## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

	Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
	Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
	Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
	Cover title missing / Le titre de couverture manque	V	Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
	Coloured maps /		Pages detached / Pages détachées
	Cartes géographiques en couleur		Showthrough / Transparence
	Coloured ink (i.e. other than blue or black Encre de couleur (i.e. autre que bleue ou		Quality of print varies / Qualité inégale de l'impression
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur  Bound with other material / Relié avec d'autres documents		Includes supplementary materials / Comprend du matériel supplémentaire
	Only edition available / Seule édition disponible	ortion	Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais,
	Tight binding may cause shadows or distoration along interior margin / La reliure serrée per causer de l'ombre ou de la distorsion le lo marge intérieure.	eut	lorsque cela était possible, ces pages n'ont pas été numérisées.
J	Additional comments / Conti	inuous pagination.	



Vol. XXVI.--No. 8.

AUGUST 31st, 1898.

Price free by post in Canada and the United States, \$2.00.
SINGLE NUMBERS, - - - 20 Cts

## NOTICE.

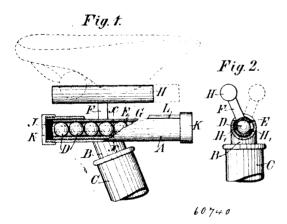
All solicitors, agents or attorneys who, in circulars or advertisements, or otherwise, refer to the Commissioner or Deputy Commissioner of Patents, or to any other official of the Patent Office, for evidence of their professional standing, do so without authority.

## INVENTIONS PATENTED.

NOTE.—Patents are granted for 18 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 60,740. Cycle Saddle Support,

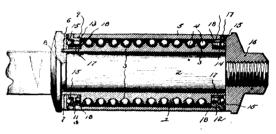
(Support de selle de bicycles.)



Paul Richard Gulden, 11 Plagwitzer Strass, Leipsic, Saxony, German Empire, 2nd August, 1898; 18 years. (Filed 10th May, 1898.)

Claim.—1st. In a cycle seat or saddle support, a tubular casing A, a slide E, movably supported therein by anti-friction bodies D, an arm F, on said slide extending through an opening in said casing and adapted to have a seat or saddle secured thereon, and means as described for limiting the extent of movement of the said slide within the said casing, substantially as and for the purpose described. 2nd. In a bicycle seat or saddle support, the combination with the tubular casing A, having an upper guide slot G, and a shank B, of a slide supported on anti-friction bodies, such as balls, within said casing, an arm F, on said slide, projecting through said guide slot and having an extension for the attachment of a seat or saddle, end stops, such as J, for limiting the extent of axial movement of the said slide, and side stops, such as H<sup>1</sup>, for limiting the extent of lateral rocking movement of the said slide, substantially as and for the purpose described.

No. 60,741. Axle Box. (Boîte à graisse.)



60741

Charles Bingley Hobron, Boerne, Texas, U.S.A., 2nd August, 1898; 6 years. (Filed 15th April, 1898.)

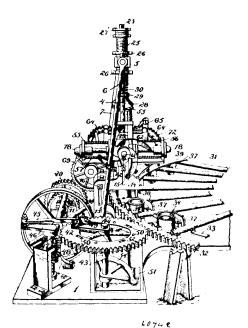
Claim. - 1st. In a device of the class described, the combination of a spindle provided at its inner end with a series of lugs litting sleeve provided at its inner end with a series of lugs litting in the recesses of the spindle, whereby the bearing sleeve is detachably interlocked with the same, an axle box, and an axle nut engaging the bearing sleeve and the axle box, substantially as described. 2nd. In a device of the class described, the combination of a spindle provided at its inner end with a shoulder having a series of recesses, a bearing sleeve provided with a series of annular ball races and having at its inner end a series of projecting lugs fitting in the recesses of the spindle and interlocking the bearing sleeve with the same, an axle box, and balls arranged in the ball races and interposed between the bearing sleeve and the axle box, substantially as described. 3rd. In a device of the class described, the combination of a bearing sleeve designed to be arranged on a spindle and provided with a series of annular channels forming ball races, said sleeve having smooth extensions at its ends, an axle box provided at its ends with recesses and having the same threaded, balls interposed between the bearing sleeve and the axle box, and the threaded end rings arranged on the smooth extensions of the bearing sleeve and fitting in and closing the ends of the axle box and engaging the threads of the recesses, substantially as described. 4th. In a device of the class described, the combination of an axle box, balls arranged within the same, an end ring secured to the axle box and provided with openings threaded at their inner portions, balls arranged within the openings and projecting beyond the outer face of the ring, and threaded plugs closing the inner ends of the openings, substantially as described. 5th. In a device of the class described, the combination of a bearing sleeve, and axle box, balls interposed between the bearing sleeve and the axle box, and the end bands arranged at the ends of the axle box, closing the same and provided at their faces with projecting balls arranged in sockets or openings, substantially as and for the purpose described.

# No. 60,742. Glassware Making Machine. (Machine à faire la verrerie.)

Frank O'Neill, Cicero, Indiana, U.S.A., 2nd August, 1898; 6 years. (Filed 46th May, 1898.)

Claim.—1st. In a machine for the manufacture of glassware, aligned plungers adapted to be moved, successively, in and out of operative position, means for moving the plungers, and depressing mechanism operatively engaging an inactive plunger for actuating an aligned active plunger.—2nd. In a machine for the manufacture

of glassware, pressing mechanism including a revoluble shaft, pressing plungers arranged radially thereon with each plunger aligning

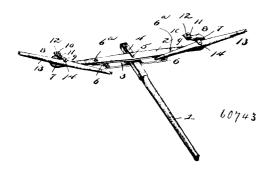


with another plunger through the shaft and adapted, successively, to move to operative position, and mechanism for longitudinally pressing one plunger for actuating the aligned active plunger. 3rd. In a machine for the manufacture of glassware, a movable series of plungers, the plungers being arranged in pairs, cam members movable with the plunger series, and actuating mechanism adapted to engage one pluger of a pair for actuating the other plunger, the actuating mechanism also imparting movement to the cam members for bring ing the plungers, successively, to operative position. 4th. In a machine for the manufacture of glassware, pressing mechanism including a revoluble series of reciprocating plungers, and plunger reciprocating mechanism operatively connected to the plunger series for rotating the same. 5th. In a machine for the manufacture of glassware, pressing mechanism including a revoluble shaft, pressing plungers thereon adapted, successively, to move to operative position, and plunger reciprocating mechanism operatively connected to the shaft for imparting thereto intermittent rotary movement. 6th. In a machine for the manufacture of glassware, an intermittently revoluble vertically reciprocating shaft, pressing plungers arranged radically thereon, each plunger aligning with another plunger through the shaft, the plungers becoming successively active, and reciprocating mechanism adapted to engage the plunger aligning with the active plunger. 7th. In a machine for the manufacture of glassware, pressing mechanism including a shaft, pressing plungers thereon, spiders on the shaft, and plunger reciprocating mechanism operatively engaging the spiders for intermittently rotating the shaft. 8th. In a machine for the manufacture of glassware, pressing machanism including rotstable pressing plungers spiders rotatable therewith, and plunger reciprocating mechanism operatively connected with the spiders for intermittently rotating the plungers. 9th. In a machine for the manufacture of glassware, pressing mechanism including rotatable plungers, spiders rotatable therewith baving curved arms, plunger reciprocating pitmen, and bolts on the pitmen operatively engaging the curved spider arms for intermittently rotating the plungers. 10th. In a machine for the manufacture of glassware, pressing mechanism including rotatable plungers, spiders rotatable therewith having curved arms, plunger reciprocating pitmen, spring actuated bolts on the pitmen operatively engaging the spider arms for intermittently rotating the plungers, engaging and means for automatically engaging and disengaging the bolts and spiders. 11th. In a machine for the manufacture of glassware, pressing mechanism including rotatable plungers, and two spiders rotatable therewith, two plunger reciprocating pitmen, one adlacent each spider and operatively connected thereto, to alternately partially rotate the spiders and plungers. 12th. In a machine for the manufacture of glassware, pressing mechanism including rotatable vertically reciprocating plungers, plunger depressing mechanism adapted to impart longer upward movement to the latter than to plungers so as to free the plungers for rotation. 13th. In a machine for the manufacture of glassware, pressing mechanism including rotatable plungers, vertically reciprocating supports therefor, and eccentrics beneath the supports for reciprocating them and the plungers. 14th. In a machine for the manufacture of glassware,

supports, in which the same rotate, a plunger depresser and actuating mechanism therefor, rotatable eccentrics for reciprocating the supports, and plunger rotating mechanism. 15th. In a machine for steplants, and panger to the manufacture of glassware, pressing mechanism including rotatable plungers, vertically reciprocating supports in which the plungers rotate, a depresser adapted to engage an inactive plunger for actuating another plunger actuating wheels, pitmen connecting the wheels and depresser, and eccentrics rotatable with the wheels for reciprocating the supports. 16. In a machine for the manufacture of glassware, pressing mechanism including a series of radially arranged plungers, a head carrying a plunger depresser, plunger reciprocating mechanism, head reciprocating mechanism adapted to raise the depresser clear of the plungers for the purpose described, and plunger turning means. 17th. In a machine for the manufacture of glassware, a series of rotatable plungers and means for rotating the same, reciprocating supports in which the plungers rotate, a plunger depresser, actuating mechanism operatively connected to the depresser and plungers, and support reciprocating eccentrics. 18th. The combination of a carrier, moulds mounted therein, members adapted to swing the moulds and having straight surfaces extending adapted to swing the mould axes, and guides adapted to engage said straight surfaces for holding the moulds against swinging. 19th. The combination of a carrier, moulds mounted therein to swing vertically, and mechanism for righting the moulds and holding them upright as they are presented to the pressing machine. 20th. The combination of a carrier, moulds rotatable therein, discs rotatable with the moulds and flattened on one edge, and guides which the flats or the discs engage for holding the moulds in fined position. 21st. The combination of a carrier, moulds revoluble therein, discs revoluble with the moulds and flattened on a line parallel with the mold tops, and guides out of the plane of the mould axes but in line with the discs, the flats of the latter engaging the gnides and holding the moulds fixed. 22nd. The combination of a carrier, moulds revoluble therein, discs turnable with moulds and flattened on one edge, and vertically yieldable guides in line with the discs and adapted to hold the moulds as described. 23rd. The combination of a mould carrier, wheel 42 geared thereto, a vertically movable locking bolt adapted to engage the wheel, and actuating mechanism common to the wheel and bolt. 24th. The combination movable locking bott adapted to engage one which makes mechanism common to the wheel and bolt. 24th. The combination of a mould carrier geared to wheel 42, a wheel locking bolt, and mechanism actuating simultaneously the wheel and bolt. 25th. The combination of a mould carrier geared to internittently rotating wheel 42, a locking bolt for the wheel, and vibrating cam 54 for actuating the bolt. 26th. The ecombination of a mold carrier geared to wheel 42, a shaft, an arm adapted to vibrate the shaft, a dog on the arm arm and an arm adapted to viorate the shart, a tog on the arm engaging and intermittently rotating the wheel, cam spider 54 secured to the vibratory shaft, and a locking bolt for the wheel actuated by the said cam spider. 27th. The combination of a mould carrier, a wheel geared thereto formed with depressions on one face, a vibratory arm, means for vibrating the arm, and a spring actuated bolt carried by the arm and adapted automatically to successively engage the wheel depressions. 28th. Molten glass feeding mechanism, consisting of oppositely revoluble wheels, a feeding box between the wheels, pins revoluble with and projecting beyond the wheel peripheries, and means for retracting the pins so as to pass the feeding box. 29th. Molten glass feeding mechanism including knives, and cam-wheels operatively connected to the knives for actuating the the same. 30th. Molten glass mechanism, including knives having projecting pins, and wheels formed with cam-grooves into which the oins project for actuating the knives when the wheels are in motion. 31st. Molten glass feeding mechanism, including feeding wheels, intermeshing gears on the wheel journals, shaft 68 operatively connected to the gears, cut-off knives beneath the wheels, and actuating mechanism for the knives operatively connected to the said shaft. 32nd. Molten glass feeding mechanism, including intermittently rotating wheels, cut-off knives beneath the wheels, and actuating mechanism common to the wheels and knives. 33rd. In a machine for the manufacture of glassware, pressing mechanism, molten glass feeding mechanism, a mould carrier, moulds on the carrier, and means for intermittently moving the carrier so as to pass the moulds, successively, from the feeding mechanism to the pressing mechanism. 34th. In a machine for the manufacture of glassware, pressing mechanism, molten glass feeding mechanism, a mould carrier, moulds on the carrier, and actuating mechanism, common to the ressing mechanism, the feeding mechanism and the carrier, and adapted to intermittently move the carrier to pass the moulds from the feeding mechanism to the pressing mechanism. 35th. In In a machine for the manufacture of glassware, a mould, a mould carrier, a movable cut-off mechanism above the carrier, a plunger, means for moving the cut-off and plunger, and means for alternating the movement of the carrier with that of the cut-off and plunger. 36th. In a machine for the manufacture of glassware, a mould, a movable mould carrier, a movable cut-off mechanism above the carrier, a plunger, and means for intermittently moving the carrier, and simultaneously actuating the cut-off mechanism and plunger, the movement of the carrier alternating with that of the cut off and plunger. 37th. In a machine for the manufacture of glassware, a mould, a mould carrier, a movable cut-off mechanism above the carrier, a plunger, a power shaft operatively connected to the carrier and to the cut-off and to the plunger, whereby the carrier will be intermittently moved alternately with the cut-off and plunger. 38th. In a machine for the manufacture of glassware, a mould, a pressing mechanism including rotatable plungers, reciprocating mould carrier, a cut-off mechanism above the carrier, a plunger,

actuating mechanism common to the carrier, the cut-off and plunger, the movement of the carrier alternating with that of the cut-off and plunger, and a lock for securing the carrier when the plunger and cut-off operate. 39th. In a machine for the manufacture of glassware, a mould, a mould carrier, means for separating a quantity of molten glass from the supply thereof, a plunger, and means for alternating the movement of the carrier with that of the separating means and admired means and plunger.

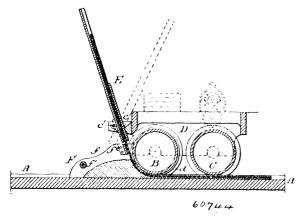
No. 60,743. Doubletree. (Volée d'arrière.)



John W. Sheppard, Chariton, Iowa, U.S.A., 2nd August, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—The combination with a pole, of a doubletree consisting of a metal bar pivoted to the upper face of the pole and having its ends curved rearward and laterally and proyided directly in advance of the terminals of the curved portions with pivot-openings, singletrees arranged on the doubletree and having pivot-openings registering with the said pivot-openings, hamner-straps 9, extending across the space between the curved ends of the doubletree and the singletrees and arranged on the upper faces of said ends and the singletrees, pivots passing through the front ends of the hammer-straps and the perforations of the singletrees and the doubletree, fastening devices securing the rear ends of the hammer-straps to the curved ends of the doubletree, rearwardly-extending slotted ears arranged on the lower faces of the ends of the doubletree and secured to the same by the said fastening devices, and the brace 3 arranged on the lower face of the pole, connected to the same by the pivot of the doubletree and having its terminals bent upward and secured to the lower face of the doubletree at opposite sides of the pole, substantially as described.

## No. 60,744. Wire Glass Making Machine. (Machine à faire le fil de verre.)



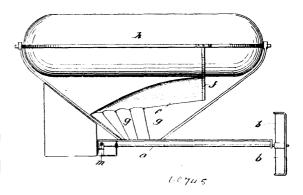
Frank Shumen, Philadelphia, Pennsylvania, U.S.A., 2nd August

1898; 6 years. (Filed 25th June, 1898.)

Claim.—1st. The process herein described of producing what is known as "wire glass", said process consisting in simultaneously and coincidently forcing the wire into the glass until it reaches the and confidency forcing the wife into the glass until it reaches the position in which it is to remain therein and rolling the glass into a sheet, and then covering the embedded wire by rolling down that surface of the glass through which the wire was forced. 2nd. In a wire glass making machine, the combination of a table, a roller mounted to travel at such fixed distance above the same, that the wire to be forced into the glass will be forced into place where it is to remain therein, said rollar having spaced ribs on its periphery, and means for feeding said sheet of wire down in front of the roller and to be forced thereby into a mass of glass placed on the table in front of the same, whereby the wire will be pressed into the glass

until it reaches the position in which it is to remain therein, and the glass will at the same time and place, be rolled into a sheet of uniform thickness, substantially as described. 3rd. In a wire glass making machine, the combination of a table, a roller mounted to travel at such a fixed distance above the same that the wire to be forced into the glass will be forced to the place where it is to remain therein, said roller having spaced ribs on its periphery, means for feeding a sheet of wire down in front of the roller, and to be forced thereby into a mass of glass placed on the table in front of the same, and a roller following the ribbed roll, and having its surface closer to the table than the base of the ribbed roll, and having the ribbed roll whereby to the table than the bases of the ribs on said ribbed roll, whereby the wire is pressed into the glass until it reaches the position in which it is to remain therein, the glass is at the same time and place rolled into a sheet of uniform thickness, and the projecting ribs in the upper surface of the glass are finally rolled down, so as to cover and enclose the embedded wire, substantially as described.

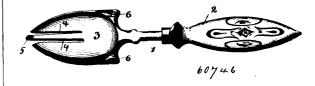
#### No. 60,745. Air-Ship. (Vaisseau aérien.)



Max Lochner, Charlottenberg, Prussia, 2nd August, 1898; 6 years. (Filed 13th June, 1898.)

Claim.—1st. In an air-ship, a concaved body or surface whose concavity is directed forwardly, that is, in the direction in which the air-ship is adapted to travel whereby a quantity of air of greater density than the surrounding air will be gathered in the pocket formed by said concaved body, substantially as and for the purpose set forth. 2nd. In an air-ship, a rotary propeller whose blades are concaved on their forward surfaces to form pockets adapted to retain the air during the forward motion of the ship so as to produce a body of air of greater density than the surrounding air and thus afford a medium of increased resistance, substantially as described. 3rd. An medium of increased resistance, substantially as described. 3rd. An air-ship provided with a concaved body inclined downwardly from front to rear and adapted to hold a quantity of air of greater density than the surrounding air and to discharge said air in a mainly downward direction, as and for the purpose set forth. 4th. In an air-ship, propelling devices and a supporting surface inclined downwardly from the front to the rear and having a forwardly facing concavity adapted to retain a body of air of greater density than the surrounding air and to discharge such body of air downwardly during the progress of the ship, substantially as shown and described. 5th. The combination, in an air-ship, of propelling devices and a balloon whose lower surface is inclined downwardly from front to rear and has a concavity facing forwardly, as and for the purpose set forth.

#### No. 60,746. Corn Fork. (Fourche à blé d'inde)

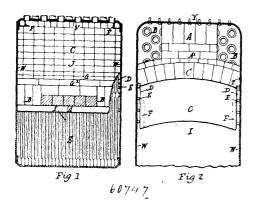


William Northgraves, Perth, Ontario, Canada, 2nd August, 1898; 6 years. (Filed 26th March, 1898.)

6 years. (Filed 26th March, 1898.)
Claim.—1st. A corn fork, comprising a bowl portion, having a handle, and a tine located therein and extending inward from the point of the bowl portion, substantially as described. 2nd. A corn fork, comprising a bowl portion, having a handle, and a series of kerfs formed in said bowl portion, having a handle, and a series of from the point of said bowl portion to a point about midway thereof substantially as described. 3rd. A corn fork, comprising a bowl portion having rearwardly extending shoulders, and a tine located therein and extending inward from the point of the bowl portion, substantially as described. substantially as described.

#### No. 60,747. Steam Boiler Furnace Arch.

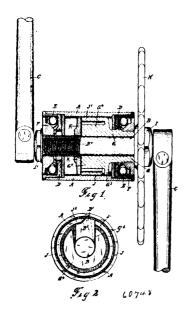
(Arche pour fournaises de chaudieres à vapeur.)



Alfred Frank Hack, Melbourne, Victoria, Australia, 2nd August, 1898; 6 years. (Filed 28th May, 1898.)

Claim.--1st. A fire-box arch having an inclined arched bridge extending the full width of the fire-box, and supporting upon its rear end a central vertical wall of lesser width, whereby two combustion chambers I.J. are formed connected by passages or flues B, substantially as set forth. 2nd. A fire-box arch having an inclined arched bridge extending the full width of the fire-box, a part only of the bridge front touching the tube plate, and a space H being left between the tube plate and the lower part of said bridge front, substantially as set forth. 3rd. In a fire-box, an upper combustion chamber, having at its base a bridge the full width of a fire-box and having as its rear a central wall of less width, extending from the fire-box top to the rear of the said bridge, so as to leave side passage between the said combustion chamber and the chamber containing the firebars, substantially as set forth. 4th. The combination of the several parts C, D, E, F and G with a wall A reaching to the fire-box roof, substantially as set forth.

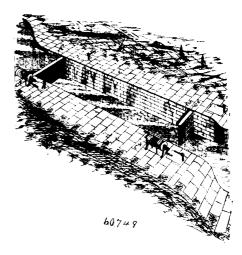
#### No. 60,748. Bicycle Brake. (Frein de bicycle.)



George E. Clark, Ingersoll, Ontario, Canada, 2nd August, 1898; 6 years. (Filed 15th November, 1897.)

stud B<sup>1</sup>, engaging with the free end of said spring J, substantially as and for the purpose set forth. 2nd. A brake for bicycles, consisting of a sleeve G, and a spring J, one end of which is fixed to said ing of a sierve  $\alpha$ , and a spring  $\delta$ , one end of which is fixed to said sleeve, in combination with an axle B, provided with a stud B<sup>1</sup>, the cylinder A, and a nut K, screwed on said axle B, to prevent the movement laterally of said spring J, substantially as and for the purpose set forth. 3rd. A brake for bicycle, concealed within the partial branking adhigher  $\lambda$  and consisting in combination with the latter bearing cylinder A, and consisting, in combination with the latter, of the sleeve G, the spring J, one end of which is fixed to said sleeve, and the axle B, provided with a stud B1, said stud B1, being adapted to engage with either the free or fixed end of said spring J, substantially as and for the purpose set forth. 4th. A brake for bicycles, concealed within the pedal bearing cylinder A, and consisting, in combination with the latter, of the sleeve G, provided with a bearaxing G<sup>4</sup>, the spring, J, one end of which is fixed to said sleeve the axle B, provided with a stud B<sup>1</sup>, and the nut K, substantially as and for the purpose set forth. 5th. The crank axle B, provided with the lug or stud B<sup>1</sup>, and the latter formed with a beyelled should B<sup>2</sup>, in combination with the sleeve G, the sprocket-wheel H, secured thereto, a spring J, one end of which is fixed to said sleeve G, a shoulder or stop G, formed on said sleeve, and the pedal–bearing cylinder A, substantially as and for the purpose set forth.

## No. 60,749. ('anal and Lock. (Canal et écluse.)



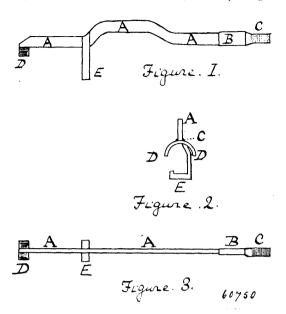
Delia Rochette, assignee of Emilien Alfred Manny, all of Beauharnois, Quebec, Canada, 2nd August, 1898; 6 years. (Filed 25th September, 1897.)

Claim.-1st. The combination with a canal, of auxiliary channels connected to said canal, and controllable ports, operated independently of each other for regulating the passage of the water through said channels whereby said channels may be used independently or collectively, substantially as described. 2nd. The combination with a canal, of auxiliary channels connected to said canal, valves for controlling the entrance of water to said channels, and valves for controlling the discharge of water from said channels, each valve being independent of the movement of the remaining valves valve being independent of the movement of the remaining valves whereby said channels may be used independently or collectively, substantially as described. 3rd. In a canal, the combination with gates adapted to enclose a portion of said canal, of channels connected with said canal but independent of said inclosed portion, means for connecting said channels and said enclosed portions, valves for controlling the entrance of water to said channels, and valves for controlling the discharge of water from said channels, each valve being independent of the movement of the remaining valves, substantially as described. 4th. In a canal, the combination with gates adapted to enclose a portion of said canal, of a channel connected with said canal but independent of said enclosed portion, and transverse channels connecting said independent channel and said enclosed portion, the openings of said transverse channels within said enclosed portion being arranged at opposite sides thereof, in such manner that water will be admitted to said enclosed portion at both sides simultaneously, substantially as described. 5th. The combination with a canal having a lock portion, of an auxiliary channel having connection with said canal and said lock portion, and independently operated valves located in said channel on a plane above the bottom of said bock portion, whereby said lock por-tion cannot be entirely emptied through the medium of said channel, substantially as described. 6th. In a canal, the combination with gates adapted to enclose a portion of said canal, of channels con-Claim.—1st. A brake for bicycles, consisting of a sleeve G, and a spring, J, one end of which is fixed to said sleeve, in combination with an axle B, provided with a stud B<sup>3</sup>, and the cylinder A, said means for admitting water into said enclosed portion from each of

said channels simultaneously at opposite sides of said enclosed portion, substantially as described. 7th. The combination with a canal having a lock portion, of a series of auxiliary channels having connection with said canal and said lock portion and independently operated valves located in each of said channels, each of said valves being located on a plane above the bottom of said lock portion, said valves being located on the same plane, whereby the water will be passed downward through said valves, and said lock portion will be passed downward through said vaives, and said lock portion will be prevented from becoming entirely empty through the medium of said channels, substantially in described. 8th. A canal lock comprising a series of gates located in said canal, auxiliary channels connected to said canal, transverse channels formed in series connecting said auxiliary channels and said portion between the gates, each series having its openings in said portion, arranged at opposite sides of the bottom thereof, substantially as described. 9th. A valve for canal locks, comprising a plate having per-forations secured to said lock, a plate having similar perforations adapted to be movable against one side of said stationary plate, a truck arranged to support said novable plate, and means for moving said truck, substantially as described. 10th. A gate for canal locks, comprising a series of bars having great tensile strength interposed between layers of less tensile strength, and bars secured to the sides of bars and said layers in a direction at right angles to said bars and layers, substantially as described. 11th. The combination with a canal, having a channel extending across the bottom thereof, said channel being provided with rolls, of a gate located in said canal over said channel, the lower face of said gate being adapted to rest on said rolls, and means for moving said gate backwards and forwards on said rolls, substantially as described. 12th. The combination with a canal, having a channel extending across the bottom thereof, said channel being provided with rolls, of a gate located in said canal over said channel, said gate being provided with a track on its under face, said track being adapted to rest on said rolls, and means located on one side of said canal and having connection with said gate for moving said gate backward and forward on said rolls, substantially as described. 13th. The combination with a canal, of auxiliary channels having connection with said canal, and independently operated valves located in said channel, said valves being located on the same plane, whereby the water will be passed downward through said valves, substantially as described. 14th. The combination with a canal gate, of a bar located in front of said gate, and yielding buffers secured between said bar and said gate, substantially as described. 15th. The combination with a canal gate, of a bar located in front of said gate, and a series of spring buffers secured between said gate and said bar, substantially as described. 16th. The combination with a canal, of auxiliary channels connected thereto, and connec tions between said channels and the lock portion of said canal, said connections being arranged to deliver water to and from said lock portion and on both sides thereof from said channels independently or collectively, substantially as described. 17th. The combination with a canal, of auxiliary channels connected thereto, controllable ports to and from said channels whereby said channels may be used independently or collectively, and connections between said channels and the lock portion of said canal, said connections from each channel being arranged to deliver water to and from said lock portion and on both sides thereof whereby water will be admitted on both sides of said lock portion from either or both of said channels, substantially as described. 18th. The combination with a canal, of an auxiliary channel connected therewith, a lock portion formed in said canal contiguous to said channel, and transverse channels leading from said channel to said lock portion, each alternate transverse channel having its opening in said lock portion arranged on the same side of said portion, substantially as described. 19th. The combination with a canal, of an auxiliary channel connected therewith, a lock portion formed in said canal contiguous to said channel, and a series of transverse channels connecting said channel and said lock portion, each series of channels having their openings in said lock portion arranged alternately on opposite sides of said portion, substantially as described. 20th. The combination with a canal, of auxiliary channels connected therewith, controllable ports independent dently operated between said canal and said channels, a lock portion formed in said canal contiguous to said channels, and transverse channels leading independently from each of said channels to said lock portion, each alternate transverse channel leading from the same channel having its opening in said lock portion arranged on the same side of said portion, substantially as described. combination with a canal, of auxiliary channels connected therewith, controllable ports independently operated between said canal and said channels, a lock portion formed in said canal contiguous to said channels, and a series of transverse channels connecting each of said channels and a series of transverse channels connecting each of said channels to said lock portion, each series of channels leading from the same auxiliary channel, having their openings in said lock por-tion arranged alternately on opposite sides of said portion whereby water will be admitted to said lock portion at both sides thereof regardless of the number of auxiliary channels used, substantially as described.

#### No. 60,750. Carriage Jack. (Chèvre de carrosserie.)

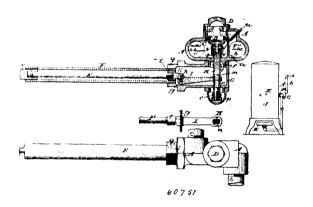
Allan Quarrie, Oak Lake, Manitoba, Canada, 2nd August, 1898; 6 years. (Filed 23rd April, 1898.)



intermediate of its length, the lever-portion being bent, substantially as and for the purpose described and hereinbefore set forth.

#### No. 60,751. Thermostatic Gas Regulator.

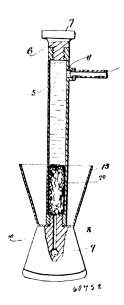
(Régulateur à gaz thermostatique.)



John Seely Coe, Paterson, New Jersey, U.S.A., 2nd August, 1898; 6 years. (Filed 14th April, 1898.)

Claim. 1st. In a thermostatic gas regulator, the combination of Chron.—1st. In a thermostatic gas regulator, the combination of a thermostat, a valve box, and a valve seat therefor in said box, a valve operating spindle capable of a longitudinal movement independently of the valve and forming a connection between the thermostat and the valve, a guide for said spindle, consisting of a fixed socket projecting within the valve box, a screw cap on said socket forming both a guide for the stem of the valve and an adjustable stop to limit the opening of the valve, substantially as herein described. 2nd. In a thermostatic gas regulator, the combination of a thermostatic a valve box, a valve and a seat therefor in bination of a thermostat, a valve box, a valve and a seat therefor in said box, a valve-operating spindle in line with the stem of the valve and capable of a longitudinal movement independently of the valve, a lever connecting said spindle with the thermostat, a stop in the valve box for limiting the opening movement of the valve, and a screw adjustment between said lever and spindle for adjusting the said spindle to the valve, substantially as herein described. 3rd. In a thermostatic gas regulator, the combination of a tube constituting one member of a thermostat and having one end closed and at the other end a hollow head piece, a valve box mounted on said hollow head piece, a valve in said box, a valve-operating spindle passing between the said hollow head piece and valve box and capable of a longitudinal movement independently of the valve, a rod constituting the other member of a thermostat attached to the closed end of said tube and passing through its other end to said biollow head piece, a lever in said hollow head piece connecting the said spindle with the said rod, and means for adjusting said spindle to said lever and valve, substantially as herein described.

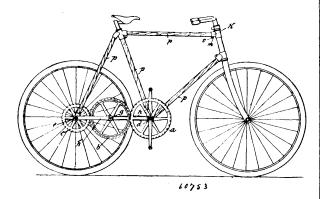
## No. 60,752. Mining Implement. (Outil de mineur.)



Findlay Alexander McRae, Montreal, Quebec, Canada, 2nd August, 1898; 6 years. (Filed 26th February, 1898.)

Claim. 1st. A mining implement comprising a hollow shaft, a working tool carried by and located at one end of said shaft, and a gatherer or collector carried by said shaft adjacent to said tool. 2nd. A mining implement comprising a hollow shaft with or with out a section of absorbent material therein, an opening to which water or stem pipe may be connected, a perforated working tool carried by and located at one end of said shaft and having a channel extending therethrough from said perforation to the interior of said shaft, and a gatherer or collector carried by said shaft adjacent to said tool, for the purpose set forth.

## No. 60,753. Bicycle. (Bicycle.)



Johannes H. W. Schwarz, 104 Adolbstrasse, Ottona, German Empire, 2nd August, 1898; 6 years. (Filed 3rd May, 1898.)

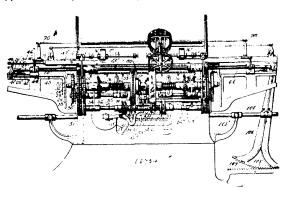
Claim. -1st. A bicycle with wooden frame characterised by the joints being made of split metal collars with threads on the inside pressed together by a bolt passing through ears constructed and arranged substantially as hereinbefore described. 2nd. A bicycle of the kind described charaterised by a friction wheels gear, of which wheels the one b which intervenes a and c is covered with india-rubber or other suitably elastic material, constructed and arranged substantially as hereinbefore described.

#### No. 60,754. Knitting Machine. (Machine à tricoter.)

The Automatic Knitting Machine Company, New York City, assignee of Ellis Spear, Washington, et al., assignee of Frank Wilcomb, Pawtucket, Rhode Island, all in the U.S.A., 2nd August, 1898; 6 years. (Filed 9th April, 1897.)

Claim. -1st. In combination with a rotary sinker-dial, the sinkers carried thereby and operating means for the sinkers, and the main and supplementary presser-wheels adapted to operate on the two sets of needles of a rib knitting machine. 2nd, In combination

shield for the dial and sinkers, and the presser wheel adjustably supported thereby, substantially as described. 3rd. In combina-



tion with a rotary sinker-dial, the sinkers carried thereby, the main presser-wheel arranged centrally of the dial to operate on one set of needles and the two supplementary presser-wheels to operate on the second set of needles and arranged on each side of the dial centre, substantially as described. 4th. In combination with a rotary sinker-dial, the sinkers carried thereby, the main presser-wheel arranged centrally of the dial, the bracket for supporting the same, the two supplementary presser-wheels arranged on each side of the dial centre, the protecting shield for the dial and sinker the said supplementary presser-wheel being supported thereby, substantially as described. 5th. In combination with a rotary dial, the sinkers carried thereby, and the main and supplementary presser-wheels arranged substantially at right angles to each other to operate on the two sets of needles of a rib knitting machine, substantially as described. 6th. In combination, the rotary dial, the sinkers, the shifting can piece for operating the sinkers to sink the thread, arranged to be shifted by the contact of the sinkers, substantially as described. 7th. In combination the rotary dial, the sinkers, and the shifting cam piece, said cam piece being adjustable, substantially as described. 8th. In combination, the rotary dial, the sinkers, the shifting cam piece, the carrier block therefor and adjusting means, substantially as described. 9th. In combination, the rotary dial, the sinkers carried thereby, a sinker-can adapted to operate the sinkers on either rota tion of the dial, automatically adjustable to present on each rotation of the dial, a high part to operate the sinkers and then a receding low part to allow the sinkers to recede, substantially as described. Oth. Hn combination the dial arranged to rotate either way, the sinkers and the shifting cam piece for operating the sinkers to sink the thread. 11th. In combination in a knitting machine, the two sets of spring needles, a single series of sinkers, means for advancing and retracting the needles of each set independently of each other, and means for operating the sinkers independently of each other, to sink enough yarn on one set of needles for both sets and the presser-wheels for the two rows of needles to act on the needles of each set independently and successively. 12th. In combination in a knitting machine, the two sets of needles, the sinkers and the cam bars for the needles having each two sets of knitting cams, the cams of each set being arranged to act alternately on each reciprocation of the cam-bars, substantially as described. 13th. In combination, in a knitting machine, the two sets of sliding spring needles, the sinkers and the front and rear cam-bars having two sets of knitting cams, means for causing the needles to advance along the lifting cam of the first set of cams of the rear bar to receive the varn, and along the under surface of the second set of lifting cams of te rearh bar to lay the yarn across the stems of the needles of the front row and to cast-off the stitches of rear row, and means to direct the needles of the front row along the lifting cam of the cam of the second set of cams in the front bar and for retracting the needles to cast-off their loops after the needles of the rear row have completed their knitting movement, substantially as described. 14th. In combination in a rib knitting machine, with two sets of spring needles, the cam bars therefor each having two sets of cams, comprising the cam surfaces for advancing and partially retracting the needles of the rear row on each stroke in advance of the forward movement of the front needles, and cam surfaces completing the retraction of the said rear needles in advance of the complete retraction of the needles of the front row, substantially as described. 15th. In combination in a knitting machine, the two sets of needles, the sinkers, the cambars, the two sets of needle cams, and the call-jacks and call-cams for causing the cams of each to act alternately for knitting on each reciprocation of the cam-bars, substantially as described. 16th. In combination the needles, and the cam-bars each having two sets of cams, those of the front bar including the two pivoted pieces adapted to open the needle path at the centre of the sets of cams, the means for operating the said pivoted pieces, comprising the call-jacks and call-cam for directing the needles into the opened cam path, substantially as described. 17th. In combination in a knitting machine, the needles, the sinkers, the cam-bars having two sets of cams, those with a rotary sinker-dial, the sinkers carried thereby, the protecting of the front bar including the pivoted pieces, the call-jacks and central call-cam for the front bar and the pair of call-cams and calljacks for the rear bar, substantially as described. 18th. In combination in a knitting machine, the needles, the knitting cams, the call-jacks, the call-can and detent means for holding the jacks in either forward or backward, substantially as described. 19th. In combination, the knitting machine, the needles, the stitch-cam, the jack having the notch and the inclined end and the holding dog adapted to engage the inclines to hold the jack in either position, substantially as described. 20th. In combination with the two sets of spring needles, the single series of sinkers, the means for operating the sinkers, the single presser-wheel for one row of needles, the two presser-wheels for the second row of needles, and the cams in the cam-bars adapted to operate the needle of the second row after those of the first row, substantially as described. 21st. In combination, in a knitting machine, the independently operated needles, the needle cams, the sinkers, the rotary dial and means for operating the sinkers, the thread-guide and carrier and a detachable driving connection for the carrier arranged to shift the same to locate the guide in advance of the sinkers and of the needle cams and means for releasing the said connection, substantially as described. 22nd. In combination in a knitting machine, the independently operated needles, the needle-cams, the sinkers with means for operating them independently, the thread-guide carrier, the thread-guide arranged to move to and from its point of work, a detachable driving connection, operating means therefor and means for retracting the thread-guide from its point of work to permit the sinkers to pass, substantially as described. 23rd. In combination in a knitting machine, the independently operated needles, the needle-cams, the sinkers with operating means therefor, the thread-carrier, the thread-guide haying movement thereon to and from the point of work, the detachable driving connections for the carrier adapted to shift and drive it in advance of the sinkers on each stroke, and means for retracting the thread-guide to allow the sinkers to pass and for returning the guide to the working point on the opposite side of the sinkers, substantially as described. 24th. In combination, the needles, the cams therefor, the thread-carrier and guideway, the thread-guide on the carrier, the two sliding dogs arranged to move transversely of the carrier, the projections on the dogs extending into the guideway and the inclines on the guideway for operating the dogs through the said projections. 25th. In combination, the needles, the cams, the thread-carrier, the guidway therefor, the threadguide, the driving means comprising the spring-pin, the two dogs on the carrier and means for operating the dogs reversely, said spring pin being arranged to pass by one of the dogs on each stroke, substantially as described. 26th. In combination, the needles, the cams, the thread-carrier, the guideway, the driving means, the two sliding dogs movable transversely of the carrier to engage the same, the said dogs having rack teeth and the intermediate pinion engaging the racks and the means for operating one of the dogs on each stroke, including the inclines on the guideway and the projections on the sliding dogs to engage the same, substantially as described. 27th. In combination, the needles, the cams, the series of sinkers with opening means therefor, the driving means for the thread-carrier, the thread-guide pivoted on the carrier and the cambar having the inclines and adapted to engage and retract the thread-guide to pass the sinkers, substantially as described. 28th. In combination, the call-bar extending lengthwise of the needle row, the racking-bar also extending lengthwise thereof and means for operating the bars, substantially as described. 29th. In combination the needles, the cams, the sinkers, the travelling dial, means for rotating the same and means for operating the sinkers, the non-rotating shield, the thread-carrier, the guide therefor, the detachable connection between the carrier and the shield, the pivoted thread guide and the cam-bar on the shield for operating the thread guide, substantially as described. 30th. In combination, the knitting needles, the cams and the travelling knock over device moving transversely of the needles, and acting on the under side of the fabric and under the needles as the same are retracted to cast off the stitches, substantially as described. 31st. In combination the needles, their cams, the travelling knock off finger and the travelling evener finger in rear of the knock over finger, said fingers moving transversely of the needles and below the same and fabric, substantially as described. 32nd. In combination the needles, the cam-bars, the knock off finger moving transversely of and below the needles, and the bar carrying the same connected to the cam bars, substantially as described. 33rd. In combination the needles, the cam-bar, the knock off finger movable transversely of and below the needles, the bar carrying the same, and the detachable connection between the same and the cam-bar, substantially as described. 34th. In combination with two needle beds, and two sets of needles, one bed being in a lower plane than the other, means for operating the needles to produce a ribbed fabric, and a travelling knock over finger and means for operating the same to act in conjunction with the needles of the lower bed, substantially as described. 35th. In combination with the needles operating independently of each other, the movable knock off means arranged below the needles, to move fabric from the ends of the needles to aid in the knocking off action, said knock off means operating below the fabric and in conjunction with the retracted needles, substantially as described. 36th. In combination the needles, their cams, the call-jacks and their cams, the rocking call-bar for throwing the needles into action

the arms, the links, the cam on the main shaft and the rock-shaft operated thereby and connected to the links, substantially as described. 37th. In combination in a knitting machine, the needles, the call-jacks, the needle-cam, the call-cam, and the call-bar for throwing the needles into action through the call-jacks, substantially as described. 38th. In combination the needles, the needle-cam, the call-jacks and the jack racking bar with means for operating the same to retract the call-jacks, substantially as described. 39th. combination the needles, their cams, the rock-shaft, the call-bar carried thereby for throwing the needles into action and the racking carried thereby for throwing the needles into action and the racking bar also carried by the rock-shaft, substantially as described. 40th. In combination the needles, their cams, the call-jacks and call-cam, the jack racking bar extending lengthwise of the machine, and means for reciprocating the racking bar laterally to throw the call-jacks out of action, substantially as described. their sliding cams, and the driving mechanism therefor comprising a drive-gear with means for operating it, the transmitting gear meshing therewith and arranged to oscillate, the pinion carried on the axis of the oscillating gear, the reciprocating continuous rack meshing with the pinion, the cam track, the projection engaging the same and controlling the oscillation of the transmitting gear and the connection from the reciprocating rack to the sliding cams, substantially as described. 42nd. In combination in a knitting machine, the needles, the sliding cams and the driving mechanism comprising the drive gear with operating means therefor, the oscillating frame journalled on the axis of the drive gear, the transmitting gear journalled on said frame, the pinion on the axis of said transmitting gear, the continuous rack, the cam track, the roller on the axis of the pinion engaging therewith and the drive rod connected with the slide bars and connected to the continuous rack, substantially as described. 43rd. In combination in a knitting machine, the needles, the sliding cams, the drive rod, the driving mechanism for the same for imparting a uniform movement thereto, and a multiplying lever connected to the sliding cams and drive rod and having a shifting fulcrum to impart a uniform motion to the sliding cams and moving parallel with the movement of the drive rod, substantially as described. 44th. In combination in a knitting machine, the needles, their sliding cams, a drive rod, its actuating mechanism adapted to give said rod a uniform motion, a multiplying lever with its loose end provided with a rocker, a bed for that rocker, and means to connect the rocker and bed, substantially as described. 45th. In combination with the spring needles and transfer cams, the transfer prongs, means for operating them substantially in the arc of a circle, and means for giving them a falling and rising movement in addition thereto, substantially as described 46th. In combination with the spring needles and transfer cams, the transfer prongs, means for operating them through the loops along the stems of the needles toward the hooks and for lifting them, means for shifting them laterally when the needles have been retracted from beneath them, and means for retracting the narrowing prongs along the stems of the needles from the hooks when the needles are advanced beneath them, substantially as described. 47th. In combination with the spring needles, the transfer prongs arranged over the needle stems, means for advancing and retracting the needles, means for operating the prongs along the stems of the needles toward and from their hooks and for making contact between the prongs and needles, substantially as described. 48th. In combination with the spring needles, and transfer cams, transfer prongs, the sliding block, the prong holder carried thereby and movable in relation thereto, the prong shifter having curved ways for the sliding block and the stationary cam path on the prong shifter for controlling the movement of the prong holder, substantially as described. 49th. In combination, the needles, transfer cams, the transfer prongs, the shifting block, the means for operating the transfer prongs and the means for shifting the block comprising the push block, a connection therefrom to the shifting block, and means for operating the push block, substantially as described. 50th. In combination, the needles, transfer cams, the transfer-prongs, the shifting block, means for operating the transfer device, the push-block, a connection there-from to the shifting block, the rotary shaft, a connection therefrom to the push block and means for rotating the shaft step by step, substantially as described. 51st. In combination, the needles, transfer-cams, the transfer-prongs, means for operating the same, the shifting block therefor, the push-block, a connection therefrom to the shifting block the grooved rotary shaft, means for operating it step by step, the sliding pawl operated thereby and the rack bar connected to the pushed-block, substantially as described. 52nd. In combination, the needles, transfer-cams, the transfer-prongs means for operating the same, the shifting block therefor, the push-block at the ends of the machine connected to the shifting block, the block, the rotary shaft and means to operate the block therefrom, the pinion on the shaft, the gear meshing, therewith and mean for operating the gear step by step, substantially as described. 53rd. In combination in a knitting machine, the transfer-prongs and means for advancing and retracting the same consisting of rotary cams connected between the same and the transfer-prongs and means for ing movement, substantially as described. 54th. In combination in a knitting machine, the transfer-prongs, devices for advancing the said prongs and devices for retracting the same, means for actuating the said devices and changing their relation at each through their jacks, and the means for operating the bar comprising successive narrowing action and connection between the said devices

and prongs, substantially as described. 55th. In combination in a a knitting machine, the transfer prongs, means for advancing the said prongs and for retracting the same including the two gears said prongs and for refracting the same inchanging the coverage moving at different rates of speed and means for operating the gears, substantially as described, 56th. In combination, the needles, the transfer-cams, the transfer-prongs for the loops, means for shifting the same along the needles, a cam for advancing the transferprongs, a cam for retracting the same, connections to the transferprongs and means for driving the cams at different speeds, substantially as described. 57th. In combination, the needles, transforcams, the transfer-prongs for the loops, means for the shifting the same along the needles, a cam for advancing the transfer-prongs, a cam for retracting the same, gearing for operating the cams having different numbers of teeth and connections between the cams and the transfer-prongs, substantially as described. 58th. In combination, the needles, transfer cams, the transfer-prongs, means for shifting the same, the cam for advancing the transfer-prongs, the cam for retracting the same, the gears carrying the cams, said gears being operated at different rates of speed and connections between the cams and the transfer prongs for operating the same, substantially as described. 59th. In combination, the needles, transfer-cams, the transfer-prongs for the loops, means for shifting the same along the needles, the cams for advancing and retracting the transfer-prongs and the connections therefrom comprising the sliding rack, the lever having a segment engaging the same, the rock-shaft and the connection from the lever to the rock-shaft, substantially as described. 60th. In combination, the two rows of needles, transfer-caus, the transfer-prongs, the sliding rack with means for operating the same, the two pivoted levers having segments, the connection from the levers to the transfer prongs and a segment on one lever engaging the rack, substantially as described. 61st. In combination, the needles, transfer-cams, the transfer-prongs, the rack, the slide carrying the same, means for operating the slide, the connections from the rack to the transfer-prongs, and the detachable connection between the rack and slide, substantially as described. 62nd. In combination, the needles, transfer-cams, the transfer-prongs, the shifting block therefor, connections for shifting the block, connections for advancing and retracting the transfer-prongs, the gear carrying the advancing cam, the gear carrying the retracting cam and the third gear for operating the shifting connections, the said advancing gear moving slower and the retracting gear faster than the shifting gear and means for operating the gear, substantially as described, 63rd. In combination, the needles, transfer-cams, the transfer-prongs, means for advancing and retracting the same, means for shifting the prongs lengthwise of the needle-row comprising the step by step gear and intermediate devices, the pinion meshing therewith, the toothed wheel connected to the pinion and the the gear having the pin for engaging the toothed wheel with operating mechanism for the gear, substantially as described. 64th. In combination, the needles, the transfer-prongs, operating connections thereto for advancing and retracting the prongs and for shifting the same along the needle-row, the main shaft, the latterally shifting rack-wheel on the shaft having the incline, the switch pin to act thereon, the pin ion arranged to be operated by the rack-wheel and to operate the said connections to the transfer-prongs and pattern mechanism for controlling the switch-pin, substantially as described. 65th. In combination, the call-bar extending lengthwise of the needle-row, the racking bar also extending lengthwise thereof, pattern mechanism for operating the racking-bar longitudinally of the needle-row and means for operating the call-bar and racking-bar at each stroke of the machine and in a direction laterally of the machine, substantially as described. 66th. In combination, the needles, the transfer-prongs, the main shaft, the shifting rack-wheel thereon, means for shifting the same, the supplemental shaft, the pinion thereon, the gearing loose on the main driving shaft, geared to the supple mental shaft and connections to the transfer-prongs operated by said gearing for advancing and retracting the prongs and for shifting the same along the needle-row, substantially as described. 67th. In combination, the needles, their cams, means for rendering the needles inactive comprising a racking bar, means for reciprocating the bar laterally of the machine, the sliding block having a loose connection therewith to permit it to move laterally and means for adjusting the sliding block, substantially as described. 68th. In combination, the transfer-prongs, driving mechanism therefor In contomation, the transfer-prongs, driving mechanism therefor for advancing and retracting the prongs and for shifting the same along the needle-row and the pattern mechanism including a pattern device, means for moving the same, the rotary can wheel with operating means therefor, the sliding bar adapted to engage the cam-wheel, the catch plate arranged to hold the bar out of engagement with the cam, said catch plate being adapted to be operated by the pattern device to release the bar and connections from the bar to the driving mechanism to control the times of operation therefor, substantially as described. 69th. In combination, the transferprongs, driving mechanism therefor for advancing and retracting the prongs and for shifting the same along the needle-row, and the pattern mechanism comprising the pattern device with operating means, the cam-wheel, the sliding bar adapted to engage the same. the connections from the slide to the driving means for the transfer prongs to control the times of operation thereof, and the open framelatch to hold the slide bar out of engagement with the cam and arranged to be lifted by the pattern device, substantially as described. 70th. In combination the transfer-prongs, driving mechanism therefor including the shifting-wheel for advancing and retract-

ing the prongs and for shifting them along the needle-row, the switch pin for operating the same laterally, the pattern mechanism with connections for operating the switch-pin and the flange of the shifting-wheel for holding the switch-pin in its moved position, substantially as described. 71st. In combination, the transferprongs, driving mechanism therefor, including the shifting-wheel for advancing and retracting the prongs and for shifting them along the needle-row, the switch-pm, means for operating the same, the pin on the switch-pin, the flange on the shifting-wheel and the incline for returning the switch-pin to position, substantially as described. 72nd. In combination, the transfer-prongs, driving mechanism for advancing and retracting the prongs and for shifting them along the needle-row, the sliding bar with connections to the driving mechanism to control the times of operation thereof. the grooved cam having reversely inclined portions, the pattern device and means controlled thereby for throwing the bar into connection with the grooved cam, substantially as described. 73rd. In combination, the two seats of transfer-prongs, the two seats of driving mechanisms therefor for advancing and retracting the said prongs and for shifting them along the needle-rows, two slide-bars with connections to the driving mechanism to control the times of operation of the driving mechanisms, the cam for operating the bars when in contact therewith, the latches for controlling the engagement of the bars with the cam-wheel and the pattern device arranged to operate the latches in succession, said cam having reverse inclines to rest the bar first operated before the second bar is operated, substantially as described. 74th. In combination, the two sets of transfer-prongs, the two sets of driving mechanism for advancing and retracting the transferprongs and for shifting the same along the needle-rows, said driving mechanism including the shifting-wheels, two slide bars arranged side by side, the levers connected thereto, the hollow shaft connected to one lever, the shaft connected to the other lever and passing through the hollow shaft, means operated by the shafts for controlling the two sets of driving mechanism by engaging the shiftingwheels and pattern mechanisms for controlling the slide-bars, substantially as described. 75th. In combination, the transfer-prongs, the driving mechanism for advancing and retracting the prongs and for shfting the same along the needle-rows, said mechanism including the main shaft, the shifting-wheel thereon having the rack, the supplemental shaft having the pinion splined thereon, and connections from the supplemental shaft to the transfer-prongs, the revolving pulley loose on the supplemental shaft, the locking disc on the supplemental shaft having a clutch connection with the pinion and the clutch connection with the pinion, with means for shifting it to engage the revolving pulley and to be released from the locking-disc, substantially as described. 76th. In combination, transfer-prongs, driving mechanism for advancing and retracting the prongs and for shifting the same along the needle-row, said mechanism including the main shaft, the shifting rack-wheel thereon, the supplemental shaft having the pinion to engage the rack, and connections from the supplemental shaft to the transfer-prongs, the revolving pulley on the supplemental shaft and the clutch to connect the same with the shaft to return the parts to normal position, substantially as described. 77th. In combination, the transferprongs, driving mechanism for the same for advancing and retracting them and for shifting them along the needle-row, including the main and supplemental shafts with a clutch connection between them, and connections from the supplemental shaft to the transfer-prongs, and means for rotating the clutch connections backward, substantially as described. 78th. In combination, fastening prongs, a main shaft, devices between the main shaft and the prongs for advancing and retracting the latter and shifting the same along the needle-row, said devices including a clutch portion together with means to operate said devices backward when disconnected from the main shaft, substantially as described. 79th. In combination, fashioning mechanism, including the transfer prongs, the main shaft, operating means therefrom to the fashioning mechanism, including the loose gears, for advancing and retracting the prongs and shifting them along the needle-row, and a clutch connection and means for turning the gears backward when the clutch connection is disengaged, substantially as described.

#### No. 60,755. Pharmaceutical Product.

## (Produit pharmaceutique.)

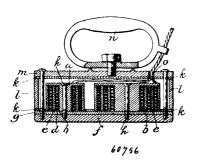
F. Hoffmann-La Roche & Cie, assignee Carl F. M. Schaerges and Paul Schwarz, all of Basil, Switzerland, 2nd August, 1898; 6 years. (Filed 14th September, 1897.)

Claim.—1st. The process for the preparation of a pure alkaline acetosulphanilate by acetyling an alkaline salt of sulphanilic and by means of glacial acetic acid and by delivering the product of reaction from free sulphanilic acid and alkaline acetate by means of water and alcohol. 2nd. As a new antipyretic and antineuralgic product, the herein described pure alkaline acetosulphanilate, which consists of a white hygroscopic substance in minute crystals, is readily soluble in water, soluble with difficulty in alcohol and insoluble in ether.

## No. 60,756. Electric Heater. (Chauffeur électrique.)

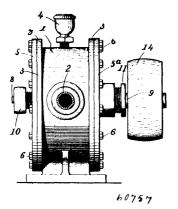
The American Electric Heater Co., Detroit, Michigan, U. S. A., assignee of Richard A. L. Snyder, Pittsburg, and August F. Tinnerholm, of Detroit aforesaid, 2nd August, 1898; 6 years, (Filed 4th April, 1898.)

Claim.—1st. In an electric heating apparatus, a metallic part to be heated, a metallic core, layers of resistance wire arranged on the



core and insulated therefrom, a metallic strip, between said layers of resistance-wire and insulated therefrom, said strip in metallic contact with the part to be heated. 2nd. In an electric heating apparatus, a metallic plate to be heated, a metallic core attached thereto, an insulated layer of resistance-wire arranged on the core, a metallic shell in metallic contact with said plate, a layer of insulated resistance-wire arranged on the metallic shell. 3rd. In an electric heating apparatus, the combination of an outer casing, a heating-coil arranged with said casing, said casing composed of separate parts consisting of the heating plate, side portions and top, poor heat-conducting material separating the side portions and said top, substantially as described.

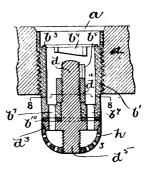
## No. 60,757. Rotary Pump. (Pompe rotatoire.)



William Henry Slade, assignee of John William T. Briggs, both of Buffalo, New York, U.S.A., 2nd August, 1898; 6 years. (Filed 19th March, 1897.)

Claim.-1st. In a rotary engine or pump, the combination with an oblong outer case, having inlet and outlet openings, and its upper and lower sides in the form of a semi-circle, of a circular slideway cylinder, its upper portion fitting the upper semi-circular portion of the case and mounted on the driving shaft so as to fit and turn in said semi-circular portion, circular depression located centrally in each flat side of said cylinder, a stationary corresponding oblong cam secured to the inner side of each cover for the case and located in each circular depression, and means for securing the covers to the case, the cams being in the form of a semi-circle at the top and case, the cams being in the form of a semi-circle at the top and bottom, and a series of sliding plates fitted to slide radially in the slideway cylinder and interposed between the innersides of the case and pre-phery of the cams, substantially as described. 2nd. In a rotary pump, the combination with the cylinder carrying the sliding plates, of a series of rubber packing portions inclosed transversely within said cylinder, a series of transverse openings in the periphery of the cylinder located over said rubber portions, and a series of leather packing strips in said openings having their lower or base portions rest against said rubber portions, substantially as described. 3rd. In a rotary pump, the combination with the inclosing case and stationary cams, of a cylinder having a series of radial slideways and mounted on a shaft within said case, a sliding plate mounted in each slideway, spiral springs secured in the sliding plates and a ball interposed between each spring and the peripheries of the cans, substantially as described. 4th. In a rotary pump, the combination with the inclosing case and stationary cams, of a cylinder having depressions on each side and a series of radial slideways in its periphery and mounted on a shaft within said case, a sliding plate mounted in each slideway, spiralsprings and balls in one end of each sliding plate and a packing of leather secured to the opposite ends of said sliding plates, substantially as described.

No. 60,758. Tap. (Robinet.)



60758

The Rochester Bunging Apparatus Company, Rochester, New York, assignee of Rudolph F. Staul, Boston, Massachusetts, U.S.A., 2nd August, 1898; 6 years. (Filed 20th May, 1898.)

Claim. - 1st. A tap comprising in its construction a bushing formed with a web provided with one or more ports and a valve-stem aperture, a valve-stem arranged in said aperture, a disc carried by said stem and arranged to seat against the inner face of said web, and means upon said valve-stem upon the opposite side of said web for adjustably holding said valve against its seat, said means comprising a member arranged to turn with the valve-stem and to engage the web or some part of the bushing, and a nut to engage said member to force the latter against its support and the valve against its seat. 2nd. A tap comprising in its construction a bushing formed at its lower end with a web provided with one or more ports and a valve-stem aperture, the walls of said aperture being extended to form an upwardly projecting flange, a valve-stem arranged in said aperture and provided with an apertured valve-disc adapted to seat against the lower face of said web, a winged washer locked on said stem and resting on said flange, and a nut on said stem adapted to engage said washer and to force said valve against its seat, said wings being adapted to stand over the ports when said disc is turned to close communication into the cask. 3rd. A bushing comprising in its construction a cylindrical body having an off-set flange at its upper end and a shoulder  $b^3$  within said flange and flange at its upper end and a shoulder  $b^a$  within said hange and surrounding the opening in said bushing, came  $b^4$  projecting from the inner wall of said bushing, a stop-rib  $b^5$  arranged below one of said came, the lower end of said bushing being formed with an apertured web. 4th. The combination with a bushing having came on its inner face, and recessed at its upper end, terminating in an upwardly projecting rib, a projecting stop-rib arranged below one of said cams, a valve mechanism arranged in the lower end of said bushing, comprising a nut having wings adapted to protect the ports in said valve mechanism when the latter are closed, combined with a delivery-tube having a washer adapted to engage the rib  $b^3$ , and complemental cams and rib adapted to engage the cams, and a stop-rib in the interior of the bushing. 5th. A tap comprising a bushing formed at its outer end with a web provided with one or more ports and a valve-stem aperture, a valve-stem arranged in said aperture, a disc carried by said stem and adapted to seat against said web, a winged washer locked on said stem or said web and formed with wrench-engaging means, as lugs t<sup>4</sup>, and means for holding said disc against its seat. 6th. A tap wrench comprising a shell formed on its lower end with holding members, a rotatable spanner arranged in said shell and formed on its lower end with parts adapted to engage a nut. 7th. A spanner comprising a shell having radial lugs or projections  $t^2$  and axial lugs or projections  $b^2$ a rod arranged to rotate in the said shell and provided at one end with a nut-engaging means, and provisions on said rod for turning the latter. 8th. A cleaning tool for the ports of taps for casks or barrels, comprising one or more fingers shaped at their working ends to enter said ports, the main body of the finger or fingers being shaped to engage lugs or other members of the interior walls of the tap to guide said fingers and cause the working ends to properly register with the said ports. 9th. A tap comprising a bushing formed at its lower end with a web provided with one or more ports and a valve-stem aperture, a valve-stem arranged in said aperture, a disc carried by said stem and adapted to seat against the lower side of said web, and a winged washer locked on said stem or said web and formed with wrench engaging means, as lugs t\*, a nut on said stem adapted to engage said washer to force said valve against its seat, said nut being accessible from the exterior of the cask.

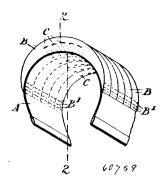
#### No. 60,759. Wheel Tire and Fastening.

## (Bandage et attache de roues.)

The Leather Pneumatic Tire Company, 3 Bloomfield Square, London, assignee of Charles Ernest Squier, 203 Upper Thomas Street and Francis Windham, 73 Victoria Street, of London aforesaid, 2nd August, 1898; 6 years. (Filed 9th May, 1898.)

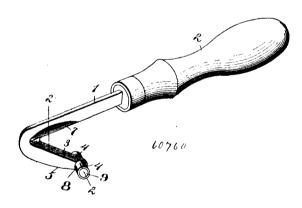
Claim.—1st. In a tire, a flexible backing, in combination with arched sections B, sewn independently to the said backing, substan-

tially as described. 2nd. In a tire the combination with a flexible backing of arched sections such as B, each centrally sewn to the



backing by stitches passing diagonally through each section from its side, substantially as described. 3rd. In a tire the combination with a flexible backing of arched sections such as B, each centrally sewn to the backing by stitches passing diagonally through each section from its side, and also from each end, substantially as described. 4th. In a tire the combination with a flexible backing of arched sections such as B, sewn to the backing and plates D, between the sections, substantially as described. 5th. In a pneumatic tire the combination with a tire cover such as B, of a flat band such as C, which has one end attached to the valve and the other end movable between the fixed end and the rim and adjustably attached to the rim, substantially as and for the purpose described. 6th. In a pneumatic tire the cover provided with arched sections sewn to a flexible backing and with enlarged edges in combination with a channel rim and a flat band with overlapping ends having one end retained by the valve, the other end movable past the valve and adjustably attached to the rim, substantially as and for the purpose described.

## No. 60,760. Knife for Cutting Oil-Cloth, (Couteau pour tailler la toile cirée.)

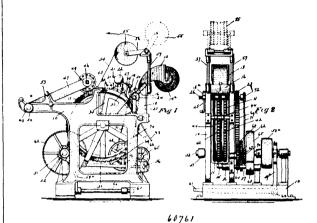


John C. Creveling and William Abbott, both of Espy, Pennsylvania, U.S.A., 2nd August, 1898; 6 years. (Filed 26th May,

Claim,-1st. A cutter of the character described comprising a shank, having a downwardly and rearwardly extending cutter arm, the extremity of the cutter arm forming a support for the tool, and the front edge thereof tapered to a cutting edge the same adapted to be operated, as shown and described. 2nd. A cutter of the charac-ter described comprising a shank, a downwardly and rearwardly extending arm baving its front edge formed into a cutter, its lower end provided with supporting rollers, whereby the rollers are in rear of the cutter and the tool adapted to be operated as described. 3rd. A cutter of the character described comprising a shank, a downwardly and rearwardly extending arm having its lower end adapted to form a support, and the front edge of the arm sharpened to a cutting edge at a point above the said supporting portion of the arm, substantially as described. 4th. A cutter of the character described comprising a shank, a downwardly and rearwardly extending arm, rollers situated at each side of the arm and supporting its extremities in a plane above the lower periphery of the roller, the front edge of the arm sharpened to a cutting edge at a point in a plane above the lower extremity, substantially as described. 5th. A cutter of the character described comprising a shank, having a downwardly and rearwardly extending arm, supporting rollers at extremities of the arm with their lower periphery in a plane below

the arm being sharpened to a cutting edge, substantially as and for the purpose described. 6th. A cutter of the character described comprising a shank, a downwardly and rearwardly extending cutterarm having a laterally projecting base or supporting portion at its extremity, the edge or edges of the arm being sharpened to a cutting edge, substantially as described.

Machine for Cutting and Assembling Match Splints. (Machine pour couper et assembler les eclisses d'allumettes.) No. 60,761.

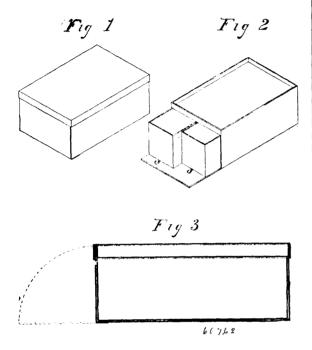


The Diamond Match Co., Chicago, Illinois, assignee of John F. Kay, Passaic, and Daniel Hutchinson, Bound Brook, both in New Jersey, all in the U.S.A., 2nd August, 1898; 6 years. (Filed 12th May, 1898.)

Claim.—Ist. A machine of the kind described, comprising a table, a splint-cutting device at the end of the table, a revoluble toothed wheel having a belt groove therein, located below the cuttoothed wheel having a belt groove therein, located below the cutting device and adapted to receive the cut splints, a travelling belt arranged in the groove, and means for rolling up the belt and splints, substantially as described. 2nd. A machine of the kind described, comprising a feed table, a knife movable at the end of the table, a rotary toothed wheel having a belt groove therein located below the knife and table and adapted to receive the cut located below the knife and table and adapted to receive the cut splints, a travelling belt arranged in the groove and a coiling device to assemble the splints, substantially as described. 3rd. A machine of the kind described, comprising a revoluble toothed wheel, a feeding device to feed veneer into the teeth of said wheel, and a knife for severing portions from the veneer while engaged by the wheel, substantially as described. 4th. A machine of the kind described, comprising a revoluble toothed wheel, a reciprocating knife movable over the face of the wheel opposite the teeth, and a feeding device to feed veneer into the teeth in front of the knife, substantially as described. 5th. In a machine of the kind described, the combination of the toothed wheel, the feed table delivering thereto and provided with a transverse groove, and the scribed, the combination of the toothed wheel, the feed table delivering thereto and provided with a transverse groove, and the knife movable over the face of the wheel and into the groove, substantially as described. 6th. In a machine of the kind described, the combination of the feed table having a transverse knife groove therein, a knife movable in and out of the groove, and colling mechanism to receive the splints falling from the knife, substantially asdescribed. 7th. In a machine of the kind described, the combination of the trothed wheels the feed table delivering thereto. combination of the toothed wheels, the feed table delivering thereto, said table having a transverse groove relieved at the back, and the said table having a transverse groove relieved at the back, and the knife movable in and out of the groove, substantially as described. 8th. In a machine of the kind described, the combination of the toothed wheels, the rec procating knife, the seed table having a relieved groove to receive the knife edge, and the face plate forming one side of the groove, substantially as described. 9th. A machine of the kind described, comprising a revoluble toothed wheel, a sliding head fitting over the face of the wheel, a knife at the front edge of the sliding how and support of the light in the stant of the scene of the sliding have great described. front edge of the sliding head, and a veneer feed delivering veneer into the teeth in advance of the knife, substantially as described. 10th. A machine of the kind described, comprising a revoluble toothed wheel having a belt groove in its face, a sliding head fitting over the face of the wheel, a veneer cutting knife on the head, a coiling device behind the head, and means for feeding veneer into the the thin advance of the knife, substantially as described. 11th. A machine of the kind described, comprising a revoluble toothed wheel or wheels having belt grooves therein, a sliding head fitting over the face of the said wheel or wheels, a knife fitting over the face of the said wheel or wheels, a knife at the front edge of the head, a cutting-off knife carried by the head and arranged behind the first-mentioned knife, means for delivering veneer into the teeth in advance of the head, and a coiling device behind the head, substantially as described. 12th. A machine of the kind described, comprising revoluble toothed wheels spaced apart and provided with circumferential belt grooves. the plane of the lower end of the arm, the front and rear edges of a sliding head movable over the face of the wheels, a splitting knife

at the front edge of the head, a cutting-off knife carried by the head and extending between the wheels, means for feeding veneer into the toothed wheel in advance of the splitting knife, and a coiling device behind the head, substantially as described. 13th. The combination of the toothed wheels having circumferential belt grooves, the sliding head fitting over the face of the wheels, the splitting knife carried by the head, the shield covering the wheels behind the head, the coiling device behind the shield, and a veneer feed delivering into the teeth in advance of the splitting knife, substantially as described.

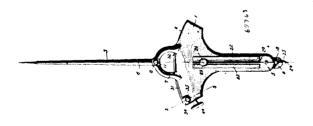
## No. 60,762. Show Box for Confectionery etc. (Boite de montre pour confiseries etc.)



Frank Alfred McClarkey and Alfred John McClarkey, both of Saint-John, New Brunswick, Canada, 2nd August, 1898; 6 years. (Filed 30th March, 1898.)

Claim.—A box A with cover B with one end or side of the box F, to open hinged at the bottom as shewn in combination with a fixed horizontal partition E near the top of the box forming a shallow tray or receptacle C with one or more drawers D,D, which occupy the space between the said partition E and the bottom of the box substantially as and for the purpose set forth.

#### No. 60,763. Dividers. (Diviseur).



Frederick H. De Tray, Eugene B. Potter and Adam Rohrbough, all of Quinsy, Illinois, U.S.A., 2nd August, 1898; 6 years. (Filed 6th April, 1898.)

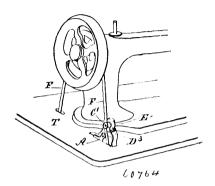
Claim.—1st. Dividers having pivotally connected members carrying long and short arms, and provided with segmental scales concentric with the pivot of the members, substantially as specified. 2nd. Dividers having pivotally connected segmental-faced members carrying long arms and extensible short arms, substantially as specified. 3rd. Dividers having pivotally connected members provided, concentric with their pivot, with a segmental interlocking joint, and carrying long and short arms, substantially as specified. 4th. Dividers having pivotally connected members provided, concentric with their pivot, with a segmentral interlocking connection consisting of a lip or tungue on one of the members permanently engaging a chan-

nel in the other member, said members carrying long and short arms, substantially as specified. 5th. Dividers having pivotally connected members carrying long and short arms, and provided, concentric with their pivot, with segmental interlocking guiding devices extending in opposite directions from the lines, and in the planes of, the arms, substantially as specified. 6th. In dividers, the combination of quadrant-members, a pivot-bolt connecting the members, long arms carried by, and occupying fixed relations to, the quadrant-members, short arms slidably fitted upon the quadrant-members, radially with relation to the pivot-bolt, means for indicating the fateral adjustment of the quadrant-members and arms, and means for indicating the slidable adjustment of the short arms, substantially as specified. 7th. In dividers, the combination with pivoted quadrantrant-members, and long arms movable therewith, of short arms s idably fitted to the respective quadrant-members to occupy normal axial relation to said long arms, and locking devices each mounted on one quadrant-member and operatively connected with the short arm fitted thereto, substantially as specified. 8th. In dividers, the combination with flanged quadrant-members, a pivot-bolt, long and short arms mounted on the respective quadrant-members, a setting-bar housed within said flanged quadrant-members, and an adjusting-screw connected to one end of the setting bar and to one of the quadrant-members, and means on the other quadrant-member for engagement with the setting-bar, substantially as specified. 9th. In dividers, the combination with pivoted quadrant members carrying arms, a two-part setting bar having a feed screw mounted upon one of the quadrant-members for communicating linar movement to the other bar-member, and means carried by the other quadrant-member for engaging the adjustable bar-member, substantially as specified. 10th. In dividers, the combination with quadrant-members provided with guides, and short arms slidably quadrant-members provided with guides, and short arms shown; fitted in said guides, of a pivot-bolt connecting said members and passing through said short arms, means for locking the short arms at the desired extension, and long arms carried by the quadrant-members, substantially as specified. 11th. In dividers, the combination with quadrant-members having guides, of entensible short arms wilded to fitted in said guides pointers movable with said short. arms slidably fitted in said guides, pointers movable with said short arms and traversing scales on the quadrant-members, means for securing the short arms at the desired adjustment, and long arms carried by the quadrant-members, substantially as specified. A pair of dividers comprising quadrant-plates or members having scales on their segmental edges, long arms carried by said plates, short arms slidably connected to the plates, a single pivot-bolt connecting the plates and extending through longitudinal slots in the short arms, locking devices for sccuring the short arms at the desired extension, and a setting device having members connected respectively to the said plates or members, substantially as specified.

13th. Dividers having pivotally-connected segmental-faced plates or members carrying long arms, extensible short arms mounted to slide respectively upon the plates or members, and provided with projections operating in radial slots therein, pointers adjustably mounted upon said projections to traverse scales parallel with the slots in the plates or members, and common locking devices for holding the pointers in place and securing the short arms in their adjusted positions, substantially as specified. 14th. Dividers having pivotally connected segmental-faced plates or members provided with radial slots and carrying long arms, extensible short arms mounted to slide upon the plates or members and having angular projections extending through said radial slots, pointers having openings fitted upon said projections to traverse scales on the exterior surfaces of the plates or members parallel with the slots therein, and thumbscrews threaded upon extensions of said projections to clamp the pointers upon the surfaces of the plates on members and secure the short arms in their adjusted positions, sub-stantially as specified. 15th. Dividers having pivotally-connected arm-carrying plates, a setting-bar carried by one of the plates and provided with spaced seats, and a latch carried by the other plate and provided with a spur or tooth to engage said seat, substantially as specified. 16th. Dividers having pivotally-connected arm-carrying plates, a setting-bar having a member adjustably mounted upon one of the plates, and provided with spaced seats, and a latch carried by the other plate and having a spur or tooth to engage said seats, substantially as specified. 17th. Dividers having pivotally-connected arm-carrying plates, a segmental setting-bar mounted upon one of the plates for adjustment concentric with the pivot thereof and having spaced seats, and a latch carried by the other plate and having a spur or tooth to engage said seats, substantially as specified. 18th Dividers having pivotally-connected arm-carrying plates, a segmental setting-bar mounted upon one of the plates for adjustment concentric with the pivot thereof and provided with plate and provided with a spur or tooth, to engage the seats of the setting bar, and an exposed thumb-hold and a stop for limiting the swinging movement of the latch, substantitally as specified. 19th. Dividers having pivotally-connected arm carrying plates, a settingbar having a member mounted upon one of the plates for sliding movement, and also having a swivelled feed-screw, and a pivotal feed-nut mounted upon sliding member and engaged by the feedscrew, and a latch carried by the other plate for engaging said sliding-member, substantially as specified. 20th. Dividers having pivotally-connected arm-carrying plates, and setting devices including a rack-bar mounted upon one of the plates for sliding movement concentric with the pivot of the plates, a slotted guiding eper, a

swivelled feed-screw, and a feed-nut pivotally mounted upon the rack-bar, engaged by said feed-screw, and having a trunnion mounted in the slot of the keeper, and a latch carried by the other plate for engagement with the seats of the rack-bar, substantially as specified. 21st. Dividers having pivotally-connected plates or members, and means for securing the same at the desired angular adjustment, neans for securing the same at the desired angular adjustment, yokes carried respectively by the plates or members and provided with sockets aligned with the pivotal point of the plates or members, short arms carried by the plates or members, long arms fitted respectively to slide in said sockets, and securing devices for fasten ing the long arms at the desired adjustment, substantially as specifield. 22nd. Dividers having its arms provided with tapered scats, and tapered contractible needle-holding sockets fitting in said seats, substantially as specified.

## No. 60,764, Ripping Attachment for Sewing Machines (Appareil à decoudre pour machines à coudre.)



Maurice W. Talen, George Henry Croft and Albert J. Anderson, all of Geneseo, Illinois, U.S.A., 3rd August, 1898; 6 years. (Filed 20th April, 1898.)

Claim.—1st. A ripping attachment for sewing machines, comprising a base plate separate from and attachable to the sewing machine ing a base plate separate from an accentance of the second table, and having two pulleys supported therefrom and adapted to receive the sewing machine belt between them, and a ripping disc connected with one of said pulleys, substantially as described. 2nd. A ripping attachment for sewing machine, comprising base plates separate from and attachable to the machine table, and having two pulleys supported therefrom at different elevations and adapted to receive the belt between them by deflecting the belt, one of said pulleys being movable horizontally, and a cutting disc connected to one of the pulleys, substantially as described. 3rd. A ripping attachment for sewing machines, comprising a base plate separate from and attachable to the machine table, and having a pulley mounted thereon, a plate adjustable horizontally up on the base plate and having a pulley mounted thereon above the other pulley, and a cutting disc connected to one of the pulleys, substantially as described. 4th. A ripping attachment for sewing machines, comprising a base attachable to the machine table and having a pulley mounted thereon, a plate adjustable horizontally upon the base and having a pulley mounted thereon above the other pulley, said plate having its upper portion curved over to form a shield for the edge of the cutting disc, and a cutting disc mounted upon the shaft of the second pulley, substantially as described. 5th. A ripping attachment for sewing machines, comprising a base attachable to the machine table, and having a pulley mounted thereon, a plate adjustable upon the base and having a pulley mounted thereon above the other pulley, said plate having its upper portion curved over to form a shield for the edge of the cutting disc, and its front edge bent laterally and slotted to embrace the disc and form a work support or guide, substantially as described. 6th. A ripping attachment for sewing machines, comprising a base having an upwardly extending arm on one side carrying a roller thereon, the same edge of the base plate being curved upwardly and inwardly to form a guide flange, and an upwardly extending flange or web upon the other and having a horizontally extending slot therein, means for securing the base to the table, a plate lying alongside of the slotted web of the base and having a base flange engaging beneath the guide flange of the base, a pulley and connected cutting disc journalled on base plate above the other pulley, said plate also having its upper edge rolled over the edge of the disc to form a guard therefor, and a recess at one side exposing a section of the disc, substantially as described. 7th. A ripping attachment for sewing machines, comprising a base having an upwardly extending arm on one side carrying a roller, the same edge of the base plate being curved upwardly and inwardly to form a guide flange, and an upwardly extending flange or web upon the other side having a horizontally extending slot therein, means for securing the base to the table, a plate lying alongside of the slotted web of the base and having a base flange engaging beneath the guide flange of the base and a leg engaging the machine table beyond the belt, a pulley and connected cutting disc journalled

one side exposing a section of the disc, and a bolt passing through the slot in the base plate and entering the sliding plate whereby the two may be adjusted, substantially as described. 8th, A ripping attachment for sewing machines, comprising a base having an upwardly extending arm on one side carrying a roller, said base being bent upwardly and inwardly to form a guide on the same side of the base, and an upwardly extending flange or web upon the other side having a horizontally extending slot therein, a clamping arm extending downward from said base and adapted to pass through the bolt hole in the machine table, a plate lying alongside of the slotted web of the base and having a base flange engaging beneath the guide flange of the base, and a leg engaging the machine table beyond the bolt, a bolt passing through the slot in the base plate and into the sliding plate, a pulley and connected cutting disc journalled in said plate above the other pulley, said plate also having its upper edge rolled over the edge of the disc to form a guard therefor, a recess at one side exposing a section of the disc, and a side extending flange at the lower part of the said recess, said flange being slotted to embrace the disc and forming a work guide or support, substantially as described.

## No. 60,765. Bicycle Umbrella. (Parapluie pour bicycles.)

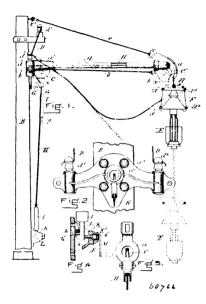


William Metchiner Pentelow, London, and Mercy Weston, Toronto, assignees of George Valiant, Toronto, all of Ontario, Canada, 3rd August, 1898; 6 years. (Filed 5th April, 1898.)

Claim. - 1st. An umbrella for bicycles comprising the telescopic standard having a lower elbow, means for securing the elbow to the standard having a lower enow, means for securing the top bar of the seat post, the umbrella proper and a support for same upon the top of the telescopic standard, as and for the purpose smaller 2nd. An umbrella for bicycles comprising the D-tube telescopic standard having a lower elbow, a tail extending forwardly from said elbow and designed to rest on the top bar, the seat clasp and set screw for holding such tail in position upon the top bar, the slits and clamps at the joints for holding the lengths of the telescopic standard in any desired position, the umbrella proper and support therefor on the top of the standard, as and for the purpose specified. 3rd. The combination with the standard suitably secured to the bicycle and having a jaw at the upper end, of the quadrant pivoted in such jaw, the pin extending through the jaw and provided with a square portion and knob, the pinion on the pin designed to be brought into mesh with the quadrant, the spring between the pinion and one member of the jaws and the square hole in the opposite member of the jaw designed to receive the square portion of the pin to lock it, the arms secured to the upper rear end of the quadrant, and the umbrella suitably held in the end of the arms, as and for the purpose specified. 4th. The combination with the standard suitably secured to the bicycle and having a jaw at the upper end, of the quadrant pivoted in such jaw, means for turning the quadrant, higs formed at the rear end of the quadrant, the arms pivoted in the lugs, means for holding the ends of the arms apart and collapsing same, and the umbrella proper held in the ends of the arms, as and for the purpose specified. 5th. The combination with the standard suitably secured to the bicycle and having a jaw at the upper end, of the quadrant pivoted in such jaw, means for turning the quadrant, lugs formed at the rear end of the quadrant, the arms pivoted in the lugs, the dovetail groove formed in the upper side of the quadrant, the block fitting same, the bars pivotally connected to the arms, the pin extending through the opposite end into the block, and spring in one bar extending into a notch in the other, as and for the purpose specified. 6th. In a device of the class described, the combination with the umbrella suitably supported on the ends beneath the guide flange of the base and a leg engaging the machine table beyond the belt, a pulley and connected cutting disc journalled on said plate above the other pulley, said plate having a recess at looped ends of the other ribs, the cover for the ribs, the arch-shaped

crossed bar gate pivotally connected to the sleeves on the ribs, and the rods connecting the ends of the centre bars of the gate to the end loops of the central rib, as and for the purpose specified. 7th. In a device of the class described, the unbrella proper comprising the ribs 1, 12 and central rib 14 adjustably connected together at the ends, the cover for the ribs, the arch-shaped crossed bar gate pivotally connected to the ribs, and the rods connecting the ends of the centre bars of the gate to the ends of the ribs, as and for the purpose specified. 8th. An umbrella comprising a series of flexible ribs having suitable ends adjustably connected together, a cover suitably secured to the ribs, and a spreading device whereby such ribs may be drawn together or expanded to open the umbrella, substantially as described.

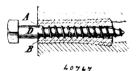
No. 60,766. Mast Arm. (Bras de mat.)



Orvis Prentiss Philbrick, Somerville, and Roanah E. Philbrick, Lexington, both in Massachusetts, U.S.A., 3rd August, 1898; 6 years. (Filed 18th January, 1898.)

Claim.—1st. In a mast arm device for electric lamps, the locking device herein described, consisting of the shell K, the catch  $h^+$ , the screw-nut k, and the hook L, combined substantially as and for the purposes set forth.—2nd. In a mast arm, for electric lamps, the combination of the rope H, and the ice breaker G, substantially as set forth.

No. 66,767. Anchor Bolt Bushing. (Dé de boulon à ancre)

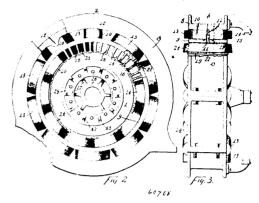


Henry B. Newhall, assignee of John H. Cook, Brooklyn, New York, U.S.A., 3rd August, 1898; 6 years. (Filed 12th January, 1898.)

Claim. 1st. A tubular bushing for anchoring a screw or screwbolt, in stone, brickwork or like material, consisting of a metallic tube having one or more longitudinal ribs B, and being slotted by a single slot along its length, as and for the purposes set forth. 2nd. A tubular bushing for anchoring a screw or screw-bolt in stone brickwork or like material, consisting of a metallictube slotted along its length, for the purpose set forth. 3rd. A longitudinally-slotted tubular bushing A, for anchoring a screw or screw-bolt in masonry or like material, which bushing is provided with walls of varying thickness and with one or more ribs B, substantially as and for the purpose set forth. 4th. A longitudinally slotted tubular bushing for anchoring a screw or screw-bolt in masonry or like material, which bushing is provided with walls of varying thickness, substantially as set forth. 5th. A longitudinally slotted tubular bushing for anchoring a screw or screw-bolt in masonry or like material, which bushing is provided with walls of varying the kness, in combination with means acting to expand the inner end of said bushing, substantially as and for the purpose set forth. 6th. A longitudinally slotted and interiorally-threaded tubular bushing A, for anchoring a screw or screw bolt in masonry or like material, which bushing is provided with one or more longitudinal ribs B, substantially as and for the purpose set forth.

No. 60,768. Dynamo Electric Machine.

(Machine dynamo-électrique.)



Milton Ellsworth Thompson, Ridgway, Pennsylvania, and Charles L. Cornell, Hamilton, Ohio, all in the U.S.A., 3rd August, 1898; 6 years. (Filed 12th October, 1897.)

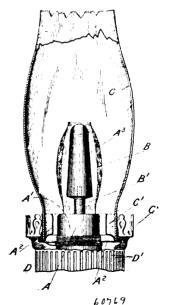
Claim.—1st. In a dynamo electric machine, the combination, substantially as set forth, of a coil of wire having a binding wrapper, as of cord, and studs projecting from the faces of the coil and having feet engaging under the wrapper. 2nd. In a dynamo electric machine, the combination, substantially as set forth, of a field core provided with a dividing slot, and a coil disposed upon said core and free therefrom so as to form an air space extending around the core and in communication with the slot therein. 3rd. In a dynamo electric machine, the combination, substantially as set forth, of a field frame, a core projecting inwardly therefrom and provided with a dividing slot and with a projection inwardly at the root of the slot, and a coil disposed upon said core and near said field-frame but free from the core and field-frame so as to leave an air space in communication with said slot and extending between the coil and core and between the coil and field-frame. 4th, In a dynamo electric machine, the combination, substantially as set forth, of a fieldframe, having inwardly projecting field cores, cylindrically bored at their faces, and a bushing-ring carrying coils, and having its periphery engaging the faces of said cores. 5th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame having inwardly projecting field cores cylindrically bored at their faces, a bushing-ring carrying coils and having its periphery engaging the faces of said cores, and circumferential rib and groove connections between the bushing-ring and core faces to retain the bushing-ring sidewise. 6th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame having inwardly projecting field cores cylindrically bored at their faces, a bushing-ring carrying coils and having its periphery engaging the faces of said cores, and symmetrically disposed circumferential rib and groove connections between the bushing-ring and core faces to retain the bushing-ring sidewise and to permit of its reversal within the field-frame. 7th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying inwardly projecting cores and field-coils, an armature concentrically mounted within the field-frame, a bushing-ring carrying coils and encircling the armature and supported by the cores of the field-frame. 8th. In a dynamo electric machine, the combination, substantially as set forth, of a field frame provided with poles and magnetizing coils, an armature, and a ring carrying coils and interposed between said armature and field-frame. 9th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying inwardly projecting cores and field coils, an armature concentrically mounted within the field-frame, a bushing-ring encircling the armature and supported by the cores of the field-frame, and a circumferential series of conductors carried by the bushing-ring and disposed parallel with the axis of the armature. 10th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying inwardly projecting cores provided with field-coils, an arma-ture mounted concentrically within the field-frame, a bushing-ring surrounding the armature and supported by the field-frame and provided with passages extending through it parallel with its axis, and conductors extending across the bushing-ring through said passages. 11th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying cores and field-coils, an armature mounted concentrically within the field-frame, a bushing-ring surrounding the armature and supported by the field-frame and having passages through it parrallel with its axis, and conductors disposed within said passages and joined at each side of the bushing-ring to form a circumferential series of coil carried by the bushing-ring. 12th. In a dynamo electric machine; the combination, substantially as set forth, of a field-frame carrying cores and field coils, an armature mounted concentrically with the field-frame, a bushing-ring having a tire fitting within and held by the field cores and provided with lugs extending across the tire and projecting inwardly to near the armature, and coils formed of conductors wound upon said lugs. 13th. In a dynamo electric machine, the combination, substantially

as set forth, of a field-frame carrying cores and field-coils, an armature mounted concentrically within the field-frame, a bushing-ring comprising a transversely and circumferentially slotted tire, and slotted lugs projecting inwardly from the tire to near the armature, and coils formed by conductors wound upon said lugs. 14th. In a dynamo electric machine, the combination, substantially as set forth, with a field-frame and armature, of a tire having pairs of transverse slots and having circumferential slots between the pairs of transverse slots, commutation lugs projecting from the tire between each pair of transverse slots, additional lugs projecting from the tire between the commutation lugs and divided by inward prolongations of said circumferential slots, and coils formed by conductors wound on said lugs. 15th. In a dynamo electric machine, the combination, substantially as set forth, of a field frame, cores projecting there from and having dividing slots, coils on said cores, a tire supported by said cores and having circumferential slots registering with the slots in said cores, lugs projecting inwardly from the tire, and coils formed by conductors wound upon said lugs. 16th. In a dynamo electric machine, the combination with a field-frame and armature, of a ring interposed between said field-frame and armature and the combination substantially as set forth, with a field-frame and armature, of a slotted tire, lugs projecting inwardly from the tire and having less width than the tire, additional lugs projecting inwardly from the tire between the first mentioned lugs and having a greater width than the first mentioned lugs, bridges extending across the ends of the first mentioned lugs and connecting the lugs immediately at each side of the first mentioned lugs, and coils formed by conductors wound upon said lugs. 18th. In a dynamo electric machine, the combination, substantially as set forth, with a field frame and armature, of a tire held by the field-frame and lugs projecting inwardly from the tire and provided with inner feet cylind-rically bored to form a chamber for the armature, and coils wound upon said higs between said tire and feet. 19th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying cores and field coils, an armature mounted concentrically within said field-frame and having a diameter less than the bore of the series of field-cores, a circumferential series of coils disposed around the armature between the armature and the fieldcores, and a metallic support for said last mentioned coils and concores, and a metanic support for said use inclinoised constant corrected separably with the field-frame. 20th. In a dynamo electric machine, the combination, substantially as set forth, of a fieldframe carrying inwardly projecting cores, field-coils on said cores, an armature mounted concentrically within the field-frame and having a diameter less than the bore of the series of field-cores, coils disposed in circumferential series around the armature between the armature and the field cores, the last mentioned coils having longitudinal elements parallel with the axis of the armature, and the axis of each of said last mentioned coils coming midway between the axis of the pair of field-cores, and a support engaging said field cores and said last mentioned coils. 21st. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying cores and field coils, an armature mounted concentrically within the field-frame and having a diameter less than the bore of said field-core, fixed conductors parallel with the axis of the armature and exposed in circumferential series around the armature between the armature and the field-cores, and connections to convey current through said conductors in direction opposite to that fol lowed by the current flowing through contiguous conductors in the 22nd. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying cores and fieldcoils, an armature mounted concentrically within the field-frame and having a diameter less than the bore of the series of field-cores, fixed conductors parallel with the axis of the armature and arranged in the circumferential series between the armature and the fieldcores, and connections between said fixed conductors and the armature to convey the current transversing the armature conductors through said fixed conductors in such direction that the current flowing in each of said fixed conductors will magnetically oppose that flowing in the contiguous armature conductor. 23rd. In a dynamo electric machine, the combination, substantially as set forth, with a field-frame carrying cores and field-coils, and an armature mounted within the field-frame, of fixed conductors parallel with the axis of the armature and disposed in circumferential series around the armature, connections conveying current through said fixed conductors in direction to magnetically oppose the currents flowing through contiguous armature conductors, commutation lugs disposed between the field-cores and magneticallly energized by the currents flowing in said fixed conductors. 24th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying cores and field-coils, an armature mounted concentrically within said field-frame and having a diameter less than the bore of the field-cores, a commutation lug disposed between each pair of field-cores and presenting a pole to the armature, additional similar lugs disposed between said commutation lug, and coils formed by winding a conductor first upon a commutation lug and then outside the pair of additional lugs at each side of the commutation lug. 25th. In a dynamo electric machine, the combination, substantially as set forth, of a field-frame carrying cores and field-coils, an armature mounted concentrically within the field-frame and having a diameter less than the bore of the series of field-cores, and a series of fixed coils disposed around the armature between the

direction of winding, 26th. In a dynamo electric machine, the combination, substantially as set forth, of a longitudinally grooved armature barrel, ribs of non-magnetic metal disposed in said grooves, a series of discs with their bores engaged by said ribs, and clamps secured to the armature barrel and engaging the end of the series of 27th. In a dynamo electric machine, the combination, substantially as set forth, of an armature barrel, a series of discs thereon and provided with a circumferential series of radial slots, each slot being widened at its outer portion, and clamps carried by the armature barrel and engaging the ends of the series of discs. 28th. In a dynamo electric machine, the combination, substantially as set forth, of a longitudinally slotted armature bar disposed within said slots and projecting endwise from the body of the armature, bends formed upon the projecting end of said bars to bring the ends of a pair of bars toward each other, and flat coupling strips united to and connecting the ends of such pair of bars. 29th. In a dynamo electric machine, the combination, substantially as set forth, of a longitudinally slotted armature, bars disposed in said slots and projecting endwise from the body of the armature, bends formed upon the projecting ends of said bars to bring the ends of a pair of bars toward each other, connections between the ends of such pair of bars, and rings concentrically carried by the armature within the projecting connected ends of the bars and forming a support for such projecting ends. 30th. In a dynamo electric machine, the combination, substantially as set forth, of an armature hub, arms projecting endwise therefrom, a hollow nose carried by said arms, and a commutator hub having its bore fitting upon said nose. 31st. In a dynamo electric machine, the combination, substantially as set forth, with balancing coils for neutralizing armature reaction, of a bushing-ring carrying said balancing coils and supported by the field-frame. 32nd. In a dynamo electric machine, the combination, substantially as set forth, with balancing coils for neutralizing arms ture reaction and disposed within the main field of magnetic forces impressed upon the armature, of commutation lugs passing through the centres of said balancing coils and energized solely by said coils. 33rd. In a dynamo electric machine, the combination, substantially as set forth, with balancing coils for neutralizing armature reaction, of a bushing-ring carrying said balancing coils, and commutation lugs passing through the centres of said balancing coils and energizing thereby. 34th. In a dynamo electric machine, the combination. substantially as set forth, with balancing coils for neutralizing armature reaction, of a bushing-ring formed of magnetic material and carrying said balancing coils, and commutation lugs passing through centres of said balancing coils and energizing thereby. 35th. In a dynamo electric machine, the combination, substantially as set forth, with an armature and a field-frame and cores, of a ring carrying balancing coils and commutation lugs contiguous to the armature.

#### No. 60,769. Gas and Oil Lighting Apparatus.

(Appareil d'éclairage à l'huile ou gaz.)

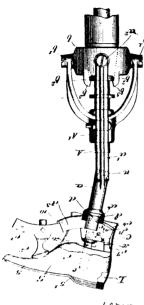


William Hudson Hand, Grena Lodge, Richmond, Surrey, England, assignce of Malcolm Horsey Hwes, and Robert Farrington, both of 71 Shoe Lane, Middlesex, all in England, 3rd August, 1898; 6 years. (Filed 1st June, 1898.)

tion, substantially as set forth, of a field-frame carrying cores and field-coils, an armature mounted concentrically within the field-frame lamp by the insertion of a solid refractory core in close proximity and having a diameter less than the bore of the series of field-cores, and a series of fixed coils disposed around the armature between the armature and the field-cores, the coils of said series alternating in of a refractory core of suitable shape made of a mixture by weight

of 75 parts of pipe clay, 5 parts of asbestos, 10 parts of oxide of magnesium, 5 parts of calcium hydrate and 5 parts of zirconium, and suitably held in position within an annular lamp flame, substantially as specified.

## No. 60,770. Support for Boots or Shoes. (Support pour chaussures.)



60770

The McKay Shoe Machinery Company, Boston, Massachusetts, assignee of Louis Amédée Casgrain, Winchester, Massachusetts, U.S.A., 3rd August, 1898; 6 years. (Filed 11th July, 1898.)

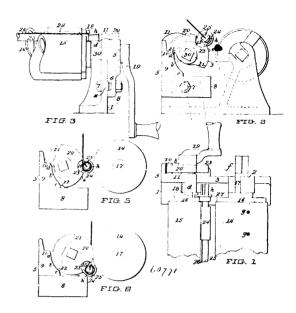
Claim.--1st. A work-support for boots and shoes, consisting of a standard, a last-holder mounted to rotate thereon and adapted to be tipped in the direction of the length of the last, and means to normally prevent the last holder from tipping, while permitting it to be tipped when rotated to a predetermined point, substantially as described. 2nd. A work-support for boots and shoes, consisting of a standard, a last-holder mounted thereon to turn in a lateral plane and adapted to be tipped at times in the direction of the length of the last, and means to permit the holder to be tipped at a predetermined point, and to automatically lock it thereat from lateral movement, substantially as described. 3rd. A work-support for boot and shoes consisting of a standard, a last-holder mounted to turn laterally thereon, and adapted to be tipped in the direction of the length of the last, means to permit the last holder to be tipped at a predetermined point, and a stop to limit the extent of tipping movement of the last holder, substantially as described. 4th. A work-support for boots and shoes consisting of a standard forked at its lower end, a sustaining member upon which said forked end is pivoted, stops to limit the rocking movement of the standard thereon, a last holder mounted to turn laterally on the standard, and adapted to be tipped in the direction of the length of the last, and means to normally prevent the last support from tipping, substantially as described. 5th. A work-support for boots and shoes consisting of a standard, a circular bearing thereon having an opening in its side, and a last holder mounted to turn laterally upon the standard and engaging said bearing, rotation of said holder to bring its engaging portion opposite the opening of the bearing permitting the holder to be tipped in the direction of its length, substantially as described. 6th. A work-support for boots or shoes consisting of a standard, a rotatable and tipping last holder thereon provided with a fixed last pin and a movable heel support pivotally mounted on the holder, controlled as to its position by the counter of the boot or shoe, substantially as described. 7th. A work-support for boots or shoes consisting of a standard, a rotatable and tipping last holder thereon provided with a fixed last-pin, and a spring-controlled heel support pivotally mounted on the holder, positioned by the counter of the boot or shoe, substantially as described.

#### No. 60,771. Gutter Former. (Machine à gouttière )

Denis J. Whelan, Troy, assignee of Hugh Augustine Riley, Hoosick Falls, both in New York, U.S.A., 3rd August, 1898; 6 years, (Filed 15th July, 1898.)

Claim.—1st. The combination in a gutter former with a presser roller carried in fixed bearings and a forming roller carrying a beadforming mandrel, of elongated bearings for the forming roller in

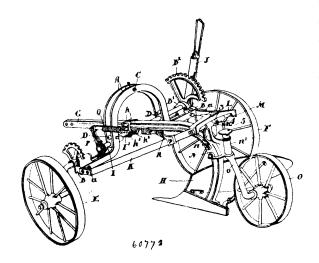
the presser roller and means for forcing and holding the forming roller to its duty in connection with the presser roller in the bending



of a plate. 2nd. In a gutter former the combination with the presser roller carried in fixed bearings open at one side to permit removal of the roller therefrom, and a forming roller carrying a bead forming mandrel, elongated bearings for the forming roller in which its journals can both turn and slide towards and away from the presser roller and means for forcing and holding the forming roller to its duty in connection with the presser roller in bending a plate to form a gutter. 3rd. In a gutter former the combination with a presser roller carried in fixed bearings and a forming roller carrying a beadforming mandrel, of elongated bearings for the forming roller open towards the presser roller to permit ready removal of the forming roller therefrom and in which its journals can both turn and slide towards and away from the presser roller, and means for forcing and holding the forming roller to its duty in connection with the presser roler in the bending of a plate to form a gutter. 4th. The combination with the beading mandrel mounted on the forming roller of the forming roller and means connected therewith for preventing its rotation and resisting the tendency of the mandrel cranks to turn in the same direction as the mandrel turns in the process of rolling up a bead. 5th. The combination with the stands and journal brackets having the elongated bearings, of the forming roller carrying the beading mandrel, the crank can having the shoulder and the ledge on the bracket which co-operates therewith. 6th. The combination of a stand which forms the lower member of an elongated journal bearing, with an adjustable bracket having an arm which overhangs said lower member and forms the upper member of said bearing. 7th. In a gutter former, the combination with two co-operative bending rollers, of a pair of detachable cranks adapted to 6t either willow and havings in which said sullegards the first three willows and the said sullegards. to fit either roller, and bearings in which said rollers rest in operation, all of which bearings open in a direction opposed to the line of thurst in bending a plate, as a means of promoting interchange or transposition of the rollers. 8th. The combination with a forming roller, of a pair of bearing rollers carried in an oscillatory frame which is hung in a swinging stirrup pivoted to a stand upon which is pivoted a brake lever which carries a roller that is adapted by the movement of the brake lever to be brought to bear against one or both of the bearing rollers to crowd them against the forming roller or against any material carried by or being formed thereon. 6th. The combination with the forming roller and beading mandrel carried thereon, of a pair of bearing rollers carried in an oscillatory frame which is hung in a swinging stirrup pivoted to a stand upon which is pivoted a brake lever which carries a roller that is adapted by a movement of the handle of the brake lever to be brought to bear against one or both of the bearing rollers to crowd them against the forming roller, or against any material carried by or being formed thereon. 10th. The combination with the bracket stand and brake lever of the pivoted stirrup carrying the oscillatory roller frame and bearing rollers and having a rearward extension which projects into the path of the brake handle when it drops for the purpose of throwing the bearing rollers out of their normal field of duty. 11th, In a gutter former, the combination with a pair of forming rollers one of which carries a beading mandrel, of a transversely adjustable brake bracket upon which is hung a swinging stirrup that carries an oracke bracket upon which is many a swinging stirrup that carries an oscillatory frame in which are pivoted two rollers adapted to bear against one of the forming rollers or against any material being formed thereon, and a brake lever carrying a roller that is adapted to bear against one or both of the stirrup rollers. 12th. As a prowhich its journals can both turn and slide towards and away from vision for maintaining continuous contact and pressure against a

moving irregular surface, three rollers, two of which are pivoted in a frame which is itself pivoted in a movable carrier, and the other roller is pivoted in a movable member which is under operative control, the latter roller being connected with means adapted to force it into tangential contact with both of the rollers.

No. 60,772. Sulky Plough. (Charrue à siege.)



The Cockshutt Plough Company, assignee of George Wedlake, both of Brantford, Ontario, Canada, 3rd August, 1898; 6 years. (Filed 12th July, 1898.)

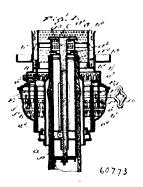
Claim. -1st. In a riding plough, the combination with the cross beam provided with a central arch and the land wheel and furrow wheel supporting the ends thereof, of the plough and plough beam pivotally supported on the rear of the frame and means for supportting and adjusting the front end of the plough beam within the arch as and for the purpose specified. 2nd. In a riding plough, the combination with the double cross beam provided with a central arch and the land wheel and furrow wheel supporting the ends thereof, of the plough and plough beam pivotally supported on the rear of the frame, the bracket secured towards the front end of the plough beam and provided with the lower slots, the crank shaft and journals therefor supported in the arched cross beam and having the crank portion extending through the slots in the brackets and means for turning the crank shaft, as and for the purpose specified. 3rd. In a riding plough, the combination with the double cross beam provided with a central arch and the land wheel and furrow wheel supporting the ends thereof, of the plough and plough beam pivotally supported on the rear of the frame, the bracket secured towards the front end of the plough beam and provided with the lower slots, the crank shaft and journals therefor supported in the arched cross beam and having the crank portion extending through the slots in the brackets, the quadrant secured in the end of the cross beam and a co-acting lever secured in the end of the crank shaft, as and for the purpose specified. 4th. In a riding plough, the combination with the double cross beam provided with a central arch and the land wheel and furrow wheel supporting the ends thereof, of the plough and plough beam pivotally supported on the rear of the frame, the bracket secured towards the front end of the plough bean, and provided with the lever slots, the crank shaft and journals therefor supported in the arched cross beam and having the crank portion extending through the slots in the brackets, means for turning the crank shaft, the arms secured on one end of the crank shaft, the bracket secured in the frame and the spiral spring connecting the frame and the bracket, as and for the purpose specified. 5th. In a roller plough, the combination with the cross beam provided with a central arch and the land wheel and furrow wheel, of the rear cross bar, the rod secured in the ends of the same, the braces extending from the end of the arched beam to the ends of the rear cross bar, the double bracket supported on the rod and carrying the plough beam and follower wheel and the adjus-table collar hold on the rod between the two members of the double bracket, as and for the purpose specified.

## No. 60,773, Lamp Burner. (Bec de lampes.)

George D. Moffat, New York, State of New York, U.S.A., assignee of Paul Lucas of Berlin, Empire of Germany, 3rd August, 1898; 6 years. (Filed 2nd June, 1898.)

Claim.—1st. In a lamp burner having a central wick tube, a perforated gallery and a perforated cylinder within said gallery surrounding the upper end of said wick tube and extending above the gasifier, a gasifier located immediately above said wick tube, and consisting of a perforated body, an upper unperforated cap and lower ring, the latter being parallel to the end of the wick tube, as set forth. 2nd. The herein described lamp, comprising a central

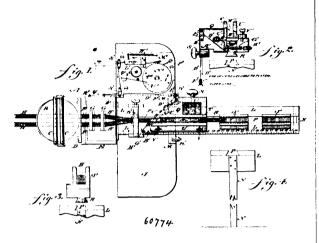
wick tube, a perforated gallery and gallery support surrounding said tube, an upper perforated cylinder within said gallery extend-



ing from below the top of the wick tube to above the gasifier, and a gasifier consisting of a tubular body located centrally above and close to said wick tube, and having an upper cap and a lower ring, the latter being located parallel with the upper end of said wick tube, substantially as set forth. 3rd. The herein described lamp burner comprising a central wick tube, a gallery and support therefor having perforations therein, a flanged ring within said gallery, a perforated cylinder above said ring and extending above the gasifier, said ring surrounding the upper end of said wick tube, a gasifier consisting of a perforated tubular body and upper unperforated cap, and a ring on the lower end of said tubular body close to the wick tube, a rod depending from said cap, and a support in said wick tube for said rod, substantially as set forth. 4th. In a lamp burner having a central wick tube and perforated gallery extending above the gasifier, a gasifier consisting of a perforated cylinder within said gallery, a ring located above, close to, and parallel with the upper end of said wick tube, a perforated tubular body above said ring to which the latter is secured, and a spreader, substantially as set forth. 5th. In a lamp burner for incandescent petroleum lamps having a central wick tube and an outer perforated gallery and gallery support, a perforated cylinder extending above the gasifier, a gasifier consisting of an upright cylinder supported within said wick tube, and a ring located above, close to, and parallel with the upper end of said wick tube, and a spreader for he mantle above and around said gasifier, whereby a bright incandescent light may be produced, substantially as set forth. 6th In a lamp burner, a movable gallery carried by vertically sliding uprights, said uprights being bent outwardly and downwardly at the top, the downward bends having slotted right angular extensions, in combination with a wick shaft carrying arms having pins working in the slots in said extensions, substantially as set forth. 7th. In a lamp burner, the combination of a wick tube composed of inner and outer members, the inner member forming a draft tube and having an opening for the admission of air, a gasifier above the wick tube consisting of a tubular shell or thimble having a top plate, perforated sides, and a deflecting ring below said top plate and perforated sides and located directly above and close to the top of the wick when the lamp is in operation, said gasifier having also an opening for the admission of air from the draft tube and gas from the wick, and a casing surrounding the wick tube and gasifier and provided with openings for the admission of air into the space surrounding the wick tube and gasifier, the construction and proportions of the parts being such that when the lamp is in operation combustible vapour generated by the flame at the top of the wick passes through the gasifier and the perforations therein, and burns with a blue or colourless flame on the outside of the gasifier, substantially as 8th. In a lamp burner, the combination with wick and inner draft tubes, of a gasifier above the wick tube consisting of a tubular shell or thimble having a top plate, perforated sides, and a deflecting ring at the bottom, located directly above and close to the top of the wick when the lamp is in operation, said gasifier having in its bottom an opening through which air from the draft tube and gas from the wick tube may pass into the gasifier and through the perforations therein, and be burned with a blue or colourless flame on the outside of the gasifier, substantially as described. 9th. The combination with a central draft wick tube, of a hollow gasifier located close to the top of the wick tube, and having an open lower end and openings for the exit of the vapour and air, the construction and proportion of the parts being such that a luminous flame can be produced extending from the wick upward and outside of the gasifier, or a blue or colourless flame produced projecting from the gasifier, substantially as described.

# No. 60.774. Ribbon Cutting and Counting Device for Printing Presses. (Coupe-ruban et compteur pour presses à imprimer.)

Ferdinand Berkemeyer and Charles N. Cressman, both of Sellersville, Pennsylvania, U.S.A., 3rd August, 1898; 6 years. (Filed 13th June, 1898.) Claim.—1st. In an attachment for a printing press having a platen, a bed suitably supported on said press, a body portion carried by



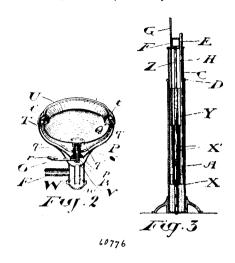
said bed, a cutter mounted on said body portion, connections from said platen to said cutter whereby the latter is operated by the novement of the said platen, and means for returning said cutter to its normal position. 2nd. In an attachment to a printing press having a platen, a bed suitably supported on said press, a groove in said bed, a body portion having a tongue entering said groove and carried by said bed, a cutter mounted on said body portion, connections between said cutter and platen whereby the latter is operated by the movement of said platen, and means for returning said cutter to its first position. 3rd. A printing press having a platen, a standard with a bed thereon, a block having a tongue movable in a groove in said bed, guides on said block forming a passage way, a cutting device on said block, a flexible connection from the movable member of said cutting device to the movable platen of a printing press 4th. In an attachment to a printing press having a platen, a bed suitably supported on said press, a body portion carried by said bed, means for adjusting said body portion thereon, a cutter mounted on said body portion, means for operating said cutter, means for returning said cutter to its normal position, and an adjustable guide mounted on said body portion. 5th. In an attachment to a printing press having a platen, guides thereon, a bed suitably supported on said press, a groove in said bed, a body portion having a tongue entering said groove and carried by said bed, means for adjusting said body portion thereon, a cutter mounted on said body portion, means for operating said cutter, means for returning said cutter to its first position, and an adjustable guide mounted on said body portion. 6th. In an attachment to a printing press having a platen, portion. That accommended a printing press having a placen, a bed suitably supported on said press, a groove in said bed, a body portion having a tongue entering said groove and carried by said bed, means for adjusting said body portion thereon, a cutter mounted on said body portion, means for operating said cutter, means for retaining said cutter to its first position, an adjustable guide mounted on said body portion, and a registering device operated by the movement of the platen. 7th. An attachment to a printing press for the purpose set forth, consisting of a block having a body with a tongue thereon and provided with guides in its upper face forming an adjustable passage way, one end of said body being at an oblique angle to its sides and provided with a cutting device having connections with the provided victor of the press for constitute the same. with the movable platen of the press for operating the same. 8th. A printing press having a movable platen, a standard with a bed thereon, a block having a tongue adjustable in a groove in said bed, guides on said block forming a passage way, a cutting device on a slanting end of said block, a movable member provided with a saming end of said once, a moradae memoer provided with a flexible connection adapted to be secured to said platen. 9th. The swinging platen E with guides G having openings therein, the bed L with the groove N therein, the block Q having the tongue R in said groove and provided with the clamping screw S, a cutter device having a novable member C<sup>1</sup> with flexible connection D<sup>1</sup> secured to said platen E, the returning spring G<sup>1</sup> for said member, the guide K<sup>1</sup> movably secured to the said bed L, and the fixed guide T and adjustable guide U forming the passageway W.

## No. 60,775. Concrete. (Béton.)

Winifred M. Robinson, Schubenacadie, and Samuel M. Brookfield, Halifax, both of Nova Scotia, Canada, 3rd August, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. In a concrete composed of small stones or gravels and or earthy matter mixed with iron oxidated or comminuted, the addition thereto of flour of sulphur, in about the proportion stated. 2nd. A concrete composed of small stones or gravel, sand or earthy material, iron oxidated or comminuted and flour of sulphur, mixed dry, and hardened by wetting with saturated solutions of silicate of soda and salt, substantially as set forth.

No. 60,776. Spittoon. (Crachoir.)

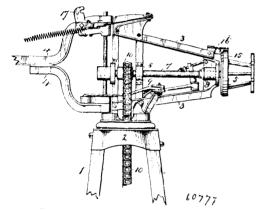


H. McLaren & Son, assignees of Walter Andrew Inglehart, both of Toronto, Ontario, Canada, 3rd August, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—1st. In a fountain spittoon, an outer bowl with a tube formed on and raising from the centre of the outer bowl, in combination with an inner stationary bowl supported on said tube, substantially as specified. 2nd. In a fountain spittoon, an outer bowl with a tube formed on and rising from the centre of the outer bowl, in combination with an inner bowl supported on said tube, rotatable jet arms provided with a collar sleeved on said tube, and movable in the space between the outer and inner stationary bowls, substantially as specified. 3rd. In a fountain spittoon, the combination of an outer bowl provided with drain holes, a threaded tube formed on and rising from the centre of the outer bowl, an inner bowl provided with drain holes, a threaded collar formed on the bottom of the inner bowl, and adapted to engage with the thread formed on the tube, rotatable jet arms provided with a collar sleeved on said tube, a water pressure supply passing through the tube to actuate the jet arms, and a valve spindle on the bottom of the inner bowl and adapted to pass within the tube so as to regulate the supply of water to the jet arms by rotating the inner bowl, substantially as speci-fied. 4th. In a fountain spittoon, an outer bowl with a tube formed on and rising from the centre of the bowl, in combination with an inner bowl supported on said tube, rotatable jet arms provided with a collar sleeved on said tube and movable under water pressure in the space between the outer and inner stationary bowls, and a hard rubber bushing applied to said tube as a bearing for the collar, substantially as specified. 5th. In a fountain spittoon, the combination of an outer bowl P, provided with drain holes p, the combination of an outer bowl P, provided with drain holes p, the threaded tube R, formed on the outer bowl, the pipe O, for supplying water pressure within the tube, the rotatable jet arms T, with jets  $tt^1$  provided with collar S, bearing against the hard rubber bushing r on the tube R, the inner bowl Q, with threaded collar  $q^1$  and valve spindle  $q^{11}$ , and drain holes q, the flanged collar U, the drain-off chamber V, formed below the outer bowl, the drain-off pipe w leading from the drain chamber V, the gold trap W, and the discharge with E proposeding from the transparent supplementally as specific discharge pipe F, proceeding from the trap, substantially as speci-fied. 6th. In a fountain spittoon, the combination of the faucet field. 6th. In a fountain spittoon, the combination of the faucet pipe J, supplied with water under pressure from the water supply tube through faucet K, the water inflow pipe H, the hollow supporting pillar A, the tube C, sleeved within the pillar, tube C, and tube X<sup>1</sup> forming the hydraulic air compressing chamber X<sup>1</sup>, the chamber X, the drain-off pipe Y, and the obtunder blower pipe G, substantially as specified. 7th. In a fountain spittoon, the combination of the faucet pipe J, contracted at its lower end, and supplied with contract and contract from the vactor supplied to the trace. with water under pressure from the water supply tube through faucet K, the water inflow pipe H, with shoulders  $H^1$ , the saliva ejector pipe I, the adjustable cap or collar  $A^1$  with vent hole x, the vent hole b in top of tube H, the whole arranged for conveying air and water to the hydraulic air compressing chamber in the base of the supporting pillar, substantially as specified. 8th. In a fountain spittoon, the combination of the hollow supporting pillar A, containing at its base the hydraulic air compressing chamber, the tube C, sleeved within the pillar A, and carrying the spittoon and connecting pipes, the clamping collar D, with pinch bolt d for regulating the height of the spittoon, substantially as specified. 9th. In a fountain neight of the spittoon, substantiary as specified. Just it a formation spittoon, the combination of a discharge pipe F, carrying-off the water from the bowls, the chamber E, with suitable inlet and outlet openriom the bowis, the chainter P., with suitable fliet and outlet openings, the discharge pipe Z, within tube C, and the drain-off pipe Y within the hollow supporting pillar A, substantially as specified. 10th. In a fountain spittoon, a gold trap W, located below the bowls with inlet and outlet pipes so located with respect to each other as to form a water seal, and a removeble bottom W<sup>1</sup>, for gaining access to the interior of the gold trap, substantially as specified. 11th. In a fountain spittoon, the combination of a downwardly projecting faucet pipe supplied with water under pressure from a water supply tube through a single faucet, and designed to force a supply of water mixed with air to the base of the hollow standard, a hydraulic air compressing chamber formed near the base of and within the hollow compressing chamber formed near the base of and within the hollow standard, and an obtunder blower pipe proceeding upwardly from the air compressing chamber, substantially as described and for the purpose specified. 12th. In a fountain spittoon, the combination of a downwardly projecting faucet pipe supplied with water under pressure from a water supply tube through a single faucet, a water inflow pipe, provided with suitable air openings and a saliva ejector pipe, designed to force a supply of water mixed with air to the base of the hollow standard supporting the spittoon, a hydraulic air conpressing chamber formed near the base of and within the hollow standard, and an obtunder lower pipe proceeding upwardly from the air compressing chamber, substantially as described, and for the purpose specified. 13th. In a fountain spittoon, inner and outer stationary bowls, in combination with a revolving spindle having stationary moust, in combination with a revolving spinor maying attached thereto supply tubes between the bowls to carry water to the inner bowl, substantially as specified. 14th. In a fountain spittoon, the combination of an outer bowl, a tube formed on and rising from the centre of the outer bowl, a collar sleeved on said tube and carrying rotatable jet arms and a hard rubber bushing applied to said tube as a bearing for the collars, substantially as described and for the purpose specified.

#### No. 60,777. Pump Wind Mill.

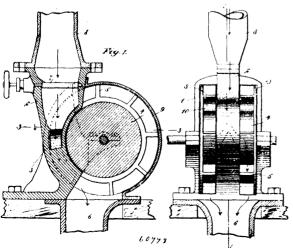
(Moulin à vent pour pomper l'eau.)



The Goold Shapley & Muir Company, assignee of John Muir, all of Brantford, Ontario, Canada, 3rd August, 1898; 6 years. (Filed 20th May, 1898.)

Claim.—The combination in a pumping wind mill having a gear frame carrying the vane and a driving shaft carrying the wind wheel, of a sprocket wheel keyed on said shaft, an endless chain hung on the periphery of said wheel, a chain wheel journalled to the tower and connected to the pump rod by a wrist pin and driven by said endless chain, as set forth.

## No. 60,778. Water Wheel. (Roue d'eau.)

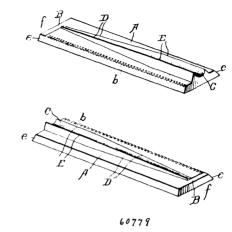


Churles T. Monroe, Silas C. Dishno and Narcisse Deloge, all of Jackson, Montana, U.S.A., 3rd August, 1898; 6 years. (Filed 18th May, 1898.)

Claim.—A water wheel, comprising a casing, a water wheel mounted in the casing, blades or brackets on the periphery of the wheel at its opposite sides, flanges on the wheel forming the outer walls of the buckets, and a water feed pipe extended into the casing and having lateral outlets, the said pipe being adapted to engage against the inner ends of opposite blades to form the inner walls of the buckets, substantially as specified.

#### No. 60,779. Die for Making Rolled Forgings.

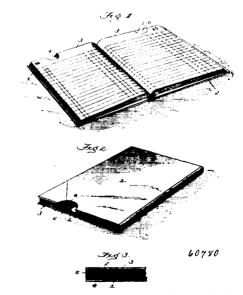
(Matrice pour rouleaux forgés.)



The Hathorn Manufacturing Company, assigned of Fred Herbert Hathorn, all of Bangor, Maine, U.S.A., 3rd August, 1898; 6 years. (Filed 11th May, 1898.)

Claim.—1st. In a device of the character described, a die consisting of a base plate, cutting edges formed on the base plate and diverging slightly and increasing in height, then extending horizontally and parallel to the end of the base, said cutting edges enclosing a groove gradually increasing in depth from the beginning to the end of the diverging edges, a raised surface formed at one side of the ridge having indentations and forming at the reduced end a plane surface between the ends of the indentations and raised portion, said plane surface tapering with the diverging wall, as and for the purpose specified. 2nd. In a device of the character described, a base having cutting edges, scrrations formed along the side of the base, and a smooth surface between the scrrations and cutting edges of equal height with the serrations, as and for the purpose specified. 3rd. In a device of the character described, a base having the initial cutting edges starting separately a short distance back of the forward end thereof, scrrations on the side of the base and a smooth surface of equal height with the serrations and the cutting edges, as and for the purpose specified.

## No. 60,780. Blank Book. (Livre de blanc.)

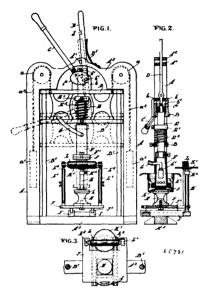


Thomas Elliott, of Rexburg, George B. Rogers and Lorenzo R. Thomas, both of Blackfoot, all of Idaho, U.S.A., 3rd August, 1898; 6 years. (Filed 10th May, 1898.)

Claim.—1st. As an improved article of manufacture, a blank book comprising the front cover 1, formed with a recess 4, in combination with the leaves 3 having aligned detachable portions 5 substantially as described. 2nd. As an improved article of manufacture, a consecutive entry book comprising the solid back cover 2, the front cover 1 provided in its top edge with a recess 4 formed as described and arranged between the centre and outer side edge thereof, and the leaves 3 having the aligned detachable portions 6 formed at the upper edges of their head marginal portions 3a, each detachable portion being arranged between the centre and outer side edge of said marginal portion and separated from the body of the same by an intervening row of perforations 5, substantially as described.

#### No. 60,781. Hat Printing Machine.

(Machine à imprimer pour chapeaux.)



John Harrison Matthews, assignee of Thomas Joseph McCarthy, both of Orange, New Jersey, U.S.A., 3rd August, 1898; 6 years. (Filed 9th May, 1898.)

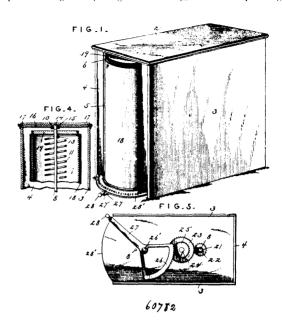
Claim. 1st. A hat printing machine, comprising a frame having guideways thereon, a frame mounted to slide on said guides, a lock for holding the frame in its lower position, a plunger mounted in said sliding frame and carrying a printing die, means for normally retracting the plunger, a lever mounted on the sliding frame and connected to said plunger to project it, and an impression bed in line with said plunger, substantially as described. 2nd. A hat printing machine, comprising a frame having vertical guides, a frame mounted to slide on said guides and provided with counterbalances, a lock for holding the frame in its lower position, a plunger mounted in said frame and carrying the printing die, a spring normally supporting the plunger, a lever connected to said plunger to depress it, and an impression lever some connected to said plunger to depress it, and an impression bed beneath said plunger, substantially as described. 3rd. A hat printing machine, comprising a frame having vertical guides, a frame mounted to slide on said guides and having counterbalances attached, a lock for holding said frame in its lower position, a plunger, hollow in its lower portion, mounted in said frame and carrying the printing die, a gas heating apparatus within said plunger for heating the die a spring normally supporting the plunger, a lever connected to said plunger to depress it, and an impression bed beneath said plunger, substantially as described. 4th. A hat printing machine, comprising a vertically movable frame having therein a reciprocable plunger carrying a printing die, a lock engaging said frame in its lower position, a lever for depressing the plunger, a transversely movable slide, an impression bed mounted thereon, and an inking roller mounted upon said slide and engaging the surface of the printing die when the latter is in its upper position, substantially as described. 5th. A hat printing machine, comprising a vertically movable plunger carrying a printing die, a counterweighted frame supporting sale plunger and mounted to slide vertically, a spring normally supporting the plunger in said frame, a lever for depressing the plunger, a transversely movable slide, an impression bed mounted thereon, and an inking roller mounted upon the slide and engaging the surface of the printing die when the latter is in its upper position, substantially as described.

## No. 60,782. Indexer. (Indexeur.)

Josiah Newman Young and David Smith Jones, both of Sunnyside, Mississippi, U.S.A., 4th August, 1898; 6 years. (Filed 20th June, 1898.)

Claim. 1st. In an indexer, the combination with a casing, of a

axes, an index strip wound upon said cylinders and designed to be exposed through an opening in the casing, means for operating one

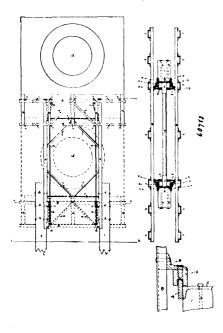


of said cylinders, a retracting spring for the other cylinder, and a spring winding bar engaging the shaft of the last mentioned cylinder and having its ends removably stepped in recesses in the casing, substantially as described. 2nd. In an indexer, the combicasing, substantiany as described. That indexet, the comoration with a casing having an opening in one end, of a pair of cylinders mounted therein to rotate on parallel axes, an index strip connected to and wound upon said cylinders, a retracting spring located within one cylinder, a shaft passing centrally through the last mentioned cylinder and connected to the spring and having one end squared, and a winding bar fitted upon the squared end of said shaft and having its ends removably stepped in recesses in the casing, substantially as and for the purpose described. 3rd. In an indexer, the combination with a casing having an opening, of a pair of cylinders mounted to rotate on parallel axes an index strip secured to and wound upon said cylinders, a retracting spring arranged within one cylinder, an operating lever projecting outside of the casing and provided with a gear segment, and gearing interposed between said segment and one of the cylinders, substantially as and for the purpose described. 4th. In an indexer, the combination with a casing having an opening, of a pair of cylinders mounted to rotate on parallel axes, an index strip secured to and wound upon said cylinders, a retracting spring arranged within one cylinder, an operating lever fulcrumed intermediate its ends and provided with a gear segment, a pinion connected fast to one cylinder, and a double gear interposed between said pinion and the gear segment, substantially as described. 5th. In an indexer, in combination, a casing having an opening, a pair of cylinders rotating on parallel axes therein, an index strip secured to and wound upon said cylinders, a retracting spring arranged within one cylinder, grooved pulleys or wheels mounted on the ends of said cylinders, a band or belt passing around said pulleys, and means for rotating one cylinder, substantially as described. 6th. In an indexer, in combination, a casing having an opening therein, two cylinders mounted to rotate on parallel axes therein, a retracting spring within one cylinder, means for rotating one cylinder, grooved pulleys or wheels at the upper ends of said cylinders, sprocket teeth in the grooves of said pulleys, and a chain passing around both pulleys and engaging the teeth thereof, substantially as described. 7th. In an indexer, in combination, a casing having an opening, a pair of cylinders mounted to rotate on parallel axes therein, an index strip secured to and would would have added to a complete the secured to be a complete to the secured to the secur and wound upon said cylinders, an operating lever connected with said cylinders so as to rotate the same simultaneously and equally and having its forward end bent to form a pointer, a knob connected to the pointer, and a segmental plate at the front of the casing having characters such as the letters of the alphabet represented thereon, characters such as the letters of the appliance trajecter of the casing substantially as described. 8th. In an indexing device, a casing having an observation opening in one end and also having a shelf extended in advance of the front of the casing and beyond said opening, in combination with a pair of cylinders rotatable on parallel axes within said casing, a retracting spring located within one cylinder, an index strip attached at its opposite ends to said cylinders and wound thereon, a dial on the shelf, an index hand having an arbor extended through the shelf, and operative connections between said arbor and one of the cylinders whereby movement of the index hand controls the movement of the cylinders and pair of cylinders mounted therein to rotate on parallel vertical index strip, substantially as described. 9th. In an indexing device,

a casing in the form of a rectangular box provided with an observation opening in one end, and having its bottom extended in advance of the front of the casing and beyond said opening to form a dial support, in combination with a pair of cylinders rotatable on vertical axes within said casing, a retracting spring located within one cylinder, an index strip attached at its opposite ends to said cylinders and wound thereon, a dial plate on the extended bottom of the casing, an index hand having an arbor extended through the bottom, wheels on said arbor and one of the cylinder shafts beneath the bottom, and a band passing around said wheels, all arranged for joint operation, substantially as described.

#### No. 60,783. Target Frame and Carriage.

(Cadre de cible et chássis.)



John Herbert Wynne, Montreal, assignee of Paul Weatherbe, Ottawa, all in Canada, 4th August, 1898; 6 years. (Filed 8th July, 1898.)

Claim.—1st. In a target frame and carriages of the class described, a supporting frame consisting of two upright bars preferably of channel shaped metal suitably braced and supported on a base, metal rails rigidly connected to each flange of said upright bars, brackets also firmly connected to the upper end of upright bars, perforations in said brackets and upright bars to form bearings for the axle of a sheave, and a sheave, substantially as shown and for the purpose set forth. 2nd. In a target frame and carriages of the class described, carriages consisting of horizontal bars preferably of metal, sockets rivited at suitable distance thereto, connecting bars preferably of angle-shaped metal uniting each pair of horizontal bars, and grooved blocks on their equivalents firmly secured to the connecting bars, substantially as shown and for the purpose set forth. 3rd. In a target frame and carriages of the class described and in combination, a supporting frame consisting of two upright bars suitably braced and supported on a base, rails connected to said upright bars, brackets secured to said upright bars, sheaves mounted between said brackets and upright bars, ropes passing over said sheaves, target carriages slidingly mounted between said upright bars and suspended by said ropes so that when one carriage is up the other is down, substantially as described and for the purpose set forth.

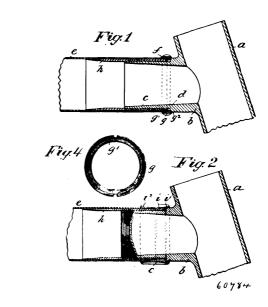
## No. 60,784. Joint for Vehicles Frames.

(Joint pour cadres de voîtures.)

The Pope Manufacturing Company, assignee of Robson C. Green, all of Hartford, Connecticut, U.S.A., 4th August, 1898; 6 years. (Filed 31st May, 1898.)

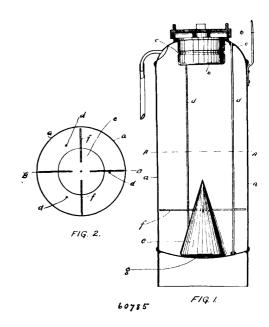
Claim.—1st. In combination in a vehicle frame composed of bracket members and separable tubular members, a bracket members with a threaded tang, a tubular member having a threaded end thing upon the threaded tang, and a filling ring located between the end of the tube and a shoulder on the tang with a tapered sur-face overhanging the end of the tube while the ring is held against lateral movement lengthwise of the tube, all substantially as described. 2nd. In a vehicle frame, in combination with a bracket

the thread upon the tang, a filling ring threaded to fit upon the tang with its edges overhanging the adjacent surfaces on the tang



and on the tube, the inner surface of the ring adjacent to the tube end being tapered, all substantially as described.

No. 60,785. Fire Extinguisher. (Extincteur d'incendie.)

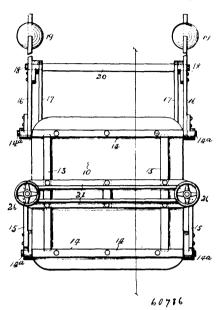


James Abercrombie Burden, and George Henry Downing, both of New York City, U.S.A., 4th August, 1898; 6 years. (Filed 27th June, 1898.)

Claim.—1st. In a portable fire extinguisher of the type wherein two liquids when combined form a fluid which will extinguish fire are arranged in separate receptacles, adapted to operate through the breaking of one by a weight falling upon it, the combination of the closed cylindrical receptacle a, of wood or metal, having a concave bottom, the weight guiding rods d d, the weight c, arranged to move between said rods endwise and provided with rods or prongs ffff, which engage with said vertical rods d d d, the horizontal reinforcing bars g g, fastened at the ends to the concave bottom of the case a, all constructed, arranged and combined to operate substantially as described so as to guide the said weight  $\epsilon$ , when the extinguisher is reversed from its normal position upon the bottle fixed in the tube of the barrel in direct line with the thrust of said weight. 2nd. A portable fire extinguisher of the type aforesaid, consisting of a metal or wooden case with a concave bottom and containing an alkaline solution, three or more metal guiding rods having a threaded tang, a tubular member having a thread fitting fastened to the top and bottom of said case, a metal weight having

horizontal bars through the same engaging with said vertical guiding rods, an acid containing bottle fastened in the top of said extinguisher, horizontal metal rods, fastened by rivetting or soldering to the bottom of the case so as to receive the impact of the metal weight when the vessel is reversed, substantially as described.

## No. 60,786. Retort Door. (Porte de cornue.]



Alexander Morrison and William H. Armstrong, both of Vancouver, British Columbia, Canada, 4th August, 1898; 6 years. (Filed 26th May 1898.)

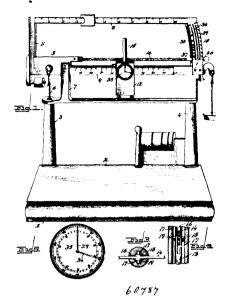
Claim. 1st. In a retort door having rubber packing intervening between its supporting edges and the seat or mouth to be closed. between its supporting edges and the seat or mouth to be closed. The continuation of reinforcing strips 13 and 14, placed at right angles around the outer edges of the door, parallel angle pieces 21 secured to the strips 13 across the centre of said door, check pieces 22 secured to the inner opposite sides at the extreme ends of the pieces 21, sleeved trunions 23 journalled in and arranged to turn between the said cheeks, and T-bolts passed through the sleeves 23, leached the latest the said cheeks. brackets 25 secured to the sides of the openings to be closed engaging the Ts on the ends of the bolts, and screw wheels 26 on the opposite ends of said bolts, whereby the door may be secured upon its seat, as set forth. 2nd. In a door of the class described, means for raising and lowering the same, which consists in strips or pieces projecting horizontally from the upper and lower corners of said door arms 15 journalled on the lower projections and having their opposite ends pivotally connected to the opposite sides of the retort to be closed, arms 16 journalled on the upper oppositely disposed projections, such arms pivotally supported on the opposite ends of a cross piece 20, supported above the retort by standard 17, and counterbalancing weights 19, on the projecting ends of the said arms 16, substantially as and for the purposes set forth.

## No. 60,787. Computing Scales. (Balance & computation.)

The American Computing Scale Company, New York City, assignee of Thomas A. Killman, and Herschel A Bratten, Liberty, Tennessee, U.S.A., 4th August, 1898; 6 years. (Filed 30th May, 1898.)

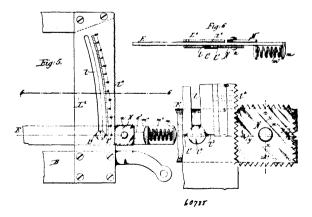
Claim.—1st. In a computing scale, the combination of a scale-beam, a sliding poise mounted on the same, and upper and lower rollers carried by the poise and bearing against the upper and lower edges of the scale-beam, one set of rollers being spring-actuated and yieldingly engaging the beam, substantally as set forth. 2nd. In a computing scale, the combination of a scale-beam, an adjustable bar arranged at an angle to the same, a siding poise mounted on the scale-beam, a rack-bar mounted on the poise and connected with the adjustable bar, an indicator geared with and operated by the rack-bar, upper rollers journalled on the poise and resting upon the upper edge of the scale-beam, the lower rollers engaging the lower edge of the scale-beam, screws mounted on the poise, sleeves adjustably connected with the screws, rods arranged in the sleeves and carrying the lower rollers, and springs inter-posed between the sleeves and the lower rollers, substantially as set forth. 3rd. In a computing scale, the combination of a scalebeam, a sliding poise mounted thereon, an adjustable bar arranged at an angle to the scale-beam and adapted to the scale-beam and adapted to be moved to and from the same to vary the angle, registering mechanism mounted on the poise and operated by the adjustable bar, an arm extending upward from the front or outer end of the scale-beam, arranged in the path of the adjustable bar, scale-beam, and an angular member movable relatively thereto, of a

and being rigid with the said scale-beam, said arm being provided with graduations, and means for securing the adjustable bar at any



point on the arm, substantially as set forth. 4th. In a computing scale, the combination of a scale-beam, a sliding poise mounted on scale, the combination of a scale-beam, a shiring poise mounted on the same and provided at its top with a vertical post having a long-tudinal slot, an adjustable bar disposed longitudinally of the scale-beam, arranged within the slot of the post and adapted to be moved to and from the beam to vary the angle between the same, a verti-cally movable rack-bar mounted on the poise, extending into the post and connected with the adjustable bar and adapted to be actuated by the same when the poise slides along the scale-beam, and an indicating mechanism mounted on the poise and geared with and actuated by the rack-bar, substantially as set forth. 5th. In a computing scale, the combination of a scale-beam provided with graduations, an arm extending upward from the outer or front end of the scale-beam, said arm being provided with a longitudinal slot, and having graduations, an adjustable bar arranged at an angle to the scale-beam and adapted to be moved to and from the same to vary the angle thereof, said adjustable bar having its outer end arranged at and moving along said arm, a pointer carried by the adjustable bar, operating in the slot, a sliding poise mounted on the beam, and a registering mechanism carried by the poise and actuated by the adjustable bar, substantially as set forth.

## No. 60,788. Computing Scale. (Balance à computation.)

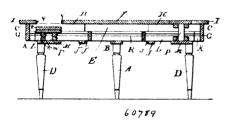


The American Computing Scales Company, New York City, assignee of Frederick D. Foster, Jersey City, all in the U.S.A., 4th August, 1898; 6 years. (Filed 30th May, 1898.)

Claim. -1st The combination, with a scale-beam, and an angular member movable relatively thereto, of a poise mounted to slide on the scale-beam, and provided with indicating mechanism influenced by said angular member, and a rotary ounce-disc provided with means whereby it is turned when the poise is moved along said scale-beam, substantially as set forth. 2nd. The combination, with a

poise mounted to slide on the scale-beam, and provided with an indicating mechanism, influenced by said angular member, and having an observation opening in its front-plate, an ounce-disc seen through said observation opening, and means in connection with the scalebeam for turning said disc as the poise is slid along the scale-beam, substantially as set forth. 3rd. The combination, with a toothed scale-beam, and an angular member movable relatively thereto, and provided with means for adjusting it relatively to the scale-beam, of a poise mounted to slide on the scale-beam and provided with an indicating mechanism influenced by said angular member, and a rotary ounce-disc provided with a pinion adapted to engage the teeth on said scale-beam, substantially as set forth. 4th. The combination, with a scale-beam, of a poise provided with a rotary ounce-disc, and means in connection with the said ounce-disc whereby when the poise is moved along a scale-beam the disc is rotated through the medium of the scale-beam, substantially as set forth. 5th. The combination, with a scale-beam, provided with a series of teeth, of a or teeth, or a spoise guided on said scale-beam and provided with a rotary ounced isc having a pinion adapted to mesh with said series of teeth, substantially as set forth. 6th. The combination, with a scale-beam provided with a series of teeth, of a poise arranged to slide on said scale-beam and provided in its front face with an observation opening, and a rotary ounce disc seen through said observation opening, and provided with a pinion adapted to mesh with said series of teeth, substantially as set forth. 7th. The combination of a scale-beam, a poise, an angular member movable relatively to the scale beams, indicating mechanism arranged on the poise and influenced by said angular member, a rotary setting member for adjusting to fractions of a cent, and means carried by the scale-beam against which said setting member may be set, substantially as set forth. 8th. The combination of a scale-beam, a poise, an angular member movable relatively to the scale-beam, indicating mechanism carried by the poise and acted on by said angular member, and a shiftable and rotary setting member provided with sides indicating fraction of a cent, any one of said sides being adapted to be set relatively to the longitudinal axis of the angular member, substantially as set forth. 9th. The combination of a scale-beam, a poise, an angular member indicating mechanism arranged on the poise and influenced by the movement of the said angular member, a plate or arm carried by the scale-beam; and provided with a series of price per pound gradua-tions, a pointer carried by the angular member and adapted to be set opposite any of said graduations, and a rotary setting member adapted to be set at any one of its sides against the said arm or plate on the scale-beam, the axis of said setting member being coincident with the pointer on the angular member, substantially as set forth. 10th. The combination of a scale-beau, a poise, an angular member, indirating mechanism arranged on the poise and influenced by said angular member, an arm projecting from the scale-beam and provided with a series of teeth, and having a series of price per pound graduations, a pointer on the angular member, and a rotary teethed setting member adapted to be set in contact with the series of teeth on the arm of the scale-beam, substantially as set forth. 11th. The combination of a scale-beam, a poise, an augular member, indicating mechanism carried by the poise and influenced by the angular member a rotary setting member adapted to be set against an arm attached to the scale-beam, and a spring-pressed finger-piece for shifting said setting member, substantially as set forth. 12th. The computing scales of the class described, the herein described setting member having sides arranged at an angle to each other, each side being provided with a series of teeth, one series being offset or shifted from the centre of the setting member, relatively to the other series, substantially as set forth. 13th, in computing scales of the class described, the herein-described rectangular setting-member having a series of teeth on each of its four sides, each series of teeth being offset or shifted from the centre of the setting member relatively to each other, so that the series of teeth on the four sides are shifted at determined and differing distances from the diameters of the setting member, substantially as set forth.

#### No. 60,789. Extension Table. (Table à rallange.)



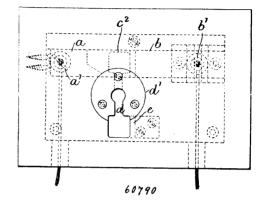
Sylvester Louis McAdams, assignee of Charles Andrew Curl, both of Beaver Falls, Pennsylvania, U.S.A., 4th August, 1898; 6 years. (Filed 8th July, 1898.)

Claim. 1st. In an extension table, the combination with the main or relatively stationary frame, of the extension-frame sliding laterally from the main frame and having a supporting bar M, and an extension-leaf formed in two sections N, N<sup>1</sup>, the section N being connected to the support M by a parallel-rule joint, and the section

N¹ being connected to the section N by one or more links, the ends of the sections being bevelled, substantially as set forth. 2nd. In an extension table, the combination with the relatively stationary body part, of the laterally adjustable extension board, it having a support, as at M, and an extension-leaf formed in two sections N, N¹, hinged together at adjacent ends, means for rigidly supporting the inner end of one section upon the inner end of the other, and a parallel-rule joint connecting the section N to the supporting bar M, whereby the leaf sections are movable to and from each other on planes transverse to the table, and the leaf, as a whole, is movable both transversely and vertically of the table in the same planes, substantially as set forth.

## No. 60,790. Electric Carriage Safety Device.

(Appareil de surête pour voîtures électriques.)

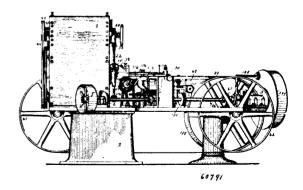


The Electrical Vehicle Syndicate, Juxon Street, London, England, assignce of the Honourable Reginald Thomas Dudley Brougham. 22a Dorset Street, and Walter Charles Bersey, 28 Victoria Street, of London, aforesaid, 4th August, 1898; 6 years. (Filed 15th December, 1898.)

Claim.—1st. A safety device for electric carriages to prevent unauthorized operation of the controller parts, such device consisting of a closed box having a keyhole leading into the box, two open contacts located within the box at a point out of line with the keyhole and connected to the circuit wires, and a key adapted to pass through the keyhole and to be turned to connect the contacts. 2nd. A safety device for electric carriages to prevent unauthorized box having a keyhole leading into the box, two open contacts located within the box at a point out of line with the keyhole and connected to the circuit wires, and a key having an off-set projection adapted to pass through the keyhole and to be turned so that said projection will connect the contacts.

## No. 60,791. Cigarette Making Machine.

(Machine à cigarettes.)



Ezra Torrence Gilliland, Pelham Manor, New York, U.S.A., 4th August, 1898; 6 years. (Filed 26th April, 1898.)

Claim.—1st. In filler feeding and distributing mechanism for cigarette machines, the combination, with filler-supply means and filler feeding-rolls, of a toothed picker-roll facing the feed-rolls and distributing rolls having interrunning teeth, moving in the same direction but at different peripheral speeds, to receive and even the filler from the picker-roll. 2nd. In filler-feeding and distributing mechanism for cigarette machine, the combination, with filler-supply means, and filler feeding-rolls, of a toothed picker-roll

facing the feeding-rolls, distributing-rolls having interrunning teeth moving at different peripheral speeds to receive and even the filler from the picker-roll, and a stripper-roll having teeth interrunning the teeth of both the distributing rolls to take the filler therefrom and discharge it in a uniform stream. 3rd. In filler-forming mechanism for cigarette machines, the combination with a belt-carrier to convey a stream of filler, and means for compressing and forming said filler into a continuous rod, of a rod-wrapping trough leading obliquely from the side of the belt-carrier to receive at a diminished distance the continuous rod from the filler-forming means. 4th. In filler-forming mechanism for cigarette machines, the combination, with a belt-carrier to convey a stream of tiller, and a rod-wrapping trough leading obliquely from the side of the belt-carrier, of a pair of tangential grooved forming wheels arranged obliquely across the belt-carrier in a line transverse to the wrapping-trough to discharge the formed filler at the side of the belt-carrier into the wrappingtrough, and means for compressing and guiding the stream of filler on the belt carrier to and between the forming wheels. 5th. In filler-forming mechanism for cigarette machines, the combination, with a belt-carrier to convey a stream of filler, a rod-wrapping trough leading obliquely from the side of the belt-carrier, a pair of tangential grooved forming wheels arranged obliquely across the belt-carrier to discharge the formed filler into the wrapping-trough, and filler-confining means extending along the sides of the beltcarrier to the forming wheels, of a revoluble repressing and diverting disc covering the belt-carrier to the forming wheels and journalled to move laterally toward said wheels substantially in the oblique line of the wrapping devices, means for compressing and guiding the stream of filler on the belt-carrier beneath said diverting-disc, and means for rotating the diverting-disc at substantially the same speed as the underlying filler and belt-carrier. 6th. In fillerforming and wrapping mechanism for cigarette machines, the combination, with a belt-carrier to convey a stream of filler, and means for compressing and forming said filler into a continuous rod and discharging said rod off the belt-carrier, of a wrapping trough extending said rod of the eartest of a wasping todgit extending underneath said belt-carrier both rearwardly and forwardly from said rod-discharging point, said trough being formed back of said rod-discharging point with a gradually deepening U shaped slit in which the wrapping tapeand strip run and whereby they are formed into a furrow where they receive and thus confine the compressed filler-rod. 7th. In filler-forming and wrapping mechanism for cigarette machines, the combination, with a pair of grooved forming-wheels and means for carrying, compressing, and guiding a stream of filler there between, of a wrapping-trough extending both rearwardly and forwardly beneath said forming, wheels, and formed back of the exit of said wheels with a gradually deepening U shaped slit in which the wrapping tape and strip run and whereby they are formed into a furrow where they receive and thus confine the com-pressed and formed filler-rod. 8th. In filler forming and wrapping mechanism for cigarette machines, the combination, with the fillerforming means whereby a continuous filler-rod is formed and dis-charged, of a wrapping-trough formed with a U shaped slit in which the wrapping-tape and strip run and whereby they are furrowed and an inclined furrow leading from the discharge of the rod forming means downward into the under-running wrapping-tape and strip, and U shaped slit. 9th. In filler-wrapping and pasting mechanism for cigarette machines, a wrapping-trough having a capped-furrow or tube in which the wrapping-tape and strip containing the fillerrod run and are confined, a slot opening outwardly through which one edge of the wrapper-strip runs and is exposed to the paste applymeans, a lateral slot forming a curved stripper beyond the pasting means, a nateral soctorming a curved stripper ocyonal the pasting slot, from and by which stripper one edge of the wrapping-tape is gradually stripped from the wrapper-strip, and a groove leading from the pasting-slot and arching gradually down to the wrapper-strip, by which groove the past-d edge of the wrapper-strip is gradually folded, lapped and pasted over the inner edge of the wrapper-strip. 10th. The combination, with the paste-wheel, of a paste-tube having a mouth revoluble on the periphery of the paste-wheel, a spindle having a head fitted and revoluble in said mouth and also revoluble on the periphery of the paste-wheel, means for supplying the paste under pressure into the paste-tube and between its mouth and said spindle-head on the paste wheel, and means for rotating the paste-tube and the spindle relatively therein. 11th. The combination, with the paste wheel, of a paste-tube having a conical mouth revoluble on the paste-wheel, a spindle having an inner cone on its head fitted and revoluble in said tube-mouth and on the paste-wheel, means for supplying paste under pressure into the paste-tube, and means for rotating the tube and the spindle relatively therein.

12th. The combination, with the paste-wheel, of a paste-tube having an end mouth revoluble on the paste wheel, a spindle having a paste-conveying worm fitted and revoluble in said tube and a head fitted and revoluble in the mouth of said tube and revoluble on the paste-wheel, means for supplying paste into said tube and worm, and means for rotating the paste tube and the spindle therein. 13th. The combination, with the paste-wheel, of a paste-tube having a mouth revoluble on the paste-wheel, a spindle fitted to rotate and move lengthwise in said tube and having a head fitted in the mouth of the tube and revoluble on the paste-wheel, means for adjusting the spindle and its conical head axially in the tube, means for rotating the tube and the spindle, and means for supplying paste into the tube. 14th. The combination, with the paste-wheel, the paste-frame, the pastetube bearing against the paste wheel and revoluble and adjustable

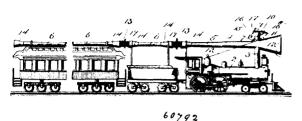
lengthwise in the paste frame, the spindle having a head closing the tube and bearing against the paste-wheel and revoluble and adjustable lengthwise in the paste-tube, means for rotating the tube and spindle, and means for supplying paste to the tube, of an axially pressing spring between the bearings on the tube and spindle, and an adjusting screw on the paste-frame to work against a bearing on the spindle for adjusting the spindle and tube axially. 15th. combination, with a paste-plunger and reservoir, a paste-chest opening therefrom, a paste-tube revoluble in the paste-chest and having paste admission opening within the paste-chest, a spindle revoluble in the paste-tube, and a paste-wheel, said tube having a mouth, and said spindle a mouth-closing head, revoluble on the paste-wheel. 16th. The combination with the paste-reservoir having a paste exit, a paste-forcing plunger in the reservoir, and means for propelling the plunger, of a pressure-head in the paste-reservoir, and connections between the pressure-head and the plunger-propelling means, whereby an excessive movement of the pressure-head disengages the plunger from its propelling means and reversely. 17th. The combination, with the paste-reservoir having a paste exit, a paste-forcing plunger in the reservoir, and means for propelling the plunger including a clutch-wheel and pawl, of a yielding pressurehead in the paste-reservoir, a plunger-rod bearing on the pressurehead, and connections between said diaphragm plunger-rod and said pawl whereby an excessive movement of the pressure-head disengages the pawl from the plunger-propelling clutch-wheel and reversely. 18th. The combination, with the paste-reservoir having a paste-exit, a paste-plunger in the reservoir, and means for propelling the paste-plunger, of a yielding pressure-head in the reservoir, a spring reinforcing the pressure-head, means for variously compressing said spring, and operating connections between said pressure-head and the plunger-propelling means, whereby the movement of the pressure-head governs the plunger-propelling means. 19th. The combination, with the frame of the cigarette machine of a horizontally swinging frame carrying the paste-wheel and paste-mechanism, and means for locking and adjusting said swinging frame to the main frame, so that the pastewheel will run properly on the wrapper-strip. 20th. The combination, with the paste-reservoir, and paste-plunger having a spirally threaded and longitudinally grooved plunger-rod, of a disengageable tongue entering said groove and preventing said plunger-rod from turning while permitting it to advance longitudinally, a gear-wheel through which the plunger-rod screws lengthwise, and connecting gears, and a hand wheel on the plunger-rod for turning it in said gear-wheel as a nut when the tongue is freed from the grove in the plunger-rod. 21st. A cutter for continuous cigarette machines, consisting of a revoluble radially expanding, helical blade. A cutter for continuous cigarette machines, consisting of a revoluble, radially expanding helical blade, arranged with its axis oblique to the line of the continuous eigarette and its helical cutting edge substantially perpendicular thereto. 23rd. The combination, with means for propelling, and guiding a continuous cigarette lengthwise, of a revoluable, expanding, helical, cutter-blade of a pitch equal to the length of the cigarette sections, and means for rotating the cutting-blade across the path of the continuous eigarette so that it will sever the same while moving lengthwise in unison therewith. 24th. The combination, with a longitudinally moving guide for a continuous cigarette having a transverse opening, of a revoluble, expanding helical cutter-blade, arranged to run transversely through said openings across the path of the cigarette and simultaneously to advance with said guide and cigarette. 25th. The combination, with an endless belt or chain, whose links have longitudinal furrows to guide a continuous cigarette and transverse openings, of a revoluble expanding helical cutter-blade arranged to run transversely through said openings and simultaneously to advance with the end-less belt or chain guide and cigarette. 26th. The combination, with the revoluble, expanding, helical cutter-blade, and the carrier across which the blade runs and which also travels lengthwise with the blade of a blade-sharpener on said carrier to operate on said blade. 27th. The combination, with the revoluble cutter and its driving-shaft, of an escapement-clutch therebetween, substantially as described, for adjusting the cutter behind its driving-shaft. 28th. The shaft-clutch device herein generally described as an escapement-clutch and as consisting of a wheel fixed on one section, having two relatively staggered rows of teeth, and teeth movable axially on, but rotating with the other section to alternately engage the staggered teeth on said wheel.

No. 60,792. Spark Conductor. (Conducteur d'étincelles.)

Clarence Sleister, Rutland, Illinois, U.S.A., 4th August, 1898; 6 years. (Filed 18th July, 1898.)

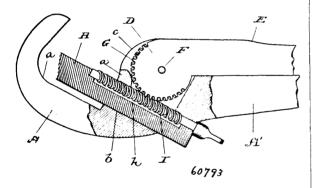
Claim.—1st. In a spark conductor, the combination of a vertical tube designed to be connected with a locomotive, a flaring month or funnel extending forward from the mouth of the tube, a rearwardly extending tube connected with the vertical tube and disposed opposite the flaring mouth or funnel, and a vertical hood located directly above the vertical tube and provided with a cap, the rear wall of the hoof terminating short of the front wall and being provided with the inclined portions 7 connected with the rearwardly extending tube and and extending downward and rearward from a point above the lower edge of the front wall of the hood, substantially as and for the purpose described. 2nd. In a spark conductor, the combination of two pipe sections having their adjacent ends flared or funnel-

shaped to increase the diameter of the conductor, and the flexible bellows-shaped connection secured to the flaring or funnel-shaped



ends of the pipe sections, substantially as described. 3rd. In a device of the class described, the combination of a tube, a hinged cap or valve provided with an arm pivoted between its ends, a catch mounted at the free edge of the cap or valve and adapted to engage the tube, and a cord or rope secured to the catch and connected with the arm, said cord or rope having a limited movement independent of the arm whereby the catch is released before the cap or valve is raised, substantially as described. 4th. In a device of the class described, the combination of a tube, a hinged cap or valve provided with an arm pivoted between its ends and having an opening in its outer portion, a catch pivoted between its ends at the free edge of the cap or valve and having its lower portion adapted to engage the tube, and a cord or rope passing through the opening of said arm and connected with the upper portion of the catch, said cord or rope being provided between the arm and the catch with a stop adapted to engage the former, substantially as described.

#### No. 60,793. Pipe Wrench. (Clé à tuyau.)



John H. Smyth, North Burton, Ontario, Canada, 4th August, 1898; 6 years. (Filed 22nd June, 1898.)

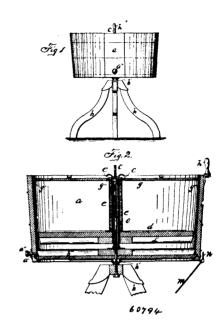
Claim.—1st. A wrench, embracing in its construction a fixed jaw terminating in a lever, a bore through the top of the fixed jaw parallel with its back, two lugs projecting forwardly from the fixed jaw in juxtaposition to the bore, a lever pivoted between the lugs having a cam-shaped toothed end extending into the bore, a movable jaw shidably working in the bore, having one face fitted to mesh with the teeth of the cam-shaped end of the lever, substantially as specified. 2nd. A wrench, embracing in its construction a fixed jaw terminating in a lever, a bore through the top of the fixed jaw parallel with its back, two lugs projecting forwardly from the fixed jaw in juxtaposition to the bore, a lever pivoted between the lugs having a cam-shaped toothed end extending into the bore, a movable jaw slidably working in the bore, a recess formed in that face of the movable jaw contiguous to the end of the lever, a worm journalled within the recess, and a thumb-nut fitted to the worm extending beyond the fixed jaw, substantially as specified.

## No. 60,794. Washing Machine. (Machine à laver.)

Alonzo Abram Casler, Lestershire, New York, U.S.A., 4th August, 1893; 6 years. (Filed 16th July, 1898.)

Claim. 1st. A washing machine, comprising a base, having a post secured thereto, and a tub or clothes receptacle having a tube mounted upon said post, an agitator within said tub, and having uprights secured thereto, and means for securing said uprights to the post, as set forth. 2nd. A washing machine, comprising a base, having a post secured thereto, a tub or clothes receptacle, having a central tube or sleeve surrounding said post, an agitator having uprights united at the top, and provided with finger pieces and adapted to engage with the central post or disc thereon, for the purpose of holding the agitator rigid with the post, as set forth. 3rd. A washing machine, comprising a base, having a post secured

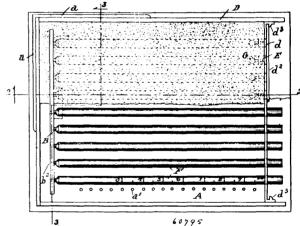
thereto, said post being provided with a laterally slotted disc, a tub or clothes receptacle having a central tube surrounding said post,



an agitator having uprights adapted to engage with the slot-ways in said disc, and means for locking the tub from rotating, as set forth.

## No. 60,795. Sash Weight Moulding Machine.

(Machine à mouler les pesées de châssis.)

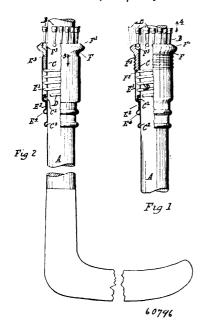


Wesley H. Fonda, Amherst, Nova Scotia, Canada, 4th August, 1898; 6 years. (Filed 2nd July, 1898.)

Claim. 1st. In an apparatus for moulding sash weights, the combination of a bottom board having guides, a flask fitting on said bottom board in contact with said guides, said flask having an end plate pierced by transverse holes, a gate pattern adjustable relative to the perforated end plate of said flask, and sash weight patterns slidable in the holes of the end plate of said flask and detachably connected with said gate pattern, as set forth. 2nd. In an apparatus for moulding sash weights, the combination of flasks having a perforated end plate, a gate pattern adjustable in said flask relative to said perforated end plate as weight patterns slidable in the perforations in said end plate and detachably connectible with said gate pattern, chills fitting in the perforations in said end plate, and means for preventing outward displacement of said chills, as set forth. 3rd. In an apparatus for moulding sash weights, a graduated sash weight, a graduated sash weight pattern in combination with a flask having perforations in which said graduated sash weight pattern is slidable and a gate pattern adjustable within said flask to correspond to the graduations on said sash weight pattern, as set forth. 4th. In an apparatus for moulding sash weight, a chill adapted to form the end of a sash weight and mark thereon the weight of said sash weight, in combination with a mould in the end of which said chill fits, as set

forth. 5th. In an apparatus for moulding sash weights the combination of graduated sash weight patterns, a series of chills of the same cross section as said sash weight pattern and provided with numerals or characters, a flash having perforations in which said sash weight patterns and said chills fit, and a gate pattern adjustable in said flask, as set forth. 6th. In an apparatus for moulding sash weights a core of substantially the form shown and described in combination with a sash weight mold, and a chill fitting in the end of said mould and adapted to support said core, as set forth, 7th. In an apparatus for moulding sash weights the combination of a flask having a perforated plate, a bottom board having a series of holes, a gate pattern having transverse holes and provided with pins fitting in the holes in said bottom board, and a series of sash weight patterns fitting in the perforations of the perforated plate of said flask and having pins fitting in the transverse holes in said gate pattern as set forth.

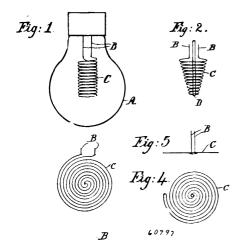
#### No. 60,796. Umbrella. (Parapluie.)



Ernest Sydney Ross, Hobart, Tasmania, 4th August, 1898; 6 years. (Filed 21st June, 1898.)

Claim.—1st. The combination of stick A, runner C, having enlargements C<sup>1</sup> and C<sup>11</sup>, and F<sup>21</sup> spiral spring D, tip cup F having bevelled edge F<sup>1</sup>, and cylindrical spring sheath E<sup>1</sup>, E<sup>11</sup> having enlarged extremity E<sup>1</sup>, all substantially as and for the purposes set forth. 2nd. In devices of the kind set forth, a bevel-edged tip cup F situated above its actuating spring D and detachable from a non-removable spring sheath E<sup>1</sup>, E<sup>11</sup>, substantially as and for the purposes set forth.

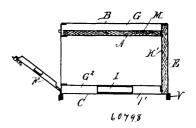
#### No. 60,797. Electric Lamp. (Lampe électrique.)



Theophilus Davies Farrell, 82 Judd Street, London, England, 4th August, 1898; 6 years. (Filed 9th February, 1898.)

Claim.—1st. The combination of a glass globe, a filament of refractory ill-conducting material bent into a close doubly-wound spiral so that adjacent spires of the filament have current flowing through them in opposite directions, and leading in wires to connect the filament with a feeding circuit. 2nd. The combination of a glass globe, a filament of refractory ill-conducting material bent into a close doubly-wound flat spiral so that adjacent spires of the filament have current flowing through them in opposite directions, and leading in wires to connect the filament with a feeding circuit. 3rd. The combination of a glass globe, a filament of refractory ill-conducting material bent into a close doubly-wound spiral so that adjacent spires of the filament have current flowing through them in opposite directions, leading in wires to connect the filament with a feeding circuit, and means for supporting the filament from the side of the globe, as set forth. 4th. The combination of a glass globe, two filaments of refractory ill-conducting material each bent into a close doubly-wound spiral, said filaments being connected in series or in parallel and so arranged that adjacent spires of the filament have current flowing through them in opposite directions, and leading in wires to connect the filaments with the feeding circuit.

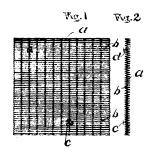
No. 60,798. Camp Stove. (Poêle de camp.)



Oliver D. Hunt, Detroit, Michigan, U.S.A., 4th August, 1898; 6 years. (Filed 22nd February, 1898.)

Claim. - 1st. In a camp stove, the combination of an oven having two separated top and end walls forming between them a continnous flue across the top, and a fire-box detachably connected to the end of the oven, and having a top detachably connected to and end of the oven, and having a top detachably connected to and forming a continuation of the outer top wall of the oven, substantially as described. 2nd. In a camp stove, the combination with the oven having double top walls of a reinforcing plate on the edge of the upper wall of the top, a fire-chamber detachably secured to the end of the oven, a top therefor, a corresponding plate below the edge of the top forming a groove between in which the reinforcing plate is adapted to engage and means for securing the fire-chamber to the oven for the purpose described. 3rd. In a camp stove, the combination of an oven having a smoke flue across the top, of a fire-chamber comprising a side and end walls hinged together, means for detachably connecting it to the end of the oven, and a detachable top for the fire-chamber, substantially as described. 4th. In a camp stove, the combination with an oven having a double wall top formstove, the combination with an oven having a double wall top forming a snoke flue between, of the reinforcing plate projecting from the edge thereof and having the apertures X¹, of a fire box or chamber detachably secured to the end of the oven and extending up to the top wall of the oven, a detachable top W for the fire-chamber, having hooks Y adapted to engage in the apertures X¹, and a plate or lip X² below the top forming a recess in which the reinforcing plate X is adapted to engage, substantially as described. 5th. In a camp stove, the combination with an oven having smoke flue across the top open at one end, of a fire box detachably connected to the end of said oven and communicating with said flue at its open end, and the plate O detachably secured on the end of the oven, substantially as described. 6th. In a camp stove, the combination of an oven having a double wall top forming a smoke-flue between, of the detachable fire-chamber including the end of this smoke flue and comprising a side and ends hinged thereto, the this smoke flue and comprising a side and ends ninged thereto, the hooks T on the ends, the detachable plate O on the end of the oven and the flange Q on the end of said plate, over which the hooks T are adapted to engage. 7th. In a camp stove, the combination of the oven having the double wall top forming a smoke flue between, with L shaped plate M extending over the end, and part of the top, of the inner wall of the oven and insulating material between, and a detachable fire-chamber across that end of the oven. 8th. In a camp stove, the combination of an oven having a smoke flue crossing the same and terminating at the bottom, a smoke pipe extending laterally from the bottom of the oven and communicating with said smoke flue, and a pipe H<sup>1</sup> at the outer end of the smoke pipe located a sufficient distance from the stove to permit the wall of a tent to be placed between, substantially as described. 9th. In a camp stove, the combination of the oven having double walls to form a smoke flue on the top, end and bottom of the flue I in the form a smoke flue and communicating therewith at or near the middle thereof and extending to the outside of the stove and the smoke exit at the end of the flue I in the base of the stove, substantially as described. 10th. In a camp stove, the combination of the fire-chamber and ledges thereon, of a grate consisting of the flat metal bars e set on edge, the end twisted portions h arranged at right angles thereto and the connecting bar i to which these twisted portions are connected at each end.

No. 60,799. Signboard Letters. (Lettre pour enseignes.)



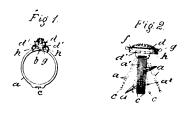
Arthur Block, Berlin, Prussia, Empire of Germany, 4th August, 1898; 6 years. (Filed 26th February, 1898.)

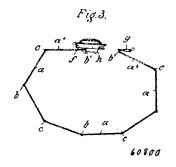
60799

Claim.—1st. A sign-board with interchangeable letters consisting of a corrugated plate bored as specified and a series of letters having stems and eyes therein and a rod passing through said boaring and letter stem, substantially as described. 2nd. In a sign-board, the arrangement of letters having fixed stems to be inserted between the corrugations and retained in position by rods or bars as specified.

#### No. 60,800. Finger-ring and Bracelet.

(Anneau et bracelet.)





Ernest Emil Curt Gerisch, 75 Eisenbahnstrasse, Leipzig-Neustadt, Empire of Germany, 4th August. 1898; 6 years. (Filed 8th January, 1898.)

Claim.—1st. A finger-ring capable of being converted into a bracelet, characterised by a number of thin rings a being connected in pairs alternately above and below by means of hinges b and c in such a way that they may be laid one against the other to form a finger ring, one ofthe rings a being provided with a device b adapted to hold all the rings together on the finger, constructed and aranged substantially as hereinbefore described. 2nd. A combination finger ring and bracelet comprising rings a, hinges b and c, ornamental part d, fastener casing f, slide g and clips b constructed and arranged substantially as hereinbefore described.

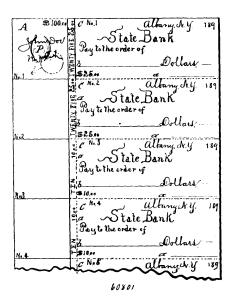
## No. 60,801. Protective Bank Check System.

(Système protecteur de chèque de banque.)

Charles Lyman Beers, Scranton, Pennsylvania, U.S.A., 4th August, 1898; 6 years. (Filed 16th September, 1897.)

Claim.—1st. The protective bank-check system, consisting of a series of detachably united bank-checks, a stub attached to said chamber communicating at one end with the open space to be checks and having marked on it the limit of the total amount the series of checks may be drawn for, an a mark of identification of the tube within one of said air tubes, with suitable cistern for supplying

drawer of the checks applied to said stub. 2nd. The improved bankcheck system, consisting of a series of blank checks detachably



united and each having marked on it the amount for which said may be drawn, a stub attached to one of the checks and having marked on it the sum of the amounts marked on the series of checks, as set forth. 3rd. The protective bank-check system, consisting of a series of blank checks detachably united and each having marked on it the amount for which said check may be drawn, a stub attached to one of said checks and having marked on it the sum of the amounts marked on the series of checks, and a mark of identification of the drawer applied to said stub. 4th. The protective bank-check system, consisting of a series of blank checks detachably united, a stub attached to one of said checks and having marked on it the total amount for which the entire series of checks may be drawn, and a photograph or analogous likeness of the drawer of the checks applied to the stub, as set forth. 5th. The protective bank-check system, consisting of a series of blank checks detachably united, a stub attached to one of the said checks and having marked on it the total amount for which the series of checks may be drawn, a photograph or analogous likeness of the drawer applied to said likeness, as set forth. 6th. The protective bank-check system, consisting of a series of blank checks detachably united, a stub attached to one of said checks and having marked on it the total amount for which the entire series may be drawn, a photograph or analogous likeness of the drawer applied to said likeness, and signature, as set forth. 7th. The protective bank-check system, consisting of a series of blank checks detachably united and each having marked on it the amount for which the check is to be drawn, a stub attached to one of said checks and having marked on it the sum of the amounts marked on the series of checks, a photograph or analogous likeness of the drawer applied to said stub, the signature of the drawer on said likeness, the seal or other private mark of the bank applied to said likeness and signature, and the signature of the cashier

## No. 60,802. Cake Making Ingredient.

(Ingrédient pour la confection des gâteaux.)

Menno Grosz, Elmira, Ontario, Canada, 4th August, 1898; 6 years. (Filed 20th May, 1898.)

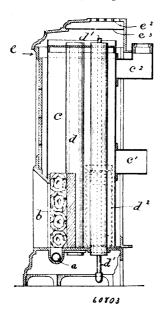
Claim.—The combination of the ingredients above named in the manner and in the proportions as hereinbefore described, substantially as and for the purpose set forth.

#### No. 60,803. Gas Stove. (Poêle à gaz.)

John Langfield, Manchester, England, 4th August, 1898; 6 years. (Filed 1st June, 1898.)

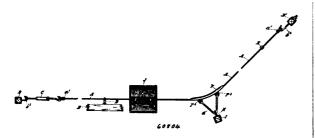
Claim.—1st. In a gas stove, the combination of a closed heating chamber having an outlet for the heated products of combustion at such a point in its height as to leave a considerable column of heat at a constant temperature, and also having a safety valve, a gas burner in the lower part of such heating chamber, air tubes within said chamber communicating at one end with the open space to be heated and at the other end with a fresh air supply, and a water tube within one of said air tubes, with suitable cistern for supplying

the water tube, substantially as described. 2nd. In a gas stove, the combination of heating chamber c, having outlet  $c^+$  and safety valve



outlet  $e^2$ , burner a, grate b, air tubes d, water tube  $d^1$ , eistern  $d^2$ , and suitable easing such as  $e, e^1, e^2$  with or without screen  $e^3$ , subsantially as shown and described,

## No. 60,804. Manure Carrier. (Transport à engrais.)



Thomas G. Hodgins and Eli Hodgins, both of Biddulph, Ontario, Canada, 4th August, 1898; 6 years. (Filed 29th November, 1897.)

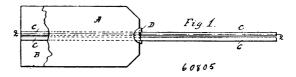
Claim.-1st. A track A, in combination with a curved guides F, claim.—1st. A track A, in combination with a curved guides r, and means for holding said guide in contact with said guide in contact with said track, so that one portion of the track may extend at an angle to the other portion, substantially as and for the purpose set forth. 2nd. A track A, in combination with a curved guide F, in which a recess F<sup>1</sup>, is formed and which is provided with the arms F<sup>2</sup>, set down below the body of the guide and means for securing said arms to a suitable support, substantially as and for the purpose said arms to a suitable support, substantially as and for the purpose set forth. 3rd. A track A, in a combination with a curved guide F, in which a recess F¹, is formed and which is provided with the arms F², the bail G, hook H, and post or support I, substantially as and for the purpose set forth. 4th. A track A, in combination with a curved guide F, and means for holding said guide in contact with said track and the hangers D, formed with upturned ends d¹, in which a recess d² is formed substantially as and for the purpose which a recess  $d^2$ , is formed, substantially as and for the purpose set forth. 5th. A track A, a curved guide F, and means for holding said guide in contact with said track, in combination with the hangers D, and turnbuckle, C, substantially as and for the purpose set forth. 6th. A track A, a curved guide F, and means for holding said guide in contact with said track, so that one portion of the latter will extend at an angle to the other portion, and a stop block E, in combination with a carriage travelling on said track and provided with means, which engages with said stop block for dumping the contents of said carriage, substantially as and for the purpose set

## No. 60,805. Tag. (Ferret.)

Gustaf Libert Reenstierna, Boston, Massachusetts, U.S.A., 4th August, 1898; 6 years. (Filed 24th March, 1898.)

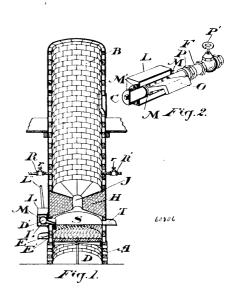
Claim. -1st. The herein described tag consisting of two sheets or layers cemented or otherwise secured together by adhesive material, combined with one or more tapes, strings or wires adhesively con-

device arranged at the junction of the tag and the tapes, strings or wires, substantially as and for the purpose set forth. 2nd. As a



new article of manufacture, a tag and package-tying device combined, consisting of a tag composed of two layers adhesively connected together, and a tying tape, string or wire arranged between said layers and having its ends projecting beyond said tag, substantially as and for the purpose set forth.

No. 60,806. Apparatus for the Manufacture of Steel and Malleable Iron. (Appareil pour la fabrication de l'acier et du fer malléable.)

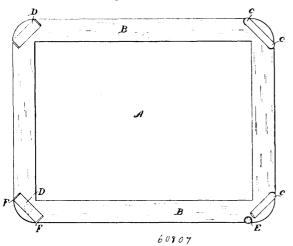


Thomas Doherty, Sarnia, Ontario, Canada, 4th August, 1898; 6 years. (Filed 26th March, 1898.)

Claim.—1st. The method of producing in one cupola and without the use of a separate converter, cast steel, consisting of first, charging the cupola upon a partition above a converting chamber and an air blast, second, subjecting the molten iron to the air blast in the chamber below the partition and into which it descends in a molten condition through an opening in the partition, meeting the air blast in its descent, substantially as described. 2nd. The method of producing in one cupola and at one operation cast steel or malleable iron as may be desired by first charging the cupola upon a perforated partition in the usual manner, and subjecting the melted metal to a blast of air or air and steam through tuyeres located above the par-tition, second, subjecting the molten metal which passes through the perforated partition into the converter to such air blast as may be desired by means of the rotatable tuyere which projects into the converter chamber, so that the air blast may be directed through the mass of the molten metal within the converter or into the open space within the converter chamber above the molten metal, and then drawing on the metal so treated, substantially as specified. 3rd. A cupola divided into two chambers by a partition adapted to support the charge, and provided with a perforation whereby the molten charge is enabled to descend into a lower chamber, and means for subjecting the charge to an air blast, substantially as described. 4th. In a cupola, the combination of the shell, a perforated partition located in said shell and dividing the cupola into two chambers, an upper melting chamber, and a lower converting chamber, substantially as described. 5th. In a cupola, the combination of a shell, tany as described. Some in a capon, the community of shelf, a perforated partition located therein and dividing the cupola into two chambers, one or more tuyeres, and means for changing the direction of the air blast in the lower chamber, substantially as described. 6th. In a tuyere, the combination of a casing, a hollow sleeve partially rotating therein and having a coupling connection with the air blast pipe, said hollow sleeve carrying a fire clay nozzle, and means for partially rotating the hollow sleeve whereby the nected to and arranged between said sheets or layers, and a fastening direction of the air blast can be changed, substantially as described.

## No. 60,807. Slate Frame Cushion.

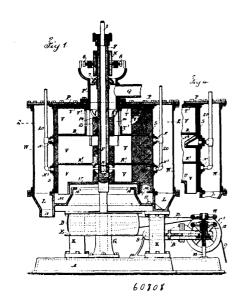
(Conssinct pour cadre d'ardoises.)



Gustav M. Beyer, Milwaukee, Wisconsin, U.S.A., 4th August, 1898; 6 years. (Filed 12th April, 1898.)

Claim, -1st. The combination with the corners of a slate frame, provided with retaining recesses, of an elastic cushion secured thereto and held in place by its own elasticity, substantially as and for the purpose specified. 2nd. The combination with the corners of a slate purpose specified. 2nd. The combination with the corners of a slate frame, provided with cylindrical retaining recesses formed within its marginal edge, having entrance openings of less diameter than such recesses, and a cylindrical elastic cushion of greater diameter in cross section than its retaining recess, and of less length than the bearing surface around which it impinges, whereby said cushions are retained around said corners by their contracting force longitudinally, and within said recesses by their expansive force in cross section, substantially as and for the purpose specified.

#### No. 60,808. Pulp Screen. (Tamis à pulpe.)

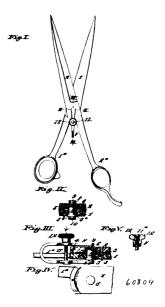


James H. Baker, George F. Shevlin and Frederick H. Baker, all of Saratoga Springs, New York, U.S.A., 4th August, 1898; 6 years. (Filed 26th April, 1898.)

Claim.—1st. The combination in a machine for screening paperstock and similar material, of a centrifugal device upon which the materials to be screened are delivered, a surrounding vertical screen through which the water and fine materials are passed by the centrifugal action, and means for supplying water for washing down the materials that do not pass through the screen and for directing such materials inward, and a centrifugal device for acting on such materials to protect them against the screen, substantially as set forth. 2nd. The combination in a machine for screening paper-stock and similar material, of a centrifugal device and means for supplying the material to be screened, a screen against which the materials are centrifugally projected, and means for supplying water ratchet-face of the eye, and a nut fitted to the screw-threaded top

upon such stationary screen for washing down the materials that do not pass through the screen, substantially as set forth. 3rd. The combination in a centrifugal pulp separator, of a cylindrical screen and a hollow waterway and a water supplying pipe and a centrifugal device within the screen for projecting the water and paper-stock first against the upper part of the screen and then against the lower part of the screen, substantially asset forth. 4th. The combination in a centrifugal pulp screen of means for supplying the water and pulp, a centrifugal device, a surrounding screen against which the naterials are projected and means for supplying water without pulp to the centrifugal device, substantially as set forth. 5th. The cen-trifugal apparatus, consisting of two or more circular plates, a slotted cylinder for a portion of the water and pulp to pass off above one of the circular plates and an opening through such circular plate for the other portion of the pulp and water to pass down and a surrounding screen against which the water and pulp are projected and annular troughs at the bottom of the screen, substantially as set forth. 6th. The combination with the centrifugal apparatus and the surrounding screen, of waterways connected with the screen for supplying water to such screen, substantially as specified. 7th. The combination in a paper-stock apparatus, of a centrifugal device, a surrounding screen and means for supplying the paper-stock and water to the centrifugal device, and a pipe for an independent supply of water to such centrifugal device for thinning the paper-stock, substantially as set forth.

#### No. 60,809. Scissors. (Ciseaux.)



Eli Bailey, Macon, Missouri, U.S.A., 4th August, 1898; 6 years, (Filed 28th April, 1898.)

Claim.—1st. In a pair of shears or scissors, the combination of a yoke applied to the pivotal point of the blades thereof and means for adjusting said yoke to said blades, substantially as described. 2nd. In a pair of shears or scissors, the combination with the blades and. In a pair of shears or seissors, the combination with the blades thereof, of a yoke applied to the pivotal point of said blades, a screw attached to said yoke, and a nut applied to said screw adapted to contract the ends of said yoke to bind said blades, substantially as described. 3rd. In a pair of shears or seissors, the combination with the blades thereof, of a removable pivot pin in one of said blades, the other of said blades being provided with a cavity adapted to receive said blyot pin, and a voke adapted to be applied to said blades, the other of said blades being provided with a cavity analysis to receive said pivot pin, and a yoke adapted to be applied to said blades in line with said pivot pin, substantially as described. 4th. In a pair of shears or scissors, the combination with the blades thereof, of a yoke adapted to be applied to the pivotal point of said blades, a screw attached to said yoke, a nut on said screw, said nut being provided with a threaded portion adapted to engage said screw, and a counter-sink, and said screw having a shouldered head adapted to fit in said counter-sink, substantially as described.

#### No. 60,810. Foot Support and Leg Straightener.

(Support de pieds et appareil à redresser les jambes.)

David Fortney, Otho, Iowa, U.S.A., 4th August, 1898; 6 years. (Filed 11th May, 1898.)

Claim.—1st. In a device for supporting and straightening the feet and legs of a person, a plate adapted in form to engage the person above the thigh and provided with an eye at one end and a ratchet-face at the bottom of the eye, in combination with the top of a jointed brace adapted to extend upward over the thigh and provided end of the said extension, as and for the purpose stated. 2nd. A device for supporting and straightening feet and legs, comprising a

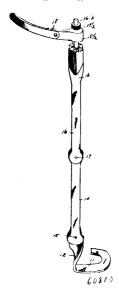
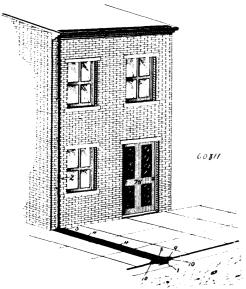


plate having an eye at one end and a ratchet-face at the bottom of the eye, a thigh-piece having an extension at its top to enter said eye and a ratchet-face to engage the ratchet-face of the eye, a nut fitted to the screw-threaded end of said extension, a shank-piece pivoted at its upper end to said thigh-piece, an ankle-piece pivoted at its upper end to the lower end of the shank-piece and provided with a right-angled projection at its lower end and means for attaching the device to the body and leg of a person, as and for the purpose stated.

No. 60,811. Drainage Conduit.

(Conduit pour égouttement.)



John William Wright, Quebec City, Canada, 5th August, 1898; 6 years. (Filed 20th July, 1898.)

Claim.—1st. A drainage conduit for pavements, comprising a drain pan having its rear end closed and its front end exposed, and a sectional cover removably located thereon, said cover being provided with an opening for the reception of the drain pipe or spoat, whereby water from said drain pipe or spout will be carried across the pavement in a closed conduit, substantially as described. 2nd. A drainage conduit for pavements, comprising a drain pan having its rear end closed and its front end exposed, a sectional cover removably located on said drain pipe, said sections being removably connected together, the rear section being provided with an opening for the reception of the drain pipe or spout, and means for securing the front section of said cover to the pavement, substantially as described.

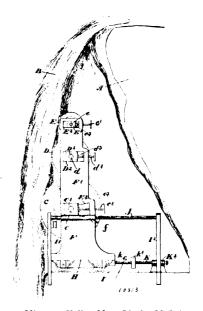
No. 60.812. Damper. (Régistre.)



George C. Fraser and Norman P. Fraser, both of Carsonville, Michigan, U.S.A., 5th August, 1898; 6 years. (Filed 20th July, 1898.)

Claim.—1st. The combination with a flue, of two dampers mounted to turn therein and each having an area less than the width of the flue, a pinion connected with each damper, and a rack-bar extending between and connected with the pinions, the rack-bar engaging opposite sides of the pinions to turn the dampers oppositely, substantially as described. 2nd. The combination with a flue, of two dampers mounted to turn therein on axes transverse to the flue and each having an area less than the width of the flue, a pinion fixed to the trunnion of each damper, and a bar having a loop at each end, the loops respectively inclosing the pinions and each loop having rack-teeth at one of its sides whereby to be connected with the pinions, and the rack-teeth being oppositely located with reference to each other, substantially as described. 3rd. The combination with a flue, of two dampers mounted to turn therein on axes transverse to the flue and each having an area less than the width of the flue, a pinion fixed to the trunnion of each damper, a bar extending between the pinions and having a loop at each end, the loops respectively inclosing the pinions, and one side of each loop having rack-teeth to respectively engage the pinions, the rack-teeth being oppositely located with reference to each other, and a spring held within each loop of the bar and respectively pressing the pinions into engagement with the rack-teeth, substantially as described.

No. 60,813. Water Wheel. (Roue d'eau.)

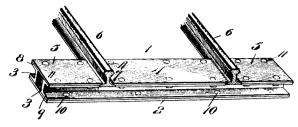


John Drummer, Niagara Falls, New York, U.S.A., 5th August, 1898; 6 years. (Filed 23rd May, 1898.)

Claim.— 1st. A water wheel for water falls having a flow over an overhanging ledge and supporting ledges underneath the overhanging ledge, comprising a suitable frame, a water wheel supported in suitable bearings in said frame and adjusting means whereby such water wheel may be adjusted to and from the under flowing water of the falls, as and for the purpose specified. 2nd. A water wheel for water falls having a flow over an overhanging ledge and supporting ledges underneath the overhanging ledge, comprising a suitable frame, a suitable car therefor and track for such car, a water wheel supported in suitable bearings, slots in the frame to receive the bearings and a screw spindle for adjusting such bearings in the slots, as and for the purpose specified. 3rd. In a water wheel for the purpose described, in combination the carriage, the frame, the screw spindle connected to the rear end of the carriage and extending through a suitable standard at the inner end and the water wheel adjustably supported in the frame, as and for the purpose specified. 4th. In a water wheel for the purpose described, a carriage, adjustable means for throwing such carriage to and from the inner side of such fall, the frame supported in the carriage and

the graduated set of water whoels larger at the bottom and smaller at the top and means for adjusting each wheel independently in the frame, as and for the purpose specified.

No. 60,814. Metallic Cross-Tie. (Traverse métallique.)

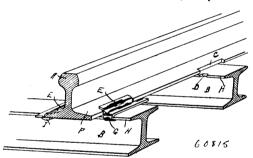


60814

William Franklin Penner, Richardsville, Kentucky, U.S.A., 5th August, 1898; 6 years. (Filed 19th July, 1898.)

Claim.—1st. A device of the class described comprising a bottom plate, sides secured to the bottom plate and provided at their upper edges with recesses adapted to receive rails, the central and end top plates secured to the sides and provided at their adjacent edges with means for engaging the raios, the end plates being removable, and the blocks arranged between the sides and extending above the bottoms of the recesses and adapted to support the rails out of contact with the sides, substantially as described. 2nd. A device of the class described comprising a bottom plate, sides provided with upper and lower outwardly extending flanges, secured to the bottom plate and having recesses at their upper edges, the central and end top plates secured to the upper flanges of the sides and forming clamps for engaging the bottoms of rails, and wooden blocks arranged within the tie and extending above the bottoms of the recesses and adapted to support the rails, substantially as described.

No. 60,815. Clamp for Rails etc. (Lien pour rails etc.)



Huram K. Ritter, Reading, Pennsylvania, U.S.A., 5th August, 1898; 6 years. (Filed 18th July, 1898.)

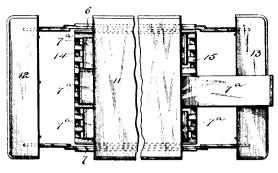
Claim.—1st. A clamp for securing rails, etc., in plate consisting of a body, slit transversely producing two parts one of which is adapted to be forced beneath the flange of one member and the other part to overlap said flange, and a tongue formed on said body to engage the flange of the other member, substantially as shown and described. 2nd. In combination, a railway-rail having notched therein crossities also having notches therein, a clamp-plate having a body for engagement with a flange of the rail and a notch therein, a hook formed upon said clamp adapted for engagement with the flange of the teal, as specified. 3nd. The hereindescribed combination of two beams crossing eech other, a clamp-plate consisting of a body adapted to overlap the flange of one of said beams, a tongue for passing beneath said flange, and a hook projecting at right angles to the tongue and body adapted to engage with a flange of the other beam, as shown and described.

#### No. 60,816. Extension Table. (Table à rallonge.)

Charles A. Curl, Beaver Falls, Pennsylvania, U.S.A., 5th August, 1898; 6 years. (Filed 18th July, 1898.)

Claim.—1st. In an extension table, the central frame-section, the permanent horizontal shelf extending across said central frame-section, the shelf-supports secured to the sides of the central frame-section on a horizontal plane above the permanent shelf, and a horizontal removable shelf fitted within the central frame-section to rest upon the shelf supports and sustained in an elevated position thereby parallel to the permanent shelf, combined with extension frame-members slidably fitted to the central frame-section for adjustment without hindrance from the shelves, and a series of leaves adapted to be individually stored on the permanent and removable shelves, substantially as described. 2nd. In an extension table, the central frame-section carrying a permanent top-section, a horizontal

permanent shelf secured within said frame-section to extend across from side to side thereof and having one edge exposed beyond the

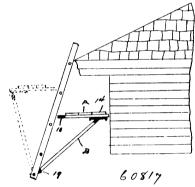


60816

plane of the permanent top-section, the shelf supports secured to the sides of the central frame-section and on a horizontal shelf resting on the shelf supports within the frame-section in parallel relation to the permanent shelf and having one edge of said shelf extended beyond the other edge of the permanent top-section, combined with extension frame-sections slidably fitted to the central frame-member for adjustment in relation thereto without hindrance from the shelves, and removable leaves adapted to be stored individually on the upper and lower shelves, substantially as described.

## No. 60,817. Scaffolding Jack.

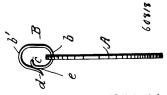
(Chevalet pour échafaudage.)



Alvoid O. Manning, Orange, Massachusetts, U.S.A., 5th August, 1898; 6 years. (Filed 18th July, 1898.)

Claim.—1st. In a device of the class described, the combination of the connected arms A and B, the hook pieces 10 and 11 extending from the arm A, and a single locking section 12 arranged between the hooks 19 and 11 and pivotally connected to the arm A to lock said hooks into engagement with the round of a ladder, substant ally as described. 2nd. In a device of the class described, the combination of a horizontal arm A, a downwardly-extending, inclined arm or prop B, and means for adjustably connecting said arms, comprising a notched piece or rack 14, a retaining piece or strip 16 arranged below said rack, pieces 17 extending up from the arm B on opposite sides of the retaining piece 16, and a cross pin or bolt 18 carried by said pieces for engaging the notched rack 14, substantially as described. 3rd. In a device of the class described, the combination of a horizontal arm A, hooks 10 and 11 extending from opposite sides of said arm, a single locking piece 12 arranged between said hooks and pivotally connected to the arm A to lock said hooks into engagement with a ladder round, an inclined, downwardly-extending arm or prop B, and means for adjustably connecting the arms A and B, comprising the notched rack 14, the retaining strip 16 carried by the arm A, pieces 17 extending up from the arm B on opposite sides of the retaining strip 16, and a cross pin 18 secured in said pieces, substantially as described.

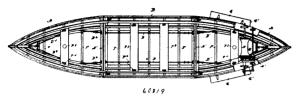
No. 60,818. Tag Fastener. (Attache de ferret.)



Simon C. Lauber, East Toledo, Ohio, U.S.A., 5th August, 1898, 6 years. (Filed 23rd June, 1898.)

Claim.—A tag fastener, comprising a loop of spring wire, one end of the wire being blunt and bent inward at the middle part of the loop on one side thereof, and the other end being pointed and overlapping the blunt end, the wire being bent in one direction only from its blunt end to its pointed end, which is bent outward, substantially as described and shown.

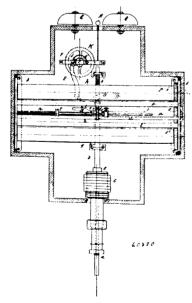
No. 60,819. Sectional Boat. (Vaisseau en section.)



William Hermann Kurlbaum, San Francisco, California, U.S.A., 5th August, 1898; 6 years. (Filed 2nd April, 1898.)

Claim.—1st. In a boat, the combination of two end sections A A adapted to be joined to form a boat, with middle sections B adapted to fit between the said end sections, and brace rods D D¹ D⁴ connected with the end sections and extended under the bulk-heads near the bottom of the boat at the points of junction of the different sections, substantially as described. 2nd. In a boat, the combination of two pointed end sections A A adapted to be joined to form a boat and having bent anchor rods D⁴ secured in the keel or prow, with middle sections B adapted to fit between the said end sections and having brace rods D extended lengthwise the sections to either side of the centre and secured to the bottom, suitable connections D² for connecting the said anchor rods and brace rods to draw them together, and suitable fastening devices C for securing the butted ends of the said sections together, substantially as described. 3rd. A boat having hinged to the sides thereof two blades or wings G, having curved or upturned ends G¹ adapted to be raised when in contact with the water, in combination with suitable extensions G³ set out from the sides of the boat to prevent the blades raising beyond the horizontal, substantially as described. 4th. A boat constructed in separable sections A A and B, provided with two keels E E on each side of the longitudinal centre to serve the purpose of sled runners on land, substantially as described. 5th. A boat constructed in separable sections A A and B, provided with two keels E E, one on each side of the longitudinal centre to serve as sled runners on land, substantially as described. 5th. A boat constructed in separable sections A and B, provided with two keels E E, one on each side of the longitudinal centre to serve as sled runners on land, substantially as described. 5th. A boat constructed in separable sections A et al.

## No. 60,820. Station Indicator. (Indicateur de gares.)



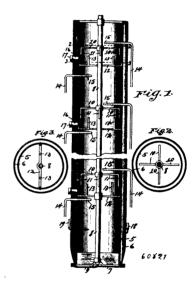
Anissim Ledowsky, Moscow, Russia, 5th August, 1898; 6 years. (Filed 16th March, 1898.)

Claim.—1st. In a station or similar indicator, meens for rotating cylinders for winding up the ribbon with inscriptions, in combination with an adjustable coupling device, comprising ratchet-wheels l, m, a spindle n, having notches  $q^1$ ,  $q^2$ , a toothed-wheel f, and crosspices  $tt^1$ , provided with guide rods s s, whereby at a predetermined time the motion of the cylinders and of the ribbon is reversed. 2nd. In a station or similar indicator, in combination with mechanism

for moving the band with the names of the stations or the like, means for giving an audible signal comprising levers D, E, toothedwheel K, and cam M, so that at each movement of the band a ball is struck by the rotation of the rathet-wheel k, the parts returning into their original position, when the rod operating the hand descends. 3rd. In a station or similar indicator, means for removing, replacing, and stretching the band carrying the names of the stations or the like, and wound on cylinders p,  $p^1$ , in combination with the means for enabling the position of the band to be altered to a desired extent in one apparatus only without interfering with the other apparatus, substantially as described. 4th. In a station or similar indicator, means for reversing the movement of the band-carrying cylinders at a predetermined time, comprising ratchet-wheels l, m, carried on a common hub  $n^1$ , on a spindl n, and movable on a rib A, thereon in combination with a frame constituted by two rods s, and cross pieces  $t^n$ , one of said cross-pieces pressing at the desired moment against a spring v or  $v^1$ , engaging with the hub  $n^1$ , and causing the hub to move in a longitudinal direction so that the pawls engage accordingly with one or the other wheel and thus cause the spindle to rotate in the opposite direction. 5th. In a reversing device of the character described the provision of divisions on the front bar u, serving as a guide for the cross-pieces  $t^1$ , the divisions enabling the cross-piece to be adjusted so as to reverse at any given moment in an automatic manner, substantially as described.

## No. 60,821. Apparatus for Treating Oleaginous Seed.

(Appareil pour le traitement de graines oléagineuses.)



Alexander Euston, Chicago, Illinois, U.S.A., 6th August. 1898; 6 years. (Filed 27th September, 1897.)

Claim.—1st. An apparatus to be used in the treatment of oleaginous seeds, comprising in combination a vertically arranged steam jacketed cylinder whose height exceeds its transverse diameter, a centrally mounted rotating shaft extending through the working space of the cylinder, a series of rakes or agitators mounted upon and turning with said shaft and a series of pipes projecting into the working space at suitable intervals for introducing a tempering or modifying medium, substantially as described. 2nd. In an apparatus to be used in treating oleaginous seeds the combination with a vertically arranged steam jacketed cylinder having a feed opening in its upper portion and a discharge opening in its lower portion, said cylinder having a vertical height greatly in excess of its diameter, a centrally mounted rotating shaft extending through the working space of the cylinder, a series of rakes or agitators mounted upon and turning with said shaft and whereby a stream of material is caused to move continuously through said chamber from the inlet to the dischhage opening and means for introducing into the working spaces of the cylinder a tempering or modifying medium at suitable elevations, substantially as described. 3rd. In an apparatus of the class described, the combination with a steam jacketed cylinder, abunder a vertical height greatly in excess of its transverse diameter, agitators, pipes for delivering a tempering or modifying medium to the working space at different heights and test tubes piercing the walls of the jacketed cylinder for testing the condition of the mass at different altitudes, substantially as described.

## No. 60,822. Process of Treating Margarine.

(Procéde pour le traitement de margarine.)

Henrich Hermann Christiansen, 73 Beseler Allee, Kiel, Prussia, Empire of Germany, 6th August, 1898; 6 years. (Filed 21st September, 1897.) Claim.—Process by means of which margarine is improved in taste and flavour and receives those good and pleasant properties which belong to natural butter, consisting therein that fresh casein granulated is mixed with the margarine, which casein is obtained in adding remnet to fresh milk suitably temperated, whereupon whey and casein are separated and the latter after having been made solid under a cooled press can be granulated in a rolling mill.

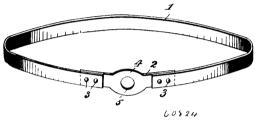
#### No. 60,823. Hide or Skin Curing Process.

(Procédé pour préparer les peaux.)

John William Scott, Albionville, Burnet River, Queensland, Australia, 6th August, 1898; 6 years. (Filed 10th July, 1897.)

Claim.—1st. For curing or preserving hides or skins, the use of a mixture of molasses and water, substantially as herein described and for the purposes set forth.—2nd. For eneing or preserving hides or skins, the use of a mixture of molasses (either synthetically or artificially prepared) and water, substantially as herein described and for the purpose set forth.—3rd. For curing or preserving hides or skins, the use of inverted or invert sugars and water, substantially as herein and described and for the purposes set forth.

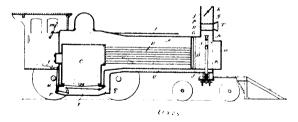
No. 60,824. Barrel Hoop. (Cercle de baril.)



John George Bauer and Jacob Michel Baur, both of Lawrenceburg, Indiana, U.S.A., 6th August, 1898; 6 years. (Filed 21st May, 1898.)

Claim.—1st. A barrel hoop comprising a body portion formed of a strip of flat sheet metal and a bung section connecting the ends of said body portion and having a central widened or laterally-expanded portion provided with an opening adapted, when the hoop is in place on the swelled or bilge portion of the barrel, to permit the insertion or removal of the bung, substantially as set forth.—2nd. The combination of a barrel having its staves held in place by end hoops and having a central swelled or bilge portion provided with a bung hole, and a metal hoop passed around said central swelled or bilge portion and consisting of a body portion formed of a strip of flat sheet metal and a bung section riveted at its ends to the ends of the body portion and having a central widened or laterally-expanded portion provided with an opening adapted to coincide with the bung hole and of larger diameter than the same to permit the ready insertion and removal of the bung, substantially as set forth.

No. 60,825. Method of and Apparatus for Producing Gas. (Méthode et appareil pour la production de gaz.)



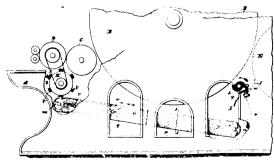
David Clegg, Philadelphia, Pennsylvania, U.S.A., 6th August, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—1st. The herein described method of forming a gas from the combination of the products of combustion, exhaust steam and a certain amount of atmospheric air and re-using the same in the fire-box for the further support and increase of combustion therein, consisting of excluding the direct admission of atmospheric air from the fire-box and ash pit, forming a pressure at the outlet end of the tubes or flues of the boiler, driving the products of combustion by a counter pressure of greater potential through said tubes or flues, injecting steam within these products of combustion before permitting atmospheric air to come in contact therewith, admitting a certain amount of atmospheric air to these gases, forcing the combined gases from this point downward or rearward, also admitting more steam thereto at this point, and then forcing this combination of elements through the active fire bed, substantially as and for the purpose set forth—2nd. The herein described method of forming a gas from the combination of the products of combustion, exhaust steam and a certain amount of atmospheric air and re-using the same in the fire-box for the further support and increase of com-

bustion therein, consisting in excluding the direct admission of atmospheric air from the fire-box and ash-pit, forming a pressure at the outlet end of the tubes or flues of the boiler, driving the products of combustion by a counter pressure of greater potential through said tubes or flues, injecting steam within the products of combustion before permitting atmospheric air to come in contact therewith, admitting a certain amount of atmospheric air to these gases, forcing the combined gases from this point downward or rearward, also admitting more steam thereto at this point, admitting a larger quantity of atmospheric air to the combination, forceng said combination through the active fire-bed whereby the conbustion of the latter is supported and the fuel gas is formed which burns above the surface of the fire-bed, and finally throwing off the inert or non-combustible elements, substantially as and for the purpose set forth. 3rd. In an apparatus for forming a gas from the combination of the products of combustion, exhaust steam and a certain amount of atmospheric air and returning the same to the fire-box for the further support and increase of combustion therein, a fire-box, a boiler, tubes or flues in connection therewith, a sealed ash-pit, compartments formed in front of the boiler and connected with the tubes, a standpipe leading from the exhaust, nozzles connected therewith for combining steam with the products of combustion and forcing the combination upward, baffle-plates for deflecting the gases, injectors consisting of steam nozzles for driving the combined gases downward, means for feeding air to the combustion at this point, means for admitting more or less air to combustion at this point, means for admitting more or less air to the combination thereafter, a conduit for conveying the combined gases to the ash-pit and suitable dampers and levers for regulating the inflow of air and outflow of inert gases, as specified. 4th. The herein described combination of a sealed fire-box, a sealed ash-pit, a boiler, tubes or flues for conveying the products of combustion from the fire-box, an extension secured to the opposite end of the boiler, compartments formed in said extension, a stand pipe leading from the exhaust and located within one of the compartments, nozzles leading from said standpipe for driving the products of combustion myard and commissions. for driving the products of combustion upward and commingling steam therewith, baffle-plates for deflecting said gases downward, steam therewith, name-plates for deflecting said gases downward, passages for admitting atmospheric air at this point, steam nozzles also connected with the standpipe for admitting more steam to the combination and injecting the combined gases downward, slats admitting a further quantity of atmospheric air, a conduit for conveying the combined gases to the ash-pit, a passageway for permit ting the non-combustible elements to escape, a deflector-plate for bringing about an inflowing of air while permitting the outflow of the non-combustible elements, and means for regulating the action of the apparatus, substantially as shown and described. 5th. In combination, a boiler, a sealed fire-box connected therewith, a sealed ashpit beneath the fire-box, suitable tubes or flues for leading the products of combustion from the fire-box, an extension formed with the boiler having therein three compartments, means for admitting steam to the central compartment, baffle-plates for deflecting the steam and products of combustion downward, means for admitting air at this point, means for admitting more steam to the combination and injecting the same within the remaining compartments of the extension, means for forcing atmospheric air within the apparatus at various points, and means for perm tting the escape of noncombustible element, substantially as and for the purpose set forth. 6th. The herein described method of intensifying the action in the firebox of a boiler and preventing the agitation of the fire-bed and out-flow of particles of unconsumed fuel, consisting of excluding the direct admission of atmospheric air from the fire-box and ash-pit, forcing certain gases through the fire-bed and creating a pressure of less potential within the fire-box and its outlet, as specified.

## No. 60,826. Fibre Treating Machine.

(Machine pour le traitement des fibres.)



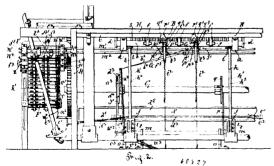
1.6826

Joseph Choquette, St. Hyacinthe, Quebec, 6th August, 1898; 6 years. (Filed 8th July, 1898.)

Claim.—1st. The device for treating waste from fibre-treating machines, which consists of a continuous conveyor, a cylinder at the delivery end of said conveyor having bristles and clear spaces thereon, whereby the fibre and dirt contained in the waste borne on said conveyor are separated and the fibre held and the dirt thrown

off, and means for operating said conveyor and cylinder, substantially as described. 2nd. The device for treating waste from fibre-treating machines, which consists of a continuous conveyor, a cylinder at the delivery end of said conveyor having straight bristles and clear spaces thereon, whereby the fibre and dirt contained in the waste borne on said conveyor are separated and the fibre held and the dirt thrown off, and means for operating said conveyor and cylinder, substantially as described. 3rd. The device for treating waste from fibre-treating machines, which consists of a continuous conveyor, a cylinder at the delivery end of said conveyor having parallel strips or bristles thereon, whereby the fibre contained in the waste borne on said conveyor is separated from said waste and held, and means for operating said conveyor and said cylinder, substantially as described. 4th. In combination with a fibre-treating machine, the device for saving and presenting to said machine the fibre contained in the waste therefrom, which consists of a continuous conveyor adapted to receive and convey the waste or a common some context and the delivery end of said conveyor having bristles and clear spaces thereon, whereby the fibre and dirt in said waste are separated and the fibre held and returned to said machine and the dirt thrown off, and means for operating said device, substantially as described. 5th. In combination with a fibre-treating machine, the device for saving and presenting to said machine the fibre contained in the waste therefrom which consists of a continuous conveyor adapted to receive and convey the waste produced as said machine operates, means for seizing and delivering to said machine the fibre contained in the waste on the said conveyor and throwing off the residuum, means for receiving and regularly delivering to said conveyor portions of the waste produced as said machine operates, and means for operating said device, substantially as described. 6th. In combination with a fibre-treating machine, the device for saving and presenting to said machine the fibre contained in the waste therefrom, which consists of a continuous conveyor adapted to receive and convey the waste produced as said machine operates, means for seizing and delivering to said machine the fibre contained in the waste on said conveyor and throwing off the residuum, means for protecting from dirt the working parts of said conveyor, means for receiving and regularly delivering to said conveyor portions of the waste from said machine, and means for operating said device, substantially as described. 7th. In combination with a fibre-tre-ting machine, the device for saving and presenting to said machine the fibre contained in the waste therefrom, which consists of a continuous apron adapted to receive and convey the waste produced as said machine operates, means for preventing said waste from escaping from said apron or clogging the working parts thereof, means for receiving and regularly delivering to said apron portions of said waste, and means for operating said device, substantially as described. 8th. In a continuous apron for conveying waste from fibre-treating machines, the device for preventing the escape of said waste from said apron as it is conveyed, and the clogging of the working parts of said apron thereby, which consists of side boards extending above the travelling plane of said apron and bearing a grooved runway, and strips on the under edges of said apron adapted to run in said substantially as described. 9th. In a fibre-treating machine, the combination of a continuous conveyor underneath the working parts of said fibre-treating machine, a cylinder at the delivery end of said conveyor and near the front of said machine, having bristles and clear spaces thereon, whereby dirt is removed from the fibre on said machine and cast on said conveyor and the fibre and dirt on said conveyor are separated and the fibre returned to said machine, and the dirt thrown off, and means for operating the same, substantially as described.

## No, 60,827. Lappet Loom. (Métier.)

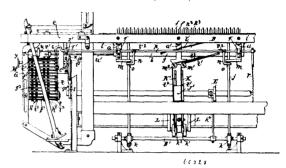


James R. MacColl, Pawtucket, Rhode Island, U.S.A., 6th August, 1898; 6 years. (Filed 27th October, 1897.)

Claim. 1st. In a lappet boom, the combination of the lap and the needle bar carried by the lay, with the pattern pins or projections and the engaging-rod held independently of the lay, and a sliding connection between the needle-bar and the engaging-rod, substantially as described. 2nd. In a lappet-boom, the combination of the lay, and the needle-bar carried by the lay, with the pattern pins or projections and the engaging-rod held independently of the lay, means for holding the engaging-rod against the pattern pins or

projections and a sliding connection between the needle-bar and the engaging-rod, substantially as described. 3rd. In a lappet-loom, the combination of the lay, and the needle-bar carried by the lay, with the pattern pins or projections and the engaging-rod hely didependently of the lay, means for holding the engaging-rod against the pattern projections, a sliding connection between the needle-bar and the engaging-rod, and means for preventing backlash at the sliding connection, substantially as described. 4th. In a lappet-loom, the combination of the lay, the needle-bar, and then lifting-rols carried by the lay, with the lifting-arms, and means independent of the lay, for causing the proper engagement and disengagement of the lifting-rods with the lifting-arms, substantially as described.

#### No. 60,828. Lappet Loom. (Métier.)

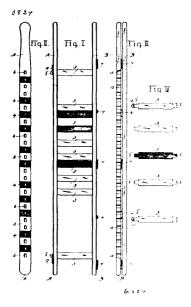


James R. MacColl, Pawtucket, Rhode Island, U.S.A., 6th August, 1898; 6 years. (Filed 27th October, 1897.)

Claim. 1st. In a pattern-chain for lappet-looms, the combination of the bar-links, with adjustable pattern screws or pins, the varying positions of which relatively to the bar-links govern the form and position of the lappet-pattern, substantially as described. 2nd. In a pattern-chain for lappet-looms, the combination of the bar-links, with screws or pins adjustable longitudinally of said bar-links to with screws or pins adjustable longitudinally of said bar-links to form the pattern, and screw pins arranged at right angles to the said bar-links, to govern the lifting of the needles, substantially as described. 3rd. In a lappet-loon, the combination of the front needle-bar, and attached needles, with the row of shuttle-guide pins arranged between and slightly in front of the line of the needles, substantially as described. 4th. In a lappet-loom, the combination of a pattern-chain, with a needle-bar, an intermediate connection between the needle-bar and pattern-chain, means for holding the intermediate connection against the nattern-chain and means the intermediate connection against the pattern-chain and means for withdrawing said holding means from its action upon the intermediate connection, preparatory to the forward movement of the pattern-chain, substantially as described. 5th. In a lappet-loom, the combination of a pattern-chain, with a needle-bar, a cam connected with the needle-bar and bearing against the pattern-chain, means for holding the cam against the pattern chain, and means for withdrawing said holding means from its action upon the cam, preparatory to the forward movement of the pattern chain, substantially as described. 6th. In a lappet-loom, the combination of a needle-bar, and pattern-chain mechanism, with intermediate engaging mechanism for causing the desired movement of the needles into the shed, the pattern-chain mechanism being adapted to govern the longitudinal position of the needle-bar, and control the operative connection of the needle-bar with the engaging mechanism, whereby the said engaging mechanism may be caused to remain inoperative at any desired point in the pattern, substantially as described. 7th. In a lappet-loom, the combination of the needle-bar, with the lifting-In a happer-room, the combination of the needle-bar, with the mang-rod for raising the needle-bar, the cam for vertically operating the lifting-rod, and the pattern-chain operatively connected with the lifting-rod to cause the engagement or disengagement with the needle-bar, substantially as described. 8th. In a lappet-loom, the combination of a pattern-chain with the needle-bar, and the needlebar frame, spring means for forcing the end of the needle-bar against the needle-bar frame, to prevent back-lash, the connections intermediate of the needle-bar frame, and the pattern-chain, and yielding pressure means for holding the intermediate connections against the pattern chain, substantially as described. 9th. In a lappet-loom, the combination of the lay, with the sprocket-roll having its axis directed lengthwise of the lay, the pattern-chain upon the sprocketroll, the ratchet wheel for actuating the sprocket-roll, and the pawl provided with a yielding end piece adapted to impart a progressive forward movement to the pattern-chain, substantially as described. 10th. In a lappet-loom, the combination of a needle-bar, and a vibrating lever for causing the movement of the needles into the shed, with pattern-chain mechanism adapted to govern the longitudinal position of the needle-bar and control the operative connection of the needle-bar with the vibrating lever, and a bar provided with the shuttle-guide pins, arranged in continuous operative connection with said lever, substantially as described. 11th. In a lappet-loom, the combination of a needle-bar frame connected with the lay, and adapted for movement longitudinally of the lay, with a needle-bar adapted for sliding up and down movement in the guides of the needle-bar frame, pattern-chain mechanism for imparting direct movement to the needle-bar and frame in one direction longitudinally of the lay, reacting means for imparting movement to the needle-bar and frame in the opposite direction, and engaging means controlled by the pattern-chain mechanism for causing the desired movement of the needle-bar for carrying the needles into the shed, substantially as described.

#### No. 60,829. Musical Scale Teaching Device.

(Appariel à enseigner la gamme.)



Evelyn Ashton Fletcher, Toronto, Ontario, Canada, 6th August, 1898; 6 years. (Filed 9th July, 1898.)

Claim.—1st. A musical scale teaching device, comprising a ladder having side bars with apertures in them, and rundles con.prising abutting key tablets with reduced ends designed to fit into the apertures, and means for removably locking the ends of the tablets to the side bars, as described. 2nd. A musical scale teaching device comprising a ladder having side bars with apertures in them and rundles comprising abutting key tablets with reduced ends, such key tablets being arranged to represent one or more of the octaves of the piano in black and white keys, and one of the side bars having corresponding black and white spaces, as described. 3rd. A musical scale teaching device comprising a ladder having side bars with apertures in them and rundles comprising abutting key tablets with reduced ends, such key tablets being arranged to represent one or more of the octaves of the piano in black and white keys, and one of the side bars having corresponding black and white spaces, such black notes and black spaces having roughened surfaces, as described. 4th. In a musical scale teaching device the tablets arranged in octave form with black and white notes, one side bar provided with black and white spaces, and apertures to receive the ends of the key tablets, and the longitudinally divided opposite side bar, hinged and provided with retaining eccentrics and means for holding the tablets in the side bars, as described. 5th. In a musical scale teaching device, the tablets arranged in octave form of black and white notes, one side bar of the device provided with correspond-ing black and white spaces and apertures to receive the ends of the key tablets, and the longitudinally divided opposites de bar, hinged and provided with retaining eccentrics, the hooks on the solid side bar fitting into apertures in the tablets at this side, the opposite end of the key tablet being provided with a dove-tail shape tongue fitting into corresponding end notches in the divided side bar, as described.

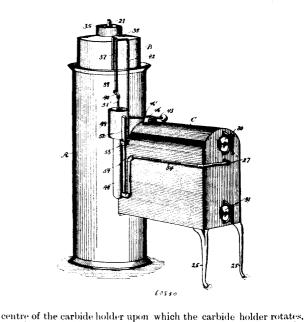
## No. 60,830. Acetylene Gas Making Machine.

(Machine à faire le gaz acétylène.)

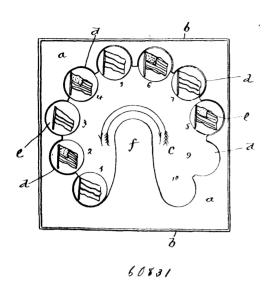
Harold J. Bell, Rochester, New York, U.S.A., 6th August, 1898; 6 years. (Filed 12th July, 1898.)

Claim.-1st. In a device for generating acetylene gas, in combination, a generator case, a perforated water pipe in the center of the carbide holder upon which the carbide holder rotates, and means for rotating said holder and suitable means for supplying water to said holder and for leading the gas generated to the point of consumption, substantially as described. 2nd. In a device for generating acetylene gas, in combination a generator case, a rotary carbide holder therein, a perforated water pipe in the centre of the carbide

for generating acetylene gas, in combination, a generator, case, a rotary carbide holder within the generator, a perforated pipe in the



a tank, a gas holder within the tank, means to mediately rotate the a cank, a gas noter within the tank, means to ineclately rotate the carbide holder by a step by step movement from the vertical movement of the gas holder, and suitable means for supplying water to the carbide holder and for leading the gas generated to the point of consumption, substantially as described. 4th. In a device for generating and storing acetylene gas, in combination, a gas holder, a tank, a vertical movable arm held in guides within the tank, a link provided at its upper end upon the outwardly turned end of the vertically movable arm and having its lower end in contact with and adjustable upon a lever pivoted to the outside of the wall of the tank and a lever pivoted at its inner end to the outside of the tank wall and its outer end resting upon the top of a floating valve stem connected with a floating valve to downwardly actuate the floating valve, as and for the purpose set forth. 5th. In a device for generating and storing acetylene gas, in combination, a generator case, a carbide holder within the generator, a tank, a gas holder within the tank, a vertically movable arm in guides attached to the inner side of the tank wall, a link connecting the outwardly bent end of the vertically movable arm with a weighted lever, a weighted lever connected at its unweighted end to a link and attached between its extremities to a trunion carrying a stud, a pawl attached to the stud located upon the trunion, a ratchet integral with a carbide holder and a carbide holder, substantially as and for the purpose set forth. 6th. In a device for generating and storing acetylene gas, in combination, a generator case, a carbide holder within the generator, a tank, a gas holder within the tank, a vertically movable arm in guides attached to the inner side of the tank wall, a link connectmighte outwardly bent end of the vertically movable arm with a weighted lever, a weighted lever connected at its movable end to a link and attached between its extremities to a trunion carrying a stud. a pawl attached to the stud located upon the trunion, stops pivoted upon the trunion to be progree the treth of the ratchet a ratchet internal with a cardidate. engage the teeth of the ratchet, a ratchet integral with a carbide holder, substantially as and for the purposes specified. 7th. In a device for generating and storing acetylene gas, in combination, a generator case, a carbide holder within the generator, a tank, a gas holder within the tank, a vertically movable arm in guides attached to the inner side of the tank wall, a link, a lever pivoted at one end to the outside of the tank wall, the opposing end resting on a floating valve stem, a floating valve having stems for guides in a water chamber, a water chamber of pre-determined capacity connected with the tank, a syphon leading from the tank, and a connecting water pipe leading to the carbide holder, as and for the purposes set forth. 8th. In a device for generating and storing acetylene gas, in combination, a generator case, a tank, a gas holder within the tank, a pipe leading from the generator to the gas holder through the tank and a check valve consisting of an inverted floating cup on a guide rod in guides attached to the pipe side, and a pipe through the inverted cup having its lower end bevelled, as and for the purposes set forth. 9th. In a device for generating and storing acetylene gas, in combination, a condensing chamber below the tank and separated from the tank by a septum, means of charging the condensing chamber with water, a pipe for the escape of water from the condensing chamber, inflow and outflow gas receiving chambers opened at the bottoms thereof into the condenser chamber and a gas holder upon which the carbide holder rotates, and means for rotating said holder by a step by step movement and suitable means for supplying water to said holder and for leading the gas generated to the point of consumption, substantially as described. 3rd. In a device air, as and for the purposes set forth. No. 60,831. Puzzle. (Jeu de patience.)

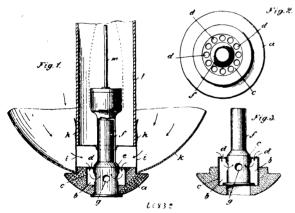


William Herbert Clarendon Mussen, Montreal, Quebec, Canada, 6th August, 1898; 6 years. (Filed 15th July, 1898.)

Claim—1st. A puzzle consisting of a box the bottom of which contain a horseshoe-shaped recess with scalloped edge and a dividing tongue or inward projection from such edge and a series of buttons some of which bear the representation of the American flag and others the representation of the Spanish flag, as shown and described. 2nd. A puzzle comprising the box having bottom a, sides b horseshoe-shaped, recess c with scallops d, and dividing tongue f, and movable buttons c, all as shown and described.

## No. 60,832. Incandescent Gas Lamp.

(Lampe à gaz incandescent.)



Adalbert Keysser, 26 Thiergarten Strasse, Hanover, Germany, 6th August, 1898; 6 years. (Filed 1st March, 1898.)

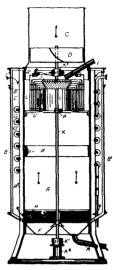
Claim.—1st. The construction of incandescent gas lamps in such manner that the air is heated on the regenerative principle before it comes in contact or mixes with the gas, whereby the illuminating effect is increased and the incandescing mantle is at the same time protected from direct draught, constructed and arranged substantially as hereinbefore described. 2nd. The improved incandescent gas lamps constructed on the regenerative principle in which the air is heated by passing between a globe k and the cylinder l and after flowing through a chamber b which surrounds the air inlet holes g of the Bunsen burner f, is carried along by the gas and mixes whilst in a highly heated state with the latter, the incandescing mantle not being exposed to direct draught, constructed and arranged substantially as hereinbefore described.

# No. 60,833. Apparatus for Treating Fats and Oils. (Appareil pour le traitement de graisse et huile.)

Charles Graham Hepburn, Sydney, New South Wales, Australia, 6th August, 1898; 6 years. (Filed 27th December, 1897.)

Claim.—1st. Apparatus for the purpose set forth, consisting of a vertica—chamber through which a current of air is made to pass

upwardly, a spraying device in the upper part of said chamber for finely dividing the liquid fat or oil, and a tray in the bottom of said



6013

chamber for collecting the treated liquid, substantially as described. 2nd. Apparatus for the purpose set forth, consisting of a vertical chamber through which a current of air is made to pass upwardly, a spraying device in the upper part of said chamber, a distributor below the sprayer, a tray in the bottom of said chamber for collecting the treated liquid, substantially as described. 3rd. Apparatus for the purpose set forth, consisting of a vertical chamber through which a current of air is made to pass upwardly, a spraying device in the upper part of of said chamber, a distributor below the sprayer, a tray in the bottom of said chamber for collecting the treated liquid, and an annuiar chamber E in which said air is heated, substantially as described. 4th. Apparatus for the purpose set forth, consisting of a vertical chamber through which a current of air is made to pass upwardly, a spraying device in the upper part of said chamber, a distributor below the sprayer, a tray in the bottom of said chamber for collecting the treated liquid, an annular chamber E in which the said air is heated, and an annular chamber N in which said air is dried, substantially as described. 5th. In apparatus for air blowing oils and fats substantially in the manner set forth, a centrifugal sprayer such as J co-acting with a distributer such as L, substantially as described. 6th. In apparatus for the purpose set forth, the combination of chamber A, air propeller D, heating chamber E with steam pipes G therein, tray F, sprayer J, distributer L, apparatus for the purposes set forth, the combination of chamber A, air propeller D, heating chamber E with steam pipes G therein, tray F, sprayer J, distributer L, spindle K, insulating space M, and air drying chamber N with cold pipes N¹ therein, substantially as described.

#### No. 60,834. Food Product. (Produit alimentaire.)

Edwin B. McDougall, St. Johns, Newfoundland, 6th August, 1898; 6 years. (Filed 31st January, 1898.)

Claim.—ist. As a new article of manufacture, a food product consisting of fish meal or fish flour. 2nd. As a new article of manufacture, a food product consisting of dried, boneless, ground fish, forming a fish meal or flour. 3rd. The herein-described method for producing fish meal or fish flour, consisting in drying the fish, removing the bones, entrails and refuse matter, then forming strips of the remainder of the fish, and finally reducing the strips into meal or flour, substantially as described.

## No. 60,835. Art of Making Fibrous Material.

(Art de fabrication de matières fibreuses.)

Karl Andreas Yschorner, Vienna, Austria, 6th August, 1898; 6 years. (Filed 5th January, 1898.)

Claim.—A process for the manufacture of a fibrous material from peat, appropriate for making paper, said process consisting in treating the washed peat, at the ordinary temperature and under pressure, with a dilute, preferably a two per cent solution of alkali, whereupon, after the lye has been drawn off and the product washed, the latter is either submitted to bleaching by treating the same at the ordinary temperature and under pressure, with a dilute solution, (preferably from 1° to 2° Be¹) of calcium or sodium hypochlorite, or the product is submitted, under pressure and at the ordinary temperature, either before or after the bleaching, to the repeated lixiviating action of an

alkaline solution which is more diluted than the one previously employed and has preferably about one per cent of strength, the said lixiviating and bleaching operations being if necessary repeated successively several times, according to requirements, substantially as and for the purpose set forth.

#### No. 60,836. Process of Making Powder.

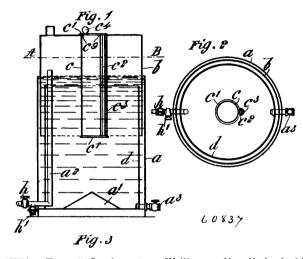
(Procédé de fabrication de la poudre.)

Benjamin Cory, Pettingell, Victoria, British Columbia, Canada, 6th August, 1898; 6 years. (Filed 20th April, 1898.)

Claim.—The process of making powder from mineral coal, which consists in grinding the coal and nitro together while mixed with sufficient water to form a pasty mass, the same being kept at a temperature of about 200° F, and adding the sulphur just before the termination of the process, the water being allowed to evaporate at the termination of the process.

## No. 60,837. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

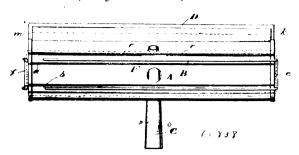


William Tyree, 54 Lambton Quay, Wellington, New Zealand, 6th August, 1898; 6 years. (Filed 13th April, 1898.)

Claim .- 1st. In an apparatus for generating acetylene gas the combination of a tank containing water with a holder having a trunk whereby the carbide may be introduced and without removing the gas from the interior of the generator, substantially as and for the purposes set forth herein. 2nd. In an apparatus for generating acetylene gas the combination of a tank containing water with a holder having a trunk whereby the carbide may be introduced without removing the gas from the interior of the generator said trunk being provided with a slide or trap to prevent escape of gas through the trunk, substantially as and for the purposes set forth herein. 3rd. In an apparatus for generating acetylene gas consisting of a tank for holding water a holder sliding in the tank and a trunk whereby the carbide may be introduced without removing the gas from the interior of the generator, substantially as and for the purposes set forth herein. 4th. An apparatus for generating acetylene gas consisting of a tank for holding water, a holder for containing the gas as it is generated, said holder sliding in the annular space formed between the tank and its inner lining and having a trunk whereby the carbide may be introduced without removing the gas from the the carbide may be introduced without removing the gas from the interior of the generator, the escape of gas being prevented by a slide or trap attached to the trunk, substantially as and for the purposes set forth herein. 5th. An apparatus for generating acetylene gas consisting of a tank for holding water, a holder for containing the gas as it is generated, said holder sliding in the annular space formed between the tank and its inner lining and having a trunk for the introduction of the carbide which falls upon a cone and is dispersed at the bottom of the tank without removing the gas from the interior of the generator, the escape of gas being prevented by a slide or trap attached to the trunk, substantially as and for the purposes set forth herein. 6th. An apparatus for generating acetylene gas consisting of a tank for holding water a holder for containing the gas as it is generated, a trunk whereby the carbide may be introduced without removing the gas from the interior of the generator and a crate whereon the carbide is caught and held in suspension, substantially as and for the purposes set forth herein. 7th. In an apparatus for generating acetylene gas, a trunk in the holder and sludge cock in the tank whereby the generator may be washed out without material altera-tion of pressure or waste of gas, substantially as and for the purposes set forth herein. 8th. The improved generator for the manufacture of acetylene gas consisting of parts constructed, arranged and operating, substantially as and for the purposes set forth herein and illustrated on the accompanying drawing.

#### No. 60,838. Window Glass Cleaner.

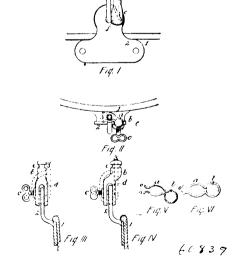
(Nettoyeur de vitres de fenêtres.)



William Harry Heinz, Dayton, Ohio, U.S.A., 6th August, 1898; 6 years. (Filed 18th July, 1898.)

Claim.—1st. In a scrubber and cleaner, the combination of a mettalic reservoir having apertures in its scrubbing face and adapted to be closed by a removably attached absorbent scrubbing pad in attractive contact with the moisture in the reservoir, with a cleaner oppositely placed to the scrubbing surface and attached to the back of the reservoir for the purpose mentioned, substantially as herein set forth. 2nd. In a scrubber and cleaner, the combination of a metallic reservoir having a longitudinal slot along the upper edge of the scrubbing face, an inwardly-extending apron in the slot and reservoir, an aperture centrally located in the scrubbing face to be covered by a removably attached absorbent scrubbing pad in attractive contact with the moisture in the reservoir through the slot and aperture, with a cleaner oppositely placed to the scrubbing surface and attached to the back of the reservoir of the purposes mentioned, substantially as set forth. 3rd. In a scrubber and cleaner, the combination of reservoir and frame adapted to hold and fasten the scrubber pad in attractive contact with the moisture in the reservoir—the rubber cleaner D suitably placed and attached to the reservoir—the purposes mentioned, substantially as set forth. 4th. In a scrubber and cleaner, the combination of reservoir A provided with slot c, gutters a and b, hole F, and apron g, scrubbing pad F, wire frame B hinged at one end to the end of the reservoir—the reservoir and frame adapted to hold and fasten the scrubbing pad F, wire frame B hinged at one end to the end of the reservoir—the rubber cleaner D suitably placed and attached to the reservoir—the rubber cleaner D suitably placed and attached to the reservoir—the rubber cleaner D suitably placed and attached to the reservoir—the rubber cleaner C suitably placed and attached to the reservoir—the rubber cleaner C suitably placed and attached to the reservoir—the rubber cleaner C suitably placed and attached to the reservoir—the rubber cleaner C suitably placed and a

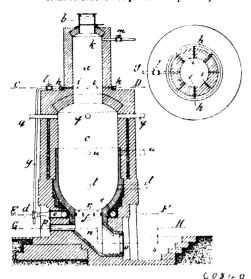
No. 60.839. Pot Bail Holder. (Porte-anse de chaudron.)



Marcus A. Cogley, Croton-on-Hudson, Westchester County, New York, U.S.A., 6th August, 1898; 6 years. (Filed 20th July, 1898.)

Claim. A pot bail holder comprising a post slotted to receive a lug of the pot and a thumb screw for securing the post thereto, the post having a spring on its upper end adapted to receive and hold the bail, substantially as shown and described.

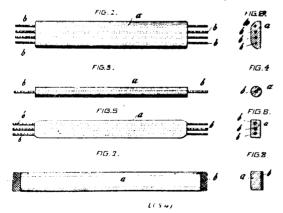
No. 60,840. Apparatus for obtaining Liquid Products of Distillation from Wood and Peat. combination with the rollers and band containing the names of the (Appareil pour obtenir par la distillation du bois et de la tourbe des produits liquides.)



Jean Bach, Riga, Prussia, 6th August, 1898; 6 years. (Filed 22nd October, 1897.)

Claim .-- 1st. Process for obtaining tar, tar water, acetic acid, methylic alcohol and turpentine oil from peat, wood etc., according to which distillation is effected in continuous working by means of a current of hot, burnable gases, obtained from partially or wholly gasifying the charcoal, heretofore resulting as by product, substantially as and for the purpose set forth. 2nd Process for obtaining tar, tar-water, acetic acid, methylic alcohol and turpentine oil from peat, wood etc., in continuous working by means of a current of hot burnable gases, whereby said produces are drawn off and lead to condensing apparatus according to their greater or smaller degree of volatility from different heights of the furnace containing the raw material, substantially as and for the purpose set forth. 3rd. For obtaining tar, tar-water, acetic acid, methylic alcohol and turpentine oil from peat, wood etc., in continuous working by means of a current of hot, burnable gases, an apparatus in shape of a shaft-furnace with contrivance for air conveyance of known construction, from which the differently volatile distilling produces are drawn off through pipes, superposed in systematic succession, substantially as and for the purpose set forth.

#### No. 60,841. Sealing Wax. (Cire à cacheter.)



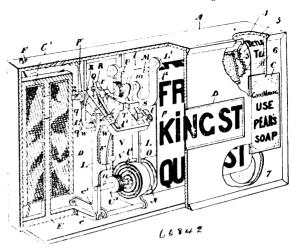
Isidore Lambert, Paris, France, 6 août, 1898; 6 ans. (Déposé 6 juillet 1898.)

Résumé. En résumé je revendique par la presente demande. comme ma propriété exclusive un nouveau genre de baton de cire à cacheter, caracterisé par l'application de meches noyées ou non dans le baton, comme décrit ci-dessus en prencipe en référence au dessin spécimen annexé et dans le but spécifié.

#### No. 60,842. Street Annunciator for Cars.

(Annonciateur de rues pour chars,)

Phillip Harold Patriarche, Toronto, Ontario, Canada, 8th August, 1898; 6 years, (Filed 13th May, 1898.)



streets, the circuit completing switch and the operating hanger and magnet located in the circuit when complete, of the armature operations are completed in the circuit when complete in the circuit when circui ated by the magnet and interposed mechanism between the armature and rollers whereby upon the armature being drawn to the magnet one roller is given a limited rotary movement as and for the purpose specified. 2nd. In an advertising street annunciator for cars, the combination with the rollers and band containing the names of the streets, the circuit completing switch and the operating hanger and magnet located in the circuit when complete, of the armature operated by the magnet and interposed mechanism between the armature and rollers whereby upon the armature being drawn to the magnet the mechanism is momentarily disengaged and a spring on the spindle of the lower roller designed during such disengage ment to impart a momentary retrograde movement to the lower and upper rollers an and for the purpose specified 3rd. The combination with the upper and lower rollers suitably driven and provided with a name band, of a gear wheel on one end of the spindle of the upper roller and independent rollers and advertising band, one of the rollers having a pinion on the spindle of the same meshing with the gear wheel on the end of the spindle of one of the major rollers as and for the purpose specified. 4th. In a device of the class described, the combination with the circuit wires F and G, and contact plate f, and spring contact arm g, secured on the trolley pole on the ends of the wires, of the hanger k, pivotally supported at the top by a sleeve on the cross wire and designed to come in contact with the arm g, as and for the purpose specified. 5th. In a device of the class described, the combination with the circuit wires F and G, and contact plate f and spring contact arm g, secured on the trolley pole at the ends of the wires, of the guard arm H, extending laterally from the trolley pole as and for the purpose specified. 6th. The combination with the magnet and armature operated through the closing of the circuit as specified, of the upper and lower rollers provided with spindles journalled in suitable standards, the band connected at spindes journaled in suitable standards, the band connected at the ends to the rollers, the ratchet pinion on the upper spindle, the swinging frame and spring-pressed dog pivoted thereon and engaging with the ratchet pinion and the roll connecting the swinging frame to the armature, as and for the purpose specified. 7th. The combination with the magnet and armature operated hed. 4th. The combination with the magnet and armature operated through the closing of the circuit as specified, of the upper and lower rollers provided with spindles journalled in suitable standards, the band connected at the ends to the rollers, the ratchet pinion on the upper spindle, the swinging frame and spring-pressed dog pivoted thereon and engaging with the ratchet pinion, and the rod connecting the swinging frame to the armature the controlling wheel secured to the spindle and the spring-pressed locking bar having a bevelled end adjustably supported and designed to co-act with the controlling wheel, as and for the purpose specified. 8th. the combination with the magnet and armature operated through the closing of the circuit as specified, of the upper and lower rollers provided with spindles journalled in suitable standards, the band connected at the ends of the rollers, the ratchet pinion on the upper spindle, the swinging frame and spring-pressed dog pivoted thereon and engaging with the ratchet pinion, the rod connecting the swinging frame to the armature, the controlling wheel secured to the spindle, the spring-pressed locking bar having a bevelled end, adjustably supported and designed to co-act with the controlling wheel, means for shifting the frame upon the shaft, a contacting block secured on the frame and designed to come in contact with the laterally extending end of the locking bar and a spring on the lower roller designed to normally impart to such roller a retrograde movement, as and for the purpose specified. 9th. The combina-tion with the magnet and a mature operated through the closing of the circuit as specified, of the upper and lower rollers provided with spindles journalled in suitable standards, the band connected at the ends of the rollers, the ratchet pinion on the upper spindle, the

swinging frame and spring-pressed dog pivoted thereon and engaging with the ratchet pinion, the rod connecting the swinging frame to the armature the controlling wheel secured to the spindle, the spring-pressed locking bar having a bevelled end and slots in the same designed to co-act with the controlling wheel, the drums on each of the roller spindles, the wire cord connecting the drums and provided with a bead near each end, the bell-crank through which the cord passes suitably pivoted on the standard, the metal strap pivotally connected to the upper end of the bell-crank and fitting in a recess in the bearing of the  $\mathcal U$  shaped frame, a spring-held contacting block secured on the frame end designed to come in contact with the laterally extending end of the locking bar and a spring on the lower roller designed to normally impart to such roller a retrograde movement, as and for the purpose specified. 10th. The combination with the rollers and the spindles and spring connected at one end to the spindles, of the lower roller, and at the other end to the frame, of a controlling wheel and locking bar and means for intermittently withdrawing the locking bar from beneath the teeth of the controlling wheel, as and for the purpose specified. 11th. The combination with the magnet and armature operating as specified, of the upper and lower rollers supported on suitable spindle and suitably journalled and the name bend connected at each end to the rollers, of a turning device having an operative connection to the upper spindle and an operating rod connecting such device to the armature of the magnet, as and for the purpose specified.

No. 60,843. Inhaler. (Inhalateur.)



John Harvey Kellogg, Battle Creek, Michigan, U.S.A., 8th Aug ust, 1898; 6 years. (Filed 20th May, 1898.)

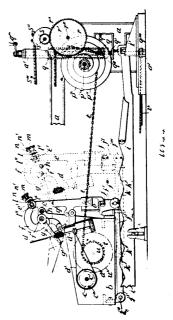
Claim. - 1st. The improved pocket inhaler, comprising the tubular mouth-piece having a longitudinal passage, and an absorbent and holder for the vaporizable medicament, which holder is contained in nonder for the vaporizable medicament, which noder is comfaned in said mouth-piece, the nose piece, and compressible air bull, and separate flexible tubes connecting the latter two directly with each other and also with one of the open ends of the mouth-piece, as shown and described, whereby air may be forced from the bull directly through the mouth-piece, or directly to the nose piece, or from the patient's mouth through the mouth-piece to the nose-piece, as required. 2nd. The improved inhaler, composed of the tubular and the absolute and holder therein add nooth piece. mouth piece, and the aborbent and holder therein, said mouth-piece having two nipples which communicate directly with each other, the nose piece and its flexible tube connected with one of said nipples, and the air bulb and its flexible tube connected with the opposite nipple, as shown and described, whereby air pressure in the nasal cavity produced by expulsion of air directly through the mouth-piece and nose piece may be augmented at pleasure, by comcompression of the air bulb, as specified.

#### No. 60,844. Weavers' Mule. (Muel-jenny.)

Arthur Taylor, Ernest Firth and Joe Ramsden, all of Batley, York, England, 8th August, 1898; 6 years. (Filed 30th March, 1898.)

Claim, 1st In self-acting mules the method of crossing or re-crossing the yarn as it is being wound upon the spindles, comprising the reciprocation of the front faller wire during its ordinary movements to guide the yarn to its proper place on the cop, together with the means for imparting the reciprocatory notion to the front

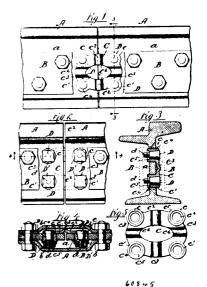
an undulating surface or succession of opposing inclined surfaces for imparting through the intermediate parts a reciprocity motion to



the front faller wire as herein shown and described. 3rd. In the winding motion of self-acting mules the use and employment of a scroll for determining the un-winding of the winding chain from the winding barrel and regulating the rate of speed at which the spindles shall be driven whilst the yarn is being wound, such said scroll taking the place of and performing the function of the ordinary quadrant and being actuated in the manner and by the means substantially as herein shewn and described. 4th. In the winding motion of the self-acting mules the combination with the winding barrel and winding chain of a scroll, a screw or worm, a pinion on the scroll shaft together with the means for raising said screw or worm and for rotating it to give motion to the screw to take up the chain and to adjust it rotatively to regulate the speed of the spindles all arranged as described.

#### No. 60,645, Electrical Connection.

(Connexion électrique.)

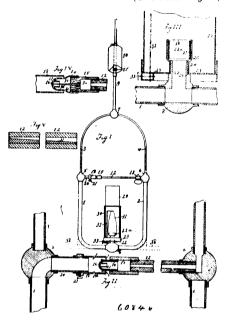


Peter Reith, Chicago, Illinois, U.S.A., 8th August, 1898; 6 years. (Filed 22nd May, 1896.)

Claim. 1st. An electrical connector for track rails or the like, said onnector having cylindrical terminals in the form of tubes provided faller wire all arranged and operated substantially as herein shewn and described. 2nd. In self-acting mules the copping rail having ductor formed integrally with the walls of uniting said terminals, the

length of each tubular terminal being greater than the thickness of the body within which it is to be secured so as to project at that end having the smaller end of the bore, whereby a drift may be inserted in each tubular terminal and said projecting ends waged outwardly, and the tube expanded by the drift, substantially as described. 2nd. An electrical rail connector having terminals in the form of tubes open at both ends, each having its bore tapered inwardly from one of its ends, and a connecting bar or plate formed integrally with said tubes adjacent to the ends thereof and extending at right angles to the axes of the terminals, whereby said connector acts as a head for each terminal to limit its insertion with the rail, the length of each tubular terminal being greater than the thickness of the body within which it is to be secured, whereby, when inserted through said body, the projecting tubular end may be swaged over outwardly to form a retaining flange, substantially as set forth. 3rd. The combination with the adjacent ends of two track-rails, of an electrial connector uniting said rails which comprises cylindrical tubular terminals open at both ends and having conical bores, said tubes occupying and protruding through aperture in said rails and each having its protruding end swaged outwardly into the form of an annular flange resting against the rail body and its body expanded into intimate contact with the rail, conical or tapered bolts extending through said terminals convex faced nuts upon the ends of said bolts, and a conductor formed integrally with and connecting said terminals, substantially as described.

#### No. 60,846. Gas Generator. (Générateur à gaz.)



John F. Williams, Kansas City, Missouri, U.S.A., 8th August, 1898; 6 years. (Filed 30th June, 1898.)

Claim.-1st. In a device for generating and burning gas from liquid hydro-earbons, the combination of a suitable supply pipe, a gas generating pipe connected thereto and provided with a gradually decreasing internal bore toward its discharge end, a discharge out-let for said generating pipe, a burner, a mixing chamber intermediate said burner and outlet, and means for admitting air into said mixing chamber. 2nd. In a device for generating and burning gas from liquid hydro-carbons, the combination of a suitable supply pipe, a gas generating pipe connected thereto and provided with a gradually decreasing internal bore toward its discharge end, a restricted discharge opening for said generating pipe, a burner, a mixing chamber intermediate said burner and discharge opening, and means for admitting air into said mixing chamber. 3rd. In a device for generating and burning gas from liquid hydro-carbons, the combination of a suitable supply pipe, a gas generating pipe connected thereto and provided with a gradually decreasing internal bore toward its discharge end, a restricted outlet 'or said pipe, a burner located in proximity to said pipe, a mixing chamber intermediate said burner and the generating pipe, an air inlet into said mixing chamber, and means for controlling the admission of air. 4th. In combination means for contoining the admission of al. 4th. In commutation with an elevated reservoir, a discharge pipe leading therefrom, a gas generating chamber connected to said pipe and provided with a gradually narrowing passage toward its discharge end, a restricted discharge opening for said chamber, a burner located in proximity to said generating chamber, a mixing chamber intermediate said burner and the discharge opening of the gas generating chamber, and means for controlling the admission of air to said mixing chamber. 5th. The combination with a gas fixture for generating and burning gas from liquid hydro-carbons, having a supply pipe and

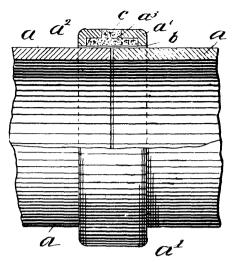
with the mixing pipe, a chimney holder mounted below said burner, and a chimney supported thereon, of a vaporizing tube having a gradually decreasing bore toward its discharge end and connected with the supply pipe arranged over said chimney, a tip mounted upon the discharge end of the tube and having a minute opening therem, and an air supply regulator surrounding said tip connected therein, and an air supply regulator surrounding said tip connected with said mixing pipe, substantially as set forth. 6th. In a gas fixture for generating and burning liquid hydro-carbons, the combination with a supply pipe and mixing pipe forming part of the fixture, and a burner connected with the mixing pipe and provided with a suitable chimney, of a vaporizing tube provided with a shut-off cock connected with the supply pipe arranged to be heated from the laws to be a suitable connected. the burner, a tip having a minute opening therein, and a coupling the burner, a tip having a minute opening therein, and a coupling connecting said tip with said vaporizing tube, arranged to form an expansion chamber between said tip and said tube, and a sleeve surrounding said tip provided with openings in the sides thereof adjustably connected with said mixing pipe, and arranged to regulate the air supply, substantially as set forth. Th. In a gas fixture for generating and burning liquid hydro-carbons, the combination with a supply pipe and a mixing pipe forming part of the fixture, of a vaporizing tube connected with supply pipe, a tip having a minute opening and provided with an internal collar surrounding said comping a consider generating and the wind surrounding said opening, a coupling connecting said tip with said tube arranged to form an expansion chamber between said tip and tube, and a sleeve surrounding said tip provided with openings in the sides thereof, adjustably connected with said mixing pipe, and arranged to regulate the air supply, substantially as set forth. 8th. In a gas fixture for generating and burning liquid hydro-carbons, a vaporizing tube, a tip having a minute opening and provided with an internal collar surrounding said opening, and a coupling connecting said tip to said tube and arranged to form an expansion chamber between said tip and tube, substantially as set forth. 9th. In a gas fixture for generating and burning liquid hpdro-carbons, a vaporizing tube, a tip having a suitable opening and provided with an internal collar surrounding said opening, a coupling connecting said tip with said tube, and a needle point connected with said coupling arranged to pass through said opening in said tip to control the flow of vapour therethrough, substantially as set forth. 10th. In an apparatus for generating and burning gas from liquid hydro-carbons, the combination with a suitable burner and a supply pipe leading to a source of supply, of a vaporizing tube having a tapering longitudinal opening gradually diminishing toward the discharge end of the tube, substantially as and for the purposes set ferth. 11th. In an apparatus for generating and burning gas from liquid hydro-carbons, the combination of a generator provided with a gradually diminishing area toward its discharge end, a minute discharge opening, a burner, a mixing chamber intermediate the burner and said discharge opening, said chamber being of a relatively large area, and an air inlet for said chamber. 12th. In an apparatus for generating and burning gas from liquid hydro-carbons, a gas generating chamber comprising a tube of gradually diminishing area toward its discharge end, a minute discharge opening, and an area toward us discharge end, a minute discharge opening, and an enlarged chamber intermediate the opening and the end of the tube. 13th. In an apparatus for generating and burning gas from liquid hydro-carbons, a gas generating tube having a bar or rod mounted therein, said rod being provided with an inclined flat face upon one side and commended with the control of the control side and so arranged within the tube as to gradually decrease the area thereof toward the discharge end, and a discharge tip mounted on the tube. 14th. A fixture for generating and buring gas from liquid hydro-carbons, comprising in combination a tube or pipe 9 having a reservoir connected thereto, supply pipe 4, a gas generator 12 connected to pipe 4, provided with a suitable valve, a mixing and conducting pipe 1 into which the gas is discharged, and air inlet for said mixing pipe and means for controlling it, a pipe 3 connecting pipe 9 and pipe 1, a pipe 22 communicating with the mixing pipe, a chimney mounted on said pipe 22 below the generator 12, and a mantle of incandescing material mounted in said chimney.

## No. 60,847. Pipe Joint. (Joint de tuyau.)

James Farley, St. Andrew's Street, Hertford, England, 8th August, 1898; 6 years. (Filed 29th April, 1898.)

Claim. -1st. In a pipe joint, the combination of a strip or ring of canvas or the like and a filling of cementing material, substantially as herein shown and described and for the purpose stated. a pipe joint, the combination of a strip or ring of canvas or the like means for fixing the same in position and a filling of cementing means for fixing the same in position and a mining or cementing material, substantially as herein shown and described and for the purpose stated. 3rd. In a pipe joint, the combination of a pipe or pipes, an abutment ring or socket surrounding the parts to be joined, a strip or ring of canvas or the like, means for fixing the canvas strip by its edges in position and means for filling cement or the like into the joint upon one side of the canvas strip, substantially as herein shown and described and for the purpose stated. 4th. In a pipe joint, a strip or ring of canvas or the like provided with a filling tube, substantially as herein shown and described and for the purpose stated. 5th. In a pipe joint, the combination of a pipe or pipes, an abutment ring or socket surrounding the parts to be joined, a flange or flanges or study forming distance pieces to centralise the tubes or tube with relation to the abutment ring or socket, strip or ring of canvas or the like means for fixing the canvas strip by its edges in position and means for filling cement or the like mixing pipe forming part of the fixture, a suitable burner connected into the joint upon one side of the canvas strip, substantially as

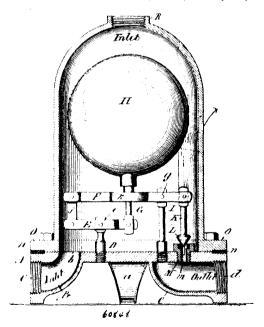
herein shown and described and for the purpose stated. 6th. In a pipe joint, the combination of a strip or ring of canvas or the like and



66847

strings or spring or other wires or the like for fixing the strip by its edges to the abutment ring, to the socket, to the pipe, or pipes or to the pipe and abutment ring or socket, substantially as herein shown and described and for the purpose stated. 7th. In a pipe joint, the combination of a pipe or pipes, an abutment ring or socket surrounding the parts to be joined a strip or ring of canvas or the like, annular grooves in the abutment ring, in the socket, in the pipe or pipes, or in the pipe or pipes and abutment ring or socket, rings of spring or other wire or strings for fastening the strip by its edges in said grooves and means for filling cement or the like into the joint upon one side of the canvas strip, substantially as herein shown and described and for the purpose stated.

#### No. 60,848. Steam Trap. (Purge de tuyau à vapeur.)



Timothy J. Kieley, New York City, U.S.A., 8th August, 1898; 6 years. (Filed 6th June, 1898.)

Claim.—1st. In a steam trap, the combination with a base plate having an inlet and outlet pipes formed thereon, of a dome secured thereto, a lever, one end of which carries a float, a second lever linked at one end to the former lever and a valve tod having a valve on one end and at its opposite end connected with one end of said second lever, said valve adapted to open and close the passage into said outlet pipe, substantially as described.—2nd. In a steam trap, the combination with a base A formed with the pipes B, C, of a dome N secured to said base, the lever E carrying the float H, lever

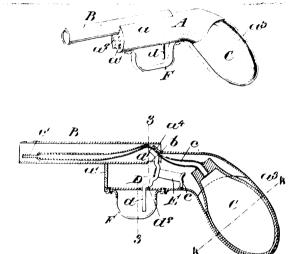
F linked at one end to said lever E, said valve and valve rod connected to the opposite end of said lever F, and adapted to open and close the passage into the said outlet pipe C, substantially as described.

## No. 60,849. Cattle Food. (Nourriture pour bestiaux.)

Paul Blanbach, Detch No. 8, Bremen, German Empire, 8th August, 1898; 6 years. (Filed 9th June, 1898.)

Claim.—The improved cattle food, consisting essentially of the mixture of oathead or groats saturated and mixed with a warm dilute melasse, the whole mass being prepared by repeated turning over until the drying and absorption of the fluid material is effected.

No. 60,850. Pistol-like Weapon. (Pistolet.)



60850

Russell Parker, Brooklyn, New York, U.S.A., 8th August, 1898; 6 years. (Filed 13th June, 1898.)

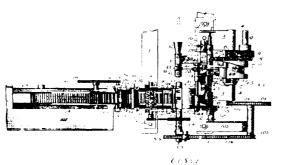
Claim. -1st. A pistol-like implement provided with a compressible fluid-receiving chamber, a compressible discharge-tube leading from the said chamber and means for opening and closing the dischargetube. 2nd. A weapen comprising a barrel, a stock, a collapsible bulb located within the stock provided with a flexible delivery tube extending into the barrel, a trigger in position to open and close tube extending into the barrel, a trigger in position to open and close the delivery-tube and a retraction-spring engaging the trigger to yieldingly hold the tube closed, the said trigger lawing a shoulder between the finger portion and the spring for retaining the trigger in its operative position within the weapon, substantially as set forth. 3rd. A weapon comprising a barrel, a stock, a collapsible bulb located within the stock and provided with a flexible deliverytube extending into the barrel and a trigger adapted to open and close the said delivery-tube for permitting the escape of the liquid from the bulb and retaining it within the same at pleasure, substantially as set forth. 4th. A weapon comprising a barrel, a stock, a collapsible bulb located within the stock and projecting through the sides thereof, the said bulb being provide I with a flexible delivery-tube extending into the barrel and a trigger normally holding the tube closed in position to open the tube when rocked in one direction, substantially as set forth 5th. A weapon comprising a barrel, a stock having a shoulder thereon, a collapsible bulb seated within the said stock, the said stock being cut away to expose the bulb, a delivery-tube extending from the bulb into the barrel and a trigger having a finger-piece extending without the stock and an upwardly extended portion adapted to normally compress the tube against the said shoulder on the stock, the said trigger when rocked in one direction serving to open the said tube to permit the discharge of liquid from the bulb, substantially as set forth.

# No. 60,851. Cigarette Machine. (Machine à cigarettes.)

Michael Kirshmer, Salem, Virginia, U.S.A., 8th August, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. In a cigarette machine, a mechanism for severing cigarettes from a continuously moving cigarette rod combined with a device for collecting and arranging in an orderly manner the severed cigarettes, said device being placed at the point at which the cigarettes are severed from the rod, substantially as set forth. 2nd. In a cigarette machine, the combination of mechanism for outting and delivering cigarettes and means for positively conveying the severed cigarettes away from the said mechanism at a speed greater than that at which the cigarettes are delivered thereto, substantially as set forth. 3rd. In a cigarette machine, the combination of the combination o

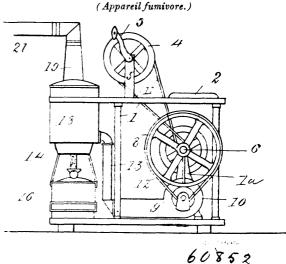
tion of mechanism for cutting and delivering cigarettes, means for conveying the cigarettes away from said mechanism and delivering



them into a suitable case or box, and means for diverting the flow of the cigarettes in their ordinary course of progression to the case or box, substantially as set forth. 4th. In a cigarette machine, the combination of mechanism for cutting and delivering cigarettes, means for conveying the cigarettes away from the said mechanism and conveying them into a suitable case or box, means for diverting the flow of cigarettes in their passage to the box, and a magazine for holding the diverted cigarettes, substantially as set forth. 5th. In a cigarette machine, the combination of mechanism for cutting and delivering cigarettes, means for conveying the cigarettes from the said mechanism and delivering them into a suitable case or box, means for diverting the flow of the cigarettes in their passage to the said case or box, a magazine for temporarily holding the diverted cigarettes, and means for returning the cigarettes from the magazine to the conveyor, substantially as set forth. 6th. In a cigarette machine, the combination of the mechanism for cutting and delivering cigarettes, an endless rack for conveying the cigarettes from the delivering mechanism to a suitable case or box, and an endless belt working within the bottom of the said case or box for distributing the cigarettes throughout its entire length in an orderly manner, substantially as set forth. 7th. In a cigarette machine, the combination of mechanism for cutting and delivering cigarettes, an endless rack for conveying the cigarettes from the delivering mechanism anism to a suitable case or box, and pivoted fingers adapted when raised to deflect the cigarettes from the endless rack, substantially as set forth. 8th. In a cigarette machine, the combination of mechanism for cutting and delivering the cigarettes, an endless rack for conveying the cigarettes from the delivery mechanism to a suitable case or box, a pivoted finger on each side of the endless rack adapted when raised to deflect the cigarettes from the said rack, and a magazine for collecting and holding the deflected cigarettes, substantially as set forth. 9th. In a cigarette machine, the combination of mechanism for cutting and delivering rigarettes, an endless rack having upwardly projecting teeth for conveying the cigarettes from the delivering mechanism to a case or box, a magazine through which the endless rack passes, fingers pivoted to the sides of the magazine, and an inclined bottom also pivoted to the sides of the magazine, substantially as set forth. 10th. In a eigarette machine, the combination of mechanism for 10th. In a cigarette machine, the combination of mechanism for cutting and delivering cigarettes, an endless rack having upwardly projecting teeth between which the cigarettes rest while being carried to a suitable case or box, fingers adapted to engage the projecting ends of the cigarettes and deflect them from the endless rack, and a magazine for temporarily storing the deflected cigarettes, substantially as set forth. 11th. In a cigarette machine the combination of the change for temporarily and delivering the cigarettes and nation of mechanism for cutting and delivering the cigarettes, and an endless rack having upwardly projecting teeth between which the cigarettes rest, said endless rack moving at a speed greater than that at which the delivering mechanism moves in feeding them thereto, whereby spaces unoccupied by cigarettes are left between the teeth of the rack, substantially as set forth. 12th. In a cigarette machine, the combination for cutting and delivering cigarettes, an endless rack having upwardly projecting teeth between which the cigarettes rests, said endless rack moving at a speed which the cigarettes rests, said endiess rack moving at a speed greater than that at which the delivering mechanism moves in feeding them thereto, whereby spaces unoccupied by cigarettes are left between the teeth of the aforeeaid rack, a magazine through which the endless rack passes, means for deflecting the cigarettes from the belt into the magazine, and means for forcing the cigarettes from the magazine into the unoccupied spaces between the teeth of the endless rack, substantially as set forth. 13th. In combination with the delivery mechanism of a cigarette machine, an endless rack for carrying the cigarettes therefrom, a removable colleeting box, and an endless belt running within the collecting box for evenly distributing the cigarettes along the length of the box as they are delivered therein by the endless rack, substantially as set forth. 14th. In a cigarette machine, and in combination with the delivering mechanism thereof, an endless rack for conveying the cigarettes lying transversely thereon away from the said delivering mechanism, means for causing the cigarettes to enter between the teeth of the rack, and converging plates for centreing the cigarettes on the endless rack, substantially as set forth. 15th. In a cigarette machine, and in combination with the delivering mechanism

thereof, an endless rack for carrying the cigarettes from the said delivery mechanism, means for causing the cigarettes to enter between the teeth of the endless rack, a removable collecting box or case into which the endless rack enters, and a distributing belt projecting within the collecting box or case, substantially as set forth. 16th. In a cigarette machine and in combination with the delivering mechanism thereof, a plate 18, an endless toothed rack, a collecting box or case into which the cigarettes are deposited by the endless toothed rack, and means for distributing the cigarettes uniformly throughout the length of the box, substantially as set forth. 17th. In a cigarette machine and in combination with a cutting mechanism, a device for collecting and arranging in regular order the severed cigarettes, which consists of an endless rack, an endless belt, and a collecting box above the endless belt and overlapping the endless rack, substantially as set forth. 18th. In a cutting mechanism for a cigarette machine, the combination of a reciprocating frame, a vibrating knife carrying frame pivoted thereto, a cigarette rod support bolted to the reciprocating frame, an arm pivoted to the reciprocating frame, and an adjustable connection between said arm and a vibrating knife-carrying frame, substantially as set forth. 19th. In a cutting mechanism for a cigarette machine, the combination of a reciprocating frame, a cigarette rod support bolted thereto, a vibrating knife-carrying frame, and an arm 50, pivoted to the vibrating frame, an adjusting device between the vibrating frame and arm 50, and cams for operating the reciprocating frame and the vibrating knife-carrying frame, substantially as set forth. 20th. In a cutting mechanism for a cigarette machine, the combination of a frame adapted to reciprocate in a line parallel to the cigarette rod, a cigarette rod support affixed to the said frame, a knife-carrying frame pivoted to the reciprocating frame and arranged to vibrate across its line of movement, an arm pivoted to the reciprocating frame, an adjustable connection between said arm and the knife frame, a slide pivoted to said arm, and cams for operating the reciprocating and vibrating frames, substantially as set forth. 21st. In a cigarette machine, and in combination with the delivering mechanism and an endless rack, a collecting box or case having an opening in its bottom for the passage of the distributing belt, and an opening in its front for the entrance of the endless rack and the cigarettes, substantially as set forth. 22nd. A box for temporarily holding cigarettes delivered thereto from a cigarette machine, having an open front end for the entrance of the cigarettes thereinto, and an open bottom, combined with a grooved strip fixed to each side of the box at its lower edge for the inserting of a tongue board, substantially as set forth.

# No. 60,852. Fumigating Apparatus.

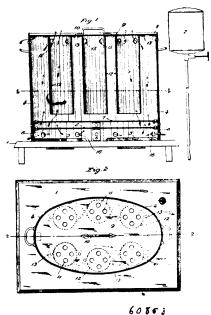


Henry Franklin Hunter, Colborne, assignee of Alexander G. Hunter, Niagara Falls, both in Ontario, Canada, 8th August, 1898; 6 years. (Filed 27th June, 1898.)

Claim.—1st. In an apparatus for fumigating and disinfecting purposes a chamber having an upper and lower compartment, a coil of pipe in the lower compartment the upper end of which discharges into the upper compartment, means for heating said coil and means for heating said coil and means such as described for causing a current of air to pass through said coil and become heated and then be discharged into the upper compartment containing the fumigating material and a pipe leading from said upper compartment to the atmosphere, substantially as set forth. 2nd. In an apparatus for fumigating and disinfecting purposes, a chamber having an upper and lower compartment the upper compartment containing the fumigating material, a coil of pipe in the lower compartment having an extension passing into the upper compartment, said extension passing horizontally over said fumigating material and then extending upward, the bend of said pipe being provided with a small

hole, a blower for causing a current of air to pass through said coil and means for heating same, whereby the heated air will be discharged into the upper compartment, a small portion passing through the hole in the bend of the pipe and striking the surface of the funigating material substantially as set forth. 3rd. In an apparatus for funugating and disinfecting purposes the combination of a frame, a blower, pulleys to transmit motion to said blower, agas-chamber, a connection between the blower and gas-chamber, a heating-chamber, a coil within the hesting-chamber, a pipe leading from the coil into the gas-chamber, a pipe leading from the gas-chamber and adapted to heat the coil and gas-chamber, substantially as set forth.

#### No. 60,853. Heating Drum. (Poêle-sourd.)



Charles B. Tourville and Michael Tully, both of St. Louis, Missouri, U.S.A., 8th August, 1898; 6 years. (Filed 16th July, 1898.)

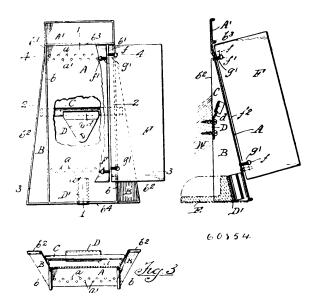
Claim.—1st. A heating drum adapted to be placed over a flame, and having a perforated bottom normally raised a suitable distance above the lower edge of the vertical walls of the drum, a cover for the drum, a series of tubes depending from the cover and having the lower free ends raised a suitable distance above the bottom, a series of openings being formed in the cover and in communication with the discharge end of the tubes, the vertical walls of the drum being provided with air induction openings leading to the space below the raised bottom, substantially as set forth. 2nd. A heating drum adapted to be placed over a flame, a perforated bottom forming a part of the drum and normally raised a suitable distance above the lower edge of the vertical walls of the drum, a perforated intercepting plate located a suitable distance above the bottom, the perforations of the latter being out of alignment with those of the plate, a cover plate for the drum provided with perforations, tubes communicating with the perforations depending from the inner surface of the cover plate and reaching to within a suitable distance of the intercepting plate, a series of openings being formed in the peripheral walls of the tubes adjacent to the cover plate, the walls of the drum having a series of air induction openings, leading to the space below the raised bottom, substantially as set forth. a heating drum, a drum proper, a perforated bottom raised above the lower edge of the peripheral walls thereof, a perforated cover plate for the drum, and a series of tubes depending from the cover and establishing communication between the interior of the drum and the outer air through the perforations of the cover, the lower ends of the tubes removed a suitable distance above the bottom, substantially as set forth. 4th. In a heating drum, a drum proper, a bottom raised above the lower edge of the same, the said bottom a outom raised above the lower edge of the same, the said bottom having a solid portion against which the flames are adapted to im-pinge, a series of openings formed adjacent to the outer edge of the bottom, and a series of tubes aligning with said openings, the tubes communicating with openings formed in the top of the drum, substantially as set forth.

#### No. 60,834. Telephone Directory.

#### (Télephone-directoire.)

John Douglas Browning and Irvin Jacob Lerch, both of Reading, Pennsylvania, U.S.A., 8th August, 1898; 6 years. (Filed 9th April, 1898.)

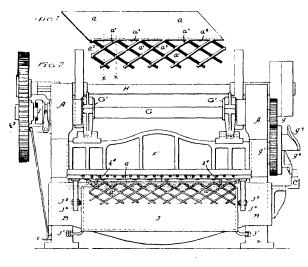
Claim.—1st. As an improved article of manufacture, a frame for telephone directories or the like formed of sheet material and com-



prising a rectangular main panel adapted for attachment of the index leaves, triangular rearwardly spreading side panels having the acute handle thereof at or near the top of the central panel, and forwardly projecting ribs at the intersections of said panels forming rests for the hinged leaves, substantially as set forth. 2nd. As an improved article of manufacture, a frame for telephone directories or the like formed of sheet material and comprising a rectangular main panel, triangular rearwardly spreading side panels, a top extension of said main panel lying in the same plane with the free inner edges of said main panel lying in the same plane with the free lines edges of said side panels, and forwardly projecting ribs at the intersections of said panels and extensions substantially as set forth. 3rd. As an improved article of manufacture, a frame for telephone directories or the like formed of sheet material and comprising a rectangular main panel, triangular rearwardly spreading side panels, a supporting device or devices fixed to the rear of the frame between said spreading panels and within the plane of the free edges of the latter, substantially as set forth. 4th. A frame for telephone directories or the like, comprising a rectangular main panel, triangular rearwardly spreading side panels, and a rear cross-bar located between said side panels and within the plane of the free edges of the latter, in combination with a wall plate or bracket having outwardly inclined portion with which said cross-bar is adapted to engage and thereby firmly but removably support the frame, substantially as set forth. 5th. A frame for telephone directories or the like, comprising a rectangular main panel, triangular rearwardly spreading side panels. a desk supporting attachment thereto near the base of the frame adapted to engage a desk plate substantially as described, and a second supporting attachment above the first adapted to engage a wall plate or bracket, both of said attachments being located within the plane of the free edges of the side panels, substantially as set forth. 6th. A frame for telephone directories or the like comprising a rectangular main panel having parallel transverse rows of perfora-tions, and triangular side panels having the acute angles thereof at or near the top of the main panel, in combination with a series of directory cards or leaves arranged on said main panel longitudinally parallel to the same, and cords passing through said perforations and securing each card to the panel by a loose or easily flexible hinge as described, whereby when the frame is hung upon a vertical wall the cards lie inclined longitudinally and will remain at any place as specified. 7th. In a telephone directory or the like the combination with a supporting frame having two or more transverse series of perforations arranged in parallel undulating lines, of a series of cards correspondingly perforated adjacent to one longitudinal edge thereof, said perforations being located at different distances from the top and bettom edges in adjacent cards, and cords passing through said frame and card perforations and forming flexible hinge connections each of which is out of line with the adjacent ones, substantially as and for the purpose set forth. 8th. As a nes article of maunfacture a supporting frame for directories or the like formed of sheet material and comprising a rectangular main panel adapted for attachment of the index leaves, triangular side panels, and means for suspending this frame with the free edges of side panels in contact with a wall. 9th. A telephone directory or the like comprising a supporting frame and a series of cards or leaves each of which is hinged to said frame, the hinges of each card being out of line with the hinges of the adjacent cards on opposite sides thereof, thereby avoiding the piling upon each other of adjacent hinges, substantially as set forth.

## No. 60,855. Machine for making Expanded Metal.

( Machine pour faire le métal expansible.)



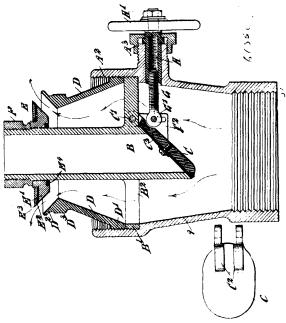
6.6855

Charles W. Adams, assignee of John French Golding, both of Chicago, Illinois, U.S.A., 8th August, 1898; 6 years. (Filed 6th April, 1898,)

Claim.—1st. In a machine forming expanded sheet metal, the combination with a laterally-shifting support for the sheet, an upper vertically-moving cutter and lower stationary cutter, said cutters being adapted to slit and simultaneously stretch the metal, of devices for feeding the sheet acting upon the expanded portion thereof, substantially as specified. 2nd, 1n a machine for forming expanded sheet metal, the combination with cutters acting to slit simultaneously stretch the metal as set forth, of devices for feeding the sheet and adapted to act upon the expanded portion thereof, devices for engaging the sheet and serving to regulate the feed, and means for shifting the sheet, substantially as specified. 3rd. In a machine for producing expanded sheet metal, a feeding device consisting of a hinged or pivoted spring-controlled frame and inclines carried by the reciprocating head of the machine, the said inclines acting upon the hinged or pivoted frame, substantially as described and for the purpose specified. 4th. In a machine for producing expanded sheet metal, a device for regulating the feed and for enabling any desired width of the expanded metal to be served from the metal sheet, the said device consisting of arms having fingers at their outer ends and pivotally connected at their inner ends to a shaft which can be rocked in one or other direction and be retained in such position, substantially as specified. 5th. The combination with the herein described feed regulating device of means for regulating the position of the fingers, the said means consisting of set screws k, passing through sleeves  $k^4$ , carrying the pivoted levers  $k^3$ , and acting on opposite sides of the shaft K, feathers ks, on the said shaft, and segmental slots k<sup>7</sup>, into which the said feathers enter, so that by turning the set screws the sleeves can be shifted angularly in either direction on the shaft, substantially as specified. 6th. In a machine for producing expanded sheet metal means for enabling the expanded sheet to be automatically delivered from the machine, the said means conbe automatically delivered from the machine, the said means consisting of ar arm loosely mounted on the shaft K, with its free end normally resting on the sheet of metal passing through the machine, the pivoted arms  $k^3$ , and lever mechanism connecting the said arms to the pivoted arms  $k^3$ , substantially as described. 7th. In a machine for producing expanded sheet metal, the combination with means for cutting and expanding the metal and approximation of finding the sheet of automatic arms of the said arms for finding the sheet of automatic arms of the said arms. means for feeding the sheet, of automatic means for determining when the sheet shall be ejected from the machine, substantially as described. 8th. The machine for forming expanded open work metal sheets wherein are combined a laterally shifting support for the sheets adapted to shift between the cutting operations, devices adapted to engage the expanded portion of the sheets and feed them forward, a stationary straight-edged cutter, and a sinuous-edged cutter moving in a fixed vertical plane and coacting with the straightedged cutter in severing the sheet and acting also to stretch the severed portions in a direction approximately at right angles to the plane of the sheet, substantially as specified. 9th. In a machine for producing expanded sheet metal, the combination with means for cutting and expanding the metal and means for feeding the sheet, of an arm L resting at its free end upon the sheet and serving to determine when the sheet shall be ejected from the machine, substantially as specified. 10th. In a machine for producing expanded sheet metal, the combination with means for cutting and expanding

to determine when the sheet shall be ejected from the machine, substantially as specified. 11th. The combination, in a machine for producing expanded sheet metal, with the cutters, the feed mechanism and the feed regulating devices, of means for throwing said regulating devices out of action and allowing the sheet to be ejected by the feed mechanism, substantially as specified. 12th. The combination in a machine for producing expanded sheet metal, with the cutters, the feed mechanism and the feed regulating devices, of adjustable means for throwing said regulating devices out of action and allowing the sheet to be ejected by the feeding mechanism, substantially as specified.

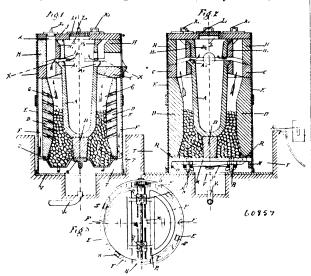
No. 60,856. Hose Nozzle. (Lance de boyaux.)



George Washington Hopp and Walter Inglis Agnew, both of Olympia, and Ellsworth Douglas Kellerman and Benjamin Chapman Crane, both of Montesano, all in Washington, U.S.A., 8th August, 1898; 6 years. (Filed 4th May, 1898.)

Claim.—1st. A nozzle having a casing, a portion of which is internally threaded, a threaded spider co-operating with the threads of the casing, a steam pipe carried by the spider, the outer end of the steam pipe projecting beyond the casing, a disc carried by the steam pipe, and anozzle proper having a threaded portion co-operating with the threads of the casing, the nozzle proper being capable of movement towards and from the disc, substantially as described. 2nd. A nozzle consisting of a casing having a tapering inner portion and a cylindrical inner portion, the cylindrical portion being internally-threaded, a spider having threads co-operating with the threads of the cylindrical portion, a stream pipe carried by the spider and projecting beyond the cylindrical portion of the nozzle, a discourred by the outer end of the steam pipe, a tapering nozzle proper having a screw-threaded portion co-operating with the threads of the cylindrical portion of the casing and being capable of movement towards and from the disc on the stream pipe, and means for controlling the stream pipe, substantially as described. 3rd. In a nozzle, the combination with a casing having a bearing and cap therefor, of a stream pipe, a hinged valve capable of closing the stream pipe, an internally threaded sleeve having an annular collar, the sleeve being revolubly held within the bearing and the collar engaged with the cap thereof, and a bolt connected to the valve and co-operating with the threads of the sleeve, substantially as described. 4th. A nozzle having a casing, a portion of which is internally-threaded, a threaded spider co-operating with the threads of the casing, astream pipe carried by the spider and and projecting out of the casing, a disc held on the stream pipe, a nozzle proper having adjustable connection with the casing and capable of movement to engage and disengage the disc, and a valve commanding the stream pipe, substantially as described. 5th. A nozzle having a casing, a stream pipe held within the casing and having a diagonal inner end, a disc carried by the stream pipe, a nozzle proper adjustable on the casing and capable of engaging the disengaging the disc, a valve pivotally mounted adjacent to the inner diagonal end of the stream pipe and capable of moving to close or open the same, and means extending through the casing by which the valve may be operated, substantially as described. 6th. A nozzle having a casing, a stream pipe held within the casing and extending out of the same, a disc carried by the stream pipe, a nozzle proper movable on the casing to engage and disengage the disc, a pivotally mounted valve capable of movethe metal and means for feeding the sheet, of an arm L resting and disengage the disc, a pivotally mounted valve capable of move-its free end upon the sheet and adjustable as to length and serving ment to open and close the stream pipe, and means extending through the easing by which the valve may be operated, substantially as described.

No. 60,857. Smelting Furnace. (Haut-fourneau)

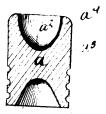


Louis Rousseau, Paris, France, 8th August, 1898; 6 years. (Filed 21st February, 1898.)

Claim.—1st. In a smelting furnace as described, the combination with a hearth, of a crucible pot arranged and suitably supported in said hearth, said crucible pot bearing at its upper end upon a crown and adapted to receive interiorily the hot gases from the hearth or combustion chamber, whereby the metal contained therein is melted by the radiation of heat, a pit contiguous to and below said combustion chamber, a casing surrounding said combustion chamber, vertical flues formed between said casing and the wall of the combustion chamber and communicating with said pit, said wall provided with means for introducing air laterally to the combustion chamber, and suitable means for supplying air under forced draft to said pit, substantially as described. 2nd. In a smelting furnace as described, the combination with a hearth, of suitable means for supplying fuel to said hearth from above, a crucible pot arranged and suitably mounted in said hearth, a casing surrounding and adapted to carry said hearth or combustion chamber, a fire bridge or crown supporting said crucible at its upper end, said crucible pot adapted to receive the combustion chamber. adapted to receive interiorly the hot gases from the hearth, channels connecting said hearth and crucible pot, said crucible pot being provided with means for the escape of gases of combustion and with suitable means for its oscillation, a pit contiguous to and below said combustion chamber, vertical flues formed between said casing and the wall of the combustion chamber and communicating with said pit, said wall being provided with inclined channels adapted to admit air to the combustion chamber in an opposite plane to that of the ascending gases, whereby an intimate mixture occurs and the application of saids, combustion of said gases is completed, and suitable means for supplying air under forced draft to said pit, substantially as described.

3rd. The combination with a smelting furnace, a crucible pot arranged therein, and means for supplying air laterally to the combustion chamber as described, of a pair of trunnions secured one on each side of said furnace and mounted in sliding blocks adapted to slide between two standards, a sleeve fixed to one of said standards, said sleeve being provided with sockets, and a lever adapted to be engaged in said sockets, whereby the furnace may be oscillated on said trunnions, substantially as described. 4th. In combination with a smelting furnace as described, trunnions secured to either side of said furnace and mounted in standards, a fork f mounted on said trunnions, whereby the furnace may be elevated, and suitable means for oscillating said furnace, substantially as specified.

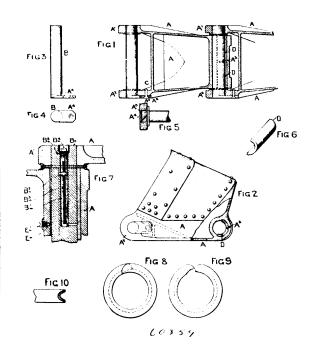
No. 60,858. Bullet. (Balle.)



Thomas William Webley, 81 Weaman Street, Birmingham, 8th August, 1898; 6 years. (Filed 17th March, 1898,

Claim.—1st. A bullet or projectile for revolvers and other small arms, having at the fore or striking end of same a cavity or sinking, substantially as for the purpose set forth. 2nd. The bullet or projectile having body a, fore and  $a^1$  cavity  $a^2$  parallel walls  $a^3$  and lead, substantially as shown and described.

No. 60,859. Dredge Bucket. (Godets de drège.)



Arthur Wells Robinson, Milwaukee, Wisconsin, U.S.A., 8th August, 1898; 6 years. (Filed 2nd June, 1893.)

Claim.—1st. In a dredge bucket, a joint-pin, having a lug formed on one end thereof and extending laterally therefrom, a bucket bottom or link, having a recess which extends away from the direction of strain, adapted to receive the lug and a screw-bolt or rivet, passing through the lug, means for securing the joint-pin against end motion in the eyes, substantially as and for the purpose hereinbefore set forth. 2nd. In a dredge bucket, a bucket bottom or link, having a single eye at one end through which the joint-pin passes, a half-bushing or bushings, located in a corresponding recess in the eye, a joint-pin provided with a lug at one end, which extends laterally therefrom, and a means for securing the joint-pin against end motion in the eyes, substantially as and for the purposes herein before set forth. 3rd. In a dredge bucket chain, a joint-pin having a lug formed on one end thereof, a bucket bottom or link, having a recess adapted to receive the lug, means for securing the joint-pin against end motion in the eyes, and the packing protecting-ring, substantially as and for the purposes herembefore set forth. 4th. In a dredge bucket chain, a bucket bottom or link, with a single eye at one end through which the joint-pin passes, a half-bushing or bushing located in a recess in the eye, and the packing protectingrings, substantially as and for the purposes hereinbefore set forth.

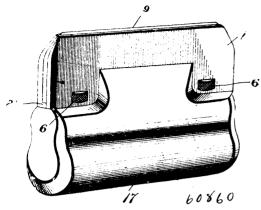
5th. In a dredge bucket chain, a bucket bottom, or link, with a single eye at one end through which the joint-pin passes, half-bushing, or bushings, located in a recess in the eye, and a joint-pin having a lubricating chamber formed within it, substantially as and for the purposes hereinbefore set forth.

## No. 60,860. Knife for Skinning Animals.

(Conteau à écorcher les animaux.)

Paul F. Payan, St. Hyacinthe, Quebec, Canada, 8th August, 1898; 6 years. (Filed 28th March, 1898.)

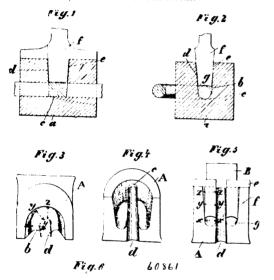
Claim.—1st. A knife for skinning animals, comprising a shield, a blade removavbly located therein, and means located within said shield and operated from without for adjustably moving said blade into and out of said shield, substantially as described. 2nd. A knife for skinning animals, comprising a shield, a blade removably located within said shield, screw threaded pins removably connected to said blade, and adjusting nuts mounted on said pins, whereby said blade may be moved into and out of said shield, substantially as described. 3rd. A knife for skinning animals, comprising a shield, a blade removably located therein, screw threaded pins



into and out of said shield, and a handle removably connected to said shield, substantially as described.

## No. 60,861. Chain Link and Chain.

(Chaîne et anneau de chaîne.)



Fritz Theile, Schwerte, Westfalia, Prussia, Empire of Germany, 8th August, 1898; 6 years. (Filed 21st September, 1897.)

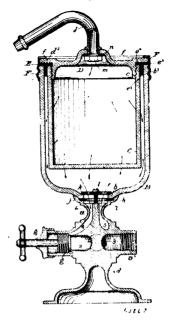
Claim. -- An improved method for the manufacture of chain links therein consisting that an iron rod of equal thickness after having been formed into a chain link, is brought an glowing heat, then put into a mould and is welded stretched and stamped by one stroke of the die, whereupon the chain link is turned in the mould and the second half of the side parts is stretched and the endpiece is strengthened by another stroke of the die.

## No. 60,862. Filter. (Filtre.)

William E. Saunders, Cleveland, Ohio, U.S.A., 8th August, 1898; 6 years. (Filed 20th June, 1898.)

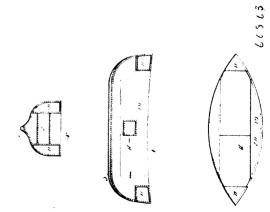
1st. A filter comprising an incorrodible, impervious shell composed of a body having a separable cab securely affixed thereto, a porous solid diaphragm secured to the shell, and an inlet opening to the shell and a discharge opening therefrom on opposite sides of the diaphragm, substantially as described. 2nd. A filter comprising an diaphragm, substantially as described. 2nd. A filter comprising an incorrodible, impervious shell having a valve-controlled inlet, a compressed porous diaphragm closing said shell, a cap secured to said shell and inclosing said porous diaphragm, and an outlet from said cap, substantially as described. 3rd. A filter comprising a glass shell having a valve-controlled inlet, a compressed carbon diaphragm closing said shell, a cap secured to said shell and enclosing said carbon diaphragm and an outlet from said carbon diaphragm. ing said carbon diaphragm, and an outlet from said cap, substantially as described. 4th. A filter comprising a glass shell having a yalve-controlled inlet, a cap detachably secured to said shell and having a discharge outlet, and a compressed carbon diaphragm interposed between said shell and cap, substantially as described. 5th. In a filter the combination of a glass shell having a valve-controlled inlet, a cap fitting upon said shell and having a discharge outlet, a

removably connected to said blade, adjusting nuts mounted on said cap, and a clamping ring engaging said shell and cap and clamping pins, and adapted to impart an adjustable movement to said blade them tightly together, substantially as described. 6th. In a filter the



combination of a glass shell having a valve-controlled inlet, a cap fitting upon said shell and having a discharge outlet, a compressed carbon diaphragm secured to said cap, a gasket interposed between the cap and shell, and a clamping ring engaging said shell and cap and clamping them tightly upon said gasket, substantially as described. 7th. In a filter the combination of a glass shell having a valve-controlled inlet, a cap fitting upon said shell and having a discharge outlet, a carbon cup detachably secured to said cap, a clamping ring engaging said cap and shell and clamping them to getter and an invervious cacket interpretal between the cap and ctamping ring engaging said cap and shell and clamping them together, and an impervious gasket interposed between the cap and the cup and shell whereby the cup is made to act as a diaphragm across said shell, substantially as described. 8th. In a filter the combination of a base having valve-controlled inlet and outlet ports, a glass shell rigidly secured to said base and enclosing said ports, a cap fitting on said shell and having a discharge outlet, a carbon cup detachably secured to said cap, a clamping ring engaging said cap and shell and clamping them together, and an impervious gasket interposed between the cap and the cup and shell whereby the cup is made to act as a diaphragm across said shell, substantially as described. 9th. In a filter shell in combination with the body and cap, a gasket of T-shaped section having two bearing flanges and an intermediate rib at right angles thereto, substantially as described. 10th. In combination with the filter shell, porus cup, cap, and clamping ring, the T-shaped gasket having flanges to bear on the cup and shell and a depending intermediate rib, substantially as described.

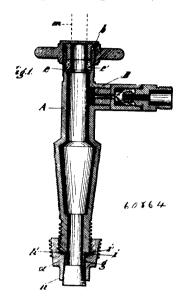
## No. 60,863. Life Boat. (Canot de sauvetage.)



Lewis Smith, Barrytown, New York, U. S. A., 8th August, 1898; 6 years. (Filed 11th March, 1898.)

Claim. 1st. A life boat provided at the bow and stern with a shallow transverse water tight compartment, longitudinal compart. compressed carbon diaphragm interposed between said shell and ments on each side of said boat extending to the bottom thereof, and a central transverse compartment secured to the sides of the longitudinal compartments and serving as a seat, substantially as described. 2nd. A life boat provided with a weighted keel and having shallow transverse water tight compartments at the bow and stern, longitudinal compartments at the sides extending to the bottom of the boat, all of said compartments being flush with the gunwale of the boat, and a transverse compartment secured to the longitudinal compartments and adapted to serve as a seat, substantially as described.

No. 60,864. Tap and Bung-Hole. (Robinet et bonde).



Wilhelm Pelzer, Dursburg, Rheinland, Germany, 11th August, 1898; 6 years. (Filed 30th May, 1898.)

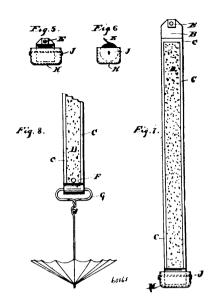
Claim.—1st. Improvements in taps and bung holes, the combination with a tap of a conical bung-hole tube terminating in a small smooth tube carrying a cork or stopper, the in and outside of which is threaded for the purpose of being screwed into the bung-hole of a keg and receiving the threaded end of a tap, substantially and for the purpose put forth. 2nd. Improvements in taps and bung-holes, the combination with a tap of a conical bung-hole tube terminating in a small smooth tube carrying a cork or stopper, the in and outside in a small smooth tube carrying a cork or stopper, the in and outside of which is threaded for the purpose of being screwed into the bunghole of a keg and rec iving a tap, the end of which terminates in a small tube carrying a ring washer, for the purpose when screwed into the bung-tube of partly pushing the cork or stopper from its seat and forming an air-tight joint, substantially as and for the purpose put forth. 3rd. Improvements in taps and bung-holes, the combination with a bung-hole-tube of a tap having a laterally arranged tubular arm containg a back-stroke valve the above end of which tap being threaded to receive a perforated can pressing upon which tap being threaded to receive a perforated cap pressing upon the tube and a washer for the purpose of forming an air-tight joint with a siphon-pipe passing through the top into the keg, substantially and for the purpose put forth. 4th. In a beer tapping device, the arrangement of a tap with a lateral tubular arm leading to a receiver of carbonic acid, which tap is screwed into a bung-hole-tube of a keg forming an air-tight joint with the same at the same time partly removing a corker stopper, in the terminating end of the bung-hole tube and which cork is then pushed from its seat by a siphon-pipe passing through the tap, and forming an air-tight joint with the same, into the keg, by which means a keg can be tapped without the loss of beer and carbonic acid, substantially and for the purpose put forth.

#### No. 60,865. Fly Paper. (Papier tue-mouche.)

The O. & W. Thum Company, assignee of Hugo Thum, all of Grand Rapids, Michigan, U.S.A., 9th August, 1898; 6 years. (Filed 12th April, 1898.)

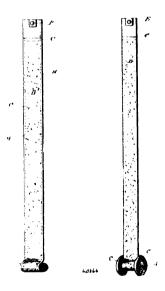
Claim.—1st. An insect catcher, comprising a strip of paper coated with sticky material forming a web adapted to fold upon itself and provided at one end with means for suspending the same, a hollow core secured to the opposite end of the web and upon which the latter is wound, a wire passed loosely through said hollow core, and arter is wound, a wire passed loosely through said nonlow core, and a receptacle carried by said wire, said receptacle being adapted to catch the drippings falling from the web. 2nd. A strip of paper coated with sticky fly catching material, forming a web adapted to fold upon itself, provided with suitable means for suspending the same at one end and having a marginal confining border for the sticky material, a hollow core secured to the opposite end of the web, a wire passing loosely through said hollow core, and a receptacle mounted upon the wire, said receptacle having a relatively wide milk, consisting in coagulating both the casein and the albumen of

open mouth and adapted to catch the flies and drippings falling from the web. 3rd. A strip of paper coated with sticky fly catching



material forming a web adapted to fold upon itself and provided with a marginal confining border for the sticky material, a hollow through the said hollow core and provided with a hook, and a receptacle for catching the drippings and flies suspended from said hook, substantially as described.

No. 60,866. Fly Paper. (Papier tue-mouche.)



The O. & W. Thum Company, assignee of William Thum, all of Grand Rapids, Michigan, U.S.A., 9th August, 1898; 6 years. (Filed 22nd April, 1898.)

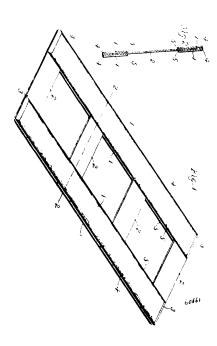
Claim. A package of sticky fly paper formed of a web or strip of suitable material having its central portion covered with the fly-catching compound, its margin covered by a retaining material, the central portion separably connected to the maginal portions and adapted to be unrolled without unwinding said marginal portions, substantially as described.

No. 60,867. Substitute for Eggs. (Substitut pour oeufs.) The Dairy Improvement Company, assignee of Alexander Bernstein, all of Boston, Massachusetts, U.S.A., 9th August, 1898; 6 years. (Filed 6th April, 1898.)

Claim. - 1st. The process of obtaining a substitute for eggs from

the milk, removing the liquid and then reducing the mixed curd, by mechanical means, to the consistency of paste, substantially as described. 2nd. As an article of manufacture, a substitute for eggs, consisting of coagulated milk-albumen and casein intermingled and in a finely divided condition, substantially as described.

No. 60,868. Cloth Board. (Planche pour draps.)



Rascoe Witherle Gage, Boston, Massachusetts, assignee of John Conway Murphy, New York City, U.S.A., 9th August, 1898; 6 years. (Filed 6th June, 1898.)

Claim.—1st. A cloth board, upon which to wind a bolt of cloth. consisting of longitudinal strips constituting side-bars, and crossstrips connecting said side-bars at intervals and having the ends thereof secured within said side-bars, the whole making a skeleton or open framework, substantially as described. 2nd. The improved cloth board, upon which to wind a bolt of cloth, consisting of sidebars each composed of a pair of longitudinal strips, and cross-strips connecting said side-bars at intervals and having the ends thereof secured between the longitudinal strips composing the respective side-bars, the whole making a skeleton or open framework, substantially as described.

#### No. 60,869. Method of Incoating Metals with Aluminum. (Méthode d'enduire les métaux d'aluminium.)

The Michigan Stove Company, assignees of Frederick W. King, all of Detroit, Michigan, U.S.A., 9th August, 1898; 6 years. (Filed 5th May, 1898.)

Claim.—The process of coating metal with aluminum, consisting in first, treating the metal to be coated with a sand blast, second, applying to the cleansed surface a sizing of linseed oil or other similar substance, third, applying to the sticky coating dry aluminum powder, and fourth, baking at a high heat until the coating becomes united to the metal, substantially as described.

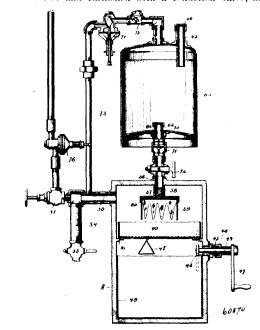
#### No. 60,870. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

Clarence Ross Gillett and Egbert Warren Gillett, both of Chicago, Illinois, U.S.A., 9th August, 1898; 6 years. (Filed 2nd May,

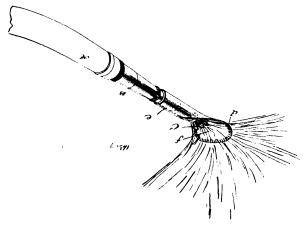
Claim-1st. The combination with the carbide retort and with the water supply tank, of the intermediate feed tube having check valve therein and the gas exit pipe leading from the retort, communicating with the supply tank and furnished with a pressure reducer to keep the gas tension at the tank less than in the retort, substantially as described. 2nd. The combination with the carbide

having one-way check-valve therein, the distribution pipe leading from the retort and furnished with a reduction valve, and the



pressure tube interposed between the retort and tank, discharging into said tank and having a reduction valve and separate checkvalve therein, substantially as described,

No. 60,871. Spraying Device. (Appariel à arroser.)



Richard Orford and Adolph Reich, both of St. Josephs, Michigan, U.S.A., 9th August, 1898; 6 years. (Filed 10th June, 1898.)

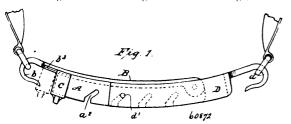
Claim.—1st. The herem described spray attachment formed of a single piece of resilient sheet metal and having the longitudinally disposed socket a at its rear end, open longitudinally throughout its length as indicated by c, whereby it is rendered resilient and is adapted to be secured of itself on hose nozzles of different diameters, the intermediate flat portion f adapted to bear on the ground, and the upwardly curved forward portion arranged at a distance from the socket with its end in the same horizontal plane as the uppermost portion of the socket, the upper side of the said forward portion being grooved or notched at its transverse and side edges, substantially as specified.

## No. 60,872. Hame Fastening. (Couplière d'attelles.)

The Manchester Hame Fastening Company, assignee of Joseph Elie Lemyre, Manchester, New Hamp hire, U.S.A., 9th August, 1898; 6 years. (Filed 20th July, 1898.)

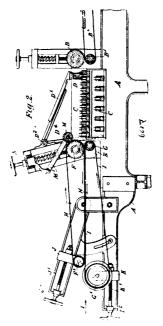
Claim. -1st. In a hame fastening, a frame having a series of slanting slots in its lower edge, an exterior frame fitting upon the former provided with a cross pin at one end adapted to engage the slots of the inner frame and with a hook at the opposite end for attachment to a hame, a bar fitting upon the top of the inner frame to which it is pivotally attached at one end and having at its opposite substantially as described. 2nd. The combination with the carbide retort and with the water-supply tank, of the intermediate conduit attached to said bar for engaging the free end of the inner frame,

substantially for the purpose set forth. 2nd. In a hame fastening, a frame having a series of slanting slots in its lower edge, an exterior



frame adapted for attachment to the former frame by means of a cross pin engaging either of said slanting slots, and having a hook for engaging a hame, a bar pivotally connected at one end of said inner frame and having a hook at its opposite end for engaging a hame, grooves formed in opposite sides of said bar near said hook, and a sliding clasp secured therein and adapted to engage one end of said inner frame, substantially for the purpose set forth.

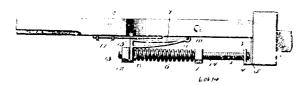
#### No. 60,873. Gill Box. (Boite à preparer les fibres.)



The Flax Combining Syndicate, assignee of Taylor Burrows, both of London, England, 9th August, 1898; 6 years. (Filed 1st March, 1898.)

Claim.—In gill boxes the employment of two endless sheets or belts such as H and I mounted on and carried round by the drawing rollers F and G of said machine lapping the fibre on one said belt as said fibre is drawn from the gills or teeth and then subjecting said fibre while lapped on said belt to the repeated action (pressure) of said drawing rollers by passing said lapped fibre repeatedly between said rollers, substantially as hereinbefore set forth.

## No. 60,874. Tongue Support. (Tuteur de limonières.)

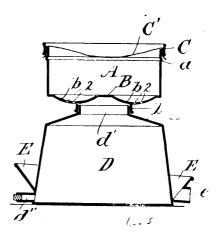


Jerry Weeter, Callensburg, Pennsylvania, U.S.A., 9th August, 1898; 6 years. (Filed 25th July, 1898.)

Claim.—1st. A tongue support comprising a rod designed to be arranged beneath a tongue and mounted independently of the same, a spring disposed on the rod, and a link extending longitudinally of the tongue between the same and the spring having one end hinged to the said tongue, the other end of the link being slidingly connected with the rod and engaging the front end of the spring, substantially as described.—2nd. A tongue support comprising a rod designed to be located beneath a tongue, a coiled spring disposed on the rod, a

link engaged by the spring and designed to be hinged to a tongue, and a catch designed to be mounted on the tongue and consisting of a leg or prop adapted to be interposed between the tongue and the link, whereby the former is supported in an elevated position, substantially as described. 3rd. In a device of the class described, the combination with a running gear, of a rod mounted thereon and located beneath the tongue, a spring disposed on the rod, a link hinged to the tongue and slidingly connected with the rod in advance of the spring, and an automatically operating catch consisting of a leg or prop hinged to the lower face of the tongue and arranged to engage the link, substantially as described. 4th. In a device of the class described, the combination of a running gear, a bracket, a rod mounted on the bracket and located beneath the tongue and having a limited swing, a substantially L-shaped link hinged at its rear end to the tongue and provided at its depending arm with an opening receiving the rod, a front nut arranged on a threaded portion of the rod at the front end thereof, a rear nut mounted on a threaded portion of the rod at the back thereof, and a coiled spring interposed between the rear nut and the arm of the link, substantially as described. 5th. In a device of the class described, the combination with a suitable support, and a tongue, of a laterally swinging leg or prop hinged at its upper end to the tongue and disposed at an acute angle to the rear portion thereof, said leg or prop being arranged to engage the support automatically when the tongue is raised, substantially as described. 6th. In a device of the class described, the combination with a tongue, and a suitable support, of a leg or propconnected with the tongue and arranged to engage the support automatically when the tongue is raised, whereby the said tongue is supported in an elevated position, substantially as described.

No. 60,875. Milk Cooler. (Aérateur à lait.)



Richard Howes, Sussex, New Brunswick, 9th August, 1898; 6 years. (Filed 8th July, 1898.)

Claim.—1st. In a milk cooler, the combination with a water tank having slightly sloping sides and much sloping top with open neck and provided near the bottom with a sloping gutter with spont and with a spout for letting off the water, of a strainer having a bottom formed with an annular depression perforated at its lowest part, a rim on the lower face of the bottom inside of said perforations and fitting upon the neck of the tank, a bead near the upper edge and a strainer ring adapted to clamp the strainer cloth upon said bead, substantially as set forth. 2nd. In a milk cooler, the combination of a water tank having a neck to hold a strainer adapted to be held upon said tank and having in its bottom an annular depression with perforations outside the rim holding it upon the tank, substantially as set forth.

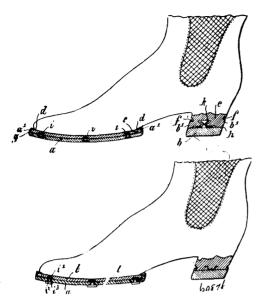
## No. 60,876. Sole and Heel Fastening.

(Attache pour semelles et talons.)

Sebastian Kistler, Medenau, Prussia, Germany, 9th August, 1898; 6 years. (Filed 19th July, 1898.)

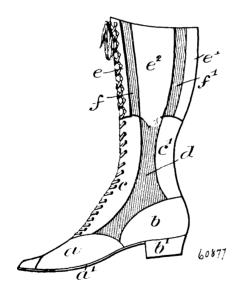
Claim.—Ist. Fastening for detachable soles and heels, characterised by the detachable sole or heel being formed with a clip of elastic material to grip over the edge of the inner sole or inner heel, in such a manner that the dividing slit between the parts is covered and the passage of outside objects into the slit prevented, constructed and arranged substantially as hereinbefore described. 2nd. The clamping buttons i, the upper portion  $i^*$  of which is carried by the inner sole 1, whilst the under portion  $i^*$  passes through the outer detachable sole a, and is here flattened to a head  $i^*$ , which serves for the better fastening of the clamping button also as a sole protector, constructed and arranged substantially as hereinbefore described. 3rd. The clamping button i having the parts  $i^*$  which pass through the outer detachable sole a made conical for the pur-

pose of giving sufficient hold upon the detachable sole a, constructed and arranged substantially as hereinbefore described. 4th. Fasten-



ings for detachable soles and heels, arranged substantially as here-inbefore described and illustrated in the drawings annexed.

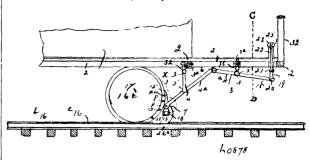
No. 60,877. Boot or Shoe. (Chaussure.)



Lebbens Hill, Lynn, Essex, Massachusetts, U.S.A., 9th August, 1898; 6 years. (Filed 22nd July, 1898.)

Claim.—As an article of manufacture, a high top boot or shoe having a front opening extending from the top of the shoe to a point below the instep thereof to admit the foot without necessarily stretching or expanding the sides of the shoe, means to close said open front and the shoe upon the foot for use, both sides of said shoe being provided with non-expansible portions extending substantially from the top to the bottom of the shoe at the front and back thereof, and expansible portions also extending substantially from the top to the bottom of the shoe and arranged between said non-expansible portions, both sides of said shoe being horizontally divided between their front and back portions with the adjacent edges of said divided portions left free and independent for a distance between said non-expansible front and back portions for independent expansion and contraction of the same at both sides of the foot, the degree or extent of such expansion and contraction both across the instep and adjacent and above the ankle portions of the shoe and the conjoint action of the upper and lower expansible portions of the sides of said shoe being variable by the fastening means for said front opening substantially as described.

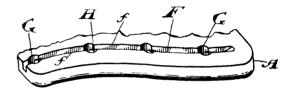


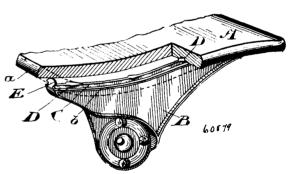


Joel A. Hughes, Dallas, Texas, U.S.A., 9th August, 1898; 6 years. (Filed 25th July, 1898.)

Claim.—The combination of a brake for street cars and railway cars, having a system of hanger-bars 3, provided with working joints 3<sup>b</sup>, secured to the framework of the car by bolts 3<sup>a</sup>, the lower ends of hanger-bars provided with bearings 4, which engage a system of levers 4<sup>a</sup>, the middle ends of which being attached to each other by bolts 6, while the ends 7 are attached by bolts 3 to the upper ends of cuffs 9, which carry the brake-beam 10, to the ends of which are suitably secured the brake-locks 13, provided with a shoe 14, secured to said block by bolts 15, with a flange 16<sup>a</sup> secured to the lower edge of the block, and with a link 19 attached to the ends of the levers by bolts 20, and to the hoisting and lowering rods by bolts 21, and hoisting and lowering rod engaging at the uppermost end of the fulcrum and of the lever 24, provided with the standard 27 and bearing 20, all for a purpose substantially as set forth.

No. 60,879. School Desk. (Pupitre d.école.)



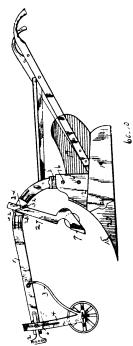


Jacob H. Mickler, Prestou, Waterloo, Ontario, Canada, 9th August, 1898; 6 years. (Filed 21st July, 1898.)

Claim.— 1st. The method of fastening the wood-work of an article of furniture to the metal frame thereof, which consists in forming a groove with a series of enlargements of suituble width and depth on the face of the wood-work, also in forming a rib on the flange or flanges on which the wood-work is to be seated of such width and depth as to permit the seating of the wood-work with lugs on the rib spaced to correspond with the enlargements in the groove, and adapted to pass into the enlargements and to engage with the sides of the groove when the wood-work is forced home, in then applying the groove in the wood-work to the metal rib by passing the enlargements in the groove over the lugs on the rib, and then forcing the wood-work home to its seat lengthwise of the rib, so that the lugs on the rib engage with and grip the sides of the groove in the wood-work, substantially as specified. 2nd. In a school desk, the combination of wood-work provided with a groove and a series of enlargements formed therein of suitable width and depth, flanges on a metal frame, and a rib having lugs formed on one or both sides so spaced as to correspond with the enlargements on the groove, the groove being adapted to fit on the rib, so that its sides, or either of them, may engage with the lugs on the rib, when the wood-work is forced home to its seat, substantially as specified. 3rd. In a school desk, the combination of wood-work provided with a groove and a series of enlargements formed therein of suitable width and depth, flanges on a metal frame to form a seat for the wood-work,

and a rib having dove tailed lugs formed therei n so spaced as to correspond with the enlargements on the groove, the groove being adapted to fit on the rib, so that its sides may engage with the lugs on the rib when the woodwork is forced home to its seat, substantially as specified. 4th. In a school desk, the combination with seat A, provided with groove F, and enlargements G, formed therein of flanges forming a seat for the wood-work, the metal rib C, provided with lugs D, spaced to correspond with the enlargements in the groove, and adapted to engage with the sides  $f\,f^1$  of the groove F, when the wood-work is forced home, substantially as specified. 5th. In a school-desk, the combination with seat A, provided with groove F, having sides  $f\,f^1$  and enlargements G, formed therein, of metal flanges  $b\,b^1$  forming a seat for the wood-work, the top E, the metal rib C, provided with dove tailed lugs D, spaced to correspond with the enlargements in the groove and adapted to engage with the sides  $f\,f^1$  of the groove F, when the wood-work is forced home to the stop E, substantially as specified.

#### No. 60,880. Plough. (Charrue.)



Frank L. Woodward, Clinton, Michigan, U.S.A., 9th August, 1898; 6 years. (Filed 15th July, 1898.

Claim.—1st. In v plough, the combination with the beam, the standard formed with a convex corrugated portion provided with horizontal elongated slots, of the plate formed with bolt-holes and having a corrugated concave portion or recess engaging with said convex portion or rib engaging with a corresponding concave recess and the bolts passing through said holes and slots in the beam, substantially as described. 2nd. In a plough, the combination with the beam formed with a recess in the side, of the plate formed on one side with a concave corrugated recess and in its opposite side formed with a concave corrugated recess, the apertured lugs at diagonal corners, the plate having a corrugated convex portion engaging with said recess, and the other side made straight or plain, the jointer abutting against the same, and the yoke passing around said arm and through said lugs, substantially as described.

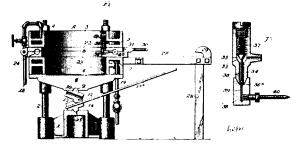
# No. 60,881. Vulcanizing Apparatus.

(Appareil à vulcaniser.)

Henry James Doughty, Providence, Rhode Island, U.S.A., 9th August, 1898; 6 years. (Filed 6th June, 1898.)

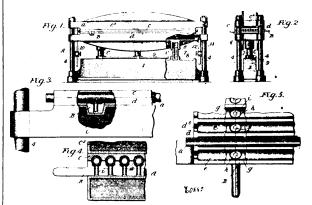
Claim.—1st. The combination with a vulcanizer, of a mould adapted thereto, and means for automatically inflating an article within the mould at a predetermined time, substantially as described. 2nd. The combination with a vulcanizer, of a mould adapted thereto and detachable therefrom, a valve controlled passage leading into the interior of the mould, and means for opening the valve at a predetermined time, substantially as described. 3rd. The combination with a vulcanizer comprising two platens, one movable towards and from the other, means for removing the said platen and for heating the same, guides, and a mould movable upon the guides to positions between and without the platens, substantially as described. 4th. The combination with a vulcanizer, comprising an upper and a lower piston, each provided with a chamber for containing a heated

fluid under pressure, a mould adapted to be inserted between the platens, a hollow inflating needle extending into the mould



chamber, and automatic means for effecting a communication between the passage of the needle and the chamber of one of the platens at a predetermined time, substantially as described. 5th. The combination with a vulcanizer comprising an upper and lower platen each being formed with a chamber for containing heated fluid under pressure, a casing having a passage communicating with one of the platen chambers, and a valve for controlling said passage, a mould adapted to be inserted between the platens, a hollow inflating needle extending into the mould chamber, and means for placing the passage of the needle into communication with that of the casing and for opening the valve in said latter passage at a predetermined time, substantially as described. 6th. The combination with a vulcanizer comprising an upper and a lower platen one of which is movable towards the other, means for moving said platens, a mould adapted to be received between the platens sant platens, a mound adapted to be received between the platens, as hollow inflating needle extending into the mould chamber, and means for automatically placing the passage of the needle into communication with a source of supply of fluid under pressure, substantially as described. 7th. The combination with a vulcanizer comprising an upper and a lower platen and a mould adapted to be received between and to be removed from the platens, said mould comprising two sections hinged together at one side and provided at its opposite side with means for forcing the sections apart, substantially as described. 8th. The combination with a vulcanizer comprising an upper and a lower platen, a track extending to and projecting beyond the press, a separable mould provided with rollers or bearings engaging the track, said mould being adapted to move upon the track to positions between and without the platens, substantially as described. 9th A vulcanizer comprising a base, an upper platen and a lower platen, a support for the lower platen, and means for raising and lowering platen comprising two toggle-blocks engaging each other and the support and base respectively, said blocks being provided with inclined bearings upon opposite sides of their fulcra, substantially as described. 10th. The combination with a vulcanizer comprising an upper and a lower platen, means for heating the platens, a separable mould adapted to be inserted between the platens, a hollow inflating needle detachable from the mould and adapted to extend into the chamber thereof, and means for automatically placing the inflating needle into communication with a source of supply of fluid under pressure when the mould is inserted into the vulcanizer, substantially as described.

## No. 60,882. Air Cushion Tube. (Tube de coussinet à air.)

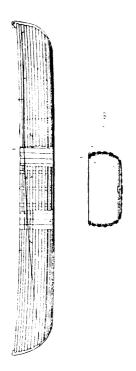


Henry James Doughty, Providence, Rhode Island, U.S.A., 9th August, 1898; 6 years. (Filed 6th June, 1898.)

Claim.—1st. The hereinbefore described method of making air cushion tubes, the same consisting in enveloping two or more separated mandrels in sheet rubber, then by pressure moulding and vulcanizing the rubber around the mandrels, and finally removing the connecting webs intermediate the mandrels, substantially as described. 2nd. In an apparatus for the purpose described, the combination of a sectional mould having circular chambers with

contracted ends, and mandrels adapted to be received in said ends and to project beyond the same, said mandrels extending centrally through the said circular chambers, substantially as described. 3rd. In an apparatus for the purpose described, the combination with a main sectional mould, of an auxiliary mould adapted to be attached to and detached from one of the sections of the main mould and to communicate with the chamber thereof, substantially as described. 4th. In an apparatus for the purpose described, the combination of a mould formed in two sections having longitudinal circular chambers and mandrels extending centrally through the chambers and supported in bearings at the ends of the same, substantially as described. 5th. In an apparatus for the purpose described, the combina-tion with a sectional mould having longitudinal open ended chambers, of two or more mandre's extending centrally through the chambers and to project beyond the same, and racks at the ends of the mandrels for maintaining them in proper relative position, substantially as described. 6th. In an apparatus for the purpose described, the combination with a vulcanizing mould, of an auxiliary mould adapted to be attached to and detached from the said mould and having an opening communicating with the chamber thereof, substantially as described. 7th. In an apparatus for the purpose described, the combination with a vulcanizing mould having a transverse recess intersecting the chamber thereof, and an auxiliary two-part mould adapted to be received in said recess and having openings communicating with the chamber of the vulcanizing mould, substantially as

## No. 60,883. Canoe and Boat. (Canot et bateau.)



Thomas Sheppard Barwis, Calgary, Alberta, Canada, 9th August, 1898; 6 years. (Filed 24th March, 1898.)

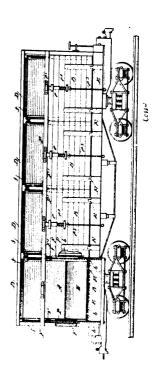
Claim.—1st. A canoe or similar craft composed of a solid bottom 1, ribs 2, longitudinal battens 4, veneer 3, canvass 7, and outer longitudinal battens 5, substantially as shown and described. 2nd. A canoe or similar crafts having a solid bottom 1, a keelson 9, ribs 2, longitudinal battens 4, veneer 3, canvas 7, longitudinal outer battens 5 and a keel 8, constructed substantially as shown and for the purpose set forth.

## No. 60,884. Car. (Char.)

Michael J. Griffin and Peter W. Hogan, both of Island Bond, Vermont, U.S.A., 9th August, 1898; 6 years. (Filed 22nd July, 1898.)

Claim.—1st. The combination in a car having its body divided into bins extending from the middle to the side thereof and provided with sloping floors, the outer side of each bin being open, of a door for each bin, each of said doors being pivoted at its lower edge to the car to swing outwardly and downwardly, and side boards attached to each door, and of such length as to form a continuous extension of the side walls of the bins when the doors are open, there being provided a series of slots or openings in which are

received the lower edges of said side boards when the doors are closed, as and for the purpose set forth. 2nd. The combination



with a car having a coal bin formed with a floor sloping towards and extending to a side of the car, the outer side of said bin being open, of a door pivoted by its lower edge to the outer edge of said floor and arranged to swing outwardly and downwardly, forming a continuation of the same, the said floor being formed with slots in the rear of each side edge of the door, and side boards attached to the said side edges of the door, and of such a length as to overlap the side walls of the bin when the door is at the outward and downward limit of its movement, the inner and lower ends of said boards being received in the said slots when the door is closed, as and for the purpose set forth. 3rd. A car body consisting of end walls, two spaced apart, longitudinal partitions connecting said end walls, said partitions extending along the middle of the car, transverse double partitions extending at predetermined intervals from a longitudinal partition to the adjacent side of the car, floors sloping from a longitudinal partition to an adjacent side of the car and provided with slots or openings near their outer edges and between a double partition, doors pivoted at their lower edges to swing outwardly and downwardly and forming sides for the car and chutes for the bins formed by the partitions, cords attached to the outer edges of the doors each of said cords passing through the space of a double transverse partition back into the space between the longitudinal partitions and there provided with a weight, and side boards attached to the sides edges of each door and of such length that they will overlap the transverse partitions when the door is fully open, the said side boards when the door is closed entering the space between the double partitions and down into the said slots in the floor, as set forth.

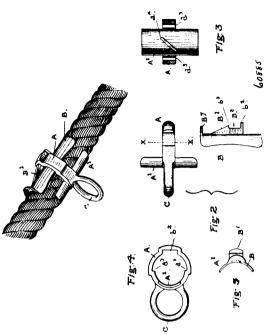
## No. 60,885. Eye for Hitching Ropes.

(Oeillet pour amarrer les cordages.)

Charles Arthur Conger, Oakland, California, U.S.A., 10th August, 1898; 6 years. (Filed 30th July, 1898.)

Claim.—1st. The combination, with an eye or loop for a rope-halter or hitching-rope, of the ring or collar having a cradle-piece to fit the rope, the clamping piece adapted for insertion between the said ring or collar and the rope, and having a wedge-shape block on its back provided with a recess adjacent to the higher end of the wedge and adapted to receive and confine the said ring or collar. 2nd. The combination, with a piece composed of the ring or collar adapted to slip over a rope, a curved cradle-piece to fit the rope, and an eye or loop on said part, of a clamping-piece adapted for insertion between the said ring or collar and the rope and having a wedge-shape block on the back, and a recess on the top of said block at the higher end thereof, and a shoulder or projection at the outer end of said block standing beyond the top face thereof. 3rd. The combi-

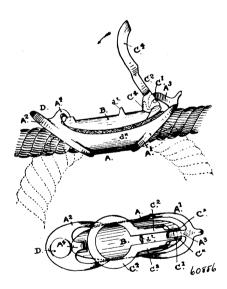
nation, with the ring or collar A having the cradle-piece A1 at one side of the collar, and the recess  $a^2$  in the inner surface of the collar



opposite the cradle-piece, of the curved clamping-piece B having the wedge-shape block  ${\bf B}^2$  on the back face, and a recess in the top of said block to receive the ring or collar.

## No. 60,886. Ring-Slide for Rope Halters.

(Anneau pour licoux de cordes, )



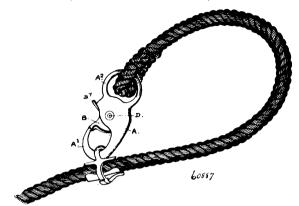
Charles Arthur Conger, Oakland, California, U.S.A., 10th August, 1898; 6 years. (Filed 30th July, 1898.)

Claim.-1st. In a fastening of the character herein described, the tubular cradle open on one side, and having the inwardly turned hooks on the ends, in combination with the clamping-plate over the open side of the cradle adapted to rest upon the rope, and a clamping lever having a cam or eccentric at one end and constructed to press the clamping-plate against the cradle and lock said parts together by the movement of the lever. 2nd. The combination, with the tubular cradle having an opening on one side, an inwardly bent hook at each end, and a ring or loop on one end to take a hook off a clampingplate fitted to cover the opening of the cradle, and a clamping-lever having a cam and a fulcrum pin to engage the hook on the cradle and adapted to press the clamping-plate against the rope confined in the cradle. 3rd. In a fastening of the character herein described,

constructed to press said plate against the rope confined in the cradle, and having a fulcrum on the hook at one end of the cradle and an operating lever secured to said cam, combined for operation as set forth. 4th. In a fastening of the character herein described, the cradle-piece having a ring or eye on one end integral with the said piece, the overlanging hooks adapted to confine a clamping-plate in the open top of the piece and the closed rims on the ends, substantially as and for the purposes set forth.

### No. 60,887. Harness Snap-Hooks.

(Crochet à ressort de harnais.)



Charles Arthur Conger, Oakland, California, U.S.A., 10th August, 1898; 6 years. (Filed 30th July, 1898.

Claim.—1st. A snap-hook, comprising a shank or body having an Claim.—18t. A snap-nook, comprising a sname or only norms an inwardly bent beak turned to one side and in the same plane with the body, a circular recess in one face of the body and a loop on the end opposite to the beak, a retary keeper or latch-piece pivotally mounted in said recess in position to engage the beak of the hook and close the opening between that part and the body of the hook, said latch piece having a deep flange on one face fitted to seat and turn in the recess in the body, a rim extending beyond said flange circumferentially, a segmental cut-away portion or recess extending from the rim towards the centre of the latch-piece having a stop or shoulder at one end to engage the beak of the hook, and a stop at the opposite end to engage the body of the hook when the latch-piece closed, and a spring in the latch-piece adapted to hold the said piece in engagement with the beak, as described. 2nd. The combination, with the hook-body, or shank, having a downwardly bent beak, an opening thereunderto the side of the body and a circular recess in one face situated belowsaid opening, of the latch-piece pivotally mounted in said recess having a rotative movement therein and composed of a disk with segmental recess in one side of the center, extending from the circumference towards the centre, a deep flange on the bottom face fitted to turn in the recess of the hook-body and following the contour of the disc at and on the sides of the segmental recess, a flat rim on the top face projecting beyond the flange excepting at the said recess, and the stoppor shoulders on the circumference one of which recess, and the stoppor shoulders on the circumference one of which is adapted to engage the point of the beak, and the other a stop on the shank of the hook, and the coil spring situated within the flanged bottom of the latch-piece and adapted to hold the said piece in position to close the hook, as hereinbefore described. 3rd. The combination, with a snap-hook having a circular recess in the shank or body beneath the beak of the hook, and a central hole in the bottom of said recess, of the circular latch-piece pivotally mounted to rotate in the said recess and having a deep flange on the bottom face fitted to turn in the recess of the shank or body, a projecting top rim extending over the shank around the margin of the recess, a post in the centre of the latch-piece integral therewith adapted to fit and turn in the aperture in the centre of the recess and having a head on the outer end to confine the same in place while allowing the said post to turn therein, the stop or shoulder on the circumference adapted to engage and cover the point of the hook, a stop to engage a shoulder on the shank, and the segmental recess in the edge between the said stops as described for operation as set forth.

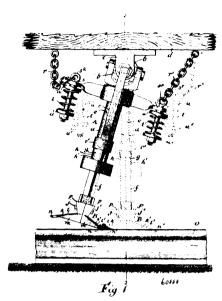
## No. 60,888. Rail Track Cleaner.

(Nettoyeur de voies de chemin de fer.)

Edward George Jones, Hart's Building, Market Street, Johannesburg, South African Republic, 10th August, 1898; 6 years. (Filed 28th July, 1898.)

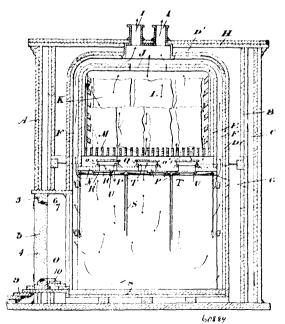
Claim.-1st. A scraper for a rail track cleaning apparatus, consisting of a shaft to which are rigidly fixed two plates bent to, or sisting of a shart to which are rigidly fixed two places bent to, or meeting together at an angle along a central longitudinal line, thus each plate forming two lateral oblique planes, one of such planes having on the bottom edge thereof a tooth-like projection, as and for the purpose described and set forth. 2nd. A holder for the the cradle A having a hook at each end, and an opening along one scraper of a rail track cleaning apparatus, consisting of a T-shaped side beneath said hook, a clamping-plate fitted to cover said opening and having lugs on its top surface to engage said hook, and a cam helical spring and the lower end being adapted to retain the headed

end of the shaft of the scraper, and the cross bar of which is provided with a hole at each extremity thereof to receive an eye bolt, as and for



the purpose described and set forth. 3rd. In a rail trck cleaning apparatus, the combination with a suitable carriage, of the T-shaped scraper holder suspended from the centre of its cross bar by a gimbal joint from a bearing bracket on the underframe of the carriage and from the extremities of its cross bar by means of chains attached at one end to the underframe of the carriage and at the other to eye bolts adapted by means of helical springs and washers to cushion the movement of the said scraper holder, as and for the purpose described and set forth. 4th. In a rail track cleaning apparatus, the combination with a suitable carriage of the T-scraper holder suspended by a gimbal joint, chains and spring-cushioned eye bolts to the underframe of the carriage, lateral spring-sliding guides adapted to control any lateral movement of the holder, and the scraper and scraper shaft, as and for the purpose described and set forth.

# No. 60,889. Cold Storage Building. (Entrepot frigorifique.)

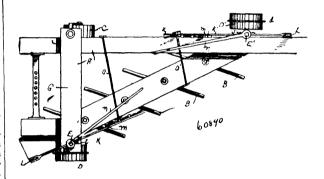


Michael Ouillette, Montreal, Quebec, Canada, 10th August, 1898; 6 years. (Filed 23rd July, 1898.)

Claim.—1st. A cold storage building comprising a building constructed with a series of walls, dead-air space between such walls, latter, and levers pivoted at one end an the interior of the building being divided into an ice-compartment

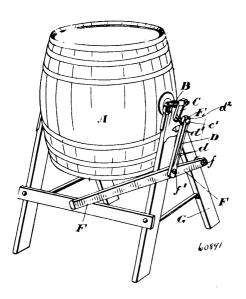
and preserving-room, means for regulating the supply of cold air from the ice-compartment into the preserving-room, and suitable passage ways for conveying the warm air from the preserving-room into vent pipes, as set forth and for the purpose specified. 2nd. In a cold storage building in combination, a plurality of walls, dead-air spaces between such walls, of an interior comprising an ice-compartment and preserving-room, a suitable partition between the two constructed to regulate the supply of cold air from the ice-compartment into the preserving-room, and a passage way leading from the preserving-thamber to vent pipes, as set forth and for the purpose specified. 3rd. In a cold storage building constructed as described, the combination with the ice-compartment and preserving-room, of a partition or ceiling dividing the two, openings in such ceiling, and suitable raised covers fitting above said openings, and means for admitting or cutting off the supply of cold air from the ice-compartment into the preserving-room, as set forth and for the purpose specified. 4th. In a cold storage building constructed as described, the combination with the ice-compartment and preserving-room, partition or ceiling dividing the two, openings in said ceiling and suitable raised covers fitting above said openings of slides supported and operated as described, for opening or closing the openings in the said ceiling, as set forth and for the purpose specified. 5th. In combination with a cold storage building constructed as described, of an air-tight door comprising a jam 5, and central swinging portion 4, groove 6, formed in the jam 5, packing 7, placed as described, all arranged as set forth for the purpose specified.

## No. 60,890. Gang-Plough. (Charrue-buttoir.)



George Washington De Witt, San Ardo, California, U.S.A., 10th August, 1898; 6 years. (Filed 25th July, 1898.)

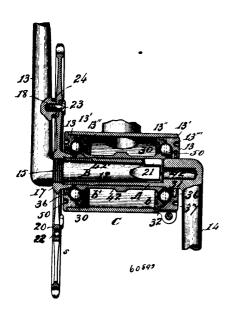
Claim.—1st. In a gang-plough having a triangular supporting-frame with one of the bases thereof serving as the front of the plough, the wheels approximately at the angles of said frame, said wheels journalled in forks having vertically extending shanks or standards, bearings in which the shanks or standards are both slidable and turnable, spaced collars on the shanks or standards and forming annular channels, levers secured between said collars at points intermediate of their ends, vertically disposed standards to which the outer ends of the levers are adjustably connected whereby the shanks or standards are vertically moved, other levers engaging the shanks or standards and movable in lateral planes to turn the former in their bearings and thereby adjusting the angle of the wheel and means for securing the free ends of said levers. 2nd. In a gang-plough of the character described, a swivel-wheel at one angle of the front of the triangular frame, adapted to travel upon the land, a second flanged furrow-wheel at the other front angle of the frame and a corresponding flanged furrow-wheel at the rear angle of said frame, forks in which the furrow-wheels are mounted, having upwardly extending shanks or standards movable vertically and axially bearings on the frame, levers secured between their ends, to said shanks or standards, vertically-disposed standards to which the outer ends of the levers are adjustably secured whereby the shanks or standards are movable in vertical planes, other levers fixed to the upper ends of the shanks or standards and movable in horizontal planes to turn the shanks or standards axially whereby the wheels are set at an angle with the line of travel of the plough to correct the side thrust in either direction, vertically disposed rack-bars for the first named levers and horizontally-disposed rack-bars for the other levers, whereby said levers are 3rd. In a gang-plough, a frame of triangular shape havsecured. ing one of its bases serving as the front of the plough, a smooth swivel-wheel at one front angle of the frame adapted to run upon swivel-wheel at one front angle of the frame adapted to run upon the unploughed land and to freely swivel, a wheel at substantially the opposite front angle and another wheel at the rear angle of said frame, both of which latter wheels having a projecting flange adapted to enter the hard ground in the furrow to steady and hold the wheels from side thrust, means for independently turning the shanks or standards of the furrow-wheels to vary the angle of the latter, and levers pivoted at one end and engaging the shanks or No. 60,891. Churn. (Baratte.)



William H. Wortman and Charles A. Pettet, both of London Ontario, Canada, 10th August, 1898; 6 years. (Filed 2nd (Filed 2nd August, 1898.)

Claim. -1st. In a barrel churn, the combination with a barrel and trunnion supporting the same on the frame, of a crank secured to the end of one trunnion and lever-pivoted at one end on the frame, and a link connecting the end of the crank with the lever, as and for the purpose specified. 2nd. In a barrel churn, the combination with the barrel and trunnion supporting the same on the frame, of a crank secured to the end of one trunnion and provided with a reduced free end and button on the extreme end, the lever pivotally connected to the frame, the link pivotally connected to the lever and provided with a V-shaped longitudinal slit and hole in the link extending through the slit and encompassing the reduced end of the crank and the screw extending edgewise through the link, so as to contract the slit, as and for the purpose specified.

No. 60,892. Bicycle. (Bicycle.)

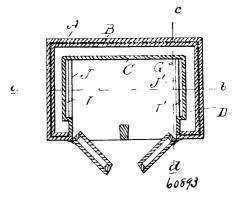


William Wallace Tucker, Hartford, Connecticut, U.S.A., 10th August, 1898; 6 years. (Filed 1st June, 1898.)

Claim.-1st. The combination of a bearing sleeve, a crank shaft extending through and rotatable in the bearing sleeve and comprising two detachable sections, one of which has a tapered bore and forming enamelled plates comprising a base-plate, a matrix located the other of which is tapered and extends into said bore and means thereon, said matrix receiving the plate, a cover hingedly connected

in unison. 2nd. The combination of a bearing sleeve, a crank shaft extending through and rotatable in the bearing sleeve and comprising two detachable sections, one of which has a tapering bore and the other of which is tapered and extends into said bore, said sections having, respectively, right and left hand screw threads near one end of the crank shaft, cranks secured to said shaft sections, a sprocket wheel having right and left hand screw threads for engaging the sections of the shaft and wedging said sections together for rotation in unison, and fastening means for the sprocket wheel. 3rd. The combination of a bearing sleeve, a crank shaft extending through and rotatable in the bearing sleeve and comprising two detachable sections, one of which has a tapering bore and the other of which is tapered and extends into said bore, said sections having, respectively, right and left hand screw threads near one end of the crank shaft, cranks secured to said shaft sections, a sprocket wheel having right and left hand screw threads for engaging the sections of the shaft and wedging said sections together for rotation in unison, and fastening means for securing the sprocket wheel to one of the cranks at any desired point circumferentially of the sprocket wheel. 4th. In a ball bearing, the combination of a fixed and a movable bearing cone, and a ball-separating retaining ring surrounding the balls and having ball sockets formed in said ring for separating the balls. 5th. In a ball bearing, the combination of a movable bearing cone, a ball-separating retaining ring surrounding the balls and having ball sockets formed in said ring for separating the balls, and a holding ring detachably secured to the cone for maintaining and retaining ring and the balls in position in the cone.

No. 60,893. Refrigerator. (Réfrigérateur.)



George C. Perkins, Detroit, Michigan, U.S.A., 10th August, 1898; 6 years. (Filed 25th July, 1898.)

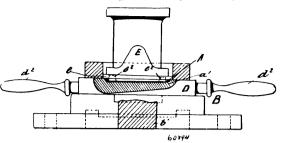
Claim.—1st. In a refrigerator, a refrigerating-chamber having an upper and lower compartment, two vertical end partitions in said upper compartment forming between them and the adjacent upright walls of the refrigerating-chamber narrow air flues or passages communicating with the upper compartment at different heights and communicating with the lower compartment at different neights and communicating with the lower compartment at or near its top, the refrigerating-chamber having air-passages through the upright walls thereof into the top of the upper compartment, the air-passage adjacent the flue having the lower communication with the upper compartment being located below the air-passage adjacent the other air-flue, substantially as described. 2nd. In a refrigerator, the combination of the outer inclosing walls of non-conducting construction, a refrigerating-chamber inclosed within and having its walls separated by an air space from the outer walls, an upper compartment for the ice formed in said refrigerating-chamber, two vertical end boards of different heights in said compartment forming narrow vertical air-flues between them and the side walls of the refrigerating-chamber respectively and through which the upper compartment communicates into the compartment below, and air-passages connecting the ice holding compartment upon the sides near the top directly with the outer air, said passages being placed above the end boards at different heights respectively and communicating also into the air-space between the outer walls and the refrigeratingchamber.

No. 60.894. Enamelled Plate Manufacturing Process and Apparatus. (Procédé et appareil pour la fabrication de plaques émaillées.)

Werner Frauz Stiel, Cologne, Germany, 10th August, 1898; 6 years. (Filed 23rd December, 1897.)

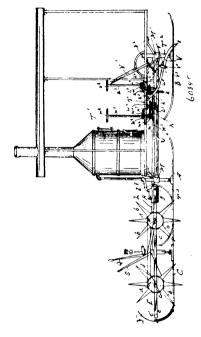
Claim.-1st. The process of manufacturing enamelled plates, which consists in coating the plate with enamel of interior quality, then heating said enamel coated plate, then subjecting said plate, while warm, to the action of a compressing apparatus, and then forming the inclined tenons on the rear face of the plate, while said plate is still warm, substantially as described. 2nd. A machine for for wedging the two sections of the crank shaft together for rotation to said matrix; and a punch adapted to give form to said plate when

used in connection with said matrix, substantially as described.  $3\mathrm{rd}$ . A machine for forming enamelled plates, comprising a base-



plate, a matrix located thereon, a slide having movement on said matrix, said slide being provided with rotary rowels, a cover hingedly connected to said matrix, and a punch, substantially as described.

No. 60,895. Sleigh and Carriage. (Traineau et carrosse.)

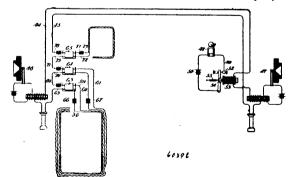


John M. Trull, of Yrull, Colorado, U.S.A., 10th August, 1898; 6 years. (Filed 9th March, 1898.)

Claim,-1st. In a sleigh having forward and rear runners, said runners connected in pairs each by a pivoted transverse piece said pivoted transverse piece being connected to the block-pieces M M, and movable vertically at its ends, a connection between said transverse piece and the runners, and means for moving same a designated distance, substantially as set forth. 2nd. In a sleigh having forward and rear runners, said runners inovably connected in pairs by a pivoted transverse piece, said pivoted transverse piece being connected to the block-pieces M M, and movable vertically at its ends, a horizontal bar moveably connected with said transverse piece, and means for turning said horizontal bar a designated distance, substantially as set forth. 3rd. In a sleigh having forward and rear runners, said runners connected in pairs each by a pivoted transverse piece, a horizontal bar secured movably to said transverse piece, a piece having a knuckle joints secured to each end of said horizontal bar, and knuckle joints formed in the opposite end of each of said pieces secured to said bar, at right angles to said first mentioned knuckle-joint, to movably connect the said horizontal bar with the said transverse pieces, and means for turning the said horizontal bar, substantially as set forth. 4th. In a sleigh having forward and rear runners, said runners movably connected in pairs each by a pivoted cross-piece, a horizontal bar movably secured to said cross-piece, a cog-wheel upon said bar, a pinion meshing with said cog-wheel, said pinion secured upon a shaft suitably journaled, said shaft also carrying a bevel-gear, another bevel-gear connected with a hand-wheel and meshing with said first mentioned bevel-gear, substantially as set forth. 5th. In a sleigh having runners, said substantiany as set form. 5th, in a siegn naving runners, said runners movably connected in pairs each by a transverse piece pivoted to the machine-frame, the said transverse piece having a vertical movement at its ends, and means for imparting by said transverse piece a positive vertical movement to said runners, substantially as

by a pivoted transverse piece, means for imparting a positive vertical movement to said runners, and a guide to direct said movement of each of said runners, substantially as set forth. 7th. In a sleigh having runners, said runners movably connected in pairs by pivoted transverse pieces, means for imparting a positive vertical movement to said runners, a vertical guide piece connected with each of said runners, and a socket connected with the sleigh-frame for receiving runners, and a socket connected with the sleigh-frame for receiving said vertical guide-piece, substantially as set forth. 8th. In a vehicle having runners, and a device for raising and lowering said runners on one side of said vehicle and oppositely affecting the runners on the other side thereof, a lock consisting of a piece for removably engaging a portion of said raising and lowering device, to arrest the movement thereof, substantially as set forth. 9th. A convertible sleigh and wheeled vehicle comprising a frame having runners, propelling-wheels having radial arms or blades and means for driving said wheels, a friction-brake applied to said propelling-wheels, means for regulating the depth of the projecting of the propeller-blades below the runners, a steering device, and means for adjusting the below the runners, a steering device, and means for adjusting one relative positions of the runners to maintain the platform in an even plane on uneven roads, together with means for adjusting wheels to said vehicle in place of the runners, substantially as set forth. 10th. In a power-sleigh the combination of vertically-movable and self-adjustable runners, a pair of propelling-wheels arranged tandem-wise, means for driving said wheel-, and means upon said wheels for engaging with the surface of the path travelled, substantially as set forth. 11th. A power-sleigh having a pair of propellingwheels pivoted thereto tandem-wise, means for driving said wheels comprising a crank on one of said wheels and a disc or drum on the other of said wheels, a connecting-rod between said crank and disc, a pitman-rod pivotally connected with said connecting-rod, and a piston-rod connected with said pitman-rod, all to rotate the propelling wheels, substantially as set forth. 12th. In a power-sleigh, having a propelling-wheel whose periphery extends below the sleigh-runners, a post or upright pivotally secured to a cross-spring borne by uprights, a lever having a rectangular, arm, a friction-piece encircling said post and a link pivotally connecting said arm and friction-piece, and arranged to be operated by said lever to raise the propelling-wheel, substantially as set forth. 13th. In a power-sleigh, having a propelling-wheel, a friction-brake and means for applying said brake, substantially as set forth. 14th. In a power-sleigh, having a propelling-wheel, a drum secured upon the shaft of said wheel, on either side thereof, a double lever and a band applied to the surface of each of said drums, said bands being connected with and operated by said lever, substantially as set forth. 15th. In a sleigh having vertically-adjustable forward and rear runners, bars connecting opposite forward and rear runners, and means for moving said bars to alter the relative and positive positions of two pairs of said runners, substantially as set forth. 16th. In a sleigh having forward and rear runners, rack bars connecting opposite forward and rear runners, a pinion at the point of intersection of said racks, a cog-wheel carried by said pinion and another pinion meshing with said cog-wheel, said second mentioned pinion connected with and operated by a hand-wheel, substantially as set forth. 17th. A snow-packer for sleighs comprising a semicircular sheet of metal and means for connecting the same, substantially as set forth. 18th. In a combined sleigh and wheeled vehicle, hooked bars adapted to support the frame and slidable vertically in guides arranged between said frame and said bars, the said hooked bars having alex-journals, substantially as set forth.

# No. 60,896. Automatic Electro Mechanical Circuit Closers. (Ferme-circuit éléctro mécanique.)

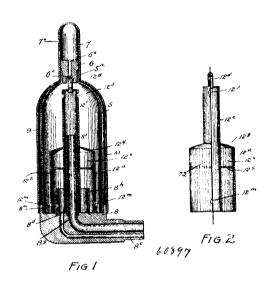


Charles Wesley Price, Newark, Essex County, New Jersey, and John Duncklee Gould, Brooklyn, New York, both in the U.S. A., 11th August, 1898; 6 years. (Filed 26th November, 1897.)

said shaft also carrying a bevel-gear, another bevel-gear connected with a hand-wheel and meshing with said first mentioned bevel-gear, substantially as set forth. 5th. In a sleigh having runners, said runners movably connected in pairs each by a transverse piece pivoted to the machine-frame, the said transverse piece having a vertical movement at its ends, and means for imparting by said transverse piece a positive vertical movement to said runners, substantially as set forth. 6th. In a sleigh having runners movably connected in pairs

lever serving to move the spring plate out of engagement with the armature lever, and also serving to return the stop lever to its normal position, substantially as specified. 2nd. An electro-mechanical controller for an electric circuit, comprising a spring-driven motor, a screw shaft operated by said motor, a main circuit-making and breaking disc on said screw shaft, a pivoted lever having a pin engaging between the threads of said screw shaft, a pin extended laterally from said lever, a pin extended from the screw shaft at its end opposite that upon which the disc is mounted, and adapted to engage with the pin on the lever, a shifting lever extended from the first-named lever, an electro-magnet comprised in a local circuit, an armature lever operated by said electro-magnet, for releasing the motor, a spring plate for holding said armature lever in its inoperative position, and an arm on the shifting lever for moving said spring plate out of engagement with the armature lever, substantially as specified.

#### No. 60,897. Air Valve. (Soupape à air.)

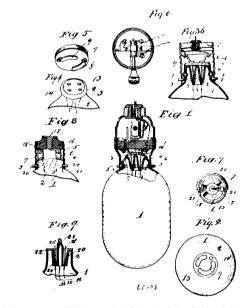


The Argon Manufacturing Company, assignee of Charles F. Paige and Samuel C. Arnold, both of Denver, Colocado, U.S.A., 11th August, 1898; 6 years. (Filed 7th June, 1898.)

Claim.—1st. A float for use in valves, comprising two tubes, one inclosed within the other and connected by two separated dia-phragms, which form an air-tight chamber, both tubes being open of its wall and the outer tube having an orifice in the lower part of its wall and being closed at the top by the upper diaphragm, the inner tube projecting above the upper diaphragm and having an orifice in its upper portion which is provided with a valve. 2nd. In a valve of the character described, the combination with the base having two passages communicating with the radiator, of the valve chamber having an outlet at the top thereof, and an inlet tube communicating with one of said passages, said tube projecting upwardly and opening into said chamber a suitable distance above its base, the outer walls of said inlet tube and the inner walls of the valve chamber forming sides of a basin adapted to hold liquid and communicating with the other passage in the base, a partition surrounding said inlet tube and dividing said base into two separate liquid chambers, a float consisting of two inverted chambers inclosed one within the other, both being open at the bottom and connected by two separated diaphragms forming an air-tight chamber, the upper diaphragm closing the top of the outer chamber, which has one or more orifices near its bottom, the inner chamber of the float having an orifice in its upper portion, the walls of said float chamber pene-trating into said liquid chambers, and a valve operated by said float and inclosing the said air outlet when the float rises. 3rd. In an air valve, the combination with the base, the float, and the enclosing shell of the outer casing attached to the base and surrounding the shell, an air space being left between the shell and the casing, and a cap applied to the top of the shell and engaging the outer casing whereby the latter is held securely in place. 4th. In a valve of the character described, the combination of a base connected with the radiator and having two passages, the valve chamber having an outlet at the top thereof, and an inlet tube communicating with one of the passages in the base, said tube projecting upward and opening into said chamber at some distance from the base, the outer walls of the said inlet tube and the inner walls of the valve chamber forming the sides of a basin adapted to hold liquid and communicating with the other

bers inclosed one within the other, both being open at the bottom, the outer chamber being closed at the top and having one or more orifices near its bottom, the inner chamber of the small orifice in its upper portion, the walls of said float chamber penetrating into said liquid chambers, and a valve operated by said float and closing the said outlet when said float rises. In a valve of the character described, the combination of a base In a valve of the character described, the combination of a base connected with the radiator and having two passages, the valve chamber having an outlet at the top thereof, and an inlet tube communicating with one passage of the base and projecting upward trable distance above the base, the outer walls of the inlet tube and the inner walls of the ralve chamber forming the sides of a basin adapted to hold liquid and communicating with the other passage adapted to hold liquid and communicating with the other passage in the base, a partition surrounding said inlet tube and of a less height than said tube and dividing said basin into two separate liquid chambers, said partition having one or more orifices formed a short distance from its bottom, a float consisting of two inverted chambers enclosed one within the other and both open at the bottom, the outer chamber being closed at the top and having one or more orifices near its bottom, the inner chamber having an orifice in its upper portion, the walls of said float chamber penetrating into said liquid chambers, and a valve operated by said float and closing said inlet when the float rises. 6th. In a valve of the character described, the combination of a base connected with the radiator and having two passages, a valve chamber having an outlet at the top thereof, and an inlet tube connected with one assage of said base and projecting upward from its bottom and opening into said chamber at a suitable distance above the base, the outer wall of said tube and the inner wall of said chamber forming the sides of a basin adapted to hold liquid and communicating with the other passage in the base, a float open at the bottom and having an air chamber in its upper portion and a separate chamber communicating with the inlet tube connected with the base and provided with one or more small orifices, said float projecting downward into said basin and having one or more orifices located near its bottom, and a valve operated by said float for closing said outlet in the valve chamber.

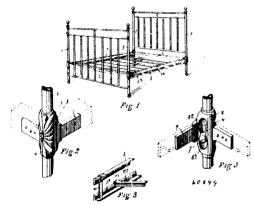
## No. 60,898. Incandescent Lamp. (Lampe incandescente.)



John F. Lister and William Selah Chamberlain, both of Cleveland, Ohio, U.S.A., 11th August, 1898; 6 years. (Filed 19th March, Ohio, U.S.A., 11th August, 1898; 6 years.

Claim.—1st. In an incandescent lamp, the combination with a bulb, provided with two filaments and two pairs of terminals, the said filaments being placed side by side, of a base and circularly shaped spring contacts therein, one of the said contacts being shorter than the other, whereby the shorter contact will engage only one terminal at a time, and means for rotatably securing the bulb to the base, substantially as described. 2nd, In an incandescent lamp, provided with two filaments arranged side by side, the combination therewith and with the individual terminals of the filaments exposed upon an insulating disc, of a base provided with switch mechanism, and circularly shaped contacts for the lamp circuit mounted upon said base, one of said contacts being shorter than the other, and means for rotatably supporting the bulb upon the base, substantially as described. 3rd. In an incandescent lamp, the combination with a bulb, base passage in the base, a partition surrounding said inlet tube and dividing said basin into two separate liquid chambers, said partition their terminals extending through the bulb, and individually exposed having one or more orifices, a float consisting of two inverted champaigness and two circuit contacts in the base, adapted to make contact with the filaments, one pair at a time, when the bulb is rotated upon the base, and means for securing the bulb rotatably in the socket, consisting of a wire spring upon the socket and an annular recess in the bulb, substantially as set forth. 4th. In an incandescent lamp, a bulb sealed at the base extremity and provided with two filaments of equal candle power arranged side by side, the said filaments being provided with terminals exposed upon the exterior of an insulating surface and individually metal coated, in combination with two spring contacts, one being shorter than the other to include only one terminal at a time, a metallic ring over the stem of the lamp provided with an annular depression, and a wire spring enclosing one half of the base, the two extremities of which project inwards and into the annular depression, whereby the bulb is secured rotatably to the base, substantially as described. 5th. In an incandescent lamp, a bulb stem provided with an annular recess and central tube at the extremity of which the lamp is sealed, in combination with an insulating filling for the annular recess in the stem, a protecting disc, and a multiple number of filaments arranged side by side and of equal candle power, the extremities of which extent through said disc and filling and end in metal terminals, substantially as described.

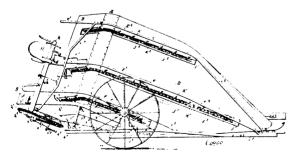
## No. 60,899. Bedstead. (Bois de lit.)



The Foster Bros. Manufacturing Co., assignee of William S. Foster, all of Utica, New York, U.S.A., 11th August, 1898; 6 years. (Filed 14th July, 1898.)

Claim.-1st. The combination in an extension bedslat of the two angle-sections thereof placed back to back and two T-shaped holders, the st m portion of which occupies a position between the adjacent backs of the sections and having hooked lips embracing the edges of the sections, substantially as set forth. 2nd. The combination in a bedstead of a sleeve secured to the post having a lateral projection and a headed projection, a cross-bar secured to the lateral projection, a side rail, a rail fastener secured on the end of the side rail having a pair of oppositely-disposed keyhole-like openings adapted to receive a pair of oppositely supposed two pole-like openings analyted or each earlier of the sleeve, substantially as set forth. 3rd. The combination in a bedstead of a post having a headed projection, a rail fastener secured to the end of the side rail having a pair of oppositely-disposed keyhole-like openings, adapted to receive and engage on the headed projections, substantially as set forth.

#### No. 60,900. Harvester. (Moissonneuse.)



The Johnston Harvester Co., assignee of George Albert Farrall, all of Batavia, New York, U. S. A., 11th August, 1898; 6 years, (Filed 25th July, 1878.)

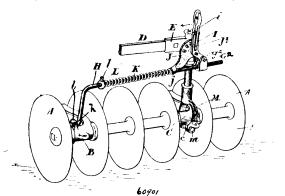
Claim. -1st. The combination with the cutter and the binder mechanism, of a platform arranged lengthwise with reference to the line of draft and upright but inclining toward the stubbleward side, so that its bearing surface faces grainward and upward, and a longitudinal conveyor which moves the grain along the inclined face of the platform, substantially as set forth. 2nd. The combination

lengthwise with reference to the line of draft and upright but inclining toward the stubbleward side, so that its bearing surface faces grainward and upward, a binder deck extending stubbleward from the rear end of the platform, and a longitudinal conveyor which moves the grain along the bearing faces of the platform and binder deck, substantially as set forth. 3rd. The combination with the cutter and the binder mechanism, of a platform arranged lengthwise with reference to the line of draft and upright but inclining toward the stubbleward side, so that its bearing suface faces grainward and upward, and a binder deck extending stubbleward from the rear end of the platform and inclining forwardly, the inclination of the platform and binder deck being at the same angle, substantially as set 4th. The combination with the cutter and the binder mechanism, of a platform arranged lengthwise with reference to the line of draft and upright but inclining toward the stubbleward side, so that its bearing surface faces grainward and upward, a binder deck which extends stubbleward from the rear end of the platform and conveying belts running rearwardly along the bearing face of the plat-form, thence stubbleward along the bearing face of the deck and thence forwardly to the front end of the platform, substantially as set forth. 5th. The combination with the cutter and the binder mechanism, of a platform arranged lengthwise with reference to the line of draft and upright but inclined toward the stubbleward side, so that its bearing surfaces faces grainward and upward, a binder deck extending stubbleward from the rear end of the platform and inclining forwardly, conveyer belts passing lengthwise of the platform and binder deck and supported on wheels or rollers, and needle and knotter shafts arranged adjacent to the binder deck, said platform and binder deck, the pivots of the conveyer wheels, and the needle and knotter shafts being arranged at the same angle, substantially as set forth. 6th. The combination with the cutter and the binder mechanism, a platform arranged lengthwise with reference to the line of draft and upright but inclining toward the stubbleward side, so that its bearing surface faces grainward and upward, and a vertically adjustable bottom arranged along the lower portion of the platform and adapted to support the butts of the stalks, substantially as set forth. 7th. The combination with the cutter and binder mechanism of a platform arranged lengthwise with reference to the line of draft and upright but inclining toward the stubbleward side. so that its bearing surface faces grainward and upward, a binder deck which extends stubbleward from the rear end of the platform, belt conveyers which run rearwardly along the bearing face of the platform, thence stubbleward along the bearing face of the deck and thence forwardly to the front end of the platform, and guide bars which are arranged grainward opposite the belt conveyers, substantantially as set forth. 8th. The combination with the upright longitudinal platform, the upright binder deck extending stubbleward from the rear end of the platform and the binder mechanism, of a conveyer belt arranged lengthwise of the platform and binder deck and provided with teeth which are pivoted to the conveyer belt to fold back on the same when unsupported, a tooth supporting guide arranged in the binder deck and extending stubbleward from the junction of the platform and binder deck, said guide being pivoted at its front end and capable of swinging forwardly at its rear end, and connections between said guide and the binder mechanism, whereby the guide is swung forwardly to release the teeth when they are not required to feed, substantially as set forth. 9th. The combination with the upright longitudinal platform, the upright binder deck extending stubbleward from the rear end of the platform and the binder mechanism, of a conveyer belt arranged lengthwise of the platform and binder deck and provided with teeth which are pivoted to the conveyer belt to fold back on the same when unsupported, a sprocket-wheel arranged at the junction of the platform and binder deck and a stubbleward sprocket wheel arranged form and binder deck and a stubbleward sprocket-wheel arranged in the binder deck for supporting the rear portion of said conveyer, a tooth supporting guide pivoted in front of said first-mentioned sprocket and extending toward the stubbleward sprocket-wheel, and connections whereby said guide is shifted from the binder mechanism, substantially as set forth. 10th. The combination with the longitudinal platform, the binder deck extending stubbleward from the rear end of the platform and the binder mechanism, of a conveyer belt arranged lengthwise of the platform and binder deck and provided with pivoted feeding teeth, a rock shaft arranged near the junction of the platform and binder deck and provided with a guide bar adapted to hold the teeth in their operative position in passing along the binder deck, and a rod attached to an arm on the needle shaft and having a sliding connection with an arm of said rock shaft, substantially as set forth.

## No. 60,901. Disc Harrow. (Herse à disque.)

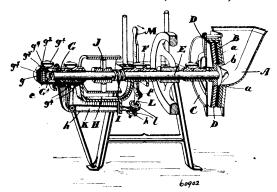
William H. Wortman and Charles A. Pettet, both of London, Ontario, Canada, 12th August, 1898; 6 years. (Filed 2nd (Filed 2nd August, 1898.)

Claim.-1st. The combination with the gangs, the bearings, the standard pivotally connected to the outer bearings and the beam secured to the top of the standard, of a rod provided with a bent end, means for removably connecting such rod to the inner bearing, a collar on the rod, a spring, a stop for the opposite end of the spring, and means for changing the position of such stop to vary the compression force of the spring, as and for the purpose specified. 2nd. The combination with the gangs, the bearings, the standard with the cutter and the binder mechanism, of a platform arranged pivotally connected to the outer bearing and the beam secured to the top of the standard, of the rod provided with a bent end, means for removably connecting such rod to the inner bearings, a collar on



the rod, a spring, a quadrantal plate having an open boss at one end and arc-shaped holes therein, a lever pivoted to the quadrantal plate and co-acting therewith and a jaw connected to the standard upon which such lever is fulcrumed at the bottom, as and for the purpose specified. 3rd. The combination with the beam, bracket and socket therein, the socket of which is provided with a lower annular flange having inwardly extending arc-shaped lugs, of the standard provided with outwardly projecting arc-shaped co acting lugs, which are designed to be turned to insert the standard in position and to rest within the inwardly extending arc-shaped lugs to hold it in position, as and for the purpose specified.

#### No. 60,902. Grain Grinder. (Moulin à blé.)



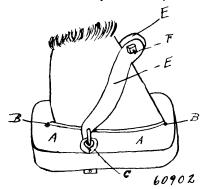
William H. Wortman and Charles A. Pettet, both of London, Ontario, Canada, 12th August, 1898; 6 years. (Filed 2nd August, 1898.)

Claim.—1st. In a grain grinder, the combination with the stationary plate, of the adjustable plate and shaft to which it is secured, suitable bearings for the shaft, a longitudinal adjustable bearing at one end slidably supported on the frame, and means for imparting to such bearing the requisite movement, as and for the purpose specified. 2nd. In a grain grinder, the combination with the stationary plate, of the adjustable plate and shaft to which it is secured, suitable bearings for the shaft, a longitudinal adjustable bearing at one end slidably supported on the frame, downwardly projecting lugs extending from the bearing, a bell-crank lever pivoted in the frame and having the upper end extending between the lugs, the operating lever pivoted on the frame and a flexible brake-joint connection between the operating lever and the end of the bell-crank lever, as and for the purpose specified. 3rd. In a grain grinder, the combination with the stationary plate, of the adjustable plate and shaft to which it is secured, suitable bearings for the shaft, a longitudinal adjustable bearing at one end slidably supported on the frame, downwardly projecting lugs extending from the bearing, a bell-crank lever pivoted in the frame and having the upper end extending between the lugs, the operating lever pivoted on the frame, a flexible brake-joint connection between the perating lever and the end of the bell-crank, and a spring encircling the main shaft between a fixed point of the frame and a collar or hub on the main shaft, as and for the purpose specified. 4th. In a nuo on the main shart, as and for the purpose specified. 4th. In a grain grinder, the combination with the stationary plate, of the adjustable plate and shaft to which it is secured, suitable bearings for the shaft, a longitudinal adjustable bearing at one end slidably supported on the frame, downwardly projecting lugs extending from the bearing, a bell-crank lever pivoted in the frame, and having the upper end extending between the lugs, the operating lever pivoted on the frame a link pivoted by contend to the letters. pivoted on the frame, a link pivotally connected to the bottom end of the operating lever and extending through a hole in the bell-crank lever, and the nuts screwed on the link and having the con-

vex faces arranged at each side adjacent to the hole in the lever, as and for the purpose specified. 5th. The combination with the shaft and adjustable bearing, of the cone secured to the reduced square end of the shaft, the cup and balls and hinged oil cup, all arranged as and for the purpose specified.

No. 60,903. Muck Shoe for Horses.

(Fer à boue pour chevaux.)

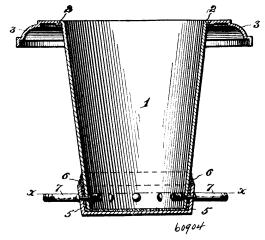


Oswell Parks, Sheffield, Ontario, Canada, 12th August, 1898; 6 years. (Filed 8th July, 1898.)

Claim...-The combination in a muck shoe for horses of the plate A having the calk holes B, B, B, with the metal clasps E, E, and the metal bar D, substantially as and for the purpose hereinbefore set forth.

## No. 60,904. Hot Air Attachment for Stoves.

(Attache de calorifère pour poêles.)



John H. J. Clare, Hammond, Indiana, U.S.A., 12th August, 1898; 6 years. (Filed 27th June, 1898.)

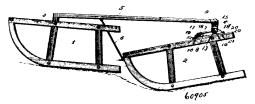
Claim.—The combination with a heating stove or furnace, of an attachment comprising a ring removably fitted to the upper end of the stove, a conico-cylindrical body of sheet metal having an outer-flange at its upper end by means of which it is removably suspended from the said ring, a shallow cast-metal pan having its rim portion flaring and embracing the lower smaller end portion of the sheet-metal body and firmly attached thereto, and pipes having their outer ends extending through the sides of the stove-body and their inner ends passing through the rim of the pan and the lower portion of the body projecting a short distance into the said body, and arranged relatively at an angle to each other, substantially as specified.

# No. 60,905. Bob sled. (Traineau-jumeau.)

Lewis Wiley, Westoreland, New York, U.S.A., 12th August, 1898 6 years. (Filed 29th July, 1898.)

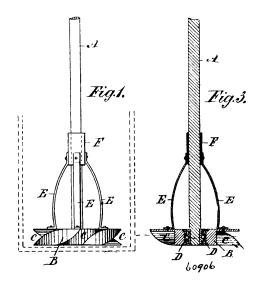
Claim.—A coupling for the runner and bolster of a sled, consisting of two members adapted to be secured to the runner and bolster respectively, the running member consisting of a plate formed in two sections and an upwardly-extending cross-sectionally T-shaped portion integral with one of the plate-sections and projecting at one end therefrom to extend over the other plate-section, and the horizontal flanges of the T-shaped portion being curved downwardly at each end, the said plate-sections and horizontal flanges forming ways closed at each end, and the bolster member having spaced depending ears provided with inwardly-projecting lugs to enter the ways in the

runner member, and a V-shaped portion between the ears to engage the upper face of the runner member, and the plate-section which is



separate srom the T-shaped portion being independently removable to permit the lugs to be entered in or withdrawn from the ways, substantially as described.

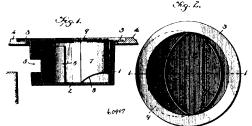
No. 60,906. Churn Dasher. (Cylindre de baratte.)



Henry Trull, Oshawa, Ontario, Canada, 12th August, 1898; 6 years. (Filed 30th July, 1898.)

Claim.—A vertically operating churn dasher, consisting of the shaft A, having a circular head or disc B, centrally pivoted thereto, at one end to rotate, and provided with spiral notches C, around the circumference, to rotate the head reversely at each change of riciprocation of the shaft, and a socket or tube F, through which said shaft passes, and connected to said head by strips or rods E, said tube and strips forming a conical frame, as and for the purposes set forth.

No. 60,907. Stove Attachment. (Attache de poêle.)

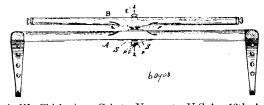


David Yrénée Bruneau, Sherbrooke, Quebec, Canada, 12th August, 1898; 6 years. (Filed 27th July, 1898.)

Claim.—1st. An attachment for stoves, comprising a pan removably mounted in the top of said stove, said pan being adapted to receive and centain the fire, and a sinuous passage-way formed within said pan, having its outlet in juxtaposition to the fine of the stove, substantially as set forth. 2nd. An attachment for stoves, comprising a pan portion removably located in the top of the stove, an opening formed at the rear of said pan portion, and plates mounted in said pan portion to form a sinuous passage-way through said pan, the outlet of said passage-way being an opening in said pan portion, substantially as described. 3rd. An attachment for stoves, comprising a pan portion removably located on a stove, said pan portion being adapted to receive and contain the fire, an opening formed in the periphery of said pan at the rear thereof, a plate secured to said pan in front of said opening, said plate extending upward to within

a short distance of the top of said pan, a plate secured at the front of said pan, said plate having an opening formed at its lower edge, and a lid mounted on said pan and partially enclosing the top thereof, substantially as described. 4th. An attachment for stoves, comprising a pan portion, a sinuous passage-way formed therein, and a removable attachment secured within said pan and adapted to form separate fire pots, substantially as described.

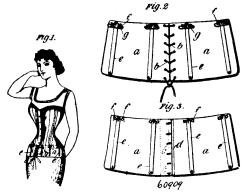
No. 60,908. Whiffletree Couplings. (Joint de palonnier.)



Frank W. Chickering, Cabot, Vermont, U.S.A., 12th August, 1898; 6 years. (Filed 27th July, 1898.)

Claim.—1st. In a whiffletree-coupling, the whiffletree, the hard metal lining D rigid in the bore therein and provided with the plate K extending under and secured to the under side of the whiffletree, said plate being formed with the downwardly projecting annular flange or cup K¹, the cross-bar, the hard metal lining C rigid in the bore therein and provided with the flange or plate F extending over and secured to the upper surface of the cross-bar, said plate being provided with the integral metallic platform or circular block F¹ formed with the annular groove F¹¹ for the reception of the balls H, said cup or flange extending down over the platform or block as described, the bolt E extending down through the said linings D and C, and a safety-spring one end of which is secured to the bolt between the head thereof and the upper surface of the whiffletree, and the other end is secured to the bolt below the cross-bar and held in such position by a suitable nut, substantially as described. 2nd. In a whiffletree, said plate being provided with the metal lining D secured thereto and formed with the plate K extending under the whiffletree, said plate being provided with the downwardly-extending flange or cup K¹, the cross-bar provided with the inetal lining C formed with the plate F extending over the surface of the cross-bar, said plate being provided with the circular platform or block F¹ extending up into the said cup, the bolt E extending through said linings in the whiffletree and cross-bar, the spring L provided at its lower end with the oppositely-extending spring arms S, the upper end of said spring being secured to the bolt between the head thereof and the upper side of the whiffletree and the lower end being secured to said bolt below the cross-bar, said spring-arms being formed to hold the portion of the spring next the lower end of the bolt normally at a short distance below the cross-bar, and a nut adapted to regulate the tension of the spring at that point thereby holding the two parts of the coupling t

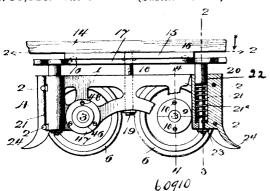
No. 60,909. Attachment for Corsets. (Attache de corset.)



Annie Wardroper, Chelsea, London, England, 12th August, 1898; 6 years. (Filed 27th July, 1898.)

Claim.—1st. A corset attachment consisting of an abdominal belt provided with vertical stiffening ribs at the parts where said belt is attached to the corset, substantially as described. 2nd. A corset attachment consisting of an abdominal belt composed of a plurality of connected parts provided with vertical stiffening ribs at the parts where said belt is attached to the corset, substantially as described. 3rd. A corset attachment consisting of an abdominal belt composed of a plurality of parts which are connected together by lacing and which are provided with vertical stiffening ribs and with eyelet holes at each side of said ribs for the reception of the safety pins used for attaching the belt to the corset, substantially as described,

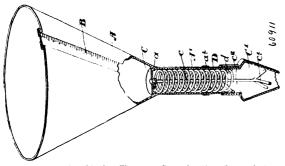
No. 60,910. Car Truck. (Chassis de chars.)



Michael F. Noraconk, Milton, Pennsylvania, U.S.A., 12th August, 1898; 6 years. (Filed 20th July, 1898.)

Claim.—1st. In a car truck, the combination with a pair of side frames, of one or more spring pockets in said frames, a spring in each pocket and a plunger resting upon the spring, one or more bearings rigidly connected to one of said side frames, and a single wheel mounted to rotate upon each bearing, substantially as described. 2nd. A car truck, consisting of a pair of side frames fitting together and connected by suitable bolts, one or more bearings rigidly connected to one of said frames and a single wheel on each bearing, each wheel being located between the side frames and arranged to turn freely upon the bearing, substantially as described. 3rd. In a car truck, a pair of side frames connected together with suitable bolts, one or more bearings connected to the truck and provided with single wheels between the side frames, one or more spring pockets in the side frames of the truck, springs in said pockets and plungers resting upon the springs, said plungers being adapted to support the car body, substantially as described. 4th. In a car truck, the combination with two side frames rigidly connected to gether, one or more bearings rigidly connected to one of said frames, a two part box mounted to rotate on each bearing, rollers between the box and the bearing and a wheel mounted on the box, substantially as described. 5th. In a car truck, the combination of the two side frames, the bearing rigidly connected to one of said side frames and extending through the other, the two-part box upon the bearing, the sprocket or driving wheel upon the outer end of the box and the car wheel upon the box between the side frames, substantially as described. 6th. In a car truck, the combination of the two side frames, the bearing rigidly connected to one of said frames and extending through the other, the two-part box surrounding the bearing, the sprocket or driving wheel upon the outer end of the box bearing, the sprocket or driving wheel upon the outer end of the box and having a cup-shaped hub which embraces the box, and roller bearings between the box and the frame adjacent to the driving wheel, substantially as described. 7th. The combination of the car body, the plate connected to the car body, a second plate pivoted to the first, suitable ball bearings between said plates, plungers connected to the lower plate, and a car truck having spring boxes through which the plungers extend, and coiled springs upon which the plungers are supported, substantially as described. 8th. In a car truck, a pair of side frames connected together, one or more wheels mominted of side frames connected together, one or more wheels mounted between said frames upon suitable bearings and twe-part wheel fenders, the parts being formed integral respectively with the ends of the two side frames and extending downward and outward into proximity with the rail, substantially as described.

## No. 60,911. Funnel and Measure. (Entonnoir et mesure.)

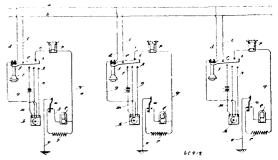


William Alexander Clarke, Toronto, Ontario, Canada, 12th August, 1898; 6 years. (Filed 4th March, 1898.)

Claim.—1st. In combination the funnel proper having a suitably graduated scale extending from top to bottom, a cylindrical lower end, a valve having a seat at the bottom of the funnel proper, the spout adjustably held on the cylindrical lower end, the rod connecting the spout and valve, and a spring for holding the valve on its

seat, as and for purpose specified. 2nd. In combination the funnel proper having a suitably graduated scale-extending from top to bottom, the cylindrical lower end, the valve having a seat at the bottom of the funnel proper, the spont having a cylindrical portion, the rod suitably connected to the top of the valve and at the bottom by a forked end to the spont and a spiral spring located underneath the valve, encircling the rod, and suitably connected at the top to the valve and at the lower end to the interior of the cylinder as and for the purpose specified. 3rd. In combination the funnel proper, having a cylindrical lower end, a valve having a seat at the bottom of the funnel proper and the cylindrical spout adjustably held on and closely fitting the lower cylindrical end of the funnel and provided with a flat bottom and centrally reduced cylindrical outlet, an annular washer fitting upon the flat bottom of the spout and the rod connecting the valve and spout, as and for the purpose specified.

No. 60,912. Telephone Systems. (Système de téléphone.)

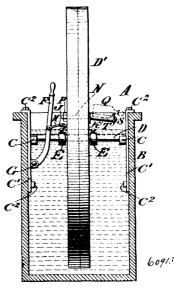


Burton Riley Dodge, Post Mill Village, Orange County, Vermont, U.S.A., 12th August, 1898; 6 years. (Filed 16th June, 1898.)

Claim.—1st. A party line telephone system having two metallic main leads and a plurality of stations, each station having a talking circuit, a signalling circuit and a telephone switch alternately closing the circuits, the signalling circuit comprising a signal bell, a generator and a resistance, the resistance being in parallel with the generator and in series with the bell, and the signalling circuit also comprising a switch for normally holding the resistance in the closed circuit and capable of throwing the bell in such circuit to the exclusion of the resistance. 2nd. A party line telephone system having two main metallic leads and a plurality of stations, each station comprising a talking circuit, a signalling circuit, and a telephone switch alternately closing the circuits, the signalling circuit having a ground top and the signalling circuit also having a signalling bell, a generator and a resistance, the resistance being in parallel with the generator and in series with the bell, and the talking circuit also having a switch for normally holding the resistance in the closed circuit and capable of throwing the bell into such circuit to the exclusion of the resistance.

## No. 60,913. Bottle Washer.

(Machine à laver les bouteilles.)



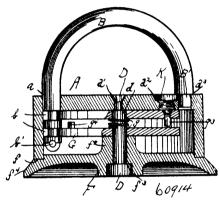
William John Cunningham, Philadelphia, Pennsylvania, U.S.A., 12th August, 1898; 6 years. (Filed 2nd August, 1898.

Claim.—1st. A bottle washing machine consisting of a tank, a wheel or disc rotatably mounted therein and holders projecting at

an angle from a side of said wheel, said holders being adapted to retain the bottles in position and said wheel having openings therein between said holders. 2nd. A bottle washing machine consisting of a tank, a shaft mounted therein, a wheel mounted on said shaft a lever suitably fulcrumed, connections from said lever to said wheel for shifting the latter longitudinally on said shaft, means for holding said wheel in the desired position and holders mounted in said wheel and projecting at an acute angle therefrom. 3rd. A bottle washing machine consisting of a tank and a shaft rotatably mounted therein, a wheel supported on said shaft and holders carried by said wheel, said holders having a trough-shaped body portion, a flange at one extremity thereof, and a threaded stem projecting from said flange out of an alignment with said body, the other extremity of said holder having a head projecting therefrom and a washer supported adjacent to said head. 4th. In a bottle washing machine, a tank, a disc or wheel rotatory supported therein, and holders supported on said wheel and inclined at an angle thereto, said holders being arranged in groups of three which are adapted to support a single bottle, and said wheel having openings therein intermediate said holders. 6th. A bottle washing machine consisting of a tank, a shaft mounted thereon, a wheel adjustable longitudinally on said shaft and inclined holders secured to said wheel, the latter having openings therein permitting the insertion therein of the necks of the bottles on said holders.

#### No. 60,914. Permutation Lock.

(Serrure à combinaison.)



Edward S. Hodgson, jr., Springfield, Illinois, U.S.A., 12th August, 1898; 6 years. (Filed 27th July, 1898).

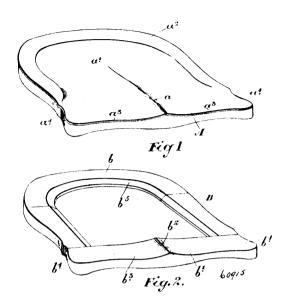
Claim.—1st. In a permutation-lock the means for changing the combination, consisting of a notched screw fitting in a hole in the shell of the lock, a rotatable tumbler having an-annular series of holes and a screw-pin fitting in the holes in said tumbler, in combination with a shell within which said tumbler turns and a shackle entering said shell and fitting in the notch in said screw, the annular series of the holes in said tumbler registering with the holes in said shell in which said screw fits, as set forth. 2nd. In a permutation-lock, the combination of a cylindrical shell having in its top holes a, a¹, a² and a³, adapted to receive the body of a shackle B, a central rivet D, a screw K and the free end B¹ of the shackle B respectively, a circular dial-plate having an annular ledge on which said shell fits, a central shouldered rivet connecting said dial-plate rotatably with said shell, a notched lower tumbler provided with an upwardly-projecting pin and secured to, and turning with said dial-plate, a notched upper tumbler rotatable on said central rivet, and having a circular series of holes registering with the hole a² in the top of the shell, a screw-pin fitting in any hole of the said circular series of holes in the top tumbler and adapted to engage with the pin on the lower tumbler, a spring between said tumblers, a shackle B fitting in the hole a in the top of the shell, and having circumferential channels in which the perimeters of the notched tumblers move, the free end B¹ of said shackle fitting in the hole a² in the top of the shell, and having a rotch conforming to the perimeter of said shackle, as set forth.

#### No. 60,915. Chair Seat. (Siège de fauteuil.)

John Cleghorn Mundell, Elora, Ontario, Canada, 12th August, 1898; 6 years. (Filed 29th July, 1898.)

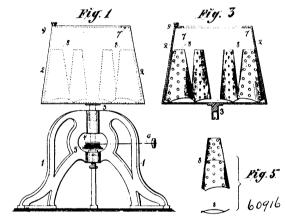
Claim.—1st. As a new article of manufacture, a saddle-chair seat consisting of an edge frame having a flat back portion, a front crosspice having a central ridge and curvular depression and a piece of wood veneer having a flat ledge designed to fit on the rear portion of the frame, a rear depression and a central front ridge and side curvulate depressions fitting upon the front cross-piece of the frame, the parts being suitably secured together as and for the purpose specified. 2nd. As a new article of manufacture, the saddle-chair seat consisting of an edge frame having a flat back portion, having bevelled inner edges, a front cross-piece having a central ridge and curvulate depressions and a piece of wood veneer having a flat edge designed to fit on the rear portion of the frame, a rear depression

having the edge thereof supported by the bevelled edge of the back portion of the frame, and a central front ridge and side curvulate



bearings fitting upon the front cross-piece of the frame, the parts being suitably secured together, as and for the purpose specified.

No.60,916. Churn. (Baratte.)



Carl Sigfrid Berghmark, 56 Riddaregatan, Stockholm, Sweeden, 12th August, 1898; 6 years. (Filed 23rd July, 1898.)

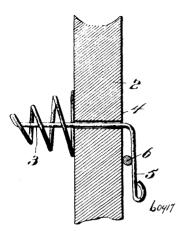
Claim... 1st. A churn consisting of an open, vertically rotating vessel 1, which is alternately rotated in opposite directions, and provided on its inner circumference with a number of radial blades or wings 8 eventually bent or curved transversely and having a number of apertures, so that the cream which is caused to rise along the inner side of the vessel by the rotation of the same may be submitted to vigorous working by impinging against and penetrating the blades or wings, when the direction of rotation of the vessel is reversed. 2nd. In a churn of the kind referred to in claim 1, the arrangement of consecutive blades or wings 8 in a group or groups bent in the same direction and in the opposite direction to the blades or wings of the preceding group (or groups) Figure 2, or in such a manner that alternate blades or wings are bent in opposite directions, Figure 4. 3rd. In a churn of the kind referred to in claim 1, the arrangement in which the blades or wings or a part of the same have the upper portion bent in the opposite direction to the lower portion thereof, substantially as described with reference to the drawing.

#### No. 60,917. Sample Holder. (Porte-échantillon.)

Nelson Marquis Brinkerhoff, Gibsonburg, Ohio, U.S.A., 13th August, 1898; 6 years. (Filed 19th July, 1898.)

Claim.—Ist. A device of the class described, comprising a coiled spring designed to frictionally engage the inner feee of a box or sample board, and a stem connected with the spring and designed to extend roughth a perfortion of the box or sample board and porvided at its outer end with an arm arranged at right angles to the stem, and adapted to clamp an article between it and the outer face

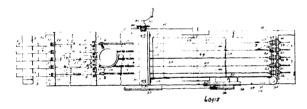
of the box or sample board, said stem and arm being adapted to be drawn outward and cable of rotation to arrange the arm and the



article in any desired position, substantially as described. 2nd. The combination with a box or sample board having a perforation, of a coiled spring frictionally engaging the inner face of the box or sample board, and a stem formed integral with and arranged within the coiled spring and passing through the perforation of the box or sample board from the inner face of the same to the outer face thereof, and provided at its outer end with an arm extending outward from it at right angles and adapted to engage the sample, said stem and arm being adapted to be rotated to bring the sample in the desired position, substantially as described.

#### No. 60,918. Tube Making Machine.

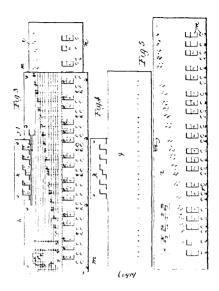
(Machine à faire des tubes.)



Marion Chester Stone, Washington, District of Columbia, U.S.A., 13th August, 1898; 6 years. (Filed 9th May, 1898.)

Claim. - 1st. In a tube machine the combination of a former, a mandrel therein, rolls between which the mandrel extend and means for driving said rolls. 2nd, In a tube machine the combination of a former, a mandrel extending therein, a feeding mechanism for advancing the tube through the former, and a cutting mechanism for severing the tube. 3rd. In a tube machine the combination of a fixed former, a fixed rod extending through said former, rolls between which the rod extends, and means for applying an adhesive composition to the paper before the passage of the tube through the rolls. 4th. In a tube machine the combination of a series of fixed horizontal longitudinal formers, a series of fixed rods extending through said formers, and upper and lower feeding rolls between which the rods extend. 5th. In a tube machine the combination with mechanism for advancing the tube longitudinally, of a rotary cutting disc arranged transversely of the tube, and means for moving one to and from the other to sever the tube. 6th. In a tube machine the combination with mechanism for forming and 6th. In a advancing the tubes longitudinally, of a rotary cutting discarranged transversely of the tube, and means for moving one to and from the other to sever the tube. 7th. In a tube machine the combination with mechanism for forming a series of tubes simultaneously, of mechanism for advancing said tubes longitudinally, a series of rotary cutting discs arranged transversely of the tubes, and means for moving one series bodily to and from the other to sever the tubes. 8th. In a tube machine the combination with mechanism for forming a series of tubes simultaneously, of mechanism for advancing said tubes longitudinally, a series of rotary cutting discs arranged transversely of the tubes and means for moving one series to and from the other and transversely of the axes of the tubes, 9th. In a tube machine the combination with a former, of rollers between which the tube extends, said rollers formed to conjointly and flexibly embrace the tube in its passage between them. 10th. In a tube machine the combination with a tube former, of two rubber rollers between which the tube extends, said rollers adapted to conjointly and flexibly embrace the tube between them.

# No, 60,919. Musical Note Reading Device, (Appareil à lire la musique.)

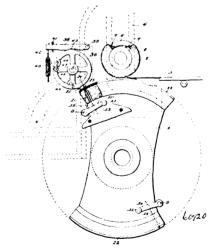


Enoch Gerard Wickersham, Glover Hill, Ohio, U. S. A., 13th August, 1898; 6 years. (Filed 12th May, 1898.)

Claim.-1st. The combination with a musical chart having perforated notes in a musical staff through which notes may be read, of a slide or card beneath provided with characters indicating the names of notes, fingering, or chords, substantially as set forth. 2nd. The combination in a musical chart of the slide i having the different signatures in sharps and flats and their corresponding scales and lettering of the instrument movable with the face card h having scales with perforated notes through which the various scales may be viewed, substantially as described and for the purpose specified.

#### No. 60,920. Plate Printing Press.

(Plaque de presse à imprimer.)



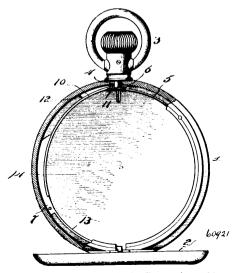
Judah Touro Robertson, New York City, U.S.A., 13th August, 1898; 6 years (Filed 12th May, 1998.)

Claim.—1st. In a plate printing press, the combination of the plate carrier, impression surface, independent gripper carrier, and mechanism adapted to be projected through the plate for lifting the printed sheet therefrom into operative engagement with the grippers mounted on said gripper carrier, substantially as set forth. 2nd. In a plate printing press, the combination of the plate carrier, impression surface, independent gripper carrier, and mechanism adapted to be projected through the plate for lifting the pointed sheet therefrom into operative engagement with the gripper carrier, said mechanism consisting of a series of pins moving through apertures in the plate carrier and plate, and means for projecting said pins through said plate and for withdrawing said pins flush with or beneath said plate substantially as set forth. 3rd. In a plate printing press, the combination with the plate carrier, an impression

surface, and an independent rotary gripper carrier, of mechanism adapted to be projected through the plate for lifting the printed sheet therefrom, and mechanism for checking the rotation of the gripper carrier in position to receive the sheet into operative engagement with said gripper carrier, substantially as set forth. 4th. In a plate printing press, the combination with the plate carrier, an impression surface, and an independent rotary gripper carrier of mechanism adapted to be projected through the plate for lifting the printed sheet therefron, and friction mechanism for checking the rotation of the gripper carrier in position to receive the sheet into operative engagement with said gripper carrier, substantially as set forth. 5th. In a rotary plate printing press, the combination with the plate cylinder, the impression cylinder, and an independent rotary gripper carrier, of means for feeding the sheet to be printed between the plate and impression cylinders after the printing contact between said cylinders has been established, and means for lifting the front edge of said sheet from the plate after receiving its impression into operative engagement with the gripper carrier, substantially as set forth. 6th. In a rotary plate printing press, the combination with the plate cylinder, the impression cylinder, and an independent rotary gripper carrier, of means for feeding the sheet to be printed between the plate and impression cylinders after the printing contact between plate and impression cylinders after the printing contact between said cylinders has been established, a series of pins adapted to be projected through apertures in the body of the engraved plate, and means for projecting and withdrawing said pins whereby the sheet, after receiving its impression, will be lifted into engagement with the gripper carrier, substantially as set forth. 7th. In a rotary plate printing press, the combination with the plate cylinder, the impression cylinder, and an independent rotary gripper carrier, of means of feeding the sheet to be printed between the plate and impression cylinders after the printing contact between said cylinders has been established, means for lifting the front edge of said sheet from the plate after receiving its impression, and mechanism for checking the rotation of the gripper in position to receive the lifted edge of said sheet into operative engagement with said gripper carrier, substantially as set forth. 8th. In a rotary plate printing press, the combination with the plate cylinder, the impression cylinder, and an independent rotary gripper carrier, of means for feeding the sheet to be printed between the plate and impression cylinders after the printing contact between said cylinders has been established, means for litting the front edge of the sheet from the plate after receiving its impression, and friction mechanism for checking the rotation of the gripper carrier in position to receive the lifted edge of said sheet into operative engagement with said gri per carrier, substantially as set forth. 9th. In a rotary plate printing press, the combination with the plate cylinder, the impression cylinder, and an independent rotary gripper carrier, of means for feeding the sheet to be printed between the plate and impression cylinders after the printing contact between said cylinders has been established, a series of pins passing through apertures in the body of the engraved plate, means for projecting and withdrawing said pins whereby the sheet, after receiving its impression, will be lifted, and friction mechanism for checking the rotation of the gripper carrier in position to receive the lifted sheet into operative engagement with the said gripper carrier, substantially as set forth.

## No. 60,921. Watch Case Spring.

(Ressort de boîte de montre.)

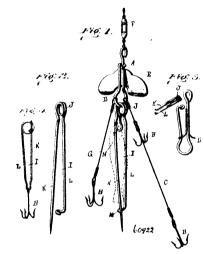


August Edward Wolkow, Hartford, Connecticut, U.S.A., 13th August, 1898; 6 years. (Filed 30th May, 1898.)

Claim.—Ist. In a watch case, the combination with the rim cover, stem and catch-spring, the latter having an end portion cut away,

of a restraining-spring secured within the rim and having an inner extansion to enter the cut-away portions of the catch-spring and to engage with the latter and hold it repressed when the stem is moved inward to release the cover, and a vertical extension at the active end of the restraining-spring to be projected within the path of the lid or cover to be engaged thereby when closing the case so as to release the aforesaid inner extension of the restraining-spring from the catch-spring, whereby the latter is liberated and permitted to engage with the cover, substantially as set forth. 2nd. In a watch-case, the combination with the rim, the cover, stem, and catch-spring, the latter having an end portion cut away, of a filling piece applied to the rim at one side of the stem and forming a backing, and a restraining-spring secured within the rim and having an inner extension and a vertical projection at its free end, the inner extension entering the cut-away portion of the catch-spring and adapted to engage with the latter and hold it repressed, and the vertical projection adapted to extend within the path of the lid so as to be engaged thereby when closing the case and liberate the catch-spring, substantially as set forth.

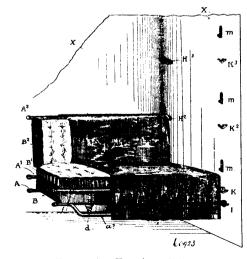
No. 60,922. Fishing Appliance. (Appareil de pêche.)



Henry J. Welch, Carthage, New York, U.S.A., 13th August, 1898; 6 years. (Filed 20th April, 1898.)

Claim.—In a trolling device, the combination with the looped wire D having gang-hooks secured thereto, of the independent impalling device I held to the looped wire D by loop J, of a bait-suspending hook carried by the loop J and designed to engage with the impaled bait to retain the same in place, substantially as and for the purpose set forth.

No. 60,923. Berth and Settees for Ship and Railway Cars. (Cabine pour vaisseau et chars.)

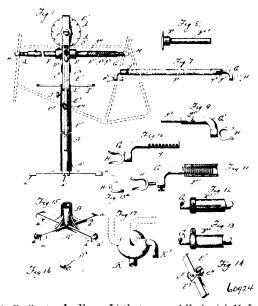


Thomas Richard Turner, San Francisco, California, U.S.A., 13th August, 1898; 6 years. (Filed 6th June, 1898.)

Claim.—1st. In convertible berths, the combination of a set of berth-frames, each composed of side-rails with projecting ends, header-rails uniting the side-rails and a yielding bed-bottom, the

sets of sockets and supports H, H¹, H², H³ and K, K¹, K², K³ arranged at given vertical distances apart, as described for operation as set forth. 2nd. In convertible berths, the combination with the set of berth-frames, of the sockets and supports H, H¹, H², H³ and K, K¹, K², K³, and the supplemental set H¸ K¸ arranged in front of the lowest set H, K, as described for operation as set forth. 3rd. In convertible berths, the berth-frame having a straight side-rail on one side, a drop rail on the opposite side, the header-rails at head and foot uniting the side-rails, the yielding bed-bottom stretched between the header-rails and the spiral-springs upon the drop rail. 4th. In convertible berths, the combination with the sets of supports H, H¸ K¸ K¸ and H², K², of two berth-frames each having one side-rail of the frame formed with a drop or downwardly bent middle-pertion, whereby the said frames are adapted when placed in the said supports to form a double berth, and also by separating and adjusting in position one over the other to form two single berths, substantially as set forth. 6th. In convertible berths and settees, the combination with the sets of stationary supports H, H¸ H¹, H², H³ and K, K¹, K², K³, of the three berth-frames having side-rails with projecting ends adapted to engage said sockets of two of said frames being assembled to form the seat of the settee, the third forming the back-frame of the settee, and the mattress constituting the cushions for the back and the seat and the bedding for the three frames when the same are separated and set up, substantially as described for operation as set forth.

## No. 60,924. Bicycle Stand. (Porte bicycle.)

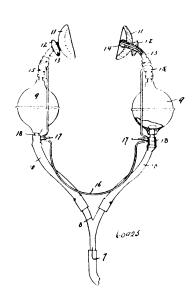


Mevin Buffington Le Fevre, Littlestown, and Zachariah K. Loucks, Philadelphia, both in Pennsylvania, U.S.A., 15th August, 1898; 6 years. (Filed 12th March, 1898.)

Claim-1st. In a bicycle stand, a tubular standard, a shaft movable freely in said standard, an arm having connections to hold a bicycle frame, and a discs rigidly connected to each other at right angles and pivoted to said shaft and said arm, whereby the latter may move in any direction with respect to the former, substantially as described. 2nd. In a bicycle stand, a tubular standard, a shaft therein, an arm having a cross-head to receive a bicycle-frame, discs rigidly connected at right angles to each other and provided with peripheral detents, pivotal connections between said discs, shaft and arms, and spring-pressed pawls upon said shaft and said arm to engage the detents in said discs, substantially as described. 3rd. The combination, in a bicycle stand, of circular discs rigidly connected together at right angles to each other and provided with peripheral detents, with a fixed standard, and arram having a cross-head provided with stirrups to hold a bicycle-frame, and spring pressed pawls connected to said standard and to said arm to engage the detents in said discs, substantially as described. 4th. In a bicycle stand, the combination of a standard having feet provided with dove-tailed grooves to engage floor-plates, a shaft within said standard, a collar upon said shaft having a tool rest or table connected thereto, and a set screw therein to engage said shaft, an arm having a cross-head provided with stirrups and with a sliding hook to hold a cross-head provided with starrups and with a sinding hook to hold a bicycle-frame, an universal joint having hinged connections to said standard and said arm, and means to hold said arm at any angle with said standard, substantially as described. 5th. In a bicycle stand, a standard having a two-part socket connected by a screw, a swinging arm to hold a bicycle, said arm having a cross arm rigid therewith and provided with hooks, and a crosshead novably content of the starter and provided with hooks. nected thereto and provided with hooks, a ball rigidly connected to said arm to engage the socket upon the standard and hold said arm at different angles with said standard, substantially as described.

#### No. 60,925. Receiver for Telephones, etc.

(Receveur de téléphones etc.)

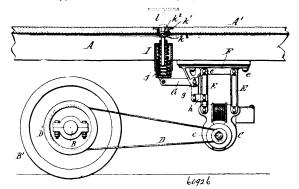


Charles W. Dennis, Kings Ferry, New York, Ten Eyek Lockwood, and Frank J. Peddie, both of Detroit, Michigan, all in the U.S.A., 15th August, 1898, 6 years. (Filed 18th May, 1898.)

Claim.—1st. As a new article of manufacture, a receiver for telephones, phonographs and similar instruments, consisting of a flexible tube adapted to engage the instruments in any desired manner, branches formed from said tube, a hollow rubber ball or bulb in connection therewith, balls or bulbs forming earpices and secured to the outer end of said branches, a short tube having a head at one end thereof secured to said branches, shanks secured on said tubes and earpicees secured on said shanks, and a spring-yoke in connection with the said earpieces and adapted to hold the receiver in position, said parts being combined substantially as and for the purpose described. 2nd. As a new article of manufacture a receiver for telephones, phonographs and similar instruments consisting of a receiving tube or cord having branches engaging the same, a hollow rubber ball or bulb secured to each of the branches, earpices, shanks secured thereon, heads on said shanks, a short tube which passes therethrough, a head on the end of said tube, said tubes engaging said balls or bulbs, a spring-wire yoke engaging the lower end of said tubes, spring-coils in the sides of said yoke, all of the said parts being combined substantially as and for the purpose described.

## No. 60,926. Apparatus for Railway Cars.

(Appareil d'éclairage électrique pour chars.)

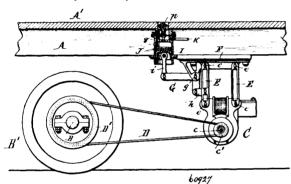


Charles Moulton Gould and Willard Fillmore Richards, both of Buffalo, New York, U.S.A., 15th August, 1898; 6 years. (Filed 8th June, 1898.)

Claim.—1st. The combination with the car, the driving axle provided with a pulley, the dynamo provided with a pulley and capable of movement toward and from the driving axle in a substantially horizontal direction, and a driving belt applied to said pulleys of a pressure device attached to the car and pressing the dynamo away from the driving axle, whereby the pressure is applied to the belt for producing the desired normal speed of the dynamo shaft irrespective of the weight of the dynamo, while the latter is moved toward.

the axle when the speed of the latter increases above that which produces the desired normal speed of the dynamo, causing a slippage of the belt which neutralizes the excess of speed of the axle, substantially as set forth. 2nd. The combination with the car, the driving axle provided with a pulley, the dynamo provided with a pulley and the driving belt, of front and rear links by which the dynamo is suspended from the car and rendered capable of moving dynamo is suspended from the car and reintered capable of moving lengthwise of the car in a horizontal position, and a pressure device attached to the car and pressing the dynamo away from the axle, substantially as set forth. 3rd. The combination with the car, the driving axle provided with a pulley, the dynamo provided with a pulley, and a driving belt, of front and rear links by which the dynamo is suspended from the car and rendered capable of movement levels are the controlled to the cont ment lengthwise of the car in a horizontal position, an elbow lever pivoted on the car and acting with its short arm upon the dynamo, and a pressure spring attached to the car and connected with the long arm of said lever, substantially as set forth. 4th. The combination with the car, the driving axle provided with a pulley, the dynamo provided with a pulley and capable of movement toward and from the driving axle, of a lever having one arm connected with the dynamo, a telescopic cylinder having one of its sections connected with the other arm of said lever, a pressure spring arranged in said cylinder, and an adjusting screw connected with the other section of said cylinder, substantially as set forth.

No. 60,927. Electric Lighting Apparatus for Railway Cars. (Appareil d'éclairage éléctrique pour chars.)



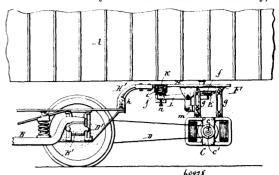
Charles Moulton Gould, assignee of William Fillmore Richards, both of Buffalo, New York, U.S.A., 15th August, 1898; 6 years. (Filed 8th June, 1898.)

Claim. -1st. The combination with the driving axle provided with a pulley, a dynamo provided with a pulley and capable of movement toward and from the driving axle, and a driving belt applied to said pulleys, of a fluid pressure mechanism which is connected with the movable dynamo and by which the same is pressed away from the driving axle to tighten the belt, while the dynamo is drawn toward the axle by an excessive speed of the belt, substantially as set forth. 2nd. The combination with the driving axle provided with a pulley, a dynamo provided with a pulley and capable of movement toward and from the driving axle, and a driving belt applied to said pulleys, of a fluid pressure mechanism which is connected with the movable dynamo and by which the same is pressed away from the driving dynamo and by which the same is pressed away from the circumstance of axle to tighten the belt and which is provided with a pressure equalizer by which a uniform fluid pressure is maintained, substantially as set forth. 3rd. The combination with the driving axle provided with a pulley, a dynamo provided with a pulley and capable of movement toward and from the driving axle, and a driving belt applied to said pulleys, of a cylinder and piston adapted to receive fluid pressure and apply it to the movable dynamo and to press the same away from the driving axle, a valve chamber connected with said cylinder, a reducing valve arranged in said chamber, and an equalizing passage connecting the cylinder with said chamber, substantially as set forth. 4th. The combination with the driving axle, a dynamo and a frictional mechanism whereby the dynamo is driven from said axle, of a cylinder and piston for tensioning such driving mechanism, a valve chamber connected with said cylinder and having a flexible diaphragm and a fluid inlet entering the same between the cylinder and said diaphragm, a reducing valve controlled by said diaphragm and governing the admission of the fluid into the cylinder, and an equalizing passage connecting the cylinder with the portion of the valve chamber above or in rear of said diaphragm, substantially as set forth.

#### No. 60,928. Electric Lighting Apparatus for Railway Cars. (Appareil d'éclairage électrique pour chars.)

Charles Moulton Gould, assignee of Willard Fillmore Richards, both of Buffalo, New York, U.S.A., 15th August, 1898; 6 years. (Filed 9th June, 1898.)

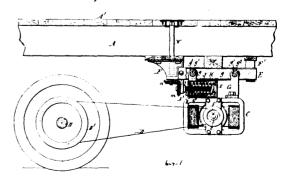
car body by which the dynamo is carried, and which permits of the lateral movement of the dynamo with reference to the car body, and



connection from the dynamo to the car truck, by which the dynamo is caused to remain in alignment with the car axle, substantially as set forth. 2nd. The combination with a car body, having a transverse track on its underside, and a car truck and its axle, of a dynamo capable of lateral movement on said track, and a pivoted frame which connects said dynamo with the truck and moves laterally with the truck, substantially as set forth. 3rd. The combination with a carriage adapted to move transversely on the underside of a car body, and a dynamo suspended therefrom and adapted to be driven from one of the car axles, of a connecting frame which connects said carriage with the car truck, and which causes the carriage and the dynamo to follow the swivelling movements of the car truck and remain in alignment therewith, substantially as set forth. 4th. The combination with a transverse track or way adapted to be arranged on the underside of a car body, of a carriage mounted on said track, a dynamo suspended from said carriage and adapted to be driven from one of the car axles, and a connecting frame connecting said carriage with the car truck and causing the carriage and the dynamo to follow the swivelling movements of the car truck, substantially as set forth. 5th. The combination with a transverse track or way adapted to be arranged on the underside of the car body, of a carriage mounted on said track, a dynamo suspended from said carriage and adapted to be driven from one of the car axles, and a connecting frame adapted to connect said carriage with the car truck carrying said axle and to be thinged to the truck by a transverse pivot, substantially as set forth.

6th. The combination with a transverse track or way adapted to be arranged on the underside of a car body, of a carrier, or carriage adapted to be run on said track, a dynamo suspended from said carriage and adapted to be driven from one of the car axles, and a connecting frame adapted to connect said carriage with the car truck carrying said axle, and a tension device for the driving gear of the dynamo mounted on said connecting frame, substantially as set forth. The combination with a transverse track or way adapted to be arranged on the underside of the carbody and a carrier or carriage adapted to run thereon, of a dynamo adapted to be driven from one of the car axles by a belt and suspended from said carriage by links swinging lengthwise of the car, a frame adapted to connect said carriage with the car truck, a socket mounted on said connecting frame, a follower moving therein, a tension spring arranged in said socket and follower, and a lever operating with one arm against said follower and having its other arm connected with the suspension links of the dynamo, substantially as set forth.

No. 60,929. Electric Lighting Apparatus for Railway Cars. (Appareil d'éclairage électrique pour chars.)

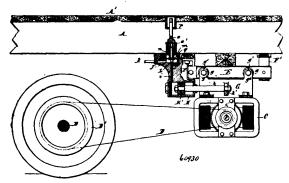


Charles Moulton Gould, assignee of Willard Fillmore Richards, both of Buffalo, New York, U.S.A., 15th August, 1898; 6 years. (Filed 9th June, 1898.)

Claim.-1st. The combination with the car body and the driving Claim.—1st. The combination with a car body, a car truck and its axle, and a dynamo driven from said axle, of a support on the underside of the car body, a carriage mounted on said track arranged on the

carrying a dynamo provided with a pulley, a horizontal socket mounted on said carriage, a follower applied to said socket, a pressure spring arranged between said socket and follower, an adjusting device connected with said follower, and a belt applied to said pulleys and extending in a substantially horizontal direction from the driving to the driven pulley, substantially as set forth. 2nd. The combination with the car body and a car axle, of a longitudinal track or way arranged on the underside of the car body, a carriage mounted on said track and carrying a dynamo, a horizontal socket mounted mounted on said carriage, a tubular follower applied to said socket, a tension spring arranged in said socket and follower, an adjusting screw engaging with said follower an an upright operating shaft geared with said adjusting screw, substantially as set forth.

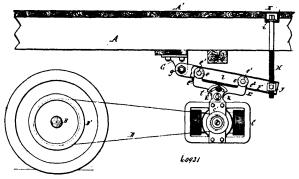
No. 60,930. Electric Lighting Apparatus for Railway Cars. (Appareil d'éclairage éléctrique pour chars.)



Charles Moulton Gould, assignee of Willard Fillmore Richards, both of Buffalo, New York, U.S.A., 15th August, 1898; 6 years. (Filed 9th June, 1898.)

Claim.—1st. The combination with a railway vehicle and its axle, of a longitudinal track or way arranged an the underside of the vehicle, dynamo mounted on said track and capable of removing towards and from the car axle, a frictional driving mechanism whereby the dynamo is driven from said car axle, a horizontal cylinder supported by the vehicle, a piston arranged in said cylinder and connected with the dynamo, and means for delivering fluid under pressure to said sylinder, substantially as set forth. 2nd. The combination with a reilway vehicle and its axle, of a longitudinal track or way arranged on the underside of the vehicle, a dynamo carriage mounted on said track and capable of moving towards or from the car axle, a frictional driving mechanism whereby the dynamo is driven from said car axle, a horizontal pressure cylinder arranged between the car axle, and the dynamo and supported by the vehicle, a piston arranged in said cylinder and having its rod connected directly with the dynamo carriage and an inlet valve controlling the admission of fluid to said pressure cylinder. substantially as set forth. 3rd. The combination with a railway vehicle, its axle and a movable dynamo adapted to be driven by a frictional driving mechanism, of a longitudinal track or way arranged on the underside of the vehicle and supporting the dynamo, a bracket supporting the front end of said track and carrying a horizontal pressure cylinder and a valve chamber communicating with said cylinder, a piston arranged in said cylinder and connected with the dynamo, and an inlet valve arrrnged in said chamber and controlling the admission of fluid to the same, substantially as set forth.

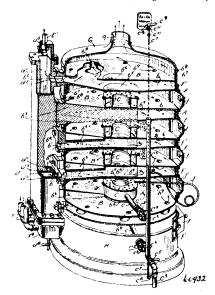
No. 60,981. Electric Lighting Apparatus for Railway Cars. (Appareil d'éclairage électrique pour chars.)



Charles Moulton Gould, assignee of Willard Fillmore Richards and Edward Wilhelm, all of Buffalo, New York, U.S.A., 15th August, 1898; 6 years. (Filed 9th June, 1898.)

Claim.—1st. The combination with a railway vehicle and its axle, of an inclined track or way arranged on the underside of the vehicle, a dynamo supported on said track and capable of moving thereon toward and from said axle, and a frictional driving mechanism whereby the dynamo is driven from said axle, substantially as set forth. 2nd. The combination with a railway vehicle and its axle, of an inclined track or way arranged on the underside of the vehicle, means whereby the inclination of the track or way can be adjusted, a dynamo supported on said track or way and capable of moving thereon toward and from the axle, and a frictional driving mechanism whereby the dynamo is driven from said axle, substantially as set forth. 3rd. The combination with a railway vehicle and its axle, of an inclined track or way arranged on the underside of the vehicle and pivoted at one end thereto, means for adjusting the opposite end of the track vertically, a dynamo supported on said track and capable of moving toward and from said axle, and a frictional driving mechanism whereby the dynamo is driven from said axle, substantially as set forth. 4th. The combination with a railway vehicle and its axle, of an inclined track or way arranged lengthwise on the underside of the vehicle, a carriage mounted on said track, a dynamo adjustably attached to said carriage, and a frictional driving mechanism whereby the dynamo is driven from said axle, substantially as set forth.

No. 60,932. Water Heater. (Chauffeur d'eau.)

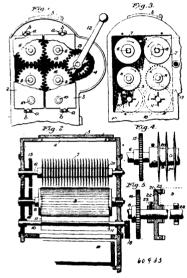


James Oliver Buchanan, assignee of Frederick Sayers Henning, both of Toronto, Ontario, Canada, 15th August, 1898; 6 years. (Filed 28th July, 1898.)

Claim.-1st. A water heater comprising a plurality of hollow sections having each an ingress and an egress port, adapted to allow water to flow through said sections and means for independently applying heat to the several sections, for the purpose specified. 2nd. A water heater comprising a plurality of hollow sections having each ingress and egress water ports, therefor, separate burners be-neath the several sections, feed pipes connecting the fuel supply with said burners and means for causing mixed air and fuel to pass through said burners, as and for the purpose specified. 3rd A water heater comprising a plurality of hollow sections having each water heater comprising a plurality of hollow sections having each ingress and egress water ports, therefor, burners beneath the several sections—pipes connecting burners with the fuel supply—air injectors and regulating cocks interposed in the paths of said fuel, as and for the purpose specified. 4th A water heater comprising a plurality of hollow water sections with ingress and egress water ports therefore, the burners C, pipes c, air injectors C2, cocks C3, regulating cock C4, rod C7 and regulator, as and for the purpose specified. 5th A water heater comprising a plurality of hollow water sections, ingress and egress water ports therefor. low water sections, ingress and egress water ports therefor, com-bustion chambers beneath the several chambers, doors and dampers therefor and separate burners supplied with fuel within the several combustion chambers and flues leading from the several combustion chambers, as and for the purpose specified. 6th. In a water heater the combination with a plurality of independent sections having hollow water chambers, the ingress water ports of which are respectively lower than the egress water ports thereof, the water chambers gradually rising from the one to the other of means for applying heat to the said water chambers, as and for the purpose specified. 7th. A water heater comprising a plurality of independent sections having spirally-shaped water chambers with ingress water ports respectively lower than egress ports, the central parts of said water chambers being horizontal-heaters placed beneath the several said central parts, as and for the purpose specified. 8th. A water heater

comprising a plurality of hollow water sections-ingress and egress ports, and the double water posts D, the collecting and distributing caps  $d^4$  and  $d^5$ , the draining cock  $d^8$ , and means for applying heat to the water sections, as and for the purpose specified. 9th. A water heater comprising a plurality of hollow water section, ingreand egress water ports therefor, combustion chambers between said and egress water ports therefor, combustion chambers between said water sections, doors and dampers to said combustion chambers, flues connecting said combustion chambers, the cap and gas vent and base burners situated in the several combustion chambers, as and for the purpose specified. 10th. In a water heater, the combination of a plurality of hollow water sections, ingress and egress water ports therefor, the combustion chambers, doors, dampers and vents therefor, burners connecting with fuel supply of the tube and vents therefor, burners connecting with fuel supply of the tube J, cock j, and nozzle j, as and for the purpose specified. 11th. In a water heater, in combination with a plurality of water section and intermediate air chambers of inclined flues, connecting the air chambers through the water sections, and means for applying heat in the air chambers to the water sections, as and for the purpose specified. 12th. In a water heater, in combination with a plurality of water sections and intermediate air chambers of flues connecting the air chambers, having the upper ends contracted and means for applying heat in the air chambers, as and for the purpose specified.

## No. 60,933. Meat Tenderer. (Pilon & viande.)



Jesse Elmer Snelling and George H. McLain, both of Newark, Ohio, U.S.A., 15th August, 1898; 6 years. (Filed 30th July 1898.)

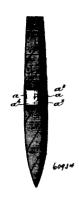
Claim.—1st. A meat tendering machine, comprising two gangs of circular cutters arranged to cut part way through the meat, but not to sever it into strips, two cylindrical gangs of longitudinal blades below the circular cutters, and also arranged to cut part way through the meat without severing it into strips, gearing for driving the circular blades, and longitudinal blades towards the centre of the machine to feed the meat inwardly and downwardly between them, two shafts below the longitudinal blades and carrying guiding and cleaning blades geared to rotate in a direction opposite to the corresponding longitudinal blades above them, and to direct the meat inwardly and clear the longitudinal blades from meat adhering thereto, and mechanism for driving the cutters and blades in the proper direction. 2nd. A meat tendering machine, comprising two gangs of circular cutters arranged to cut part way through the meat, but not to sever it into strips, two cylindrical gangs of longitudinal blades below the circular cutters, and also arranged to cut part way through the meat without severing it into strips, gearing for driving the circular blades, and longitudinal blades towards the centre of the machine to feed the meat inwardly and downwardly between them, two shafts below the longitudinal blades and carring guiding and cleaning blades geared to rotate in a direction opposite to the corresponding longitudinal blades above them, and to direct the meat inwardly and clear the longitudinal blades from meat adhering thereto, mechanism for driving the cutters and blades in the proper direction, and adjustable plates at opposite ends of the machine, carrying bearing for the shafts of the cutters and guiding and cleaning blades.

## No. 60,934. Cigar Band. (Bande pour cigares.)

John Michaels, assignee of Albert Edward Morris, both of Montreal, Quebec, Canada, 15th August, 1898; 6 years. (Filed 14th May, 1898.)

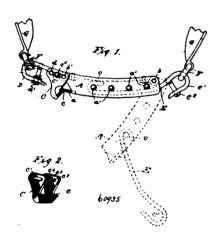
Claim.-1st. A cigar band, composed of an easily separable

jections adapted to be readily grasped between the thumb and finger, slight strain on the band parting the same and enabling it to



be removed laterally from the cigar, substantially as described. 2nd. A cigar band, presenting one or more tabs or projections which may be grasped and subjected to slight strain to part the band, substantially as described. 3rd. A cigar band, presenting one or more tabs or projections having lines of weakness to facilitate the easy parting of the band, substantially as described.

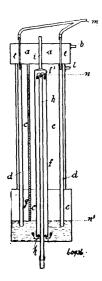
#### No. 60,985. Hame Fastening. (Couplière d'attelles.)



The Manchester Hame Fastening Company, assignee of Joseph Elie Lemyre, both of Manchester, New Hampshire, U.S.A., 15th August, 1898; 6 years. (Filed 20th July, 1898.)

Claim.-1st. In a hame fastening, a curved casing provided with a series of centrally located rivets, a bar provided with a hook at each end adapted to engage either of said rivets and the ring of a hame, a curved bar conforming to the upper edge and pivotally connected at one end to one end of said casing, an automatic latching device pivotally attached to the opposite end of said casing, and a suitable hook adapted to engage the ring of a hame and pivotally attached to said latch. 2nd. In a hame fastening, a curved casing provided with a series of centrally located rivets, a bar having a hook at each end and adapted to connect either of said rivets with the ring of a hame, a curved bar conforming to the upper edge of said casing and pivotally connected to one upper corner thereof, a hook adapted to engage the ring of a hame, and an auto-matic latching device connecting the said hook and bar at separate pivotal points and provided with a rivet in line with those of the hook and bar and between the same. 3rd. In a hame fastening, a curved casing provided with a series of cross-pins or rivets, a bar attachable to either of said cross-pins or rivets and carrying a hook for engaging the ring of a hame, a curved bar pivotally attached to one upper corner of said casing, a hook for attachment to the ring of a hame, and an automatic latching device connecting the free end of said curved bar with said hook at separate pivotal points, said latch being provided with perforations on one side and an elongated opening on the opposite side to receive the rivets of the bar and hook, and a rivet passed through said latch between said pivot connections of the bar and hook, substantially for the purpose set forth. 4th. In a hame fastening of the character described, suitable hooks for attachment to the rings of the hames, provided each Claim.—1st. A cigar band, composed of an easily separable with a screw adapted to close the entrance and prevent the dismaterial to embrace the cigar and present one or more tabs or proengagement of the ring of a hame, substantially as specified.

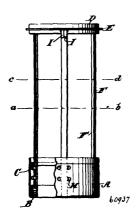
No. 60,936. Gas Compressing and Pressure Regulating Apparatus suitable for Incandescent Gas Lighting. (Appareil de compression à gaz et regulateur de pression pour éclairage à incandescence.)



George Rothgiesser, Bayreutherstrasse, 7, Berlin, in Germany, 15th August, 1898; 6 years. (Filed 18th January, 1898.)

Claim.—1st. In hydraulic gas compressing apparatus, a receiver provided with a hydrostatic discharge pipe or a tube in which the pressure water used in the apparatus must rise to a given height before reaching the entrance to the exit tube, substantially as compressor having a gas-supply reservoir, and a receiver for compressed gas and water situated below the same, a regulating tube connecting the receiver with the gas reservoir and adapted to conduct compressed gas from the reservoir, when the water in the latter drops below a given level, substantially as described.

#### No. 60,937. Lamp Chimney. (Cheminée de lampes.)

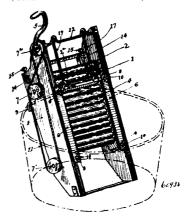


Thomas Redman, Bolton, Bradford, Yorkshire, England, 15th August, 1898; 6 years. (Filed 21st April, 1898.)

Claim.—1st. An open work cylindrical lamp chimney frame composed of a top ring, a bottom ring internally provided with means for supporting separately removable sheets of mica or other transparent material, the said top and bottom rings being of the same diameter, and vertical connecting ribs having central longitudinal flanges on their inner sides to hold the separately removable sheets of transparent material from lateral displacement, substantially as described. 2nd. A lamp chimney frame composed of one or more stamped open work metal sheets comprising a top ring, a bottom ring provided with inward projections for supporting separately removable sheets of mica or other transparent material, and longitudinally flanged connecting ribs integral with said top and bottom rings and provided with a joint at one side of said frame, substantially as described.

#### No. 60,938. Washing and Wringing Machine.

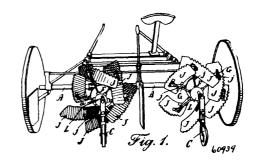
(Machine à laver et tordeuse.)



Margaret Killeen, Halifax, Nova Scotia Canada, 15th August, 1898; 6 years. (Filed 5th January, 1897.)

Claim.—1st. The combination of the two side stand pieces, a series of rollers journalled in said stand pieces, and having rotary motion, a longitudinally sliding frame having rollers journalled therein, bars fastened to the side pieces of the frame of the stationary roller bed adjustable springs for pressing said rollers in contact with the rollers of the stationary frame, a driven roller mounted in the side pieces at the top of the first mentioned series of rollers, a squeezing or wringing roller applied in connection with said driven roller means for operating the said driven roller and also simultaneously operating the said sliding frame, all of the said parts being mounted upon the said side pieces, substantially as described. 2nd. The combination of the two side stand pieces, a bed of rubbing rollers journalled in said stand pieces, endless belts, carrying spring clips, and passed around stand pieces, endless betts, carrying spring cips, and passed around the bed for operating the endless carrying belts, a reciprocating frame having rollers journalled therein, bars fastened to the side pieces of the frame of the stationary roller means for operating said reciprocating bed frame, springs for keeping the rollers of the reciprocating frame in yielding contact with the rollers of the stationary rubbing bed, all of the said parts being mounted upon the side pieces substantially as described. 3rd. The combination of the two side stand pieces, a bed of rubbing rollers journalled in the side stand pieces, the top and bottom ones of which are adapted to be positively revolved, a spring acting roller above the stationary bed of rollers, endless belts provided with spring clips passed around said rollers and around the driven rollers, a reciprocating frame having rollers journalled therein, means for operating said driven rollers and the endless belts, springs for keeping the reciprocating frame in yielding contact with the rollers of the side stand pieces, substantially as described.

No. 60,939. Machine for turning the Swath for Hay-makers. (Tourne-andain.)

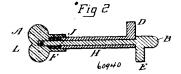


Thomas Martin Jarmain, Oxford, England, 15th August, 1898; 6 years. (Filed 13th May, 1898.)

Claim.—1st. A machine for turning the swath and having a series of blades capable of being revolved, substantially as described and illustrated. 2nd. In a machine for turing the swath, blades J pivotally attached to arms G and guided or moved by means of an eccentric, substantially as described and illustrated. 3rd. In a machine for turning the swath, the combination of a fixed spindle a supporting revolvable discs F carrying bars G to which are connected blades or wings J, a fixed eccentric L having a strap to which said blades are also pivotally attached, a trailing wheel and bevel wheels D and E, all for the purposes and acting substantially as described and illustrated.

No. 60,940. Door Key. (Clé de porte.)

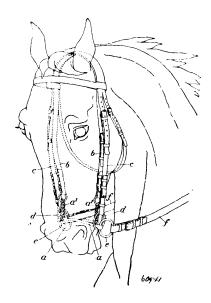




Boardman J. Loomis, Los Angeles, California, U.S.A., 15th August, 1898; 6 years. (Filed 14th July 1898.)

Claim.—In a key, the stem B having web E projecting therefrom and being integral therewith, and having on either side of the half web E square recesses b formed therein, the said stem having renovably attached thereto the thumb piece A, the thumb piece being provided with cylindrical projection F forming housing for spring J, the sleeve H having half web D projecting therefrom and being integral therewith, and having square catches h h projecting therefrom adapted to enter the recesses b b on the stem, and the spiral spring J, all in combination, substantially as shown and described.

## No. 60,941. Bridle. (Bride.)



Samuel Van Buskirk, 27 Yonge Park, London, England, 15th August, 1898; 6 years. (Filed 28th July, 1898.)

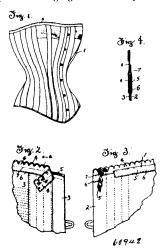
Claim.—1st. In a bridle for riding or driving, the combination of two bits attached, the one by the one end only and the other by the opposite end only, to the corresponding ends of a strap passing over the head, the other ends of the bits to which the reins are respectively attached being held up in the mouth for operation, substantially as described. 2nd. The herein described bridle, consisting in the combination with an ordinary head stall, of a double running bit, comprising two bits attached at opposite ends to the ends of a strap passing over the head beneath the head stall, the other ends of the bits to which the reins are respectively attached passing through rings on the cheek straps of the head stall for operation, substantially as specified.

## No. 60,942. Corset. (Corset.)

Carroll Walter Dodge, Worcester, Massachusetts, U.S.A., 15th August, 1898; 6 years. (Filed 3rd August, 1898.)

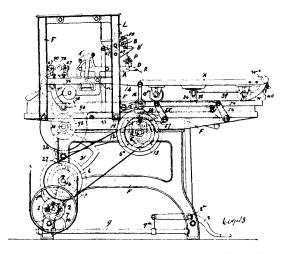
Claim.—A corset comprising a main portion, a strip of material of a pen slide so mounted in the pen beam that it is free to slide upon the inner side of the upper edge thereof and projecting above the same, an edging upon the outer side of the upper edge of the beam and connected with the pen slide of a reciprocating bar con-

main portion, and projecting above the same, a row of stitching securing the strip and the edging to the main portion, and a second



row of stitching securing the strip and the edging together above the upper edge of the main portion, substantially as set forth.

No. 60,943. Ruling Machine. (Machine à règler.)



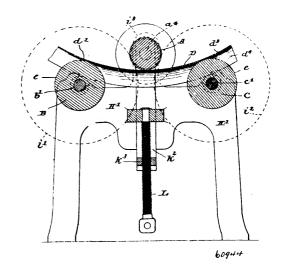
Ellis Graber and Lewis Hepworth, both of Tunbridge Wells, Kent, England, 15th August, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—1st. In a ruling machine, the combination of a reciprocating table and driving mechanism consisting of a face cam imparting motion to a reciprocating rod operating a rocking toothed quadrant, of an axle geared by a pinion with the toothed quadrant and carrying a drum of a band or belt passing round the said drum and suitable guide pulleys, of a bracket fixed to the underside of the reciprocating table through which the band or belt passes, and of a gripping device for clamping the said bracket to the band or belt, substantially as set forth. 2nd. In a ruling machine, the combination with a reciprocating or revoluble table and a rocking pen beam, of a striker connected to the pen beam by clutch mechanism, of one or more cams carried by a disc on the main axle and operating the striker either directly or indirectly by means of an intermediate lever and a connecting link, the shape of the cam or cams being such that both the rise and the fall of the pen beam is controlled, as set forth. 3. In a ruling machine, the combination with a reciprocating table and grippers for holding the sheets of paper on the table, of a paral dimotion bar operated by a cam on the main axle and engaging with the arm or lever controlling the grippers whereby the said grippers can be operated at any position of the reciprocating able on the frame, as set forth. 4. In a ruling machine, the combination with a reciprocating or revoluble table and an ink controlling device, of a cam carried by a disc on the main axle, of a rocking lever operated by the said cam, of an arm sliding laterally on the axle carrying the nipping bar, of a rocking lever engaging with the said sliding arm, and of a link coupling the two rocking levers, as and for the purpose set forth. 5th. In a ruling machine, the combination with a table for carrying the sheets of paper to be ruled, of a pen slide so mounted in the pen beam that it is free to slide transversely therein, of an oscillating frame mounted on the pen beam and connected with the pen slide of a reci

nected to the oscilating frame by means of a slotted arm to provide for the rise and fall of the pen beam of adjustable crank mechanism for imparting a variable reciprocating motion to the recipro-cating bar, and of a set of change gear for imparting a variable motion to the variable crank mechanism, as and for the purpose set forth. 6th. In a ruling machine, the combination with a reciprocating or revoluble table, of a rocking pen beam the rise and fall of which is controlled through a striker which is connected to the pen beam by clutch mechanism by a cam on the main axle, of a pen slide so mounted in the pen beam as to be free to oscillate therein, as and for the purpose set forth. 7th. In a ruling machine, the combination of a revoluble table, of driving mechanism which causes the table to travel slightly more than one complete revolution, of a brake for stopping the table at the completion of its movement, and of means for driving the table backwards until it reaches the position at which it started, as and for the purpose set forth. Sth. In a rulling machine, the combination of a revoluble table, and grippers for holding the sheets of paper on the table of a motion bar carrying the said grippers adapted to be lifted by a cam on the main axle acting on a spindle passing through the hollow stud axle on which the table is mounted and engaging the motion bar as set forth. 9th. In a ruling machine, the combination of a revoluble table, of mechanism for imparting an oscillating movement to the pen slide, and of a group of change wheels for driving the said operating mechanism whereby the number of oscillations given to the pen slide during each revolution of the table may be varied as desired, as set forth 10th. In a ruling machine, the combination with a table to receive the sheets of paper to be ruled of a pivoted pen beam, of a striker pivoted concentric with the pen beam, of clutch mechanism connecting the striker with the pen beam when the striker is moving in one direction, of one or more cams for operating the said striker carried by a cam disc on the main axle of the machine, and of means for imparting a variable oscillating movement to the pen slide, as and for the purpose set forth. 11th. In a ruling machine, the combination with a revoluble table formed of two parts superimposed one above the other the lower part having radial slots and the upper part having pins projecting through the said slots, of a foundation plate provided with a stud axle for supporting the lower part of the table, of an adjustable guide ring supported by the foundation plate and provided with a groove with which the said pins engage, of an intermediate axle receiving motion from the main axle of the machine and imparting motion to the upper part of the revoluble table, as set forth. 12th. In a ruling machine, the combination with a pivotted pen beam, of a striker pivoted concentric with the pen beam, of clutch mechanism connecting the striker with the pen beam when the striker is moving in one direction and of one or more cams for operating the said striker, of a revoluble table formed of two parts superimposed one above the other, the lower part having radial slots and the upper part having pins projecting through the said slots, of a foundation plate provided with a stud axle for supporting the lower part of the table, of an adjustable guide ring supported by the foundation plate and provided with a groove with which the said pins engage, and of an intermediate axle receiving motion from the main axle of and of an intermediate axis receiving motion to the imper the machine and imparting motion to the upper part of the rotating table, as and for the purpose set forth. 13th. In a ruling machine, the combination with a pivoted pen beam, of a striker pivoted concentric with the pen beam, of clutch mechanism connecting the striker with the pen beam when the striker is moving in one direction and of one or more cams on the main axle for operating the said striker, of a revoluble table formed of two parts superimposed one above the other the lower part having radial slots and the upper part having pins projecting through the said slots, of a foundation plate provided with a stud axle for supporting the lower part of the table, of an adjustable guide ring supported by the foundation plate and provided with a groove with which the said pins engage, of an intermediate axle receiving motion from the main axle of the machine and imparting motion to the upper part of the rotating table, and of means for imparting an oscillating movement to the pen slide, as and for the purpose set forth. 14th. In a ruling machine, the combination with a table for carrying the sheets of paper to be ruled, of a rocking beam carrying the pen slide of a striker operated by adjustable cams mounted on the axle imparting motion to the table, and of a clutch for communicating the lifting motion only to the striker to the rocking beam, as set forth. 15th. In a ruling machine, the combination in a table for carrying the sheets of paper to be ruled, of a rocking beam for carrying the pen slide, of a striker for lifting the said beam operated by one or more adjustable cams mounted on the axle imparting motion to the table, of a clutch for communicating the lifting motion of the striker to the rocking pen beam, and of a cam for controlling the downward movement of said beam, as set forth. 16th. In a ruling machine, the combination with a table for carrying the sheets of paper to be ruled, of a rocking beam carrying the pen slide, of one or more cams mounted on the axle imparting motion to the table and adapted to control the rise and fall of the pen beam, of the device for controlling the flow of ink from the reservoirs to the pens, and of one or more cams mounted on the axle imparting motion to the said device, substantially as set 17th. In a ruling machine, the combination with a table for carrying the sheets of paper to be ruled, of a rocking beam carrying the pen slide, of a striker operated by adjustable cams mounted on the axle imparting motion to the table, of a clutch for communicating the lifting motion only to the striker to the rocking beam, and of the mechanism of imparting an oscillating motion to the pen slide,

substantially as set forth. 18th. In a ruling machine, the combination with a table for carrying the sheets of paper to be ruled, of a rocking beam for carrying the pen slide, of a striker for lifting the said beam operated by one or more adjustable cams mounted on the axle imparting motion to the table, of a clutch for communicating the lifting motion of the striker to the rocking pen beam, of a cam for controlling the the downward movement of the said beam, and of the mechanism for imparting an oscillating motion to the pen slide, substantially as described. 19th. In a ruling machine, the combination with the table for carrying the sheets of paper to be ruled, of a rocking beam carrying the pen slide, of one or more cams mounted on the axle in:parting motion to the table and adapted to control the rise and fall of the pen beam, of the device for controlling the flow of ink from the reservoirs to the pens, of one or more cams mounted on the axle for imparting motion to the said device, and of the mechanism for imparting an oscillating motion to the pen slide, substantially as set forth.

No. 60,944. Machine for Bending Metallic Wheel Rings. (Machine pour courber les bandages metalliques des roues.)



Sam Thomas Richardson and Richard Price, both of 3a. Rea Street, Birmingham, England, 15th August, 1898; 6 years. (Filed 14th May, 1898.)

Claim.—In a machine for bending a trough section strip into a trough section wheel rim, rolls A, B C, the roll A being provided with a groove  $a^1$  which fits against the rounded outside of the trough, rolls B and C being provided with flanges  $\epsilon$  adapted to take inside the trough and against the bottom of the same and keep the trough open, and having the two grooves  $f^1$   $f^2$  and flanges  $g^1$   $g^2$  to support the sides of the trough, said rolls being arranged and operating substantially as described.

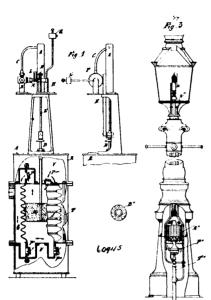
## No. 60,945. Lighting and Heating System.

(Systeme d'éclairage et de chauffage.)

Paul Greyson De Schodt, Namur, Belgium, 17th August, 1898; 6 years. (Filed 26th August, 1897.)

Claim.—1st. In a system of intensified lighting and heating in combination a suitable impeller, an aspirator mixer and a burner interposed between the impeller and mixed and operating as shown and for the purpose specified. 2nd. In a system of intensified lighting and heating, in combination an aspirator-mixer and a burner such as described, a double gas compressor-impeller, a double bellows furnished with inlet and outlet valves, the four-way cock and central piston on the faces of which the motor fluid is caused to operate successively each compartment of the bellows alternately drawing in and compressing the gas, substantially as herein shown and described. 3rd. In a gas impeller compressor, the combination with the rack connected with the vertical piston rod and gearing of a toothed wheel, a weighted rod located loosely on the axis, of the wheel, and designed after passing the vertical position to act by its own weight as shown and for the purpose specified. 4th. In the lighting and heating system, the combination with the mixer and burner of an air injector opening into a gas chamber and designed to operate upon the gas as herein shown and described. 5th. In a lighting and heating system, the combination with the aspirator-mixer and burner described, of an air impeller consisting of a double tubular recuperator and an independent flame designed to heat it, and cause the hot air to pass to the aspirator-mixer, substantially as herein shown and described. 6th. In a lighting and heating system, the

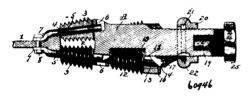
combination with the impeller and mixing apparatus, of a burner in the shape of a reversed truncated cone surmounted by metallic gauze,



and furnished at its upper part with a ring of asbestos for the purpose of isolating it from the hood which surmounts it when used for lighting purposes, substantially as herein shown and described. 7th. In an intensified light and heating system, the combination of the combustion apparatus described and claimed, and a suitable impeller designed to be utilized with coal gas, or with a combination of air with diffused mineral or vegetable oils, substantially as described.

#### No. 60,946. Boiler Flue Cleaner.

(Nettoyeur de tubes de chaudières.)

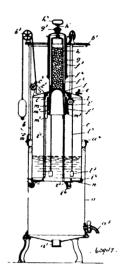


William Lewis Casady, South Bend, Indiana, U.S.A., 17th August, 1898; 6 years. (Filed 20th April, 1898.)

Claim.-1st. A flue or tube cleaner having rotatable spiral cutters, substantially as described. 2nd. A rotary flue or tube cleaner having idle rotatable spiral cutters, substantially as described. 3rd. A flue or tube cleaner having tapering, rotatable spiral cutters, substantially as described 4th. A flue or tube cleaner rotatable in one direction and having spiral cutters which rotate in the opposite direction, tending to thrust the cleaner forward and pulling the scale in the opposite direction, substantially as described. 5th. A flue or tube cleaner having a drill point and rotatable spiral cutters arranged at an angle to the longitudinal axis of the cleaner in rear of the drill point, substantially as described. 6th. A flue or tube cleaner having a drill point at one end and tapering, rotatable spiral cutters in rear of the drill point, substantially as described. 7th. A flue or tube cleaner, comprising a main body portion, rotatable spiral cutters, and means for cutting certain of the cutters outward, substantially as described. 8th. A flue or tube cleaner, comprising a main body portion, and two sets of spiral cutters, one set in advance of the other set, substantially as described. 9th. A flue or tube cleaner, comprising a main body portion and two sets of rotary spiral cutters, one in advance of the other set, one set having two cutters and the other three in triangular arrangement, substantially as described. 10th. A flue or tube cleaner, comprising a main body portion, and a set of radially adjustable spiral cutters, substantially as described. 11th. The combination with a main body portion having recessed sides, of cutters, removable bearings having bevelled ends, and wedges adapted to engage said bevelled ends to set them outward, substantially as described. 12th. The combination with the main body portion having recessed sides, and cutters therein, of removable bearings or axles located in radial slots, the outer end of each bearing or axle bevelled, wedges for engaging said bevelled ends and a ring for simultaneously thrusting forward the several wedges, substantially as described. 13th. The combination with the main body portion having recessed sides, a threaded shank and longitudinal grooves in said shank, of cutters, removable bearings

or axles having bevelled ends, wedges located in the grooves and engaging the bevelled ends of the bearings, a screw ring having an annular groove which receives the rear ends of the wedges, whereby to force the wedges forward against the bearings to set the cutters outward, substantially as described. 14th. The combination with the main body portion having a drill point at one end, and adjustable and fixed rotary cutters, of bearings or axles for the fixed cutters, said bearings held at one end in openings in the stock of the device and a common bolt passed through the other ends for securing them at the rear end of the drill point, substantially as described.

No. 60,947. Apparatus for the Manufacture of Acetylene Gas. (Appareil pour la fabrication de gaz acetylène.)

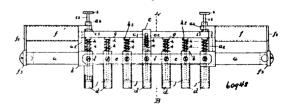


Vincenzo Sardi, Turin, Italy, 17th August, 1898; 6 years. (Filed 28th December, 1897.)

Claim.—1st. In an apparatus for the production of acetylene gas, and in combination, a water vessel, an air bell, a counterbalance for the latter, an extension tube on such bell, a perforated tube for the carbide, a rod for supporting and guiding the carbide tube in such extension, a water seal between the extension and the air bell, a movable counterbalanced bell shaped valve for holding the water forming the seal, on which the carbide tube rests, a handle for forcing the carbide tube into the water of the main vessel, and guides for controlling the bell shaped valve as it descends with carbide tube, and leaves the extension tube which carries a metal tube forming a water seal. 2nd. The combinatin with the vessel a gas bell c sealing valve m and carbid tube h and a rod attached to same, of a water seal consisting of a tube  $f^*$ , fixed to the gas bell on the outside, an outer tube  $f^*$ , secured to the first and a bell g, having a gland. 3rd. The combination with a vessel and gas bell of a perforated tube for the carbide, having an adjustable top and bottom of a surrounding tube and a rod with a handle for operating the perforated tube.

#### No. 60,948. Machine for Cutting Biscuits.

(Coupe-gateau.)

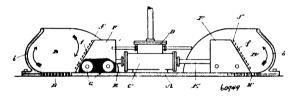


Ellis Carr, Drummond Road, Bermondsey, Surrey, England, 17th August, 1898; 6 years. (Filed 22nd October, 1897.)

Cloim.—1st. In an apparatus for cutting biscuits and other like articles, a plurality of sliding dies or cutters, a plunger mounted in each, a bearing upon which the dies or cutters are adapted to slide, and elastic connection for said cutters whereby they may be concentrated and separated and a bar for operating said plungers, substantially as shown and described. 2nd. In an apparatus for cutting biscuits and other like articles, a laterally extended rod, a plurality of sliding blocks mounted thereon, dies or cutters supported by said blocks, elastic connections for said dies, whereby they may be brought into juxtaposition and whereby the lateral movement of

said blocks is limited, and a bar for operating said dies or plungers, whereby the material in said dies may be simultaneously ejected, substantially as shown and described. 3rd. In an apparatus for cutting biscuits and other like articles, a laterally extended rod, a plurality of sliding blocks mounted thereon, and provided with elastic connections, dies supported by said blocks, the end blocks thereof being provided with upwardly directed extensions adapted in conjunction with a collar encompassing said rod to support a handle whereby said blocks may be concentrated as the content of the conten said rocks support a name whereby said mocks may be concentrated and separated, a bar for ejecting the dough from said dies, substantially as shown and described. 4th, In an apparatus for cutting biscuits or other like articles, a laterally extended rod, a plurality of sliding blocks mounted thereon, and a central immovable block dies supported by said blocks, handles supported by a sliding collar encompassing said rod and vertical extensions on said end blocks, a flexible band connected with each of said blocks to limit the lateral movement thereof, and a bar in conjunction with must the lateral movement thereof, and a bar in conjunction with said dies whereby the dough therein may be simultaneously ejected, substantially as shown and described. 5th. In an apparatus for cutting biscuits or other like articles, a laterally extended rod, a plurality of sliding blocks mounted theron, and a central immovable block, dies supported by said blocks, handles supported by a sliding collar encompassing said rod, and vertical extensions on said end blocks, a flexible band connected with each of said blocks to limit the lateral movement thereof, and a vertically sliding rod, a plunger in each of said dies, and connections between said rod and said plunger whereby the dough therein may be simultaneously ejected, substantially as shown and described. 6th. In an apparatus for cutting biscuits or other like articles, a laterally extended rod, a plunger, whereby the dough therein may be simultaneously ejected, and springs seated between said rod and said blocks whereby said plungers automatically assume their normal position, substantially as shown and described. 7th. In an apparatus for cutting biscuits or other like articles, a laterally extended rod, a plurality of sliding blocks mounted thereon, and a central immovable block, dies supported by said blocks, handles supported by a sliding collar encompassing said rod and vertical extensions on said end blocks, a flex-ible band connected with each of said blocks to limit the lateral movement thereof, and a vertically sliding rod, a plunger in each of said dies, and connections between said rod and said plunger, springs seated between said rod and said blocks whereby said plungers automatically assume their normal position, and thumb keys acting upon said vertically sliding rod, substantially as shown and described.

#### No. 60,949. Tanning Machinery. (Machine à tanner.)



James Norman Smith, Toronto, and William Sutherland Shaw, Bracebridge, Ontario, Canada, 17th August, 1898; 6 years. (Filed 2nd November, 1897.)

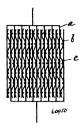
Claim.—A tanning machine consisting of a cylinder or cylinders, each cylinder having two piston rods projecting through its opposite ends, a hide hammer fitted to the end of each piston rod, each hide hammer having an inclined beating face converging from the bottom to the top, a plurality of beating pins fixed to the beating face of each hammer to nill the hides, a plurality of anti-friction rollers journalled in each hammer to faciliate its movement when in operation, a base, on the top of which works the anti-friction rollers, a bin located at each end of the base, each bin having a concaved end wall to form a recess for the hides, the top of the concaved wall overhanging the bottom, substantially as specified.

#### No. 60,950. Electric Condenser. (Condenseur électrique.)

Charles Schenck Bradley, Avon, New York, U.S.A., 17th August, 1898; 6 years. (Filed 17th May, 1898.)

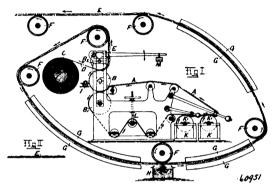
Claim.—1st. An electric condenser having as dielectric stearate of lead. 2nd. An electric condenser having between its several plates a layer of stearate of lead of uniform thickness. 3rd. An electric condenser having its several plates separated by a fibrous insulating material the pores and meshes of which are filled with stearate of lead. 4th. An electric condenser having its several plates separated by a netting of insulating material whereby a part only of the condenser plates are touched by the spacing material leaving the other parts to be separated by a better dielectric. 5th. An electric condenser having between its several plates a spacing insulating material having a plurality of transverse openings where

by a part only of the condenser plates are touched by the spacing material leaving the other parts to be separated by a better dielec-



tric. 6th. An electric condenser having between its several plates a spacing insulating material containing a plurality of transverse openings filled with a material of higher specific inductive capacity whereby part of the interspace between the plates is filled solely with the latter material. 7th. An electric condenser having between its several plates a spacing insulating material having a plurality of transverse openings filled with stearate of lead.

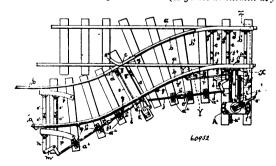
No. 60,951. Apparatus for Manufacturing Embossed Paper. (Appareil pour la fabrication de papier gaufrè.)



T. H. Frolick & Son, Christiana, Norway, assignee of Andreas G. Haehre, Hadeland, both of Norway, 19th August, 1898; 6 years. (Filed 23rd December, 1897.)

Claim.—1st. The process of embossing paper fabric, which consists in uniformly distributing paper pulp in a semi-fluid state on an endless felt belt by rotary sieve cylinders and passing the same between two rollers, one having an engraved and the other a plain surface, as and for the purpose set forth. 2nd. In a machine for embossing paper, having rotary sieve cylinders K¹ K¹, an endless felt carrier belt A passing between an embossing roller B and a blank roller B¹, a compression roller B², and rollers tightening said belt and keeping it in contact with said cylinders, as set forth. 3nd. The combination in a paper embossing machine of rotary sieve cylinders K¹ K¹, endless felt belt A, embossing roller B and plain roller B¹, between which rollers said belt passes, compression roller B² having an elastic surface, and a roller L to tighten said belt while running upon and under a series of supporting rollers and keep it in contact with said cylinders, substantially as described.

No. 60,952. Railway Switch. (Aiguille de chemin de fer.)



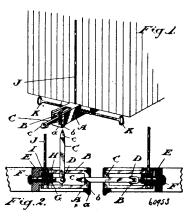
Charles Henry Sherwood and Henry Clay Lyman, both of New York, U.S.A., 19th August, 1898; 6 years. (Filed 21st July, 1898.)

Claim.—1st. In combination with the switch-operating mechanism and a supplemental section of track, a vertically-movable locking rail parallel to and outside of one of the rails of said section, a rock-shatt mounted-in suitable bearings connected with the aforesain

switch-operating mechanism and extending toward the track, an arm on the outer end of said shaft, and a rod connecting said locking rail and said arm, for the purpose described and shown. 2nd. In combination with the vertically-movable and revoluble rod  $a^3$ , of commation with the vertically-movable and resolute roll t, of the switch-operating mechanism and supplemental section of track b, vertically-pivoted arms q secured to the side of the outside rails of said section, a locking rail r secured to said arms, collars  $v^1$   $v^1$  formed on the lower portion of the rol  $a^n$ , a rock-shaft u extending from beneath the switch stand toward the track, an arm  $u^2$  secured on its end adjacent to said stand and loosely between the collars  $v^1$  $v^1$ , an arm  $u^1$  on the opposite end of said rock-shaft, and a rod r connecting the latter arm to one of the aforesaid arms q secured on the rail b, as described and shown. 3rd. In combination with the revoluble post  $c^3$  at the switch stand, of a horizontal lever  $b^3$  secured on said post, a rod pivoted at one end to said lever and extending part way toward the adjacent laterally-shifting switch rail b1, part way toward the adjacent laterally-shifting switch rail  $b^1$ , plates g secured to the inner face of one switch rail and having ears  $g^1$  formed thereon, cross bars c c and f f secured to said ears connecting said rails, a plate g on the outside of the outer rail having ears  $g^1$  formed thereon, a bar  $f^1$  pivoted to said ears and extending part way toward the switch stand parallel and in proximity to the rod t, adjacent collars or stops  $t^1$   $t^1$ , and  $f^2$   $f^2$  respectively on the rod t and bar  $f^1$  and a spring  $t^2$  on said rod and interposed between said stops as described and shown. 4th. In combination with the main-track rails a a, laterally-shifting In combination with the main-track rails a a, laterally-shifting switch-rails  $b^1$   $b^1$  movable on and off said main rails, plates g g secured to the inside of said switch-rails having ears  $g^1$   $g^1$  formed sectively to the findle of said switch land having early f formed thereon, cross-bars e and f extending from said ears and respectively from the inner and outer rails and pivoted together, a longitudinal slot  $e^1$  formed in the web of the rail a for the reception of the bar slot e formed in the web of the rail a for the reception of the bar f and means to shift the switch-rails as described and shown. 5th. The combination with the main-track-rails, of switch-rails and frog-sections movable simultaneously on and off said main rails, mechanism for moving the same, a rock-shaft operated by said mechanism, a locking-rail along the side of one of the rails of the siding, and a rod connecting said latter rail and rock-shaft, as set forth and shown. 6th. The combination with the main-track rails a a, the rail nearest the switch-stand having its web provided with slots o2 o2, of switchrails  $b^1b^1$  connected by cross-bars e e and f f pivoted together, the bars ff passing through the aforesaid slots in the main-track-rail, mechanism holding the said switch-rails on the main track rails, the frog-sections c and d at the intersection with the main-track rail and movable on and off the same, connections between said frog-sections and the switch-rails  $b^1$   $b^1$ , a spring  $t^2$  in the switch mechanism forcing the switch-rails back on the main-track rails when moved off by a moving train, a rail  $r^1$  movable vertically along the side of the side-track rails b b, and connections between the rail,  $r^1$  and switchoperating mechanism to prevent the operation of said mechanism when the side-track is occupied by a train or engine, as described and shown. 7th. The combination with the switch-rails  $b^1b^1$ , of mechanism for moving the same on and off the main track rails a a consisting of a case A suitably supported near the switch, a sleeve  $d^3$  journalled therein and resting in the seat  $g^4$  at the top of the case, a post  $e^3$  within the said sleeve provided with a vertical guide  $f^5$ , a vertically-sliding rod  $a^2$  in said guide, a vertical slot  $f^3$  formed in said post, a pin  $e^3$  passing through said slot to connect said rod and sleeve so as to turn together, a lever  $e^1$  pivoted to the upper portion of the post and connected to the upper portion of the sleeve by means of vertical arms i i by which to raise said sleeve from its seat to turn the same, a laterally-swinging lever  $b^3$  secured on the lower end of the post, a horizontal rod t pivoted at one end to said lever and extending part way toward the railway-track, a bar  $f^1$  extending from the switch-rail nearest the switch-stand part way toward said stand, stops  $t^1$   $t^1$  and  $t^2$   $t^2$  respectively on said rod and interposed between the said stops as described and shown. 8th. The combination with the switch-rails  $b^1$   $b^1$  movable on and off the The combination with the switch-rails  $b^Tb^T$  movable on and off the main-track rails a and connected by the cross-bars e and f, a switch-stand consisting of a hollow case A formed with a seat  $g^4$  in its upper portion, the sleeve  $g^3$  within the said casing and resting in the said seat, post  $e_a$  within the said sleeve, formed with the vertical guide  $f^5$ , a rod  $a^2$  movable in said guide, a pin  $e^3$  passing through a slot  $f^3$  formed in the post and connecting said rod and sleeve, a lever pivoted to the upper portion of the post to turn the same, vertical arms  $i^1$   $i^1$  connecting said lever to the upper portion of the sleeve by which to raise the same, a laterally swinging lever  $b^3$  secured on the lower end of said post, a horizontal rod t extending from said lever part way toward the switch-rails and provided with stops  $t^1$   $t^1$ , a horizontal bar  $f^1$  extending from the switch-rail part way toward the switch-stand parallel and adjacent to the aforesaid rod and provided with stops  $f^2$   $f^2$ , a spring  $t^2$  on the rod and interposed between one of the stops on said rod and the other stop on the bar, collars  $v^1$   $v^1$  formed on the lower end of the rod  $u^3$ , a rock-shaft u having secured on the end adjacent to the track a vertical arm  $u^1$ , an arm  $u^2$  extending horizontally from the track a vertical arm  $u^1$ , an arm  $u^2$  extending horizontally from the other end portion of the form of a fork to receive the lower end the other end portion of the form of a fork to receive the lower end portion of the vertical rod  $a^3$ , said arm being held between the collars  $v^1 v^1$  on said rod, a locking-rail  $r^1$  extending along the side of one of the side-track rails b, and a horizontal rod r connecting said locking-rail to the vertical arm  $u^1$  secured to the aforefaid rock-shaft as described and shown. 9th. In combination with the main-track rails a and side-track rails b b, the switch-rails b b secured at one end to the side-track rails by flexible plates b b b secured to the sides of both rails, said switch-rails having their free end portion movable

on and off the main-track rails, cross-bars e e and ff extending respectively from the switch-rail farthest set from the switch-stand and switch-rail nearest the switch stand, said bars being pivoted together and the bars f/f passing through the slots  $o^2$   $o^2$  formed in the mainrail a nearest the switch-stand, the frog-sections c and d secured at one end to the side-track rails b b also by flexible plates and having their free end portion movable on and off the main-track rail nearest the switch-stand cross-bars o o extending from said frog-sections, one passing through the slot o<sup>2</sup> of the side rail and the other crossbar passing through both the side-track rail and intersecting maintrack rail n, a lever k connecting the cross-bars, rods j extending from the said lever and connected at the opposite end to a lever inear the switch-rail  $b^1$  nearest the switch-stand, a bar h connecting said rail and the lever i, and mechanism to operate all of said parts as described and shown.

#### No. 60,953. Car Coupler. (Attelage de chars.)



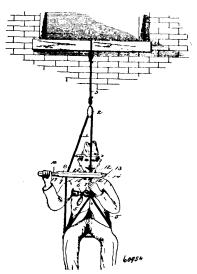
Peter Hoff, and Elijah Francis, both of the Village of Thornhill, Ontario, Canada, 19th August, 1898; 6 years. (Filed 4th August, 1898.)

Claim.—1st. An a car coupler a draw head provided with an arrow headed link journaled therein, and jaws adapted to spring apart to engage the arrow headed link of another draw head, substantially as and for the purpose specified. 2nd. As a car coupler, a draw head provided with an arrow headed link journalled therein, and jaws adapted to spring apart to engage the arrow headed link of another draw head, and suitable mechanism for rotating the said link, substantially as and for the purpose specified. 3rd. As a car coupler, a draw head provided with an arrow headed link journaled therein and hinged in a plane at right angles to the arrow head, and jaws adapted to spring apart to engage the arrow headed link of another draw head, substantially as and for the purpose specified. 4th. As a car coupler, a draw head provided with an arrow headed link journaled therein and hinged in a plane at right angles to the arrow head, jaws adapted to spring apart to engage the arrow headed link of another draw head, and suitable mechanism for rotating the said link, substantially as and for the purpose specified. 5th. As a car coupler the combination of a draw head A, open above and provided with a solid transverse portion E, the link C, hinged at D, and journalled in position E, of the draw head, the collar F, secured to the inner end of the link, and the spring jaws B, secured within the draw head and provided with the outwardly turned guides b behind which the jaws are cut away, substantially as and for the purpose specified. 6th. As a car coupler the combination of a draw head A, open above and provided with a solid transverse portion E, the link C, hinged at D, and journaled in the portion E, of the draw head, the collar F, secured to the inner end of the link, the spring jaws B, secured within the draw head, the pinion G, fast on the link, and the rack H, movable in the draw head and engaging the said pinion, draw head, substantially as and for the purpose specified. 4th. As secured within the draw head, the pinnon G, last on the link, and the rack H, movable in the draw head and engaging the said pinion, substantially as and for the purpose specified. 7th. As a car coupler the combination of a draw head A, open above and provided with a solid transverse portion E, the link C, hinged at D, and journaled in the portion E, of the draw head, the collar F, secured to the inner end of the link, the spring jaw B, secured within the draw head, the pinion G, fast on the link, the rack H, movable in the draw head and engaging the said pinion, the shaft J, journalled in the draw head, the I, fast on the shaft and engaging the teeth on the side of the rack, and the crank handle L, on the upperend of the shaft, substantially as and for the purpose specified.

#### No. 60,954. Fire Escape. (Sauveteur d'incendie.)

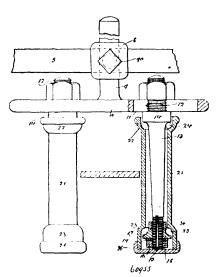
Hans C. Hansen and Rocknell E. Gager, both of Ithaca, New York, U.S.A., 19th August, 1898; 6 years. (Filed 2nd August, 1898.

Claim.-1st. A device of the class described, comprising a vertical rope doubled to form two runs, a pair of horizontal brake levers permanently connected with one run of the rope and provided between their ends with openings arranged out of alignment and receiving the other run of the rope, whereby the levers are adapted to clamp the same firmly for regulating the descent of a person,



substantially as described. 2nd. A device of the class described, comprising a pair of brake levers hinged together at one end and comprising a pair of brake levers hinged together at one end and having openings or slots arranged out of alignment, means for limiting the hinge novement, and a rope doubled between its ends, having one run permanently attached to the levers, the other run of the rope passing through the slots or openings, whereby it is adapted to be firmly gripped by the levers, substantially as described. 3rd. A device of the class described, comprising a pair of levers respicted with overlaps or slots arranged out of chirament. levers provided with openings or slots arranged out of alignment, one of the levers being bifurcated and having the bifurcated portion hook-shaped, and the other lever being reduced and provided with a pintle arranged in the bearings formed by the hook-shaped por-tions of the bifurcated lever, and a rope having one run connected tions of the bifurcated lever, and a rope having one run connected with the levers and its other run passing through the slots or openings of the same, substantially as described. 4th. A device of the class described, comprising a pulley, means for connecting it to a building, a pair of brake levers hinged together, provided with registering perforations and having slots or openings arranged out of alignment, a rope passing over the pulley and having one run passing through the slots or openings, the other run of the rope being passed through the said perforations and provided, above and below the levers with suitable stops, a fastening device for limiting the swing of the levers and means for attaching the rope to a the swing of the levers, and means for attaching the rope to a person, substantially as described.

### No. 60,955. Belt Shipper. (Change-courroies.)



Charles Dawson and Eli Adler, both of Lachine, Quebec, Canada, 19th August, 1898; 6 years. Filed 23rd July, 1898.

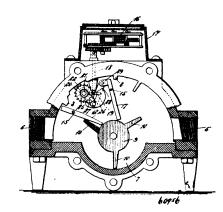
Claim.—1st. In combination with the shipper-rod of a belt shipper comprising a forked bracket adjustably secured to said shipper-

rod transversely thereof and means for adjusting said bracket trans-

versely of said shipper-rod, for the purpose set forth. 2nd. In combination with the shipper-rod of a belt shipper, a forked bracket adjustably secured to said shipper-rod transversely thereof and means for adjusting said bracket transversely and longitudinally of said shipper rod, for the purpose set forth. 3rd. In combination with the shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shipper, a forked bracket adjustably secured to said shipper-rod or a belt shippersecured to said shipper-rod transversely thereof, the prongs of said bracket being adjustable toward and away from one another, means fot adjusting said prongs, and means for adjusting said bracket transversely and longitudinally of said shipper-rod, for the purpose set forth. In combination with the shipper-rod of the belt ship-per, a forked bracket secured to said rod and consisting of a shank shank and a cross-piece formed integrally with one another, and a pair of prongs mounted upon said cross-piece and projecting laterally therefrom, said prongs each consisting of a core or trunnion and a sleeve rotatably mounted thereon, for the purpose set forth. 5th. In a belt shipper, a pair of prongs, each consisting of a core or trunnion and a sleeve rotatably mounted thereon, for the purpose set forth. 6th. In combination with the shipper-rod of a belt shipper, a forked bracket secured to said rod and consisting of a shank and a crosspiece formed integrally with one another and a pair of prongs mounted upon said cross-piece and projecting laterally therefrom, said prongs each consisting of a core or trunnion, formed near one end with a rigid collar having a concave face, the ends being screwthreaded and the end adjacent to said collar taking through a slot in said cross-piece, a nut to secure said core or trunnion in place, a nut having a concave edge and adapted to take over the other end, means for retaining said latter nut against displacement, a sleeve adapted to take over said core or trunnion and having its ends flared to provide concavities to register with said concave collar and concave nut and from runways for a series of balls, and a series of balls in each of said runways, substantially as described and for the purpose set forth.

#### No. 60,956. Fluid Meter and Motor.

(Metre et moteur à fluide.)

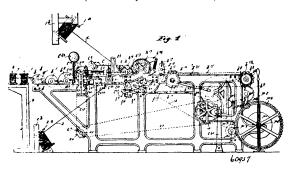


Jared A. Brewer Button, Western Springs, Illinois, assignee of John H. Dixon, Marietta, Ohio, U.S.A., 19th August, 1898; 6 years. (Filed 2nd June, 1898.)

Claim.-1st. The combination of a casing having inlet and outlet Ciam.—1st. The combination of a casing having inlet and obtlet orifices, wings mounted to turn in the casing and connected to move in unison by the action of the fluid current, two valve plates mounted in the casing and co-acting with the wings to prevent the re-action of the fluid, and a registering device driven by the movements of the valve plates. 2nd. The combination of a casing having inlet and outlet orifices, a series of wings in ratchet connection with each other and mounted to turn within the casing and driven by the fluid current therein, valves plates mounted in the casing and co-acting with the wings to prevent to re-action of the fluid in the casing, and ribs formed on the interior of the casing and respectively co-acting with the valve plates when the same are in closed position. 3rd. The combination of a valve plate, a pawl in connection therewith, a shaft, a ratchet-wheel fixed to the shaft and engaged by the pawl, a worm carried by the shaft, a worm-wheel meshing with the worm, and a register driven by the worm-wheel. 4th. The combination of a casing, valve plates mounted therein to swing by gravity to a a casing, valve plates mounted therein to swing by gravity to a normal position, and a series of wings connected with each other to turn in unison, the wings being driven by the fluid corrent within the casing and co-acting with the valve plates. 5th. The combination of a valve plate, a pawl in connection therewith, a rotary shaft, a ratchet-wheel attached to the rotary shaft and driven by the pawl, and a register in connection with the shaft to be driven therefrom. 6th. A fluid motor and meter having a casing, a series of wings mounted therein and connected with each other to turn in unison by the action of the fluid current, valve plates mounted to swing by gravity in the casing and co-acting with the wings, a pawl in connection with one of the valve plates, a rotary shaft, a ratchet-wheel carried thereon and co-acting with the pawl, and a register driven from the rotary shaft.

#### No. 60,957. Fence Making Machine.

(Machine à faire les clôtures.)



Maurice D. Pendergast, Hutchinson, assignee of James M. Whidden, St. Paul, both in Minnesota, U.S.A., 19th August, 1898; 6 years. (Filed 30th July, 1898.)

Claim.-1st. In a wire fence making machine, the combination with means for holding the fence taut and moving the same forward with an intermittent action, of a pair of travelling carriers for the loop-wires, movable crosswise of the machine, one above and the other below the filling wires, for disposing the loop wires in proper position to embrace the filling wires to form the vertical stays of the fence, when the loops are twisted together between the filling wires, substantially as described. 2nd. In a wire fence making machine, the combination with means for holding the fence taut, and moving the same forward with an intermittent action, of a pair of travelling carriers for the loopwires, movable crosswise of the machine, one above and the other below the filling wires, and corner studs around which said loop-wires are stretched by said travelling carriers to align the loop-wires in proper position to embrace the filling wires and receive the twisting action, substantially as described. 3rd. In a wire fence making machine, the combination with means for holding the fence taut and moving the same forward with an intermittent action, of a pair of travelling carriers for the loop-wires movable crosswise of the machine, one above and the other below the filling wires simultaneously, in opposite directions, and means for automatically reversing the direction of the travel of said carriers on reaching predetermined limits, substantially as and for the purposes set forth. 4th. In a wire fence making machine, the combination with means for holding the fence taut and moving the same forward with an intermittent action, of a pair of travelling carriers movable crosswise of the machine, simultaneously, in opposite directions, one above and the other below the filling wires, to properly dispose the loop-wires, and corner studs, around which the said loop-wires are stretched by said carriers, which corner studs are movably mounted for assuming their wire engaging and wire releasing positions, substantially as described. 5th. In a wire fence making machine, the combination with carriers for disposing the loop-wires to embrace the filling wires, of twisters for twisting together said loop-wires between the filling wires, and corner studs around which the loop-wires are stretched by said carriers, which corner studs are mounted for a yielding action under the draw from the stays in the twisting action, substantially as described. 6th. In a wire fence making machine, the combination with means for holding the fence taut and moving the same forward with an intermittent action, of a pair of carriers for the loop-wires, and an endless chain or belt movable over suitable wheels crosswise of the machine above and below the filling wires, with one of said carriers secured to the over running section and the other to the under running section of said chain or belt, substantially as and for the purposes set forth. 7th. The combination with means for holding the fence taut, and moving the same forward with an intermittent action, of an endless chain or belt mounted, on suitable driving wheels, to run crosswise of the machine, one section above and the other below the filling wires, a of carriers for the loop-wires secured one to the upper and the other to the lower section of said chain or belt, and a reversing drive for said chain or belt including an automatic trip operated by the carriers to reverse the motion of the belt or chain at the proper times, substantially as described. 8th. In a fence making machine, the combination with means for disposing the wires in proper relation to each other for receiving the twist, of a series of twisters for simultaneously producing the necessary twists to interlock the wires, substantially as described. 9th. In a wire fence making machine, the combination with means for properly disposing the wires to receive the twists, of a series of twisters operative simultaneously to produce the twists and interlock said wires, which twisters are constructed and arranged to allow a limited reverse motion to permit the natural reaction or limited unwinding of the twists and afford a ready release of the twisters, substantially as described. 10th. In a wire fence making machine, the combination with means for properly disposing

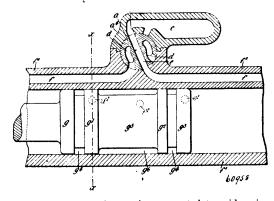
to yield lengthwise of the stays under the twisting action to compensate for the draw produced by the twists, substantially as described. 11th. In a wire fence making machine, the combination with means for properly disposing the loop wires to embrace the filling wires, of a series of twisters operative simultaneously to twist together said loop wires, between said filling wires, for forming the vertical stays of the fence, which twisters are constructed and arranged to cause the adjacent members to twist in opposite directions for alternating the twists between the successive filling wires, substantially as described. 12th. In a wire fence making machine, the combination with means for properly disposing the loop wires to embrace the filling wires, of a series of twisters for simultaneously twisting together said loop wires between said filling wires to form the vertical stays of the fence, and differential drives for said twisters for producing a greater number of twists in the stays between the filling wires widely spaced apart than those narrowly spaced apart, substantially as described. 13th. In a wire fence making machine, the combination with the series of wire twisters, of a corresponding series of holders for said twisters mounted for common movements for engaging and releasing the wires, substantially as described. 14th. In a wire fence making machine, the combination with a rock shaft, of a series of twister holders rigidly secured to said shaft and a corresponding series of twisters carried by said holders whereby all the twisters may be engaged and disengaged with and from the wires under the rocking motions of said rock shaft, substantially as described. 15th. In a wire fence making machine, the combination with a rock shaft, of a series of twister holders rigidly secured thereto, a corresponding series of twisters carried by said holders and drives for said twisters, the members of which drives are carried by the said rock shaft and said twister holders, substantially as and for the purposes set forth. 16th. The combination with a twister wheel having an open ended slot extending radially inward from its periphery, of a holder for said twister wheel having a pair of jaws spaced apart to afford a mouth registering with said slot in the wheel, when the parts are in position to engage and release the wires, substantially as described. 17th. The combination with a twister, of a drive for the same including a pair of wheels loose on a common shaft having the relation of master and mate, and means for coupling the mate wheel to the master wheel and uncoupling the same therefrom, and the mate wheel in mesh or in train with the twister wheel, whereby the master wheel may turn in a constant direction and the mate wheel be permitted to reverse for permitting the natural reaction or limited unwinding movement of the twist, substantially as described. The combination with a rock shaft, of a series of twister holders fixed thereto, a corresponding series of twisters carried by said holders, and a drive for said twisters including a pair of wheels on said rock shaft having the relation of master and mate, and provided with means for coupling and uncoupling the same together, and a train of gears having a member in mesh with said mate, and all carried by said holders, substantially as described, whereby the master wheel may turn in a constant direction and the mate with the other members of the twister trains be permitted to reverse, as required to permit the natural reaction or limited unwinding of the twist, as set forth. 19th. An automatic drive for a wire twister including a constantly running shaft having a pinion fixed thereto, a pair of wheels loose on a common shaft, which pair of wheels have the relation of master and mate, with the mate forming one member of the train operating the twisters, means for coupling and uncoupling the master and mate, an automatic trip for connecting and disconnecting the master wheel with said constantly running pinion, and means controlled by said trip to effect the coupling and uncoupling of said master and mate wheels, substantially as described. 20th. The combination with the rock shaft having the series of twister holders fixed thereto, of the series of twisters carried by said holders, a constantly running shaft having a pinion, a pair of wheels loose on said rock shaft having the relation of master and mate, on automatic trip for connecting and disconnecting the master wheel with said pinion on the constantly running shaft, means controlled by said trip for coupling and uncoupling the mate from the master wheel, a train of gearing connecting the master with the twister wheels, all carried by said holders, and means for rocking said shaft and mate when the master wheel is held stationary, substantially as and for the purposes set forth. 21st. In a fence making machine, the combination with means for holding the fence taut and moving the same forward with an intermittent action, of means for holding the same forward with an intermittent action, of means to holding and supplying the filling and lock wires including three high sheeves between which the wires are passed for straightening the wires and holder the same under proper tension. 22nd. In a wire fence making machine, the combination with means for moving the fence forward under an intermittent action, of means for holding and supplying the filling and lock wires, including a pair of drums disposed to cause the wires to pass under one and over the other thereof, for equalizing the pull on the wire holding spools and avoiding slack in the filling and lock wires of the frame, substantially as designed. in the mining and lock wires of the frame, substantially as described, 23rd. In a wire fence making machine, the combination with means for intermittently feeding forward the fence, of means for holding and supplying the wires, including three high sheaves and a pair of drums, to which the filling and lock wires are subject for straightening out the wires, petting a proper tension thereon, equalizing the pull from the spools and avoiding slack in those the wires relative to each other, for receiving the twists, of a series wires at the point where locked together into the fence, substantially of twisters operative simultaneously on the loop wires to form the as described. 24th. In a wire fence making machine, a feeding vertical stays of the fence, some of which twisters are constructed clamp for the fence having an intermittent reciprocating movement lengthwise of the machine, and comprising a resistance plate over which the wires pass, and a rock shaft above the wires having a series of eccentrics or cams for clamping the fence to the plate, subseries of eccentrics of came for clamping the fence to the place, substantially as described. 25th. In a wire fence making machine, means for feeding and holding the fence taut, independent of the winding up reel, comprising a pair of rollers between which the fence is passed at the delivery end of the machine, a pawl and ratchet in the drive for said rollers, the pawl carrying member of which is loose on the driven roller shaft and co-operates as one member of the supporting wheels, for a pair of sprocket chains or belts extending lengthwise of the machine, a clamp for the fence fixed to said chains, and means for imparting a reciprocating motion to said clamp, substantially as described. 26th. In a fence making machine, the combination with means for feeding the fence with an intermittent motion and holding the same taut while the fence is being made, of shedding mechanism for disposing of the finished fence, comprising a collapsible winding up reel for permitting the ready removal of the wound coil of fence. 27th. In a fence making machine, the combination with means for feeding the fence with an intermittent motion and for holding the same taut while the fence is being made, of shedding mechanism for disposing of the finished fence, comprising a winding up reel and an intermittent feed for the same, including an automatic controller operated by the fence itself, according as slack or taut between the delivery rollers of the itself, according as slack or taut between the delivery rollers of the main machine and the winding up reel. 28th. In a fence making machine, the combination with fence forming mechanism and a winding up reel, of intermediate fence holding mechanism, whereby the coil of finished fence may be removed at the reel without stopping the other parts of the machine, substantially as described. 29th. In a fence making machine, the combination with the fence feeding mechanism, including the fence clamp and the delivery rollers co-operating therewith for holding the fence in whatever position it may be fed, whereby the fence on the delivery side of the rollers may be separated from the part within the machine at will rollers may be separated from the part within the machine at will, substantially as described. 30th. In a fence making machine, the combination with the fence feeding mechanism, including the fence clamp and the delivery rollers, substantially as described, of the winding up reel and an intermittent drive for said reel, including an automatic controller operated by the fence itself according as slack or taut, between the delivery rollers and the reel, substantially as and for the purposes set forth. 31st. A wire twister, constructed to yield lengthwise of the twist to compensate for the shortening of the wires, substantially as described. 32nd. A wire twister, having a body portion and core portion mounted to yield lengthwise of the body portion, whereby the twister is rendered expansible and contractible, substantially as and for the purpose set forth. 33rd. A twister substantially as and for the purpose set forth. 33rd. A twister holder provided with body and cap portions co-operating to hold the twister in working position, substantially as described. 34th. A twister holder composed of body and cap portions which co-operate to hold the twisters in working position and having jaws which cooperate to afford mouths which register with the mouth of the twister, for grabbing and releasing the wires, substantially as described. 35th. The combination with a twister, of a drive for the same, including a pair of wheels having the relation of master and mate, means for coupling and uncoupling the said two wheels to-gether, and means for holding the master wheel stationary while the mate wheel is turned backward to permit the natural reaction or limited unwinding of the twist, substantially as described. 36th. or imitted unwinding of the twist, substantiary as described. Some In a wire fence making machine, a feed mechanism for the same, including a feeding clamp adapted to engage and disengage the fence, and a crank shaft having pitmans connected to said clasp, for operating the clamp and moving the fence, substantially as described. 37th. In a wire fence making machine, a feed mechanism for the fence including the fence clamp, the feed shaft with ism, for the fence, including the fence clamp, the feed shaft with crank discs and pitmans connected to said clamp, the delivery rollers, the endless chains having the base plate of the clamp connected thereto and the pawl and ratchet devices for imparting motion to said delivery rollers from said chains, and holding the same wherever set, while permitting the chains to reverse their travel, substantially as described.

#### No. 60,958. Rock Drill. (Perçoir à rocher.)

James McCulloch, Portreath, Cornwall, England, 19th August, 1898; 6 years. (Filed 27th July, 1898.)

Claim.—1st. In a rock drill, the combination of a distribution valve arranged to turn on its axis, a wing or vane on said valve, and means for admitting working fluid from the drill cylinder to said wing or vane at the proper time to operate said valve, substantially as described. 2nd. In a rock drill, the combiation of a distributing valve movable around its axis, a piston for operating the drill, and means for causing the piston to control the passage of fluid to the the valve casing for reversing the valve, substantially as described. 3rd. In a rock drill, the combination of a distributing valve movable around its axis, a wing or vane on said valve, a recess or cavity in the valve casing, passages leading from the drill cylinder to opposite sides of said recess or cavity, and means whereby the piston of the drill controls said passages, substantially as described. 4th. In a rock drill, the combination of a rotary valve, a casing for the same, a wing or vane working fluid tight in a recess in said casing, a flange at one end of said valve and a projection on said flange for operating the valve by hand, substantially as described. 5th. In a rock drill, the combination of a

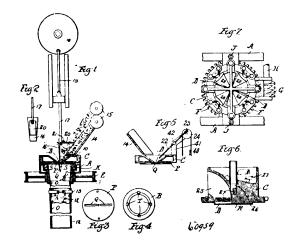
rotary valve, means for operating the valve by fluid from the working cylinder, a valve casing for said valve having a space or cavity



at one end thereof, an exhaust pipe connected to said casing and opening into said space, and a subsidiary exhaust passage leading from the space or cavity to the middle of the piston, substantially as described. 6th. In a rock drill, the combination of a distributing valve movable around its axis, a wing or vane on said valve, a valve casing having a recess to receive said wing or vane, passages in said casing leading from opposite sides of said recess to the working cylinder, a piston in the latter for operating the drill, rings on said piston for controlling said passages, a contracted portion in the middle of the piston, a passage leading from the exhaust to the cylinder and opening opposite to said contracted portion, substantially as described.

### No. 60,959. Press for Cotton, Wool, Hair, etc.

(Presse pour coton cardé, etc.)

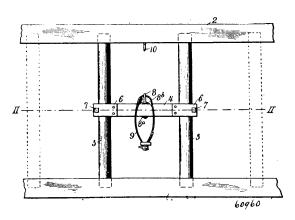


George Archibald Lowry, Chicago, Illinois, U.S.A., 19th August, 1898; 6 years. (Filed 19th July, 1898.)

Claim.—1st. A cotton or other press, comprising an open ended receiving chamber and a slotted cap plate, and means for relatively rotating said parts whereby the material to be pressed, when presented to the slot in the cap plate, is drawn into the chamber and is pressed into bale form. 2nd. A cotton or other press, comprising an open ended receiving chamber, means for rotating the same and a stationary slotted cap plate whereby the material to be pressed, when presented to the slot in the cap plate, is drawn into the chamber and compressed. 3rd. A press, comprising an open ended chamber having a tubular extension and a slotted cap plate, through which the material to be pressed is drawn into the chamber, and means for relatively rotating the chamber and its cap-plate. 4th. A press, comprising an open ended chamber having a tapering inner surface, a slotted cap plate for one end thereof, and means for relatively rotating the chamber, a slotted cap plate for one end thereof, and means for crowding or pushing the material to be pressed into proximity to the slot in the cap plate, in combination with means for relatively rotating said chamber and cap plate. 6th. A press, comprising an open ended chamber, means far rotating the same, a stationary slotted cap plate for one end of said chamber, in combination with means for preventing the material being pressed from rotating relative to the chamber. 7th. A press, comprising an open ended chamber, a slotted cap plate for one end thereof and a removable wearing plate or lining for the inner surface of the cap plate, and means for relatively rotating the chamber and cap plate.

8th. A press, comprising an open ended chamber, a slotted cap plate sth. A press, comprising an open ended chamber, a slotted cap plate for one end thereof, means for circulating a cooling medium through the cap plate, and means for relatively rotating the chamber and cap plate. 9th. A press, comprising an open ended chamber, a cap plate for one end thereof, said cap plate provided with a plurality of slots or openings therethrough, and means for relatively rotating said chamber and cap plate. 10th. A press, comprising an open ended chamber, a slotted cap plate for one end thereof, an anti-friction roller mounted on said cap plate alignment to the slot therein, and roller mounted on said cap plate adjacent to the slot therein, and means for relatively rotating the cap plate and chamber. 11th. A press, comprising an open ended chamber, a slotted cap plate for one end thereof, and means for relatively rotating the chamber and cap plate, in combination with means for applying a covering to the bale as it emerges from the uncovered end of the chamber. 12th. A press, comprising an open ended chamber, a slotted cap plate for one end thereof, a tubular extension arranged at the other end of the chamber, and means for frictionally supporting a covering or bag telescoped over the end of such extension, and means for relatively rotating the chamber and cap plate. 13th. A press, comprising an open ended chamber, a slotted cap plate for one end thereof, means for relatatively rotating the chamber and cap plate, a tubular extension connected to the chamber, a bag or covering telescoped upon said extension, and a friction band or strap for supporting said bag or covering upon said extension. 14th. A press, comprising an open ended chamber, a slotted cap plate for one end thereof, and means for relatively rotating the chamber and cap plate, in combination with a recifrocatory feeder plate for crowding the material to be pressed into proximity to the slot in the cap plate, whereby it is drawn into the chamber and compressed. 15th. A press comit is drawn into the chamber and compressed. 15th. A press comprising an open ended chamber, a slotted cap, plate for one end thereof, and means for relatively rotating the chamber and cap plate, in combination with a reciprocating bar and a hinged flap or wing for crowding the material to be pressed into proximity to the slot in the cap plate. 16th. A press, comprising an open ended chamber, a slotted cap plate for one end thereof, and means for relatively rotating said chamber and cap plate, in combination with grooves or recesses, or projecting blocks, arranged longitudinally of the chamber on the inner surface thereof to engage and lock the material being compressed from rotation relative to the chamber. 17th. A being compressed from rotation relative to the chamber. 17th. A press, comprising an open ended chamber, a cap plate for one end thereof, said cap plate provided with a passage therethrough through which the material is delivered by an air blast to the chamber, and screened passages formed in the cap plate to permit the air of the blast feed to accape. 18th. In a press, a framework, an open ended chamber mounted and supported in a bearing formed in the framework whereby it may be rotated, a stationarily mounted slotted cap plate for one end of said chamber, and means for rotating said chamber. 19th. A press, comprising an open ended chamber, a drive pulley or gear-wheel mounted thereon whereby said chamber may be rotated, and a stationarily held slotted cap plate for one end of said chamber. 20th. A press, comprising a chamber and a slotted cap plate, in combination with means for preventing the material, when presented to the cap plate, from arching or bridging across the slot in the cap

#### No. 60,960. Animal Tie. (Attache pour animaux.)

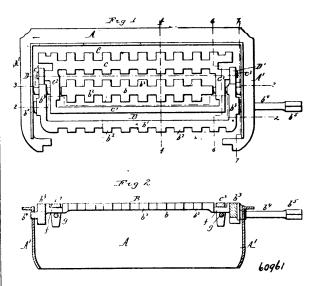


Charles M. Wood, Knoxville, Pennsylvania, U.S.A., 19th August, 1898; 6 years. (Filed 4th August, 1898.)

Claim.—1st. An animal-tie comprising a pair of uprights, a rigid horizontal throat-piece having cut-out ends fitting the uprights and adapted to slide vertically thereon and over which the animal's head projects in hitching, and the vertically-extending neck-strap fastened to the throat-piece, substantially as described. 2nd. An animal-tie comprising a pair of round uprights a rigid horizontal throat-piece having cut-out ends fitting the uprights and adapted to slide vertically thereon, the eye or ring fixed to the throat-piece and the vertically arranged neck-strap passed through the eye or ring substantially as described. 3rd. The combination of the top and base pieces, the uprights connecting them, the horizontal throat-

piece working on said uprights and formed with the cut-out portions at its ends, the metal pieces secured to the ends, the bolts connecting them, the neck-strap and the fastening by means of which the neck-strap is secured to the middle of the throat-piece, substantially as described. 4th. The combination of the top and base pieces, the hook carried by the top piece, the uprights connecting them, the horizontal throat-piece working on said uprights and formed with openings in its ends through which the uprights pass, the neck-strap adapted to be supported on the hook, and the fastening by means of which the neck-strap is secured to the middle of the throat-piece, substantially as described.

No. 60,961. Fire Grate. (Grille de foyer.)



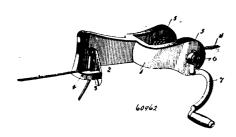
Robert Meyer, Buffalo, New York, U.S.A., 19th August, 1898; 6 years. (Filed 3rd August, 1898.)

Claim. -1st. A compound grate comprising a rocking section which is mounted on pivots and capable of a rocking movement on the same, and a dragging section which is capable of a bodily movement toward and from the pivot line of the rocking section and which is connected with the rocking section and actuated by the same, substantially as set forth. 2nd. The combination with a supporting frame, of a compound grate comprising a rocking section which is mounted on pivots and capable of a rocking movement on the same, and a dragging section which is supported at different distances from the pivot line of the rocking section by connections with the rocking section and by arms which are separate from the dragging section and pivoted to the supporting frame and permit the dragging section to move bodily to and fro in following the movement of the rocking section, substantially as set forth. 3rd. The combination with a supporting frame, of a dumping or rocking on one side of said trunnions with cylindrical portions or journals, on one side of said trumions with cylindrical portions or journals, a laterally-movable grate section provided on its underside with bearings which overlap said cylindrical portions or journals, and means for retaining said journals in said bearings, substantially as set forth. 4th. The combination with a supporting frame, of a dumping or rocking grate section journalled in said frame and having longitudinal bars connected together at their ends and separated by an intervening space, and a laterally-movable grate section operated from said dumping or rocking section and having a pair of connected longitudinal bars, the inner bar of the rocking section being arranged between the longitudinal bars of the laterally-movable section and the inner bar of the last mentioned section being arranged between the bars of the rocking section, substantially as set forth. 5th. The combination with a supporting frame, of a dumping or rocking grate section journalled in said frame, laterallyswinging arms pivoted at the ends of said supporting frame and provided in their free ends with openings or bearings, and a laterallymovable grate section provided at its ends with trunnions journalled in the bearings of said arms and connected with said rocking grate section, substantially as set forth. 6th. The combination with a supporting frame, of a dumping or rocking grate section journalled supporting frame, of a dumping of tocking grate section journaled in said frame, laterally-swinging carrying arms pivoted at the ends of said supporting frame, a laterally-movable grate section journalled in the free ends of said carrying arms and having bearings or depressions which overlap the adjacent side bar of the rocking grate sections, and retaining devices which confine said side bar in said overlapping bearings, substantially as set forth. 7th. The combination with a supporting frame provided in its end walls with upright slots, of a rocking grate section secured in said frame, laterally-swinging carrying arms having trunnions passing loosely through

the slots in the end walls of said frame and each provided at its outer end with a radial lug, and a laterally-movable grate section journalled in the free ends of said carrying arms and connected with the rocking grate section, substantially as set forth.

#### No. 60,962. Wire Tightening Device.

(Appareil à tendre le fil de fer.)

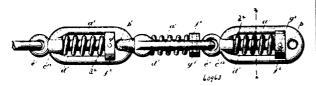


Olafur Johnson, Glenboro, Manitoba, Canada, 19th August, 1898; 6 years. (Filed 2nd August, 1898.)

Claim.—1st. A wire tightening device, comprising a main member, having a wire gripping device and also having a winding mechanism, and a supplemental member connected to and movable to and from said main member, said supplemental member being provided with a wire gripping device similar to that on the main member, whereby a plurality of wires may be brought toward each other, substantially as described. 2nd. A wire tightening device, comprising a main member, having a wire gripping device and also a winding mechanism, a supplemental member movable to and from said main member, said supplemental member having a wire gripping device, and a hook portion secured to said supplemental member, substantially as described.

#### No. 60,963. Spring Cable Tension Device.

(Appariel de tension pour cables a ressort.)



Thomas S. Whitman, Annapolis Royal, Nova Scotia, 19th August 1898; 6 years. (Filed 16th November, 1897.)

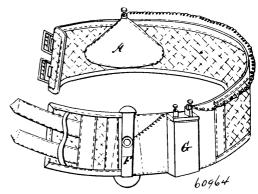
Claim.—1st. A device for towing ships or serving as ground tackle, comprising in its structure a cable and having a spring tension device composed of a series of jointed spring links interpolated in its length so as to take up sudden strains brought upon the cable to obviate breakage thereof, as and for the purposes set forth. 2nd. In a device of the character specified, the combination of a cable and a spring tension device composed of a series of jointed spring links interpolated in the length of the cable so as to take up sudden strains brought upon the cable to obviate breakage thereof, as and for the purposes set forth. 3rd. In a device of the character specified, the combination of a cable having a spring tension device interpolated in its length, the said spring tension device comprising in its series of joined spring links and a bridle comprising in its structure a plurality of cables, substantially as and for the purposes set forth. 4th. A towing apparatus for vessels, comprising a cable A, a bridle D E comprising in its structure a plurality of cables joined at one end to the cable a and each provided with a spring tension device for taking up sudden strains thereon, substantially as described, and for the purposes set forth. 5th. In a device of the character specified, a spring link comprising a loop apertured longitudinally, a bar passing through the said aperture and into the enclosed portion of the loop, a crosshead carried by the bar and and the loop.

# No. 60,964. Improvements in Devices for Preventing Sea-Sickness. (Appareil pour empecher le mal de mer.)

Carlo Calliano, Turin, Italy, 19th August, 1898; 6 years. (Filed 18th April, 1898.)

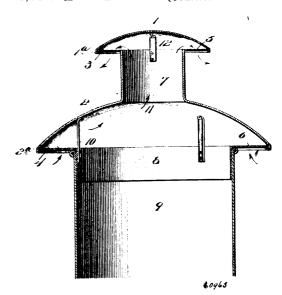
Claim.—1st. A device for preventing sea-sickness and analogous morbid sensations, the said device consisting of a belt or band provided with a cushion corresponding in shape to that of the gastric region, the said cushion exerting by the action of the band an appropriate pressure upon the said region. 2nd. A device for preventing sea-sickness and analogous morbid sensations consisting of a belt or band provided with a cushion corresponding in shape to

that of the gastric region, the said cushion exerting an appropriate pressure upon the said region with the intervention of a screw-



adjusting device whereby the distance between the belt and the cushion and consequently the pressure upon the gastric region can be varied.

No. 60,965. Milk Can Cover. (Couvercle de bidon à lait.)



Cassius Congdon, West Clarksville, New York, U.S.A., 19th August, 1898; 6 years. (Filed 8th August, 1898.)

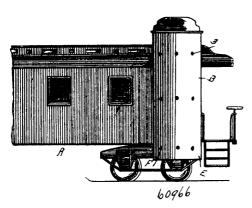
Claim.—A ventilating receptacle cover for the purpose described, having upper and lower axially-aligned bands or collars, the latter of which is adapted to fit the top of a receptacle, upper and lower domed deflectors, respectively covering, and of larger diameter than, said bands or collars, and supported by and out of contact with the same, the peripheries of said deflectors depending respectively below the upper edges of the bands or collars covered thereby, and being spaced from the exterior surfaces thereof to form intervening annular vents, and the upper band or collar being supported by the lower domed deflector and in communication with a central opening in the latter and horizontal interstitial guards ntted respectively in said annular vents above the planes of the peripheries of said deflectors, substantially as specified.

#### No. 60,966. Car. (Char.)

Joseph F. Caldwell, New Wilmington, Pennsylvania, U. S. A., 19th August, 1898; 6 years. (Filed 6th August, 1898.)

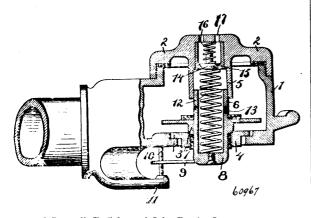
Claim.—1st. The combination with a car, of towers built in the same adjacent one end, a chamber extending transverse the car and communicating with the towers and doors for the chambers or compartment, substantially as described. 2nd. The combination with a car, of towers built within the same and projecting above the roof thereof, said towers also projecting below the car, port-holes therein, port-holes in the towers, an arch connecting the towers, and communications between the tower and car, substantially as described. 3rd. A car having towers projecting from the sides thereof and extending above the roof of the same, an arch connecting the towers and establishing communication therebetween at the top of the car, the towers opening to the interior of the car at their lower end, sub-

stantially as set forth. 4th. A car having towers projecting from the sides thereof, an arch connecting the towers within the car,



partitions dividing the towers into upper and lower compartments, doors controlling the openings through the partitions, the walls of the towers provided with port holes, the towers communicating with the interior of the car at their lower ends, and doors controlling said communications, substantially as set forth.

#### No. 60,967. Air Brake. (Frein à air.)



James McDougall, Buffalo, and John Perrie, Depew, both in New York, U.S.A., 19th August, 1898; 6 years. (Filed 8th Aug., 1898.)

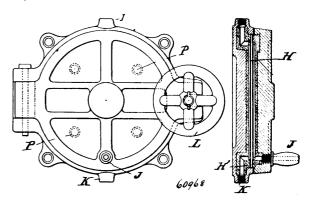
Claim.—1st. An air brake coupling provided with a removable cover so as to give access to the valves, substantially as shown. 2nd. An air brake coupling provided with an automatic relief valve, from which the pressure of the air is shut off when the main valve is opened, substantially as described. 3rd. An air brake coupling, each part of which is provided with a main valve for controlling the passage of air from one part of the coupling to the other, combined with an authomatically acting relief valve from which the pressure is shut off when the main valves are opened, substantially as set forth. 4th. In an air brake coupling, a spring actuated valve placed upon an endwise moving perforated tube, combined with a stationary tube into which the movable tube closes, and an automatic relief valve placed in the stationary tube, substantially as specified. 5th. In an air brake, an endwise moving tube carrying a valve, and a valve seat, combined with the rod or arm attached to the outer projecting end of the tube, and the guide for the outer end of the rod or arm, substantially as shown. 6th. In a coupling for an air brake valve, a removable cap provided with a stationary inwardly projecting tube, and an automatic relief valve placed in said tube, combined with an endwise moving perforated tube, a spring for actuating the movable tube, a valve secured to the tube, a valve seat applied to the casing, and a rod or arm projecting from the outer projecting end of the movable tube, the parts being arranged to operate so that when the main vajve is opened, the air pressure is shut off from the relief valve, and vice versa, substantially as set forth.

#### No. 60,968. Filtering Apparatus. (Appareil à filtrer.)

Paul Dame, Henri Pottevin and Albert Piat, all of Paris, France, 19th August, 1898; 6 years. (Filed 21st March, 1898.)

Claim.—1st. A filtering plate H, made of highly refined flax or hemp cellulose, which is mixed with water, then moulded, and finally agglomerated by drying and contraction, substantially as hereinbefore described. 2nd. A plate H, made of highly refined purpose set forth.

flax or hemp cellulose, which is mixed with water and in which is incorporated an insoluble neutral substance, then moulded and



finally agglomerated by drying and contraction, substantially as hereinbefore described. 3rd. A plate H, made of highly refined flax or hemp cellulose, which is mixed with water and in which is incorporated an insoluble antiseptic or absorbent material, with the objects of increasing the degree of porosity of the plate, and of co-operating with the filtering proper, to produce sterilization or clarification. 4th. A filtering plate H, made of highly refined flax or hemp cellulose, which is mixed with water and in which is incorporated an insoluble antiseptic or absorbent material, with the objects of increasing the degree of porosity of the plate, and of co-operating with the filtering proper, to produce sterilization or clarification, in combination with an impervious peripheral packing H<sub>2</sub>, formed either of a thin washer or band of India-rubber, having tu'ned over edges or by a suitable adhesive supple layer for the purpose of forming a tight-joint, substantially as described. 5th. A filtering plate H, made of highly refined flax or hemp cellulose, which is mixed with water and in which is incorporated an insoluble antiseptic or absorbent material, with the objects of increasing the degree of porosity of the plate, and of co-operating with the filtering proper, to produce sterilization or clarification, to which there is applied in the course of manufacture a sheet of paper or fabric N1, of less contractibility than cellulose paste, interposed between the lower felt disc of the mould and the cellulose paste poured into the said mould, the said paper or fabric being applied with the object of diminishing the contractibility of the pure cellulose, and forming the face of the plate at which the filtered liquid is to pass out, whilst upon the other face there is applied a sheet of paper or tissue N1, which may be simply applied after manufacture, in combination with an impervious peripheral packing H1, formed either of a thin washer or band of India-rubber, having turned-over edges or by a suitable adhesive supple layer for the purpose of forming a tight-joint, substantially as described. 6th. A filtering plate H, made of highly refined flax or hemp cellulose, which is mixed with water and in which is incorporated an insoluble antiseptic or absorbant material, with the objects of increasing the degree of porosity of the plate, and of co-operating with the filtering proper, to produce sterilization or clarification, to which, after the said plate has been manufactured, there is applied upon the face at which the filtered liquid is to pass out, a sheet of paper or tissue capable of retaining, in the said plate, the particles which might have a tendency to be carried away. 7th. The insertion of a filtering plate H, between two perforated straining or filtering supports resting upon grooved or fluted surfaces of cast tin, one belonging to the bottom, and the other to the cover of a domestic filter, the said bottoms and covers being hinged together and provided with hinged tightening bolts, substantially as hereinbefore described, with reference to and shown in figures 1, 2, 3 and 4, of the drawings referred to. 8th. The insertion of filtering plates HH, of large size, between successive perforated and filtering or straining supports, which in their turn rest against the grooved faces of sliding discs provided on each of their said faces with a layer of cast tin, formed with vertical grooves, communicating with a peripheral channel, one of the grooved faces receiving the liquid to be filtered, and the other receiving and discharging the filtered liquid and the said discharging the filtered liquid. ing and discharging the filtered liquid, and the said discs being arranged, and provided with means for being tightened, against one another after the manner of the discs of a filter-press, in such a way as to constitute a filter for commercial use, having great filtering power, or capacity, substantially as hereinbefore described.

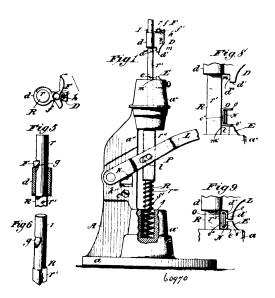
#### No. 60,969. Dental Plate Attachment.

(Attache pour plaque dentaire.)

Thomas Clark, Choisy, Interlaken, Switzerland, 19th August, 1898; 6 years. (Filed 12th April, 1898.)

Claim.—The improved enamel for refixing the dental plates of artificial teeth, composed of pink rubber dissolved in machine oil, gum shellac, rectified spirits of wine, plaster of Paris, carmine, Condy's fluid and otto of roses, in the proportions and for the purpose set forth.

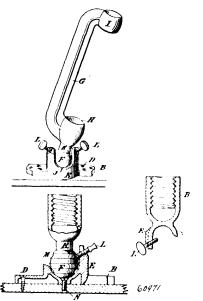
No. 60,970. Tool for Cutting and Biindng Metallic Strips. (Outil pour couper et joindre les bandes métalliques.)



Theodore L. Stewart, Brooklyn, New York, U.S.A., 19th August, 1898; 6 years. (Filed 29th June, 1898.)

Claim.—1st. In a binding tool the combination with a bar, of two jaws provided with angular pockets adjoining said bar, and means for bringing the jaws toward each other. 2nd. The combination with a bar carrying a jar having an angular pocket adjoining said bar, of an another jaw having an angular pocket adjoining said bar and mounted on a guide-head through which said bar passes. 3rd. The combination with a bar and means for moving the same, of two jaws each provided with an angular pocket adjoining said bar, one detachably mounted on said bar and the other similarly mounted on the guide for said bar. 4th. In a binding-tool the combination with a bar of a jaw provided with an angular pocket adjoining said bar and means for detachably securing the jaw to said bar. 5th. In a binding tool the combination with a bar of two jaws each provided with an angular pocket adjoining said bar, means for actuating said bar and means for normally keeping the jaws apart when not in use. 6th. The combination with a standard of a bar, two jaws provided with pockets adjoining said bar, a lever provided with a knife edge and adapted to actuate said bar, and corresponding knife-edge mounted on the standard.

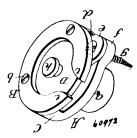
#### No. 60,971. Flag Staff Holder. (Porte-mât de pavillon.)



Walter Hart, New York, U.S.A., 19th August, 1898; 6 years, (Filed 2nd July, 1898.)

Claim.—1st. In combination with a ball and socket mechanism for supporting a flagstaff or like device, a plate provided with means of attachment to a support and carrying a cylindrical socket, a ball adjustably seated in the said socket and provided with means for engaging a flagstaff, and locking screws in the walls of the socket acting to hold the ball in said socket at various angles of adjustment. 2nd. In a ball and socket mechanism for supporting a flagstaff or similar device, the combination of a plate constructed to be attached to a support and carrying a cylindrical socket, a ball adjustably seated in said socket and provided with means for engaging a flag-staff or like device, and locking-screws in the walls of the socket acting to engage said ball. 3rd. In combination with a ball and socket mechanism for supporting a flagstaff, a base-plate adapted to be fixed to a support, a cylindrical socket carried by said plate and having its walls recessed, a ball adjustably seated in said socket and carrying a flag-pole-supporting device, and locking-screws acting to fixedly hold the ball in the socket in different relative positions. 4th. In combination with a ball and socket mechanism for supporting a flagstaff, a base-plate adapted to be fixed to a support, a cylindrical socket carried by said plate and having its walls recessed substantially as shown, a ball adjustably seated in said socket and carrying by a neck or extension therefrom a flag-pole supporting device, and locking-screws acting to fixedly hold the ball in the socket in different relative positions. 5th. In combination with the cylindrical socket E, having recesses J and means of attachment to a fixed support, a ball F carrying a pole-supporting bracket, and two or more screws L, threaded in the wall of the socket and adapted to bear upon said ball for the purpose of holding the same locked in the socket. 6th. In combination with the cylindrical socket E, having recesses J, and means of attachment to a fixed support, a roughened or corrugated ball F, carrying a pole-supporting bracket, and two or more screws L, threaded in the wall of the socket and adapted to bear upon said ball for the purpose of holding the same locked in the socket. 7th. In combination with the cylindrical socket E, having recesses J, and means of attachment to a fixed support, a ball F, carrying a pole-supporting bracket, and two or more screws L, threaded in thewall of the socket and adapted to bear upon said ball for the purpose of holding the same locked in the socket, and a screw N, or similar adjustable bearing part in the cal socket E, having recesses J and means of attachment to a fixed socket, and a screw N, or similar adjustable bearing part in the walls of the socket.

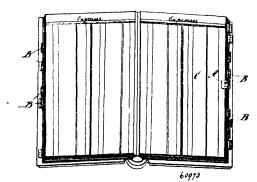
#### No. 60,972. Water Faucet. (Robinet d eau.)



Joel Cool Perry, South River, New Jersey, U.S.A., 19th August, 1898; 6 years. (Filed 2nd July, 1898.)

Claim.—A faucet consisting of a faucet-head having a tubular extension and segmental supporting-flange upon its front side, a drip-opening formed in the flange, a pivoted valve-plate having a suitable packing upon its inner side, and a removable segmental collar secured to the segmental flange, substantially as and for the purpose described.

#### No. 60,973. Index. (Index.)

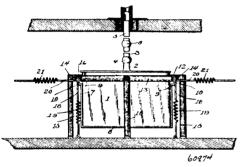


Charles Carman Smith, Exeter, Nebraska, U.S.A., 19th August, 1898; 6 years. (Filed 4th July, 1898.)

Claim.—1st. As a new article of manufacture, an index consisting of a metal clip having spring-jaws, and a tab secured to the clip, forming a cover for the same and projecting therefrom, the project-

ing portion of the tab forming a tag, substantially as shown and described. 2nd. An index, comprising a clip made of a single piece of spring metal bent upon itself and formed at its free ends with inwardly extending jaws normally contracting with each other, and a tab made of flexible material and bent upon itself, the said tab engaging with part of its free ends the outer surface of the clip and secured thereto, forming a cover for the same, the remaining portion of the flexible tab projecting from the clip, substantially and shown and described. 3rd. An index, comprising a clip made of a single piece of spring metal bent upon itself and formed at its ends with jaws adapted to engage the article to which it is applied, a tab made of flexible material and bent upon itself, the end portions of the tab extending over the clip and secured thereto, forming a cover for the same, the remaining portions of the tab extending outwardly from the bend of the clip and connected to each other by stitching, substantially as shown and described. 4th. An index, comprising a clip made of a single piece of spring metal, bent over and formed at its ends with a pair of inwardly-extending jaws normally contracting with each other and adapted to engage and clamp the leaf of a book, a tab made of a flexible material and bent over to engage with part of its free ends, the said clip forming a cover for the same, and filling secured in the said tab and extending between the bend of the clip and the bend of the tab, substantially as shown and described.

#### No. 60,974. Ship Galley. (Cuisine de navire.)

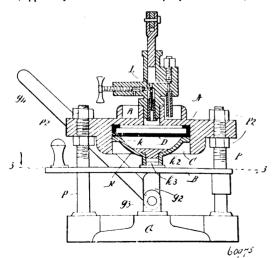


Frank Jonson, Seattle, Washington, U.S.A., 19th August, 1898, 6 years. (Filed 8th July, 1898.)

Claim.—The combination with a ship's galley, of the pipe sections connected by a ball joint, the stirrup 7 formed with the angular brackets 10, 10, the yoke 13 pivotally connected at its ends to said brackets, the fixed standards 15, 16, the trunnions 17, 17 connecting said yoke and standards and the spiral springs 19, 21 connected at right angles to said bracket 10, 10 and having their free ends fixed to the ship's structure, substantially as shown and described..

# No. 60,975. Apparatus for Making Dental Plates.

(Appareil pour la fabrication de plaques dentaires.)

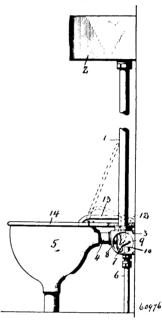


Charles Donald Grundy, Batley, York, England, 19th August, 1898, ; 6 years. (Filed 21st January, 1898.)

Claim.—1st. In an apparatus of the character and for the purpose herein described, the combination with a suitable base, of pillars or columns connected therewith, a top plate or casting adjustably mounted thereon, said top plate or casting being provided in the under side with a circular chamber in which is placed a movable rubber diaphram, a cup which is adapted to enter said chamber and

press upon said diaphram, a lever or bracket revolubly connected with one of said pillars or columns, a liquid press mounted above casting or top plate, and a communication with said chamber, and means for raising the lever or bracket, substantially as shown and described. 2nd. In an apparatus of the character and for the purpose herein described, the combination with a suitable base, of pillars or columns connected therewith, a top plate or casting adjustably mounted thereon, said top plate or casting being provided in its under side with a circular chamber in which is placed a movable rubber diaphram, a cup which is adapted to enter said chamber, and press upon said diaphram, a lever or bracket revolubly connected with one of said pillars or columns, and in communication with said chamber, and means for raising the lever brackets, consisting of a cam mounted on the base and provided with a crank lever, substantially as shown and described.

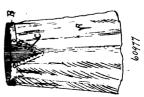
#### No. 60,976. Valve. (Soupape.)



Ferdinand Roy, Montreal, Quebec, Canada, 20th August, 1898; 6 years. (Filed 11th August, 1898.)

Claim.—1st. A closet system comprising a bowl, a tank, a flushing pipe connecting said tank and said casing, a pipe connecting said bowl and said casing, a water supply pipe having its inner end mounted within said casing, and a series of valves, operating by the movement of the seat portion for intermittently opening and closing the end of said supply pipe and said bowl pipe, the opening in one of said pipes being closed while the opposite opening is open, substantially as described. 2nd. The combination with a closet system, of a casing located in the path of movement of the water in said casing, and a series of valves having a common movement, located within said casing and adapted to intermittently open and close the water supply pipe, the opening of said supply pipe serving to close the bowl flushing pipe, substantially as described. 3rd. The combination with a casing, having three openings arranged at different sides thereof, two of said openings being adapted to have a direct communication, of a series of valves mounted within said casing and having a common movement, said valves being arranged to alternately close two of said openings, substantially as described. 4th. The combination with a casing having a plurality of openings, a valve stem located with said casing, a valve portion mounted on said stem, said valve portion having faces arronged at substantially right angles, and a washer formed on each of said faces, whereby one of said opening to said casing will be closed at all times, substantially as described.

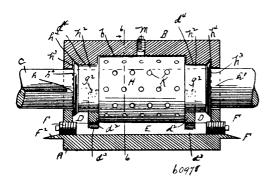
#### No. 60,977. Placket Holder. (Ferme-robe.)



Karl W. Leaf, Quincy, Massachusetts, U.S.A., 20th August, 1898 6 years. (Filed 6th August, 1898.)

Claim.—The herein-described placket-holder consisting in combination, a bar D and a grooved and laterally-expansive locking-bar F pivoted together at their lower ends, a spring H interposed between said bars and buttons G secured to the upper end of the opposite sides of the member D and adapted to interlock with button holes f in the upper end of the member F, substantially as and for the purpose set forth.

#### No. 60,978. Journal Box. (Coussinet de tourillon.)

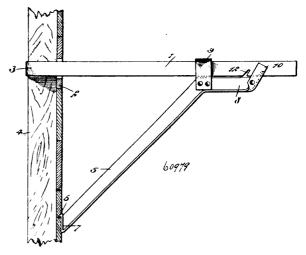


John Joseph Burke, Nanticoke, Pennsylvania, U.S.A., 20th August, 1898; 6 years. (Filed 6th August, 1898.)

Claim.—1st. The combination of a journal-box having a central longitudinal bore or opening, a shaft or axle, the bottom portion of the box being provided with a central semicircular chamber, an in-wardly-directed semicircular rib, at each end thereof, between which and the ends of the box are semicircular grooves, and the upper portion of the box being also provided with a central semicircular groove, a journal-head on the shaft, said journal-head being cylindrical and tubular in form, and being secured to said shaft, and being provided at each end with tubular extensions, at the outer end of each of which is an annular flange or rib, said parts being constructed, combined, and arranged, substantially as shown and described. 2nd. The combination of the journal-box having a central longitudinal board or opening a shaft or axle, the bottom portion of the box being provided with a central semicircular chamber, and inwardly-directed semicircular ribs, at each end thereof. between which and the ends of the box or casing, are semicircular grooves, and the upper portion being also provided with a central semicircular groove, a journal-head on the shaft, said journal-head being cylindrical and tubular in form and being secured to said shaft, and being provided at each end with tubular extensions, at the outer end of each of which is an annular flange or rib, and the upper portion of said box or casing being provided with a bore or upper portion of said tox or casing being provided with a bore or passage through which a lubricant may be poured onto said journal-head, and said journal-head being provided with a plurality of cupshaped cavities or depressions, in the surface thereof, substantially as shown and described. 3rd. The combination of a journal-box as shown and described. For The combination of a journal-box having a central longitudinal bore or opening, a shaft or axle, the bottom portion of the box being provided with a central semicircular chamber, and inwardly-directed semicircular ribs at each end thereof, between which and the ends of the box or casing, are semicircular grooves, and the upper portion being also provided with a central semicircular groove, a journal-head on the shaft, said journal-head being cylindrical and tubular in form and being keyed to said shaft, and being provided at each end with tubular extensions, at the outer end of each of which is an annular flange or rib, and the upper portion of said box or easing being provided with a bore or passage through which a lubricant may be poured onto said journal head, and said journal-head being provided with a plurality of cup-shaped cavities or depressions in the surface thereof, and the bottom portion of said box or casing being provided with longitudinal grooves adjacent to the central chamber formed therein, into which the oil also passes, and which communicate with grooves formed in the ribs at the end of said chamber, substantially as shown and described.

4th. The combination of a base portion A, a cap or cover B, both of which are provided with a longitudinal semicircular groove or recess to receive a shaft, said base having semicircular groove or receis to receive a shaft, said base having formed therein semicircular end grooves D, having longitudinal grooves or openings, screw-plugs E to close said openings, projecting lips F<sup>2</sup>, below said openings, semicircular ribs  $d^2$  forming a central chamber d, having longitudinal grooves G, in communication with transverse grooves g, said ribs  $d^2$ , having formed in the curved surface thereof grooves g, communicating with the groove g, said cap or cover having a semicircular chamber b, and a journal-head H, a shaft carrying said head and provided with tubular extensions  $h^2$ , having annular flanges  $h^3$ , fitting grooves  $h^4$ , in the cap or cover, said journal-head having cup-shaped recesses and said cap or cover having an opening L, and a screw-plug, substantially as shown and described. as shown and described.

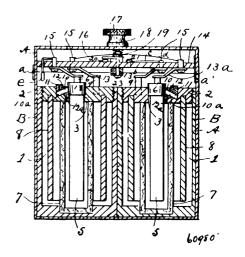
No. 60,979. Scaffold Bracket. (Boulin pour échafauds.)



Louis Simon Miller, New York, U.S.A., 20th August, 1898; 6 years. (Filed 5th August, 1898.)

Claim.—1st. A scaffold bracket, comprising an arm having a hooked inner end, and a notch near its outer end, a brace having a tooth at its lower end and a tooth at its upper end to engage in the notch of the arm, cheek plates on the brace, for engaging against the sides of the arm, and a loop on the brace through which the arm is designed to pass, substantially as specified. 2nd. A scaffold bracket, comprising an arm having a hooked inner end and notches formed near its outer end, a brace of angle iron having a tooth at its lower end, the upper portion of the brace being turned outward at an acute angle to the body, cheek plates on the outwardly turned portion, a tooth between the cheek plates to engage in either one of the notches in the arm, and a loop on the brace through which the arm may freely pass, substantially as specified.

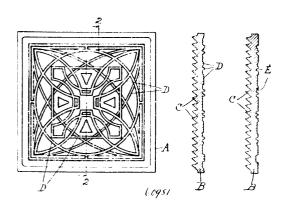
No. 60,980 · Electric Lantern. (Lanterne électrique.)



Oscar Charles Prasse, West New Brighton, New York, U.S.A., 12th August, 1898; 6 years. (Filed 21st July, 1897.)

Claim.—1st. A battery, comprising a casing having a removable head thereon, and a depending cylindrical carbon attached to said head and an enclosed porous cup and a removable zinc contained within said cup, the said cup and the said casing adapted for respectively containing chemical compounds, the said head having a vent leading therethrough for escape of gasses, substantially as shown and described. 2nd. In a battery, the combination of a porous cup containing a suspended zinc, and a cylindrical carbon surrounding said zinc, and a casing enclosing the said parts, said casing having a removable head to which the said carbon is attached and from which the zinc is suspended, and a recess formed in said head for containing mercury, said chamber adapted as a vent from the battery and the mercury therein adapted for closing the outlet when the battery is tilted or inverted, substantially as shown and described.

No. 60,981. Prism Light. (Lumière prisme.)



John Meiggs Ewen, Chicago, Illinois, U.S.A., 20th August, 1898; 6 (Filed 12th July, 1898.) vears.

Claim.—1st. A prism light comprising a substantially flat and thin body of transparent material with a series of small prisms on one side thereof, systematically arranged to produce an increased illuminating effect and distributed in a substantially uniform manner over the prism side, and a grid-like design on a part of the receiving side formed of lines produced in the transparent material and extending over a considerable portion of such receiving surface, so as to leave no relatively large unbroken surfaces thereon, said lines formed of the substance of the prism light. 2nd. A prism light comprising a substantially flat and thin body of transparent material with a series of small prisms on one side thereof, systematically arranged to produce an increased illuminating effect and distributed in a substantially uniform manner over the prism side, and a grid-like design on a part of the receiving side formed of lines produced in the transparent material and extending over a considerable portion of such receiving surface, so as to leave no relatively large unbroken surfaces thereon, said lines formed of the substance of the prism light and slightly elevated above the general surface of the receiving side. 3rd. A prism light comprising a substantially flat and thin body of transparent material with a series of small prisms on one side thereof, systematically arranged to produce an increased illuminating effect and distributed in a substantially uniform manner over the prism side, and a grid-like design on a part of the receiving side formed of lines produced in the transparent material and extending over a considerable portion of such receiving surface, so as to leave no relatively large unbroken surfaces thereon, said lines provided with edges in places substantially perpendicular to the receiving surface, said lines formed of the substance of the prism light. 4th. A prism light comprising a substantially flat and thin body of transparent material with a series of small prisms on one side thereof, systematically arranged to produce an increased illuminating effect and distributed in a substantially uniform manner over the prism side, and a grid-like design on a part of the receiving side formed of lines produced in the transparent material and extending over a considerable portion of such receiving surface, so as to leave no relatively large unbroken surface thereon, said lines of thin and of practically uniform cross section, said lines formed of the substance of the prism light. 5th. A prism light comprising a substantially flat and thin body of transparent material with a series of small prisms on one side thereof, systematically arranged to produce an increase dilluminating effect and distributed in a substantially uniform manner over the prism side, and a grid-life. substantially uniform manner over the prism side, and a grid-like design on a part of the receiving side formed of lines produced in the transparent material and extending over a considerable portion of such receiving surface, so as to leave no relatively large unbroken surfaces thereon, said lines produced in the transparent material and slightly elevated above the general surface of the receiving side and provided with edges which are in planes substantially vertical to the receiving surface, said lines formed of the substance of the prism light.

### No. 60,982. Prismatic Window. (Fenêtre prismatique.)

John Meiggs Ewen, Chicago, Illinois, U.S.A., 20th August, 1898; 6 years. (Filed 12th July, 1898.)

Claim.—1st. The combination with a window having a deep reveal, of a prism plate consisting of a series of prism lights provided with prisms systematically arranged to produce an increased illuminating effect, said prisms plate suspended near the outer face of the wall surrounding the reveal and being smaller in dimensions than said reveal, so that when in position there is an intervening space between its outer boundary and the edges of the reveal whereby the artistic effect due to the reveal remains substantially unchanged. 2nd. A prism plate for windows, comprising a bar secured in the window behind a screen having openings which expose every other adver

opening somewhat below the upper edge of such opening, two other bars secured to and suspended from the first mentioned bar, a prism

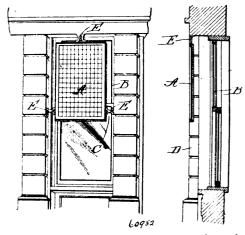
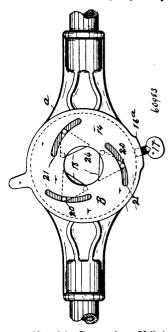


plate attached to such bars and lower supports and attachments at the corners of the prism plate, substantially as shown and described.

No. 60,983. Die Stock Bushing. (Dé de filière brissée.)



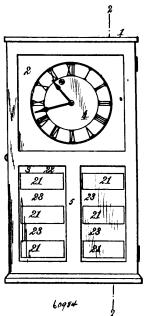
George Percy Bard, Norwich, Connecticut, U.S.A., 20th August, 1898; 6 years. (Filed 11th July, 1898.)

Claim. - As a new article of manufacture, a separate and independent bushing for a die stock, which bushing is provided with a collar that is adapted to fit a corresponding collar upon a die stock whereby the same bushing is adapted to be used upon different die stocks, combined with the adjustable jaws pivoted in the bushing, substantially as shown and described.

#### No. 60,984. Advertising Apparatus. (Appareil de publicite.)

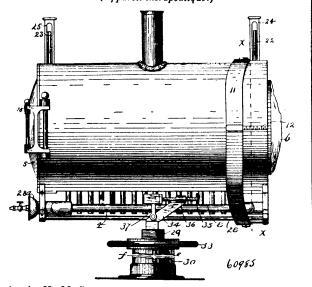
Augustus Washington Kirkpatrick, Greeneville, Tennessee, U.S.A., 20th August, 1898; 6 years. (Filed 11th July, 1898.)

Claim. -1st. In an automatic advertising apparatus, the combination with a plurality of advertisement frames arranged to move in parallel right lines behind a screen having openings which expose the advertisements, of automatic mechanism connected to said frames to move the same, an automatic stop for arresting said mechanism after each movement, means for releasing said stop, and a train of clock gearing connected to the releasing device to operate the latter at predetermined intervals, and permit it to shift the advertisement-frames simultaneously, substantially as described. 2nd. In an automatic advertising apparatus, the combination with a plurality of advertisement-frames arranged to move in parallelism tisement in each frame, of crank-arms connected to said frames, a train of gearing to drive the crank-shaft, a motive power for said



gearing, a disk on a shaft geared to said train, a spring-lifted thrustrod having one end over a spring-pressed pawl on a rigid support,
the end of said pawl being in the line of travel of a pin on the disc,
a train of clock-gearing, and a disc having mutiple cam projections
acting upon one end of the thrust-rod, substantially as described.
3rd. In an automatic advertising apparatus, the combination with
constantly-driven gearing to operate said apparatus, of a springpressed pawl on a stationary support to arrest the movement of the
gearing, a thrust-rod to disengage said pawl, a disc having a series
of cam projections to operate the thrust-rod, a spring to restore the
latter, and a train of clock-gearing to give uniform revolution to
said disc, substantially as described. 4th. In an automatic advertising apparatus, the combination with a plurality of advertisementframes arranged behind a screen having openings and imperforate
portions alternately, of a crank-shaft having arms connected to said
frames, gearing to turn the crank-shaft a disc having a pin projecting from one face and carried by a shaft driven by said gearing, a
pawl on a rigid support having a spring to hold it in the path of
said pin, a thrust-rod to disengage the pawl, a cam-disc to operate
said thrust-rod, a spring to preserve the engagement between the
latter and the cam-disc, and a separate train of gearing to operate
the cam-disc, substantially as described.

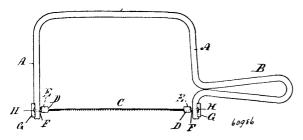
# No. 60,985. Therapeutical Apparatus. (Appareil therapeutique.)



Austin V. M. Sprague, Brooklyn, N.Y., U.S.A., 20th August, 1898; 6 years. (Filed 14th April, 1898.)

Claim. -1st. In a therapeutical apparatus, the combination of a chamber adapted to receive or to be applied to a part of the human body, means for maintaining the temperature within said chamber above the boiling point of water and means for admitting such a current of dry air to said chamber as will remove the vapours arising from the part of the body being treated as rapidly as they are generated, substantially as described. 2nd. In a therapeutical apparatus, the combination of an air chamber adapted to receive the limb of a patient, means for continually heating, and maintaining the temperature of the air within said chamber above the boiling point of water, and means for admitting such volume of air to said chamber as to continually effect the displacement of the accumulating vapour, substantially as described. 3rd. In a therapeutical apparatus, the combination of an air chamber adapted to receive the limb of a patient, means for heating the air within said chamber, and means for continually admitting a current of substantially dry air to, and thereby expelling moist air from said chamber, substantially as described. 4th. In a therapeutical apparatus, the combination of an air chamber adapted to receive the limb of a patient, means for heating the air within said chamber, means for continually admitting a current of substantially dry air to, and thereby expelling moist air from said chamber, and means for regulating the temperature in said chamber, substantially as described. 5th. In a therapeutical apparatus, the combination of an air chamber adapted to receive the limb of a patient, means for heating the air within said chamber, a series of tubes for continually admitting a current of substantially dry air to said chamber to expel moist air therefrom current of substantially dry air to said chamber to expel moist air therefrom and another series of tubes for continually discharging said moist air from said chamber, dampers for each of said series of tubes, and a lever for simultaneously operating said dampers, substantially as described. 7th. In a therapeutical apparatus, an air chamber adapted to receive the limb of a patient and provided with ventilative openings, a flue surrounding said air chamber, and a source of heat communicating therewith and situated below said air chamber and in contiguity to said openings so as to induce a current substantially dry air to said chamber, substantially as described. or substantially dry air to said chamber, substantially as described. 8th. In a therapeutical apparatus, an air chamber provided with ventilative openings, a perforated casing arranged within said chamber and adapted to receive the limb of a patient, a flue surrounding said air chamber, and a source of heat communicating therewith and situated below said chamber and in contiguity to said openings so as to induce a current of substantially dry air to said chamber, substantially as described. 9th. A therapeutical apparatus consisting of the concentrically arranged inner, intermediate and outer casings, the inner casing being perforated and adapted to receive the limb of a patient and the outer casing being open at the top and bottom, a heating apparatus beneath said bottom opening in the outer casing, a series of tubes communi-said series of tubes being adapted to discharge moist air from the intermediate casing, slide dampers for controlling the supply of air, through the tubes, and an operating lever for simultaneously operating the damper of each of said series of tubes, substantially as described. 10th. A therapeutical apparatus consisting of the concentrically arranged inner, outer and intermediate cylinders, the inner cylinder being perforated, adapted to receive the limb of a patient and provided with internally arranged protective pads, the intermediate cylinder having a series of tubes for admitting fresh air at the bottom thereof, and the outer cylinder having an opening at the top and bottom, means situated beneath said bottom opening in the outer cylinder for heating the air therein and in the intermediate cylinder, slide dampers for the tubes arranged on the intermediate cylinder, an operating lever for the dampers fulcrumed on the outer cylinder and adapted to simultaneously adjust said dampers, a gauge for the lever, a door adapted to close the cylinders at one end and provided with an observation port, and a flexible covering secured to the other end of the outer cylinder, substantially as described. 11th. In a therapeutical apparatus, the combination of an air chamber adapted to receive the limb of a patient, a plurality of parallel burners for heating the air within said chamber and situated below the same, and lower or inlet tubes and upper or outlet tubes communicating with said chamber, said lower tubes being arranged between and having their mouths slightly below the burners and said burners being adapted to induce ventilative streams of fresh air through the tubes and the chamber, substantially as described. 12th. In a therapeutical apparatus, an air chamber adapted to receive the limb of a patient and provided with means for continually ventilating said chamber, a flue surrounding said chamber, and a heating apparatus, and the surrounding said chamber, and the surrounding said chamber surrounding surrounding said chamber surrounding surrounding said chamber surrounding sur satus situated beneath and communicating with said flue and adapted to induce a heated, continuous and enveloping current of air into contact with said air chamber, substantially as described. 13th. In a therapeutical apparatus, an air chamber adapted to receive the limb of a patient and provided with upper and lower ventilative openings, a flue surrounding said air chamber, and a heating apparatus communicating with said flue and situated contiguous to the lower ventilative openings in the air chamber, and adapted to induce a heated, continuous and enveloping current of air into contact with said chamber and to project streams of fresh air through said ventilative openings in said chamber, substantially as described. 14th. In a therapeutical apparatus, the combination with an operating chamber adapted to receive the limb of a patient and provided with a supporting frame, of a base therefor, a vertical externally threaded hand-wheel for the pedestal operating thereon and resting on the base, laterally extending arms carried by said pedestal, an extension projecting forwardly and upwardly from the end of one of said arms, an axis for said chamber rigidly secured to the frame and having bearings in said arms, an upwardly extending lever secured to the end of said axis adjacent to the extension, and an adjusting hand-screw for tilting said chamber, operating in the upper end of the extension and having a ball and socket connection with the lever, substantially as set forth.

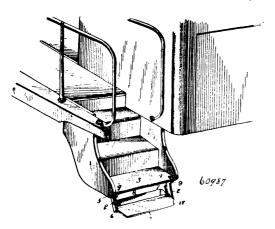
#### No. 60,986. Frame Saw. (Scie montée.)



Luke Long, Courtright, Ontario, Canada, 20th August, 1898; 6
 years. (Filed 12th August, 1898.)
 Claim.—A frame-saw having a frame and handle formed of a single

Claim.—A frame-saw having a frame and handle formed of a single piece of bent steel wire, and having thumb and finger buttons to hold the saw strained, said buttons having a head D, provided with a slot E, a shank F, passing through a hole in the frame near the ends, and a disc G, secured to the projecting end of the shank, said disc provided with diametrical grooves H, on the inner face to engage the saw-frame, and fix the saw blade at the rotated position, as set forth.

No. 60,987. Folding Car Step. (Marche de chars.)

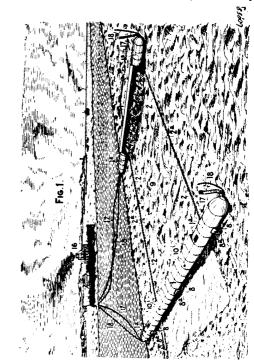


Thomas Hendrick, Glenwood Springs, Colorado, U.S.A., 20th August, 1898: 6 years. (Filed 9th August, 1898.) Claim.—1st. In a device of the class described, the combination

Claim.—1st. In a device of the class described, the combination with rigid car steps, of the riser bars 2 provided at their upper ends with outwardly extending arms pivoted at a point beneath the lowermost step at their outer ends and inwardly off-setting the riser bars to enable the upper ends of the same to engage the lower face of the lowermost car step and leave the upper face of the latter free, a handle extending rearward from the upper end of one of the riser bars in a direction opposite to that of the adjacent arm, whereby it is located beneath the car steps when the riser bars depend therefrom and is arranged in convenient position for use when the riser bars are folded upon the car step, and a folding step pivotally mounted between the lower ends of the riser bars, substantially as described. 2nd. In a device of the class described, the combination with rigid car steps having a lower step 3 provided at its outer edge with recesses, of the riser bars 2 provided at their upper edge with outwardly extending arms provided at a point below the step 3 and off-setting the riser bars rearwardly to permit the same to engage

the lower face of the step 3 in rear of the recesses, said arms being arranged to swing into the recesses to enable the riser bars to lie on the upper face of the step 3, a folding step pivotally mounted between the lower ends of the riser bars, a handle extending rearward from the upper end of one of the riser bars at the angle formed by the arm thereof, whereby the handle will be arranged beneath the step 3 when the folding step is in operative position and will extend upward from the step 3, when the folding step is arranged thereon, substantially as and for the purpose described.

No. 60,988. Dredging Apparatus. (Appareil à draguer.)



Maurice Mary Joseph Owen O'Conor, Inisfale Island, Drumshambo, Leitrim, Ireland, 20th August, 1898; 6 years. (Filed 9th August, 1898.)

Claim.—1st. In a dredging apparatus, a vessel capable of being sunk to the bed of a river or other waterway to be dredged and of being afterwards refloated by inflation and formed with an open receptacle for dredged material and with a part adapted to direct material being dredged into said receptacle, and means whereby said vessel can, when sunk, be caused to travel over said bed and cause a portion of said bed to enter said receptacle, as set forth. Dredging apparatus comprising vessels capable of being sunk to the bed of a river or other waterway and of being afterwards refloated and each formed with an open receptacle for dredged material and with a part adapted to cause material being dredged to enter said receptacle, flexible connections between said vessels, and mechanism located in said vessels and whereby the flexible connections can be hauled in and the vessels caused to approach each other in a lateral direction, as set forth. 3rd. In dredging apparatus, a vessel formed with an open receptacle for dredged material, with air and water tight con-partments and with air and water tight chambers, means whereby water can be separately admitted to and afterwards shut off from said compartments and chambers, means whereby water can afterwards be withdrawn from and air admitted to said compartments and chambers, and means whereby said vessel when sunk onto the bed of the river or other waterway to be dredged can suit onto the bed of her fiver of their waterway to be dreuged can be drawn over said bed so as to cause a portion of said bed to enter said receptacle. 4th. Dredging apparatus comprising two elongated vessels arranged parallel to one another and each formed with an open receptacle for dredged material with air and water tight compartments, and with air and water tight chambers and provided with means whereby water can be separately admitted to and afterwards shut off from said compartments and chambers and means whereby suit on from said compartments and chambers and means whereby water can afterwards be withdrawn from and air admitted to said compartments and chambers, flexible connections, arranged at right angles to and connecting said ves els, and mechanism located in said vessels and whereby said connections can be hauled in and the said vessels caused to move over the bed to be dredged and in a direction towards one another, as set forth. 5th. In dredging apparatus, a vessel capable of being partly rotated about a horizontal axis and of being sunk to the bed of a river or other waterway and of being afterwards partly rotated in the reverse direction and refloated, said vessel being provided with a receptacle having an elongated opening and adapted to receive and hold dredged material, with a wedge-like

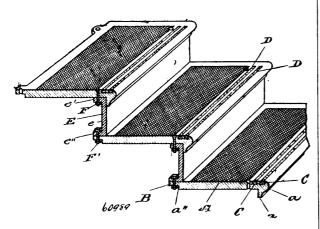
extension arranged along one side of said opening and adapted during dredging, to cause material being dredged to enter said receptacle, and with arms or projections extending laterally from said vessel in an opposite direction to said extension and so arranged that during dredging they can bear upon said bed and prevent such vessel rolling or turning thereon, substantially as described. 6th. In dredging apparatus, a vessel capable of being partly rotated about a horizontal axis and of being sunk to the bed of a river or other waterway and of being. afterwards partly rotated in the reverse direction and refloated, said vessel being provided with a receptacle having an elongated opening and adapted to receive and hold dredged material, with a wedge like extension arranged along one side of said opening and adapted, during dredging, to cause material being dredged to enter said receptacle, and with arms or projections extending laterally from said vessel in an opposite direction to said extension and provided with rollers, substantially as herein described for the purposes specified. 7th. The combination with a dredging vessel adapted to be partly rotated, of arms or projections extending from such vessel and provided with rollers, and anti-friction balls or rollers mounted on such vessel and adapted to facilitate rotation thereof about its longitudinal axis, substantially as herein described. 8th. Dredging apparatus comprising two elongated vessels each capable of being sunk to the bed of the river or other waterway to be dredged and of being refloated and each provided with an open receptacle for dredged material, with a wedge like extension arranged along one side of the mouth of said receptacle, and with arms or projections extending in an opposite direction to said wedge-like extension and adapted to bear upon said bed, the mouths of said receptacles and said wedgelike extensions facing one another, flexible connections between said vessels, and hauling-in mechanism located within said vessels and whereby said connections can be hauled in, substantially as described for the purpose specified. 9th. In dredging apparatus, the combination with a vessel capable of being sunk to the bed of the waterway to be dredged and of being afterwards refloated and formed with an open receptacle for dredged material, of a wedge-like extension arranged along one side of and projecting away from the mouth of said receptacle and adapted to cause material being dredged to enter said receptacle, arms or projections extending from said vessel in an opposite direction to said wedge-like extension and adapted to bear upon said bed during dredging, flexible connections extending from said vessel in the direction in which said wedge-like extension projects, mechanism carried by said vessel and whereby said flexible connections can be hauled in and the vessel moved parallel with itself, and additional hauling mechanism carried by said vessel and whereby other flexible connections can be hauled up for partially rotating said vessel about a horizontal axis, substantially as described for the purposes specified. 10th. Dredging apparatus comprising an elongated vessel formed at its ends with air and water-tight compartments, with a centrally-arranged longitudinal open receptacle for dredged material and with longitudinal air and water-tight chambers arranged along the opposite sides of the mouth of said receptacle and one of which is made of wedge-like shape and of larger dimensions and so as to project to a greater extent than the other chamber from said vessel, arms or projections arranged to extend from said vessel in an opposite direction to said wedge-like extension, air-tubes whereby air can enter and leave said compartments and chambers, means whereby water can be admitted to and shut off from said compartments and chambers, means whereby water can be withdrawn from said compartments and chambers, and means whereby the vessel, when sunk upon said bed so that the wedgelike extension and arms or projections bear thereon, can be drawn over said bed so as to dredge the same. 11th. Dredging apparatus comprising an elongated vessel formed at its ends with air and water-tight compartments, with a centrally arranged longitudinal open receptacle for dredged material and with longitudinal air and water-tight chambers arranged along the opposite sides of the mouth of said receptacle and one of which is made of wedge-like shape and of larger dimensions and so as to project to a greater extent than the other chamber from said vessel, arms or projections arranged to extend from said vessel in an opposite direction to said wedge-like extension, air-tubes whereby air can enter and leave said compartments and chambers, means whereby water can be admitted to and shut off from said compartments and chambers, means whereby water can be withdrawn from said compartments and chambers, mechanism whereby the said vessel can be caused to travel over the bed to be dredged, and mechanism whereby the vessel, with dredged material, can, when refloated, be partly rotated about its axis for the purposes specified. 12th. Dredging apparatus comprising two elongated vessels, flexible connections between said vessels, and mechanism located within said vessels and whereby said connections can be hauled in and the vessels thereby caused to approach each other, each of said vessels being provided with air and water-tight compartments at its ends with a central open receptacle adapted to receive and hold dredged material, with longitudinal air and water-tight chambers arranged at opposite sides of the mouth of said receptacle, one of said chambers being made of approximately wedge-like shape and of larger dimensions and so as to project from said vessel to a greater extent than the other, arms or projections arranged to extend from said vessel in an

can be withdrawn from said compartments and chambers replaced by air, substantially as described for the purposes specified. In dredging apparatus, the combination with two vessels capable of being sunk onto the river or other bed to be dredged and of being refloated with dredged material and each formed with an open receptacle for dredged material and with wedge-like extension projecting from one side of the opening leading to said receptacle, of hauling-up mechanism comprising rams and cylinders carried by each of said vessels at the side of the opening therein opposite to that carrying said extensions, and flexible connections arranged to pass under the two vessels when the same are brought together and each connected at one end to a movable part of the hauling-in mechanism on one vessel and at the opposite end to the other vessel at a part thereof at the opposite side of the opening therein to that carrying the hauling up mechanism of said vessel, substantially as described and for the purpose specified. 14th. A dredging vessel having cylindrical ends formed with air and water tight compartments capable of being filled with air or water at will and with spaces for machinery, a hollow central or intermediate compartment having an opening along one side, air and water tight chambers arranged at opposite sides of said opening and one of which is of wedge-like shape and made larger than and so as to project to a greater distance from said vessel than the other, valves adapted to be controlled from above the surface of the water in which said vessel is to float and whereby water can be admitted to and shut off from each of said compartments and chambers at will, air tubes leading to each of said compartments and chambers, hydraulic hauling-in mechanism arranged longitudinally within said vessel, passages extending laterally through said vessel and arranged near the ends of said receptacle and extension and flexible connections connected with said hauling in mechanism and extending through said passages, guide rollers for said flexible connections, and pumps and electric motors for driving the same located in said machinery spaces, one or more of said pumps being adapted to withdraw water from the end compartments, another or others for withdrawing water from the larger of the two longitudinal chambers, and another or others for supplying water under pressure to said hydraulic hauling-in mechanism, substantially as herein described. 15th. The combination with a vessel capable of being sunk to the bed of a river or other waterway and of being afterwards refloated as set forth, of hauling-in mechanism located within said vessel, a rod connected to the movable part of said mechanism and working into a tube open at one end of the external water, and water tight packing located in said tube and surrounding said rod, substantially as herein described for the purpose specified. 16th. The combination with a vessel capable of being sunk to the bed of a river or other water-way, and of being afterwards refloated as set forth, of sets of hauling in mechanism arranged to work longitudinally within said vessel and arranged so as to be at or near the bottom thereof when the same is floating normally in the water, longitudinally arranged tubes each in communication at one end with the external water and at the other end with the machinery compartment, and packing devices located in said tubes, each set of said mechanism comprising a hydraulic ram and cylinder, and a rod located in one of said tubes, connected at one end to the movable colinder or ram, and arranged to work in a water tight manner through the packing in said tube, substantially as described for the purpose specified. 17th. The combination with a vessel capable of being sunk to the bed of a river or other water way and drawn over the same and afterwards refloated, of sets of hauling-up mechanism each comprising a hydraulic cylinder and ram arranged longitudinally upon said vessel, and guiding devices whereby flexible connections attached to the movable parts of said mechanism can be led off transversely to said vessel substantially as described for the purpose specified. 18th. The combination with a vessel capable of being sunk to the bed of a river or other water-way and of being afterwards refloated and formed with a receptacle for dredged material, of valves arranged to control communications between the bottom of said receptacle and the exterior of the vessel, and means for operating said valves for the purposes specified. 19th. Dredging apparatus comprising an elongated vessel I formed with cylindrical end portions l\* having connected air and water-tight compartments 1<sup>b</sup> and machinery spaces 1° therein, and an intermediate portion formed with a receptacle 3 having an opening 3<sup>a</sup> at one side, and longitudinal air and water-tight chambers 4 and 5 located at opposite sides of said opening and whereof 5 is in communication through suitable openings with said end compartments 1b, means for controlling said openings from the surface of the water strengthening stays connecting the forward projecting portion of said chamber 4 to the part of said vessel at the opposite side of the opening 3<sup>a</sup> therein, arms or projections 8 with rollers extending from said vessel in an opposite direction to said chamber 4, air tubes adapted to extend from above the surface of the water to each of the compartments 16 and chambers 4 and 5, means for admitting water to said compartments and chambers separately, pumps with motors located within said machinery spaces 1c and adapted to separately withdraw water from said end compartments and from the chamber 4, sets of hydraulic apparatus arranged near the bottom of said receptacle, pumps with motors located in said machinery space 10 opposite direction to said wedge-like extension, air-tubes whereby air can enter and leave said compartments and chambers, means whereby water can be admitted to and shut off from each of said ompartments and chambers separately, and means whereby water

laterally from said vessel and means for admitting air or water to bottom part of said receptacle 3, all substantially as herein described for the purposes specified. 20th. Dredging apparatus comprising an elongated vessel 1 formed with cylindrical and portions 1<sup>a</sup> having connected air and water-tight compartments 1b and machinery space 1° therein, and an intermediate portion formed with a receptacle 3 having an opening 3<sup>a</sup> at one side, and longitudinal air and water-tight chambers 4 and 5 located at opposite sides of said opening and whereof 5 is in communication through suitable openings with said and compartments 1b, means for controlling said openings from the surface of the water, strengthening stays connecting the forward projecting portion of said chamber 4 to the part of said vessel at the opposite side of the opening 3<sup>n</sup> therein, arms or projections 8 with rollers extending from said vessel in an opposite direction to said chamber 4, air tubes adapted to extend from above the surface of the water to each of the compartments 1<sup>b</sup> and chambers 4 and 5, means for admitting water to said compartments and chambers separately, pumps with motors located with said machinery spaces 1° and adapted to separately withdraw water from said end compartments and from the chamber 4, sets of hydraulic apparatus arranged near the bottom of said receptacle, pumps with motors located in said machinery spaces 1c and adapted to supply water under pressure to said hydraulic apparatus, transverse passages 20 arranged near the ends of said receptacle 3, guiding devices whereby flexible connections attached to the movable parts of said hydraulic apparatus can extend away laterally from said vessel, means for admitting air or water to bottom part of said receptacle 3, sets of hydraulic hauling-up mechanism arranged longitudinally on said chamber 5, and guiding devices whereby flexible connections attached to the movable parts of said hauling-up mechanism can be led away in a direction at right angles to said vessel, all substantially as herein described for the purpose specified.

#### No. 60,989. Steps for Stairs, etc.

(Marche pour escaliers, etc.)



Henry James Hamilton, Toronto, Ontario, Canada, 20th August, 1898; 6 years. (Filed 29th July, 1898.)

Claim.—Ist. A step consisting of a body portion having a longitudinal groove or grooves formed in the top surface of the body portion, contiguous to and parallel with the front edge, and antislipping material contained within the grooves, substantially as specified. 2nd. A step consisting of a body portion having a longitudinal groove or grooves formed in the top surface of the body portion, contiguous to and parallel with the front edge, anti-slipping material contained within the grooves, lugs projecting rearwardly from the obverse edge of the body portion, in combination with a riser consisting of a body portion, rearwardly projecting flanges at the top and bottom of the body portion, bolts passing through the top flange of the riser and body portion of the next successive step above it, and bolts passing through the bottom flange and the lugs of the next successive step below it, substantially as specified. 3rd. A step consisting of a body portion having a longitudinal groove or grooves formed in the top surface of the body portion, contiguous to and parallel with the front edge, anti-slipping material contained within the grooves, lugs projecting rearwardly from the obverse edge of the body portion, in combination with a riser consisting of a body portion, pearwardly projecting flanges at the top and bottom of the body portion, bolts passing through the top flange of the riser and body portion of the next successive step above it, bolts passing through the bottom flange and the lugs of the next successive step below it, and a flange at the front edge of the step overlapping the top of the front of the body portion of the riser, substantially as specified. 4th. A step consisting of a body portion having a groove or grooves formed in the top surface, and anti-slipping material contained within the groove, substantially as specified.

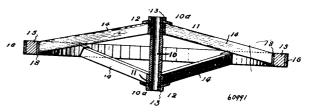
No. 60,990. Wire Cable. (Cable en fil de fer.)



John Morlock, Guelph, Ontario, Canada, 20th August, 1898; 6 years. (Filed 12th July, 1898.)

Claim—1st. The hollow spring wire cable composed of a plurality of spring wires, wound into a close coil of sufficient pitch that stretching will not open the cable but will lengthen it at the same time reducing its diameter and stiffening and strengthening the cable, as hereinbefore described and illustrated in the drawing. 2nd. The hollow spring wire cable composed af a plurality of spring wires wound into a close coil in combination with hooks formed by inserting sharp cores of tightly fitting wire into the ends of the hollow spring wire cable and then bending them into shape, as and for the purpose hereinbefore described and illustrated in the drawings.

No. 60,991. Vehicle Wheel. (Roue de voiture.)



Isaac Henderson, Vancouver, British Columbia, Canada, 20th August, 1898; 6 years. (Filed 9th June, 1898.)

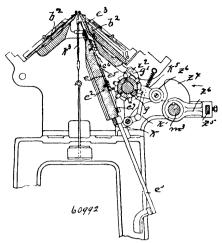
Claim.—1st. In a vehicle wheel of the character described, in combination, a tubular hub having external threads at the ends, sleeves, having flattened annular bearing faces, slidable upon the ends of the hub, sockets on the felloe, the spokes having their ends made to bear against the felloe sockets and the flattened bearing portions of the slidable sleeves, and adjusting devices secured upon the outer ends of the hub for forcing the sleeves and the inner ends of the spokes inward, substantially as shown and described. 2nd. In a vehicle wheel of the character described, in combination, a tubular hub having its outer ends externally threaded, the felloe, the shoes secured to the felloe having abutment members, said shoes being alternately arranged upon the feloe, sleeves slidable upon the hub having suitable bearing faces, the spokes having their ends formed to engage the shoes on the felloe and the slidable sleeves on the hub, and means for drawing the sleeves inward and holding them to their adjusted position upon the hub, substanially as shown and for the purposes described. 3rd. In a wheel of the character described, in combination with the axle spindle and the tubular hub fitted thereon, said hub having external threads on its opposite ends, of the shoulder nut 13a engaging the hub, the sleeves 11 having suitable bearing surfaces for the ends of the spokes, the spokes, and the felloe having spoke receiving sockets all being arranged substantially as shown and for the purposes described. 4th. A vehicle wheel having a hollow hub provided with external threads on its outer ends, sleeves 11 loosely fitted thereon, in combination of a wheel rim and the spokes 14, interposed between the sleeves and the rim, said spokes being internally deflected oppositely from the plane of the wheel rim, the washers 12, lying against the outer sides of the spokes and the sleeves, the nuts 13 engaging the threaded ends of the hub, all being arranged substantially as shown, whereby the ends of the spokes engaging the sleeves 11,

# No. 60,992. Knitting Machine. (Machine à tricoter.)

Herman Donner, Chemnitz, Saxony, German Empire, 20th August, 1898; 6 years. (Filed 19th July, 1898.)

Claim.—1st. A pulling-off apparatus for Lamb's knitting machines consisting in a frame e, arranged on the under side of the needle-bed and between the needle-bed and the knitting-ware and bearing a device for weighting the knitting-ware in connection with sliding weights  $e^2$   $e^2$ , freely sliding on the frame e, substantially as and for the purpose hereinbefore set forth. 2nd. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame e, arranged on the under side of the needle-bed and between the needle-bed and the knitting-ware, and bearing the device for weighting the knittingware in connection with the sliding weights  $e^2$ , freely sliding on

the frame e and having a device for weighting the knitting-ware firmly attached to the frame e, substantially as and for the purpose

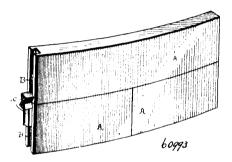


hereinbefore set forth. 3rd. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame e, sliding on rails  $e^1$ , arranged on the under side of the neddle-bed and between the needle-bed and on the uniter side of the heading a device for weighting the knitting-ware in connection with sliding weights  $e^2$ , freely sliding on the frame e, substantially as and for the purpose hereinbefore set forth. 4 pulling-off apparatus for Lamb's knitting-machines, consisting in a frame e, sliding on rails  $e^1$ , arranged on the under side of the needle-bed and between the needle-bed and the knitting-ware and bearing a device for weighting the knitting-ware in connection with sliding weights  $e^2$   $e^2$ , freely sliding in the frame c, and having a device for weighting the knitting-ware firmly attached to the frame e, in combination with a gliding-bar f, substantially as and for the purpose hereinbefore set forth. 5th. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame e, sliding on rails e, aarranged on the under side of the needle-bed and between the needle-bed and the knitting-ware and bearing a device for weighting the knitting-ware in connection with sliding weights  $e^2$   $e^2$ , freely sliding on frame e, in combination with a rotating shaft g, bearing studs for raising the sliding-weights with weighting device independent one from the other, substantially as and for the purpose hereinbefore set forth. 6th. A pulling-off apparatus for Lamb's knittingmachines, consisting in a frame e, arranged on the under side of the needle-bed and between the needle-bed and the knitting-ware and bearing as weighting-device in connection with sliding-weights  $e^2$   $e^2$ , freely sliding in frame e, a hook  $e^3$ , having on its back part an enfreely sliding in frame c, a hook  $c^3$ , having on its back part an enlargement so that the long straight point line A B, is gained in order to prevent the hook from piercing the fabric, substantially as and for the purpose hereinbefore set forth. 7th. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame c, sliding on  $c^1$ , arranged on the under side of the needle-bed and between the needle-bed and the knitting-ware and bearing as device for weighting the knitting-ware hooks  $e^3$  in connection with sliding weights ing the knitting-ware hooks  $e^a$  in connection with sliding weights  $e^2$   $e^2$ , freely sliding in frame e and having hooks  $e^a$ , as device for weighting the knitting-ware firmly attached to the frame e, substantially as and for the purpose hereinbefore set forth. 8th. A pulling-off apparatus for Lamb's knitting-machine, consisting in a frame e, arranged on the underside of the needle-bed and between the needle-bed and the knitting-ware and bearing a device for weighting the knitting-ware in connection with sliding weights  $e^2$   $e^2$  freely sliding on the frame e, adapted to both sides of the machine, under each needle-bed, substantially as and for the purpose hereinbefore set forth. 9th. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame c, arranged on the underside of the needle-bed and between the needlebed and the knitting-ware and bearing a device for weighting the knitting-ware in connection with sliding weights  $e^2 e^2$  freely sliding on frame e and having a device for weighting the knitting-ware firmly attached to the frame e, adapted to both sides of the machine under each needle-bed, substantially as and for the purpose hereinbefore set forth. 10th. A pulling off apparatus for lamb's knitting-machines, consisting in a frame e, sliding on rails e', arranged on the underside of the needle-bed and between the needle-bed and the knitting-ware and bearing a device for weighing the knitting-ware in connection with sliding weights  $e^2$   $e^2$  freely sliding on the frame e, adapted to both sides of the machine under each needle-bed, subis an appear to sold state in maximic matchine needle-bed, substantially as and for the purpose hereinbefore set forth. 11th. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame c sliding on rails  $c^1$ , arranged on the underside of the needlebed and between the needle-bed and the knitting-ware and bearing a device for weighting the knitting-ware in connection with sliding weights  $c^2$   $c^2$  freely sliding on the frame c and having a device for weighting the knitting-ware firmly attached to the frame c, in com-

before set forth. 12th. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame e, sliding on rails  $e^i$ , arranged on the underside of the needle-bed and between the needle-bed and the knitting-ware and bearing a device for weighting the knitting-ware in connection with sliding-weights  $e^z$   $e^z$  freely sliding on frame e in combination with a rotating shaft g bearing studs for raising the sliding weights with weighting device independent one from the other, adapted to both sides of the machine under each needle-bed substantially as and for the purpose hereinbefore set forth. 13th. A pulling off apparatus for Lamb's knitting machines, consisting in a frame e, arranged on the underside of the needle-bed and between the needle-bed and the knitting-ware, and bearing as weighting device in connection with sliding weights  $e^2$   $e^2$  freely sliding in frame e, a hook  $e^3$  having on its back part an enlargement so that the long straight point-line A B is gained in order to prevent the hook from piercing the fabric, adapted to both sides of the machine under each needle-bed, substantially as and for the purpose hereinbefore set forth. 14th. A pulling-off apparatus for Lamb's knitting-machines, consisting in a frame e, sliding on rail  $e^1$ , arranged on the underside of the needle-bed and between needle-bed and the knitting-ware and bearing a device for weighting the knitting-ware, firmly attached to the frame e, adapted to both sides of the machine under each needle-bed, substantially as and for the purpose hereinbefore set forth.

#### No. 60,993. Armor Plate for Vessels.

(Plaque cuirassée pour vaisseaux.)



Peter McMillan and Lewis L. Allen, both of Pierce City, Missouri, U.S.A., 23rd August, 1898; 6 years. (Filed 31st May, 1898.)

Claim.—A structure built up of plates with undercut grooves joined together by keys inserted in the adjacent grooves of the adjacent faces of the plates, a series of such plates arranged at a distance from another such series and a filling between the two series, substantially as specified.

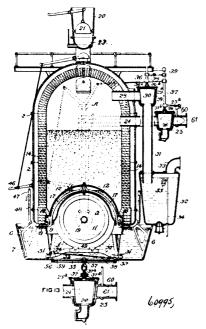
#### No. 60,994. Copper Ore Reducing Process.

(Procédé pour reduire le minerai de cuivre.)

William James Urquhart, assignee of Arthur Law Grant, Joint inventor, both of Toronto, Ontario, Canada, 23rd August, 1898; 6 years. (Filed 26th February, 1898.)

Claim.—1st. The hereinbefore described process of treating ores or matter of copper and nickel, the same consisting in first roasting the ore or matte, next fusing it in the presence of silica and thereby reduce the copper and nickel into silicates, then precipitating the copper and part of the nickel with an excess of iron, drawing off the precipitated copper and nickel and adding another portion of iron to the silicates remaining in the furnace and finally drawing off the precipitated nickel and iron. 2nd. The hereinbefore described precipitated micker and from 2nd. The nereinforcine described process of treating ores or mattes of copper and nickel, the same consisting in first roasting the ore or matte, next fusing it in the presence of silica and thereby reducing the copper and nickel into silicates, then precipitating the copper and part of the nickel with an excess of iron, drawing off the precipitated copper and nickel, then adding another portion of iron to the silicates remaining in the furnace and drawing off the precipitated nickel and iron, supplying turnace and drawing off the precipitated nickel and iron, supplying a fresh cargo of roasted ore or matte to the furnace, adding thereto the precipitated alloy of copper and nickel, and finally drawing off the precipitated copper. 3rd. The hereinbefore described process of treating ores or mattes of copper and nickel, the same consisting in first roasting the ore or mattes, next fusing it in the presence of silica and thereby reducing the copper and nickel into silicates and then precipitating the copper and part of the nickel with an excess of iron, drawing off the precipitated copper and nickel then adding another portion of iron to the silicates remain nickel, then adding another portion of iron to the silicates remaining in the furnace, and drawing off the precipitated nickel and iron, supplying a fresh charge of roasted ore or mattes to the furnace, adding thereto the precipitated alloy of copper and nickel, drawing off the precipitated copper and then adding more iron sufficient to displace the remaining copper and part of the nickel, and finally drawing off the precipitated copper and nickel. 4th. The hereinbination with a gliding-bar f, adapted to both sides of the machine before described process of treating ores or matter of copper and under each needle-bed, substantially as and for the purpose herein-inckel, the same consisting in first roasting the ore or matter, next fusing it in the presence of silica and thereby reducing the copper and nickel into silicates, then precipitating the copper and part of the nickel with an excess of iron, and drawing off the precipitated copper and nickel, and then adding another portion of iron to the silicates remaining in the furnace, and drawing off the precipitated nickel and iron, supplying a fresh charge of roasted ore or matte to the furnace, adding thereto the precipitated alloy of copper and nickel and drawing off the precipitated copper, next adding more iron sufficient to displace the remaining copper and part of the nickel, drawing off the copper and nickel and finally adding a pig of nickel and iron and drawing off the precipitated nickel. 5th. The hereinbefore described process of treating ores or mattes of copper and nickel, the same consisting in first roasting the ore or mattes, next fusing it in the presence of silica and thereby reducing the copper and nickel into silicates, then precipitating the copper and part of the nickel with an excess of iron, and drawing off the precipitated copper and nickel, and then adding another portion of iron to the silicates remaining in the furnace and drawing off the precipitated nickel and iron, supplying a fresh charge of roasted ore or matte to the furnace, adding thereto the precipitated alloy of copper and nickel and drawing off the precipitated copper, next adding more iron sufficient to displace the remaining copper and part of the nickel, drawing off the copper and nickel, adding a pig of nickel and iron and drawing off the recipitated nickel and finally adding sufficient iron to displace the remaining nickel, and drawing off the precipitated nickel and iron all drawing off the recipitated nickel and iron to displace the remaining nickel, and drawing off the precipitated nickel and iron to displace the remaining nickel, and drawing off the precipitated nickel and iron to displace the remaining nickel, and drawing off the precipitated nickel and iron to displace the remaining nickel

#### No. 60.995. Gas Manufacture. (Fabrication de gaz.)

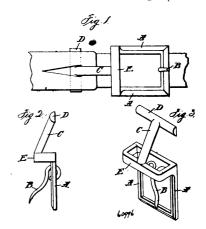


John Coyne, Pittsburg, Pennsylvania, U.S.A., 23rd August, 1898; 6 years. (Filed 29th January, 1898.)

Claim.—1st. As an improvement in the art of manufacturing gas, the method herein described, which consists in passing air upwards through an incandescent body of carbonaceous material and a superincumbent charge of fresh fuel ignited from the incandescent body and hot gases passing therethrough, and then commingling the gases so produced with steam or steam and oil, and passing such commingled gases and steam or steam and oil through an incandescent bady of carbonaceous material in such manner that the gases will be subjected to a gradually reduced heat, substantially as set forth. 2nd. As an improvement in the art of manufacturing gas, the method herein described, which consists in passing air upwards through an incandescent body of carbonaceous material and a superincumbent charge of fresh fuel ignited from the incandescent body and hot gases passing therethrough, and then commingling the gases so produced with steam or steam and oil, and passing such commingled gases and steam or steam and oil upward through an incandescent body of carbonaceous material previously blasted from the bottom, substantially as set forth. 3rd. In a gas apparatus, the combination of two chambers, pipe connections extending from the upper portions of each of said chambers and connected to the lower ends of the other chamber, and pipes for introducing air and steam into the lower portions of each chamber, substantially as set forth. 4th. In a gas apparatus, the combination of two chambers, a valve mechanism, pipe connections from the upper and lower portions of each chamber to the valve mechanism, and pipes for introducing air and steam into the lower portions of said chambers, substantially as set forth. 5th. In a gas apparatus, the combination of a water tank provided with inwardly projecting brackets, a metallic shell sup-

ported by said brackets and provided with an upwardly projecting ledge or shelf for supporting the lining, an annular apron projecting from the shell down into the water contained in the tank, and a grate arranged in the space enclosed by the annular apron, substantially as set forth. 6th. In a gas apparatus, the combination of a metallic shell provided with an inwardly projecting shelf or ledge for supporting the lining, semi-circular water pipes supported by the ledge, and a pipe for supplying water to the semi-circular pipes, substantially as set forth. 7th. In a gas apparatus, the combination of a chamber, a hollow, spherical grate with conical projections on its exterior and conical openings to the interior, and provided with a circumferential rib adjustably supported, rollers forming a bearing or support for the rib, and one or more blast pipes for rotating the grate, substantially as set forth. 8th. In a gas apparatus, the combination of a tank, a generator shell supported within the tank, with its lower end projecting below the surface of the water contained in the tank, a grate arranged in the lower end of the gencontained in the tank, a grate arranged in the lower end of the generator, a frame resting on the bottom of the tank, and a removable plate forming a portion of the bottom of the tank, substantially as set forth. 9th. In a gas apparatus, the combination of a tank, a generator shell supported within the tank, a hollow, spherical grate provided with projections on its outer surface, and having its walls provided with projections on its outer surface, and having its walls perforated, a frame for adjustably supporting the grate and a pipe extending into the grate and adapted to rotate the same, substantially as set forth. 10th. In a gas generator, the combination of two chambers having their lower ends connected to an air supply, a valve mechanism controlling the flow of air to the chambers, passages connecting the upper end of each chamber to the lower end of the other chamber, a valve mechanism controlling the flow of gas through said passages, pipes connecting the upper end of each cham-ber to a gas reservoir or conduit, a valve mechanism controlling the flow of gas to the reservoir or conduit and mechanism for operating said valve machanisms simultaneously, substantially as set forth 11th. The combination of a valve casing, a rotatable valve arranged in said casing and provided with a stem, arms secured to said stem, and inclined ridges arranged in the path of movement of said arms whereby the valve may be shifted in the direction of its axis while being rotated, substantially as set forth.

#### No. 60,996. Buckle and Fastening. (Boucle et attache.)



Alfred Augustus Grace, Nelson, and Thomas Samuel Grace, Blenheim, both in New Zealand, 23rd August, 1898; 6 years. (Filed 7th December, 1897.)

Claim.—1st. A buckle consisting of a buckle frame, a tongue pivoted to one of the cross-bars thereof, a loop set off from said cross-bar in a plane at right angles to the buckle frame, and a retaining bar or piece projecting from the outer cross-bar of said loop into the plane of the buckle frame, for the purpose set forth. 2nd. A buckle consisting of a buckle frame, a tongue pivoted to one of the cross-bars thereof, a loop set off from said cross-bar in a plane at right angles to the buckle frame, and a T bar projecting from the outer cross-bar of the loop into the plane of the buckle frame, substantially as and for the purpose set forth.

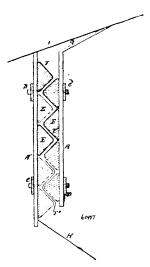
#### No. 60,997. Gold Saving Apparatus.

(Appareil à concentrer l'or.)

William Morton, Dunedin, New Zealand, 23rd August, 1898; 6 years. (Filed 23rd December, 1897.)

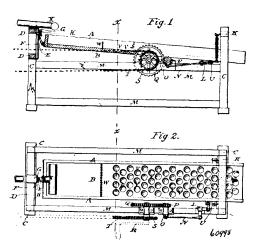
Claim.—1st. In an apparatus for saving gold, the combination with a screen or means of screening and grading, of a box preferably upright, containing blocks placed alternately against the sides of the box, so that a zig-zag passage is formed between them, or between them and plates, such as F<sup>11</sup>, the said blocks being covered with a gold saving surface, and saving gold by the auriferous wash being deflected from side to side and reversing or turning over against the surfaces, the whole being capable of being easily taken to pieces for cleaning up and extracting the gold substantially as

described and shown on the drawing. 2nd. The combination of a flanges to form riffles for retaining the precious metals, a furnace zig-zag passage, or passages, formed by different shaped substances connected with the lower end of the said drum for causing the heat



such as f, f', or plates such as  $f^{\pm 1}$ , for guiding or forcing the auriferous wash in a zig-zag direction between the gold saving surfaces in an enclosed box, substantially as described and explained and as shown in the accompanying drawing. 3rd. The passing of auriform a bin state of the state o ferous wash in thin streams between gold saving surfaces in an enclosed box, placed at any angle, in a zig-zag direction and in combination with a screen substantially as described and explained

#### No. 60,998. Ore Separator. (Separateur de minerai.)



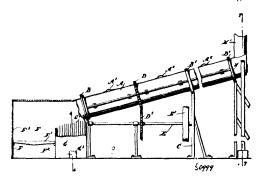
Edwin M. Sutphen, Albany, New York, U.S.A., 23rd August, 1898; 6 years. (Filed 10th December, 1897.)

Claim.—1st. In an ore separator, an inclined sluice box pivoted at its upper end and movable laterally at its lower end, and provided with a transverse grating or screen at its upper end and with rows of semi-spherical cups arranged transversely of said box below said screen, substantially as shown and described. 2nd. In an ore separator, the combination of an inclined sluice box pivoted at its upper end and having a laterally vibratory movement at its lower end, and provided with a transverse grating or screen and transverse rows of cups, and a water spout arranged above the upper end of said box, substantially as shown and described.

#### No. 60,999. Gold Separator. (Separateur de minerai.)

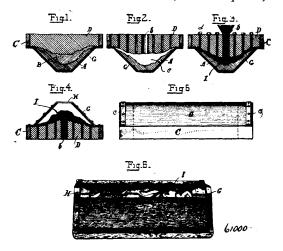
William E. Harris, Chicago, Illinois, U.S.A., 23rd August, 1898; 6 years. (Filed 26th January, 1898.)

Claim.—1st. A gold separator comprising a revoluble inclined drum provided in its interior with annularly-spaced flanges, to form with the lower end of the said drum for causing the heat emanating from the burning fuel in the furnace to pass through the drum to heat the material therein and insure a ready separation of the precious metals from the sand, gravel and other tailings, substantially as shown and described. 2nd. A gold separator comprising a revolable, inclined drum provided in its interior with annularly-spaced



emanating from the burning fuel in the furnace to pass through the drum to heat the material therein and insure a ready separation of the precious metals from the sand, gravel and other tailings, and a screening box interposed between the furnace and the drum at the lower end thereof to receive the tailings from the drum, the screening box being arranged to separate the sand from the gravel and other heavy materials, substantially as shown and described. 3rd. other neavy materials, substantially as shown and described. Srd. A gold separator comprising a revoluble inclined drum provided in its interior with annularly-spaced flanges forming riffles for retaining the precious metals, an inlet for the upper end of the said drum, and provided with a smokestack for carrying off the gases, an elevator discharging into the said inlet, and a furnace connected with the lower end of the said drum to heat the material passing through the drum and insure a ready separation of the precious metals from the sand, gravel and other tailings, substantially as shown and described. 4th. A gold separator comprising a revoluble inclined drum provided in its interior with annularly-spaced flanges forming riffles for retaining the precious metals, an inlet for the upper end of the said drum and provided with a smokestack for carrying off the gases, an elevator discharging into the said inlet, a furnace connected with the lower end of the said drum to heat the material passing through the drum and insure a ready separation of the precious metals from the sand, gravel and other tailings, and a screening box between the furnace and the lower end of the said drum and constructed to separate the precious metals from the sand, gravel and other tailings, as set forth.

#### No. 61,000. Plaster Cornice. (Corniche en plâtre.)



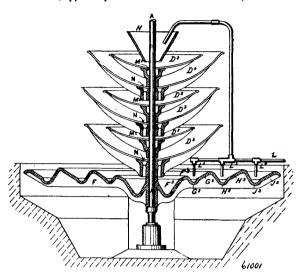
August Carlewitz, Newark, New Jersey, U.S.A., 23rd August, 1898; 6 years. (Filed 1st December, 1897.)

Claim.—1st. The herein described method of forming a mould for casting articles from plaster which have surface ornamentation in casting articles from plaster which have surface ornamentation in relief, which consists in first placing a pattern in a frame then forming a coating of clay over the face of the pattern, then casting a thick backing of plaster on the clay, then removing the clay, and then filling the space previously occupied by the clay with a gelatinous compound, and finally removing the pattern after the gelatinous compound shall have congealed, substantially as set forth. 2nd. A mould for casting cornices, which have a surface ornamentation in relief, consisting essentially of a base D of plaster with a removable facing T of tough elastic gelatinous composition having formed in it the mould for the relief ornamentation of the front of the casting, and a frame G to form the back of said casting, substantially as shown and described. 3rd. The combination to substantially as shown and described. 3rd. The combination to

form a mould for casting articles of plaster which have surface ornamentation in relief, of the metal frame G, the frame C, adapted to fit on the frame G, the backing D of plaster, in the frame C, and the removable face I, on the backing D, said face being of tough, elastic, gelatinous composition and having formed in it the mould for the relief ornamentation of the article to be cast, substantially as set forth.

No. 61,001. Ore Treating Apparatus.

(Appareil pour le traitment des minerai.)

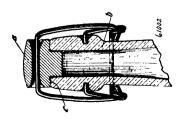


Thomas Rowland Jordan, New York City, U.S.A., 23rd August, 1898; 6 years. (Filed 11th September, 1897.)

Claim. - 1st. In an amalgamating machine, the combination with a vertical spindle and means for rotating the same, of a series of concave dishes mounted on the spindle to revolve therewith, certain of the dishes having relatively a degree of concavity in excess of the other dishes and alternating with the latter, substantially as and for the purpose set forth. 2nd. In an amalgamating machine, the combination with a vertical spindle and means for rotating the same, of a series of dishes mounted on the spindle with their peripheries eccentric to the latter, and having varying degrees of con-cavity, substantially as and for the purpose set forth. 3rd. In an amalgamating machine, the combination with a vertical driving spindle and means for rotating the same, of a series of concave dishes mounted on said spindle and provided in their base with mercury wells, and a series of dishes of relatively greater concavity alternating with the other dishes, substantially as and for the purpose set forth. 4th. In an amalgamating machine, the combination with a vertical driving spindle, of revoluble dishes the peripheries of which are set eccentrically to the spindle, and a revoluble concentrating pan provided with concentric walls and inclined surfaces, substantially as and for the purposes set forth. 5th. In an amalgamating machine, the combination with a vertical driving spindle, of a series of revoluble dishes the peripheries of which are set eccentrically to the spindle, said dishes having in their base a well for the reception of mercury, and a series of dishes having a degree of concavity in excess of that of the latter and having outlets in their base, and a revolving concentrating pan provided with a series of concentric wells and interposed inclined surfaces, and a water supply, substantially as described.

#### No. 61,002. Bottle Stoppering Process.

(Bouchon de bouteilles.)

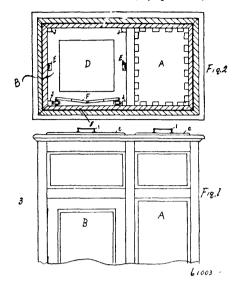


Josef Fliegel, Mallmitz, Silesia, Prussia, 23rd August, 1898; 6 years. (Filed 11th August, 1898.)

Claim.—Method for manufacturing hermetical stoppering devices or vessels of a different kind characterized by the following, that

the edge of the vessel and the stoppering part, which consist of material of a different hardness, are ground on each other direct by which means the necessary grinding material is made automatically from the softer material at the grinding surfaces on the necessary places and in the necessary quantity, constructed and arranged substantially as hereinbefore described.

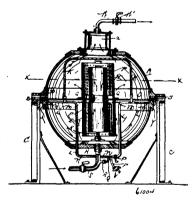
#### No. 61,003. Refrigerator. (Refrigerateur.)



Llewellyn N. Bate and Robert A. Sproule, both of Ottawa, Ontario, Canada, 23rd August, 1898; 6 years. (Filed 6th August, 1898.)

Claim.—1st. The herein described device consisting of the platform D moving in the receptacle B on runners J. J. substantially as and for the purposes hereinbefore set forth. 2nd. The combination with the moving platform D of the bar E and the cover C substantially as and for the purposes hereinbefore set forth. 3rd. The combination with the moving platform D of the double catch F substantially as and for the purposes hereinbefore set forth.

#### No. 61,004. Filter. (Filtre.)



Charles A. Kunzel, Jr., Hoboken, New Jersey, 23rd August, 1898; 6 years. (Filed 18th July, 1898.)

Claim.—1st. In a filter, a sectional body with a diaphragn having an opening in its centre, a filtering chamber supported on said dirphragm and communicating with the sections on both sides of said diaphragm, and discharge pipes at the lower and upper ends of said body, a perforated ring in the upper part of the lower section, a pipe leading from said ring to the inlet pipe, and a pipe leading from the upper section into said ring discharge pipe, said parts being combined substantially as described. 2nd. A filter having a sectional body journaled on standards, a diaphragm between said sections having a central opening, and depending inner flange, filtering chamber in said opening, a perforated pipe below said diaphragm and above the lower edge of said depending flange, and a pipe leading from said perforated pipe to said inlet pipe, said parts being combined substantially as described. 3rd. A filter having a sectional body with a diaphragm between the sections thereof, a filtering chamber in an opening in said diaphragm, a perforated pipe below said diaphragm and above the lower edge of a depending flange and said diaphragm, a gas discharge pipe leading from said perforated pipe to the outside of the filter, and inlet and dis

charge plpes for said body, said parts being combined, substantially as described. 4th. A filter, having a sectional body with a diaphragm between the sections, said diaphragm having an opening therein, perforated inner and outer cylinders or shells connected with opposite sides of said diaphragm at said opening, forming filtering chambers, a partition at said diaphragm in said outer chamber, and a stud or pin suitably connected with the lower section and supporting the cylinders which are below said diaphragm, said parts being combined substantially as described. 5th. A filter having separated sections or chambers, filtering cylinders forming a communication between said chambers and a perforated ring near the dividing partition of said chamber, having a pipe connected with the inlet pipe of said filter.

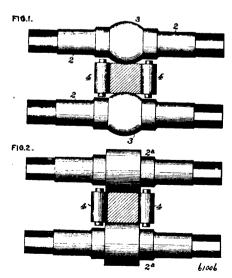
#### No. 61,005. Wrench. (Clè à écrou.)



William A. Humphrey and Otto D. Kahl, both of Barron, Wisconsin, 23rd August, 1898; 6 years. (Filed 18th July, 1898.)

Claim.—1st. A pipe-wrench comprising a shank provided with a longitudinal slot which extends through the outer extremity thereof and with the beveled extremities, a jaw having a lug or ear pivoted within the slotted extremity of, and attached directly to, the slotted shank, and also having lateral shoulders arranged to bear against the beveled extremities of said shank to limit the rearward movement of said jaw and permitting an unrestrained forward movement thereof, and an adjustable jaw fitted slidably to the shank, substantially as and for the purpose described. 2nd. A pipe-wrench comprising a slotted serrated shank having a jaw at one end thereof, a slidable jaw having a rearwardly-extending shank fitted in said slotted shank and with a head to ride against the smooth rear edge of the shank, a holding-dog pivoted to, and carried wholly by, the slidable jaw, and a spring housed within the slidable jaw and bearing against the dog to normally force the latter into engagement with the serrated face of the shank, substantially as described. 3rd. The combination of a shank provided in its front edge with the teeth or serrations, a slidable jaw recessed to form the ears and the spring-seat provided with the stem and the head to fit in the slot against the rear edge of the shank, the dog fitted in the ears to have its heel engaged with the serrated edge of the shank and the other end thereof projected beyond the front edge of the jaw, aspring fitted in the seated and acting against the free end of the dog, and another jaw carried by the shank, as and for the purposes described.

#### No. 61,006. Ingot Casting. (Lingotière.)



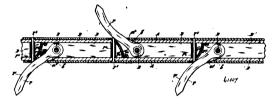
Robert Alexander McDonald, Aspinwall, Pennsylvania, U.S.A., 23rd August, 1898; 6 years. (Filed 16th July, 1898.)

Claim.—1st. As an improvement in the art of treating ingots, the method herein described, which consists in progressively displacing in a longitudinal direction from the lower towards the upper end of the ingot, the molten interior portions of the ingot by pressure

applied to the exterior of the ingot, substantially as set forth. 2nd. As an improvement in the art of treating ingots, the method herein described, which consists in removing the ingot from the mould while the interior portions are in a plastic condition, and then forcing inwardly a portion of one or more sides of the ingot progressively from its lower towards its upper end, substantially as set forth. 3rd. As an improvement in the art of treating ingots, the method herein described, which consists in forcing inwardly a portion of one or more sides of the ingot while the metal of the interior is plastic, such inward movement being progressive and graduated from the lower towards the upper end of the ingot, substantially as set forth.

## No. 61,007. Oil Rock Excavator.

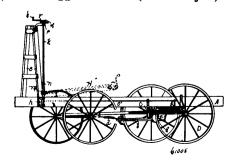
(Excavateur pour pètrole.)



Elijah Windsor, London, Ontario, Canada, 23rd August, 1898; 6 years. (Filed 29th June, 1898.)

Claim.—1st. The casing A, and stationary bars B, B, formed with the openings  $a^*$ , and  $b^1$ , respectively, in combination with the stem G, spaced apart sliding bars D, D, picks F, and guides  $F^3$ , substantially as and for the purpose set forth. 2nd. The casting A, and stationary bar B, B, formed with the openings  $a^4$ , and  $b^1$ , respectively, the plate C, and means for holding the latter in place, in combination with the stem G, spaced apart sliding bars D, D, picks F, and guides  $F^3$ , substantially as and for the purpose set forth. 3rd. The casing A, and stationary bars B, B, formed with the openings  $a^4$ , and  $b^1$ , respectively, in combination with the stem G, spaced apart sliding bars D, D, stops  $H^1$ , and  $H^2$ , picks F, and guides  $F^3$ , substantially as and for the purpose set forth. 4th. The casing A, and stationary bars B, B, formed with the openings  $a^4$ , and  $b^1$ , respectively, the sleeves  $F^4$ , and bolts  $F^5$ , in combination with the stem G, spaced apart sliding bars D, D, picks F, and guides  $F^3$ , substantially as and for the purpose set forth. 5th. The casing A, stationary bars B, B, formed with the openings  $a^4$ , and  $b^1$ , respectively, in combination with the stem G, spaced apart sliding bars D, D, picks F, guides  $F^3$ , internally screwed threaded sleeve  $a^3$ , casing I, internally screw threaded sleeve  $a^3$ , casing I, internally screw threaded sleeve B, screw K, and anchor L, substantially as and for the purpose set forth. 6th. The casing A, stationary bars B, B, formed with the openings  $a^4$ , and  $b^1$ , respectively, the plate C, and means for holding the latter in place, in combination with the stem G, spaced apart sliding bars D, D, picks F, guides F $^3$ , internally screw K, and anchor L, substantially as and for the purpose set forth. 8th. The casing A, and stationary bars B, B, in which the openings  $a^4$ , and  $b^1$ , respectively, in combination with the stem G, spaced apart sliding bars D, D, stops H $^1$ , and H $^2$ , picks F, guides F $^3$ , internally screw threaded sleev

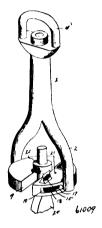
#### No 61,008. Waggon Brake. (Frein de wagon.)



George Fitz Randolph, McCausland, Iowa, 23rd August, 1898; 6 years. (Filed 11th June, 1898.)

Claim.—1st. The combination with the brake mechanism for a hay waggon or rack, of an operating mechanism comprising a short winding-shaft mounted on the frame adjacent to the base of the ladder, to receive a chain or flexible connection between the winding-shaft and brake mechanism, an operating-shaft mounted on the hinged ladder and having a universal joint connecting its lower end with the winding-shaft to permit the operating-shaft in any part of its turn to be folded with the ladder and means for rotating the operating-shaft, substantially as described. 2nd. The combination with the brake mechanism of an operating-shaft formed in sliding or telescopic sections and mounted on the waggon-ladder, substantially as described. 3rd. The combination with the winding-shaft mounted on the waggon-frame adjacent to the base of the ladder and adapted for connection with the brake mechanism, of a brake-operating shaft mounted on the ladder and formed in telescopic sections, the lower section being connected to the winding-shaft by a hinge or universal joint and means for rotating the operating-shaft, substantially as described. 4th. The combination with the operating-handle, of a brake having a projection at one end in the form of a detent or pawl, and pivoted on the upper end of the brake-operating shaft, said shaft having a lateral arm under said handle and a spring interposed between said arm and handle to hold said detent in engagement with a ratch.

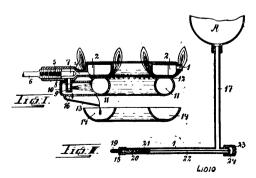
### No. 61,009. Sucker-Rod Elevator. (Bielle de pompe.)



Henry H. McLaughlin, McFann, Pennsylvania, U.S.A., 24th August, 1898; 6 years. (Filed 11th June, 1898.)

Claim.—1st. In a sucker-rod elevator, the combination with a body, of a member pivoted thereto and having a slot adapted to receive the sucker-rod, a pivoted catch, a spring bearing directly against said catch, and which normally projects the same into the slot, and a lever which is pivoted to the member and also pivotally connected to the catch by a slot-and-stop connection. 2nd. In a sucker-rod elevator, the combination with a body, of a member connected thereto and provided with a slot adapted to receive the sucker-rod, a locking-catch, a pivot-pin having a squared portion passed through the catch and which is free to turn in the member, said pin having a thumb-piece, a spring urging said locking-catch, and a lever pivoted to the member and connected to the locking-catch by a slot-and-stop connection.

#### No. 61,010. Spirit Burner. (Bruleur d'alcool)

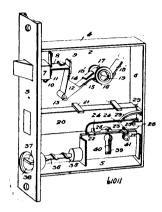


Otto Keidel, Sangerhausen, Germany, 24th August, 1898; 6 years. (Filed 26th May, 1898.)

Claim.—1st. An improved spirit burner, having in combination a vapourizer 2, an admission tube 1 thereto, interceptors 3, in the vapourizer, an outlet chamber to said vapourizer having an adjustable valve 7, an outlet tube 8, an open vessel 14 arranged under-

neath the vapourizer, and a gas distributor 11, having holes 12 underneath the vapourizer and having an extension 10 receiving the tube 8, with a hole 16 in said extension, and a channel 13 beneath said hole, for the purpose set forth. 2nd. The combination with a spirit burner, of a feed-pipe thereto, two sieves 19 and 21 in said feed-pipe, and a volume of sand filling the feed tube between the sleves, for the purposes set forth.

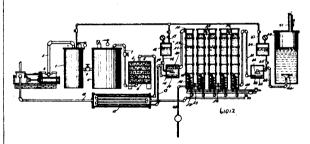
No. 61,011. Lock. (Serrure.)



Herbert Eidson and Albert Lemon, both of Berrien Springs, Michigan, U.S.A., 24th August, 1898; 6 years. (Filed 31st March, 1898.)

Claim.—1st. A lock, comprising the face plate 3 provided with the recess 38, and the back plate 2, provided with the keyhole 40, in combination with the threaded stud 36, provided with the cross-bar 37 mounted in said recess 38, and the reversible sliding guard plate 33 provided with the keyhole 39, the angular end flanges and the threaded nuts 33-35, either one of which is adapted to receive the stud 36, substantially as and for the purpose set forth. 2nd. A lock of the class described, comprising a sliding guard plate, in combination with a safety key adapted to be removably secured in said lock, but incapable of operating the same, and an operating key as 42, provided with a spring-actuated plunger 45, the end of which projects beyond the barrel of said key, substantially as shown and described.

#### No. 61,012. Hydrocarbon. (Gaz hydrogéne.)

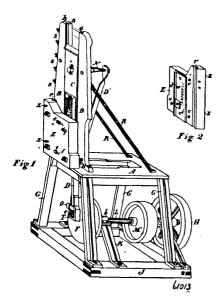


Thomas F. Gillooly, Kellettville, Forest County, Pennsylvania, and William J. Grandin, Tidonte, in Pennsylvania aforesaid, 24th August, 1898; 6 years. (Filed 3rd March, 1898.)

Claim.—Ist. The process of making hydrocarbon gas, consisting in mixing heated air with gasoline or the like, and then forcing said mixed air and gasoline through heated hydrocarbon oil, substantially as specified. 2nd. The process of making hydrocarbon gas, consisting in forcing dry hot air against a spray of gasoline or the like, then forcing the mixed air and gasoline or the like through heated cil, then forcing the elements thus mixed against another spray of gasoline or the like, and then passing the gas thus formed through hydrocarbon oil and thence to a receiver, substantially as specified. 3rd. An apparatus for making hydrocarbon gas, comprising an air tank, means for supplying air under pressure thereto, an air drying vessel having a pipe connection with the tank, an air drying material in the said vessel, a heater, a pipe leading from the air drying vessel into the said heater, a mixing vessel into which said pipe extends, the portion of the pipe within the mixing vessel being perforated, a gasoline tank having a pipe extended into the mixing vessel and terminating in a spray nozzle, a perforated receiving pipe in the upper portion of the mixing vessel, a series of oil tanks communicating one with the other and also communicating with the perforated pipe in the upper portion of the mixing vessel, a heating coil in the lower portion of each oil tank, another mixing vessel, a pipe leading from one of the oil tanks into said other mixing vessel and terminating in a perforated outet, a gasoline container having a pipe extended into the said mixing vessel and

terminating in a spray nozzle, and a pipe leading from said other mixing vessel into an oil container from which a pipe leads to a gas receiver, substantially as specified.

No. 61,013. Swaging Machine. (Machine à étamper.)

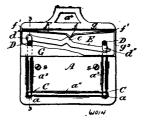


James S. Neill, Fredricton, New Brunswick, Canada, assignee of George H. Hathorn, Bangor, Maine, U. S. A., 24th August, 1898; 6 years. (Filed 11th March, 1898.)

Claim.-1st. An improved swaging machine consisting of a stand with uprights, means for holding a slide, a slide having means for securing a die thereto and reciprocated by attachment with a revolving crank, a head secured parallel to said uprights to extend across the slide and means for holding a die thereon in line with the die on the slide and means for adjusting the head vertically, transversely and longitudinally of the base, as and for the purpose described. 2nd. In a swaging machine, a frame, an adjustable head secured thereto, said head being provided with a vertical groove, uprights on the frame, one of which has flanges fitting the control of the base of the head a die holder secured to the interest force of the control the groove of the head, a die holder secured to the inner face of the head and provided with means for adjusting the die, said head being so arranged that a space is formed therebetween and one of the uprights, as and for the purpose described. 3rd. In a swaging machine, the combination with a stand having vertical uprights provided with guides for receiving a reciprocating slide, a wrist pin secured to said slide, a connecting rod attached to said wrist pin and having a brace extending to the outer end of the same, said connecting rod having at its lower end a box adapted to slide beconnecting rod naving at its lower end a look adapted to since between a strap secured thereto and a spring to retain said box in position for the purpose described, a power shaft having a crank wheel attached to the lower end of said connecting rod and means for rotating said shaft, for the purpose described and set forth. 4th. In a swaging machine provided with a reciprocating slide having means for retaining a die thereon, a stationary head secured to and parallel with the frame of the machine, said head being adjustable on said frame by means of confining bolts and set screws bearing against projecting flanges rising from one side of the frame, an adjustable die holder secured to said head and constructed with a ridge and means to secure a die thereto, adjusting bolts securing the die holder to said head, a separating bolt between the front end of the head and frame on the opposite edge from the flanges in such a manner as to leave an open top and one side for inserting the metal between the dies, as and for the purpose described. 5th. An improved swaging machine consisting of the combination of a stand having depending legs, a horizontal shaft secured thereto and provided with power wheels and connection with a suitable power medium, a crank wheel secured to one end of said shaft, a connecting rod pivoted to said crank wheel by means of a sliding box held in place by a spring, said connecting rod having its opposite end secured by a wrist pin to a slide, said wrist pin having an extended end connected by a brace to the connecting rod as described, a slide having a raised surface and longitudinal rib for the purpose described with means for retaining a swaging die thereon, parallel uprights extending from the top of said stand and having ways for receiving a slide, and also provided with a gib in said ways adjusted by gib screws projecting from said upright, one or more flanges projecting from the side of one of the uprights, confining bolts projecting from uprights and a head secured to the same by said confining bolts, said head having a groove to receive said flanges, and set screws for adjusting the same, an adjustable die holder secured to said head by bolts passing through slots in the latter and having

means for securing a die thereto, a separating bolt between the front edge of the head and from the upright opposite the flange, substantially as shown and described. 6th. In a swaging machine having a stationary frame, an adjustable head secured thereto by bolts passing through its lower corners and its upper left hand corner, said head being provided with a groove adapted to receive projecting flanges from one of the uprights of said machine and adjusted thereon by set screws, a die holder secured to the inner face of said head and provided with a die holding arrangement all constructed in such a manner as to leave an opening between the head and one of the uprights for inserting the metal between the dies and over the top of the head, substantially as shown and described.

No. 61,014. Paper File. (Enfile-lettre.)



The Eclipse Office Furniture Company of Ottawa, Ontario, Canada, assingee of Clarence Ernest Mountford, also of Ottawa, 24th August, 1898; 6 years. (Filed 31st May, 1898.)

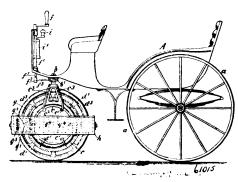
Claim.--lst. In a paper file, the combination with a file board of a base plate stiffened with raised ridges and provided with perforations for the impaling pins and arch wires contained respectively in cusps and dimples and provided with slots adapted for the reception of the lugs of a casing, tubular impaling pins rigidly secured to said plate and being bevel pointed laterally and outwardly, arch wires journalled in the base plate and casing and having bevelled and tongued points, cranks between said bearings in opposite directions, a link connecting said cranks and provided with an angular nose d, spring provided with a similar nose and adapted to press on the nose of said link and a casing covering said spring link and cranks and forming bearings for the wires abutments for the spring and a stop for the link and secured to the plate by means of lugs passing through slots and clinched on the back, substantially as set forth. 2nd. In a paper file, the combination with a file board, of a stamped sheet metal base plate formed with perforated cusps for the impaling pins, perforated dimples forming bearings for the ends of the arch wires affording room for the lower crank arms in said wires, stiffening ridges extending between the cusps and from them towards but not to the dimples, slots to receive the lugs of a casing, perforations for screws securing it to the file board and a perforation in a projection at the upper or rear edge to form a hanger, substantially as set forth. 3rd. In a paper file, the combination of a stamped sheet-metal base-plate having perforated cusps and dimples for the reception of the impaling pins and arch wires, respectively, perforations near said dimples to receive lugs, a box casing covering said dimples and having perforated cusps registering with said dimples, said dimples and cusps forming in the interior of said box-casing recesses to accommodate the crank arms of the wires, and lugs on its sides adapted to pass into said slots in the plate and be clinched at the back, substantially as set forth. 4th. In a paper file, the combination with a box-casing adapted to be secured to a base-plate and periorated to form bearings for two arch wires, wo arch wires inserted in said bearings and formed near the foot with return cranks in opposite directions, a link connecting said cranks and provided with an angularly pointed nose and a flat bow spring having an angularly pointed nose formed therein adapted to bear on the sides of the nose on the link and the ends of said spring abutting on the side of said casing and pressing with its nose on the nose of the link, substantially as set forth.

#### No. 61,015. Vehicle Wheel. (Roue de voiture.)

John Eugene M. Becker and Emily M. Dunton, both of New York City, U.S.A., 24th August, 1898; 6 years. (Filed 13th June, 1898.)

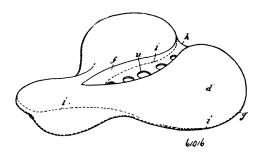
Claim.—1st. A vehicle wheel having a laterally projecting flange combined with a frame having a correspondingly projecting flange that surrounds the wheel-flange, and anti-friction balls interposed between the flange, substantially as specified. 2nd. A vehicle wheel having a laterally projecting flange combined with a duplex frame having a pair of inwardly projecting flanges that surround the wheel-flange, and anti-friction balls interposed between the wheel-flange and the frame flanges, substantially as specified. 3rd. A vehicle wheel having a laterally projecting doubly grooved flange combined with a duplex frame having a pair of inwardly projecting flanges that surround the wheel-flange, and anti-friction balls interposed between the wheel-flange and the frame-flanges, substantially as specified. 4th. In a vehicle, the combination of a wheel having a

laterally projecting flange, with a pivoted frame having a correspondingly projecting flange that surrounds the wheel-flange, anti-friction



balls interposed between the flanges, means for imparting rotary motion to the wheel, and means for turning the frame on its pivot, substantially as specified.

#### No. 61.016. Bicycle Saddle. (Selle de bicycle.)

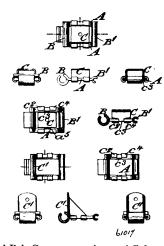


The Wheeler Saddle Company, assignee of Benjamin F. Wheeler, all of Detroit, Michigan, U.S.A., 24th August, 1898; 6 years. (Filed 13th June, 1898.)

Claim.—1st. In a bicycle saddle, the combination of the saddletree comprising two rearwardly extending independent members divided by a central opening and united in a reduced forwardly extending neck, of the leather covering consisting of two opposed layers embracing said tree having central depressions whose opposed faces meet between the members of said saddle-tree and extend outward to the rear margin of the saddle and whose marginal edges ward to the rear margin of the saddle and whose marginal edges meet beyond the perimeter of said tree, and the line of stitching around said marginal edges and following the line of said central depression, substantially as described. 2nd. In a bicycle saddle, a laminated wooden saddle-tree comprising two rearwardly extending flaring members separated by a central oblong opening and having a reduced forwardly extending neck, a reinforcing tongue extending longitudinally of said neck into the body of said tree beyond the point of the forward terminus of said central opening, substantially as described. 3rd. In a bicycle saddle, the saddle-tree comprising two rearwardly extending flaring members curved at their rear edges and divided by an opening extending forward through the back of said tree and having a reduced forwardly extending neek, substantially as described. 4th. In a bicycle saddle, the combination of the saddle tree having two rearwardly extending members divided by an opening extending through the back thereof and having a forwardly extending neck, of the padding mounted upon the tree, the two coverings of leather embracing said tree and padding, said leathers being united between the divided members of said tree and beyond the marginal edges thereof, and the line of stitching through the united faces of said leathers around the divided members of said tree, substantially as described. 5th. In a bicycle saddle, the combination of the saddle-tree having a reduced neck and flaring independent members divided by a central opening extending forward through the back thereof, the coverings of leather embracing said tree and conforming thereto, said leathers meeting between said divided members, forming a united web and having lapping margins which are united beyond the perimeter of said tree, the support or which are united beyond the perimeter of said tree, the support or spring mounted upon the under face of the saddle attached to the pommel at its forward ends, the rear ends of said spring diverging and having the closed eyes, and having the integral cross-bar extending between said eyes across the dividing opening between the members of said saddle, and the bolts mounted in the saddle-tree and projecting through said eyes in the spring, substantially a described. 6th In a bicycle saddle, the combination of the saddledescribed. 6th. In a bicycle saddle, the combination of the saddle tree having a reduced neck and flaring independent members divided by a central opening extending through the back of said tree, the coverings of leather embracing said tree and conforming thereto, the support of spring having a transverse bar which crosses the central opening between the members of the saddle-tree and is

secured at opposite ends to said members, substantially as described. 7th. In a bicycle saddle, the combination of the saddle-tree, comprising two rearwardly extending independent members divided by a central opening and united in a reduced forwardly extending neck, of the leather covering, consisting of two opposed layers embracing said tree, having central depressions whose opposed faces meet between the members of said saddle-tree and extend outward to the rear margin of the saddle and whose marginal edges are united beyond the perimeter of said tree, substantially as set forth. 8th. In a bicycle-saddle, the combination of the saddle-tree, the padding upon said tree divided centrally from the rear and united at the pommel of the saddle, the leather covering mounted upon said padding and tree and having a central depression extending through the back of the saddle, substantially as described.

No. 61,017. Chain Link. (Anneau de chaine.)

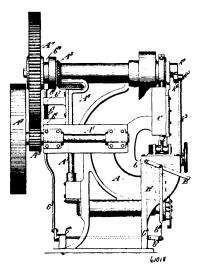


The Locke Steel Belt Company, assignee of Sylvanus Dyer Locke, all of Hoosick Falls, New York, U.S.A., 24th August, 1898; 6 years. (Filed 22nd June, 1898.)

Claim.—1st. The combination with a chain link, of a slat or bucket support clamped to the side of the link, substantially as set forth. 2nd. The combination with a chain link, of a slat or bucket support having its edge articulated and bent to embrace opposite faces of the side of the link, substantially as set forth. 3rd. The combination with a chain link, of a slat or bucket support having its opposite edges articulated and bent to embrace opposite faces of the side of the link, substantially as set forth. 4th. The combination with a chain link, having the inner face of its side recessed, of a slat or bucket support having its edge articulated, one of the articulations being fitted to extend along the recess in the inner face of the side of the link and other articulations being bent around the remaining faces of the side of the link, substantially as set forth.

#### No. 61,018. Chain Making Method.

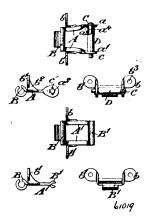
(Methode de faire les chaines.)



The Locke Steel Belt Company, assignee of Herman Osswald, and Celestin F. Vieillard, all of New York, U.S.A., 24th August, 1898; 6 years. (Filed 25th May, 1897.)

Claim.-1st. The method of forming a chain from a strip of metal consisting in simultaneously performing progressive steps in the formation of successive links while they remain a part of the strip of metal and at the same time serving a link and uniting it with a previously formed link, substantially as set forth. 2nd. In combination means for progressively forming several links while they remain a part of a strip of metal, means for severing a completed link and means for attaching a completed link to a previously formed link the several mechanisms co-acting simultaneously, substantially as set forth. 3rd. In combination stepping and locking mechanism to step a chain along and hold the end bar of its last link in coupling position during the stepping interval and mechanism for rolling up and forming the sprocket bar of the succeeding link over the end bar so held to couple the links together substantially as set forth. 4th. In combination a main frame, a driving shaft, an eccentric on the driving shaft, ways secured to the frame, a slide reciprocating in the ways and carrying the forming die, a die having a plurality of members, ways on the slide and a second slide held in place by the ways and provided with the holding die the said holding die having a plurality of members between which the members of the forming die reciprocate, substantially as set forth. 5th. In combination a reciprocating slide, a crank working orbital slot for driving the reciprocating slide, a reciprocating die attached to the slide and having a plurality of members with a series of apertures therethrough, a second slide, an eccentric for driving the slide, a second reciprocating die on said second slide and having members working in and through the apparatus of the first die, substantially as set forth. 6th. In combination an upper forming die, an upper holding die, one moving within the other and each composed of three members, the first two members of the forming die being adapted to partially form the link from the unserved material, a member of the holding die to sever the link from the strip adjacent to the third member of the forming die, a reciprocating lower die to act with the latter to complete the link and a stationary lower die to act with the first two forming and punching members, substantially as set forth. 7th. In combination a driving shaft, a plurality of dies operated thereby to partially form the link from the unsevered material, a cutting die to sever the partially formed link and a lower reciprocating forming die working upward to complete the formation of the link, whereby a link is completed at each revolution of the driving shaft, substantially as set forth.

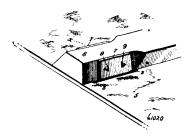
#### No. 61,019. Chain Link. (Anneau de chaiue.)



The Locke Steel Belt Company, New York City, assignee of Sylvanus Dyer Locke, Hoosick Falls, U.S.A., 24th August, 1898; 6 years. (Filed 22nd June, 1898.)

Claim.—1st. A chain link formed of sheet metal and having its sides provided with ears turned at an angle thereto in combination with a cross pin supported by said ears for connecting the link with an adjacent link, substantially as set forth. 2nd. A chain link formed of sheet metal and having ears projected from its sides for securing a cross slat or bucket to the link and means for connecting the opposite ends of the link with adjacent links, substantially as set forth. 3rd. A chain link formed of sheet metal and having its sides provided with supporting ears at their ends and at a distance back from their ends, the said ears being integral with the sides of the link and means for connecting the bearing ears at the ends of the sides with an adjacent link, substantially as set forth. 4th. A chain link formed of sheet metal and having perforated bearing ears at the extremities of its sides, a cross pin adapted to engage said ears and a spacing and bearing sleeve supported on the cross pin, the said sleeve and ear at the end of the sleeve being provided, the one with a recess and the other with a projection adapted to enter the recess to lock the sleeve against a rotary movement, substantially as set forth.

#### No. 61,020. Belt and Slat Fastener. (Attache de courroie).



Maurice L. Akers and D. J. McFane, both of Heppner, Oregon, U.S.A., 24th August, 1898; 6 years. (Filed 8th August, 1898.)

Claim.—1st. In a carrier-belt, the combination with a belt and slat, of a metallic fastener secured to said belt and having a jaw extending upwardly on each edge of said slat to hold the same in clamped relation, each jaw terminating flush with the upper surface of said slat, substantially as described. 2nd. In a carrier-belt, the combination with the belt and slat transverse thereon, of a fastener comprising a flat rectangular body portion interposed between said belt and slat and provided at each corner with a depending prong adapted to pass through the belt and be bent over on the same and also provided with upwardly-extending jaws arranged to grasp the slat on each side to clamp the same in position, substantially as described. 3rd. A belt and slat fastener, comprising a body portion having oppositely-disposed prongs and jaws, bent at an angle to the plane of said body portion and extending therefrom in opposite directions, said jaws converging and being each provided with one or more inturned barbs, substantially as described.

# No. 61,021. Net-Lifting Machine. (Machine à lever les rets.)

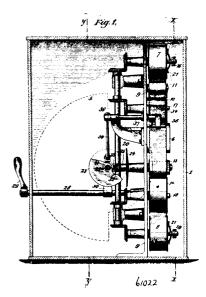


William Frank Ahearn and Peter Gagnon, both of Two Rivers, Wisconsin, U.S.A., 24th August, 1898; 6 years. (Filed 12th July, 1898.)

Claim.—1st. A net-lifting machine comprising a rotative shaft, arms radiating from the shaft, net-guards carried by the arms, reciprocative net-gripping plungers operative in conjunction with the guards, and automatic pushers operative to insure disengagement of the net from said guards. 2nd. A net-lifting machine comprising a rotative shaft, arms radiating from the shaft, net-guards carried by the arms, troughs connecting the guards, and reciprocative net-gripping plungers operative in conjunction with said guards. 3rd. A net-lifting machine comprising a rotative shaft, arms radiating from the shaft, net-guards carried by the arms, troughs connecting the guards, reciprocative net-gripping plungers operative in conjunction with said guards, and automatic pushers operative to insure disengagement of the net from the aforesaid guards. 4th. A net-lifting machine comprising a shaft mounted in bearings, arms radiating from the shaft, net-guards carried by the arms, troughs connecting the guards, reciprocative net-gripping plungers operative to insure disengagement of the net from the aforesaid guards, and a drive-mechanism having clutch-connection with said guards, and a drive-mechanism having clutch-connection with said shaft. 5th. A ret-lifting machine comprising a rotative shaft, arms radiating from the shaft, net-guards carried by the arms, levers fulcrumed to said arms, n-t-gripping plungers extending from the levers to operate in conjunction with the guards, and a lever-rocking cam adjustable on said shaft. 6th. A non-lifting machine comprising a rotative shaft, arms radiating from the shaft, net-guards carried by the arms, levers fulcrumed to said arms, net-gripping plungers extending from the shaft, trough-connected net-guards carried by the arms, levers fulcrumed to said arms, net-gripping plungers extending from the levers to operate in conjunction with the guards, pushers in guide-connection with the aforesaid arms, and a lever-rocking pusher-actuating cam adjustable on said shaft. 8th. A net-lifting mach

of the cam, these pushers being in guide-connection with the aforesaid arms and operative to force the net out of said guards subsequent to the retraction of the plungers. 9th. A net-lifting machine comprising a rotative shaft, arms radiating from the shaft, net-gnards carried by the shaft, and reciprocative net-gripping plungers having corrugated working ends opposed to the corrugated surfaces of the guards with which they co-operate. 10th. A net-lifting machine comprising a shaft mounted in bearings, arms radiating from the shaft, trough-connected net-guards carried by the arms, reciprocative net-gripping plungers operative in conjunction with the guards, a spur-wheel loose on the shaft, a clutch for the spur-wheel. 11th. A net-lifting machine comprising a shaft mounted in bearings, arms radiating from the shaft, trough-connected net-guards carried by the arms, levers fulcrumed to said arms, plungers extending from the levers to operate in conjunction with the guards, pushers in guide-connection with the aforesaid arms, a lever-rocking pusher-actuating cam, a spur-wheel loose on the shaft, a clutch for the spur-wheel and shaft, and a motor driven pinion in mesh with said spur-wheel. 12th. A net-lifting machine comprising a rotative shaft, arms radiating from the shaft, net-guards carried by the arms, levers fulcrumed to said arms, net-gripping plungers extending from the levers to operate in conjunction with the guards, a lever-racking cam in loose sleeve-connection with said shaft, lugs on a shaft-bearing and cam-adjusting screws having their bearings in said lugs.

No. 61,022. Apparatus for Projecting Views. (Appareil pour la projection des vues.)



Herman Casler, Canastota, New York, U.S.A., 24th August, 1898; 18 years. (Filed 8th January, 1898.)

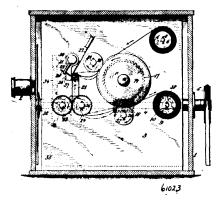
Claim.—1st. In a consecutive view reproducing apparatus, the combination, with a flexible picture strip containing a series of consecutive regularly spaced views of a moving object, of continuously moving strip, feeding devices for feeding the picture strip across the field of view, and an intermittently operating catch arranged to deliver and to carry away the picture strip across the field of view reproducing apparatus, the combination, with a flexible picture strip containing a series of consecutive regularly spaced views of a moving object, of continuously moving strip, feeding devices for feeding the picture strip possible. 2nd. In a consecutive view reproducing apparatus, series of consecutive regularly spaced views of a moving object, of continuously moving strip, feeding devices for feeding the picture strip containing a paratus, a shutter arranged to feed the strip through the field of the projecting apparatus, as hitter and catch synchronously, substantially as described. 3rd. In a consecutive view reproducing apparatus, the projecting apparatus, as hutter arranged to cut off light while the strip intermittently and at intervals corresponding to the distance between the pictures, thereby momentarily peventing the feeding of the strip across the field of view, substantially as described. 3rd. In a consecutive view reproducing apparatus, the combination, with a flexible picture strip containing a series of consecutive regularly spaced views of a moving object, of continuously moving strip, feeding devices for feeding the strip by frictional contact, and arranged to cut off light while the strip is contact, and an intermittently operating catch arranged to grasp the strip intermittently and at intervals corresponding to the distance between the pictures, thereby producing apparatus, the combination, with a flexible picture strip containing a series of consecutive regularly spaced views of a moving object, of continuously moving strip, feeding devices arranged to grasp the strip feeding mechanism arranged

deliver and to carry away a picture strip, auxiliary feeding devices moving continuously but at higher peripheral speed than the main feeding devices, and acting upon the strip by frictional contact, and arranged to feed the strip through the field of the projecting apparatus, and an intermittently operating catch arranged to grasp the strip intermittently and thereby to prevent the feeding of the strip through the field of the projecting apparatus, substantially as described. 5th. In a consecutive view apparatus, the combination, with the lenses and illuminating apparatus, of a projecting apparatus, of a spool carrying a picture strip, a delivery feed drum arranged to unwind the strip from said spool, auxiliary feed rolls acting upon the strip by frictional contact and having greater peripheral velocity than said delivery drum, and arranged to feed peripheral velocity than said delivery drum, and arranged to feed the strip through the field of the projecting apparatus, a winding spool upon which the strip may be wound, means for rotating said spool, a take off drum arranged to carry the strip from the auxiliary feed rolls to said winding spool, and an intermittently operating catch arranged to grasp the strip intermittently and thereby to pre-vent the feeding of the strip through the field of the projecting apparatus, substantially as described. 6th. In a consecutive view reproducing apparatus, the combination, with the lenses and illum-inating apparatus of a projecting amparatus of continuously moving inating apparatus of a projecting apparatus, of continuously moving strip feeding devices for feeding a picture strip through the field of said projecting apparatus, an intermittently operating catch arranged to grasp the strip intermittently, thereby preventing momentarily the feeding of the picture strip through the field of the projecting apparatus, and means for varying the length of strip fed forward while the strip is released by the catch, substantially as described. 7th. In a consecutive view reproducing apparatus, the combination with the lenses and illuminating apparatus, of a projecting apparatus, of continuously moving strip feeding devices for feeding a picture strip through the field of said projecting apparatus, an interpicture strip through the head of sant projecting apparatus, and means for varying thereby momentarily preventing the feeding of the picture strip through the field of the projecting apparatus, and means for varying the relative speed of the strip-feeding mechanism and catch whereby the length of strip fed forward each time the catch is released may be varied, substantially as described. 8th. In a consecutive view apparatus, the combination with the lenses and illuminating apparapparatus, of a projecting apparatus, of continuously moving main feeding devices arranged to deliver and carry away a picture strip, auxiliary feeding devices moving continuously but at higher peripheral velocity than the main feeding devices, and arranged to feed the strip through the field of the projecting apparatus, acting upon the strip by frictional contact, an intermittently operating catch arranged to grasp the strip intermittently thereby preventing momentarily the feeding of the strip through the field of the projecting apparatus, and a changeable speed gear connecting the driving members of the strip-feeding devices and of the catch whereby the speed of the stripfeeding devices relative to the catch may be varied, substantially as described. 9th. In a consecutive view apparatus, the combination with the lenses and illuminating apparatus, of a projecting apparatus, of a supply spool carrying a picture strip, a delivery-feeding drum arranged to unwind the strip from said spool, auxiliary feed rolls acting upon the strip by frictional contact and having a greater rois acting upon the strip by irrictional contact and having a greater peripheral velocity than said delivery drum, and arranged to feed the strip through the field of the projecting apparatus, a winding spool upon which the strip may be wound, means for rotating said spool, a take-off drum arranged to carry the strip from the auxiliary feed rols to said winding spool, an intermittently operating catch arranged to grasp the strip intermittently, thereby preventing momentarily the feeding of the strip through the field of the projecting apparatus, and changeable speed genting connecting the division ing apparatus, and changeable speed gearing connecting the driving members of the catch and delivery drum whereby the rate of feeding of the strip through the apparatus relative to the speed of the catch may be varied, substantially as described. 10th. In a consecutive view apparatus, the combination with lenses and illuminating apparatus of a projecting apparatus, of continuously moving main feeding devices arranged to deliver and to carry away the picture strip, auxiliary feed rolls moving continuously but at higher peripheral velocity than the main feeding devices, acting upon the strip by frictional contact, and arranged to feed the strip through the field of the projecting apparatus, an intermittently operating catch arranged to grasp the strip intermittently, thereby preventing momentarily the feeding of the strip through the field of the projecting apparatus, a shutter arranged to cut off light while the strip is moving through the field of the lens, the means for operating the shutter and catch synchronously, substantially as described. 11th. In a consecutive view apparatus, the combination, with a lens, a shutter arranged to interrupt the passage of light from said lens, and a continuously moving driving shaft arranged to operate said shutter, of a strip feeding mechanism arranged to feed a flexible strip through the field of the lens, and comprising a delivery drum for delivering the strip, a take off drum for carrying away

feeding mechanism for consecutive view apparatus, the combination, with a delivery drum for delivering the strip, a take off drum for carrying away the strip, means for holding the strip in contact with said drums, a winding spool, a shaft geared to said drums, means for rotating the same, and auxiliary feed rolls likewise geared to said shaft and arranged to rotate at a higher peripheral velocity than said delivery and take off drums, of a catch arranged to grasp the strip and prevent it from being fed by said auxiliary feed rolls, a shaft and connecting mechanism operated thereby for operating said catch intermittently, friction discs connected to said shaft and to a shaft of the strip feeding rolls, the periphery of one of said discs being in contact with the face of the other disc, and means for moving the first disc radially with respect to the second disc, whereby the speed of the strip feeding rolls relative to the speed of the catch may be varied. 13th. In a picture strip feeding mechanism for consecutive view apparatus, the combination, with a supply spool, a winding spool, continuously moving main feeding devices arranged to unwind the strip from the supply spool and to carry the strip to the winding spool, a shaft for driving the supply and winding spools and strip feeding devices, and clutches connecting the driving shaft with said supply and winding spools, whereby either of said spools may be thrown out of engagement with said shaft, of auxiliary feed rolls for feeding the strip across the field of view, arranged to rotate at a higher peripheral velocity than the main feeding devices, an intermittently operating catch arranged to grasp the strip intermittently and thereby to prevent the strip from being fed across the field of view, and a detent adapted to engage with the catch and hold the same out of contact with the strip.

#### No. 61,623. Apparatus for Projecting Views.

(Appareil pour la projection des vues.)



Herman Casler, Canastota, New York, U.S.A., 24th August, 1898; 18 years. (Filed 8th January, 1898.)

Claim.-1st. In a consecutive view apparatus, the combination, with a lens, continuously moving main film feeding devices arranged to deliver and carry away a strip of sensitive film, and auxiliary feeding devices moving continuously but at higher peripheral velocity than the main film feeding devices, acting upon the film by frictional contact, and arranged to feed the film across the field of the lens, of an intermittently operating catch arranged to grasp the film intermittently and thereby to prevent the feeding of the film across the field of the lens, thereby causing said auxiliary feeding devices to slip over said film, a shutter arranged to cut off light from the film while the same is moving in the field of the lens, and means for synchronously operating the shutter and catch, substantially as described. 2nd. In a consecutive view apparatus, the combination, with a lens, a supply spool carrying a strip of sensitive film, a delivery feeding device arranged to unwind the film from said spool, a winding spool upon which the film may be wound, means for rotating said spool, and a take off feeding device arranged to carry the film to the winding spool, of continuously moving auxiliary feed rolls interposed between said delivery and take off feeding devices and having a higher peripheral velocity than the delivery and take off feeding devices, acting upon the film by frictional contact, and arranged to feed the film across the field of the lens, an intermittently operating catch arranged to grasp the strip intermittently and thereby to prevent the feeding of the film across the field of the lens, thereby causing said auxiliary feed rolls to slip over said film, a shutter arranged to cut off light from the film while the same is moving in the field of the lens, and means for synchronously operating the shutter and catch, substantially as described. 3rd. In a spool carrying a strip of sensitive film, a winding spool upon which the film may be wound, a main feeding drum arranged to deliver the film from said supply spool and tocarry it to the winding spool, larranged to punch registration holes in said strip each and means for holding the film in contact with the surface of said is held by the said spring, substantially as described.

drum, of continuously moving auxiliary feed rolls having a higher peripheral velocity than said drum, acting upon the film by frictional contact, and arranged to feed the film across the field of the lens, an intermittently operating catch arranged to grasp the film intermittently and thereby to prevent the feeding of the film across the field of the lens, thereby causing the auxiliary feed rolls to slip thereon, a shutter arranged to cut off light from the film while the same is moving in the field of the lens, and means for synchronously operating the shutter and catch, substantially as described. 4th, In a consecutive view apparatus, the combination, with a lens, and film feeding devices arranged to feed a strip of sensitive film across the field of said lens intermittently, of a shutter arranged to cut off light from the film while the same is moving in the field of the lens, means for synchronously operating the shutter and film feeding mechanism, and a marking device, arranged to mark the position of each view upon the film, and operated each time the film feeding mechanism operates, substantially as described. 5th. In a consecutive view apparatus, the combination, with a lens, and continuously moving film feeding devices arranged to feed a strip of sensitive film across the field of the lens, of an intermittently operating catch arranged to grasp the film intermittently, thereby momentarily preventing the feeding of the film across the field of the lens, a shutter arranged to cut of light from the film while the same is moving in the field of the lens, means for synchronously operating the shutter and catch, and a marking device, arranged to mark the position of each view upon the film, and operated each time the catch operates to hold the film, substantially as described. 6th. in a consecutive view apparatus, the combination, with a lens, and continuously moving film feeding devices arranged to feed a strip of sensitive film across the field of said lens, of an intermittently operating catch arranged to grasp the film intermittently, thereby momentarily preventing the feeding of the film across the while the same is moving in the field of the lens, a shutter arranged to cut of light from the film while the same is moving in the field of the lens, means for synchronously operating the shutter and catch, and a punch operated synously operating the shutter and catch, and a punch operated synchronously with the shutter and catch, and arranged to mark the position of each view on the film, substantially as described. 7th. In a consecutive view apparatus, the combination, with a lens, a shutter arranged to interrupt the passage of light from said lens, and a continuously moving driving shaft arranged to operate said shutter, of a strip feeding mechanism arranged to feed a flexible strip through the field of the lens, and comprising a main driving drum, for delivering and carrying off the strip, driven from said shaft, means for holding the strip in contact with said drum on the delivery and take off sides thereof anxiliary feed rolls driven from delivery and take off sides thereof, auxiliary feed rolls driven from said driving shaft and at a higher peripheral speed than said main driving drum, and arranged to feed the strip across the field of the lens by frictional contact, and a catch arranged to grasp the strip and to prevent it from being fed across the field of the lens, and operated by said driving shaft intermittently and synchronously with the shutter. 8th. In a consecutive view apparatus, the combination, with a lens, a shutter arranged to interrupt the passage of light from said lens and a convenience of the lens and lens are convenience. light from said lens, and a continuously moving driving shaft arranged to operate said shutter, of a strip feeding mechanism arranged to feed a flexible strip through the field of the lens, and comprising a main driving drum, for delivering and carrying off the strip, driven from said driving shaft, means for holding the strip in contact with said drum on the delivery and take off sides thereof, a winding spool frictionally driven from said driving shaft and tending to revolve at a higher peripheral velocity than said main driving drum, continuously moving auxiliary feed rolls likewise driven from said driving shaft and at a higher peripheral speed than said main driving drum, and arranged to feed the strip across the field of the lens by frictional contact, and a catch arranged to grasp the strip and to prevent it from being fed across the field of the lens, and operated by said driving shaf intermittently and synchronously with the shutter. 9th. In a consecutive view apparatus, the combination, with a lens, a shutter arranged to interrupt the passage of light from said lens, and a continuously moving driving shaft arranged to operate said shutter, of continuously moving feed rolls driven from said driving shaft for feeding a flexible strip across the field of the lens, and acting upon said strip by frictional contact, a plate for supporting said strip in the field of the lens, a spring catch arranged to hold said strip against said plate and so to prevent the feeding thereof, a rock shaft carrying an arm engaging said suring and arranged to lift the same, and means, operated by the driving shaft, for vibrating said rock shaft synchronously with the operation of the shutter, thereby causing said spring to release the strip when the shutter is closed. 10th. In a consecutive view apparatus, the combination, with a lens, a shutter arranged to interrupt the passage of light from said lens, a continuously moving driving shaft arranged to operate said shutter, of continuously moving feed rolls driven from said driving shaft for feeding a flexible strip of sensitive film across the field of the lens, and acting upon said strip by frictional contact, a plate for supporting said strip in the field of the lens, a spring arranged to press said strip against said plate and so to prevent the feeding thereof, a rock shaft carrying an arm engaging said spring arranged to lift the same, means, operated by the driving shaft, for vibrating said rock shaft synchronously with the operation of the shutter, thereby causing said spring to release the strip when the shutter is closed, and a punch, operated by said rock shaft, and arranged to punch registration holes in said strip each time the same

No. 61,024. Wrench. (Clé à écrou.)

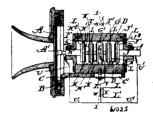


Ira B. Tripp, Aurora, Illinois, U.S.A., 24th August, 1898; 6 years.
(Filed 25th July, 1898.)
Claim. —In a sliding-jaw wrench, the combination with the body

having the fixed jaw, and having one edge toothed or serrated, of a sliding jaw having similar teeth adapted to engage with those in the body, and a locking-lever carried on the opposite side of the body from the sliding jaw, having legs straddling the said body and pivoted to the said sliding jaw, substantially as set forth.

#### No. 61,025. Telephone Transmitter.

(Transmetteur de téléphones.)



George Fiegle Payne, Philadelphia, Pennsylvania, U.S.A., 24th August, 1898; 6 years. (Filed 22nd March, 1898.)

Claim .-- 1st. In a telephone transmitter, the combination of two relatively central and two relatively lateral electrode faces, one pair being movable and one rigid in the supporting frame, granular conducting materal situated between the adjacent central and lateral electrode faces, a diaphragm and a positive connection between it and the two movable electrode faces whereby they are moved synchronously with the diaghragm and so as to simultaneously relax the pressure on one mass of granular material and proportionately increase it on the other mass. 2nd. In a telephone transmitter, the combination with the diaphragm of a perforated electrode adjacent thereto and set at an angle to a horizontal plane, a rod extending from the diaphragm through such perforated electrode, an electrode secured to the said rod and granular conducting material situated between the electrodes. 3rd. In a telephone transmitter, the combination of an electrode box as D with one or more fixed electrodes situated therein, one or more movable electrodes also situated in studied therein, one or more movable electrodes also situated in said box and attached to the diaphragm so as to move with it, and a light elastic washer extending out from the periphery of the movable electrode or electrodes serving at once to support said electrodes and to form partitions in the box. 4th. In a telephone transmitter, a set of four resistance cells containing granular conducting material, electrical connections coupling said cells in two pairs, an electrical connection between said pair connections, other electrical connections coupling said cells in two pairs the members of which are not connected by the first pair connections, an electrical connection between the second pair connections, a battery and an induction coil, one situated in the connection between the one set of pairs and the other situated in the connection between the second set of pairs, and mechanical connection from the transmitter diaphragm whereby the resistance of the cells is varied to traverse the induction coil in alternately opposite directions. 5th. In a telephone transmitter, a set of four fixed electrode faces in combination with a set of four electrode faces attached to and movable with the diaphragm, said faces of the two sets of electrodes being arranged opposite to each other in pairs and so as to form walls of cells and the electrode faces being so arranged that with each movement of the d aphragm two pairs will approach and two recede from each other, granular conducting material placed between each pair each other, granuar conducting inacting places of coating faces in the cell formed between them, electrical connections coupling one set of faces in pairs, an electrical connection between said connections, electrical connections coupling the other set of faces in pairs, said coupled faces belonging to cells not coupled by the connections between the first set, an electrical connection between the connections last mentioned, and a battery and induction coil one situated in the connection between the coupled faces of one set and the other in the connection between the coupled faces of the other set, all substantially as specified. 6th. In a telephone transmitter the combination with a set of four fixed electrode faces arranged parallel to and one behind the other, with a set of four synchronously movable electrode faces arranged in line with the fixed faces and so as to form with them the walls of four resistance cells. faces and so as to form with them the walls of four resistance cells, granular conducting material held in each cell, electrical connections coupling the two outer and two inner electrode faces of one set in | boiling down, all substantially as hereinbefore set forth.

in pairs, and connection between said pair connections, electrical connections coupling the outer and adjacent faces of the other set in pairs and a connection between said pair connections, a battery and an induction coil one situated in the one and the other in the other connection between the coupled pairs of faces aforesaid and mechanical means securing the movable electrodes with the transmitter diaphragm so as to cause them to move therewith. 7th. In a telephone transmitter the combination of one set of electrodes, the outer ones having faces turned inward and the central one having two faces, and the two outer ones electrically connected together and with the central electrode, with a second set of electrodes, one situated on each side of the central electrode, an electrical connection between the said movable electrodes, means for connecting one set of electrodes with the diaphragm so as to move therewith, a battery and an induction coil, one situated in the connection leading to the central electrode and one in the connection between the set of two electrodes, all substantially as specified, and so as to alternate the greater part of the battery current through the coil. 8th. In a telephone transmitter the conbination of three stationary electrodes, the outer ones having faces turned inward and the central one having two faces, and the two outer ones electrically connected together and with the central electrode, of two movable electrodes actuated by the diaphragm and one situated on each side of the stationary central electrodes, a battery and an induction coil, one situated in the connection leading to the central electrode and one in the connection between the movable electrodes, all substantially as specified, and so as to alternate the greater part of the battery current through the coil. 9th. In a telephone transmitter, the combination with the diaphragm of three stationary electrode buttons arranged in line therewith and the two nearest to the diaphragm being formed with perforations, two movable electrode buttons arranged between the stationary buttons, one on each side of the central button, a rod attached to the diaphragm and to the two movable buttons, said rod passing through the perforated stationary buttons, granular conducting material situated between the adjacent faces of each electrode button and electrical connections as specified. 10th. In a telephone transmitter, substantially as specified, the combination with the electrode box of the two stationary end electrode buttons having electrical connections extending through the ends of the box and the central stationary electrode button having an electrical conductor extending through the side wall of the box. 11th. In a telephone transmitter, substantially as specified, the combination with the electrode box of the two movable electrode buttons and an actuating rod embodying two insulated conductors one connected with each button.

#### No. 61,026. Pencil Sharpener. (Taille-crayon.)



Isaac Cory, New Decatur, Alabama, U.S.A., 24th August, 1898; 6 years. (Filed 25th July, 1898.)

Claim.—1st. A pencil-sharpener comprising the cylindrical socket or sleeve 4, and the conical hood 12, provided with the straight cutor sieeve 4, and the conical hood 12, provided with the straight cutting edge 15, and the spiral cutting edge 14, substantially as shown and described. 2nd. A duplex pencil-sharpener comprising the cylindrical socket or sleeve 4, formed with the spiral slot 8, having the spirally-arranged cutting edges 9 and 10, and the fixed conical hood 12, provided with the straight cutting edge 15, arranged parallel with the axis of said cylindrical socket, and the spiral cutting edge 14 extending arranged the axis of said hood, substantially ting edge 14, extending around the axis of said hood, substantially as shown and described.

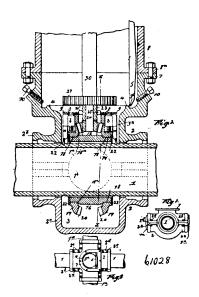
#### No. 61,027. Method of Eradicating Acid from Cider. (Méthode d'extirper les acides du cidre.)

Ephraim Huber, Berlin, Ontario, Canada, 25th August, 1898; 6 years. (Filed 14th August, 1897.)

Claim. The process of eradicating acid from cider when making syrup or applebutter, by mixing with it undecomposed lime and water, either while it is unboiled and cold, or at any stage of the

#### No. 61,028. Pipe Cutter and Branch Connection.

(Coupe-tuyau et liaison d'embranchement.)



David Willis French, Hoboken, New Jersey, U.S.A., 25th August, 1898; 6 years. (Filed 25th July, 1898.)

Claim.—1st. The combination of a divided frame or ring having two annular parallel guideways and means to clamp said frame upon a pipe, with two divided cutter-carriers or rings mounted upon and adapted to travel around said guideways, and having gearteeth respectively projecting toward each other, means for clamping said cutter-carriers or rings around said guideways, means for supporting tools on each of said carriers or rings and for feeding said tools independently, a pinion or gear-wheel located between said cutter-carriers and meshing with the gears carried by both of said cutter-carriers, a shaft carrying said pinion, a gear-wheel to rotate said shaft, a pinion or gear-wheel to operate said wheel, and a shaft for operating said pinion or gear-wheel, substantially as set forth. 2nd. The combination, of a casing adapted to be clamped around a pipe and having a chamber to receive a pipe-cutting machine, said casing being provided with a stuffing box or bearing, with a pipe-cutter adapted to be clamped around a pipe within the chamber of the casing, and a shaft journalled in said stuffing box or bearing, and connected with said pipe-cutter, and means for sustaining the pipe-cutting machine when the pipe is cut through, substantially as described. 3rd. The combination of a casing adapted to be clamped around a pipe and having a chamber to receive a pipe-cutting machine, said case being provided with stuffing-boxes or bearings, with a pipe-cutter adapted to be clamped around a pipe within the chamber of said casing, said pipecutter having two parallel shafts or rods that project through said stuffing boxes or bearings and serving to keep the pipe-cutting machine from twisting within the casing. 4th. A branch or casing adapted to be fastened upon a pipe and having a chamber adapted to surround the pipe, which chamber is greater radially than the pipe to be surrounded so as to receive a pipe-cutting machine within it whereby a tool can travel around said pipe within the casing, said branch or casing having an opening leading to said chamber for the passage of the pipe-cutting machine, a valve-seat and a valve to close said opening, said branch or casing also having an opening and a hub leading from said chamber, substantially as set forth. 5th. A divided or split branch or casing adapted to be fastened upon a pipe and having a chamber adapted to surround the pipe and that is greater radially than the pipe to be surrounded, to receive a pipe cutting machine within it whereby a tool can travel around the pipe, said branch or casing having an opening leading to said chamber, for the passage of a pipe-cutting machine, a valve-seat surrounding said opening, and a valve to close against said seat, said branch or easing also having a plurality of openings leading to said chamber, and hubs extending from said openings, substantially as set forth. 6th. The combination of a divided or split branch or casing adapted to be clamped upon a pipe and having a chamber adapted to surround a pipe and that is greater radially than the pipe to be surrounded, and adapted to receive a cutting-machine within it to enable a tool to travel around the pipe, said branch or easing having an opening leading to said chamber, for the passage of a pipe-cutting machine, a valve-seat surrounding said opening, a valve to close against said seat, and a removable bonnet or cover adapted to be fastened to said branch or

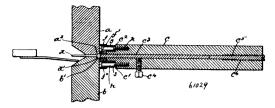
chamber and bonnets or cover being adapted to permit the passage of a pipe-cutting machine, said branch or easing also having an opening and a hub leading from said chamber, substantially as set forth. 7th. The combination of a divided or split branch or casing adapted to be clamped upon a pipe and having a chamber adapted to surround a pipe and that is greater radially than the pipe to be surrounded, and adapted to receive a pipe-cutting machine within it to enable a tool to travel around the pipe, said branch or casing having an opening leading to said chamber, for the passage of a pipe-cutting machine, a valve-seat surrounding said opening, a valve to close against said seat, a removable bonnet or cover adapted to be fastened to said branch or casing in line with said opening, and whose volume is such as to permit the passage through it of the pipe-cutting machine, the interior of said bonnet or cover constituting a prolongation of the chamber of said branch or casing, and a stuffing box carried by said bonnet or cover to receive the driving-shaft of a pipe-cutter, said branch or casing also having a plurality of openings leading to said chamber, and hubs extending from said openings, substantially as set forth. 8th. A divided or split branch or casing adapted to be clamped upon a pipe and having a chamber adapted to surround a pipe and that is greater radially than the pipe to be surrounded, said branch or casing having an opening leading to said chamber, a valve-seat surrounding said openopening leading to said chamber, a valve-seat surrounding said opening, a valve to close against said seat, a removable bonnet or cover adapted to be fastened to said branch or casing in line with said opening, the interior of said bonnet or cover constituting a prolongation of the chamber of said branch or casing, and a stuffing box carried by said bonnet or cover, combined with a pipecutter adapted to carry a tool around the pipe within said chamber, and also adapted to travel within said chamber and the bonnet or cover, and a shaft to pass through said stuffing box to operate said pipe-cutter, and means to sustain said shaft and the pipe cutter when the pipe is cut through, substantially as described. 9th. A divided or split branch or casing adapted to be clamped upon a pipe and having a chamber adapted to surround a pipe that is greater radially than the pipe to be surrounded, to enable a pipe-cutter to surround the pipe, said branch or casing having an opening leading to said chamber, a valve seat and a valve to close said opening, a removable bonnet or cover adapted to be fastened to said branch or casing in line with said opening, the interior of said bonnet or cover constituting a prolongation of the chamber of said branch or casing, stuffing boxes or bearings carried by said bonnet or cover, and two shafts or rods to pass through said stuffing-boxes or bearings, combined with a pipe-cutter adapted to be operated within said chamber of the branch or casing, and aranged to connect with said shafts or rods, said shafts or rods serving to keep the pipe cutter from twisting within the casing, substantially as set forth. 10th. The combination of a divided or split casing adapted to be clamped around a pipe and having a chamber to surround the pipe and an opening leading to said chamber, with a valve and valve-seat, a removable bonnet or cover having a stuffing-box, a pipe-cutter adapted to travel within said chamber and bonnet or cover, a tube or shaft projecting from said pipe-cutter, a threaded rod extending threfron, a tube to surround said threaded rod, and a threaded wheel or handle to operate on said threaded rod and said tube to raise the pipe-cutter, substantially as set forth. 11th. The combination of a branch or casing having a chamber to surround a pipe to receive a pipe-cutting machine within it and an opening leading thereto, a valve-seat and a flange surrounding said seat, with a removable bonnet or cover having a stuffing-box or bearing and a flange to connect with the flange on the branch or casing, and a valve to close against said seat, and with a pipe-cutting machine, a shaft or rod to project therefrom through said stuffing-box or bearing, and means connected with said shaft or rod to sustain the latter and the pipe-cutting machine when the pipe is cut through, substantially as described. 12th. The combination of a divided or substantially as described. 12th. The combination of a divided or split branch or casing having a chamber and an opening leading thereto, a valve-seat and a flange surrounding said seat, with a removable bonnet or cover having a flange to connect with the flange on the branch or casing, a valve having a threaded bore and a screw adapted to enter said bore to sustain said valve, substantially as described. 13th. The combination of a divided or split branch or casing having a chamber and an opening leading thereto, a valve-seat and a flange surrounding said seat, with a removable bonnet or cover having a flange to connect with the flange on the branch or casing, a valve having a threaded bore, and a screw adapted to mesh with the threads in said bore, and carried by the bonnet or casing, said screw being arranged to suspend the valve in an upright position outside of the seat and above the surface of the subtended metal, substantially as set forth.

No. 61,029. Machine for Heading Nails, Tacks, etc. (Machine pour mettre les têtes aux clous, broquettes

Albert Henry Brigham, Whitman, Massachusetts, U.S.A., 25th August, 1898; 6 years. (Filed 26th July, 1898.)

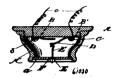
Claim.—1st. In a heading die, a carrier having a longitudinal, partially threaded bore a central abutment at one end, headed guides rigidly secured thereto at the sides of said abutment, a spring concasing in line with said opening, the interior of said bonnet or cover trolled die proper freely movable upon the guides and having a head constituting a prolongation of the chamber of said casing, said forming opening, a heading pin extended into the bore of the carrier,

an adjusting screw in the threaded portion of the bore to bear upon the inner end of said pin, and a set screw to rigidly retain said pin handle supports formed of a single piece of material, and the con-



in adjusted position, the die proper being free to position itself upon the abutment of the carrier, substantially as described.

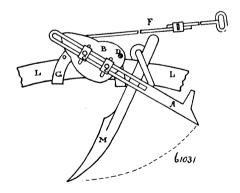
No. 61,030. Fire Alarm. (Avertiseur d'incendie.)



William A. Guthrie, Lurham, North Carolina, U.3 August, 1898; 6 years. (Filed 28th January, 1898.)

Claim.—1st. In a device of the character described, the combination with the contact plates, of a fusible metal plate, and an adjustable connection between said fusible plate and one of the contact plates, whereby the latter are held out of contact, substantially as described. 2nd. In a device of the character described, the combination with the contact plates, of a fusible metal plate, a rod attached to one of said plates, and to the fusible plate, and adapted to hold the contact plates out of engagement, substantially as described. 3rd. In a devoie of the character described, the combination with the contact plates, of a fusible metal plate, and a rod attached at one end to one of the contact plates and screw-threaded at its opposite end, said screw-threaded end passing through the fusible plate and receiving a nut, substantially as described. 4th. The combination with a base, a cup carried thereby and provided with an annular interior shoulder, contact plates carried by the base, a rod attached to one of said contact plates and screw-threaded at its opposite end, and a fusible metal plate engaging the annular shoulder of the cup and through which the screw-threaded end of the rod extends and receives a nut, substantially as described.

#### No. 61,031. Plough. (Charrue.)



Peter Perdue, Clinton, Ontario, Canada, 25th August, 1898; 6 years. (Filed 27th August, 1898.)

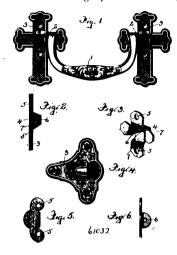
Claim.—The combination of wiper A, on swing plates B, and the necessary attachments GG, substantially as and for the purpose hereinbefore set forth.

#### No. 61,032. Coffin Handle. (Poignée de cercueil.)

Leopold Girard and Hector Louis Godin, both of Three Rivers, Quebec, Canada, 25th August, 1898; 6 years. (Filed 30th July, 1898.)

Claim.-1st. A support for coffin handles, comprising a soft metal base, and a reinforcing device secured therein and forming a part of said base, said reinforcing device being adapted to have a contact with the bearing portions of said support, substantially as described. 2nd. A reinforcing device for coffin handles supports formed of a single piece of material, bent inwardly and laterally, said device being adapted to be fixedly secured to and form part of said support

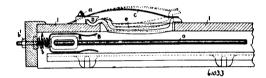
substantially as described. 3rd. A reinforcing device for coffin



figuration of a Greek cross, the extending ends of said device being bent inwardly and then laterally, substantially as described.

#### No. 61,033. Loom Picker Protector,

(Protecteur pour nopeurs de métiers.)



John Bannister, Sta. Clara, Mexico, 25th August, 1898; 6 years. (Filed 22nd October, 1897.)

Claim. 1st. The combination with a shuttle box, shuttle and picker, of a spring capable of lateral expansion arranged so as to come in contact with and be expanded by the shuttle near the end come in contact with and be expanded by the smittle near the end of its stroke without coming in contact or impeding the picker, substantially as described. 2nd. The combination with a shuttle box, shuttle and picker, of a spring device displaced laterally by the shuttle near the end of its stroke and a buffering device taking the longitudinal thrust of the shuttle. 3rd. The combination with a pivoted binder or swell of a spring device having lateral displacements of the shuttle surface in contact with said varies. ment, a shuttle coming in contact with said spring and expanding it laterally against the shank of the binder, whereby the binder proper is pressed inward against the shuttle. 4th. The combination with the shuttle, of a prong spring of less width than the shuttle and of greater width than the picker, substantially as described. 5th. The combination with the shuttle box and shuttle of the spring blades B, equally spaced round the axis of the shuttle and the buffer spring A, substantially as and for the purposes described.

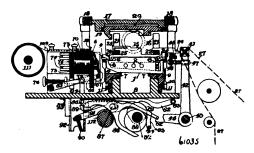
#### No. 61,034. Process of Manufacturing White Lead by Electrolysis. (Procédé pour la fabrication de blanc de plomb par l'électrolyse.

Herman Charles Woltereck, New York City, U. S. A., 25th August, 1898; 6 years. (Filed 16th August, 1897.)

Claim.—1st. The process of producing white lead by electrolysis consisting in passing an electric current from an anode of metallic lead through an alkaline electrolyte consisting of a solution of a salt of ammonia in combination with any acid, which will produce a soluble lead salt in the sense of this invention and of a hearbonate of an alkali, to a cathode of lead, carbon or any other suitable material, thereby causing a decomposition of the salts in the electrolyte, and a formation of a soluble compound of lead, which is transformed into the hydrated carbonate of lead by the simultaneous generation of free carbonic acid at the said anode and by the presence of caustic alkali (ammonia) at the said cathode, passing a current of carbonic acid gas through said electrolyte to regenerate the spent alkaline bi-carbonate until said anode is completely dissolved. 2nd. The process of producing white lead which consists in passing an electric current from an anode of metallic lead through an alkaline electrolyte consisting of a solution of a salt of an alkali in combination with any acid which will produce a soluble lead salt in the sense of this invention and of a bi-carbonate of an alkali, said solution to contain more than 5 per cent of said salt or salts, to a kathode of lead, carbon or any other suitable material, thereby causing a decomposition of the salts in the electrolyte and a formation of a soluble compound of lead, which is transformed into the hydrated carbonate of lead by the simultaneous generation of free carbonic acid at the said anode and by the presence of caustic alkali generated at said kathode, passing a current of carbonic acid gas through said electrolyte to regenerate the spent alkaline bi-carbonate until said anode is completely dissolved, all for the purpose as set forth and described.

#### No. 61,035. Lace Making Machine.

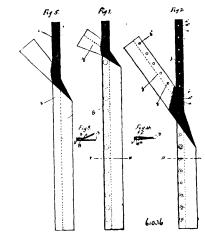
(Machine à faire de la dentelle.)



Julio de Vargas, Machnea, San Vicenta, Alicante, Spain, 25th August, 1898; 6 years. (Filed 28th August, 1897.)

Claim.—1st. In a machine for the manufacture of real lace the combination of the bobbins with a frame having spring sides arranged and operating substantially as herein described for the purpose specified. 2nd. In a machine for the manufacture of real lace, the combination of the bobbins with a bobbin frame having spring sides and bobbin carriers arranged and operating substantially as herein described for the purpose specified. 3rd. In a machine for the manufacture of real lace, the combination of the bobbins with a bobbin frame having spring sides, bobbin carriers and points for taking up the crossings of the thread arranged and operating substantially as herein described for the purpose specified. 4th. In a machine for the manufacture of real lace, the combination of the bobbins with a bobbin frame having spring sides, bobbin carriers points, for taking up the crossings of the threads and pin bars with pins fixed therein according to the pattern arranged and operating substantially as herein described for the purpose specified. 5th. In a machine for the manufacture of real lace, the combination of the bobbins with a bobbin frame having spring sides, bobbin carriers and points for taking up the crossings of the threads, pin bars with pins arranged therein according to the pattern and a jacquord or other pattern mechanism arranged and operating substantially as herein described for the purpose specified. 6th. In a machine for the manufacture of real lace, the combination of the bobbins, the bobbin frame with spring sides, the bobbin carriers with mechanism for moving the same, pin bars arranged in the two tiers with mechanism for moving the same, pin bars arranged in the two tiers with mechanism for moving the same, pin bars arranged in the two tiers with mechanism for moving the same, pin bars and point, all arranged and operating as herein described with reference to the accompanying drawings for the purposes set forth. 7th. A machine for the manufacture of real lace, constructed and operating substantially

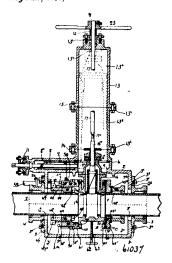
#### No. 61,036. Lacing Strip. (Bande à lacer.)



Moses K. Bortree and Mary H. Bortree, both of Grand Rapids, Michigan, U.S.A., 25th August, 1898; 6 years. (Filed 2nd August, 1898.)

Claim.—1st. A lacing-strip comprising a perforated core having fillings in its perforations, and a covering for said core intimately associated therewith and preventing the dislodgement of the filling material from the perforations in the core. A lacing-strip comprising a perforated metallic core, non-corrosive fillings in the perforations thereof, and themselves perforated, and a covering for the core intimately associated therewith so as to prevent dislodgement of the fillings. 3rd. A lacing-strip comprising a composite core of metal and non-corrosive material, the latter covering metallic edges of the core with which the lacing would contact at various points throughout substantially the length of the strip, together with a textile covering closely applied over the composite core and having a free attaching-flap projecting from one longitudinal edge to the latter, said strip having openings at intervals extending through the textile covering and the non-corrosive material of the core, substantially as described. 4th. A lacing-strip comprising a flexible core, and an outer case or cover inclosing said core having a marginal portion adapted to be attached to the garment, said core being perfectly plain and openings or perforations for the lacing may be formed through the finished article.

No. 61,037. Means for inserting Valves in Pipes and Mains. (Moyen d'insérer les soupapes dans les tuyaux, etc.)



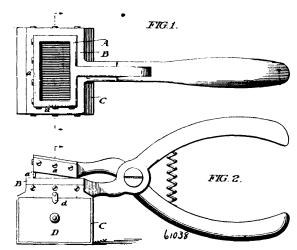
Morris R. Sherrerd, Newark, New Jersey, U.S.A., 25th August, 1898; 6 years. (Filed 25th July, 1898.)

Claim.-1st. A casing adapted to surround a pipe and having an opening to permit the passage of a valve that is to be connected with the pipe, combined with means adapated to connect the valve with the pipe while within the casing, substantially as described. 2nd. A casing adapted to surround a pipe and having an opening to permit the passage of a valve that is to be connected with the pipe, and means to close said opening to permit the valve to be connected with the pipe while the latter is under pressure, combined with means adapted to connect the valve with the pipe while within the casing, substantially as described. 3rd. A casing adapated to surround a pipe and having an opening to permit the passage of a valve that is to be connected with the pipe, and means to close said opening to permit the valve to be connected with the to close said opening to permit the valve to be connected with the pipe, while the latter is under pressure, combined with a sleeve or ring adapted to encircle the pipe while within the casing, and means to move said sleeve or ring toward the valve to hold the latter between the several ends of the pipe, substantially as described. 4th. A casing adapted to surround a pipe and having an opening to permit the passage of a valve into the casing, a valve to close said opening, and a removable bonnet or cover adapted to contain the first mentioned valve, and means to connect said bonnet or cover with said casing, combined with means adapted to connect the valve with the pipe while within the casing, substantially as described. 5th. A divided or split casing having an opening or passage-way, a valve to close the latter and means for securing said casing upon a pipe, combined with clamping devices adapted to be secured upon the pipe within said casing and to receive and hold a valve between them while within the casing, substantially as described. 6th. A divided or split casing adapted to be secured upon a pipe and having a passage-way or branch, a valve to close the latter, a bonnet or cover adapted to be secured in line with said passage-way or branch, and means for making a tight joint be-tween the casing and pipe, combined with clamping devices adapted to be connected with the pipe within said casing to hold a valve between them, substantially as described. 7th. A divided or split casing having apertures at its ends, means for clamping it upon a pipe, said casing having an opening or passage-way, a valve to

close the latter, and divided or split hubs adapted to be clamped upon the pipe and removably connected with said casing to enable the casing to be secured fluid-tight upon pipes of different sizes, substantially as described. 8th. A divided or split casing adapted to be clamped upon a pipe and having an opening or passage-way, and a valve to close the latter, combined with a sleeve or hub adapted to be clamped upon the pipe within the casing, and a sleeve or ring adapted to surround the pipe and to be moved toward said sleeve or hub to hold a valve between them, substantially as described. 9th. A divided or split casing adapted to be clamped upon a pipe and having a branch or passage-way and a valve to close the latter, combined with divided or split sleeves or hubs adapted to be clamped upon a pipe within said casing, and means carried by one of said sleeves adapted to be moved towardt he other sleeve to clamp a valve between it and the latter sleeve, substantially as described. 10th. The combination of a divided or split casing adapted to be clamped upon a pipe and having a branch or passage-way and a valve to close the same, with divided or split sleeves or hubs adapted to be clamped upon a pipe within said casing, and a sleeve or ring carried by one of said sleeves adapted to be moved toward the other sleeve to clamp the valve between it and the latter sleeve, and means for operating said ring from without the casing, substantially as described. The combination of a divided or split casing adapted to be clamped upon a pipe and having a branch or passage-way and a valve to close the same, with divided or split sleeves or hubs adapted to be mounted upon a pipe within said casing one of said sleeves or hubs having screw-threads, a ring mounted upon the latter sleeve and having threads to mesh with the threads carried by said sleeve, and means for rotating said ring to cause it to travel along the sleeve, substantially as described. 12th. The combination of a divided or split castially as described. 12th. The combination of adivided or split casing adapted to be clamped upon a pipe and having a branch or passage-way and a valve to close the same with divided or split sleeves or hubs adapted to be clamped upon a pipe within the casing, one of said sleeves or hubs having screw-threads, and a ring mounted upon said threaded sleeve and having threads to mesh with the threads carried by said sleeve, and a shaft projecting through said casing, and means within the easing for operating said ring by said shaft substantially as described. 13th. A divided or split casing adapted to be clamped upon a pipe and having a passage way or branch and a valve to close the same, combined with divided or split sleeves or hubs to be clamped upon a pipe within said casing, one of said sleeves or hubs having screw-threads, a divided or splitting adapted to be mounted upon one of said sleeves or hubs and having threads to mesh with the threads of the corresponding sleeve, rear-teeth carried by said ring, a pinion or gear-wheel to mesh with said teeth, and a shaft projecting through said casing, and adapted to operate said pinion or gear-wheel, substantially as described. 14th. A divided or split casing adapted to be clamped upon a pipe and having a passage-way or branch and a valve to close the same, and a bonnet or hood adapted to be connected with the casing it, in the control of the c with the casing in line with said passage-way or branch, combined with means within the casing to hold a valve between the severed ends of the pipe and a stop arranged to regulate the position of the valve between said ends of the pipe, substantially as described. 15th. A divided or split casing adapted to be clamped upon a pipe and having a passage-way or branch, and a valve to close the same, a bonnet adapted to be connected with said casing in line with said passage-way or branch, and a pipe-cutter adapted to be placed upon a pipe within said casing and arranged to travel through said passageway or branch and through said bonnet or cover, and a bearing and stuffing box carried by said bonnet to receive the operating shaft of said pipe-cutter, combined with means arranged to be contained within the casing to hold a valve between the severed ends of the pipe after the pipe-cutter and a section of the pipe have been removed, substantially as described. 16th. A divided or split casing adapted to be clamped upon a pipe and having a passageway or branch, and a valve to close the same, a bonnet or cover adapted to be connected with said casing in line with said passageway or branch, and a pipecutter adapted to be placed upon a pipe within said casing and arranged to travel through said passageway or branch and through said bonnet or cover, and a bearing and stuffing box carried by said bonnet to receive the operating shaft of said pipe-cutter, combined with clamping devices adapted to be secured upon the pipe within said casing on oppositesides of said pipe-cutter, and means comprised in said clamping devices for clamping a valve between the severed ends of the pipe after the pipe-cutter and a section of the pipe have been removed, substantially as described. 17th. A divided or split casing adapted to be clamped upon a pipe and having a passageway or branch and a valve to close the same, a shell adapted to be connected with said casing in line with said passageway or branch, and a bonnet or hood adapted to be secured upon said shell, combined with valve-holding devices adapted to be mounted upon a pipe within valve-notting devices anapted to be mounted upon a pipe within said casing to hold a valve in the line of pipe, and means for operating said clamping devices from without the casing, substantially as described. 18th. The combination of a divided or split sleeve or hub adapted to be clamped upon a pipe, with another divided or split sleeve or hub also adapted to be clamped upon a pipe, a divided or split ring adapted to be mounted upon the said last mentioned or spit ring anapted to be mounted upon the said last mentioned sleeve or hub, and means for moving said ring along its respective sleeve or hub whereby a valve may be clamped in a line of pipe between said sleeve or hubs, substantially as described. 19th. The combination of a divided or split sleeve or hub adapted to be clamped upon a pipe, with another divided or split sleeve or hub also adapted

to be clamped upon a pipe, the last mentioned sleeve or hub having peripheral screw-threads, a divided or split ring adapted to be clamped upon the last mentioned sleeve or hub and having threads to mesh with the threads of said sleeve or hub, and means for rotating said ring upon the latter to cause it to travel along the pipe, substantially as described. 20th. The combination of a divided or split sleeve or hub adapted to be clamped upon a pipe, with another divided or split sleeve or hub also adapted to be clamped upon a pipe, the last mentioned sleeve or hub having peripheral screw-threads, a divided or split ring adapted to be clamped upon the last mentioned sleeve or hub and having screw-threads to mesh with the threads of said sleeve or hub, said ring having gear-teeth, a pinion or wheel to mesh therewith, and means for operating said pinion or wheel to cause said ring to rotate around the corresponding sleeve, substantially as described. 21st. The combination of a divided or split sleeve or hub adapted to be clamped upon a pipe, with another divided or split sleeve or hub also adapted to be clamped upon a pipe, a divided or split ring adapted to be mounted upon the last mentioned sleeve or hub, and means for moving said ring along the latter, with a valve adapted to be clamped between said first mentioned sleeve or hub and said ring, and corresponding recesses and projections located between said valve and the first mentioned sleeve or hub and the ring, substantially as described. 22nd. The combination of a casing adapted to be secured upon a pipe, said casing having openings in opposite sides or ends, combined with divided or split hubs adapted to be clamped upon the pipe to close said openings in the casing, and means for securing said hubs to said casing, substantially as described.

## No. 60,038. Coupon Cutter. (Coupe-coupon.)



Henry H. Hall, East Orange, New Jersey, U.S.A., 25th August, 1898; 6 years. (Filed 2nd August, 1898.)

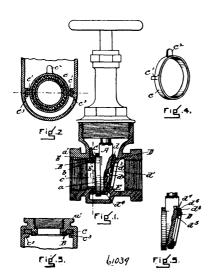
Claim.—Ist. A coupon cutter, consisting of an opposible upper and lower frame, each having at least two edges at right angles to each other, inclined shearing blades affixed to these edges of one of the frames and capable of shearing along the corresponding edges of the other frame, in combination with means for advancing and retracting the frames toward and away from each other, substantially as described. 2nd. A coupon cutter, consisting of an opposible upper and lower frame, each having at least two edges at right angles to each other, inclined shearing blades affixed to the outside of these edges of one of the frames and capable of shearing along the corresponding interior edges of the other frame, means for advancing and retracting the frames toward and away from each other, in combination with a receptacle affixed to one of said frames, substantially as described.

#### No. 61,039. Valve. (Soupape.)

Charles Jenkins, Boston, Massachusetts, U.S.A., 25th August, 1898; 6 years. (Filed 30th July, 1898.)

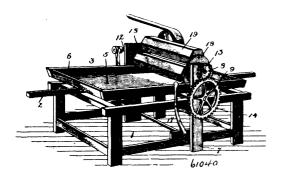
Claim.—1st. In a straightway valve, the combination of the valve-body having a narrow wall  $b^2$ , immediately about the steamway and a shoulder  $b^1$ , extending outwardly from the base of said wall, a disc B, of compressible packing of a size to fit over the said wall and against said shoulder and forming a stationary compressible valve seat, and a metal ring C, upon the exterior of said packing and said shoulder, means for securing the ring to the exterior of the shoulder, the oppositely ground metal seat E, also surrounding the steamway, and the gate A, having the ground-metal seat adapted to close upon the compressible seat B, and the oppositely arranged compressible seat D, detachably secured to the said gate and adapted to be brought into contact with the stationary ground-metal seat E. all as and for the purposes described. 2nd. The combination in a straightway valve of the wall  $b^2$ , surrounding the steamway, a shoulder  $b^1$ ,

upon the outer side of said wall, a recess in the valve-body about said shoulder, a ring or disc of packing B, to fit over said wall and



bear upon said shoulder and a removable packing-holding ring C, to fit over said ring or disc of packing and said shoulder having lugs and a turning ear  $c^2$ , and stationary ears  $c^3$ , upon the valve-body extending into the recesses about the shoulder or wall and adapted to be engaged by the ears  $c^i$ , upon the turning of the ring C, as and for the purposes described. 3rd. The combination of a straightway valve of the stationary seat B, of compressible packing surrounding the water-way, the inclined metallic seat E, also surrounding the water-way and m opposed relation to said compressible seat B, and the movable gate A, having a metal seat to co-act with the compression seat B, and the compressible or resilient seat D, adapted to co-act with the metal seat E, as and for the purposes set forth.

#### No. 61,040. Butter Press. (Presse à beurre.)



Alexis Chicoine, Arthur Chicoine and Delphis Chicoine, all of Upton, Quebec, Canada, 25th August, 1898; 6 years. (Filed 13th August, 1898.)

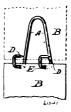
Claim.—1st. A butter press, comprising a framework, a table removably mounted thereon, means for imparting a reciprocatory movement to said table, and a series of pivotally mounted rolls, said rolls deriving their movement from the table operating means, substantially as described. 2nd. A butter press, comprising a framework, a table removably mounted thereon, means for imparting a reciprocatory movement to said table, a rotary frame mounted on said framework above said table, said framework receiving its motion from the table operating means, and a series of rolls mounted in said rotatory frame, said rolls having an independent pivotal movement, said movement being imparted by the passage of the table beneath said rolls, substantially as described.

#### No. 61,041. Impaling Pin. (Epingle à empaler.)

Alfred H. Cook, jr., Joliet, Illinois, U.S.A., 25th August, 1898; 6 years. (Filed 28th July, 1898.)

Claim.—1st. In impaling pin consisting of a single piece of wire bent to form substantially a V-shaped body, and having its extremities or arms terminating in points D, and bent backward toward said body so as to form loops, substantially as and for the purpose hereinbefore set forth. 2nd. An impaling pin consisting of a single piece of wire bent to form substantially a V-shaped body, and hav

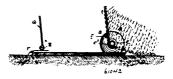
ing its extremities or arms terminating in points D, and bent backward toward said body so as to form loops, said points D being



extended slightly beyond the line of said body and turned laterally from each other, substantially as and for the purpose hereinbefore set forth.

#### No. 61,042. Lead Line Controller for Fishing Nets.

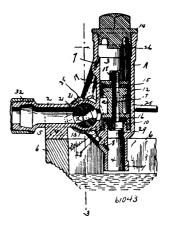
(Controleur pour plomb de ligne de rets à pêcher.)



Thomas Lindsay, Capitola, California, U.S.A., 25th August, 1898; 6 years. (Filed 27th July, 1898.)

Claim.—1st. A lead-line controller having stationary conical-shaped guides arranged in pairs upon and transversely across the top of a weighted drag, conical rollers in the ends of said guides mounted for rotation upon spindles that are adjustable longitudinally in the guides, a fixed guide-bar above the said rollers and between the conical guides, and a fluke on the tail of the drag, constructed for operation as set forth. 2nd. In a lead-line controller for fishing-nets, the combination of a drag, conical guides fixed upon the drag with the smaller ends of the cones composing each pair set toward each other, a conical roller recessed in the smaller end of each guide, a horizontally-adjustable spindle mounted in each guide and carrying the roller on the outer end, and a guide-bar between the cones of each pair of rollers and above the line of the opening between tha rollers, substantally as set forth.

#### No .61,043. Ball Cock. (Boule de robinet.)

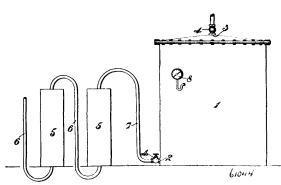


Harry Abbey Sedwick, Athol, Massachusetts, U.S.A., 25th August, 1898; 6 years. (Filed 27th July, 1898.)

Claim.—1st. In a ball-cock having a hollow body, a suitable outlet from said body, a water-supply branch communicating with said body, a cylindrical valve-barrel between said branch and body, water-passages 7 and 8, forming communication between the interior of said barrel, and the opposite ends of the interior of said body, combined with a moving valve within said body acting to close and open said outlet, a rotary valve acting in said barrel having a transverse water-passage 42: therethrough whose extremities communicate, simultaneously, with the extremities of said passages 7 and 8, within valve-barrel, substantially as set forth. 2nd. In a ball-cock having a hollow body, a suitable outlet from said body, a water-supply branch communicating with said body, a cylindrical valve-barrel between said branch and body, water-passages 7 and 8, forming communication between the interior of said barrel, and the opposite ends of the interior of said body, combined with a moving

valve within said body acting to close and open said outlet, a rotary valve acting in said barrel for controlling the water supply to the ball-cock, having a transverse water-passage 22, therethrough whose extremities communicate, simultaneously, with the extremities of said passages 7 and 8, within said valve-barrel, and a main transverse water-passage 21, thereto, substantially as set forth.. 3rd. In a ball-cock having a hollow body, a suitable outlet from said body, a water-supply branch communicating with said body, a cylindrical valve-barrel between said branch and body, water passages 7 and 8, forming communication between the interior of said barrel and the opposite ends of the interior of said body, combined with a moving valve within said body acting to close and open said outlet, a rotary valve acting in said barrel for controlling the water-supply to the ball-cock, having a main transverse water-passage 21, therethrough and a passage 23, forming water communication between said passage 21, and the surface of said rotary valve, for communication with one extremity of said hollow body, through said passage 7, substantially as set forth. 4th. In a ball-cock having a hollow body, a suitable outlet from said body, a water-supply branch communicating with said body, a cylindrical valve barrel between said branch and body water passages 7 and 8, forming communication between the interior of said barrel and the opposite ends of the interior of said body, combined with a moving valve within said body acting to close and open said outlet, a rotary valve acting in said barrel for controlling the water-supply to the ball-cock having a transverse water-passage 22, therethrough whose extremities communicate, simultaneously with the extremities of aaid passages 7 and 8, within said valve-barrel, a passage 23, forming water communication between said passages 21, and the surface of said rotary valve, for communication between one extremity of said hollow body and said passage 21, substantially as set forth. 5th. In a ball-cock having a hollow body, a circular valve-seat in said body, a circular chamber 23, surrounding said seat, a water-supply branch communicating with said body, a cylindrical valve-barrel between said branch and body, water-passages 7 and 8, forming communication between the interior of said barrel and the opposite ends of the interior of said body combined with the valve 12, having an inverted cup-shaped lower extremity for free entrance into said circular chamber, and a packing-disc 16, within said cup for engagement with said valve-seat, to rotary valve 13, having the water passages 21 and 22, transversely therethrough at right angles to each other, and suitable ball-float devices connected to said valve, substantially as 6th. In a ball-cock having a hollow body, a circular set forth. valve-seat in said body, a circular chamber 28, surrounding said sent, a water-supply branch communicating with said body, a cylindrical valve-barrel between said branch and body, water-passages 7 and 8, forming communication between the interior of said barrel and the opposite ends of the interior of said body, combined with the valve 12, comprising the body a, thereof, having an inverted cup-shaped lower end for free entrance into said chamber, a packing-disc, 16, within said cup for engagement with said valveseat, a hat brim packing 15, inclosing the upper end of said valve-body, a metal washer lying upon said packing 15, and the bolt 17, having a head for entrance within said valve-seat, and a shank extending through said valve-body, a packing-disc, packing and washer, and means for securing said bolt in said valve, the rotary valve 13, having the water-passages 21 and 22, transversely therethrough, at right angles to each other, and suitable ball-float devices connected to said rotary valve, substantially as set forth.

# No. 61,044. Apparatus for Preserving Organic Matter. (Appareil pour préserver les matières organiques.)



Joseph Jesus Hazard, Finsbury Pavement, London. England, 26th August, 1898; 6 years. (Filed 17th September, 1897.)

Claim.—Preserving organic matters by subjecting them to the action of dry carbonic acid gas, to the exclusion of air, at a pressure and for a time suited to their bulk and physiological structure and afterwards storing them in a hermetically closed chamber, the internal atmosphere of which is kept dry by means of a drying agent and agitation, substantially as and for the purposes set forth.

#### No. 61,045. Process of Deodorizing Oils and Fatty Matter. (Procede pour désinfecter l'huile.)

Charles Culmann, No. 23 Alte Groningerstrasse, Hamburg, Germany, 26th August, 1898; 6 years. (Filed 15th January, 1898.)

Claim.—1st. A process for deodorizing oil and fat, mainly consisting in subjecting the oil or fat simultaneously to the action of chemicals having an acid reaction, more especially alum or aluminum subhate in the state of a saturated solution such to the action

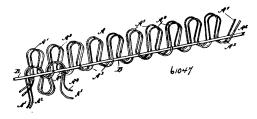
ing in subjecting the oil or fat simultaneously to the action of chemicals having an acid reaction, more especially alum or aluminium sulphate, in the state of a saturated solution, and to the action of superheated steam, constructed and arranged substantially as hereinbefore described. 2nd. In the process with a view to avoiding the dilution of the chemicals and the formation of an emulsion, subjecting the substance under the treatment to external heating or thermal insulation, and admitting the steam under such conditions that the proportion of water contained in the material does not increase, constructed and arranged substantially as hereinbefore described.

#### No. 61,046. Food Product. (Produit alimentaire.)

John H. Kellogg, Battle Creek, Michigan, U.S.A., 26th August, 1898; 6 years. (Filed 17th May, 1898.)

Claim.—1st. The process of producing an improved alimentary product, which consists in blanching and thoroughly cooking nut kernels and reducing them to a pulp, then adding water and sealing the pasty mass in cans and subjecting such cans to the action of steam at a temperature ranging between 213° and 240° F. for a considerable period, that is to say until the mass becomes changed or modified, as specified. 2nd. The process of producing an improved alimentary product, which consists in blanching and thoroughly cooking nut kernels and reducing them to a pulp, then adding water and sealing the pasty mass in cans and subjecting such cans to the action of simultaneous pressure and heat ranging between 213° and 230° F. for a considerable period, that is to say, until the mass becomes changed or modified, as specified. 3rd. The process of producing the improved alimentary product described, the same consisting in the following steps: (1) blanching the nut kernels, (2) thoroughly cooking them, (3) reducing them to a pulp, (4) adding water in the proportion of about one to two, (5) sealing the soft, pasty and emulsified mass in the tin cans, and (6) in subjecting such cans to the action of steam at a temperature ranging from 213° to 240° F. for a period varying from one to four hours, whereby the mass becomes converted into a product having the characteristics described.

#### No. 61,047. Knit Fabric. (Tricot.)



David Frost Halstead, New York City, U.S.A., 26th August, 1898; 6 years. (Filed 22nd July, 1898.)

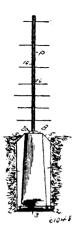
Claim.—1st. A knit fabric for hosiery, blankets, underwear and other knit goods, having a body comprising a fabric formed by a face thread, a binding thread, and a silk thread interlocked at intervals by some of the loops of the said binding thread, the latter being interlocked with the face thread, substantially as shown and described. 2nd. A knit fabric for hosiery, blankets, underwear and other knit goods, comprising a cotton fabric formed of a face thread and a binding thread in the rear of the face thread and following the lines of the said face thread, the successive courses of said face thread and binding thread being interlooped with each other, and a silk thread for each course of such face thread and binding thread silk thread passing through the bottom portions of some of the loops of the said binding thread in each course, such loop being locked by the upper ends of the succeeding loops of both face and binding threads, substantially as shown and described.

#### No. 61,048. Fence Post. (Pieu de clôture.)

James H. Sparks, Hobbieville, Indiana, U.S.A., 26th August, 1898; 6 years. (Filed 6th August, 1898.)

Claim.—1st. In a fence-post, the combination with a base, of a post supported thereby and flat and tapering in cross-section, holes through the post, oblique slots cut from the thinner edge of the post into the holes, and fence-wires removably passing through the latter, substantially as described. 2nd. In a fence-post, the combination with a base having an aperture in its lower end leading upward to a shoulder and a slot in its upper end leading downward through the shoulder, of a post proper of a shape to fit said slot and having an eye at its lower extremity, a removable stop in said eye and of a size to pass into the aperture and strike the shoulder, and a fence

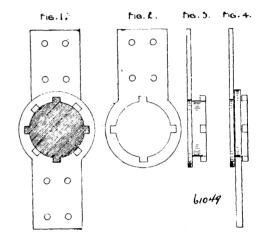
supported by the post, as and for the purpose set forth. 3rd. In a same consisting of a body substantially round in cross-section at its fence-post, the combination with a base having an aperture in its



lower end leading upward to a shoulder and a slot in its upper end leading downward through the shoulder, said slot tapering in width from one edge to the other, of a post proper of a shape to fit said slot and having an eye at its lower extremity, a removable stop in sold and naving an eye at its lower extremity, a removance stop in said eye and of a size to pass into the aperture and strike the shoulder, holes through the post where it projects above the base, fence-wires supported in said holes, and a key removably inserted in the lowermost hole at point just above the upper end of the base, as and for the purpose set forth. 4th. The hercin-described fencepost base of clay or the like, the same consisting of a body substantially round in cross-section at its upper end and oval in crosssection near its lower end, a bottom horizontal flange on said body, and upright side wings thereon, substantially as described. 5th. The herein-described fence-post base of clay or the like, the same consisting of a body substantially round in cross-section, and upright wings on diametrically opposite sides of said body, said wings being bevelled off at their upper ends and thinner at that point and growing thicker to their lower ends, substantially as described. 6th. The herein-described fence-post base of clay or the like, the same consisting of a body substantially round in cross-section at its upper end and oval in cross-section near its lower end, and upright wings on diametrically opposite sides of said body and corresponding with the longest diameter at its lower end, the outer edges of said wings standing on substantially parallel lines, substantially as described, and to the other side thereof a metallic fastening device 6, substantially as and for the purpose hereinbefore set forth.

upper end and oval in cross-section near its lower end, and upright wings on diametrically opposite sides of said body and corresponding with the longest diameter at its lower end, the outer edges of mg with the longest dameter at its lower end, the outer edges of said wings standing on substantially parallel lines and their bodies being thinner at their upper ends and thicker at their lower ends, substantially as described. 8th. The herein-described fence-post base, the same comprising an upright body substantially round at its upper end and oval near its lower end, the horizontal bottom plane at its lower end and upright side wings corresponding with the longest diameter of the body and extending from its upper end where the wings are thinner down to and merging into the flange at its lower end where the wings are thicker, the outer edges of said wings standing in parallel lines and the whole being of clay or the like, substantially as described.

#### No. 61,049. Harness Device. (Appariel de harnais.)



James Pitt Mabee, Stratford, and George Armstrong, Downie, both in the County of Perth, Ontario, Canada, 26th August, 1898; 6 years. (Filed 21st May, 1898.)

Claim.—A breast collar, for a harness, divided in its front centre and having secured to one side thereof a metallic fastening device 2,

# TRADE-MARKS

# Registered during the month of August, 1898, at the Department of Agriculture—Copyright and Trade-Mark Branch.

- 6572. HENRY TATE & SONS, LIMITED, 21 Mincing Lane, London; and H 15 Exchange Buildings, Liverpool; England. Sugar, 2nd August, 1898.
- 6573. THE NATIONAL ELECTRIC CAR-LIGHTING COMPANY, 30 Broad Street, New York, N.Y., U.S.A. Electrical Apparatus and Appliances for Lighting Railway Cars by means of Electricity generated from rotating car-wheel axles, 2nd August, 1898.
- 6574. JOHN GOSNELL & COMPANY, 93 Upper Thames Street, London, England.
  Perfumery, including Toilet articles, preparations for the teeth
  and hair, and perfumed soap, 2nd August, 1898.
- 6575. H. N. BATE & SONS, Ottawa, Ont. Tea, 8th August, 1898.
- 6576. ALFRED BISHOP & SONS, LIMITED, 17 Speck's Fields, Mile End, New Town, London, England. Effervescent Medicinal Preparations for the treatment of Gout, Stone Colic and other disorders arising from hyper-secretion of uric acid, Fevers, Headaches, Coughs, Indigestion and kindred affections of the human body, 8th August, 1898.
- 6577. E. T. DANIELS & COMPANY, St. Dunstan's Hill, London, England. Tea, Coffee and Cocoa, 9th August, 1898.
- 6578. JULIUS SIMPSON, 119 Stapleton Hall Road, Stroud Green, County of London, England. General Trade Mark, 9th August, 1898.
- 6579. EDMUND SCHEUER, Toronto, Ont. Spoons, Knives and Forks, 10th August, 1898.
- 6580. THE IDEAL MANUFACTURING COMPANY, Detroit, Michigan, U.S.A. Piumbers' Supplies and Plumbers' Sanitary Specialties, 11th August, 1898.
- 6581. LEONHARD OBERHAEUSSER et ROBERT LANDAUER, Wurtzbourg, Baviere, faisant affaires sous la raison sociale de OBERHAEUS-SER & LANDAUER. Remedes Pharmaceutiques, 12 aout, 1898.
- 6582. THE BRANTFORD STARCH COMPANY, LIMITED, Brantford, Ont. Prepared Corn, 13th August, 1898.
- 6583. J. BROWN & COMPANY, London, England; and Glasgow, Scotland. Scotch 6584. 
  Whiskey, 13th August, 1898.
- 6585. GEORGE CLEMENCE PICKHARDT, Stouffville, Ont. Skin Food, 18th August, 1898.
- 6586. BALSA Y HERMANO, Vera Crux, Mexico. Cigars, 19th August, 1898.
- 6587. SISSONS BROTHERS & COMPANY, LIMITED, Hull, England. Paints, Colours and Varnishes, 22nd August, 1898.
- 6588. THE JOHN ABELL ENGINE AND MACHINE WORKS COMPANY, LIMITED, Toronto, Ont. Threshing Machinery, 22nd August, 1898.
- 6589. THE PRESERVALINE MANUFACTURING COMPANY, New York, N.Y., U.S.A. Preservatives (Antiseptics, Bactericides, Anti-ferments, Insecticides, Antizymotics, Disinfectants and the like) 23rd August, 1898.
- 6591. GEORGE LEBEL & GODFROID LEBEL, Ottawa, Ont. Soap, 25th August, 1898.
- 6592. JOHN CHARLES HARVEY, Pellon Brewery, Halifax, England, trading as HARVEY & COMPANY, Sugar-Free Pale Ale, 29th August, 1898.
- 6593. JOHN GARVEY, London, Ont. Tea and Coffee, 30th August, 1898.
- 6594. THE GRAND HOTEL COMPANY OF CALEDONIA SPRINGS, LIMIT-ED, Caledonia Springs, Ont. A Mineral Water, 30th August, 1898.
- 6595. JOSEPH LARIVIERE, Manville, Rhode Island, U.S.A. Porous Plasters, 31st August, 1898.
- 6596. ST. LAWRENCE STARCH COMPANY, LIMITED, Port Credit, Ont. Syrups, 31st August, 1898

# COPYRIGHTS

# Entered during the month of August, 1898, at the Department of Agriculture—Copyright and Trade-Mark Branch.

- 10075. THE ANGLER'S GUIDE TO EASTERN CANADA. By E. T. D. Chambers, Quebec, Que., 2nd August, 1898.
- 10076. AT THE LAUNCHING OF THE TORONTO. (Set 1, No. 1.) Photo. William Thomson Freeland, Toronto, Ont., 2nd August, 1898.
- 10077. AT THE LAUNCHING OF THE TORONTO. (Set 1, No. 2.) Photo. William Thomson Freeland, Toronto, Ont., 2nd August, 1898.
- 10078. AT THE LAUNCHING OF THE TORONTO. (Set 1, No. 3.) Photo. William Thomson Freeland, Toronto, Ont., 2nd August, 1898.
- 10079. AT THE LAUNCHING OF THE TORONTO, (Set 1, No. 4.) Photo. William Thomson Freeland, Toronto, Ont., 2nd August, 1898.
- 10080. AT THE LAUNCHING OF THE TORONTO. (Set 2, No. 1.) Photo. William Thomson Freeland, Toronto, Ont., 2nd August, 1898,
- 10081. AT THE LAUNCHING OF THE TORONTO. (Set 2, No. 2.) Photo William Thomson Freeland, Toronto, Ont., 2nd August, 1898.
- 10082. AT THE LAUNCHING OF THE TORONTO. (Set 2, No. 3.) Photo. William Thomas Freeland, Toronto, Ont., 2nd August, 1898.
- 10083. AT THE LAUNCHING OF THE TORONTO. (Set 2, No. 4.) Photo.
  William Thomson Freeland, Toronto, Ont., 2nd August, 1898.
- 10084. AT THE LAUNCHING OF THE TORONTO. (Set 2, No. 5,) Photo. William Thomson Freeland, Toronto, Ont., 2nd August, 1898.
- 10085. THE LEGENDS OF THE ST. LAWRENCE. By Sir James McPherson Lemoine, F. R. S. C., Sillery, near Quebec, 2nd August, 1898.
- 10086. LIFE AND WORK OF MR. GLADSTONE. By J. Castell Hopkins. The Bradley-Garretson Co. (Ltd.), Toronto, Ont., 2nd August, 1898.
- 10087. MANUEL DE PRIÈRES ET DE CANTIQUES. A l'usage de la Jeunesse, par un Prêtre de la Congrégation des Frères de Saint-Vincent-de-Paul. Alexandre Nunesvais, Quebec, Qué., 2 août 1898.
- 10088. THE STENOGRAPHER'S COMPANION. (Vol. 1, No. 5, August, 1898.) R. Goltman, Montreal, Que., 2nd August, 1898.
- 10089. THE SOLDIERS OF THE QUEEN. (Song.) By Leslie Stuart. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 3rd August, 1898.
- 10090. CANADA, O! WHY WILL YE ROAM IN FOREIGN LANDS. (Song.) Words by Eloise A. Skimings. Music by Lieut. R. Skimings, G. G. A. Miss Eloise A. Skimings, Toronto, Ont., 5th August, 1898.
- 10091. GROUPE PHOTOGRAPHIQUE DU CLERGÉ DU DIOCÈSE DU MONTREAL. Laprès et Lavergne, Montreal, Qué., 8 août 1898.
- 10092. HAND READING. (Chart.) Alonzo E. Dupell. 1055, Broadway, Brooklyn, New York, U.S.A., 8th August, 1898.
- 10093. EDUCATIONAL REVIEW SUPPLEMENTARY READINGS, CANA-DIAN HISTORY. (Number Two, June, 1898.) George U. Hay, St. John, N. B., 8th August, 1898.
- 10094. LES RIBAUD. Une Idylle de 37. Par Ernest Choquette. Saint-Hilaire de Rouville, Qué., 8 août 1898.
- 10095. McALPINE'S HALIFAX CITY DIRECTORY, 1898-99. H. M. McAlpine, Halifax, N.S., 9th August, 1898.
- 10096. HUGHES' SUPPLEMENTARY INTEREST TABLES. Charles M. C. Hughes, Montreal, Que., 9th August, 1898.
- 10097. O! GIVE THANKS UNTO THE LORD. (Anthem for Harvest-tide.) By Albert Ham, Mus. Doc. F. R. C. O. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 9th August, 1898.
- 10098. CODE MUNICIPAL DE LA PROVINCE DE QUEBEC. Annoté. Textes Français et Anglais. Par. I. E. Bédard, C.R. I. E. Bédard, Québec, et C. Théoret, Montreal, Què., 9 août, 1898.

- 10099. DANCE OF THE SPOOKS. (Musical composition.) By R. Peggio. Arranged by A. W. Hughes. W. H. Billing, Toronto, Ont., 10th August, 1898.
- 10100. OFFICIAL TELEPHONE DIRECTORY, CITY OF MONTREAL AND SUBURBS. The Bell Telephone Company of Canada (Ltd.), Montreal, Que., 10th August, 1898.
- 10101. THE SCOT: AT HOME AND ABROAD. Being the substance of a lecture delivered by the Scottish Canadian Poet, John Imrie. Graham & Company, Toronto, Ont., 12th August, 1898.
- 10102. FIRST EDITION OF THE BOOK OF LIFE, by John Gruenbeck. John Gruenbeck, Winona, County of Wentworth, Ont., 12th August, 1898.
- 10103. THE DELINEATOR. (A Journal of Fashion, Culture and Fine Arts, September, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th August, 1898.
- 10104. THE GLASS OF FASHION UP TO DATE. (September, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y. U.S.A., 12th August, 1898.
- 10105. METROPOLITAN FASHIONS. (September, 1898.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th August, 1898.
- 10106. A SCHOOL HISTORY OF CANADA FOR THE USE OF YOUNG STUDENTS IN THE PROVINCE OF QUEBEC. Translated from the French of F. X. Toussaint, Professor of the Laval Normal School. C. Darveau, Quebec, Que., 12th August, 1898.
- 10107. CONSUMPTION CURED, by one who has come through it. Mrs. Elizabeth Kuchenmaster, Forest, Ont., 13th August, 1898.
- 10108. ESSAYS FOR THE TIMES. Studies of Eminent Men and Important Living Questions, by Rev. E. H. Dewart, D.D. William Briggs, Toronto, Ont., 13th August, 1898.
- 10109. COMMODORE DEWEY'S MARCH. (Musical Composition.) By Paul Kruger. W. H. Billing, Toronto, Ont., 13th August, 1898.
- 10110. SURRENDERED. (Song.) Words and Music by Bianco. Whaley, Royce & Company, Toronto, Ont., 13th August, 1898.
- 10111. THE MONSTER OF THE DEEP. (Song.) Words and Music by Bianco. Whaley, Royce & Company, Toronto, Ont., 13th August, 1898.
- 10112. HARBORED. (Song.) Words and Music by Bianco. Whaley, Royce & Company, Toronto, Ont., 13th August, 1898.
- 10113. SADDLE MY HORSE. (Song.) Words and Music by Bianco. Whaley, Royce & Company, Toronto, Ont., 13th August, 1898.
- 10114. MY HEART'S ABLAZE. (Song). Words and Music by Bianco. Whaley, Royce & Company, Toronto, Ont., 13th August, 1898.
- 10115. TRUE AND FALSE, OR A TALE OF THE KLONDIKE. By Byron C. Tapley. Byron C. Tapley, St. John, N.B., 15th August, 1898.
- 10116. VICTORIAN READERS: THIRD BOOK. The W. J. Gage Company (Ltd.), and The Copp, Clark Company (Ltd.), Toronto, Ont., 15th August, 1898.
- 10117. CANADA: AN ENCYCLOPÆDIA OF THE COUNTRY. Edited by J. Castell Hopkins. (Illustrated.) Volume III. The Bradley-Garretson Company (Ltd.), Toronto, Ont., 17th August, 1898.
- 10118. TRADING STAMP DIRECTORY: TORONTO EDITION. Baldwin C. Hubble, Marmora, Ont., 18th August, 1898-
- 10119. TRADING STAMP DIRECTORY: TORONTO EDITION. Baldwin C. Hubble, Marmora, Ont., 18th August, 1898.
- 10120. TRADING STAMP DIRECTORY: BRANTFORD LDITION. Baldwin C. Hubble, Marmora, Ont., 18th August, 1898.
- 10121. THE TRADING STAMP SYSTEM. (Forms.) Baldwin C. Hubble, Marmora, Ont., 18th August, 1898.
- 10122. VICTORIAN READERS: FIRST BOOK--FIRST PART. The W. J. Gage Company (Ltd.), and The Copp, Clark Company (Ltd.), Toronto, Ont., 19th August, 1898.
- 10123. VICTORIAN READERS: FIRST BOOK—SECOND PART. The W. J. Gage Co. (Ltd.), and The Copp, Clark Co. (Ltd.), Toronto, Ont., 19th August, 1898.
- 10124. L'ART DE DIRE: TRAITÉ DE LECTURE ET DE RÉCITATION. Adjutor Rivard, Québec, Qué., 20 août 1898.
- 10125. MARCH OF THE ROUGH RIDERS. By Paul Kruger. W. H. Billing, Toronto, Ont., 20th August, 1898.

- 10126. ELEMENTARY PHONETICS. By A. W. Burt. The Copp, Clark Co. (Ltd.), Toronto, Ont., 20th August, 1895.
- 10127. SELECT POEMS. (Being the Literature prescribed for the Junior Matriculation (Third Form) Examination, 1899. Edited with Introduction, Notes and Appendix.) By W. J. Alexander. The Copp, Clark Co. (Ltd.), Toronto, Ont., 20th August, 1898.
- 10128. FALL AND WINTER CATALOGUE: No. 41, 1898. The T. Eaton Co. (Ltd.), Toronto, Ont., 22nd August, 1898.
- 10129. OTTAWA AND GATINEAU RAILWAY MARCH. By H. Alice Allen-Heeney, Chelsea, Que., 22nd August, 1898.
- 10130. PUBLIC SCHOOL DOMESTIC SCIENCE. By Mrs. J. Hoodless. The Copp, Clark Co. (Ltd.), Toronto, Ont., 25th August, 1898.
- 10131. THE ELECTORAL MAP OF BRITISH COLUMBIA. The Province Publishing Company (Limited Liability), Vancouver, B.C., 25th August, 1898.
- 10132. SELECT POEMS OF WORDSWORTH,—SCOTT'S LADY OF THE LAKE. Edited with Introductions and Annotations. By Frederick Henry Sykes, M.A., Ph.D. The W. J. Gage Co. (Ltd.), Toronto, Ont., 26th August, 1898.
- 10133. AGRICULTURE. By Charles C. James, M.A. George N. Morang, Toronto, Ont., 27th August, 1898.
- 10134. INSURANCE PLAN OF THE CITY OF QUEBEC, VOLUME I. Charles Edward Goad, Montreal, Que., 29th August, 1898.
- 10135. HIGH SCHOOL CADET DRILL MANUAL. Arranged by W. Bennett Munro, M. A., LL.B. The Copp, Clark Co. (Ltd.), Toronto, Ont., 30th August, 1898.
- 10136. BUST OF ARCHBISHOP WALSH. Sculptured by Hamilton MacCarthy, A.R.C.A. The Canadian Fine Arts Publishing Co., Toronto, Ont., 31st August, 1898.
- 10137. REPORTS OF THE DECISIONS OF THE REFEREES APPOINTED FOR THE PURPOSE OF THE DRAINAGE LAWS, AND OF THE COURT OF APPEAL FOR ONTARIO, IN CASES WHERE THE REFEREES DECISIONS HAVE BEEN APPEALED FROM, AS WELL AS OF SOME IMPORTANT DECISIONS OF THE COURTS RELATIVE TO THE DRAINAGE LAWS. By Alfred Henry Clarke and Edmund I. Scully, Windsor, Ont., 31st August, 1898.