal drum journaled therein and having a pair of alternately arranged ratchet-wheels and a pair of independent pivoted pawls engaging the latter, substantially as and for the purpose set forth. 2nd. A combined sheet holder and winch, consisting of a hollow post, a horizontal drum journaled therein and having a pair of alternately arranged ratchet-wheels with independent pawls engaging the same, and a pawl carrying disc journaled on the end of said drum and a ratchet ring on the interior of the latter adapted to engage with the pawl carrying disc and its pawls, substantially as and for the purpose set forth. 3rd. A combined sheet holder and winch, consisting of a hollow post having a laterally projecting arm and a drum journaled in said post and provided with alternately arranged ratchet-wheels engaging with independent pawls in the upper end of the post, substantially as and for the purpose set forth. 4th. A combined sheet holder and winch, consisting of a hollow post having a laterally projecting arm and a drum journaled in said post, and having alternately arranged ratchet-wheels and independent pawls engaging with the latter, and a pawl carrying disc loosely mounted on one end of said drum and having pawls pivoted to it for engagement with a toothed surface of said drum and a central fastening bolt for holding the said disc and drum in proper position relative to the post, substantially as and for the purpose set forth. 5th. A combined sheet holder and winch, consisting of a drum journaled in a post and having one or more ratchets and pawls and auxiliary ratchet and pawl mechanism for positively rotating said drum, substantially as and for the purpose set forth.

No. 50,030. Substituting and Transposing Keyboard for Pianos and Organs. (*Clavier pour pianos et orgues.*)

William Shephard Moses, Tracy, Minnesota, U.S.A., 20th September, 1895; 6 years.

Claim.—1st. A transposer and substitute keyboard for musical instruments, comprising a longitudinally adjustable board mounted on a fixed support and provided with keys, of means suitably supported below the transposer and adapted to be actuated by a pedal to change the inclination of the transposer, for the purpose set forth. 2nd. In a transposer for musical instruments, the combination of a frame C, the rear end of which is supported by a bar or rod B, levers pivoted to a suitable support and engaging the frame C, said levers being connected to a pedal so that the angle of the transposer can be varied, the transposer keys having pins which engage the regular

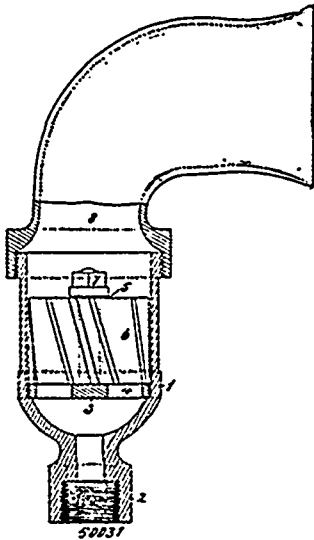
keys of the instrument, substantially as set forth. 3rd. In a transposer for musical instruments, the combination of a frame C, the



rear end of which is supported by a bar or rod B, a keyboard carried by the frame and located over the regular keys, the keys of the supplemental keyboard extending beyond the ends of the regular keyboard, levers pivoted to a suitable support and connected to a pedal so that the angle of the transposer can be varied, the supplemental keys having pins which engage with the regular keys of the instrument, substantially as set forth. 4th. In a transposer for musical instruments, the combination of a transposer mounted at its rear end upon a rod so that it can be moved longitudinally and the front portion thereof raised and lowered, an apertured plate secured to the underside of the transposer, a support beneath the front portion of the transposer having an upwardly-projecting pin which engages the apertured plate, and means for raising the transposer, substantially as set forth. 5th. In a transposer for musical instruments, the combination, of a transposer board supported so as to be tilted and then moved longitudinally, of spring-actuated means for moving the transposer board in either direction when elevated. 6th. In a transposer for musical instruments, the combination, of a transposer board supported so that its forward end may be raised vertically and the transposer then moved longitudinally, of levers for elevating the front end of the transposer, and a spring-actuated frame connected to the transposer to shift the same longitudinally when raised, and means for holding the transposer against movement when lowered, substantially as set forth. 7th. The combination, of a transposer mounted at its rear end upon a rod so that it can be moved longitudinally and the front portion raised and lowered, of a fixed support beneath the front end of the transposer and pins projecting therefrom to engage apertures in the transposer, together with levers pivoted to the fixed support and provided with means for moving them in unison, the ends of the levers which engage the transposer being provided with rollers, substantially as shown and for the purpose set forth. 8th. In a transposer for musical instruments, the combination, of a transposer board C, supported at its rear end so that it may be tilted to disengage it from its other supports and its locking means, means for automatically moving the transposer longitudinally when elevated, and pins carried by the transposer board, said pins being adapted to engage the keys of the transposer and of the instrument, and springs which abut against the transposer board and collars on the pins to exert an upward pressure on the pins and hold them out of engagement with the regular keys when the front end of the transposer board is elevated. 9th. In a transposer for musical instruments, the combination, of a transposer board having pins carried thereby and of sufficient length to engage with the keys of the transposer and with the regular keys of the instrument, an upwardly-projecting bar carried by the transposer board, said bar being positioned in front of a rigid part of the frame, said rigid part having a series of holes for the reception of a stop-pin, and means for automatically reciprocating the transposer board when raised, substantially as set forth. 10th. In a transposer, the combination, of a frame which is movable longitudinally and pivotally upon a support, said frame having keys, pins extending from said keys so as to bear upon the regular keys, the upper part of the instrument having a slot and a transposer series of perforations with which a removable pin is adapted to engage, a locking-bar carried by the transposer frame and extending through the slot in the upper part of the piano frame to engage with the pin, together with the scale or indicator plate and indicator, substantially as set forth. 11th. In combination

with a musical instrument, of a transposer pivotally supported at its rear end and laterally movable, a locking-bar attached to the transposer and extending through a slot in the frame of the instrument, a removable pin with which the locking-bar engages, said pin being adapted to engage anyone of a transverse series of perforations in the frame of the instrument, together with means for raising the forward end of the transposer frame and means for moving said frame longitudinally, substantially as set forth. 12th. In a transposer for musical instruments, the combination, of a rigid frame having a transverse series of apertures, a corresponding scale-plate carried by said rigid frame, of a movable transposer having attached thereto a scale-bar and an indicator pin, the scale-bar being in line with the apertures in the rigid frame and the indicator-pin in line with the scale-plate, a removable stop-pin adapted to engage the apertures in the rigid frame, and pins carried by a rail or bar adjacent to the front end of the transposer, said pins being adapted to engage with apertures in the transposer, for the purpose set forth. 13th. In a musical instrument having fixed supporting means for a transposer, the combination, of a transposer consisting in part of a board C, pivotally supported at its rear end upon a transverse rod attached to the rigid frame of the instrument, coupler-boards hinged within a recess in the upper side of the board C, wires pivoted on the coupler-boards and having bent ends one of which engages with depending pins extending from the transposer keys and the other with adjustable blocks carried by the keys, together with means for raising the coupler-boards in unison, substantially as set forth. 14th. The combination, of a transposer constructed substantially as shown and provided with coupler-boards each having a series of wires bent as shown to engage with the keys of the transposer and with pins interposed between the supplemental and regular keys, means for raising the forward end of the coupler-boards, said means consisting of a rock-shaft having arms which engage the coupler-boards, the rock-shaft being actuated by a pedal connected thereto by an interposed bell-crank lever and connecting rods, substantially as set forth. 15th. In a transposer for musical instruments constructed substantially as shown, the combination with a pair of coupler-boards hinged to the transposer board, of a rock-shaft pivoted at its ends to the frame of the transposer and having rearwardly-projecting arms which engage the coupler-boards for raising and lowering the same and a depending arm by which said shaft is operated, the depending arm being connected to a foot-pedal by means of an interposed bell-crank lever and connecting rods, substantially as set forth.

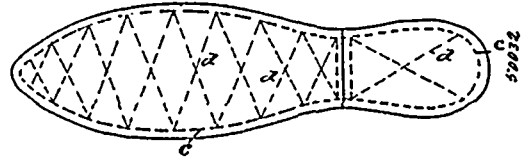
No. 50,031. Syren. (Sirène.)



Isaac Smith and William Smith, Nottingham, England, 20th September, 1895; 6 years.

Claim.—1st. A circular plate 3 containing angular slots or radial perforations, with a perpendicular shaft, stalk or spindle 5, cast on its centre, such plate being secured to a cup like vessel connected to a steam or compressed air supply. 2nd. A circular plate 3 containing angular slots or radial perforations with a perpendicular shaft 5, cast on its centre and a circular revolving boss with wings, ribs or vanes 6 cast on it and placed at reverse angles to the slots or radial perforations in the plate, as shown. 3rd. A circular plate 3, containing angular slots or radial perforations with a perpendicular spindle 5 cast on its centre, and a circular revolving boss with wings 6 cast on it placed at reverse angle to slots in the plate, and a perforated screw-threaded flanged lock nut at the top of the spindle to regulate the position of the revolving boss with vanes, substantially as described and shown.

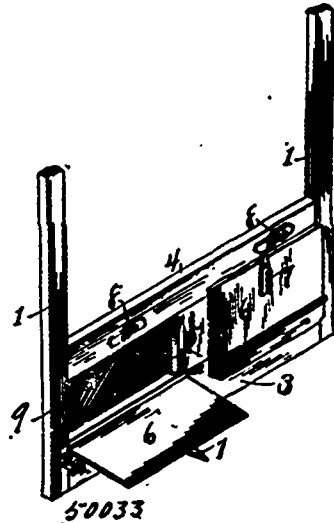
No. 50,032. Slipper or Shoe. (Pantoufles ou souliers.)



Antoine Guizard, Villeneuve-sur-Lot, France, 20th September, 1895; 6 years.

Claim.—A slipper or shoe having a felt sole, lined with an outer sole of leather, rubber, gutta-percha, cork or other similar material, secured to the felt sole by the ordinary seam along the edge and by supplementary seams, crosswise or parallel all over the surface of the sole, substantially as described and for the purpose set forth.

No. 50,033. Ventilator. (Ventilateur.)

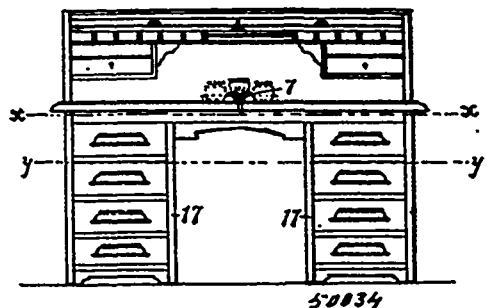


William W. Robinson, Ripon, Wisconsin, U.S.A., 20th September, 1895; 6 years.

Claim.—The combination, with a window sash provided with a horizontal rail and a vertical rail near the lower end of the hinged doors, the wire gauze screen and the hood or housing secured to the outside of the sash, open at the lower side and closed at the upper side, substantially as described.

No. 50,034. Apparatus for Locking Desks, etc.

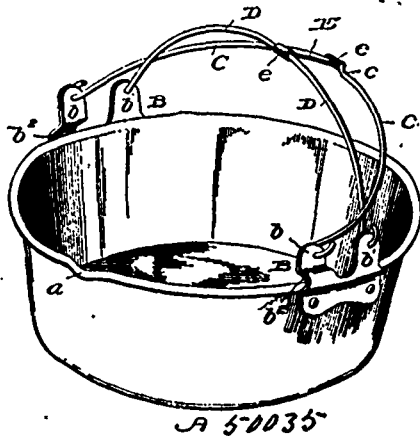
(Appareil pour fermer à clef, les pupitres, etc.)



John Wilson Yoho, Chewton, Pennsylvania, U.S.A., 20th September, 1895; 6 years.

Claim.—In a roll or other upright desk top, the combination with the drawers, of means for locking said drawers consisting of vertical locking bars provided with sets of short crank arms, said bars being half round and mounted in openings of the inner wall of the drawer casings, the crank arms and connecting link rods the laterally projecting arms, the flat disc rigidly connected to a key pin or bolt, a plate countersunk in the false top of the desk, and means for operating the key, substantially as described.

No. 50,035. Saucepan. (Casserole.)

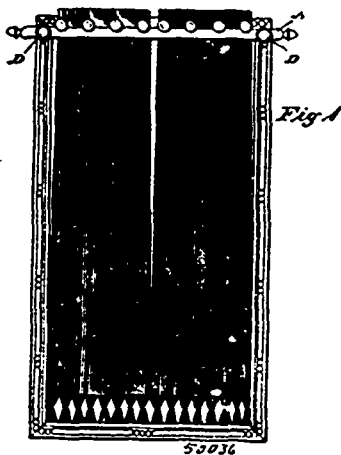


Robert Benton Vanderburg, Long Beach, California, U.S.A., 20th September, 1895; 6 years.

Claim.—1st. The combination with the vessel and its pair of operating bails, of a bar or rod pivoted positively to each bail and spacing them apart, substantially as described. 2nd. The combination with the vessel and its pair of operating bails, of different lengths, and both adapted to fold down close to one side of the vessel, of a bar or rod pivoted positively to both bails, holding them apart at their middle portions and lying close to the side of the vessel when the bails are folded together, substantially as described. 3rd. The combination with the vessel and its two operating bails of different lengths, one of said bails being cranked or offset at its middle, of the bar or rod having eyes at its ends, respectively receiving and pivoting on the said crank or offset and the middle portion of the other bail, substantially as described. 4th. The combination with the vessel, having opposite twin ears, each having a pair of apertured lugs lying at opposite sides of the centre of the vessel, the forward lugs being bulged outwardly at their lower ends to form cover-receiving grooves, and the rear lugs projecting upwardly, exterior to the plane of the vessel out of the way of the cover, and bails pivotally connected at their ends with said lugs and operatively connected at their middle portions, substantially as described. 5th. The ear having apertured twin lugs projecting upward in parallel planes, the inner lug only having an outward bulge at its lower end forming a cover-receiving groove in its inner face, substantially as described.

No. 50,036. Device for Movable Suspending Curtains.

(Appareil pour suspendre les rideaux.)

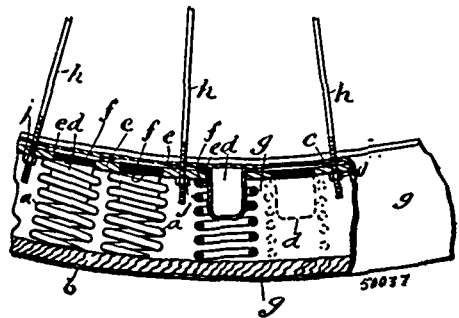


John Hitchcock, Brooklyn, New York, U.S.A., 21st September, 1895; 6 years.

Claim.—1st. A support for window curtains or similar articles consisting of a frame, comprising side bars on which are placed rollers which are united by means of a shaft or bolt said shaft or

bolt forming also a support for the curtain or other article, substantially as shown and described. 2nd. A support for curtains or similar articles, consisting of a frame comprising side bars which are united at each end, and between or on which are mounted rollers arranged in pairs which are united by a bolt or shaft, said bolt or shaft being adapted to be passed through and support the curtain or other article, substantially as shown and described. 3rd. A support for curtains or similar articles consisting of a frame comprising side bars which are united at each end, and between or on which are mounted rollers arranged in pairs which are united by a bolt or shaft, said bolt or shaft being adapted to be passed through and support the curtain or other article, the side bars of the frame being united by means of tubular bearings at each end thereof through which pass pins or bolts which are also adapted to secure the support in position substantially as shown and described. 4th. A support for a curtain or similar article, comprising a frame, consisting of side bars united at each end by means of tubular bearings through which pass pins or bolts by which the frame is suspended in position, and rollers arranged in pairs and united by shafts or bolts, said rollers being adapted to rest upon the side bars of the frame and the pins or bolts by which they are united being adapted to form a support for the curtain or other article, substantially as shown and described.

No. 50,037. Wheel. (Roue.)



Francis Joseph Freese, Lowell, Massachusetts, U.S.A., 21st September, 1895; 6 years.

Claim.—1st. A wheel tread formed of an outer continuous tire and inner continuous bearing plate, coiled springs arranged radially of the wheel axis between them, and radial tubular guides carried by said inner plate and located centrally of said springs. 2nd. A wheel tread formed of an outer continuous tire, an inner continuous bearing plate perforated and carrying tubular sections fitted in said perforations that project within the tread, coiled springs arranged between said tire and plate and fitting over said tubular section and a cover for the whole. 3rd. In a wheel tread, the combination of an outer continuous tire, an inner continuous thin bearing plate having screw threaded perforations therein, tubular sections screw threaded to take into said screw threaded perforations and adapted to project radially of the wheel axis into the space between said tire and bearing plate, coiled springs encircling said tubular sections and having their ends bearing upon both tire and bearing plate, and a cover for the whole, as set forth. 4th. In a wheel tread, the combination of an outer continuous tire *b*, an inner continuous thin metal bearing plate *c* having screw threaded perforations *c'* therein, tubular metallic sections *d* screw threaded to take into said screw threaded perforations and adapted to project radially outward of the wheel axis into the space between said tire and bearing plate, coiled springs *a* encircling said tubular metallic sections and having their ends bearing upon both tire and bearing plate, and a cover *g* for the whole, as set forth. 5th. A wheel tread formed of an outer continuous tire, an inner continuous metal bearing plate having circular sections of metal removed from the centre thereof to form openings therein, guides in the form of sections of metal tubes formed of a less thickness of metal than said bearing plate, rigidly fitted or connected to the edges of the openings in said plates, leaving the central spaces thereof open, and projecting radially outward within the tread, coiled springs arranged between said tire and plate and encircling said guide, and a cover for the whole.

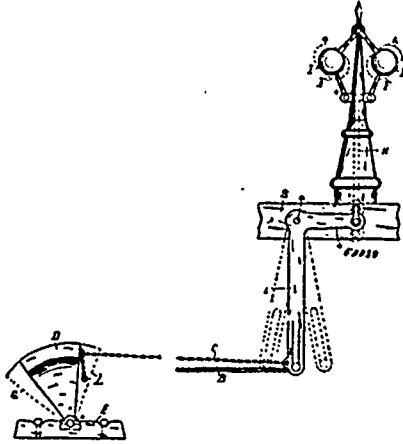
No. 50,038. Automatic Governor Regulator.

(Régulateur automatique pour gouverneurs.)

Herbert J. Page, St. Mary's, Ontario, Canada, 21st September, 1895; 6 years.

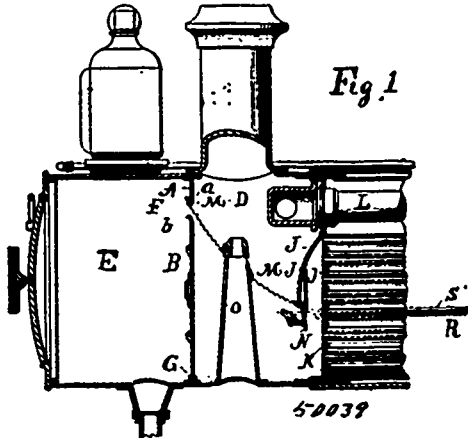
Claim.—1st. As a new article of manufacture, a governor regulator consisting of a segmental plate or bar, substantially as shown and described and for the purpose set forth. 2nd. A pivotal segmental plate or bar *D*, in combination with the flexible or yielding connection *C*, and lever *A*, substantially as shown and described and for the purpose set forth. 3rd. A pivotal segmental plate or bar *D*, in combination with the flexible or yielding connection *C*,

and the lever A, said connection C being adapted to be lengthened or shortened for the purpose of increasing or reducing the resistance



of the segmental bar or plate D, to adapt the one device to regulate different speeds, substantially as shown and described and for the purpose set forth.

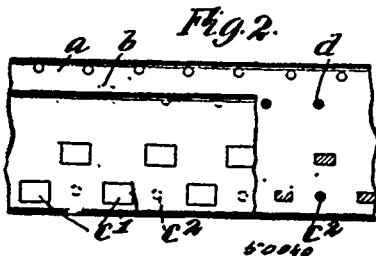
No. 50,039. Locomotive Engine. (*Machine de locomotive.*)



Earl Edwin Hanson, Freeport, Illinois, U.S.A., 21st September, 1895; 6 years.

Claim.—1st. The combination of the division plate A B C, the screen M and the baffling plate J, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the baffling plate J, the diaphragm N and the screen M, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the baffling plate J, the diaphragm N, the shaft Q, the arms q^1 , the pins q , the rocking lever S, and the rod S^1 , substantially as and for the purpose hereinbefore set forth. 4th. The combination of the baffling plate J, the diaphragm N, the shaft P, the link-arms $p p^1$, the rocking lever R and the rod R^1 , substantially as and for the purpose hereinbefore set forth. 5th. The combination of the baffling plate J, the diaphragm N, the shaft Q, the arms q^1 , the pins q , the rocking lever S, the shaft P, the link arms p, p^1 , the rocking lever R, and the rods $S^1 R^1$, substantially as and for the purpose hereinbefore set forth.

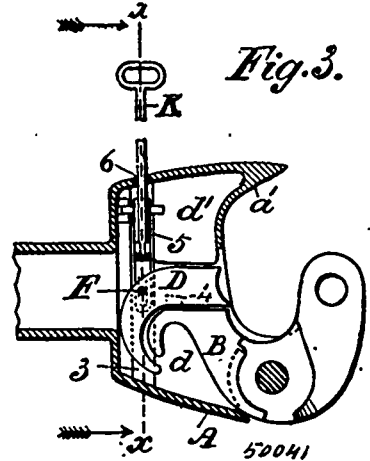
No. 50,040. Rod Packing. (*Garniture de piston.*)



James Walker, Shadwell, London, England, 21st September, 1895; 6 years.

Claim. 1st. A packing having a loose flap projected away from the body or main part, substantially as described. 2nd. A packing having a loose flap projected away from the body or main part, and a baffle space directly contiguous to the flap, substantially as described. 3rd. A packing formed of a sheet of material folded into superposed layers and having a loose flap projected away from the main or body portion, and a baffle space contiguous to said loose flap, substantially as described. 4th. A packing having a baffle space therein and arranged to communicate with the rod or other part to be packed, substantially as described. 5th. A packing having a loose flap projected away from the main or body portion and adapted to engage the rod or other part to be packed, to the exclusion of the said main or body portion, substantially as described. 6th. A packing composed of a single sheet of material folded to form superposed layers, part of which are longer than the others, so as to form a loose flap projected away from the main or body portion of the packing and also to form a baffle space directly contiguous to the flap, and rivets passing through the layers and holding them together, substantially as described. 7th. A packing having a loose flap projected away from the main or body portion, and a section of spring metal combined with the packing, substantially as described.

No. 50,041. Car-Coupler. (*Attelage de chars.*)



Michael John Grady and Richard McMillan, both of Kingston, Ontario, Canada, 21st September, 1895; 6 years.

Claim.—1st. The combination with the draw-head A, provided with an internal side recess d^1 , and having a striking lug 4, provided with an inclined plane face, the locking block or keeper D, sliding pivotally on a guide pin F, passing vertically through the draw-head, the elbow lever 5, within the draw-head and fulcrumed at the elbow to engage the end side of said block, and the pull rod K, passing through a slot in the side of the draw-head and connected to said lever, whereby the lever is located within the draw-head, and lifts the locking block, and the striking lug by its inclined face moves said keeper or locking block pivotally, and the locking block throws out the knuckle and lodges a portion of said block in said recess, as and for the purpose set forth. 2nd. The combination with the draw-head A, having a hinged knuckle B, and provided with an internal recess d^1 , at the side, and a gravitating locking block D, sliding on a vertical guide pin F, passing through the draw-head, of an elbow lever 5, fulcrumed within the cavity of the draw-head and lifting said block, and a striking lug 4, having an inclined face struck by the block when raised to move one end pivotally into said recess, as and for the purpose set forth. 3rd. The combination of the draw-head A, having at top internally a drop lug 4, provided with an inclined face, a transverse depression S, in the floor and internally a side recess d^1 , a knuckle B, hinged to the front of the draw-head, a gravitating locking block or keeper D, sliding pivotally on a vertical guide pin F, passing through the draw-head, an elbow lever 5, fulcrumed within the draw-head, and a pull rod K, passing through the side of the draw-head and connected to said lever, substantially as and for the purpose set forth.

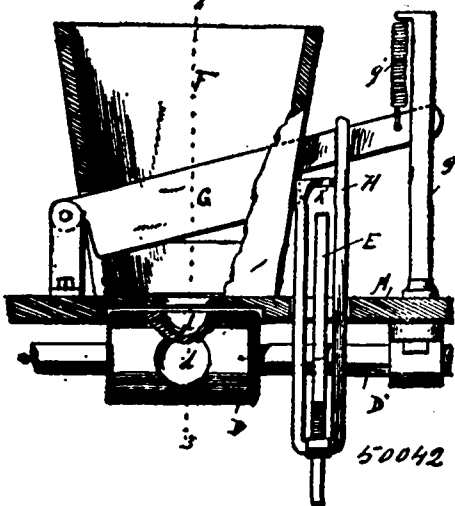
No. 50,042. Combined Potato Planter and Cultivator.

(*Semoir à patates et cultivateur combinés.*)

John M. Blake, Eldred, Pennsylvania, U.S.A., 21st September, 1895; 6 years.

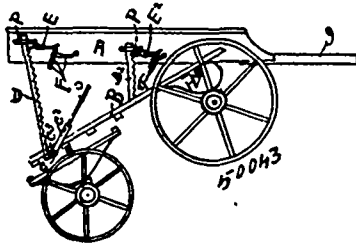
Claim.—1st. In a planter, the combination with a hopper, of a knife extending across the hopper and pivoted at one end and adapted to have a vibratory motion at its opposite end, and a cam on a power driven shaft adapted to engage with and operate the free end of the said knife, substantially as and for the purpose set forth. 2nd. In a planter, the combination with a hopper, of a cutter adapted to operate vertically, a cam, and an operating rod

connected with the said cutter at one end and having its opposite end recurved to engage with the cam, and having the recurved end



terminating in a foot rest within convenient reach of the driver's seat, substantially as set forth for the purpose described. 3rd. In a planter, the combination with a hopper a rotating feeding cylinder having cavities in its periphery, a knife working vertically in the said hopper, a spring for holding and returning the knife to an original position, a cam mounted on the same shaft with the planting cylinder, and an operating rod attached at its upper end to the said knife and having its lower end bent and extended vertically and terminating in a foot rest, substantially as set forth.

No. 50,043. Dump Wagon. (Char à bascule.)

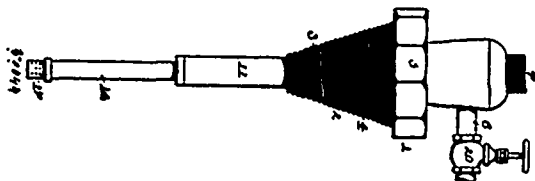


James Grierson, Toronto, Ontario, Canada, 21st September, 1895; 6 years.

Claim.—1st. In a dump wagon, the combination of the sills and bed B, and box A, with bar or axle C, and lever C², and notched pieces D, working with dogs E, and levers F, and axle H, substantially as described and shown. 2nd. In a dump wagon, the combinations of the sills and bed B, and box A, with notched pieces D², working with dogs E, and levers F², and axle H, substantially as described and shown. 3rd. In a dump wagon, the combination box A, with the coal chute I, and guides of K, and swinging gate L, substantially as set forth and shown.

No. 50,044. Device for Discharging Liquids.

(Déchargeur pour liquides)



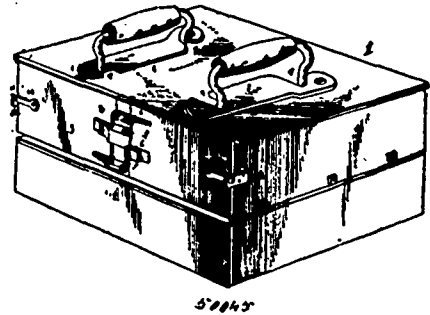
Peter Brandell, Council Bluffs, Iowa, U.S.A., 21st September, 1895; 6 years.

Claim.—A liquid discharging apparatus comprising a tapered body portion with exterior screw threads, a vertical opening through the same, said opening having an interior enlarged tapering chamber 10, a main liquid tube traversing said opening and engaging by screw threads the upper portion thereof, a compressed air inlet to said tapering chamber, a secondary liquid tube telescoped within the said main liquid tube and having fixed at its upper end a guide

ring and at its lower end a strainer device a sliding guide ring between the main liquid tube and the secondary liquid tube, and a threaded thimble retaining said secondary liquid tube within the said main liquid tube with packing for the said thimble, substantially as described.

No. 50,045. Flat Iron Heater.

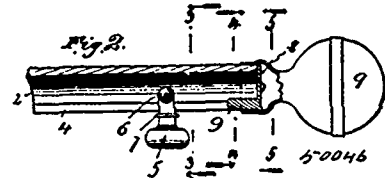
(Chasseur pour fer à repasser.)



Adeline J. Myers, Industry, Illinois, U.S.A., 21st September, 1895; 6 years.

Claim.—In a device of the class described, the combination with a heater, of a superjacent, co-extensive receptacle hinged at its rear side to the heater and provided with a closed bottom, and a flange depending below the plane of the bottom, extending around three sides, and resting upon the upper surface of the heater, and doors closing the front open side of the receptacle and terminating at their lower edges flush with the plane of the bottom of the receptacle, substantially as specified.

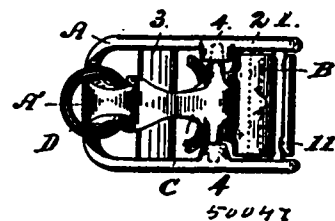
No. 50,046. Curtain Pole. (Bâton de rideau.)



Albert Phillip Waters, Jersey, New Jersey, U.S.A., 21st September, 1895; 6 years.

Claim.—1st. A tubular support or pole for curtains, having a longitudinal slot as 4, in the bottom thereof which communicates with the central bore of the pole throughout its length, in combination with a clamp or support for a curtain adapted to be suspended through said slot, consisting of a clamp 5, provided with arms or extensions united by a ball head as 6, by which the clamp is supported and suspended through said slot, the ball head being adapted to rest within the pole over said slot, said parts being constructed, combined and arranged, substantially as shown and described. 2nd. A clamp or support for curtain fixtures, consisting of two pieces as C, having extensions or arms united at one end by means of two hemispherical pieces, and a rivet or pin passed through the same forming a ball head or support as 6, said clamp or support being adapted to be suspended from a tubular pole provided with a longitudinal slot in the bottom thereof, substantially as shown and described. 3rd. In a curtain fixture, the combination with a tubular pole or support for curtains, having a longitudinal slot as 4, in the bottom thereof which communicates with the central bore of the pole throughout its length, of curtain clamps adapted to be supported through said slot, and head pieces adapted to cover the ends of the pole and provided with projections or splines adapted to enter the end of the longitudinal slot, said parts being constructed, combined and arranged substantially as shown and described.

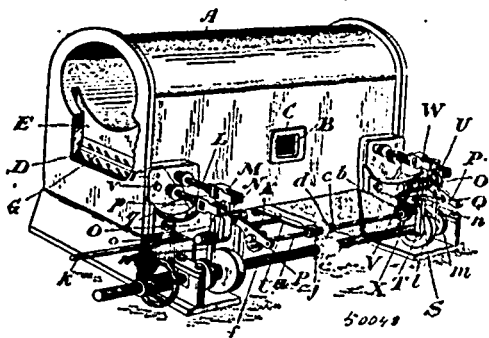
No. 50,047. Buckle. (Boucle.)



Charles Arthur Conger, San Francisco, California, U.S.A., 21st September, 1895; 6 years.

Claim.—The herein described buckle consisting of the frame A, having the cross-bars 1-2 at one end, between which the end of the strap is inserted, the bottom cross-bar 3, between the bar 2 and the opposite end of the frame, and the inwardly turned hook or beak A¹ on the top of the frame, in combination with the plate B, having the cradle-piece and the upwardly turned end fitted between the cross-bars of the frame and the lever C pivoted in the frame and having an eccentric portion extending below the pivots and resting in the cradle-piece and adapted by the pivotal movement of the lever to press the cradle-piece down between the cross-bars of the frame, substantially as hereinbefore set forth.

No. 50,048. Variable Cut-off Engine.
(Machine à détente variable.)

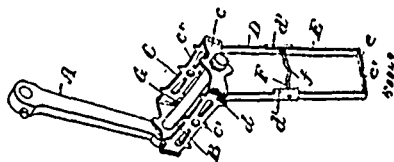


John Abell, Toronto, Ontario, Canada, 21st September, 1895; 6 years.

Claim.—1st. In a steam engine, a cylinder having a cylindrical chamber formed therein in combination with a removable cylindrical casing provided with seats for steam and exhaust valves and divided into two parts on a plane at a slight angle to the longitudinal axis of the casing so that by sliding the parts on one another, the shell may be tightened in place in the cylindrical chamber in the cylinder or loosened therein for removal, substantially as and for the purpose specified. 2nd. In a steam engine, the cylinder A, having a cylindrical chamber D, formed therein, in combination with the cylindrical casing G, divided into two parts at 1, 1, 2, 2, the plate *t*, and the set screw *u*, passing through the plate *t*, into the smaller end of one of the halves of the casing, substantially as and for the purpose specified. 3rd. In a steam engine, the cylinder A, having a cylindrical chamber D, formed therein, in combination with the cylindrical casing G, divided into two parts at 1, 1, 2, 2, the plate *t*, the set screw *u*, passing through the plate *t*, into the smaller end of one of the halves of the casing, and the set screw *v*, passing through the overlapping edge of the opposite head of the same part of the casing and bearing against the side of the cylinder, substantially as and for the purpose specified. 4th. In a steam engine, a pivoted arm N, connected with the spindle of the steam valve J, an arm P, connected to the arm N, to which arm P, a spring-weight or dash pot is connected, the notched detent Q, pivoted on the arm P, the pivoted arm T, and the lug or projection S, on the arm T, in combination with the suitably driven spindle *f*, and the cam *l*, adapted to rock the arm T, substantially as and for the purpose specified. 5th. In a steam engine, a pivoted arm N, connected with the spindle of the steam valve J, an arm P, connected to the arm N, to which arm P, a spring-weight or dash pot is connected, the notched detent Q, pivoted on the arm P, the cam projection V, connected to the said detent, the pivoted arm T, and the lug or projection S, on the arm T, in combination with the suitably driven spindle *f*, the cam *l*, adapted to rock the arm T, the spindle *a*, geared to the spindle *f*, and the disc X, on the said spindle *a*, carrying a pin W, adapted to engage with the cam projection V, and disengage the notched detent Q, from the lug S, substantially as and for the purpose specified. 6th. In a steam engine, a pivoted arm N, connected with the spindle of the steam valve J, an arm P, connected to the arm N, to which arm P, a spring-weight or dash pot is connected, the notched detent Q, pivoted on the arm P, the cam projection V, connected to the said detent, the pivoted arm T, and the lug or projection S, on the arm T, in combination with the suitably driven spindle *f*, the cam *l*, adapted to rock the arm T, the spindle *a*, geared to the spindle *f*, and the disc X, on the said spindle *a*, carrying a pin W, adapted to engage with the cam projection V, and disengage the notched detent Q, from the lug S, and means for revolving the spindle *a* by the action of the governor independent of its gear connection with the spindle *f*, substantially as and for the purpose specified. 7th. In a steam engine, the combination of the pivoted arm N, connected with the spindle of the steam valve J, the arm P, connected to the arm N, to which arm a spring weight or dash pot is connected, the notched detent Q, pivoted on the arm P, the spring U, the cam projection V connected to the said detent, the pivoted arm T, the lug or projection S, the cam *l*, the spindle *f* suitably driven, the pinion *e*, the spindle *a*, the pin W, the sleeve *c* spirally grooved at *g*, the pinion *d*, and means for imparting a longitudinal motion to the sleeve *c* by the

governor of the engine, substantially as and for the purpose specified. 8th. In a steam engine, a detent adapted to form a connection between a cam operated arm and an arm suitably connected either directly or indirectly with the spindle of the steam valve, in combination with a disc carrying a pin adapted to release the detent when the disc is rotated, and with means controlled by the governor for rotating the said shaft in either direction independent of the gearing by which it is driven from a moving part of the engine so that the pin may be made to raise the detent a little sooner or later as the case may be, substantially as and for the purpose specified. 9th. In a steam engine, a cylinder having a chamber formed therein, and a split or opening between the end of the cylinder and the chamber, in combination with a valve casing fitting the said chamber, substantially as and for the purposes specified. 10th. In a steam engine, a cylinder having a chamber formed therein, and a split or opening between the end of the cylinder and the chamber, in combination with a valve casing fitting the said chamber, lugs formed on the cylinder on opposite sides of the split and bolts through the lugs, substantially as and for the purpose specified.

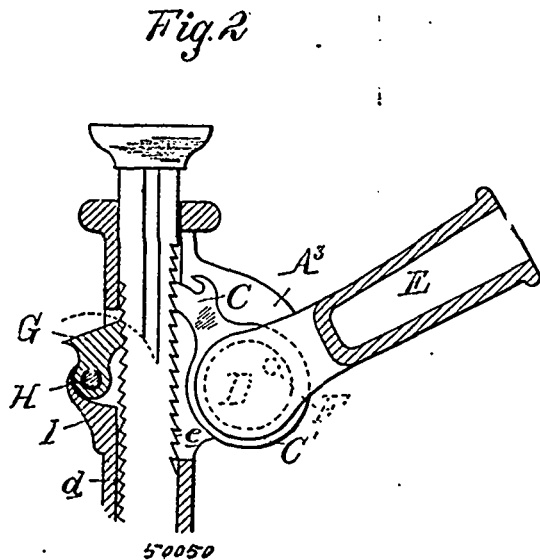
No. 50,049. Bicycle Support. (Support de bicyclette.)



Robert Stephen Selby, Toronto, Ontario, Canada, 21st September, 1895; 6 years.

Claim.—1st. In a bicycle, the combination, with a pedal of a folding support, pivoted at the outer end of the pedal and adapted to fold within the pedal and to unfold so as to form a support for the bicycle, and means for retaining it in position within the pedal, substantially as described and specified. 2nd. The combination, with the pedal C, of the folding legs D pivoted at *d*, the stops *d*¹, the folding frame E, pivoted on the free ends of the folding legs D, and the springs G, substantially as described and for the purpose specified. 3rd. The combination, with the pedal C, of the folding legs D, pivots *d*, stops *d*¹, the folding frame E, cross brace F, and spring G, substantially as described and for the purpose specified. 4th. The combination, with the pedal C, and pedal spindle B, attached to the crank arm A, of the folding legs D, pivots *d*, stops *d*¹, the folding frame E, cross piece *e*, with circular notch *e*¹, cross brace F, with bend *f*, and spring G, substantially as described and for the purpose specified.

No. 50,050. Track Jack. (Cric.)



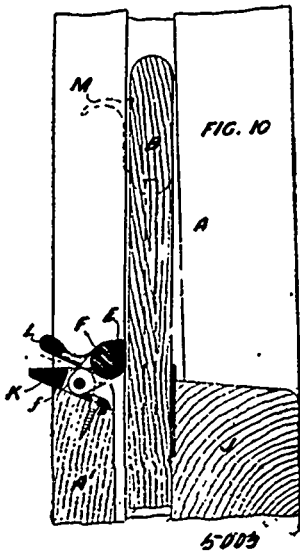
Frank Robinson, Bangor, Maine, and Arthur Norton, Boston, Massachusetts, both in the U.S.A., 23rd September, 1895; 6 years.

Claim.—1st. In a track jack, the combination, with the supporting casing, of a lifting bar provided with ratchet teeth upon front and rear, a holding pawl engaging with the ratchet teeth upon the front thereof, a tripping cam hinged thereto free to swing on the side of the casing, a lifting pawl engaging with the ratchet teeth on the rear of the lifting bar, and an operating lever actuating said lifting pawl and provided with a forward extension adapted to

engage with the tripping cam and trip the holding pawl, substantially as described. 2nd. In a track jack, the combination, with the supporting casing and the lifting bar slidably engaging therein and provided with ratchet teeth upon front and rear, a lifting pawl engaging with the ratchet teeth upon the rear of the lifting bar and provided with an eccentric strap, an operating lever, provided with a socket fulcrumed at its inner end to the rear side of the casing, and an eccentric formed upon one side of the lever socket and having the strap of the lifting pawl sleeved upon it, substantially as described. 3rd. In a track jack, the combination, with the supporting casing and its vertically slidable lifting bar, of a holding pawl engaging the lifting bar upon the front side of the casing and having a tripping cam hinged thereto which is adapted to be turned rearwardly against the side of the casing, a lifting pawl engaging the lifting bar upon the rear side of the casing, and an operating lever provided with a socket having a forked inner end fulcrumed upon rearwardly extending flanges of the sides of the casing, one of the forked ends of said socket extending forwardly on one side of the casing, and adapted to engage with and trip the holding pawl and the other being enlarged and flattened and provided upon its outer side with an eccentric bearing upon which the lifting pawl is sleeved, substantially as described. 4th. In a track jack, the combination, with the lifting bar having ratchet teeth in front and rear and provided with vertical guide flanges and a foot B¹, of the outer casing in which said lifting bar slidably engages, said outer casing consisting of the part A¹, inclosing the lifting bar upon three sides and cast integrally with a base A, forming a housing b for the foot of the lifting jack, and the part A², forming the fourth side of the casing and secured upon a foot a above the base, substantially as described. 5th. In a track jack, the combination, with the casing and the lifting bar slidably engaging therein, of the holding pawl G, pivoted in front to said casing, the ratchet teeth d, formed in the front side of the casing and having their faces cut in line with the circle struck from the centre of the holding pawl, the tripping cam L, hinged to the holding pawl, and having the inclined face L¹ as described, the ratchet teeth c, cut upon the rear side of the lifting bar, the lifting pawl C, adapted to engage therewith, and the operating lever socket E, provided with the forked ends E¹, E², one formed with an eccentric carrying the lifting pawl and the other having the extension E³, adapted to operate the tripping cam, substantially as described.

No. 50,051. Window Sash Support.

(Support de cadre de châssis.)

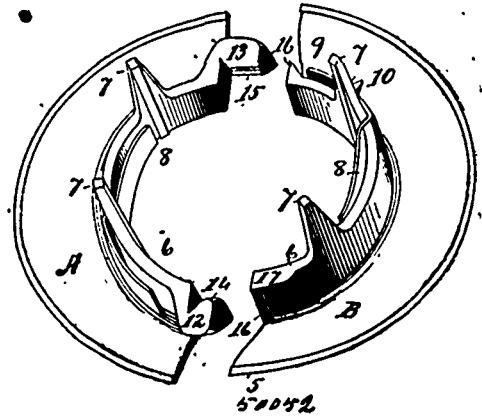


Edward Jacob Hill, London, England, and John Atkin, Montreal, Quebec, Canada, 23rd September, 1895; 6 years.

Claim.—1st. The herein described support for sash windows consisting of a gripping jaw faced with india-rubber or equivalent material, pivoted to the frame or the sash and adapted to become jammed with a wedge-like gripping action between the parts, substantially as specified. 2nd. In a railway carriage or other similar sash window, the combination with the gripping jaw pivoted to the garnish rail of the frame or door carrying such window, of means for operating such jaw, as and for the purpose set forth. 3rd. The combination with sash B, of plate N secured to same and having bracket P with centre g, gripping jaw E, and holder F, having tail-piece L, and arm f, pivoted to such centre, for the purpose set forth.

No. 50,052. Floor and Ceiling Plate.

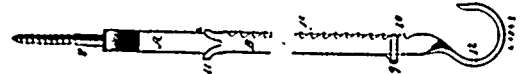
(Plaque pour planchers et plafonds.)



The Beaton & Bradley Company, assignee of Allan Joseph Beaton, both of Southington, Connecticut, U.S.A., 23rd September, 1895; 6 years.

Claim.—1st. A pipe thimble consisting of two sections joined at their abutting ends by hooked lugs and recesses with which the sections are respectively provided, one end of one of the sections having an overhanging edge or locking flange adapted to prevent disengagement of the hook and recess at that point, and the opposite end of one of the sections having a retaining spring adapted to prevent accidental disengagement of the hook and recess thereat, substantially as described and for the purpose specified. 2nd. A pipe thimble comprising two sections adapted to be connected and disconnected for application to and removal from a pipe, and having an inner flange provided with slits, and the spring arms 8 secured within said slits and extended along inside of the inner face of said flange, substantially as described and for the purpose specified.

No. 50,053. Pipe Hanger. (Support de tuyau.)

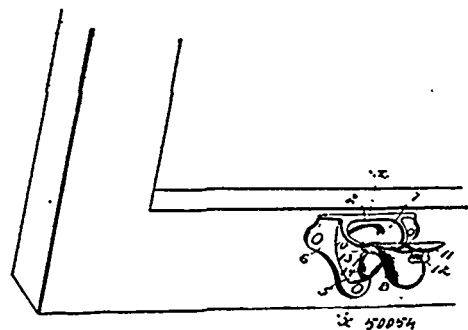


The Beaton & Bradley Company, assignee of Allan Joseph Beaton, both of Southington, Connecticut, U.S.A., 23rd September, 1895; 6 years.

Claim.—1st. A pipe hanger having means for attaching to a suitable support and two bars and loops with the body of one bar passing through the loop of the other bar and vice versa, one of said bars being toothed on one edge, said teeth being adapted for engagement with the cross or end bar of the loop of the companion bar, substantially as described and for the purpose specified. 2nd. A pipe hanger having two bars and loops interlocking each other, one of said bars having at one edge the ratchet shaped teeth with the projection 14 on the holding face of said ratchet teeth, substantially as described and for the purpose specified.

No. 50,054. Ventilator and Sash Lift.

(Ventilateur et appareil à soulever les croisées.)

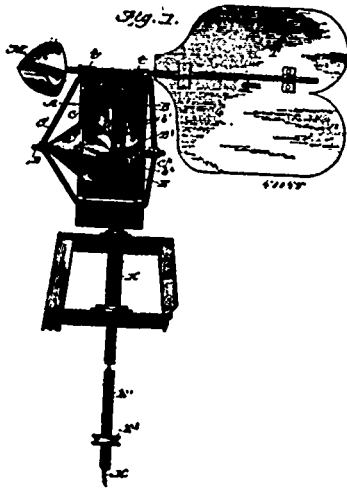


Thomas A. Blanchard, East Randolph, New York, U.S.A., 23rd September, 1895; 6 years.

Claim. The herein described combined sash lift and ventilator, consisting of an integrally formed hollow body adapted to be attached to one side of a sash rail and open at the top and one side to freely communicate with a ventilating opening in the sash rail, said

hollow body being provided with a curved finger lift projected from the front side of the top opening, and a lid or cover pivoted to the top of the hollow body in a position convenient to be raised by the thumb when the lift is grasped, substantially as set forth.

No. 50,055. Wind Wheel. (Roue à vent.)



Ninian Holmes Dolsen, Hessel, Michigan, U.S.A., 23rd September, 1895; 6 years.

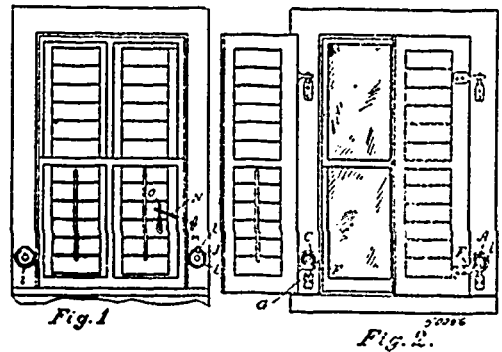
Claim.—1st. A wind wheel, consisting of an impact wheel with longitudinal wings or flanges to oppose the transverse movement of the air, in combination with a cylindrical enclosing case, and a series of deflector blades arranged in front of the impact wheel to deliver the air full upon the impact wheel, substantially as and for the purpose described. 2nd. A compound wind wheel consisting of two reversely rotating wheel arranged immediately adjacent to each other and geared together by three bevel gears, and a cylindrical rim or casing enclosing both wheels circumferentially for retaining the air against centrifugal action and compelling the front wheel to direct its discharged air currents full into the main or impact wheel, substantially as and for the purpose described. 3rd. The combination of the two reversely rotating wheels arranged side by side and geared together, and an enclosing cylindrical case having a hinged section to give access to the wheels, substantially as and for the purpose described. 4th. The combination of the two reversely rotating wheels having central drum housings, and enclosing cylindrical case, and bevel gears connecting the two wheels and located within the drum housings, substantially as and for the purpose described. 5th. The combination of the two reversely rotating wheels having sleeves with bevel gears, a stationary axis, a vertically adjustable tube with horizontal bevel gear adapted to be brought into or out of mesh with the bevel gears of the wheels, and an eccentric upon one of the sleeves of said wheels with connecting rod running down the adjustable tube, substantially as and for the purpose described. 6th. The combination of the two reversely rotating wheels having sleeves with bevel gears, a stationary axis, a vertically adjustable tube with horizontal bevel gear adapted to be brought into or out of mesh with the bevel gears of the wheels, an eccentric upon one of the sleeves with connecting rod running down the adjustable tube, and a locking device for locking the front wheel when the bevel gears are disconnected, substantially as and for the purpose described. 7th. The combination, with a wind wheel having a circumferential or enclosing case, of a horizontal rock shaft mounted in bearings on said case parallel to the axis of the wheel, and having at the front end a screw propeller and at the rear end a guiding tail, substantially as and for the purpose described. 8th. The combination of the two reversely rotating wheels having sleeves with bevel gears, and a yoke-shaped supporting frame composed of two separated wrought metal sheets fastened together and having anti-friction rollers between them for the sleeves, and means for retaining the sleeves in the yoke-shaped frames, substantially as and for the purpose described.

No. 50,056. Venetian Blind Opener. (Appareil à ouvrir les stores.)

Jeremie Lessard, Cohoes, New York, U.S.A., 23rd September, 1895; 6 years.

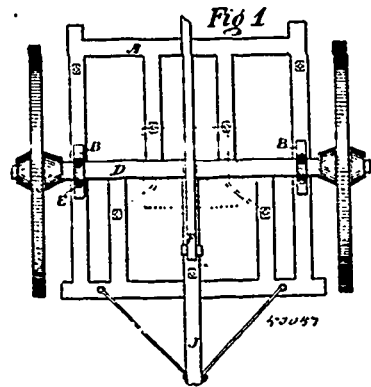
Claim.—1st. The sleeve B, having the flange H, and raised edge I, the spindle A journalled in said sleeve, and having the hand wheel J, with its spring K, and the mitre gear wheel C secured on the spindle A, and meshing into a mitre gear formed on the eye piece F of the hinge, as shown and described. 2nd. The combina-

tion, with a venetian window blind, of a slat opener consisting of a bent lever fulcrummed in the window jamb, and arranged to engage



in a loop o, fixed to one of the slats of the blind, in the manner herein shown and described. 3rd. The arrangement and combination of the several parts of the herein described blind opening, and slat turning devices, substantially as shown and described.

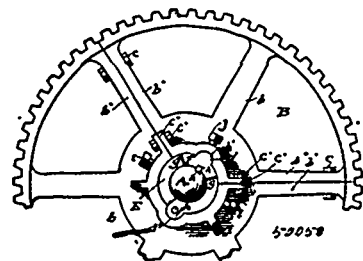
No. 50,057. Cultivator. (Cultivateur.)



David Dick, Winnipeg, Manitoba, Canada, 23rd September, 1895; 6 years.

Claim.—1st. The combination of the shears H, attached to legs C, in the position as shown in drawings with the framing A, all substantially set forth. 2nd. The combination of the lever F, with the framing A, sliding vertically in standards B, attached to the axle D, as hereinbefore set forth.

No. 50,058. Means for Fastening Wheels to Shafts. (Moyen d'assujétir les roues aux arbres de couche.)

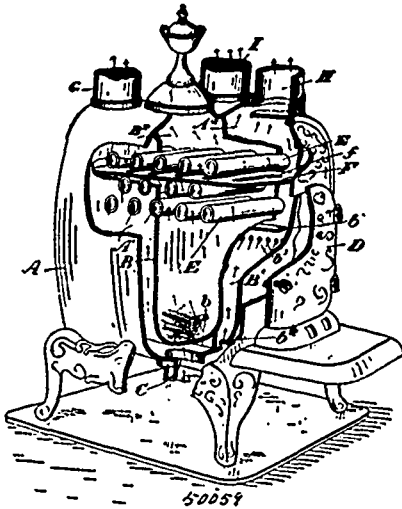


John C. Fiester and Jacob S. Ammon, both of Reading, Pennsylvania, U.S.A., 23rd September, 1895; 6 years.

Claim.—1st. The combination with a shaft and a wheel-hub of an articulated sleeve between the shaft and wheel-hub and interlocked with the latter, a key also interlocked with the wheel-hub, and means for clamping the sleeve and key upon the shaft, substantially as and for the purposes described. 2nd. The combination with a shaft, of a wheel-hub, a divided sectional sleeve having its members articulated together and interlocked with the wheel-hub, a key fitted between the ends of said sleeve and also interlocked with the wheel-hub, and clamping devices carried by the wheel-hub and bearing upon the sleeve and hub, substantially as and for the purposes described. 3rd. The combination with a shaft, and a wheel-hub, of the concentric

sleeve and key interposed between the hub and shaft and independently interlocked with the hub and clamped upon the shaft, substantially as and for the purposes described. 4th. The combination with a shaft, of a wheel-hub having the grooves or channels within the same, a sectional sleeve having its members pivoted together and forming a tongue which fits in one of the grooves or channels of the hub, a key concentric with the sleeve between the ends of which it is fitted and provided with a tongue occupying the other groove or channel of the hub, and the clamping screws fitted in said hub and bearing upon the sleeve and key, substantially as and for the purposes described. 5th. The combination with a shaft, of a divided hub and wheel having the members detachably clamped together, a divided articulated sleeve partially encompassing said shaft and interlocked with one section of the hub, a key fitted between the ends of the sleeve and interlocked with the other section of said hub independently of the sleeve, and clamping devices carried by the hub and bearing upon the sleeve and key, substantially as and for the purposes described. 6th. The combination with a shaft, of a divided wheel-hub and wheel having the members separably clamped together, the concentric sleeve and key interposed between the hub and shaft and independently interlocked with the hub on lines which break joints with the lines of division of the hub and wheel, and the clamping device carried by the hub and bearing upon the sleeve and key, substantially as and for the purposes described.

No. 50,059. Stove. (Poêle.)

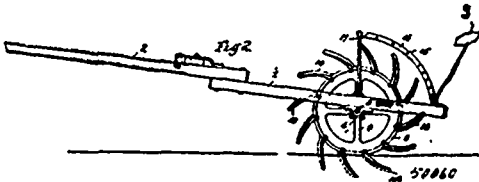


Edward Gurney, Toronto, Ontario, Canada, 23rd September, 1895; 6 years.

Claim.—1st. The combination with a stove provided with double walls and intake chamber, of tapered tubes leading from such chamber to a separate chamber on the opposite side which is provided with outlet pipes, as and for the purpose specified. 2nd. The combination with a stove provided with double walls, an intake chamber and tubes leading across from such chamber to a separate chamber on the opposite side which is provided with outlet pipes, of a diaphragm extending from front to back of stove and side to side of the inner wall beneath a portion of the hot air tubes and provided with openings *f*, arranged and formed as shown and for the purpose specified.

No. 50,060. Agricultural Implement.

(Instrument aratoire.)

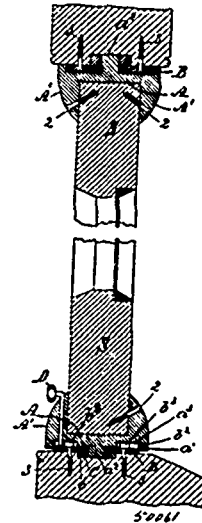


Roswell H. Morgan, Chicago, Illinois, U.S.A., 23rd September, 1895; 6 years.

Claim.—1st. An implement for the purpose described, having in combination a series of blades adapted to enter the earth, and means for causing such series of blades to revolve in an upright plane, substantially as set forth. 2nd. An implement for the purpose described, having in combination a plurality of series of shovels or blades adapted to enter the earth, and said series being arranged at a slight distance apart and in an upright position, and means for

revolving said series, substantially as set forth. 3rd. An implement for the purpose described, having in combination a drum or rim adapted to roll along the ground, and a series of blades or shovels projecting from the periphery thereof and adapted to enter the ground, and means for propelling said drum or rim, substantially as set forth. 4th. An implement for the purpose described, having in combination a series of drums or rims arranged at a slight distance apart and adapted to roll along the ground, and a series of blades or shovels secured to the periphery of each of said drums or rims and adapted to enter the ground, substantially as set forth. 5th. An implement for the purpose described, having in combination a circular series of curved blades or shovels adapted to roll along and enter the ground, and means for rolling said series, substantially as set forth. 6th. An implement for the purpose described, having in combination a series of shovels curved from end to end and inclined transversely and adapted to enter the ground, and means for rolling said series along the ground, substantially as set forth. 7th. An implement for the purpose described, having in combination a plurality of series of shovels adapted to revolve in an upright plane, and an axle or shaft on which the said series of shovels are mounted, the shovels in one series being arranged in advance of the shovels in the next whereby the shovels in contiguous series will enter the ground one after the other, substantially as set forth. 8th. An implement for the purpose described, having in combination a draft frame, a shaft mounted across said frame, a series of drums or rims secured rigidly to said shaft and a series of transversely inclining shovels secured to each of said drums or rims, substantially as set forth. 9th. An implement for the purpose described, having in combination a drum or rim provided with perforated oblique seats in its periphery, and shovels having threaded stems passing through said perforations and fitting in said seats and means for rolling said drum or rim along the ground, substantially as set forth. 10th. An implement for the purpose described, having in combination a series of blades or shovels adapted to enter the ground and being arranged in a vertical plane, an axle or shaft around which said shovels revolve, and wheels of greater diameter than the arc described by the points of said shovels, removably secured on the ends of said axle, substantially as set forth. 11th. An implement for the purpose described, having in combination a roller or sheave adapted to rest upon and roll along the ground, and a number of blades planted in the periphery thereof and being curved on substantially the same arc as the periphery of said roller or sheave, the concave side of the descending blades being presented downwardly whereby the point of the blades will strike the ground first and the blade will enter the ground endwise and the subsoil will be raised as the blade leaves the ground, substantially as set forth.

No. 50,061. Sash Pivot. (Pivot de châssis.)



William Hodgson, Ottawa, Ontario, Canada, 25th September, 1895; 6 years.

Claim.—1st. The combination of the circular plate *A*, having cheeks *A*¹, *A*², circumferential rim or wall *a*¹, and central pin *a*², forming an annular channel *a*³, and the circular disc *B* fitting into said channel, and having a central hole *B*¹ receiving said pin, and preferably thickened around said hole, exteriorly, said plate and disc having holes to fasten the same to the sash and window frame respectively, by screws, as set forth. 2nd. The combination of the circular plate *A*, having cheeks *A*¹, *A*², circumferential wall or rim *a*¹, and central pin or pivot *a*², forming an annular channel *a*³, and provided with a sliding bolt *D*, and preferably a collar *C* surrounding said pin, and the circular disc *B* fitting into said channel *a*³, and having a notched rim *b*², *b*³ engaged by the end of said bolt,

said disc having a central hole B¹ receiving said pin, and preferably thickened around said hole, said plates and disc having holes to fasten the same respectively to the sash and frame, as set forth. 3rd. The combination with a window frame and sash, of the check plates A, having a central pivot a² and attached to the sash, and the circular discs B, having a hole to receive said pivot and fitting into a recess a³ in said plates, one of said plates provided with a locking bolt D, and one of said discs with a notched rim b², b³, to be engaged by the end of the bolt, as set forth.

No. 50,062. Lasting Machine. (Machine à enformer.)

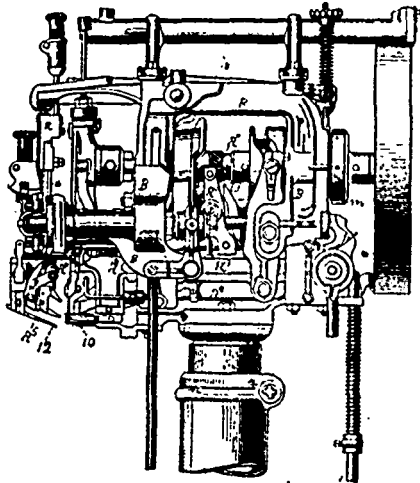


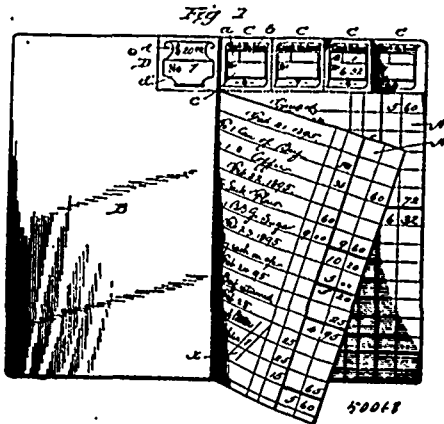
Fig 1 50062

Sherman W. Ladd, Somerville, Massachusetts, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. In a lasting machine, in combination, upper working devices for working the upper over the last, a cutter blade supported to permit an independent movement with relation to the upper working devices for cutting or slitting the edge of the upper and mechanically operated, driving connections for actuating the cutter blade in the operations of cutting the upper, said driving connections having independent movement with relation to the upper working devices, for moving the cutter blade in time relations independently thereof, substantially as described. 2nd. In a lasting machine, in combination, upper working devices for working the upper over the last, a cutter blade arranged for independent movement with relation to the upper working devices for cutting or slitting the edges of the upper, and mechanically operated driving connections for actuating the cutter blade in the operations of cutting the upper, said driving connections operating by described or equivalent means, to move the cutter blade intermittently, substantially as described. 3rd. In a lasting-machine, in combination, upper-working devices, actuating mechanism for moving said devices in working the upper over the last and plaiting or crimping the upper at times, a cutter blade arranged for an independent movement with relation to the upper-working devices, for cutting or slitting the edge of the upper, and mechanically-operated driving connections, for actuating the cutter blade in the operations of cutting the upper, the mechanisms being timed for completing the operations of the cutter blade before the operations of the upper-working devices for plaiting the upper, whereby is allowed opportunity for superimposing the marginal edges of the slitted upper, one upon the other, by the upper-working devices completing the operation of plaiting the upper over the last, substantially as described. 4th. In a lasting-machine, in combination, upper-working devices for working the upper over the last, a cutter blade, movable independently of the upper-working devices, for cutting or slitting the edge of the upper, a movable driver, and means to move the driver and repeat the movements thereof automatically, connections between the driver and cutter blade, actuated by the driver to move the cutter blade in the operations of cutting the upper, substantially as described. 5th. In a lasting-machine, in combination, upper-working-devices for working the upper over the last, a cutter blade for cutting or slitting the edge of the upper, a revoluble shaft and actuating means to revolve the same, a cam on said shaft and connections between the cam and cutter blade, actuated by the cam, to move the cutter blade in the operations of cutting the upper, substantially as described. 6th. In a lasting-machine, the combination, upper working devices for working the upper over the last, a cutter blade and a cutter blade support, the support being arranged to permit an independent movement of the cutter blade, with relation to the upper working devices, for cutting and slitting the edge of the upper, and actuating mechanism to be put in working relation therewith by a movement of the cutter blade support for actuating the cutter blade in the operation

of cutting the upper, substantially as described. 7th. In a lasting-machine, in combination, upper-working devices, actuating mechanism for moving said devices in working the upper over the last and plaiting or crimping the upper at times, a cutter blade permitting independent movement with relation to the upper working devices, for cutting or slitting the edge of the upper, mechanically-operated, driving connections for actuating the cutter blade in the operations of cutting the upper, said driving connections having provision, by described or equivalent means, for repeating the operations of the cutter blade automatically, in time relation relatively to the plaiting operations of the upper-working devices, whereby the operations of the cutter blade are automatically limited to take place in conjunction with the operations of the upper-working devices, for plaiting or crimping the upper, substantially as described. 8th. In a lasting-machine, in combination, upper-working devices, actuating mechanism for moving said devices in working the upper over the last and plaiting or crimping the upper at times, a cutter blade for cutting or slitting the edge of the upper, mechanically-operated driving connections for actuating the cutter blade in the operations of cutting the upper, said driving connections having provision, by described or equivalent means, for repeating the operations of the cutter blade automatically and in time relation relatively to the plaiting operations of the upper-working devices, whereby the operations of the cutter blade are limited to take place in conjunction with the operations of the upper-working devices for plaiting or crimping the upper, and mechanism, controllable by the workman, to start and stop the plaiting operations at will, substantially as described. 9th. In a lasting-machine, in combination, upper-working devices, actuating mechanism for moving said devices in working the upper over the last and plaiting or crimping the upper at times, a cutter blade for cutting or slitting the edge of the upper, mechanically-operated driving connections for actuating the cutter blade in the operations of cutting the upper, said driving connections having provision, by described or equivalent means, for repeating the operations of the cutter blade automatically and in time-relation relatively to the plaiting operations of the upper-working devices, whereby the operations of the cutter blade are limited to take place in conjunction with the operations of the upper-working devices for plaiting or crimping the upper, and mechanism, controllable by the workman, to start and stop the plaiting operations at will, an independent mechanism to be actuated by the workman, during the continuous operation of the machine, for starting and stopping the cutting operations of the cutter blade, substantially as described. 10th. In a lasting-machine, in combination, upper-working devices for working the upper over the last, a cutter blade for cutting or slitting the edge of the upper, mechanically-operated driving connections for actuating the cutter blade in the operations of cutting the upper, and a part or section, movable by the workman during the continuous operation of the machine, to start and stop the cutting operations of the cutter blade, substantially as described. 11th. In a lasting-machine, in combination, upper-working devices for working the upper over the last, a cutter blade adapted for independent movement with relation to the upper-working devices for cutting or slitting the edge of the upper, mechanically-operated driving connections for actuating the cutter blade in operations of cutting the upper, and means to start and stop the cutting operations of the cutter blade, independently, with relation to the upper-working devices, substantially as described. 12th. In a lasting-machine, having in combination a single set of upper-working devices adapted for working a part or section only of a boot or shoe upper over the last, at one operation, actuating mechanism arranged for moving the upper-working devices in working the upper over the last and plaiting or crimping the upper at times, said mechanism having provision by described or suitable means for repeating the operations of the upper-working devices, at intervals, the lasting operation as a whole being completed by a plurality of operations of the upper-working devices applied to different parts of the upper at different times, a movable cutter blade having local relation with the upper-working devices for cutting or slitting the section of the upper engaged thereby, or closely adjacent thereto, mechanically-operated driving connections for actuating the cutter blade in the operations of cutting the upper, having provision by described or equivalent means for repeating the operations of the cutter blade automatically, and mechanism arranged to be actuated during continuous operation of the machine, for starting the operations of the cutter blade, where cutting of the upper is to be introduced and stopping the operations thereof at intervals of one or more operations of the upper-working devices, where cutting of the upper is to be omitted, substantially as described. 13th. In a lasting-machine, in combination, upper-working devices for working the upper over the last, a cutter blade for cutting or slitting the edge of the upper, mechanically-operated driving connections for actuating the cutter blade in the operations of cutting the upper, a part or section movable by the workman to start and stop the operations of the cutter blade, and shifting devices for moving the said movable part, substantially as described. 14th. In combination, with the upper-stretching devices having jaw member 16 movable, and jaw member 14 fixed, a relation to the movable jaw member of the cutter blade support a¹, supported movably in connection with the fixed jaw member and a cutter blade, said cutter blade being adapted for cutting or slitting the edge of the upper by a suitable movement of the support, substantially as described.

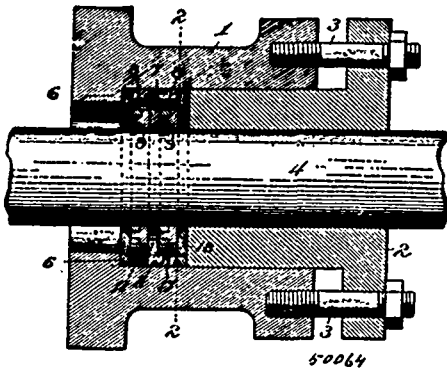
No. 50,063. Pass Book. (Livre de fournisseur.)



Uriah G. Beck and Warren F. Beck, both of Elmira, New York, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. A pass book having a series of pass leaves provided with a series of consecutively numbered coupons detachably connected to their upper ends and detachably connected with each other, said book having on the page opposite the first pass leaf in line with the coupons and beyond the edges of the pass leaves an inclosed space approximately of the same size as one of the coupons and containing suitable headings or prefixes for entries, substantially as and for the purpose described. 2nd. A pass book having a series of leaves provided with a series of detachable, consecutively numbered coupons at their upper ends, each coupon having spaces inclosed by printed lines and separated by dividing lines and having suitable headings, said book having at the top of the page, opposite the first pass leaf and in line with and adjacent to the coupons above the edges of the pass leaves, blank spaces inclosed by lines and of approximately the same size as one of the coupons and containing suitable headings or prefixes for entries, substantially as and for the purpose described.

No. 50,064. Metallic Packing. (Garniture métallique.)



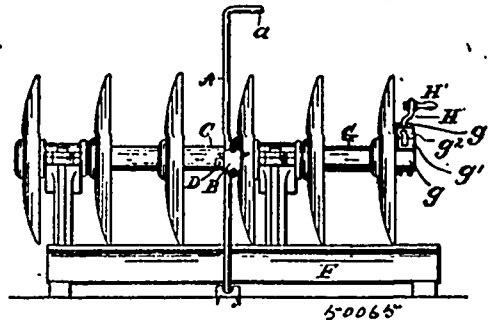
Wilson E. Symons and Thomas Smith, both of Raton, New Mexico, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. A self-adjusting metallic packing comprising an annular cross-sectionally T shaped frame having a shell 7 and an inwardly extending web 10, and adjustable packing rings less in depth than and fitting in the annular channels upon opposite sides of the web of the frame and comprising opposite relatively adjustable sections or members having straight interlocking extensions arranged parallel with tangents of the rod or stem extending through the packing, the outer surfaces of said rings being flush with the lateral edges of the shell, hand springs arranged exteriorly upon the packing-rings to hold the inner surfaces of the sections or members thereof in steam-tight contact with the surface of the rod or stem, and covering plates bearing against the said flush surfaces of the packing-rings and shell, the inner peripheries of the web and covering plates being of greater diameter than the rod or stem, whereby said rod or stem with the packing rings, which are held from movement in the direction of reciprocation of the rod or stem by the web and covering plates, are capable of radial movement, substantially as specified. 2nd. A self-adjusting metallic packing having packing rings comprising opposite similar relatively adjustable sections or members, each consisting of a segmental or arc-shaped body portion provided with terminal parallel arms of extensions of half thickness arranged parallel with tangents of the rod or stem extending through

the packing, the arms or extensions of one of said members being provided with longitudinal ribs 16a, to fit in longitudinal slots 16b, in the arms or extensions of the other member, and means for holding the sections or members in operative positions and pressing them inward to cause steam-tight contact of their inner peripheries with the surface of the rod or stem, substantially as specified.

No. 50,065. Disc-sharpener.

(Appareil à affûter les disques.)

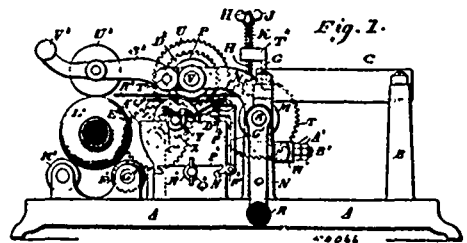


Gustave Wenzelmann, Missal, Illinois, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. A disc sharpening apparatus including among its members, a grinding standard having a device for engaging the ground at its lower end and a handle at its upper end, a transversely supported knife intermediate said ends, extending on one side of the standard and a block of abrading material extending on the other side of said standard, substantially as described. 2nd. A disc sharpening apparatus including among its members, a grinding standard, a transversely supported knife, a block of abrading material, a clip having parts for engaging the said standard, knife and block and bolts for clamping said clip, adjustably, upon the standard, knife and block, substantially as described. 3rd. A disc sharpening apparatus including among its members, a grinding standard, a knife, a block of abrading material, a clip having recesses for engaging said standard and recesses extending transversely of said standard for receiving said knife and block and clamping bolts and nuts for clamping said clip adjustably upon the standard, knife and block, whereby said knife and block may be adjusted transversely of said standard and said clip may be adjusted with said knife and block longitudinally of said standard, substantially as described. 4th. A disc sharpening apparatus including among its members, a grinding standard, a knife and block of grinding material adjustably secured to said standard, and a fulcrum provided with penetrating points and a socket for receiving one end of said standard, substantially as described.

No. 50,066. Apparatus for Labelling Bottles.

(Machine à numéroter les bouteilles.)



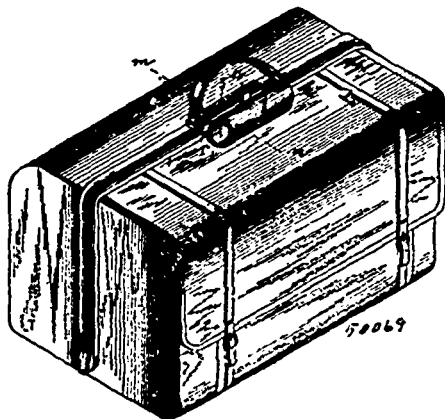
George Rehfuss, John George Rehfuss, and Martin Oscar Rehfuss, all of Philadelphia, Pennsylvania, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. In a labelling machine, the bed A with the standards B and N thereon, the label-holder C supported on said standards, the feed roll M journaled in said standards N, the paste-cup A', the arms W loosely mounted on the journal S of the feed roll, the shaft V journaled in the arms W, and carrying a gear wheel meshing with a gear wheel on the journal S, the paste roll Z suitably mounted and having on its shaft a gear wheel meshing with the gear wheel on the shaft V, said parts being combined, substantially as described. 2nd. In a labelling machine, a holder, a feed roll having a gear wheel on its journal, a paste cup, a paste roll dipping in said paste cup, the arms W loosely mounted on the journal of said feed roll and having extensions with a connecting cross-bar, a shaft journaled in said arms and carrying a roll thereon, meshing gearing

of the money drawer, substantially as and for the purpose set forth. 4th. In a cash register, the rocking key-disk 15, having a projection 26, in combination with the bar 25 for engaging said projection, the rock-bar 27, having an arm for disengaging the bar 25, the lever 30 for operating said rock-bar and projecting into the path of the money-drawer. 5th. In a cash register, the rocking keys, and the gate carried thereby, in combination with a spring-pushed pawl for locking said gate, a rocking bar engaged by said keys and operating the drawer-releasing mechanism, and mechanism actuated by said bar for releasing said pawl. 6th. In a cash register, the tablet rods provided with the arms 67, and pivoted fingers in combination with the rocking keys having projections for engaging said fingers, and devices for sustaining said tablets when elevated by the keys. 7th. In a cash register, the rocking keys D slotted as described, in combination with the gate having a bar passing through said slots, the shaft supporting said keys and gate, the gear 36 on said shaft, and secured to said gate and the spring-actuated returning gear 35, meshing with gear 36. 8th. In a cash register, the rocking pin-plate 40, in combination with the rocking keys, the gate actuated thereby, a projection on said gate engaging said plate and disengaged when the gate is moved by the action of a key. 9th. In a cash register, a spring-pushed money-drawer, a releasing mechanism therefor, the rocking pin-plate for operating said mechanism, the rocking keys for actuating said plate and devices for locking the plate until engaged by a key, substantially as described.

No. 50,069. Holder for Umbrellas, etc.

(Porte-parapluie, etc.)



August Henry Albershardt, Crawfordsville, Indiana, U.S.A., 25th September, 1895; 6 years.

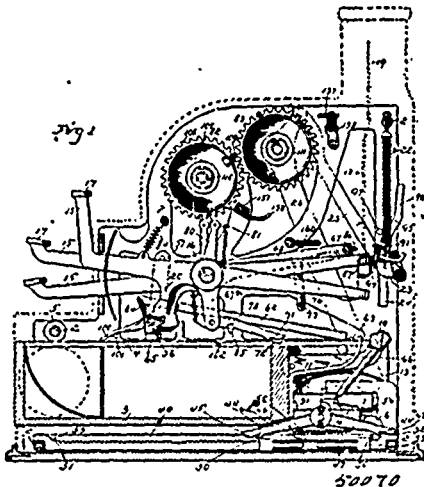
Claim.—1st. A resilient metallic holder, adapted to be fixed to the frame of a valise, satchel or grip for the purpose of carrying an umbrella, parasol, cane or similar articles, the same comprising a cylinder or roll portion rolled or bent cylindrically about one and a half times from the outer side and a fastener portion bent at right angles to the body of the cylinder or roll portion and provided with an intervening slot and an inward projecting flange for the purpose of catching over the frame of the valise, satchel or grip, substantially as specified. 2nd. A resilient metallic holder, adapted to be fixed to or removed from the frame of a valise, satchel or grip for the purpose of carrying an umbrella, parasol, cane or like article, the same comprising a cylinder or roll portion provided with a leather or pliable tug whereby the roll is drawn open for the reception or removal of the umbrella, parasol, cane or similar article, and a fastener portion provided with an intervening slot, an inward projecting flange, and a rectangular slot adapted to receive the lock on the frame of the valise, satchel or grip whereby the holder is prevented from sliding longitudinally on the frame, substantially as specified.

No. 50,070. Cash Register. (Registre de monnaie.)

The Victor Cash Register Company, assignee of William G. Latemer, both of Detroit, Michigan, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. In a key operated cash register, a cash drawer having a lock to hold it open, a spring acting to close it, connecting mechanism with the keys for releasing the lock when any key is operated, and a lock applied to the keys by the closing drawer. 2nd. The universal bar 56, and its co-operating parts, acting as a lock for the operated and unoperated keys. 3rd. The mechanism for returning the keys in opening the drawer, comprising the bar 62, the lug 63, on the drawer, the universal bar 67, bell crank levers having long arm 68, and short arms 67a, dogs 70 engaging a notch in the bar, and the pin 85, the parts combined and operating as described. 4th. The mechanism for compelling the complete operation of a key or keys, comprising the universal bar 56, the lever 100, fulcrumed on

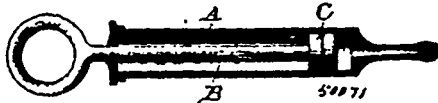
the pin 101, and the notch 102 on the cash drawer. 5th. The mechanism for permitting the successive partial operation of a series of



keys, and for completing the movement of all such keys upon the complete depression of any one key, consisting of the check pawls 91, supported on a common cross bar, and means for raising said bar on the complete operation of any key. 6th. The construction of the register wheels of the circular toothed disc 103, having a circular series of apertures, the numbered rim made of a sheet metal strip having teeth 108 integral therewith adapted to pass through the apertures in the disc and bent down on the outer face. 7th. The means for assembling the register wheels frictionally on the register shaft, comprising the washers slidingly feathered on the shaft on each side of the wheels, the spacing sleeves, and the spring at one end for clamping the wheels frictionally between the washers. 8th. The mechanism for releasing the tension of the clamping spring on the register shafts, laterally shifting the register wheels of the two series differentially, the combs and the mechanism for turning the register shafts to reset the register wheels to zero. 9th. The construction of the noiseless double pawl, comprising the pawls 41, 42, the friction plate sliding over the rack bar having the lips 50 at the end of the rack bar for the plate.

No. 50,071. Syringe. (Seringue.)

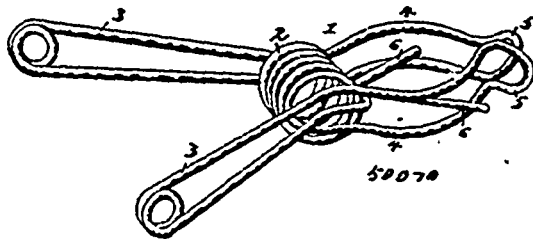
Fig. 1.



The Butler Hard Rubber Company, New York, assignee of Isaac Q. Gurnee, Butler, New Jersey, all in the U.S.A., 25th September, 1895; 6 years.

Claim. A piston rod having a central metal core and a hard rubber casing or exterior vulcanized thereon.

No. 50,072. Wire Clip. (Serre pour fils de fer.)



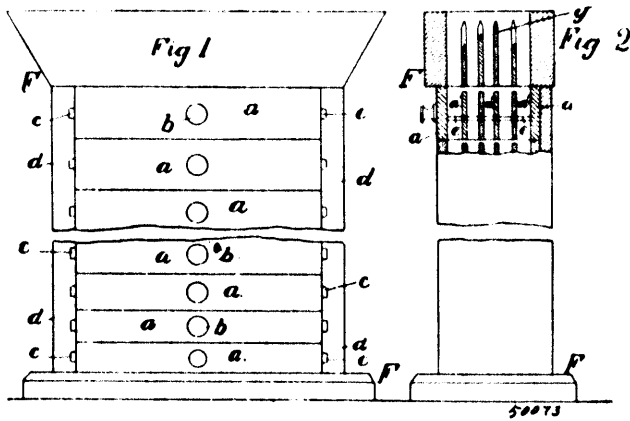
Charles Melvin Hilleker and William Hilleker, both of Chateaugay, New York, U.S.A., 25th September, 1895; 6 years.

Claim. 1st. A clip or clasp constructed of wire and comprising a central coil, a pair of converging jaw-loops, forwardly-extending handle-loops connected to the jaw-loops and adapted to spread the same, and the yielding modified diverging extensions or arms located centrally of the jaw-loops and extending forward from the coil, substantially as described. 2nd. A clip or clasp constructed of a single

piece of wire and consisting of a central coil, the forwardly-converging U-shaped loops forming jaws and having their outer terminals flared, the handle-loops forming continuations of the jaw-loops and diverging, and the forwardly-diverging extensions formed by containing the wire of one side of each handle-loop around the front of the coil and extending outward and diverging and providing yielding engaging-arms, substantially as described,

No. 50,073. Coin Sorting Apparatus.

(Appareil à assortir la monnaie.)



Henry Howard Hanmer, Liverpool, England, 25th September, 1895; 6 years.

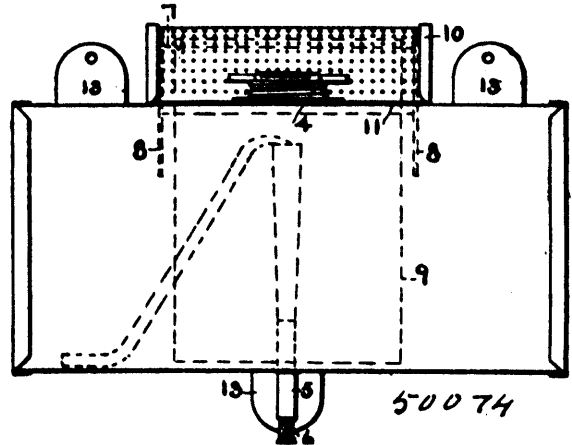
Claim.—1st. Coin sorting apparatus comprising vertical partitions disposed closely together, and of a depth relatively great to the distance apart of said partitions, and forming relatively narrow and deep passages, by which coins introduced into the said passages between the said partitions are maintained in a vertical or substantially vertical position, and stops in said passages at the lower part thereof, spaced apart at a distance less than the coin or coins it is desired to catch and hold, and greater than those it is desired should pass through them, substantially as described. 2nd. Coin sorting apparatus comprising vertical partitions disposed closely together, and of a depth relatively great to the distance apart of said partitions, and forming relatively narrow and deep passages, by which the coins which are introduced into the said passages between said partitions are maintained in a vertical or substantially vertical position, and stops in said passages at the lower part thereof, spaced apart at a distance less than the coin or coins it is desired to catch and hold, and greater than those it is desired should pass through them, and having at the upper part forming the mouth of the machine, partitions with their uppermost edges at varying levels, by which coins introduced into them assume a more or less upright position and automatically enter the spaces between them, said spaces being coincident with those of the sorting partition beneath the same, substantially as described. 3rd. Coin sorting apparatus, comprising vertical partitions disposed closely together, and of a depth relatively great to the distance apart of said partitions, and forming relatively narrow and deep passages, by which the coins are introduced into the said passages between said partitions are maintained in a vertical or substantially vertical position, and movable stops in said passages adapted to be moved so as to make the spaces between them greater in sorting coins, and so to separate and sort coins of different sizes, successively, substantially as described. 4th. Coin sorting apparatus, consisting of vertical walls, an open mouth or inlet at the top at which the coins are introduced into the apparatus, a plurality of sliding trays therein, disposed one below another, and having partitions disposed closely together, and of a depth relatively great to the distance apart of said partitions, and forming relatively narrow deep passages by which the coins which pass into said passages between said partitions are maintained in a vertical or substantially vertical position, and stops in said passages at the lower parts thereof spaced apart in the successive trays, from the uppermost, at diminishing distances, and adapted to catch and hold in the successive trays coins of smaller diameters, substantially as described.

No. 50,074. Disinfecter. (Désinfecteur.)

Robert S. West, Cleveland, Ohio, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. The combination in a disinfecter, of a receptacle having a tube therein opening above and below the bottom, and a fibrous wick in said tube, substantially as and for the purpose set forth. 2nd. The combination in a disinfecter, of a receptacle having an opening in the top, a roll secured to said top, and a fibrous band supported by said roll and extending through said opening, substantially as and for the purpose set forth. 3rd. The combination in a disinfecter, of a receptacle having an opening in the top, a roll

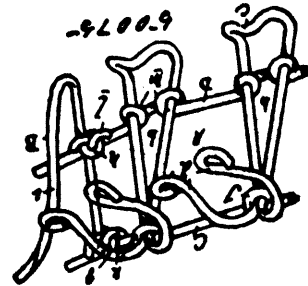
secured to said top, a fibrous band supported by said roll and extending through said opening, and a perforated hood over said roll and opening, substantially as and for the purpose set forth. 4th. The combination in a disinfecter, of a receptacle having an opening in



the top, a roll secured to said top, a fibrous band supported by said roll and extending through said opening, a tube in said receptacle extending above and below the bottom of the same, and a fibrous wick in said tube, substantially as and for the purpose set forth. 5th. The combination in a disinfecter, of a receptacle having an opening in the top, a roll secured to said top, a fibrous band supported by said roll and extending through said opening, a perforated hood over said roll and opening, a tube in said receptacle extending above and below the bottom of the same, and a fibrous wick in said tube, substantially as and for the purpose set forth.

No. 50,075. Cartridge and Game Belt.

(Cartouchière et gibecière.)



Joseph R. Randle, Columbus, Mississippi, U.S.A., 25th September, 1895; 6 years.

Claim.—1st. A cartridge and game belt comprising a series of cartridge holders formed from wire, a series of game suspending hooks also formed from wire and having eyes as *g*, *h*, an upper wire link having eyes at intermediate points in its length to embrace the cartridge holders and also having eyes at its ends to engage the eyes *g* of the hooks, and a lower wire link engaging the cartridge holders and having eyes at its ends to engage the eyes *h* of the hooks, substantially as specified. 2nd. A cartridge and game belt comprising a series of cartridge holders respectively formed from a single piece of wire bent into hoop form and having an angular bracket branch at its lower end, a series of game suspending hooks respectively formed from a single piece of wire bent upon itself, and having eyes as *g*, *h*, an upper wire link having eyes at intermediate points in its length to embrace the cartridge holders and also having eyes at its ends to engage the eyes *g* of the hooks, and a lower wire link engaging the cartridge holders, and having eyes at its ends to engage the eyes *h* of the hooks, substantially as specified.

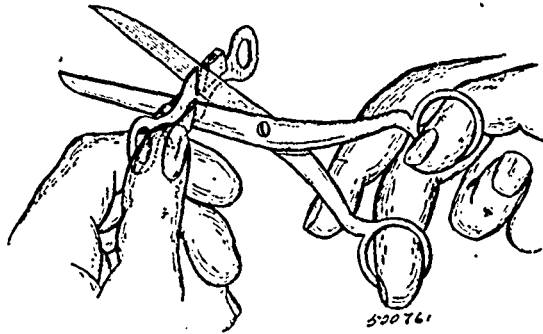
No. 50,076. Scissor Sharpener.

(Appareil à affûter les ciseaux.)

George R. Ford, Chicago, Illinois, U.S.A., 26th September, 1895; 6 years.

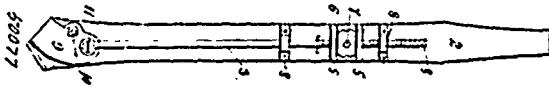
Claim.—1st. In a device for sharpening scissors or shears, the combination of a plate having inclined projections, a swaging rod of steel or other suitable material, elastic guides, one on either side of the swaging steel adapted to press the blades of the scissors in contact with the projections from the plate, substantially as and for the purpose described. 2nd. In a scissor sharpener, the combination of a metallic plate having projections adapted to trim or swage the

sides of the scissor blades, a hardened swaging rod or bolt, elastic guides, one on either side for the purpose of pressing the scissor



blades in contact with the swaging projection, and metallic supports within the elastic guides in order to give stability to such guides, substantially as and for the purpose described.

No. 50,077. Adjustable Bit. (Mors ajustable.)



Axel Theodore Pearson, New York, State of New York, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. A bit adapted to be connected with a brace or stock and having secured thereto a rimming device, consisting of a rod longitudinally adjustable thereon and connected at one end with a rimmer, substantially as shown and described. 2nd. A bit adapted to be connected with a brace or stock, and having connected therewith a rimming device, consisting of a rod secured thereto and longitudinally adjustable thereon, and a rimmer pivotally connected with the bit near its cutting end and also pivotally connected with said rod, the construction and arrangement being such that the rimmer may be drawn back by the rod when the bit will operate independently thereof and gradually worked forward and operated in connection with the bit, substantially as shown and described. 3rd. The combination, with a bit adapted to be connected with a brace or stock, of a rimming device consisting of a rod and a rimmer or cutter, said rod being connected with said bit by means of a bolt extending therethrough and provided with clamps or jaws through which the rod passes, said rod being also screw-threaded and having mounted thereon between said jaws a screw-threaded nut, and said rod being also passed through guides or supports connected with the bit at each side of said clamps or jaws, and a rimmer or cutter pivotally connected with the bit near the cutting end thereof and also pivotally connected with said rod, the construction and arrangement being such that the rod may be drawn back and allow the bit to work independently of the rimmer or forced forward and the rimmer be operated, substantially as shown and described. 4th. The combination, with a bit, of a support provided with clamps or jaws connected therewith, a screw-threaded rod passing through said clamps or jaws and having mounted thereon an adjusting nut, guides or supports at each side of said jaws connected with said bit through which the rod is also passed, a rimming device pivotally connected with the bit near the cutting end thereof and being pivotally connected at one end with said rod and having a cutting edge at the other end and being curved on its outer edge or side, the construction and arrangement being such that the rimmer may be drawn back by the rod and allow the bit to work independently thereof, or gradually forced forward and operated, substantially as shown and described.

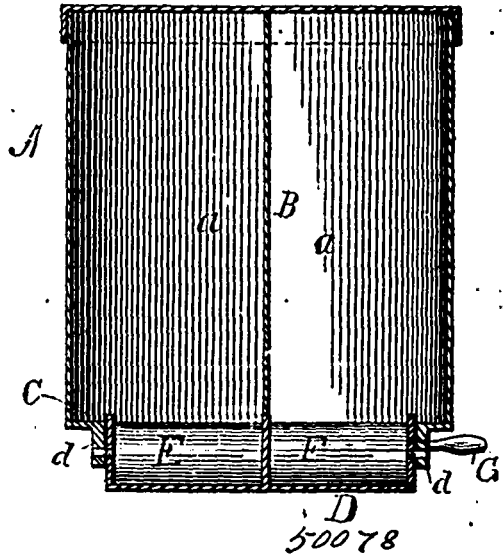
No. 50,078. Box and Measuring Device.

(Boite et appareil à mesurer.)

Sidney F. Austin, Baltimore, Maryland, U.S.A., 26th September, 1895; 6 years.

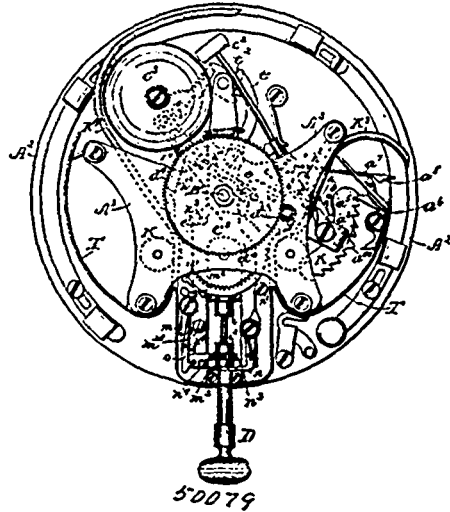
Claim.—1st. The combination with a compartment box, of a compartment measuring device, adapted to convey a definite amount of different ingredients from said box, substantially as shown and described. 2nd. The combination with a box divided into a series of compartments, and having an opening in the bottom which is also divided, of a measuring attachment arranged beneath said opening, and also divided into a series of compartments to correspond with

the compartment of the box, substantially as shown and described. 3rd. The combination with a compartment box, having an opening



in its bottom, of a rotary measuring device arranged below said opening and divided also into a series of compartments, substantially as shown and described.

No. 50,079. Fare Register and Recorder. (Registrs.)



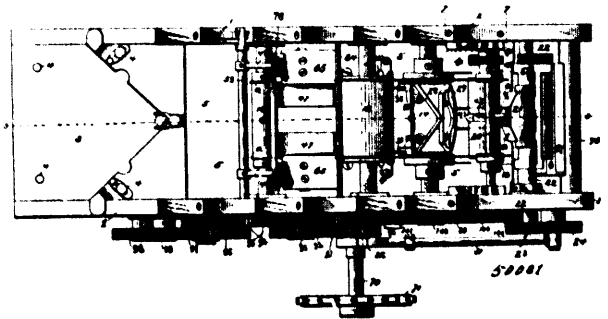
Charles Spencer Sergeant, Winchester, Louis Joseph Hirt, Boston, both in Massachusetts, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. The combination of the counting mechanism with independent supports for two independent recording surfaces, and operating mechanism whereby the indication of said counting mechanism is recorded upon said surfaces consecutively, substantially as described. 2nd. The combination of the counting mechanism and movable support therefor, with a support for a recording strip, and a door affording access for the introduction or removal of said strip, and a lock for said door, with mechanism for operating the said movable support to produce a record on said strip from the counting mechanism thereon, and means for unlocking the said door by the said recording mechanism, substantially as and for the purpose described. 3rd. The combination of the movable trip register and actuator therefor, with the counting mechanism operated by said actuator, and the movable support for the said counting mechanism, said actuator and support being constructed and arranged, as described, whereby each when in abnormal position locks the other from movement, substantially as described. 4th. The combination of the counting mechanism and movable support therefor, with actuating mechanism for moving said support normally disengaged

therefrom, and a lock for holding said parts in engagement, and means for releasing said lock near the end of the movement of said support, substantially as described. 5th. The combination of the counting mechanism and actuator therefor, with a support for a recording surface to receive a record from said counting mechanism, and a lock for said actuator controlled by said recording surface, substantially as and for the purpose described. 6th. The combination of the movable actuator and a pointer, and counting mechanism advanced at each operation thereof, with means for moving the said counting mechanism to record the indication thereof, connected with the said pointer to set the same back to zero, as described, and a clutch connecting said pointer and its actuator and disengaged by the operating mechanism by which the record is made, substantially as and for the purpose described. 7th. The combination of the trip register and counting mechanism and rotating support or barrel for said counting mechanism, provided with a recess in its periphery with the movable actuator for said trip register and counting mechanism, which enters said recess and operates said counting mechanism when the said barrel is in normal position and is at other times prevented from movement by the unrecused part of said barrel, substantially as described. 8th. The combination of the counting mechanism and a support or barrel therefor, with a key for rotating said barrel, normally disengaged therefrom, a slide connected with said key and movable to engage and disengage the same with and from the barrel, a locking pawl for holding said slide when the key and barrel are engaged, and a protection on the barrel for disengaging said pawl at or near the end of its rotation produced by said key, substantially as described. 9th. The combination of the counting mechanism and a support or barrel therefor, with a key for rotating said barrel normally disengaged therefrom, a slide connected with said key and movable to engage the same with and disengage the same from the barrel, a lock preventing said key from rotating when disengaged from the barrel, and means for releasing the same when the key and barrel are placed in engagement, substantially as described. 10th. The combination of the counting mechanism and a support or barrel therefor with a key for rotating said barrel, normally disengaged therefrom, a slide connected with said key and movable to engage the same with and disengage the same from the barrel, a locking pawl for said slide, and a projection on the barrel for disengaging the same, and a projection on the slide engaging said barrel and operating to disengage the projection thereof from said locking pawls, substantially as described.

No. 50,081. Envelope Machine.

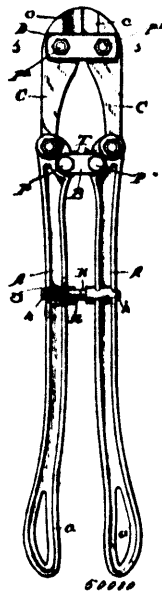
(Machine à fabriquer des enveloppes.)



Henry Buckley Cooley, John Madison Noble and James Edward Trevor, all of Hartford, Connecticut, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. An envelope machine comprising supporting frames and a table over which the blanks are fed, a set of creasing rolls for creasing the blanks along the side flaps, a reciprocating plate folding mechanism located to the rear of the said creasing rolls and operating laterally of the line of travel of the blanks to fold the side flaps, a second set of creasing rolls, on the opposite side of the folding mechanism, the upper one of which is provided with longitudinal creasing edges for creasing along the end flaps, gumming rolls arranged in the rear of the latter creasing rolls for gumming the flaps, and mechanism for folding and pressing one of the end flaps against the side flaps, substantially as described. 2nd. An envelope machine comprising supporting frames, and a table over which the blanks are fed, a set of creasing rolls for creasing the blanks along the side flaps, a folding mechanism located to the rear of the said creasing rolls adapted to fold the side flaps, a second set of creasing rolls located on the opposite side of the folding mechanism for creasing along the end flaps, gumming rolls arranged to apply gum to the front edges of the side flaps and the rear flap, mechanism for sealing the front end flap to the gummed side flaps, and delivery rolls through which the envelope is delivered, substantially as described. 3rd. In an envelope machine, mechanism for creasing the blank transversely and longitudinally comprising a set of transverse creasing rolls, consisting of an upper roll having circumferential creasing edges or flanges, and a lower roll provided with bands of yielding material against which the creasing flanges of the upper roll are adapted to bear, and a set of longitudinal creasing rolls consisting of an upper roll provided with longitudinal flanges or edges and a lower roll having grooves with which said flanges or edges mesh, whereby straight creases are insured without jar or shock to the mechanism, substantially as described. 4th. In an envelope machine, the combination with mechanism for creasing and folding the side flaps, and mechanism for creasing the end flaps, and the gumming rolls, adapted to gum the side flaps after they are folded and also the rear end flaps, of pressing or sealing rolls through which the blank is drawn to fold and seal the rear end flaps, and means for intermittently rotating said rolls in opposite directions, thereby subjecting the body of the blank to two pressing sections of the rolls, thus permanently attaching the end flap to the side flaps, substantially as described. 5th. In an envelope machine, the combination with a lower impression roll provided with bands of yielding material seated in circumferential grooves near each end, of an upper creasing roll provided with continuous circumferential flanges adapted to bear upon the bands of yielding material on the lower roll and crease the blank transversely as it is drawn through said rolls, whereby shock or jars to the mechanism are wholly avoided and straight creases insured, substantially as described. 6th. In a folding mechanism for envelope machines, the combination with the table over which the blank passes through the machine, of the guide plates under which the blank is passed, the laterally movable folding plates, adapted to fold the side flaps, and the guide strips, overlapping the forward edges of said folding plates and under which the said forward edges slide and mechanism for causing said folding plates to intermittently move toward and from each other, substantially as described. 7th. In an envelope machine, the combination with the creasing rolls, of the stationary plates secured to a cross bar above said rolls, a rock shaft with arms extending therefrom for supporting said cross bar, an arm projecting from one end of said rock shaft and having a set screw in its outer end normally held in yielding contact with the fixed part of the machine, whereby the pressure of said plates upon the table of the machine may be varied with the thickness of the paper passing under the plates, substantially as described. 8th. In an envelope machine, the combination with the stationary plates pivotally and yieldingly supported above the table of the machine, means for adjusting the pressure of said plates upon the table, laterally movable folding plates adapted to overlap the edges of the stationary plates, means for intermittently moving the said folding plates, and guides for directing the side flaps of the blank above the folding plate, substantially as and for the purposes set forth. 9th. In an envelope

No. 50,080. Bolt Cutter. (Coupe boulons.)



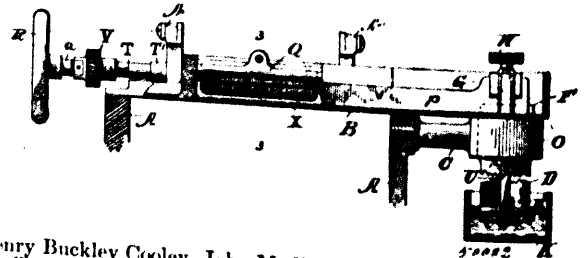
Hugh William and Stuart B. McCall, both of Freeport, Illinois, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. The combination with the suitably connected levers A, A, and blades C, C, pivoted to their ends, of the transverse bars B, D¹, lying on opposite sides of the blades near their cutting edges, the eccentrics seated adjustably in the bar D¹, and passing through the blades, and the pivots P¹, P¹, passing through the eccentrics and the bars B, D¹, and holding the parts together, whereby the blades may be adjusted at points contiguous to their cutting edges. 2nd. The combination with the suitably connected levers A, A, and the blades C, C, pivoted to the ends thereof, of the plate D¹, lying on one side of the blades and formed with recesses, E, E, the plates F, F, seated in said recesses and adjustable therein, the eccentrics, F¹, F¹, formed on the plates and passing through the blades C, C, the plate D, lying on the opposite side of the blades from the plate D¹, and the pivots, P¹, P¹, passing through the plates and eccentrics and holding the parts together.

machine, the combination with the rolls for creasing the blank transversely and the folding mechanism for folding the side flaps, of the set of rolls for longitudinally creasing said blank consisting of an upper roll having longitudinal flanges, and a lower roll having longitudinal grooves in its surface adapted to mesh the said creasing flanges in the rotation of the rolls, substantially as described. 10th. In an envelope machine, the combination with the gumming roll, of an impression roll loosely journaled upon a shaft below the same and normally held against rotation, a fixed part carried by and rotating with said shaft, and a clutch device between these two parts, with means for releasing the impression roll as the blank passes to the gumming roll thereby allowing the clutch device to lock the impression roll and fixed part together, whereby the impression roll is caused to rotate only when gum is being applied to the blank, substantially as described. 11th. In an envelope machine, the combination with the gumming roll, the flanged hubs having recesses in their inner faces and secured to the shaft journaled below the gumming roll, the impression roll rotably mounted upon the shaft between said hubs, pins within recesses within the body of the roll normally pressed toward the hubs and adapted to enter the recesses therein as the shaft rotates, a pawl for holding the roll against rotation, and means for releasing said pawl as the blank passes under the gumming roll, whereby the pins may lock the hubs and impression rolls to cause them to rotate together, substantially as described. 12th. The combination of the gumming roll of the impression roll free to turn upon its shaft having a portion of its circumference recessed, to clear the gummers, spring actuated pins within said roll, flanges hubs secured to a shaft upon which said roll is mounted, and provided with recesses in their faces into which the pins are adapted to be passed, a rock shaft having a pawl or pawls normally engaged, the front wall of the recess in the impression roll, fingers or trips extending upwardly from said rock shaft, having their ends below the line of travel of the blanks so that as the blank passes to the gumming roll, the fingers are raised, releasing the pawl and allowing the pins to lock the impression roll and hubs together, substantially as described. 13th. In an envelope machine, the combination with the gumming roll 14, of a shaft carrying flanged hubs 79, the impression roll 13, free to turn upon said shaft between the hubs, and having a recess 33, in its surface, spring pressed pins 39, adapted to enter the recesses in the flanged hubs, the rock shaft 38, journaled below the table of the machine, pawls 37, carried by said shaft and engaging the impression roll, fingers or trips 36, attached to arms 72, on the rack shaft, and having their outer ends extending slightly below the table, whereby the blank may lift the fingers as it passes under the same to release the pawls, substantially as and for the purpose set forth. 14th. In an envelope machine, the combination with the mechanism for creasing the blank and folding the side flaps, and the gumming rolls, of the feeding rolls so located as to receive the gummed blank from the gumming rolls, positively operated mechanism for engaging the bottom side of the blank and raising the advancing point of the blank, and means for checking the travel of the said point while the blank is being fed forward by the feed rolls thereby folding the front flap at the crease, and pressing rolls through which the blank passes, substantially as described. 15th. In an envelope machine, mechanism for folding and permanently attaching the gummed flaps of a blank consisting of a skeleton roll journaled above the table of the machine and bearing upon the outer edges of the blank, a roll journaled below the same, a vibrating finger or kicker upon the shaft of said lower roll in line with the advancing point of the blank, means for intermittently raising said finger to direct the point of the blank upward, a pair of pressing rolls, and a check device above the same against which the point of the blank is forced and held while the feed rolls pass the blank forward causing it to fold at the end flap and enter the pressing rolls thereby securing the end flap to the side flaps, substantially as described. 16th. In an envelope machine, the combination with the feed rolls, of the kicker mechanism consisting of the oscillating collar journaled upon the shaft of the lower roll, the finger or kicker secured to said collar across the line of travel of the point of the blank, a rock shaft pivotally connected to said collar, and means for intermittently rocking said shaft, substantially as and for the purpose set forth. 17th. In an envelope machine, the combination with the feed rolls, of a finger vibrating across the line of travel of the point of the advancing flap of the blank, means for intermittently vibrating said finger to divert the point of the flap upward, and a checking device to hold said point while the body of the blank moves under said flap, thereby folding the said flap upon the blank, substantially as and for the purpose set forth. 18th. In an envelope machine, the combination with the gumming roll journaled above the table and the impression roll below the said table, of the feed rolls for receiving the blank from the said gumming rolls, a collar loosely mounted upon the shaft of the lower feed roll, a finger over which the blank passes secured to said collar, a rock shaft below said finger, and operatively connected to the collar, a cam on the shaft of the impression roll and connections between said cam and rock shaft, for operating the latter, substantially as and for the purpose set forth. 19th. The combination with the shaft, of a collar loosely mounted on said shaft, a finger secured to said collar, a rock shaft carrying a table thereon and connected to the collar, against the upper surface of which table the said finger normally rests, with means for rocking said shaft intermittently, substantially as and for the purpose set forth. 20th. In an envelope machine, the combination with the feed rolls and kicker

mechanism, of the upper pressing roll journaled in fixed bearings, a frame journaled upon the shaft of said roll, a check box secured to said frame above the said roll, a lower roll mounted in bearings for rotating said rolls, first, in one direction and then in the opposite direction, and mechanism for oscillating intermittently the said frame about the shaft of the upper roll as an axis, substantially as described. 21st. In an envelope machine, the combination with the kicker mechanism, of the upper pressing roll journaled in fixed bearings, a frame having the check box thereon mounted upon the shaft rotating in contact with the upper roll, a cam secured to and rotating with a shaft below the table of the machine, a link operatively connecting said cam with the table of the machine, whereby the said frame may be oscillated about the shaft of the fixed roll as an axis, substantially as and for the purpose set forth. 22nd. In an envelope machine, the combination with the gumming mechanism, of the feed rolls 15 and 16, upper pressing roll 18, with the means for vibrating the same, the roll, and having the check box 21, secured thereto, the lower roll 17, journaled in the frame, means for vibrating the frame toward and away from the feed rolls to cause the flap, first, to enter the check box as it is raised by the finger, second, to fold the body of the rolls through which the said flap is drawn, and means for giving an oscillatory motion to the pressing rolls whereby the blank is first flaps and then passed downwardly, and a set of rolls below the table to receive the blank and deliver the same to the point desired, substantially as described. 23rd. In an envelope machine, the combination with the fixed roll 18, having a pinion *a*, on the outer end, a fixed roll, and receiving its motion of rotation from the latter, a frame of the machine, and means for vibrating said rack to give a motion of rotation to the said rolls, first in one direction, then in the reverse direction, substantially as and for the purpose set forth. 24th. In an envelope machine, the combination with the pressing shaft of said roll, the lower roll 17, journaled in said frame, mechanism, the quadrant 24, meshing with the pinion 23, a rotating shaft quadrant rack for vibrating the same, substantially as described.

No. 30,082. Gum Feeding Machine. (Appareil d'alimentation.)

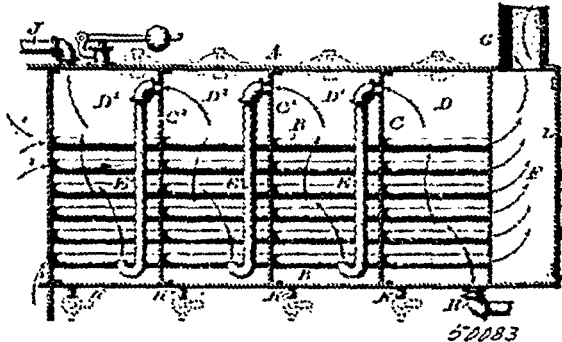


Henry Buckley Cooley, John Madison Noble and James Edward Trevor, all of Hartford, Connecticut, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. In a gum feeding device, the combination with the gum box, of a disconnected external reservoir, a well projecting having its end submerged in the bottom of the gum box and conveying gum from the reservoir to the gum in said reservoir, and means for latter also serving to return the excess gum from the box to the reservoir, substantially as described. 2nd. In a gum feeding device, the combination with the gum box, of the shaft mounted on the box, an aperture in the bottom of said box, a disconnected external reservoir into which the lower end of said conveyer is submerged, the aperture, substantially as described. 3rd. In a gum feeding device, a gum box having side walls and bottom for forming a receptacle for gum, an aperture in the bottom of said box and a dam combination around said aperture below the top of the gum box, in to said box from the reservoir, and means for carrying gum maintained in said box below the top thereof and excess gum returned from the said box to the reservoir through the same aperture which it passes to the box, substantially as described. 4th. In a gum feeding device, the combination with the gum box provided with an aperture in its bottom, a well extending downwardly from end of said well is submerged above the bottom thereof, a belt conveyer operating in said well to carry gum through said aperture to adapted to divert the gum from said conveyer into the gum box, substantially as described. 5th. In a gum feeding device, the combination with the gum box, an external reservoir, means for carrying

gum from said reservoir to the box, the feed rolls journalled in said box, the scraper for removing excess gum from said feed roll, a partition dividing the box into two channels so that excess gum may be caused to pass around said partition before it is taken up by the feed rolls, substantially as described. 6th. In a gum feeding device, the combination with the gum box, of the conveyer for carrying gum from an external reservoir to said box, and a scraper plate mounted in front of the conveyer above the bottom of said box with its scraping edge in the line of travel of the said conveyer, and means for adjusting said plate vertically at different fixed distances, from said conveyer, whereby the amount of gum directed from said conveyer by the scraper may be regulated, substantially as described. 7th. In a gum feeding device, the combination with the gum box, of a conveyer passing through the bottom of said box, and having its lower end submerged in an external reservoir, the scraper supported by the box and adapted to remove the gum from said conveyer, and consisting of a body portion and a lead projecting therefrom in the line of travel of the conveyer, and a horizontally projecting portion, with means engaging said horizontal portion for vertically adjusting the scraper, substantially as described. 8th. In a gum feeding device, the combination with the gum box having a vertical partition therein, and the conveyer, of the scraper plate mounted upon said partition in front of the conveyer, and having its scraping edge so located with respect to said conveyer as to divert the gum therefrom to the box, and the feed rolls with the plate mounted in front of the rolls to remove the excess gum and cause it to pass between the partition and the side of the box, substantially as described. 9th. The combination with the gum box having the vertical partition therein, and the cord conveyer, of the scraper consisting of the body portion *f*, from which the scraper leaf *g* projects, the horizontal extension *h*, the side strips *i*, bent downwardly to overlap the partition in the box, whereby said scraper is adjustable vertically upon said partition, substantially as and for the purpose set forth. 10th. The combination with the frame of an envelope or analogous machine, and the gum box, feed roll shaft and feed rolls journalled thereon, of the well having a journal at its upper end and extending from the bottom of said box to an external reservoir, the bracket fixed to the frame of the machine and having a journal bearing at its outer end through which the said well extends, whereby the whole feeding device may be swung out of the way of the machine, substantially as described.

No. 50,083. Steam Boiler. (Chaudière à vapeur.)



Henry Griffith Keasbey, Ambler, Pennsylvania, U.S.A., 26th September, 1895; 6 years.

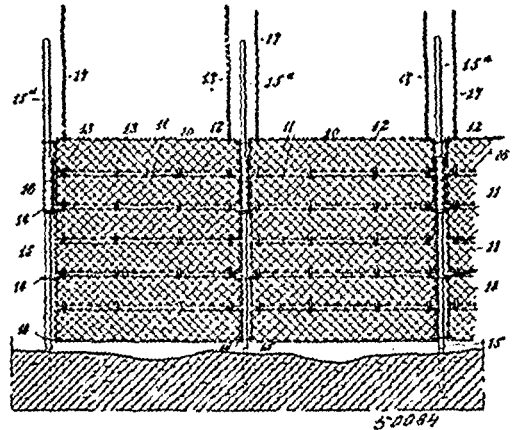
Claim.—1st. A steam boiler having partitions therein forming separate chambers, flues extending continuously in unbroken line from end to end of said boiler, through said chambers, and partitions, and pipes connecting with said chambers, exteriorly of the boiler, forming communication between the said chambers in zig zag order, the water being introduced into a chamber remote from the fire-box, and the steam chamber being over the fire-box, said parts being combined, substantially as described. 2nd. A steam boiler having partitions therein, forming separate chambers, flues extending continuously in unbroken line from end to end of said boiler through said chambers and partitions, pipes connecting with said chambers exteriorly of the boiler, forming communications between the chambers, said pipes extending alternately from bottom to top and top to bottom of said chambers, a fire box and a steam dome, said parts being combined, substantially as described. 3rd. A steam boiler provided with a fire-box, flues leading therefrom and extending continuously in unbroken line from end to end of said boiler, partitions in said boiler forming chambers, and connections between said chambers, exterior of the boiler for directing the water through the same alternately from bottom to top and top to bottom, and a steam dome located at the fire-box, and of the boiler, substantially as described.

No. 50,084. Fishing Apparatus. (Appareil de pêche.)

Peter Shedd Downie and Alfred Joseph Downie, both of Marinette, Wisconsin, U.S.A., 26th September, 1895; 6 years.

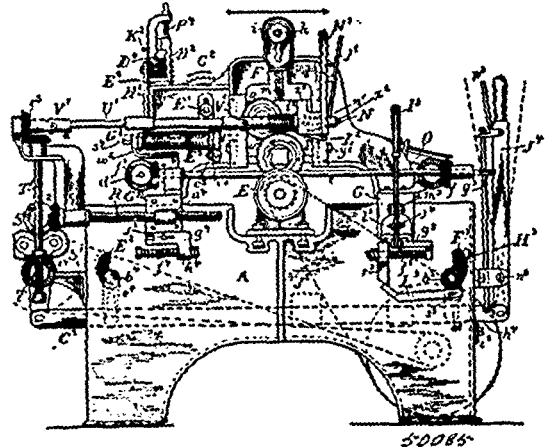
Claim.—In a fishing apparatus, the combination with a series of vertical stakes arranged in suitable proximity and relation, of a net

composed of a series of sections whose adjacent edges are loosely connected by rings, each section having a ring attached at each end,



and the rings being arranged contiguous to the upper and lower edges of adjoining sections, and engaging and adapted to slide on the stakes, and hoisting cords attached to the upper section of a series, as shown and described, whereby the net is adapted to be extended vertically and the several sections to fold flat side upon each other, as specified.

No. 50,085. Wood Working Machine. (Machine à travailler le bois.)

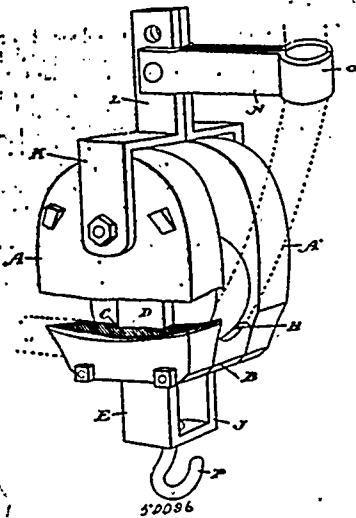


James Scott Graham and John Kane, both of Rochester, New York, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. The combination with the supporting frame and the cutter, of the reciprocating carriage provided with the wood-holders, the spring-bolt *f*, the movable spring-bolt *f*, and push-bolt *k*, the cam *E*, *F* and *H*, shifter-bar *C*, and suitable change-gears operated by the shifter-bar, substantially as described. 2nd. The combination with the supporting frame and cutter, of the reciprocating carriage, provided with the wood-holders, the movable push-bolt *k*, and arm *F*, the cam *H* and stop lever *L*, the shifter-bar and suitable change-gears adapted to be operated by the shifter-bar, substantially as described. 3rd. The combination with the supporting frame and cutter, of the reciprocating carriage, the spring-bolt *f*, the movable reversing block *g*, carrying spring-bolt *f*, and push-bolt *k*, the cams *E*, *F* and *H*, the shifter-bar and suitable change-gears, substantially as described. 4th. The combination with the reciprocating carriage of the rotatable wood-holders *J*, *J*, provided with one or more notched rings, and connected so as to revolve together, a worm-gear attached to one of the holders, a shiftable worm for operating the worm-gear, latches adapted to engage in the notches in the rings, and suitable connecting mechanism, whereby the latches are disengaged from the rings while the worm is engaged with the worm-gear, substantially as described. 5th. The combination with the carriage, of the wood-holders *J*, *J*, provided with one or more notched rings, and connected so as to revolve together, the worm gear *w* attached to one of the holders, the shiftable worm *z*, the shaft *n* carrying latches *l*, *l*, and arm *L*, the cam-lever *N* arranged to engage the worm with the worm-gear and to disengage the latches from the rings, substantially as described. 6th. The combination with the supporting frame and cutter, of the reciprocating carriage provided with the wood-holders *J*, *J*, the

worm-gear u^2 attached to one of the holders, the shiftable worm t^2 and the telescoping shaft U^1 provided with one or more universal joints, substantially as described. 7th. The combination with the reciprocating carriage, of the wood holder J provided with gear L , the pinion s , ratchet r , and lever O provided with dog l , and spring u , substantially as described. 8th. The combination with the supporting frame provided with plate i^2 , of the cutter C , the reciprocating carriage provided with the wood-holders, suitable change gearing operated by the carriage, the shifter-bar C^2 provided with notches h^1, h^2 , the hand-lever J^1 , hand-piece p^2 , and rod q^2 , substantially as described. 9th. The combination with the supporting frame and cutter, of the reciprocating carriage containing the wood-holders, the pivoted cam A^2 provided with adjustable inclined flange f^2 , the rack B^2 , and suitable connecting mechanism whereby the motion of the rack is transmitted to the wood-holders, substantially as described. 10th. The combination with the supporting frame and cutter, of the reciprocating carriage containing the wood-holders, the pivoted cams A^2, A^3 , provided with inclined flanges e^2, f^2 , the rack B^2 , suitable connecting mechanism whereby the motion of the rack is transmitted to the wood-holders, and the spring E^2 , whereby the return movement of the rack is secured, substantially as described. 11th. The combination with the supporting frame and cutter, of the reciprocating carriage, containing the wood-holders, the pivoted cams A^2, A^3 , provided with oppositely inclined flanges e^2, f^2 , the rack B^2 provided with adjustable stop D^1 , suitable connecting mechanism for transmitting the movement of the rack to the wood holders, and the spring E^2 , whereby the return movement of the rack is insured, substantially as described. 12th. The combination with the supporting frame and cutter, of the reciprocating carriage containing the wood-holders, the pivoted cams A^2, A^3 , having oppositely inclined adjustable flanges e^2, f^2 , the rack B^2 , and suitable connecting mechanism whereby the motion of the rack is transmitted to the wood-holders, substantially as described. 13th. The combination with the frame and cutter, of the reciprocating carriage containing the wood-holders, the pivoted cam A^2 , having inclined flange f^2 , the rack B^2 , stop D^1 , spring E^2 , and suitable connecting mechanism whereby the motion of the rack is transmitted to the wood-holder, substantially as described. 14th. The combination with the reciprocating carriage and cutter, of the wood-holder J, J^1 , provided with notched rings 4, 6 and 8, the shaft N , and adjustable latches t, t^1 , attached to the shaft so as to be adjusted lengthwise thereon, substantially as described. 15th. The combination with the wood-holder J , provided with notched rings 4, 6 and 8, of the latch t , arranged to be adjusted lengthwise on its support, and the correspondingly adjustable spring x , substantially as described. 16th. The combination with the supporting frame and cutter, the reciprocating carriage carrying the wood-holders J, J^1 , connected together by shaft M , and suitable gearing, the worm-gear u^2 , attached to one of the holders, the shiftable worm t^2 , the telescoping shaft U^1 , provided with one or more universal joints, the bevels r^2 , and the upright shaft T^1 , and suitable connections whereby the shaft is operated from the cutter, substantially as described.

No. 50,086. Pulley Block. (Poulie.)

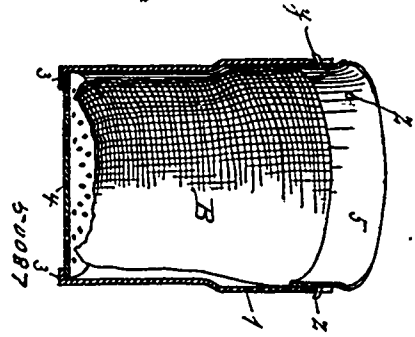


Levy L. Hölser, Ashland, Ohio, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. A pulley block comprising a casing, a sheave movable in the said casing adapted to revolve and allow of the passage of the rope during the lifting of the load and adapted to bind on the rope and lock it as soon as the load has been lifted, substantially as set forth. 2nd. A pulley block comprising a casing, a vertical slot in the inner face of each side thereof, a pin vertically movable in

said slots, a sheave mounted on said pin, a clevis connected to said pin, adapted to support the load, a bail connected to the casing, and a plunger to register with a carrier, substantially as set forth. 3rd. A pulley block comprising a casing having central vertical slots in the sides thereof, a bail to support the block, a clevis to support the sling, a pin to connect to clevis with the sheave adapted to rise and fall in the slots in the case to allow the pulley to drop on the hoisting rope to lock the rope against reverse movement, substantially as and for the purpose set forth. 4th. A pulley block comprising a casing, slots in the sides of the casing, a sheave, a clevis supporting pin adapted to slide in slots to carry the pulley up and down the casing, the arm, eye and register head when combined and operate to, substantially as and for the purpose set forth. 5th. A pulley block comprising a casing having vertical slots in the sides thereof, a bail to support the block, a clevis to support the pin sling, a pin to connect the clevis with the sheave adapted to rise and fall in the slots in the casing to allow the pulley to drop into the hoisting rope to lock the rope against reverse movement, substantially as and for the purpose set forth.

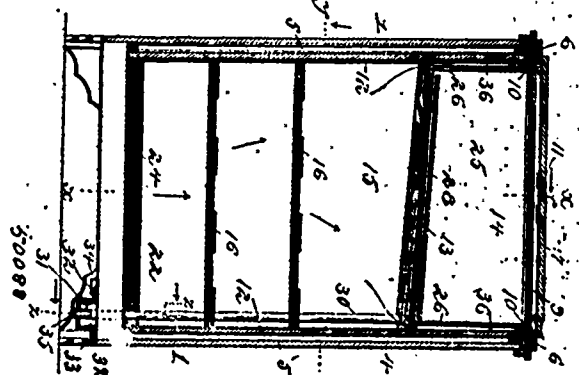
No. 50,087. Cheese Hoop. (Cerceau pour le fromage.)



Frank L. Jones, Utica, New York, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. The combination of two or more hoops, each having a removable bottom, an inwardly turned flange on its lower edge adapted to support the bottom, the lower portion of each hoop being reduced in diameter for some distance above the bottom, to enter the upper end of the next adjacent hoop when placed in a gang and a follower between the hoop, substantially as set forth. 2nd. The combination of two or more cheese hoops, each having an inwardly turned flange on its bottom and reduced for some distance above the bottom to enter each other, a removable bottom for each hoop supported on the flange and a follower having a projection on its back adapted to support the central portion of the removable bottom, substantially as set forth. 3rd. The combination of a cheese hoop having an inwardly turned flange on its bottom, a removable bottom supported thereon, a follower having a projecting portion on its back adapted to support the removable bottom and a second hoop in which the follower operates, substantially as set forth. 4th. A cheese hoop having an inwardly turned flange on its lower end, in combination with a removable bottom supported on the flange, substantially as set forth. 5th. The combination in a cheese hoop, of a bandager ring having hooked projections adapted to engage the edge of the hoop, substantially as set forth. 6th. The combination of a cheese hoop having notches in its upper edge, of a ban ager ring having hooked or headed projections adapted to engage in the notches, substantially as set forth.

No. 50,088. Refrigerator. (Réfrigérateur.)

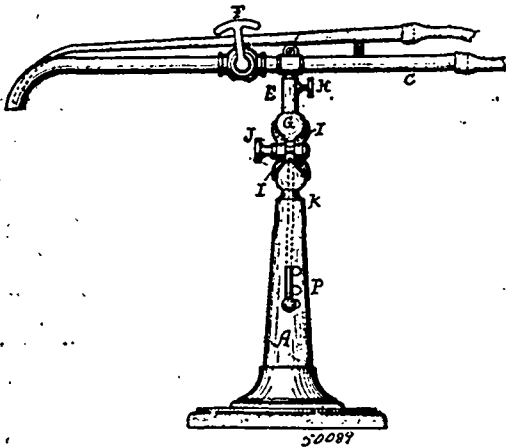


Lawson O. Read, Chattanooga, Tennessee, U.S.A., 26th September, 1895; 6 years

Claim.—1st. In a refrigerator, the casing, a longitudinally inclined inverted V-shaped partition floor-plate arranged within the casing and having side drain gutters, and bottom drain openings formed at the lower ends of said gutters, drain pipes leading downwardly from said drain openings, inner metallic side flue plates spaced from the opposite inner sides of the casing and having a seam connection at their upper edges with the side edges of said floor plate, the lower edges of said flue plates terminating short of the bottom of the casing to form inner side cold air flues communicating with the casing above and below the floor plate, warm air escape pipes arranged within opposite upper ends of the casing and communicating at their lower ends with the interior of the casing at the ends of the apex of the floor plate, and the top cover provided with an interior air circulating space, a top air escape opening, and oppositely located air circulating openings adapted to register with the upper ends of the warm air escape pipes, substantially as set forth. 2nd. In a refrigerator, the casing, a longitudinally inclined inverted V-shaped partition floor-plate arranged within the casing and narrower in width than the same, said floor-plate being provided at its opposite side edges with vertically disposed integral side seams forming longitudinal drain gutters at the side edges of the floor plate, said side seams consisting of upwardly disposed flanges and depending flanges bent downward from the upper edges of the upwardly disposed flanges, drain pipes leading from the gutters of said floor plate, inner metallic side flue plates spaced from the opposite inner sides of the casing and fitted at their upper ends in the spaces between the flanges of said side seams of the floor-plate, said flue plates terminating at their lower edges short of the bottom of the casing, the side lining plates arranged above the floor plate and provided at their lower edges with outwardly inclined drip flanges overhanging the side edges of the floor plate, and warm air escape pipes opening into the casing at the ends of the apex of the floor plate, substantially as set forth.

No. 50,089. Support for Blow Pipe.

(Support de chalumeau.)

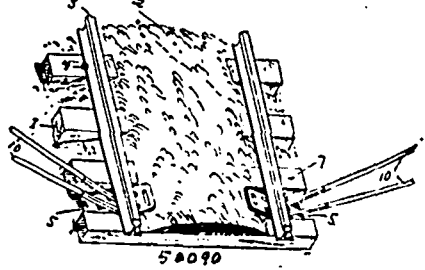


George R. Ford and David Alexander, both of Chicago, Illinois, U.S.A., 26th September, 1895; 6 years.

Claim.—1st. In combination with a blow-pipe, a standard and a ball and socket joint whereby the said blow-pipe can be adjusted to any required angle with reference to the standard, substantially as described. 2nd. In combination with a blow-pipe, a pipe for conveying gas, a clamp allowing a longitudinal adjustment of the blow-pipe, a socket and shank fitting into the socket allowing a vertical adjustment of the blow-pipe, a ball and socket joint allowing the blow-pipe and shank to be adjusted at any required angle, substantially as described. 3rd. In combination with a blow-pipe, a ball and socket joint, a standard, and a vertically moving rod, and suitable means for operating said rod for converting said standard from an adjustable one into a rigid standard, substantially as described. 4th. In combination with a blow-pipe and gas-pipe, a clamp for securing the said blow-pipe and allowing of longitudinal adjustment with reference to the clamp, a shank fitting into a socket, and suitable means for adjusting said shank vertically therein, a ball and socket joint allowing adjustment at any required angle, a clamp for operating the said ball and socket joint, a standard and a second ball and socket joint at the top of the standard allowing the double adjustment by means of all the ball and socket joints, substantially as described. 5th. The combination of a blow-pipe and the pipe furnishing the gas jet, a double ball and socket joint, a standard, and a vertically moving rod within the standard adapted to be moved from the standard into and through both of the ball and socket joints, substantially as and for the purpose described.

No. 50,090. Railway Track Liner.

(Plaque de remplissage pour lignes de rails.)

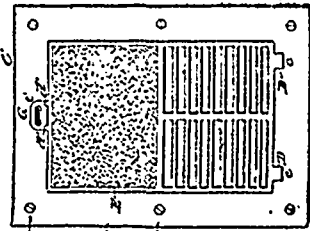


David Richardson, Indianapolis, Indiana, U.S.A., 27th September, 1895; 6 years.

Claim.—1st. In a railway track liner, comprising a bearing plate adapted to be seated between or adjacent to the ties, and having formed in or upon the general plane of its surface shoulders or bearing points adapted to receive and serve as fulcrum of an ordinary crow-bar, substantially as described. 2nd. A track liner consisting of crow-bars, and a bearing plate provided with bearing places out of line with each other laterally. 3rd. A railway track liner, comprising an ordinary independent crow-bar, and a bearing plate provided with holes to prevent the end of the crow bar from slipping, and claws formed on the under side of such bearing plate, substantially as shown and described. 4th. A railway track liner comprising a bearing plate having holes cut through it at various places, calks formed on the under surface consisting of the tongues made by cutting said holes and turning the same downward, and a crow-bar whose lower end is adapted to rest in such holes.

No. 50,091. Combined Mat and Scraper.

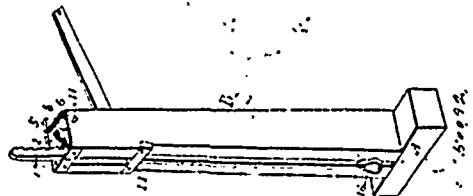
(Paillason et gratte-pieds combinés.)



John Morton Morton, Cedar Rapids, Iowa, U.S.A., 27th September, 1895; 6 years.

Claim.—1st. The combination with the floor of a railway-coach or other apartment, of the tray C, having marginal flanges and a closed bottom, and provided with supporting ledges or shoulders inside, the grate D having transverse bars *d d*, about half its length and a recess the other half to hold a mat, said grate being hinged to the tray, and provided with suitable means for holding it in normal position and for lifting one end, a mat secured in said recess, and a pan set in said tray below the grate, to catch the dirt falling through. 2nd. The combination with the floor of a railway-coach or other apartment, of the tray C, having marginal flanges *C*¹, shoulder *C*¹¹, holes *c c* and socket *c*¹, the grate D, having transverse bars *d d*, occupying about half its length, a perforated recess formed in the remainder thereof, and provided with lugs *D*¹-*D*¹ and *d*¹ *d*¹, the mat E secured in said recess, the handle G having latch *g g*¹, hinged to lugs *d*¹ *d*¹, and having a limited movement to engage and disengage with the tray, and a pan F, set in the tray below said grate, substantially as and for the purpose set forth.

No. 50,092. Log Jack. (Cric.)

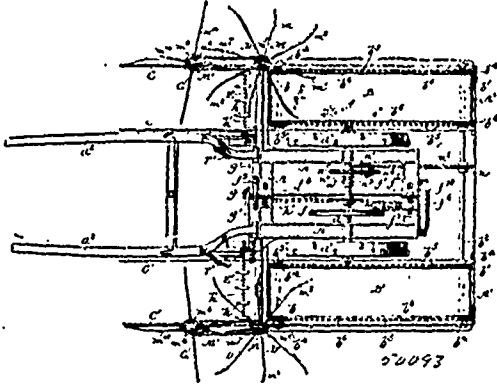


Eugene Hayford and Arthur Godfrey Hayford, Spokane, Washington, U.S.A., 27th September, 1895; 6 years.

Claim.—The combination, with the base A, and standard B, of the lifting-bar 1, provided with ratchet teeth and adapted to slide in said standard, the lever 8 hung by the hangers 10 and adapted to

engage the teeth of the lifting-bar, the engaging end of the lever and its attachments to the standard being inclosed in a bifurcated portion in the upper part of said standard, the lever extension 15, provided with a socket to engage the end of said lever, the hangers 10 and bolt 12 for supporting from the cap-plate the lever at its fulcrum, the cap-plate 2, the angular spring actuated ratchet-catch 3 pivoted to the cap-plate, the guard-plate 14 confining the lifting-bar in the standard and to the slotted plate 7, all substantially as shown and described.

No. 50,093. Corn Harvester. (Moissonneuse.)



Thomas A. Chapman, Criglerville, Edward Purcell, jr., Oliver B. Martz, both of Harrisonburg, all in Virginia, U.S.A., 27th September, 1895; 6 years.

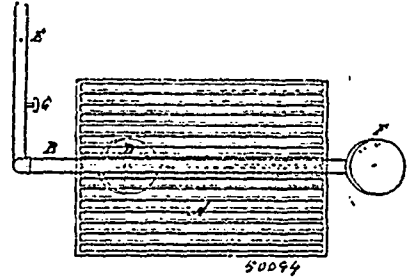
Claim.—1st. In a corn cutter and harvester, the combination of a draft frame mounted upon wheels, reciprocating cutters mounted upon each side of the same, inclined forwardly projecting frames for raising fallen stalks into an upright position to be cut by said cutters, and revoluble aprons adapted to catch and deposit the cut stalks in piles, substantially as described. 2nd. In a corn cutter and harvester, the combination of a draft frame mounted upon wheels, reciprocating cutters mounted upon each side of the same, inclined forwardly projecting frames for raising fallen stalks into an upright position to be cut by said cutters, revoluble aprons adapted to catch and deposit the cut stalks in piles, and rotary reels for raising and guiding fallen stalks and causing them to fall upon the said aprons when cut, substantially as described. 3rd. In a corn cutter and harvester, the combination of a draft frame mounted upon wheels, reciprocating cutters mounted upon each side of the same, revoluble aprons adapted to catch and deposit the cut stalks, and inclined frames upon each side of the aprons and projecting forward of the same and adapted to straighten the fallen stalks for cutting, and prevent the cut stalks from slipping sidewise from said apron, substantially as described. 4th. In a corn cutter and harvester, the combination with a draft frame mounted upon wheels, reciprocating cutters mounted upon each side of the same, inclined forwardly projecting frames for raising fallen stalks into an upright position, revoluble aprons adapted to catch the cut stalks, gearing for connecting said aprons with the moving parts of the machine, and a clutch whereby said gearing may be thrown in or out of gear at will, substantially as described. 5th. In a corn cutter and harvester, the combination with a draft frame mounted upon wheels, of reciprocating cutters mounted upon each side of the same, revoluble aprons, means for starting or stopping them at will, inclined frames upon each side of the aprons and projecting forward of the same and adapted to straighten the fallen stalks for cutting, and prevent the cut stalks from slipping sidewise from said aprons, substantially as described. 6th. In a corn cutter and harvester, the combination of a draft frame mounted upon wheels, reciprocating cutters mounted upon each side of the same, revoluble aprons adapted to catch and deposit the cut stalks, inclined frames upon each side of the aprons and projecting forward of the same, and adapted to straighten the fallen stalks, reels having arms revolving in a plane parallel with the inclined edges of said frames for raising fallen stalks, and reels having horizontal arms for holding the stalks vertical, substantially as described. 7th. In a corn cutter and harvester, the combination of a draft frame, cutters, revoluble aprons adapted to receive and deposit the cut stalks and reels for straightening fallen stalks, each consisting of a vertical shaft carrying pivoted reel arms, and a sleeve having an inclined upper edge upon which said arms rest, substantially as described.

No. 50,094. Furnace. (Fournaise.)

Cleophas Rochette, Quebec City, Que., Canada, 27th September, 1895; 6 years.

Claim.—1st. In combination with a furnace or furnaces, an exhaust steam pipe E leading from the engine, in front of one or more furnaces, pipe C having a key or stop valve G connected to the pipe E, and leading into each furnace under the front end of the fire-grate, steam scatterer or distributor D attached to the end of the

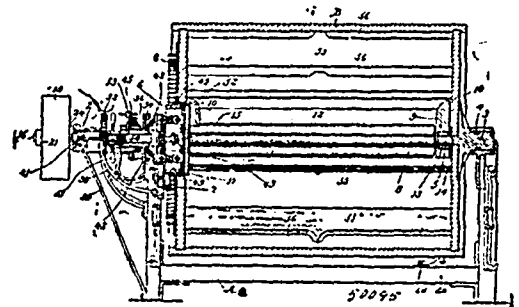
pipe C, substantially as and for the purpose hereinbefore set forth. 2nd. In combination with one or more surfaces, an exhaust steam



pipe E leading from the engine in front of one or more furnaces, pipe B having a key or stop-valve G connected to pipe E, and leading into each furnace over the fire-grate, steam distributor F attached to the end of pipe B over the fire-grate at the inner or rear end thereof, substantially as and for the purpose set forth. 3rd. In combination with one or more furnaces, an exhaust steam pipe leading from an engine to near the front of one or more furnaces, a pipe having a steam distributing nozzle at its inner end attached to said exhaust steam pipe and leading under the fire-grate, a pipe having a steam distributing nozzle at its inner end attached to said exhaust steam pipe and leading over the fire grate, and the necessary valves or stops, substantially as and for the purpose hereinbefore set forth.

No. 50,095. Churn and Butter Worker.

(Baratte et batte à beurre.)



Charles S. Brown and Frank B. Fargo, both of Lake Mills, Wisconsin, U.S.A., 27th September, 1895; 6 years.

Claim. 1st. In a churn and butter worker, the combination with a frame, of a cylindrical drum, a gudgeon fixed to one head of the drum, said gudgeon being journaled on the frame and provided with means to prevent endwise movement of the drum, a hollow or chambered annular gudgeon fixed to the other head of the drum about an aperture of considerable diameter therethrough, idle supporting wheels axled on the frame on which wheels the hollow gudgeon rests and travels, and means for securing the gudgeon on the wheels against endwise movement, substantially as described. 2nd. The combination with the revoluble drum of a churn and butter worker, of a rigid roller-carrying frame mounted revolubly in and concentrically with the axis of the drum, substantially as described. 3rd. The combination with the revoluble drum of a churn and butter worker, of a rigid roller carrying frame, comprising a plate or head at the rear end, a plate or head at the front end and parallel rigidly attached connecting bars, an arbour fixed in the head of the drum on which the roller-carrying frame is axled at one extremity, and means at the other end of the drum for correspondingly supporting the roller-carrying frame, substantially as described. 4th. The combination with the revoluble drum of a churn and butter worker, of a rigid roller-carrying frame in the drum, an arbour fixed in the head of the drum on which the frame is axled at that end, butter working rollers in the frame, a releasable partial head secured to and making a part of the frame at the other end of the drum, a spider in which the journals of the rollers extending through the releasable head are journaled, and a pin insertable through the frame and in the spider whereby the roller-carrying frame is held against revolution, substantially as described. 5th. In a churn and butter worker, the combination with a frame, and a drum having a head with a central aperture of considerable diameter therethrough, said head being provided with a hollow gudgeon or bushing about the aperture fixed therein, of a head or cover for said aperture arranged to bear releasably against the inner end of said gudgeon, a spider 42, in front of said aperture, said spider having legs adapted to bear against the outer end of the hollow gudgeon, a yoke connected flexibly to said cover, said yoke having a stem extending movably through said spider, and a nut turning on said stem against said spider whereby

the cover is clamped to the inner end of the gudgeon through push of the spider against the outer end of the gudgeon, substantially as described. 6th. In a churn and butter worker, the combination with a revoluble drum having a ring gear thereon, of a shaft having a pinion meshing with the ring gear, a band wheel loose on the shaft, a sleeve loose on the shaft, a spider on and secured adjustably to the sleeve, a collar movable endwise on the hub of the spider, clutch-heads mounted in the spider and movable radially against and from the rim of the band-wheel, links connecting the clutch-heads to the collar, means for shifting the collar, and a clutch-collar splined on the shaft adapted to be put into engagement with the sleeve on the shaft, substantially as described. 7th. The combination with a revoluble drum having a ring gear thereon, of a shaft having a pinion meshing with the ring gear, a band wheel loose on the shaft, a sleeve loose on the shaft, means for connecting the sleeve operatively with the band wheel, a counter-shaft, wheels, pinions and a clutch connecting the countershaft operatively with said sleeve and with the shaft, rollers in the drum parallel with and revoluble about the axis of the drum, a pinion splined on the countershaft capable of meshing with a wheel on the journal of one of said rollers when said roller is not revolving about the axis of the drum, substantially as described. 8th. The combination with a revoluble drum having a ring gear thereon, of a shaft having a pinion meshing with the ring gear, a band wheel loose on the shaft, a sleeve loose on the shaft, means for connecting the sleeve operatively with the band wheel, a countershaft provided with gear wheel meshing with a pinion on said sleeve, rollers in the drum parallel with and revoluble about the axis of the drum, and a gear splined on the countershaft adapted to be put in mesh with a wheel on the journal of a roller to connect the countershaft operatively with the roller when the roller is not revolving about the axis of the drum, substantially as described. 9th. The combination with a cylindrical drum, having a door-aperture, of a door closing said aperture, the hinges whereby said door is mounted on the drum, the straps of the hinges secured to the drum being elastic and so formed and disposed as at their unions to be at a distance outwardly from the drum, and means for drawing the straps nearer to the drum so as thereby to force the door more tightly into the aperture, substantially as described. 10th. In a butter worker, the combination with a revoluble case, of a series of spring actuated valves arranged annularly in the case and closing outwardly, said valves being provided with outwardly projecting stems, a rock-shaft mounted in a fixed support, and having radial arms, a plate so mounted on the radial arms on the rock shaft as by the oscillating of the rock shaft to be put in the path of the stems of the valves when the case revolves, and thereby to compel the opening of the valves while passing the plate, substantially as described.

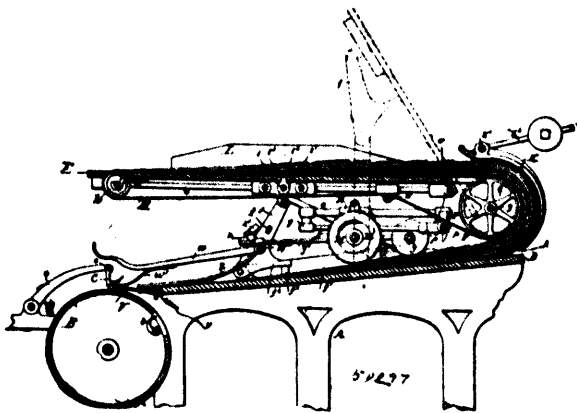
No. 50,096. Medicinal Composition. (Médicines employées pour régulariser le fonctionnement des intestins)

Henri Labelle, Montréal, Québec, Canada, 27 septembre 1895; 6 years.

Résumé.—Un médicament régularisateur du foie et des intestins et dépurateur du sang, composé d'écorce de pruche d'eau-de-vie, d'alcool et d'essence de menthe poivrée, préparée de la manière susdite et dans les proportions ci-dessus spécifiées.

No. 50,097. Paper Feeding Machine.

(Machine pour l'alimentation du papier.)

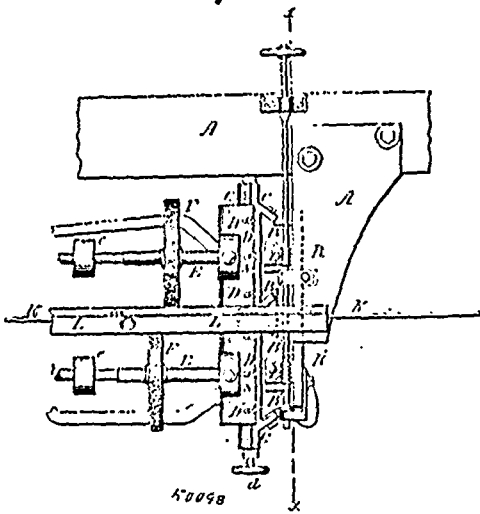


Thomas Arnold Briggs, Niagara Falls, Ontario, Canada, and William Austin Philpott, Jr., Niagara Falls, New York, U.S.A., 27th September, 1895; 6 years.

Claim.—1st. The combination with the feed table, of a comb wheel, mechanism whereby the comb wheel is rapidly rotated, feed wheels whereby the sheets are carried slowly over the feed table, a support in which the comb wheel is mounted and by which it is

caused to rest continuously on the sheets passing over the feed table, and means whereby the rotative movement of the comb wheel is stopped when the top sheet has cleared the comb wheel, thereby causing the comb wheel to rest immovably on the next lower sheets and retain the same against displacement while the top sheet is being fed off, substantially as set forth. 2nd. The combination with the feed table, of a rapidly rotating comb wheel arranged above the same, feed wheels whereby the sheets are slowly moved over the feed table, and an intermittently rotating driving mechanism whereby the comb wheel and the feed wheels are intermittently rotated, substantially as set forth. 3rd. The combination with the feed table, of comb wheels arranged above the same, a supply table arranged above the feed table and its comb wheels, feed wheels whereby the sheets are carried from the upper supply table to the lower feed table, and an intermittently rotated actuating shaft whereby the comb wheels are intermittently rotated, substantially as set forth. 4th. The combination with the feed table, of feed wheels arranged at the receiving end thereof, a supply table arranged above the feed table and pivoted adjacent to the feed wheels, and means for supporting the supply table, whereby the latter can be swung up when access is desired to parts below without disturbing the sheets on the supply table, feed wheels and feed table, substantially as set forth. 5th. The combination, with the feed table, and the pivoted supply table arranged above the same, of a brace supporting the supply table and consisting of an upper link pivoted to the supply table and provided with a stop arm and a lower link pivotally connecting the upper link with the feed table and provided with a stop lug, said stop arm being adapted to bear against said lug when the supply table is in its lower operative position or to bear against the under side of the supply table when the latter is in its elevated or inoperative position, substantially as set forth. 6th. The combination, with the upper supply table and the lower feed table, of an upper and a lower side guide capable of transverse adjustment respectively on the upper and lower tables, and arranged vertically in line and connected as to move together, substantially as set forth. 7th. The combination, with the upper supply table and the lower feed table, of an upper movable side guide adapted to rest on the upper table, a lower movable side guide resting on the lower feed table and arranged in line with the upper guide, and a telescopic connection whereby said guides are adjustably connected, substantially as set forth. 8th. The combination, with the feed table, of a comb wheel arranged above the same, a shaft from which the comb wheel is driven, a supporting rod hung concentric with said shaft and arranged lengthwise of the feed table, a support in which the comb wheel is mounted and which is made adjustable lengthwise of the feed table on said rod, and means whereby the comb wheel is driven from said shaft, substantially as set forth. 9th. The combination, with the feed table and the transverse driving shaft, of a transverse comb wheel shaft, a comb wheel and a spiral gear wheel secured thereto, a longitudinal intermediate shaft provided at its front end with a bevel gear wheel which meshes with a similar wheel on the driving shaft and at its rear end with a spiral gear wheel mounted on the longitudinal shaft so as to turn therewith, but capable of sliding thereon and meshing with the spiral gear wheel of the comb wheel shaft, a yoke connecting the driving shaft and the longitudinal shaft, a longitudinal supporting rod secured to said yoke, a hanger secured to the supporting rod and in which the rear end of the longitudinal shaft is journaled, and a sliding head provided with bearings for the comb wheel shaft and longitudinal shaft on opposite sides of each spiral gear wheel and with a clamping sleeve embracing said supporting rod, substantially as set forth. 10th. The combination, with the feed table, the vertically movable registering guides arranged in rear of the table, the feed mechanism whereby the sheets are fed from the table against said guides, and the driving mechanism, of an electro magnetic clutch whereby the driving and feed mechanisms are coupled or uncoupled, a lower and an upper contact finger arranged at the rear end of the feed table in the path of the sheet of paper and connected in circuit with said clutch, and means whereby said upper contact finger is raised with the registering guides to break the circuit, substantially as set forth. 11th. The combination, with the feed table, the vertically movable registering guides whereby the sheets are fed from the feed table to the registering guides, and the driving mechanism, of an electric clutch whereby the driving and feed mechanisms are coupled or uncoupled, a lower contact finger secured to the rear end of the feed table, an upper contact finger arranged over the lower contact finger, said fingers being in circuit with the electric clutch and adapted to come in contact with each other when the registering guides are in their lower operative position, and to be separated by the passage of a sheet between the fingers for breaking the circuit and a rock arm carrying the upper contact finger, the latter being arranged relatively with said guides so as to be held out of contact with the lower finger while said guides are elevated, substantially as set forth. 12th. The combination, with the feed table, the feed mechanism whereby the sheets are fed from the feed table and the driving mechanism, of an electric clutch whereby the driving and feed mechanism are coupled or uncoupled, a lower contact finger secured to the rear end of the feed table, a rock shaft journaled in vertically movable supports, a rock arm secured to said rock shaft and carrying the upper contact finger, and a catch whereby the rock shaft may be held against turning on its supports, substantially as set forth.

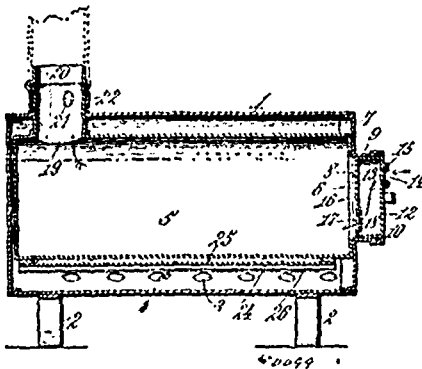
No. 50,098. Grinding Adjustment for Belt-knife Leather Splitting Machine. (*Appareil à aiguiser les couteaux sans fin pour fendre le cuir.*)



James Robertson, Woburn, Massachusetts, U.S.A., 27th September, 1895; 6 years.

Claim.—In a grinding adjustment for belt-knife leather-splitting machines, the combination of the ways B B¹, secured to the frame of the machine, the horizontally moving slides C in said ways, the carriages D secured to said slides, the driving shafts E E¹, having bearings in said carriages, the grinding wheels F F¹, fast on said driving shafts, the belt-knife K, extending between said grinding wheels, the vertical shaft P, provided with the worms R R¹, and the screws V, provided with the gears S S¹, which are engaged by said worms, said screws engaging said slides C, by means of the nuts W, substantially as described.

No. 50,099. Heating Stove. (*Poêle.*)

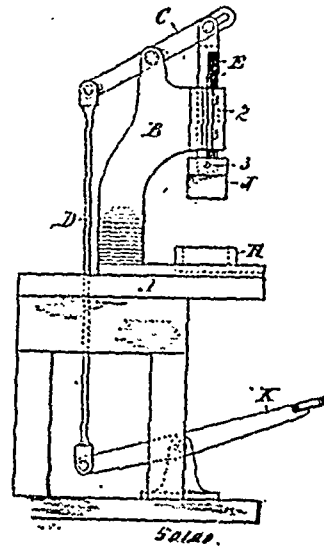


William Henry Loy and Fred Homer Grant, both of What Cheer, Iowa, U.S.A., 27th September, 1895; 6 years.

Claim.—1st. A heating stove, consisting of an external casing having the lower portion of its wall provided with longitudinal rows of inlet openings and the upper portion of its wall formed with longitudinal rows of outlet openings, a cylindrical fire-chamber located within said casing and having a door opening in its front end and a smoke flue at its rear end, flanges secured to said fire-chamber for supporting it centrally within the casing to provide a surrounding hot air space, a disc or plate at one end of the casing having a central opening, and a door for closing the door opening in the front end of the fire-chamber, substantially as described. 2nd. A heating stove, consisting of an external casing having the lower portion of its wall provided with longitudinal rows of inlet openings and the upper portion of its wall formed with longitudinal rows of outlet openings, a cylindrical fire-chamber located within said casing and having a door opening in its front end and a smoke flue at its rear end, perforated longitudinal flanges secured to the under side of said fire-chamber for supporting it centrally within the casing to provide a surrounding hot air space, a disc or plate at one end of the casing

having a central opening, and a door for closing the door opening in the front end of the fire-chamber, substantially as described. 3rd. A heating stove, consisting of an external casing having the lower and upper portions of its wall formed with inlet and outlet perforations, a cylindrical fire-chamber located in the said casing and having a door opening in its front end, a plate arranged at the lower side of the cylindrical fire-chamber and provided with supporting feet or flanges, an asbestos or fire-proof sheet interposed between the fire-chamber and the said plate, and means for closing the front end of the casing and the door opening of the fire-chamber, substantially as described. 4th. A heating stove, consisting of an external casing, a cylindrical fire-chamber centrally supported within said casing and provided at its rear end with a smoke flue and having a door opening in its front end, a disc or plate at one end of the casing having a cylindrical neck and a central opening, and a hollow door fitting said neck to close the door opening of the fire-chamber and provided in its front wall with a valve controlled cold air inlet and in its rear wall with a hot air outlet for delivering heated air into the fire-chamber, substantially as described.

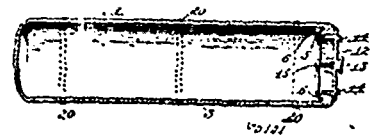
No. 50,100. Machine for Shaping and Finishing Leather Loops. (*Machine pour former et finir les ganses de cuir sans couture.*)



Allen J. Lloyd, Oakland, California, assignee of Friend J. Bringham, Chicago, Illinois, both in the U.S.A., 27th September, 1895; 6 years.

Claim.—A machine for shaping and finishing seamless leather loops, comprising a vertically reciprocating rod E, means for operating the same, and having a table A, a male die J, secured to the end of said rod, said die having an exterior corresponding to the interior shape of the loop, and a female die H, attached to said table, and having an interior cavity corresponding to the exterior shape of the loop, the male die descending into the female die and shaping the loop blank placed therein, as set forth.

No. 59,101. Burial Casket. (*Cercueil.*)



Julian Peveril Hill and William Love, both of Buffalo, New York, U.S.A., 27th September, 1895; 6 years.

Claim.—1st. A burial casket formed entirely of glass having a tapering opening at the head through which to enter the corpse, a cover also of glass having a tapering rim corresponding with the taper of the opening so as to fit air tight, and means substantially as above described for securing the cover to the casket, for the purposes above set forth. 2nd. A burial casket, having a circular tapering opening in the head through which to enter the corpse, a removable cross bar adapted to rest against a flange inside of the casket, a cover having a rim corresponding to the tapering opening, and having a central screw bolt adapted to screw into a central opening in the removable cross-bar, and means for turning the cover and thereby secure it rigidly in place, substantially as described.

CERTIFICATES OF THE PAYMENT OF FEES IN FURTHER TERMS HAVE BEEN ATTACHED TO THE FOLLOWING PATENTS.

4056. JAMES MCKENZIE DOW, 2nd five years of No. 31,992, from 9th September, 1895. Photographic Posing Chair, September 3rd, 1895.
4057. THE GOODYEAR SHOE SEWING MACHINE ASSOCIATION OF CANADA, 3rd five years of No. 22,496, from 19th September, 1895. Machine for Beating out Welts in the Manufacture of Boots and Shoes, September 3rd, 1895.
4058. JOHN CARRUTHERS, 3rd five years of No. 22,107, from 7th September, 1895. Device for Suspending Machinery, September 1th, 1895.
4059. JAMES AUBRA FACER, 2nd five years of No. 35,291, from 13th October, 1895. Process of Making Steel Wheels, September 4th, 1895.
4060. JAMES AUBRA FACER, 2nd five years of No. 35,292, from 13th October, 1895. Steam Hammer, September 4th, 1895.
4061. JAMES AUBRA FACER, 2nd five years of No. 35,283, from 24th October, 1895. Steam Hammer, September 4th, 1895.
4062. THE STONE MANUFACTURING COMPANY, (assignee), 2nd five years of No. 31,999, from 10th September, 1895. Clothes Wringer, September 5th, 1895.
4063. BARTON PETER CANNIFF, 2nd five years of No. 35,005, from 11th September, 1895. Steel for Consets, September 5th, 1895.
4064. THE RUSSELL AND ERWIN MANUFACTURING COMPANY, (assignee), 2nd and 3rd five years of No. 35,047, from 18th September, 1895. Die for Swaging Screw-Threads, September 5th, 1895.
4065. THOMAS HARRIS, 2nd five years of No. 31,990, from 9th September, 1895. Step Ladder, September 5th, 1895.
4066. CHARLES WESLEY ARMSTRONG, 2nd five years of No. 31,987, from 9th September, 1895. September 5th, 1895.
4067. DANIEL THOMAS LAWSON, 2nd five years of No. 35,007, from 12th September, 1895. Steam Boiler, September 10th, 1895.
4068. THE ELECTRIC SMELTING AND ALUMINIUM COMPANY, 3rd five years of No. 22,444, from 12th September, 1895. Process of Smelting Ores by the Electric Current and Furnace therefor, September 10th, 1895.
4069. THE ELECTRIC SMELTING AND ALUMINIUM COMPANY, (assignee), 3rd five years of No. 22,518, from 23rd September, 1895. Method of Manufacturing Alloys and Bronzes, September 10th, 1895.
4070. THE ELECTRIC SMELTING AND ALUMINIUM COMPANY, 3rd five years of No. 22,529, from 24th September, 1895. Process of Reducing Aluminium Ores, September 10th, 1895.
4071. THOMAS HENRY NOXON, 2nd five years of No. 35,007, from 1st October, 1895. Cord Holder for Harvester Binders, September 10th, 1895.
4072. THOMAS HENRY NOXON, 2nd five years of No. 35,101, from 1st October, 1895. Seeding Machine, September 10th, 1895.
4073. THOMAS MALONE, 2nd five years of No. 35,079, from 26th September, 1895. Fire Kindler, September 10th, 1895.
4074. JOHN MITCHELL ALLEN, 3rd five years of No. 22,458, from 15th September, 1895. Manufacture of Paper and Paper-Board, September 11th, 1895.
4075. CHARLES G. KNOTT and MARY R. McLAREN, 2nd five years of No. 35,055, from 19th September, 1895. Automatic Ink-stand, September 11th, 1895.
4076. JOHN B. SNIDER, 2nd five years of No. 35,035, from 17th September, 1895. School Desk, September 13th, 1895.
4077. JOHN JOSEPH LAPPIN, 3rd five years of No. 22,505, from 21st September, 1895. Brake Connections, September 13th, 1895.
4078. JOHN JOSEPH LAPPIN, 3rd five years of No. 22,876, from 25th November, 1895. Method of Making Brake Shoes, September 13th, 1895.
4079. AUGUSTUS RICHARD WOODYATT, 2nd five years of No. 35,150, from 6th October, 1895. Tree-Pruner Head, September 16th, 1895.
4080. THE CONSOLIDATED CAR HEATING COMPANY, (assignee), 2nd five years of No. 35,114, from 2nd October, 1895. Water Heater, September 20th, 1895.
4081. THE CONSOLIDATED CAR HEATING COMPANY, (assignee), 2nd five years of No. 35,115, from 2nd October, 1895. Water Heater, September 20th, 1895.
4082. JOHN M. SPARROW and JOSEPH H. FAIR, 2nd five years of No. 35,117, from 2nd October, 1895. Process of Draining Water and Volatile Matter from Refuse of the Manufacture of Illuminating Gas from Petroleum Oil, September 21st, 1895.
4083. EDWARD P. ROMAYNE, 2nd five years of No. 35,093, from 1st October, 1895. Extension Feet, September 25th, 1895.
4084. RÈMI DESTRAMPE, 2nd five years of No. 35,157, from 7th October, 1895. Ointment, September 25th, 1895.
4085. JOHN ROBERT KAUFMAN, 2nd five years of No. 35,109, from 1st October, 1895. Seat for Road Vehicles, September 27th, 1895.
4086. STILMAN WILLIAMS ROBINSON and SERN PERLEY WATT, 2nd five years of No. 35,218, from 15th October, 1895. Machine for Uniting Soles and Uppers of Boots and Shoes, September 28th, 1895.
4087. JULES COLAS, 2nd five years of No. 47,069, from 10th October, 1895. Drawing Well, September 28th, 1895.
4088. EDWARD NELSON AVERY and CHARLES ALBERT SLAYTON, 2nd five years of No. 35,237, from 18th October, 1895. Convertible Hay and Stock Rack, September 30th, 1895.
4089. HARRY E. BAKER, 2nd five years of No. 35,162, from 8th October, 1895. Chemical Fire Engine, September 30th, 1895.
4090. LAURENCE ROTH, 2nd five years of No. 35,087, from 1st October, 1895. Truss Hoop, September 30th, 1895.

TRADE-MARKS

Registered during the month of September, 1895, at the Department of Agriculture—
Copyright and Trade-Mark Branch.

5412. THE T. EATON COMPANY, LIMITED, Toronto, Ont. General Trade Mark, 7th September, 1895.
5413. THE CANADIAN FIBRE CHAMOIS COMPANY, Montreal, Que. Fabrics, particularly Interlinings made from paper pulp or fibre, 10th September, 1895.
5414. SAMUEL SHOBAL RYCKMAN, Hamilton, Ont. A Medical Preparation for the Cure of Rheumatism, Gout, Grip, Kidney and Liver Complaints, Neuralgia, Eczema, Scrofula, Paralysis, also as a Tonic and Blood Purifier, 10th September, 1895.
5415. JOHANNES DE KUYPER & ANNA MARIA DE KUYPER, NÉE AMTMANN, of The Hague and Velp, respectively, carrying on business at Rotterdam, in the Kingdom of the Netherlands, under the firm name of JOHN DE KUYPER & SON. Hollands Gin, 12th September, 1895.
5416. THE BOSTON FAST COLOR EYELET COMPANY, Boston, Massachusetts, U.S.A. Eyelets, Lacing Hooks, &c., 14th September, 1895.
5417. D. McADAM COUGHLIN, Ottawa, Ont. Dr. Petty's Prescription Powders for Dyspepsia, 17th September, 1895.
5418. LEMUEL B. DANIEL, Yarmouth, N.S. A Washing Powder, 17th September, 1895.
5419. } THE MERCHANTS MANUFACTURING COMPANY, of St. Henri,
5420. } District of Montreal, Que. Cotton Goods, 20th September, 1895.
5421. LOUIS OVIDE GROTHE, Montreal, Que. Cigars, Cigarettes and Tobaccos, 20th September, 1895.
5422. ANDREW MAXWELL IRVING, Toronto, Ont. A Folio of Pieces of Instrumental Music for Piano and Organ, 25th September, 1895.
5423. E. N. HENEY & COMPANY, Montreal, Que. Polishing Paste, 26th September, 1895.
5424. CLARK & COMPANY, Paisley, Scotland. Sewing and Crochet Cotton and Threads of all kinds, 26th September, 1895.
5425. THE TORONTO RUBBER COMPANY, LIMITED, Toronto, Ont. Rubber Goods, 27th September, 1895.
5426. ELIZABETH MORRISON, Toronto, Ont. A Cold Dairy Edible, 27th September, 1895.
5427. BATE & COMPANY, Ottawa, Ont. Tea, 30th September, 1895.

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Copyright and Trade-Mark Branch.

8104. LESSONS IN LITERATURE FOR ENTRANCE EXAMINATIONS, 1896. Edited by F. H. Sykes, M.A., Ph.D. The Canada Publishing Co. (L'd.), Toronto, Ont., 3rd September, 1895.
8105. PRÉCIS D'HISTOIRE DU CANADA. Par A. Leblond de Brumath, Cadieux et Derome, Montréal, Qué., 3 septembre 1895.
8106. THE SUMMER OF SORROW. (Gleaner Tales, Part Two.) Robert Sellar, Huntingdon, Que., 3rd September, 1895.
8107. BLOOMING ON THE WHITE RIMMED WHEEL! (Humorous Bicycle Song.) By Lindley Hunt. F. L. H. Sims, Toronto, Ont., 4th September, 1895.
8108. THE COMMON SENSE RECIPE BOOK, 1895. (First Edition.) Mrs. Sarah Allen, Montreal, Que., 4th September, 1895.
8109. A DREAM OF THE SEA. (Waltz.) By Horace Harpur, Vancouver, B.C., 5th September, 1895.
8110. APPLICATION AND CONTRACT FOR STOCK OF THE YORK COUNTY LOAN AND SAVINGS COMPANY. (Form.) Joseph Phillips, Toronto, Ont., 5th September, 1895.
8111. CIRCULAR OF STOCK OF THE YORK COUNTY LOAN AND SAVINGS COMPANY. Joseph Phillips, Toronto, Ont., 5th September, 1895.
8112. THE W-R TWO-STEP. By J. B. Glionna. Whaley, Royce & Co., Toronto, Ont., 6th September, 1895.
8113. THE PROBLEM SOLVED: A SOCIAL STATUTE TO MITIGATE THE EVILS OF POVERTY. (Temporary Copyright of a Pamphlet which is now being preliminarily published in separate articles in the "Home Journal," London, Ont.) Caleb Platt Simpson, London, Ont., 7th September, 1895.
8114. TWILIGHT JERSEY. (For Piano.) By C. Hascal Corey, Montreal, Que., 9th September, 1895.
8115. ADVERTISING MAP OF BRITISH COLUMBIA. The Province Publishing Co., Victoria, B.C., 12th September, 1895.
8116. IF YE LOVE ME. (Anthem.) Composed by Arthur Dorey, Sherbrooke, Que., 13th September, 1895.
8117. AS IT WAS IN THE FIFTIES. By Arthur Hodgkin Scife. The Province Publishing Co., Victoria, B.C., 14th September, 1895.
8118. THE FARMERS' ACCOUNT BOOK, STOCK REGISTER AND COMPENDIUM OF USEFUL INFORMATION. William Alexander Clarke, Toronto, Ont., 17th September, 1895.
8119. EUNICE WALTZES. By Alexander Joseph Pepin, Windsor, Ont., 18th September, 1895.
8120. LECTURE À HAUTE VOIX. (Lectures et Récitations Précédées d'une Étude Théorique et Pratique de la Prononciation Française d'après la Méthode de M. V. Delahaye, Professeur de Diction.) (Cours Élémentaire.) La Congrégation de Notre-Dame, Montréal, Qué., 18 septembre 1895.
8121. ABRÉGÉ D'HISTOIRE SAINTE. (Ancien et Nouveau Testament. Suivi d'un Précis d'Histoire Ecclésiastique.) (En rapport avec l'Histoire Sainte en 100 Tableaux.) La Congrégation de Notre-Dame, Montréal, Qué., 18 septembre 1895.
8122. THE RT. REV. JOHN SWEENEY, D.D., Bishop of the Diocese of St. John, N.B. (Photo A.) Timothy O'Brien, St. John, N.B., 18th September, 1895.
8123. THE RT. REV. JOHN SWEENEY, D.D., Bishop of the Diocese of St. John, N.B. (Photo B.) Timothy O'Brien, St. John, N.B., 18th September, 1895.
8124. THE RT. REV. JOHN SWEENEY, D.D., Bishop of the Diocese of St. John, N.B. (Photo C.) Timothy O'Brien, St. John, N.B., 18th September, 1895.
8125. THE RT. REV. JOHN SWEENEY, D.D., Bishop of the Diocese of St. John, N.B. (Photo D.) Timothy O'Brien, St. John, N.B., 18th September, 1895.

8126. **THE IMPERIAL.** Instrumental Pieces for Piano and Organ. (Book.) The National Electrotyping and Stereotype Co., Toronto, Ont., 19th September, 1895.
8127. **YEZ SHOULD SEE MACARTHY POLKA.** (Humorous Song.) Words and Music by Arthur Seldon. Whaley, Royce & Co., Toronto, Ont., 20th September, 1895.
8128. **THE WAYWARD BOY.** (Descriptive Song.) Words and Music by William Hall. Whaley, Royce & Co., Toronto, Ont., 20th September, 1895.
8129. **HISTOIRE DES CANADIENS DU MICHIGAN ET DU COMTÉ D'ESSEX, ONTARIO.** By Téléphore St. Pierre, Montreal, Que., 20th September, 1895.
8130. **THE CORONET.** Instrumental Pieces for Piano and Organ. (Book.) Willmott H. Billing, Toronto, Ont., 20th September, 1895.
8131. **ONTARIAN FAMILIES.** Genealogies of United Empire Loyalist and other Pioneer Families of Upper Canada. Volume I. By Edward Marion Chadwick, Barrister. Toronto, Ont., 21st September, 1895.
8132. **THE BICYCLE BELLE MARCH.** By George A. Watts, London, Ont., 21st September, 1895.
8133. **CERTIFICATE OF STOCK OF THE YORK COUNTY LOAN AND SAVINGS COMPANY.** (Form.) Joseph Phillips, Toronto, Ont., 23rd September, 1895.
8134. **THE NONPAREIL SYSTEM.** To Cutters and Tailors. (Pamphlet.) James A. Glass, Georgetown, Ont., 25th September, 1895.
8135. **THE EXTRA ACME METHOD OF TEACHING PIANOFORTE AND ORGAN PLAYING.** James Henky Keighly McCollum, Toronto, Ont., 25th September, 1895.
8136. **VALKYRIE III.** (Two-Step.) By David Johns. The Anglo-Canadian Music Publishers' Association, L'd., London, Eng., 25th September, 1895.
8137. **MATERIAL FOR EXERCISES IN GERMAN COMPOSITION.** By L. F. Horning. The Copp, Clark Co., L'd., Toronto, Ont., 25th September, 1895.
8138. **WHAT IS LIFE?** By X. Y. The Copp, Clark Co., L'd., Toronto, Ont., on behalf of the unnamed author, 27th September, 1895.
8139. **A WORD ON INSURANCE AND THE MOST FREQUENT CAUSES OF FIRES.** The Queen Insurance Company of America, Montreal, Que., 28th September, 1895.
8140. **YOUNG AND BROWNLEE'S WINNIPEG DISTRICT MAP.** Robert Evans Young, Winnipeg, Man., 28th September, 1895.
8141. **THE WRITINGS AND LIFE OF WILLIAM BLACK LAWS.** (Late Bookseller of Glasgow, Scotland.) Thomas Black Laws, Township of Warwick, County of Lambton, Ont., 30th September, 1895.
8142. **FOSTER'S VEST POCKET MAP OF TORONTO, INDEXED.** J. G. Foster & Co., Toronto, Ont., 30th September, 1895.