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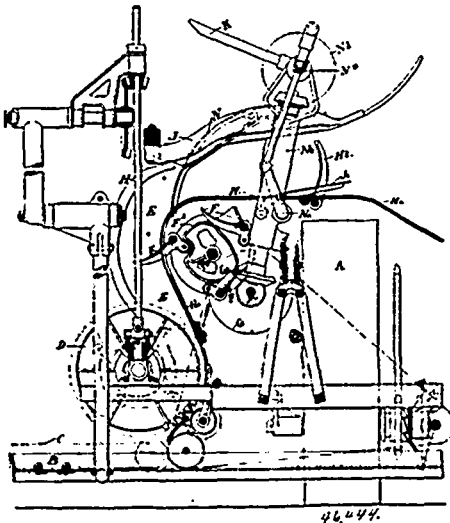
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INVENTIONS PATENTED.

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. 46,444. Construction of Sheaf Binding Harvester.
(Moissonneuse-lieuse.)

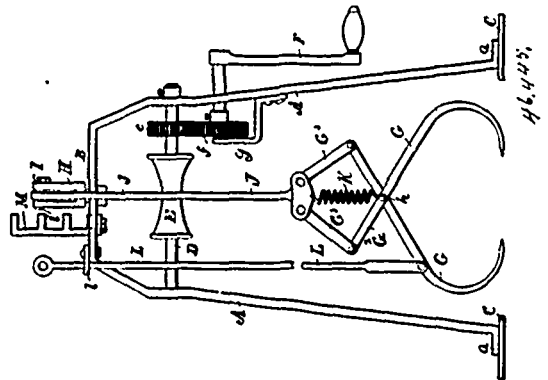


Ernest Samuelson, Banbury Oxon, England, 3rd July, 1894; 6 years.

Claim.—1st. In a low-down sheaf binding harvester the combination of a revolving drum (or its equivalent), and a gaveling chamber above it into which the said drum feeds the cut crop, and packers operating intermittently in the said chamber, so that the fingers of the said packers deliver the cut crop to a binding mechanism situated above a binding table or fence placed over the main travelling-wheel all being relatively arranged, substantially as hereinbefore explained. 2nd. In combination with mechanism arranged as claimed by the preceding claiming clause, means for arresting the movement of the packers, so that the fingers thereof close the throat of the gaveling-chamber at the proper time to effect separation between the cut crop in the chamber and that which is being bound, substantially as hereinbefore explained.

No. 46,445. Tie Lifter and Rail Adjuster.

(Appareil de relevage de traverse et ajusteur de rail.)



James Mellon, Montreal, Quebec, Canada, 3rd July, 1894; 6 years.

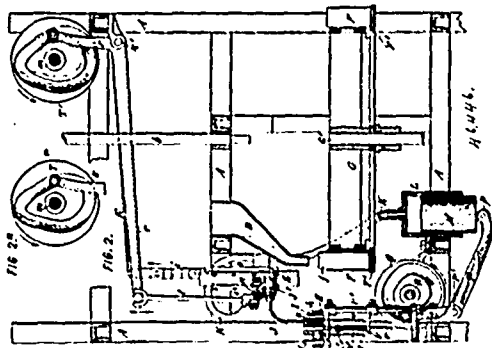
Claim.—1st. In a tie lifter, the combination with a main frame having two upright sides with broad base plates, and connected at the top by a cross piece, of a lever pivoted in a cross-head secured to the said cross-piece, bar carried at the end of the said lever, perforations in the said bar, two links pivoted to the lower end of the said bar, and to the outer ends of a pair of grippers, grippers or tongs pivoted together, a spring secured to the pivoted point of the grippers, and to the lower end of the bar carried by the lever, substantially as set forth. 2nd. In a tie lifter, the combination with a pair of grippers or tongs adapted to be held open by means of a spring, the said grippers being connected by a vertical rod to the end of a lever, of the lever carrying said rod, the cross-head pivotally secured to a suitable frame, a toothed segment, to the engage the said lever, and a rod secured to one of the jaws of the said grippers, substantially as set forth. 3rd. In a tie lifter, the combination with a pair of grippers adapted to be operated by means of a lever suitably pivoted, of the spring K, substantially as set forth. 4th. In a tie lifter and rail adjuster, the combination with a frame having legs adapted to straddle a rail or a tie, carrying a pair of grippers, of the drum D, and means for operating the said drum, substantially as set forth.

No. 46,446. Card Feeder for Package Filling Machines.
(Alimentateur de cartes pour machines à remplir les paquets.)

Henry Eyster, Philadelphia, Pennsylvania, U.S.A., 6th June, 1894; 6 years.

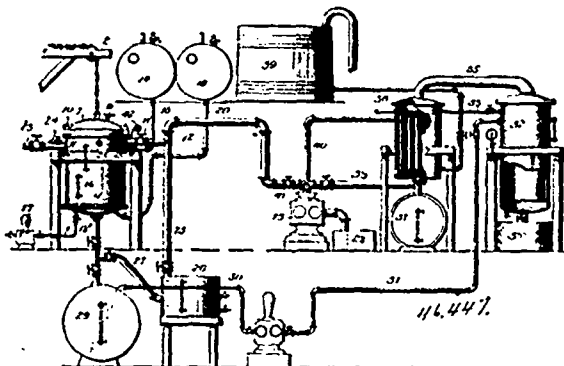
Claim.—1st. The combination with an automatic package filling machine of a mechanism for automatically inserting a card or sheet into the package in upright position alongside of the material therein. 2nd. The combination with mechanism for introducing comminuted material into a package, of mechanism for automatically feeding a card or sheet into said package at the same time with such material. 3rd. The combination with mechanism for directing a stream of comminuted material into a package, of a card-feeding mechanism adapted to insert a card or sheet into the package along with such stream of material. 4th. The combination with mechanism for directing a stream of comminuted material into a package, of a card-feeding mechanism adapted to feed a card or sheet to said package, and constructed to bring the card or sheet into proximity to the

falling stream of material, and release it, permitting it to be fed into the package with the stream of material. 5th. The combination with mechanism for introducing material into a package, of mechanism for automatically inserting a card or sheet into the package



consisting of a feeder constructed to pick up a card or sheet from a pile thereof, swing it into vertical position, and drop it into the package. 6th. The combination with an automatic package filling machine, of a table for holding a pile of cards or sheets, a feeder adapted to pick up a sheet from said pile, and mechanism for moving said feeder adapted to elevate it to lift the card off the pile, thereupon to swing the feeder to bring the card into an upright position, and thereupon to move the feeder downward and disengage the card from it, whereby the card is fed into the package. 7th. The combination with card holder H, of a feeder consisting of a foot I for picking up a card, its arm J, and an arm n, a slide S to which said parts are pivotally connected, a cam for moving said slide up to lift the picker arm and card, a cam connected to said arm n for moving it relatively to said slide to oscillate the feeder and swing the card from a horizontal to a vertical position and means for operating the feeder to cause it to drop the card in said vertical position. 8th. In a pneumatic feeder, a sucker I consisting of a rigid plate x and an elastic foot comprising a yielding outer wall y², transverse partitions y³, with air holes y⁴ for communicating the suction to the several air spaces between said partitions.

No. 46,447. Process for Treating Oleaginous Material. (*Procédé pour le traitement de matières oléagineuses.*)



Ernst Fahrig, Baltimore, Maryland, U.S.A., 3rd July, 1894; 6 years.

Claim.—The process of treating oleaginous material consisting in first subjecting such material in a suitable compartment from which the air has been exhausted to the action of a solvent circulated through the material alternately from the top and bottom, then withdrawing the solvent and dissolved oil, etc., then introducing steam directly into the material and also surrounding the material with heat in such a manner as not to come in direct contact therewith to vaporize any of the solvent remaining in the residuum, then sucking off the resultant vapor by means of a vacuum, all of the different steps of the process being applied while the material operated upon is confined in a stationary compartment, as set forth.

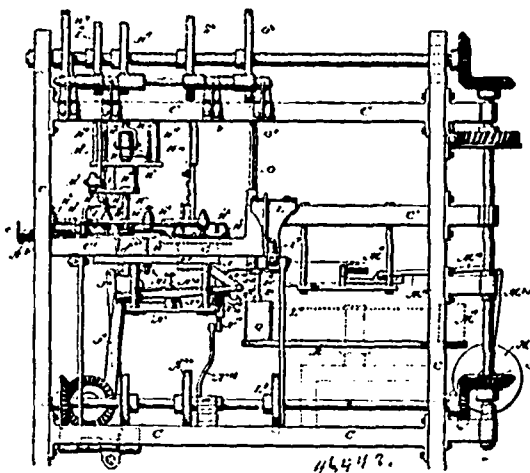
No. 46,448. Package Making Machinery.

(*Machine à faire des paquets.*)

Henry Eyster Smyser, Philadelphia, Pennsylvania, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. The combination of a paste-disc, a series of carriers movable down upon said disc, then descending upon a pile of paper, then lifting and transferring the top sheet of the pile, driving mechanism for imparting the successive movements to the carriers, and a presser movable up and down, and arranged to descend as each carrier reaches the paste-disc and press it into firm contact

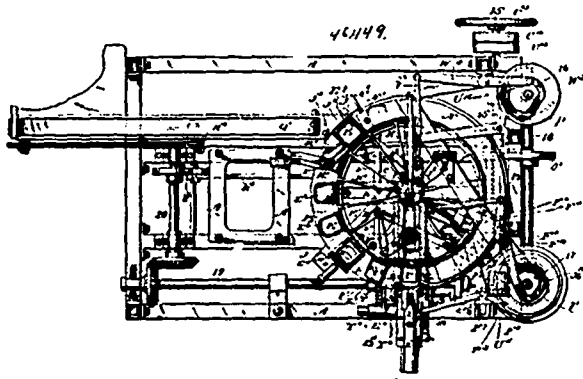
therewith. 2nd. In a paper feeling mechanism, the combination with a shaft having alternate rotative and down-and-up movements a series of paper carriers mounted thereon, and a paste-disc in position to receive the successive carriers in their descending move



ments, of a presser I movable up and down over the plate-disc, and driving mechanism for said shaft and presser, adapted to cause the presser to descend at each descending movement of the shaft, and press a carrier against the paste-disc. 3rd. In a mechanism for folding paper into a rectangular tube, the combination of a stationary former K, a forming matrix G movable toward and from the former, having wings G⁴, G⁴ for holding the sheet of paper, and a recess between them of just sufficient size to embrace the former, a movable back-plate G² mounted in said recess, standing normally flush with said wings to support the paper, and adapted to slide back into said recess, springs G³ for normally pressing said back-plate forward, mechanism for moving the matrix forward to embrace the former and back, whereby when the matrix, carrying a sheet of paper, is moved against the former the plate G² first clamps the paper against the former and remaining stationary against it holds the paper while by the continued advance of the matrix its wings move forward on opposite sides of the former and fold the paper flat against both sides thereof, and independently-operating folders acting upon the completion of the forward movement of the matrix, for folding down both projecting flaps of the sheet of paper against the opposite side of the former, whereupon the drawing back of the matrix leaves a complete tube enveloping the former. 4th. The combination of the forming matrix G fixed on a shaft J, a reciprocating slide J¹ upon which said shaft is journaled, driving mechanism for reciprocating the slide and driving mechanism engaging said shaft for oscillating the shaft and matrix, all substantially as and for the purpose specified. 5th. In a bag forming mechanism, the combination as means for forming the bag bottom, of opposite folders for folding in the bottom, wing folders for folding in the resulting triangular flaps or wings, and pasters for applying paste to these wings, of a paste-disc for supplying paste to the pasters, and driving mechanism constructed to move the pasters and paste-disc relatively to each other to press the pasters down against the paste-disc between their upward movements for applying paste to the wings. 6th. In a bag forming mechanism, the combination, with folders for closing the bag bottom of pasters N¹⁵ for applying paste to the wings, of paste-disc N², and driving mechanism for imparting relative movements to the pasters and disc, constructed to move the pasters up above the disc, then to move the disc relatively to the pasters to bring the latter over the disc, then to move them into contact with the disc to cause the pasters to take paste from the disc, and then move them out of contact therewith, then to move the disc from under the pasters, and finally to move the pasters down, invert them and bring them up to apply paste to the bag. 7th. The combination of the paste-disc N² mounted to reciprocate, pivoted paster-arms N¹⁵ mounted to oscillate around a centre, and driving mechanism for moving the disc and arms constructed to swing the arms backward and upward, then to move the disc to a position beneath the arms, and bring the arms down against the disc to take paste therefrom, then to elevate the arms and retract the disc, and then to swing the arms downwardly and forwardly to apply the paste to the bottom of the bag. 8th. The combination of the paste-disc N², slide N¹ on which it is mounted, paster-arms N¹⁵, shaft N¹⁴, on which they are fixed, and a driving mechanism consisting of cam N²¹, and intervening connections for reciprocating said slide, and rack and pinion N¹⁶, N¹⁷, cam N²⁰, and intervening connections for oscillating said shaft. 9th. The combination of the reciprocating slide N¹, and bottom folder N², carried thereby, paster-arms N¹⁵, driving mechanism for oscillating them, driving mechanism for reciprocating said slide, and paste-disc N², co-operating with said arms, mounted on said slide. 10th. In a bag forming mechanism,

the combination with means for folding the bag bottom, of a folding plate M², for making the first fold, and a folding plate N², for making the second fold, with an oblique downwardly-turned plate M³, carried by and in advance of the first folding plate, and adapted to gently turn in the paper preparatory to forming the first fold. 11th. In a bag forming mechanism comprising a former, and means for folding a sheet of paper around it to form a paper tube, the former constructed in two sections, one of them fixed and the other movable toward and from it, guides for supporting and guiding the movable section, maintaining it parallel with the first section, and an adjusting screw for propelling the movable section toward or from the fixed section. 12th. In a bag forming mechanism, comprising a former, and means for folding a sheet of paper around it to form a paper tube, the former constructed in two sections, one of them fixed and the other movable toward and from it, the folders for folding the paper against the former arranged to act against the side of the movable section, and a screw for adjusting the former connected to the movable section thereof and to said folders, so that in displacing the movable section the folders acting against it are equally displaced, and their relative engagement is unimpaired. 13th. In a bag forming mechanism, comprising a former, and means for folding a sheet of paper around it to form a paper tube, the former constructed in two sections, one of them fixed and the other movable toward and from it, a movable frame supporting the movable section, the folders for folding the paper against the former, having bearings in said frame, and means for moving said frame to adjust the thickness of the former. 14th. In combination with a relatively-fixed former section K, a longitudinally-movably saddle L, having the former section K¹, attached thereto, and folders as L², L³, having bearings in the saddle so as to preserve the same position with reference to former-section K¹, irrespective of the adjustment of the saddle. 15th. In combination with a relatively-fixed former section K, a longitudinally-movably saddle L, having the former-section K¹, attached thereto, a folder plate L², and a folding roller L³, also attached to and moving with the saddle, substantially as and for the purpose specified.

No. 46,449. Package Making and Filling Machines.
(Machine à faire des paquets et les remplir.)



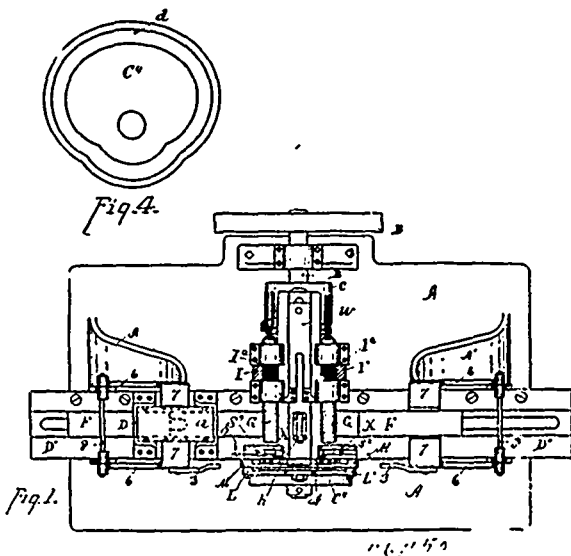
Henry Eyster Smyser, Philadelphia, Pennsylvania, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. In a package filling machine, the combination of a pocket constructed to be expanded and contracted, a plunger for forcing a bag into the pocket, and mechanism for contracting the pocket to grasp the bag and prevent its displacement by the withdrawal of the plunger. 2nd. In a package filling machine, the combination with a former having a bottom plunger adapted to move downwardly, a plunger beneath adapted to move up to meet it and grasp between the bottom of a bag on said former, and driving mechanism for moving said plungers down together to carry down a bag from said former, of a series of pockets constructed to be expanded and contracted, driving mechanism for moving them successively under said former, to receive the bags carried down by said plungers, and mechanism for contracting each pocket to grasp the bag when it is drawn into it, and prevent its displacement by the return movement of the upper plunger. 3rd. In a package filling machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, a chute for delivering charges of material into the pockets successively, and a mechanism for contracting each pocket before the charge of material is delivered into it, whereby the pocket closely grasps and supports the bag and protects it against distension by the dumping of the material into it. 4th. In a package filling machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, a former and plungers for carrying a bag from said former into a pocket, driving mechanism for moving the pockets to bring them successively to the bag-receiving position, a chute for delivering charges of material into the bags held in said pockets successively, and a mechanism for contracting the successive pockets constructed to act on each pocket to contract it after the bag has been placed in it, and before the charge of material is dumped into it, whereby during the dumping

of the material the bag is closely grasped and supported by the pocket. 5th. In a package filling machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, a chute for delivering charges of material into the pockets successively, and a mechanism for contracting each pocket before the charge of material is delivered into it, with an agitating mechanism for shaking down the contents of the packages successively, and a mechanism for expanding the successive pockets prior to the operation of the agitating mechanism. 5th. In a packaging machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, means for introducing bags into the pockets successively, an agitating mechanism for alternately lifting and dropping the bags for shaking down or compacting their contents, and a mechanism for contracting each pocket after the bag is placed in it, and for re-expanding it before the operation of the agitating mechanism, whereby the pocket is caused to serve as a loose guide for the bag during its lifting and falling movements while under the action of the agitator. 6th. In a packaging machine the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, means for introducing bars into the pockets successively, an agitating mechanism for alternately lifting and dropping the bags for shaking down or compacting their contents, and a mechanism for contracting each pocket after the bag is placed in it, and for re-expanding it before the operation of the agitating mechanism, whereby the pocket is caused to serve as a loose guide for the bag during its lifting and falling movements while under the action of the agitator. 7th. In a packaging machine the combination of a series of bag-holding pockets, constructed to be expanded and contracted, mechanism for advancing them successively, means for introducing bags into the pockets successively, an agitating mechanism for alternately lifting and dropping the bags for shaking down or compacting their contents, and folding and pasting mechanism for closing the top of the bag, with a mechanism for contracting each pocket after the bag is placed in it, and for re-expanding it before the operation of the agitating mechanism, and a mechanism for contracting each pocket before the top of its contained bag is closed and sealed by said folding and pasting mechanisms. 8th. In a packaging mechanism, the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, mechanism for contracting the pockets to embrace their contained bags, a plunger for expelling the completed packages from the successive pockets, and a mechanism for expanding each pocket before the operation of said plunger. 9th. In a packaging machine, the combination of a series of bag-holding pockets, constructed to be expanded and contracted, with mechanism for contracting them to embrace the contained bags, and an adjusting device adapted to determine the extent of contraction of the pockets by said contracting mechanism. 10th. In a packaging machine, the combination of a series of bag-holding pockets, constructed to be expanded and contracted, and folding and pasting mechanisms for closing the top of the bags, with mechanism for contracting each pocket before the top of its contained bag is closed and sealed by said folding and pasting mechanisms, and an adjusting device adapted to determine the extent of contraction of the pockets by said contracting mechanism. 11th. In a packaging machine, the combination of a series of bag-holding pockets, constructed to be expanded and contracted, with mechanism for contracting them to embrace the contained bags, consisting of an arm (as M) acting against one section of the pocket to thrust it toward the opposite section, a cam (as M²) connected to and operating said arm, and an adjusting screw (as m) interposed in the connection between said cam and arm, and adapted to adjust at will the extent of thrust imparted by said arm to the pocket, and thereby to limit the contraction of the pocket against its enclosed bag. 12th. In a packaging mechanism, the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, mechanism for contracting the pockets to embrace their contained bags, and a mechanism for expanding the pockets consisting of a pusher located exterior to the pockets at the position where the pockets are to be expanded, and mounted to be movable toward and from the pocket, a cam for reciprocating said pusher, and intervening connections for communicating the thrust of said cam to the pusher. 13th. In a packaging mechanism, the combination of a series of bag-holding pockets constructed each with a movable wall whereby the pocket may be expanded or contracted, and a projecting rod connected to said movable wall, whereby when pushed in the wall is displaced to expand the pocket, with a mechanism for expanding the pocket, consisting of a pusher movable against said rod to thrust it in, and a driving mechanism for reciprocating said pusher. 14th. The combination of a pocket E, having a movable wall E¹, and sliding rods c¹, c² connected thereto and mounted to protrude at their ends beyond their supports, with a pusher, as J¹ mounted to act against the ends of said rods to thrust them back and displace said movable wall to expand the pocket. 15th. The combination of a circular series of bag-holding pockets, a carrying wheel to which they are fastened, having bolt-notches corresponding in number and spacing to the pockets, and a driving mechanism for intermittently advancing the pockets, consisting of a bolt constructed to advance and enter a notch, to oscillate forward carrying the wheel with it the distance from one pocket to the next, to thereupon retract out of

the notch, and finally to swing freely back into position to enter the next notch, and cams for imparting these movements to said bolt. 16th. The combination of pockets E, E, carrying wheel D therefor, having bolt-notches d, d, vibratory lever F, bolt F⁴ carried thereby and movable longitudinally thereof, cam f¹ for imparting intermittent oscillations to said lever, and cam f for intermittently protruding said bolt into one of said notches and retracting it clear thereof. 17th. The combination of a series of pockets, constructed to be expanded and contracted, a carrying wheel to which said pockets are fastened, having bolt-notches, a driving mechanism for intermittently advancing said wheel, comprising a bolt, a cam for protruding it into engagement with said notches successively and retracting it, and a cam for swinging the bolt forward while engaged with a notch and backward while disengaged, and a mechanism for expanding the pockets, consisting of a pusher movable against the successive pockets to expand them, and connected to the mechanism which actuates said bolt so as to be moved forward to expand the pocket by the movement which retracts the bolt. 18th. In a packaging machine, the combination of a series of bag-holding pockets, a driving mechanism for intermittently advancing them the distance from one pocket to the next, and means for holding the pockets fixedly in correct position during their periods of rest, consisting of a moving part mounted to advance into direct engagement with the exterior of the successive pockets and to retract out of the way of the movement thereof, and mechanism for imparting these movements to said part between the successive advancing movements of said driving mechanism. 19th. In a packaging machine, the combination of a series of bag-holding pockets, a driving mechanism for intermittently advancing them the distance from one pocket to the next, and means for centring the pockets and holding them fixedly in correct position during their periods of rest, consisting of arms movable forward to embrace a pocket between them, and backward to clear the pocket, and a cam for imparting these movements thereto. 20th. In a packaging machine, the combination of a series of bag-holding pockets, a driving mechanism for intermittently advancing them the distance from one pocket to the next, and means for centring the pockets and holding them fixedly in correct position during their periods of rest, consisting of two opposite arms S S, connected together and movable toward a pocket to bear against opposite sides thereof, and thereby to draw it into correct position, and a cam S² for moving said arms toward and from the pockets. 21st. In a packaging machine, the combination with a series of bag-holding pockets, a plunger movable up through the pockets in succession to lift the packages out therefrom, and a delivery belt, of a delivering device for transferring the packages from said plunger onto said belt, consisting of a pusher-plate R, fixed on a pivoted lever-arm R¹, and a cam-movement for oscillating said arm at intervals, whereby said plate pushes each package from the top of the plunger, turns it partly around, and directs it onto the delivery belt.

No. 46,450. Slat Weaving Machine. (Machine à tisser.)

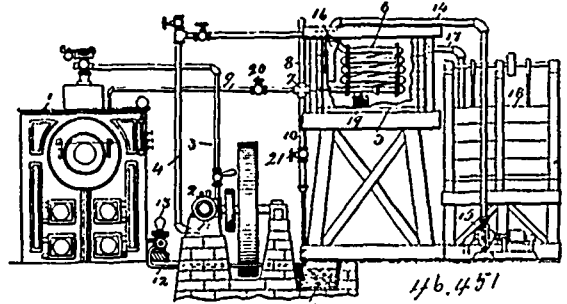


Albert Rodgers Tiffany, and Wesley Young, both of Dayton, Ohio, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. In a slat weaving machine, the combination of longitudinal slat feeding mechanism with divided weaving spindles which are wire threaded through the separate members thereof, substantially as specified. 2nd. In a slat weaving machine, the combination of longitudinal slat feeding mechanism with divided weaving spindles which are wire threaded through the separate members thereof, and the latterly delivery plunger W, and mechanism for operating it intermittently, substantially as specified. 3rd. In a slat weaving machine, the combination of the longitudinal

slat feeding mechanism, the latterly delivery plunger W, the divided weaving spindles which are wire threaded through the separate members thereof, and driving mechanism for operating said parts intermittently in time movements, substantially as specified. 4th. In a slat feeding machine employing twisting spindles and feeding mechanism for moving the slats intermittently forward for twisting, the slotted end clamps x x, for holding the slats during the operation of twisting, substantially as specified. 5th. In a slat weaving machine, in combination with the weaving spindles, the disc O revolved by step driving mechanism, devices mounted on said disc for actuating grips and cutters at stated intervals, substantially as specified. 6th. In a slat weaving machine, in combination with the spindles G, G¹, and mechanism for operating the same intermittently, the disc O, the cam q mounted thereon, and the delivery arm h, operated by said cam at stated intervals between the weaving operations, substantially as specified. 7th. In combination with a slat weaving machine, the hoppers D, D¹, mounted on the table D², each side of the wire twisting spindles, and mechanism for operating the plungers F, F¹, alternately with each other in time movement, substantially as specified. 8th. In a slat weaving machine employing one or more feeding hoppers and mechanism for feeding the slats therefrom intermittently, the step moving disc O, the yoke jaws 7, supporting the slats and mechanism actuated by said disc for raising the jaws to suspend the slat feeding at stated intervals, substantially as specified. 9th. In a slat weaving machine, the disc O, and mechanism for revolving the same in step movements in combination with a slide P, wire gripping jaws mounted thereon, and mechanism for actuating the grippers at a stated point of the revolution of said disc, substantially as specified. 10th. In a slat weaving machine, the combination of longitudinal slat feeding devices operating intermittently, the latterly slat delivery plunger W, and driving mechanism for operating the same intermittently and between the operation of the longitudinal feeding devices, the twisting spindles and mechanism for revolving the said spindles in time movements when the slat feeding and delivering devices are at rest, substantially as specified. 11th. In a slat weaving machine, the combination of the slat feeding mechanism, the slat delivery plunger W, the wire twisting devices operated in time movements to weave the slats successively after they are delivered from the spindles, the secondary slat moving arm h, and devices for operating the same in time movements and mechanism for suspending the slat feeding at stated intervals, whereby a series of slats are woven into a web with the strands knotted at each end thereof, substantially as specified. 12th. A slat weaving machine, composed substantially of the divided spindles G, G¹, and wires threaded through each member thereof, the longitudinal slat feeding mechanism, the latterly slat moving plunger W, the wire gripping devices, the wire cutters, the tripping mechanism for suspending the slat feeding and the driving mechanism mounted upon the shaft B, arranged to operate the said devices consecutively in time movements whereby a web of slat is woven with knots tied in each end of the strands, substantially as specified. 13th. In combination with grip jaws 17, the levers 20, slide 22, lever 20, and cam 19, operated by the prime shaft 10, substantially as specified.

No. 46,451. Combined Surface Condenser and Feed Water Heater. (Condensateur à surface et réchauffeur de l'eau d'alimentation combinées.)

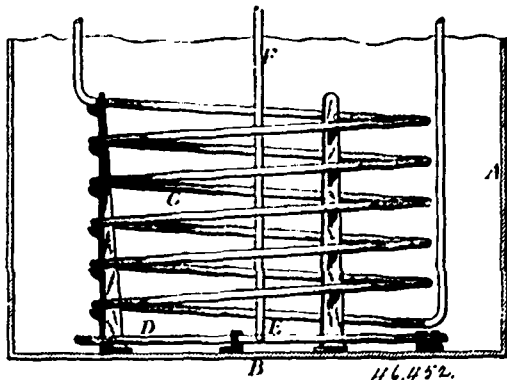


John B. McCurdy, Joplin, Missouri, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. A combined condenser and feed water heater comprising a boiler, an engine connected to the same, an exhaust for said engine, a terminal coil for said exhaust, and a cold water pipe superposed over or in proximity to the exhaust end of the coil, substantially as set forth. 2nd. A combined condenser and feed water heater, comprising a boiler, an engine connected to the same, an exhaust for said engine, a terminal coil for said exhaust, a vat for said coil, a cold water pipe within said vat having its delivery end superposed directly over the exhaust end of said coil, a valve in said exhaust end opening into said vat, a relief pipe, and pipes leading respectively to the boiler and a suitable hot well leading from the terminals of the exhaust end, substantially as set forth. 3rd. A combined condenser and feed water heater, comprising a boiler, an engine connected to the same, an exhaust for said engine, a terminal coil for said exhaust, a vat for said coil, a cold water pipe within

said vat having a funnel-shaped opening and a delivery end superposed over the exhaust end of said coil, a valve in said exhaust end opening into said vat, a relief pipe, a pipe leading to the boiler and a third pipe leading to a suitable well, a well, a feed pump, a pipe leading from said well to said feed pump, suitable valves in said pipes, an overflow for said vat, a cold water delivery pump, a pipe for delivering water to said vat connected to the delivery pump, and a suitable concentrator communicating with the overflow from said vat, substantially as set forth.

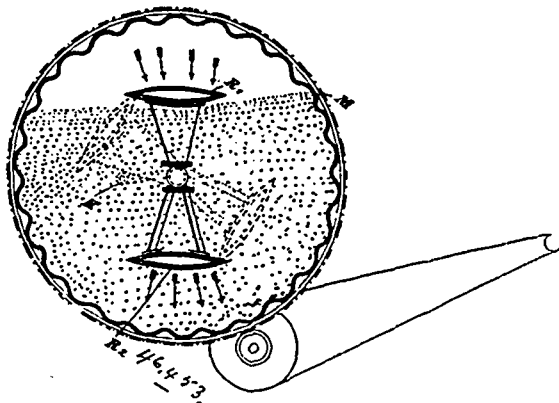
No. 46,452. Manufacture of Spirits and in Apparatus for that Purpose. (*Fabrication de spiritueux et appareil pour cet objet*)



Jerome James Murphy, Ashton, Ireland, 3rd July, 1894; 6 years.

Claim. - 1st. In the manufacture of spirits, the herein described method of preventing formation of fusel oil, aldehyde, acetic acid and other deleterious ingredients and the consequent loss of alcohol by maintaining the wort during fermentation at a temperature not exceeding 72° Fahrenheit. 2nd. In the manufacture of spirits, the herein described method of promoting fermentation of the wort by blowing air or other suitable gas through the fermenting liquid, substantially as described. 3rd. In combination with a fermenting vat a coil of pipes for water circulation and pipes for injection of air or gas, arranged in the lower part of the vat, substantially as described.

No. 46,453. Improved Apparatus for Effecting the Washing, Swelling and Germination of Grain. (*Appareil pour effectuer le lavage, renflement et germination des grains.*)

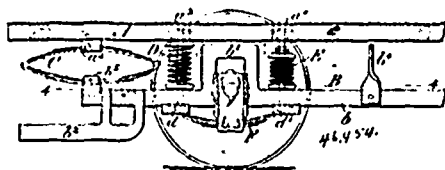


Otto Hentschel, of Grimma, Kingdom of Saxony, German Empire, 3rd July, 1894; 6 years.

Claim. - 1st. In an apparatus for effecting the washing, swelling and germination of grain a corrugated shell for the purpose of loosening the bulk of the material to be treated and to prevent the same from sliding along the inner wall of the drum, constructed and arranged substantially as hereinbefore described. 2nd. In the apparatus claimed, the construction of agitating apparatus consisting of the agitating tubes R¹, R², adapted to have water, air, or steam forced therethrough, and a hollow bearing pin through which the fluid is discharged by suction or otherwise in order to ensure the continuous circulation of the water, air or steam through the grain, constructed and arranged substantially as hereinbefore described. 3rd. In an apparatus claimed, a device for producing rotary motion consisting of a rocking lever carrying on one end a counter weight W and on the other a shovel like vessel or pan G, which is alternately filled and emptied, and a ratchet pawl and wheel transmitting such oscillating motion to the drum as a rotary motion by means of suit-

able cog wheel or frictional gearing, constructed and arranged substantially as hereinbefore described.

No. 46,454. Car Truck. (*Châssis de chars.*)

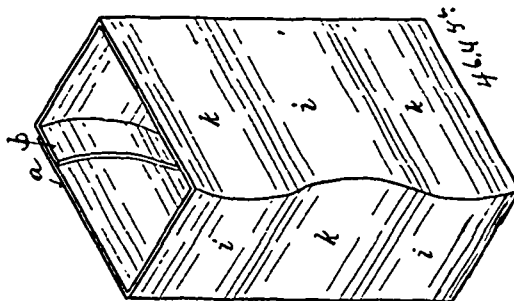


Kenneth William Blackwell, Montreal, Quebec, Canada, 3rd July, 1894; 6 years.

Claim. - 1st. In a car truck the combination of a fixed frame carrying the car-body, a movable frame having vertical extensions, and supporting the running gear, and a plurality of springs between said frames, the whole being arranged so that upon the compression of said springs, the extensions of said movable frame may play vertically within but clear of said fixed frame, substantially as and for the purpose set forth. 2nd. In a car truck, the combination with wheel-axes and axle-boxes, of a fixed frame carrying the car-body, a movable frame having vertical extensions straddling the axle-boxes and supporting the running gear, a plurality of springs between said frames and under-hung springs between the movable frame and the axle-boxes, the whole being arranged so that upon the compression of said springs, the extensions of said movable frame may play vertically within it clear of said fixed frame, substantially as and for the purpose set forth. 3rd. In a car truck, the combination with wheel-axes and axle-boxes, and the frames A and B, of the elliptical springs C C and coiled springs D D, acting contemporaneously, between said frames, graduated springs E, E, for taking up increased load and under-hung springs F acting in conjunction with the movements of axle-boxes and movable frame, substantially as set forth. 4th. In a car truck the combination with the movable frame B the springs, and running gear, of the fixed frame A formed of channel irons a, a, as described and supporting the car-body, substantially as and for the purpose specified.

No. 46,455. Wrapper for Bottles.

(*Enveloppe pour bouteilles.*)



Jeffrey Thomas Ferres, Anderson, Indiana, U.S.A., 3rd July, 1894; 6 years.

Claim. - 1st. A wrapper made from veneer or strawboard, scored in irregular lines, and adapted to be bent around a package, substantially as described. 2nd. A wrapper made from veneer or strawboard, scored in irregular wavy lines, and adapted to be bent around a package, substantially as described. 3rd. A wrapper made from veneer or strawboard, scored in irregular lines, bent into form, and the ends fastened together to form a polygonally sided wrapper, substantially as described.

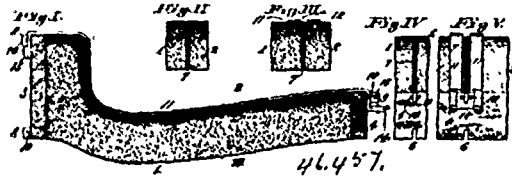
No. 46,456. Garment Stays. (*Renfort de vêtement.*)



Henry Johnston, Ypsilanti, Michigan, U.S.A., 3rd July, 1894; 6 years.

Claim. - The herein described garment stay, composed of the resilient blade having a surrounding adhesive coating, the guard tips, each consisting of a folded rubber strip having its ends secured to the blade by said adhesive coating, and two covering strips of textile material extended beyond the ends and side edges of the blade, and tips having their entire faces coated with said adhesive material, whereby the covering strips are adherent to each other and to the inclosed blade and tips, substantially as described.

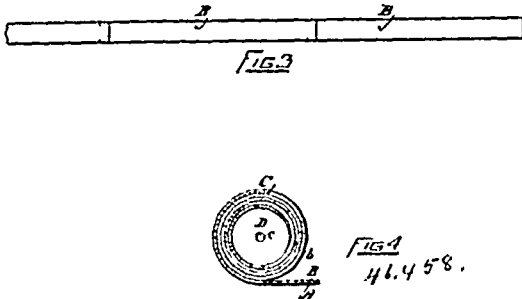
No. 46,457. Method of and Apparatus for Forming Joints Between Blocks of Concrete or Artificial Stone. (*Méthode et appareil pour former des joints entre les blocs de coneret ou pierre artificielle.*)



Rubertus G. Mayhew, St. Louis, Missouri, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. The method of forming joints between blocks of concrete or artificial stone, which consists in placing in position a frame to form the vertical edges of the blocks, then inserting a division strip, then forming the blocks, then applying a foot-piece, and finally withdrawing the division strip, substantially as set forth. 2nd. The method of forming joints between blocks of concrete or artificial stone, which consists in placing in position a frame to form the vertical edges of the block, then inserted a division strip bearing at one end of the frame, then forming the blocks, then applying a foot-piece, and finally withdrawing the division strip by swinging the same vertically upon its bearing end, substantially as set forth. 3rd. The improved apparatus for forming joints between adjacent blocks of concrete or artificial stone, which consists of the notched longitudinal strips 3 and 4, division strips 7, provided with lugs fitting in the notches of said strips 3 and 4, and the slotted foot-piece 11, substantially as set forth. 4th. The improved apparatus for forming joints between adjacent blocks of concrete or artificial stone, which consists of the notched, longitudinal strips 3 and 4, tapering division strips 7, provided with lugs fitting in the notches of said strips 3 and 4 and the slotted foot-piece 11, substantially as set forth. 5th. An apparatus for forming joints between adjacent blocks of concrete or artificial stone, which consists of the longitudinal strips 3 and 4, dividing strips extending from one longitudinal strip to the other, and having projections fitting in notches in the longitudinal strips, and the slotted foot-piece 11 having ends 13 and 14, substantially as and for the purpose set forth.

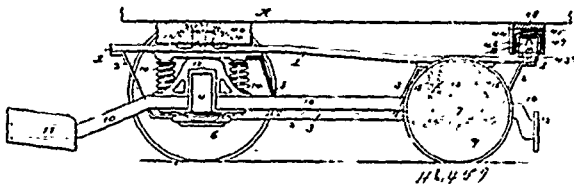
No. 46,458. Rolls for Holding and Applying Decorative Films. (*Rouleau pour tenir et appliquer des pellicules décoratives.*)



Walter Hamilton Coe, Providence, Rhode Island, U.S.A., 3rd July, 1894; 6 years.

Claim.—A roll for holding and applying decorative films, consisting of a spirally wound film and strip, the said strip having a prepared adhesive surface on one side thereof, and a prepared non-adhesive surface upon the opposite side, whereby the roll may be unwound in use without liability of tearing or displacing the film.

No. 46,459. Motor Truck. (*Châssis de moteur.*)



John A. Brill, assignee of Walter S. Adams, both of Philadelphia, Pennsylvania, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. The combination of a car body and car truck, connections for pivotally uniting the car and truck located over the side frames thereof, and pivotal connections on the end of the truck frame uniting the car body and truck, substantially as described.

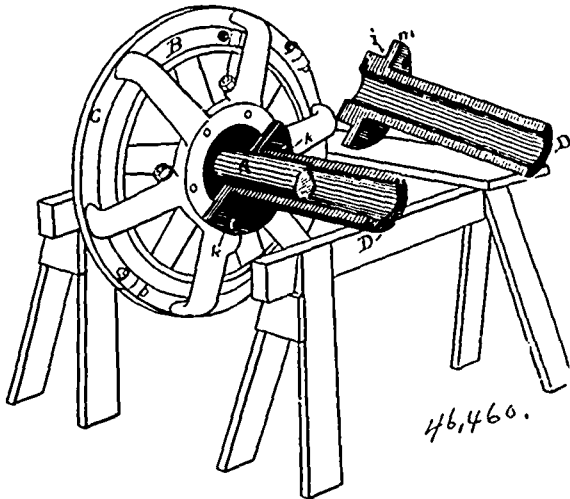
2nd. The combination of a truck having side bearings, comprising stationary and movable elements for frictional contact, the bearings being secured to the truck frame, and a car body having segmental rub plates adapted to engage the side bearings, by means of which the car and truck are pivotally united, substantially as described. 3rd. The combination of a truck and a car body, the truck having a pivot plate secured at the end thereof, with devices on the car body for engagement with said pivot plate, such combined devices forming a pivotal connection between the car body and truck, enabling the car to be drawn by the truck, or the truck by the car, substantially as described. 4th. The combination, with a car and truck, of devices for securing a pivotal or swivelling union of the car and truck, said devices permitting the propelling of the car or truck to be accomplished from the end of the truck, said devices being adapted to move in the arc of a circle generated from the pivotal centre of the truck, substantially as described. 5th. The combination, with a car and truck, of devices for securing a swivelling or pivotal union of the car and truck, such devices being movable, one in relation to the other, and secured to the truck and car without the wheel base of the truck, substantially as described. 6th. A truck having an upper chord or frame, and devices for drawing a car secured to a transverse member of the upper chord at one end, said drawing devices being adapted to move transversely of the car, substantially as described. 7th. The combination of a car and truck, of devices for securing a pivotal connection of the car and truck, such union being made at the sides and end of the truck, substantially as described. 8th. The combination in a car and truck, of devices for pivotally uniting the car and truck disposed about and away from the pivotal centre, and additional means for securing the truck and car together for propulsion of the same, substantially as described. 9th. The combination in a car and truck, of devices for pivotally uniting the car and truck secured to the truck and car over the sides of the truck, and devices for securing the truck and car together for propulsion located over the end of the truck, said devices having a relative movement in the arc of a circle, substantially as described. 10th. The combination in a car and truck, of devices for pivotally uniting the car and truck disposed about and away from the pivotal centre thereof, and devices for uniting the car and truck for propulsion situated on the end thereof and outside of the wheel base, substantially as described. 11th. The combination in a car and truck pivotally connected and additional devices which unite the car and truck together for propulsion, the union of said additional devices between the car and truck being made transversely of the truck and to one side of the pivotal centre, substantially as described. 12th. The combination, with a car and truck, of drawing devices between the car and truck, located over the end of the truck, the car and truck elements of said devices having a movement, one in relation to the other, substantially as described. 13th. The combination, with a car and truck, of pivotal devices between the car and truck comprising a bearing secured to the truck and a segmental rub plate affixed to the car and having a depending side engaging the truck bearing on the outside thereof, substantially as described. 14th. The combination, with a car and truck, of drawing devices between the car and truck comprising a segmental bearing, and a superposed segmental rub plate adapted to engage the bearing on both sides, said devices being located over the end of the truck frame, substantially as described. 15th. The combination, with a car and truck, of pivotal devices between the car and truck comprising a bearing having a roller therein, and a segmental angle iron secured to the car, the depending side or angle of which is adapted to engage the roller, substantially as described. 16th. The combination, with a car and truck, of drawing devices between the car and truck comprising a roller, and a segmental channel beam between the depending sides or angles thereof, said devices being located over the end of the truck, substantially as described. 17th. A truck having separate or unconnected pivot plates supported on the side frame over the axle of one set of wheels, and another pivot plate on the end of the truck opposing said axle, substantially as described. 18th. The combination of a car and truck, of devices for securing a pivotal or swivelling union of the car and truck comprising three bearing points on the truck and car, which are disposed about the pivotal centre and generated therefrom and which permit the car to move bodily about the said pivotal centre, substantially as described. 19th. The truck having the separate and unconnected pivot plates disposed so as to precipitate the major portion of the truck supported weight of the car upon the axle at one end, and swivelling devices for drawing the truck at the other end, substantially as described. 20th. A truck having three swivelling points of connection with a car body, two of which lie in the same arc generated from the pivotal centre, the other point being adapted to move in a greater arc, substantially as described. 21st. The combination, with a car and truck, of drawing devices between the car and truck comprising a roller, a friction plate above the roller, a channel beam superposed above the friction plate and in contact therewith, the depending sides of the channel beam engaging said roller, said devices being located over the end of the truck, substantially as described. 22nd. The combination, with a car and truck, of pivotal devices between the car and truck comprising a bearing having a roller, a friction plate on the bearing, a segmental channel beam having depending sides superposed over the bearing, a friction plate secured to the channel beam engaging the lower friction plate, the sides of the channel beam being adapted to bear against the roller, substantially

as described. 23rd. The combination, with a car and truck, of pivotal devices between the car and truck comprising a segmental channel beam secured to the car and having depending sides, a friction plate within the sides and on the channel beam, and a bearing secured to the truck having a roller and superposed friction plate, and an oil well in said bearing, the two friction plates, and the roller and channel beam being adapted to engage each other, substantially as described. 24th. The combination, with a car and truck, of pivotal devices between the car and truck comprising a bearing secured to the truck, having a friction plate, and a segmental angle iron secured to the car having a friction plate, the friction plate being superposed, and the side of the angle iron being adapted to engage the truck bearing, substantially as described. 25th. The combination, with a car and truck, of pivotal devices between the car and truck, comprising a bearing secured to the truck having a roller and a friction plate, a segmental angle iron secured to the car having a friction plate, the friction plates being superposed, the angle iron being adapted to engage the roller, substantially as described. 26th. The combination, with a car and truck, of pivotal devices between the car and truck comprising a bearing on the truck having a roller, a friction plate and an oil well adjacent to the friction plate, and an angle iron secured to the car having a friction plate both plates being superposed, the roller and angle iron being adapted to engage each other, substantially as described. 27th. The combination, with a car and truck, of separate or unconnected pivot plates between the car and truck, located directly over the side frames of the truck, and to one side of the wheel base centre thereof, substantially as described. 28th. The combination, with a car and truck, of separate or unconnected pivot plates between the car and truck, located directly over the side frames of the truck and over the axle of one set of the wheels, substantially as described. 29th. A truck without a transversely extending centre bearing bolster, having separate or unconnected pivot plates supported on the side frames to one side of the wheel base centre, substantially as described. 30th. A truck without a transversely extending centre bearing bolster, having separate or unconnected pivot plates supported on the side frames over the axles of one set of wheels, substantially as described. 31st. The combination, with a car and truck, of separate or unconnected pivot plates between the car and truck, supported upon the side frames and end frame of the truck, substantially as described. 32. The combination, with a car and truck, of separate and unconnected pivot plates between the car and truck, located over the axle of one set of wheels, and over the end of the truck, substantially as described. 33rd. The combination, with a car and truck, of separate and unconnected pivot plates between the car and truck, located over the axle of one set of wheels, and over the end of the truck without the wheel base thereof, substantially as described. 34th. The combination, with a car and truck, the truck having large and small wheels, and separate and unconnected pivotal devices between the car and truck located over the axle of the large wheels, substantially as described. 35th. The combination, with a car and truck, the truck having large and small wheels, pivotal devices between the car and truck located over the axle of the large wheel, and an end bearing between the car and truck over the small wheel end of the truck, substantially as described. 36th. The combination, with a car and truck, the truck having large and small wheels, pivotal devices between the car and truck located to one side of the wheel base centre of the truck, and drawing devices having pivotal connection with the car and truck at the small wheel end of the truck, substantially as described. 37th. The combination, with a car and truck, the truck having large and small wheels, pivotal devices between the car and truck located to one side of the wheel base centre of the truck, and drawing devices having pivotal connection with the car and truck located without the wheel base of the truck, substantially as described. 38th. The combination, with a car and truck, the truck having large and small wheels, pivotal devices between the car and truck, located over the axle of the large wheels, and drawing devices having pivotal connection with the car and truck located at the small wheel end of the truck, substantially as described. 39th. The combination, with a car and truck, the truck having large and small wheels, pivotal devices between the car and truck located over the axle of the large wheels, and drawing devices having pivotal connection with the car and truck located without the wheel base of the truck, substantially as described. 40th. The combination, in a car and truck, of a truck having rotatable instrumentalities secured on the top frame thereof, and segmental plates secured to the car body, having depending sides adapted to engage the rotatable instrumentalities on the truck, substantially as described. 41st. The combination, in a car and truck, of a truck having bearing instrumentalities secured on the top frame thereof, and segmental plates secured to the car, having depending sides adapted to engage the bearing instrumentalities, substantially as described. 42nd. The combination, in a car and truck, of a truck having bearings secured on the top frame thereof, said bearing having a friction plate, and segmental plate secured to the car having depending sides adapted to engage the bearing, and a friction plate on the segmental plate adapted to engage the bearing friction plate, substantially as described. 43rd. The combination, in a car and truck, of a truck having bearings secured on the top frame thereof, said bearing having a friction plate and a contained oil reservoir combined with the friction plate, and segmental plates having de-

pending sides secured to the car and adapted to engage the bearing and a friction plate on the car element in engagement with the bearing friction plate, substantially as described. 44th. The casting B, having the central web 16, extensions 17, oil wells 32, between the extensions and central web, and an apertured friction plate 20, in the central web, the apertures of which align with the wells, substantially as described. 45th. The casting B, having the superposed friction plate 20, apertures in said plate adjacent to its ends, and independent oil wells 32, aligning with said apertures, substantially as described. 46th. The combination, with the casting B, having the roller 24, of the angle iron 40, having the depending angle 42, adapted to engage the roller, substantially as described. 47th. The casting B, having the extension 17, bolt holes 18, therein and a depending flange 23, combined with the upper chord 1, the said flange embracing the upper chord, substantially as described. 48th. The casting B, having the central web 16, and extensions 17, the oil wells 32, adjacent to the web and on both sides thereof, and apertures 34, leading from without the casting to the said wells, substantially as described. 49th. The casting B, having a superposed friction plate 20, with transverse slots adjacent to the ends thereof, and an oil supply and wick leading to said slots, substantially as described. 50th. The casting B, having a superposed friction plate 20, with transverse slots 35, adjacent to the ends thereof, the independent oil wells 32, with openings aligning with the slots, and a wick 37, in each well extending through said slots, substantially as described. 51st. The casting B, having a superposed friction plate 20, with transverse slots 35, and slot extensions 36, adjacent to the ends thereof, the independent oil wells 32, with openings aligning with the slots, and a wick 37, having the recesses 38, in each well, the recesses engaging the slot extensions, substantially as described. 52nd. The combination, with the casting B, having the rotatively supported roller 24, and the superposed friction plate 20, of the independently supported angle iron having the depending web 42, the roller and friction plate being adapted to engage the angle iron, substantially as described. 53rd. The combination, with the casting B, having the rotatively supported roller 24, and the bearing friction plate 20, of the independently supported angle iron having the depending web 42, and attached rub friction plate 43, the friction plates, web and roller being engaged, substantially as described. 54th. The combination with the casting B, having the roller 24 and bearing friction plate 20, of the superposed rub plate 40 segmental in form, and adapted to engage the roller and friction plate, substantially as described. 55th. The combination with the casting B, having the roller 24 and bearing friction plate 20, of the superposed rub plate 40 having the rub friction plate 43, the rub plate being segmental in form, the friction plates, roller and rub plate being engaged, substantially as described. 56th. The combination with the casting B having the roller 24, oil wells 32, and bearing friction plate, apertures in the said rub plate aligning with the oil wells, a conductor leading to the friction plate, of the superposed rub plate 40 segmental in form having the rub friction plate 43, the friction plates, rollers and rub plate being engaged, substantially as described. 57th. The combination in a car and truck, of the truck bearing, the car rub plate, and the added bolster 48 between the car and rub plate, substantially as described. 58th. The combination with a truck bearing having a roller, of an independently supported rub plate, having depending webs and segmental in form adapted to engage the roller between the webs, substantially as described. 59th. The combination with a truck bearing having a roller and superposed friction plate, of an independently supported rub plate having depending webs, and segmental in form adapted to engage the roller and friction plate between the webs, substantially as described. 60th. The combination with a truck bearing having a friction plate, of an independently supported rub plate segmental in form, and having depending webs adapted to engage the truck bearing and friction plate, substantially as described. 61st. The combination with a truck bearing having a roller and a bearing friction plate, of an independently supported rub plate segmental in form, having depending webs and an affixed rub friction plate, the friction plate, webs and roller engaging, substantially as described. 62nd. The combination with a truck bearing having an apertured friction plate and an oil supply with a conductor leading to said friction plate, of an independently supported rub plate segmental in form, and having depending webs adapted to engage the friction plate and truck bearing between the webs, substantially as described. 63rd. The combination with a truck bearing, of a vertically disposed spindle rotatively supported in the bearing, a roller rotatively supported about the spindle, and an independently supported rub plate having a depending web segmental in form adapted to engage the roller, substantially as described. 64th. The combination, with a truck bearing, of a spindle and roller in the bearing, both being capable of independent movement, and an independently supported rub plate segmental in form and having a depending web adapted to engage the roller, substantially as described. 65th. The combination, with a truck bearing, of a spindle and roller in the bearing, both being capable of independent movement, and an independently supported rub plate segmental in form and having depending webs adapted to embrace the roller, substantially as described. 66th. The combination of the upper chord 1, of the casting B, having the aperture 21, of the spindle 26, extending between the casting and chord and through the aperture, and the roller 24, on said spindle, substantially as described. 67th

The combination of the upper chord 1, of the casting B, having the aperture 21, of the spindle 26, extending between the casting and chord and through the aperture, and the roller 24, on said spindle resting on the upper chord, substantially as described. 68th. The combination of the casting 49, having the ways 54, and the roller 56, on said ways, with the friction plate 66, suitably supported, substantially as described. 69th. The combination of the casting 49, having the ways 54, and the roller 56, on said ways, with the superposed plate 59, having the segmental friction plate 66, in contact with the said roller, substantially as described. 70th. The combination with the casting 49, having the segmental bearing surface 58, of the superposed plate 59, having the bracket 61, and a roller 62, journaled in said bracket, adapted to bear on the said bearing surface, substantially as described. 71st. The combination with the casting 49, having the ways 54, roller 56, on said ways, and the segmental bearing surface 58, of the superposed plate 59, having the bracket 61, and journaled roller 62, therein, and the friction plate 66, the roller 62, bearing against the said segmental surface, and the friction plate bearing on the roller 56, substantially as described. 72nd. The combination with the casting 49, having the segmental bearing surfaces 58, 58^a, of the superposed plate 59, having the brackets 61, 61^a, and rollers 62, 62^a, therein, journaled and adapted to bear on the said bearing surfaces, substantially as described. 73rd. The combination with the casting 49, having the ways 54, roller 56, on said ways, and the segmental bearing surfaces 58, 58^a, of the superposed plate 59, having the brackets 61, 61^a, with the rollers 62, 62^a, journaled therein, and the friction plate 66, the rollers 62, 62^a, bearing against the said segmental surfaces, and the friction plate bearing on the roller 56, substantially as described. 74th. The plate 59, having the downwardly extending brackets 61, 61^a, the bolts 63, 63^a, passing through said brackets, and the cross bar 68, uniting said bolts, substantially as described. 75th. The combination with the castings B, having the apertured lug 17, of the truck frame, having spring posts, and an upper chord, said posts passing through the said lugs and having nuts on the end for holding said castings down on the chord, substantially as described.

No. 46,460. Friction Clutch. (*Embrayage à friction.*)



Dodge Wood Split Pulley Co., Toronto, Ontario, Canada, assignee of George Philon, Mishawaka, Indiana, U.S.A., 3rd July, 1894; 6 years.

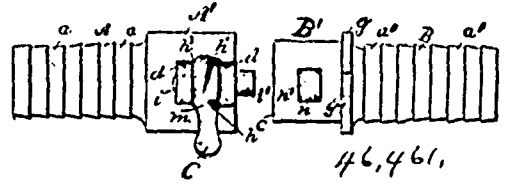
Claim.—1st. In a clutch, the combination of a clutch member having the hub seat *g* bored to a standard size, the hub made separate from said clutch member and provided with the cylindrical end or shoulder *i* formed of a size to fit said seat, having the flange *m* and formed at its end beyond said flange with the cylindrical sleeve, substantially as set forth. 2nd. In a clutch, adapted to be used as a shaft coupling, the combination of the clutch member provided with the hub seat *g* bored to a standard size, and the hub provided with the shoulder or bearing *i* formed of a diameter to fit said seat, having the flange *m*, and beyond said flange with the split sleeve adapted to be compressed upon the end of the shaft, substantially as set forth. 3rd. In a clutch, the combination of a clutch member having the hub seat *g* bored to a standard size, the hub made separate from said clutch member, and provided with the cylindrical end or shoulder *i* formed of a size to fit said standard seat, substantially as set forth.

No. 46,461. Coupling. (*Joint.*)

Irvin P. Doolittle, Los Angeles, California, U.S.A., 3rd July, 1894; 6 years.

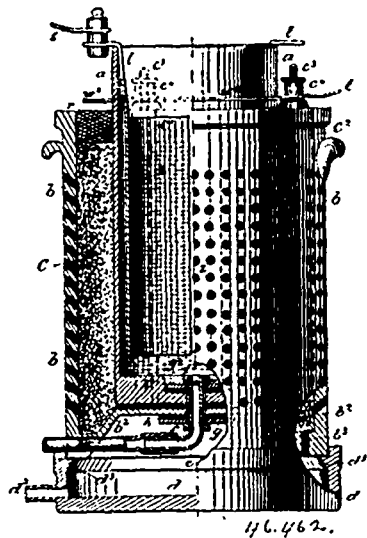
Claim.—1st. In a coupling, a spiral-cam locking-lever which is pivoted in a slot on the female coupling-section and has an adjustable interlocking connection with the channel-shoulder on the other

or male coupling-section, substantially as described. 2nd. The combination, with a male coupling-section and a female coupling-section, of a spiral-ribbed cam lever pivoted to vibrate transversely on the



female section and adapted to interlock its rib with a transverse shoulder on the male section, substantially as described. 3rd. The combination, with a male coupling-section having a diagonal channel on it near one end and a female coupling-section whereon two parallel transverse ears are formed with a slot between, of a lever having a hub-enlargement on one end pivoted between the ears, a spiral rib on the hub, and a joint-washer between the coupling-sections, substantially as described. 4th. The combination, with a male coupling-section having a diagonal channel formed near one end and a radial collar near said end having a single scalloped notch, of a female coupling-section having two parallel transverse ears thereon and slotted between said ears, a lever having a hub on one end, a spiral cam-rib on the hub, a fulcrum-bolt passing through the ears and hub, and a head on said bolt which enters the scalloped notch of the collar when the sections are assembled, substantially as described. 5th. A coupling comprising a male section diagonally channelled near one end, a female section, two transverse ears thereon near one end, spaced apart and slotted between, a locking-lever, a cylindrical hub on said lever, which is pivoted between the ears, and a spiral cam-rib on said hub which merges into a radial flange along one side edge of the hub, substantially as described. 6th. The combination, with a cylindrical male coupling-section having a diagonally-transverse channel in it near one end and a radial collar on this section near the same end, having a single scallop in its edge, of a female coupling-section, a pair of spaced ears thereon between which a slot is formed, a bent lever pivoted between the ears and provided with a hub at one end, a spiral rib on the hub which merges into a radial flange on one side of the hub, a fulcrum-bolt passing through the collar and hub, and a head on the fulcrum-bolt, which engages the scallop on the male coupling-section when the coupling sections are connected, substantially as described.

No. 46,462. Primary Voltaic Batteries. (*Pile voltaïque.*)

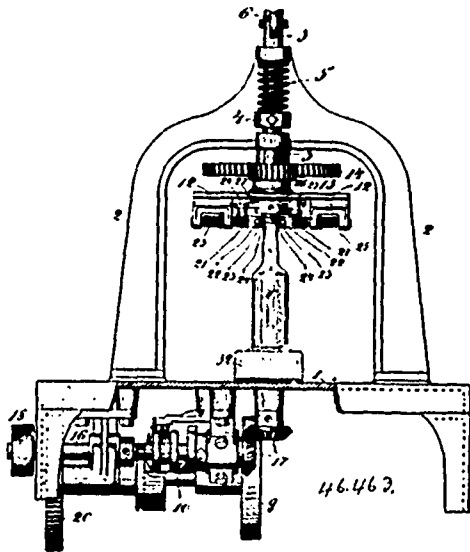


William Walker, Birmingham, Frank Richard Wilkins, Handsworth, and Jabez Lones, Smethwick, England, 3rd July, 1894; 6 years.

Claim.—1st. A single liquid primary voltaic battery, consisting essentially of a perforated glazed earthenware jar or vessel, and a porous cell of much smaller diameter than and situated concentrically in the perforated earthenware jar for containing the electrolyte in which the zinc or positive element is suspended, the space between the perforated jar and porous cell being filled with powdered carbon in which one, two or more plates or rods of solid carbon are inserted, the heads or tops of which are in electrical contact with each other, the said primary voltaic battery being constructed and arranged substantially as hereinbefore described. 2nd. A single liquid primary voltaic battery consisting of a porous cell containing the exciting liquid in which the zinc or positive element is suspended, the

other or negative element carbon in the form of powder and coarse grains being retained in position around the outside of the porous cell by means of a wire gauze casing, the whole being constructed and arranged substantially as hereinbefore described. 3rd. Making the carbon element of galvanic batteries into a vessel for containing the electrolyte or exciting liquid of the battery, the exterior of which carbon vessel is left unvarnished or uncoated with any material which will destroy the porosity of the said carbon vessel, so that the hydrogen liberated at the inner surface of the said carbon vessel may combine with the oxygen of the air in the pores of the carbon and polarization be thereby prevented or largely diminished, substantially as hereinbefore described. 4th. Making the carbon element of such galvanic batteries as have the said carbon element wholly or mainly immersed in the electrolyte or exciting liquid of the battery, tubular or hollow, so that atmospheric air may have free access to the interior of the said tubular or hollow carbon, and by its oxygen prevent or reduce the polarization of the battery, substantially as described.

No. 46,463. Capping and Sealing Bottles.
(Appareil à couvrir et sceller les bouteilles.)

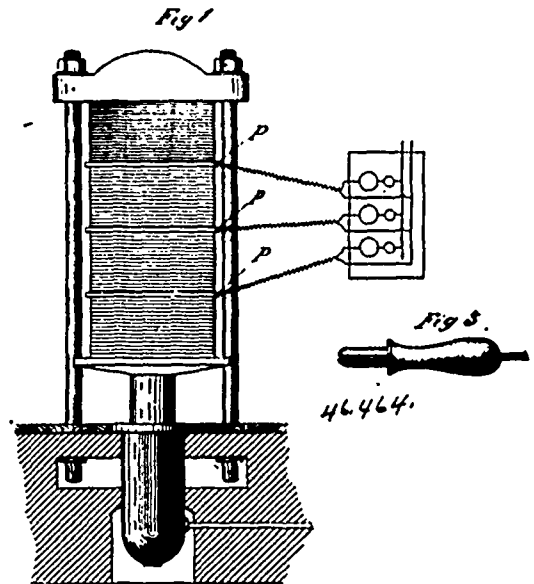


William Daniel Elger, assignee of Nathaniel B. Abbott, both of Brooklyn, New York, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. A closing or sealing cap for a bottle, comprising a cupped sheet metal cap having a cupped, adherent and smooth lining of comparatively thick paper, and a disc of cork fitting into said lined cap, the lining being interposed between the crown of the metal cap and said disc of cork, substantially as set forth. 2nd. A bottle having its neck gradually flared toward the mouth and provided with a closing device which comprises a disc of cork and a sheet-metal cap with a lining of paper or the like, the pendant, lined flange of the cap fitting smoothly about the tapered neck of the bottle and having in it numerous indentations, as set forth. 3rd. An apparatus or machine for applying a sheet metal sealing cap upon a bottle, comprising a base to support the bottle, means for holding the bottle stationary and the cap pressed down thereon, a rotating carrier adapted to move concentrically about the axis of the bottle, rollers or nurls mounted in said carrier and adapted to bear on the flange of the cap as they revolve, springs which keep said rollers pressed up the flange on the cap, and stationary cams which serve to press the rollers outwardly, radially, at each rotation of the carrier, substantially as set forth. 4th. An apparatus or machine for applying a sheet metal sealing cap upon a bottle, comprising a base to support the bottle, a plunger 3 arranged to press upon the cap and hold it down on the bottle, the spring 5 on the plunger, the rotating carrier provided with rollers or nurls for rolling down the flange of the cap, the springs behind the rollers, the cams 27, a lever 7 for raising the plunger 3, the cam and its rod for operating said lever, and gear intermediate said cam and the rotating carrier, whereby the withdrawal of the plunger is automatically effected when the rollers are withdrawn and the bottle thus released, substantially as set forth. 5th. The combination with the frame, the plunger 2 mounted in the frame, mechanism for imparting a reciprocating movement to said plunger at regular intervals, the rotating carrier mounted in the frame concentrically with said plunger, gearing connecting the carrier-rotating and plunger-operating mechanism, the rollers 24 mounted in sliding forks in the carrier, the said forks, the roller springs 25 the cams 27 arranged in different planes, and the rollers 28 on the said forks, and adapted to bear and roll on the respective cams 27 as the carrier rotates, substantially as set forth. 6th. In an apparatus for applying a sealing cap on a bottle, the combination with means for holding the cap down firmly in place on the bottle, of a rotating carrier, a fork 21

mounted in said carrier, a roller or nurl 24 carried by said fork, and a spring 25 which keeps the nurl pressed up toward the bottle-neck, said nurl being mounted on rocking bearings so that it will adapt itself to the surface of the bottle-neck, as set forth.

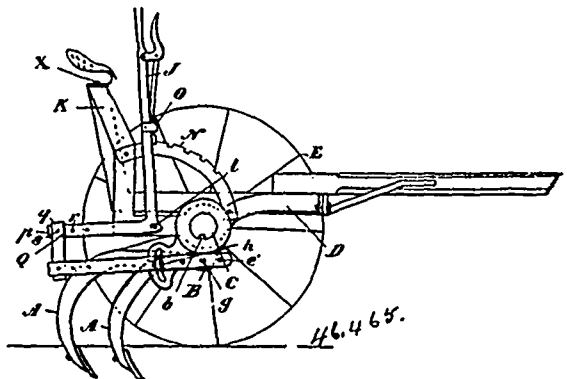
No. 46,464. Process of Calendering Goods of all Sorts.
(Procédé de calandrage de marchandises de toute espèce.)



Emil Claviez, Chemnitz, Saxony, German Empire, 3rd July, 1894; 6 years.

Claim.—1st. The process of calendering goods of all sorts, which consists in inserting cold plates, internally hollow and provided with a rheostatic arrangement, between the layers of goods in the press and then passing an electric current through the same, all substantially as described. 2nd. The process of calendering goods of all sorts, which consists in inserting cold plates, internally hollow and provided with a finely perforated tube-grating, between the layers of goods in the press and then, after heating these plates, injecting compressed air into the same, all substantially as described. 3rd. For the purpose of carrying out the methods under claims 1 and 2, a heating plate consisting of a frame provided with a lid top and bottom, a rheostatic arrangement, and a finely perforated tube-grating *r*, being inserted in the hollow thus formed, the former for the passage of an electric current, and the latter serving for the injection of compressed air into the plate, substantially as and for the purpose herein described, with reference to the accompanying drawing.

No. 46,465. Cultivator. (Cultivateur.)

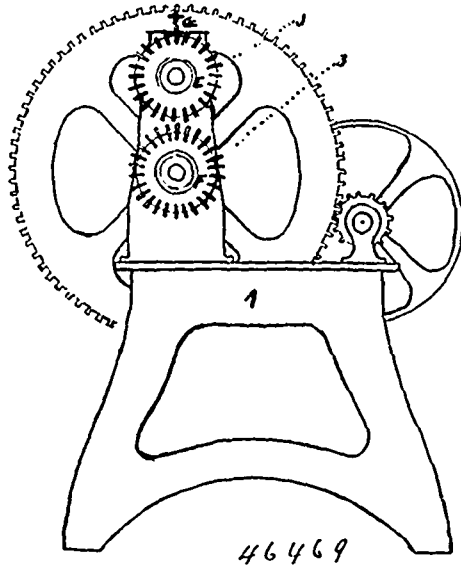


Malcolm Macleod, Los Angeles, California, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. In a cultivator, the combined apparatus substantially as described and shown. 2nd. In a cultivator, a shank carried with a pivot hole and quadrant slot or series of holes, in combination, substantially as described and shown for the purpose set forth. 3rd. In a cultivator, a slotted or angular axle, substantially as described and shown for the purpose set forth. 4th. In a cultivator, the weed cutter consisting of a thin narrow metal blade,

the form of a clasp having indicating marks corresponding with the notation of figures. 10th. A type-writing machine comprising a printing mechanism, a series of bell-crank levers having open ended slots, a pivotal rod within said slots, and a hook extending over said pivotal rod and the levers. 11th. A type-writer comprising a platen, a printing mechanism, a ribbon shifting frame, and a scale carried by said shifting frame.

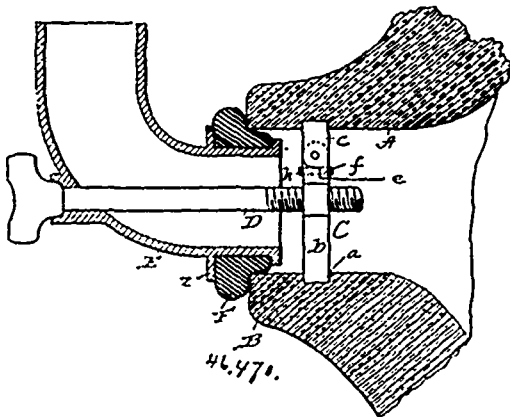
No. 46,469. Machine for Crimping Wire.
(*Machine à gaufrer le fil de fer.*)



James H. Smith, Ingersoll, Ontario, Canada, 4th July, 1894; 6 years.

Claim.—The combination of the wheels E, F, and cogs or plates J J, raised or depressed by means of the set screw G, and rubber block H, substantially as and for the purpose set forth.

No. 46,470. Coupling for Water Closets.
(*Joint pour cabinets d'aisances.*)

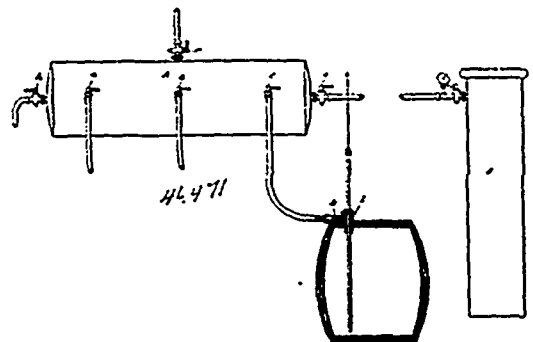


Joseph H. Savill, Philadelphia, Pennsylvania, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. In a coupling, the combination of a bowl or hopper, a nut or bearing secured in said bowl or hopper, and having a threaded aperture or bore, a pipe section, a cushion resting between the pipe section and the bowl or hopper, and a rod or bolt taking through the pipe section, and having threads to engage the threaded aperture or bore of the nut or bearing, substantially as and for the purpose set forth. 2nd. In a coupling, the combination of a bowl or similar fixture of frangible material having depressions as a, a nut or bearing seated in the said depressions and comprising two sections flexibly connected together, a pipe section, a cushion carried by said pipe section, and adapted to bear against the bowl, and a bolt or rod adapted to connect the pipe section and nut or bearing, substantially as specified. 3rd. In a coupling, the combination of a bowl or similar fixture of frangible material, having a boss provided with depressions in its inside, a nut or bearing comprising two flexibly connected sections and a band surrounding the sections, arranged in the said depressions, a pipe section, a cushion washer carried by said pipe section and adapted to rest between the same

and the boss, and a rod or bolt connecting the pipe section and the nut or bearing, substantially as specified. 4th. In a coupling, the combination of a water closet bowl or hopper having depressions as a, a nut or bearing arranged in said depressions and comprising a section having its inner side notched or recessed at its inner end, and another section flexibly connected to the first named section, and having its inner end reduced to engage the recess of said section, a pipe section, a cushion washer resting between the pipe section and the nut or bearing, substantially as and for the purpose set forth. 5th. The herein described coupling consisting of a nut or bearing comprising a section having its inner side notched or recessed at its inner end, and another section flexibly connected to the first named section, and having its inner end reduced to engage the recess of said section, a pipe section, a cushion carried by said pipe section, and a bolt or rod connecting the pipe section and the nut or bearing, substantially as specified. 6th. The herein described coupling comprising a nut or bearing, having a spring adapted to engage the flushing rim of a bowl or hopper so as to hold the nut or bearing in position in the bowl or hopper, a pipe section and a connection between the pipe section and the nut or bearing, substantially as specified. 7th. The herein described coupling comprising a nut or bearing, having a spring adapted to engage the flushing rim of a bowl or hopper so as to hold the nut or bearing in position in the bowl or hopper, a pipe section, a cushion carried by the pipe section and adapted to bear against the bowl or hopper, and a threaded bolt connecting the pipe section and the nut or bearing, substantially as specified. 8th. In a coupling, the combination of a water-closet bowl, a nut or bearing having a spring adapted to engage the flushing rim of the bowl so as to hold it in position in the bowl, a pipe section and a connection between the pipe section and the nut or bearing, substantially as specified. 9th. In a coupling, the combination of a water closet bowl, a nut or bearing having a spring adapted to engage the flushing rim of the bowl so as to hold it in position in the bowl, a pipe section, a cushion carried by the pipe section and bearing against the bowl, and a bolt connecting the pipe section and the nut or bearing, substantially as specified. 10th. As an improved article of manufacture, a nut or bearing having a spring adapted to engage the finishing rim of a water closet bowl, the said nut or bearing being designed for the engagement of a pipe connecting device, substantially as specified.

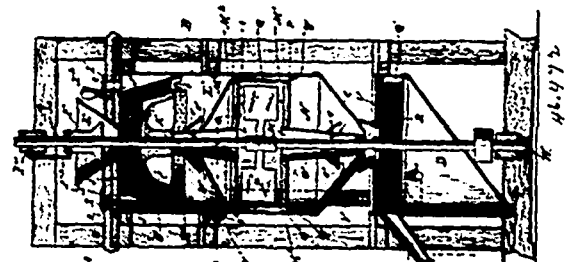
No. 46,471. Air Distributor for Beer Brewing Apparatus.
(*Distributeur d'air pour appareil de brassage de la bière.*)



Carl Raffin, Schwerte, Prussia, 4th July, 1894; 6 years.

Claim.—An air distributing device provided with means for cleaning the same, and adapted to be used in connection with pressure apparatus for beer brewing purposes, the main feature of the said air distributor being that it is connected with a water pipe or force pump, so as to facilitate the cleaning or cleansing thereof, constructed and arranged substantially as described.

No. 46,472. Grain Purifier. (*Epurateur de grains.*)

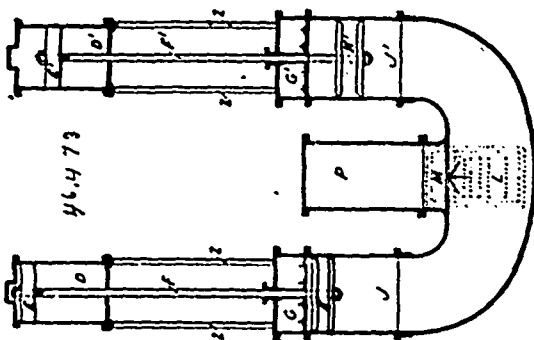


Frank M. Schell, Perry, Kansas, U. S. A., 4th July, 1894; 6 years.

Claim.—1st. In a grain purifier, the combination with the cylinder or casing having upper and lower suction chambers, the fan box arranged in the cylinder between said chambers and having its sides

separated from the cylinder or casing whereby to provide a passage between them for the grain, means for directing the grain between the fan box and the cylinder and the fan arranged to exhaust or suck the air from the upper and lower chambers, substantially as set forth. 2nd. In a grain purifier, the combination of the cylinder the fan box therein having its sides separated from the cylinder forming spaces for the passage of the grain, partition plates dividing said space into tapering passages and devices above and below the fan box for treating the grain, substantially as set forth. 3rd. In a grain purifier, the combination of the cylinder or casing the concave in the upper part thereof, the head operating in said concave, the fan box within said cylinder, upper and lower suction chambers being formed above and below the fan box, the sides of the box being separated from the cylinder forming a passage for the grain, substantially as set forth. 4th. In a grain purifier, the combination with the cylinder and the fan box therein of suction tubes extended up and down from said fan box and having inlet openings through which to exhaust the air from the upper and lower suction chambers, substantially as set forth. 5th. The combination, substantially as described of the cylinder, having its lower or discharge end tapered or conical, the fan box in said cylinder and separated at its sides therefrom forming a passage for the grain, the yielding surface concave and head operating in the cylinder above the fan box, suction tubes extended from the fan box into the suction chamber above and below the same the finishing chamber arranged to receive the grain from the cylinder and provided with a screen or sieve and a revolving brush thereon, and a pipe connecting the screenings box of said finishing chamber with one of the fan suction tubes, substantially as set forth. 6th. The combination of the cylinder or casing, fan chamber, the suction chamber, the tube extending from the fan chamber into the suction chamber and having openings *o* in the latter, and a guard *o'* partially covering said openings, substantially as set forth. 7th. The combination of the cylinder or casing having an inlet for the grain and below said inlet an outlet for such grain, the fan box arranged between said inlet and outlet and separated from the cylinder or casing by an intermediate passage whereby the grain may pass outside the fan box, and tubes or connections whereby the grain is subjected to the action of the exhaust above and below said fan case, all substantially as set forth. 8th. The combination with the fan box, the suction chamber below the same and the finishing chamber below the suction chamber, of the tube extended from the fan box downward through the suction chamber, having openings within the suction chamber and communicating at its lower end with the finishing chamber, substantially as set forth. 9th. In a grain purifier, the cylinder or casing provided with upper and lower suction chambers and an intermediate fan box connected therewith and having a passageway along the outside of said box connecting the upper and lower chambers, substantially as set forth. 10th. In a grain purifier, the combination with the cylinder, the finishing chamber having a discharge at *S* above its screen, and a screening box *D* below said screen, the pipe *V* leading from the screening box, the fan and connections whereby said fan will produce an exhaust in the said pipe *V*, substantially as set forth. 11th. The combination of the cylinder or casing, the suction chamber, the fan, the suction tube leading from the fan to the suction chamber, the screening box, the pipe *V* leading from said box and connecting with the suction tube an air inlet pipe *V'*, connecting with the pipe *V*, and a valve controlling the pipe *V'*, substantially as set forth.

No. 46,473. Method and Means for Compressing Gases. (*Méthode et moyen de compresser le gaz.*)

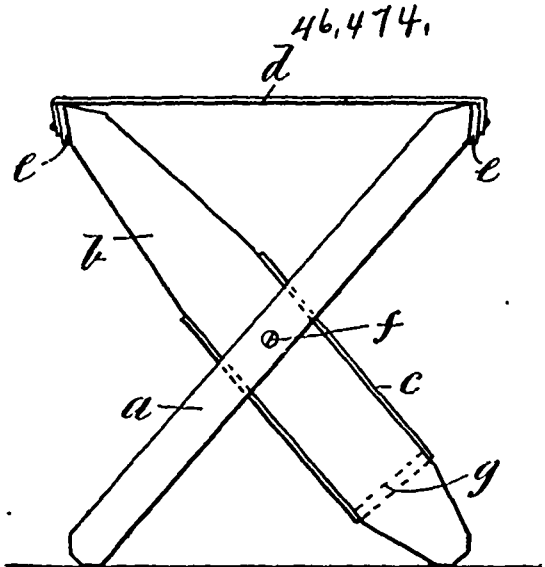


Daniel McGill, Wellington, New Zealand, 4th July, 1894; 6 years.

Claim.—1st. The method of compressing air or gas by direct steam pressure, consisting of the initial pressure of the steam discharging the air or gas when fully compressed and the resistance is great, and the expanding effort of the steam effecting the first compression of the air or gas when the resistance is small. 2nd. In an air or gas compressing engine, the combination with duplicate single acting air cylinders of a pipe or port connecting the open ends of said air cylinders, and filled with a liquid between said air pistons, of an air cushion or chamber communicating with the said connecting pipe or port by orifices, controlled by an externally operated valve. 3rd. In an air or gas compressing engine, the combination

of two single acting steam cylinders and pistons controlled by ordinary side valves, with two single acting air or gas compressing pistons, and cylinders with usual inlet and outlet air valves, and connected at ends opposite to air valves by a pipe or port filled with liquid, and an air cushion vessel thereon controlled by shut-off valve. 4th. In an air or gas compressing engine, the combination of duplicate single direct acting steam cylinders, and air compressing cylinders with steam and air pistons on single rod in each pair, with an auxiliary engine with crank, fly wheel and counter shaft, operating by compressed air or gas charge from compressors, the valve gear of said compressing direct acting engine.

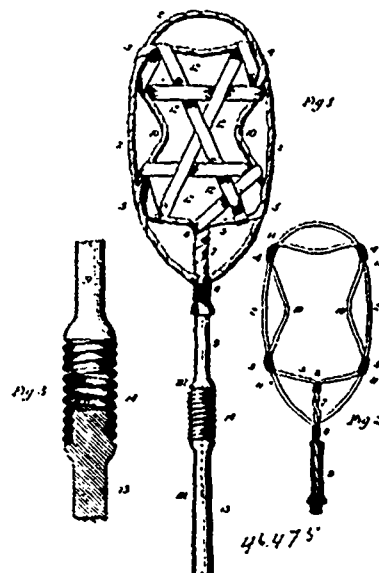
No. 46,474. Camp Stool. (*Tabouret de camp.*)



Agnes Ellis, 2 Lansdown Grove, Neasden, Middlesex, England, 4th July, 1894; 6 years.

Claim.—In a folding or camp stool, the combination of the parts constructed to dispense with the ordinary central rail, and in its place to provide a pocket or box which carries the pivots *f* upon which the folding stool works, substantially as herein described and for the purpose specified.

No. 46,475. Railway Car-seat. (*Siège de char de chemin de fer.*)



Henry Hazlitt Forsyth, Chicago, Illinois, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. A beater for railway car-seats, having a handle and a head which comprises a continuous marginal metal loop, and an inner brace situate substantially in the same plane, attached to the

marginal loop, and exerting on the latter a bracing action to resist its elongation, said metal loop and inner brace being twisted together at the end to form a common handle-shank, substantially as described. 2nd. A beater for railway car-seats, having a handle and a head which comprises a continuous marginal covered metal loop, and an inner bracing loop situate in substantially the same plane with the marginal loop, interwoven therewith, and attached thereto at the points of crossing, substantially as described. 3rd. A beater for railway car-seats, having a handle and a head which comprises a continuous marginal metal loop, and an inner bracing loop situate in substantially the same plane with the marginal loop interwoven therewith, and attached thereto at the points of crossing, the ends of the two loops being united to form a shank, substantially as described. 4th. A beater for railway car-seats, having a head comprising a metal loop, a flexible sheath or covering therefor, and flexible cross strips, substantially as described. 5th. A beater-head for railway car-seats, &c., comprising a flat open metallic frame work, having a flexible sheathing, substantially as and for the purposes described.

No. 46,476. Coating for Metal Building.
(*Peinture pour batisse en metal.*)

Sarah Eliza Pedler, assignee of George Henry Pedler, both of Oshawa, Ontario, Canada, 4th July, 1894; 6 years.

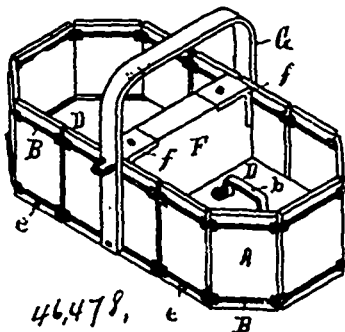
Claim.—A compound paint composed of graphite and metallic oxide prepared substantially in the proportions and manner and for the purposes above set forth.

No. 46,477. Fire Extinguishing Compound.
(*Compost à extincteur d'incendie.*)

The Muskegon Chemical Fire Engine Company, Muskegon, assignees of Albert C. Schumacher, Ann Arbor, all in Michigan U.S.A., 4th July, 1894; 6 years.

Claim.—1st. The herein described process of extinguishing fires, which consists in throwing upon the fire a stream carrying in solution an oxalate and a suitable oxidizing agent therefor, producing a fire extinguishing gas by the combination of the said chemicals when exposed to the heat of the fire, and thereby extinguishing the fire, substantially as described. 2nd. The herein described process of extinguishing fires, which consists in producing an operative pressure in the generator by the oxidization of oxalic acid by an oxidizing agent, propelling upon the fire by the pressure thus formed a stream carrying in solution an oxalate and suitable oxidizing agent therefor, producing a fire extinguishing gas by the combination of the said chemicals when exposed to the heat of the fire, and thereby extinguishing the fire, substantially as described. 3rd. The herein described process of extinguishing fires, which consists in throwing upon the fire a stream containing in solution an oxalate and manganese dioxide, producing carbonic acid gas by the action of the said chemicals when exposed to the heat of the fire, and thereby extinguishing the fire, substantially as described. 4th. The herein described process of extinguishing fires, which consists in forming an operative pressure in the generator by the action of oxalic acid and potassium permanganate, throwing upon the fire by the pressure thus formed a stream carrying in solution an oxalate and manganese dioxide, producing carbonic acid gas by the action of said chemicals when exposed to the heat of the fire, and thereby extinguishing the fire, substantially as described. 5th. A fire extinguishing compound consisting of the mixture in suitable proportions of an oxalate and manganese dioxide, substantially as described. 6th. A pressure producing and fire extinguishing compound consisting of the mixture in suitable proportions of oxalic acid, an oxalate, potassium permanganate, and manganese dioxide, substantially as described.

No. 46,478. Method of Making Baskets.
(*Méthode de faire des paniers.*)

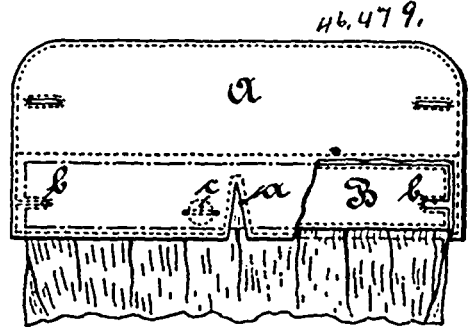


Albert Rodgers Tiffany, and Wesley Young, both of Dayton, Ohio, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. The process of making baskets which consists in uniting a series of notched slats by strands of wire embracing each

side of said slats and twisted together between the same, then twisting the opposite ends C, of said strands together forming the endless band of slats, then stretching the same into a basket shape by means of a form, and then inserting the bottom and nailing the parts together, substantially as specified. 2nd. The process of making baskets which consists in weaving a series of slats together by means of twisted strands of wire then forming the same into an endless band by twisting the surplus ends of said strands together, then stretching said band into the form of a basket having an anvil F, then inserting the bottom and adding the bale and nailing the parts together upon the form, substantially as specified. 3rd. In the process of forming baskets of an endless band formed of slats united by twisted woven wire, the form D adapted to be used for stretching the said band into the basket form, substantially as specified. 4th. A basket composed of an endless band of slats woven together by means of twisted strands of wire B, B, with the bottom E inserted in the end of the band abutting the lower strand, then uniting the endless band and bottom together, substantially as specified.

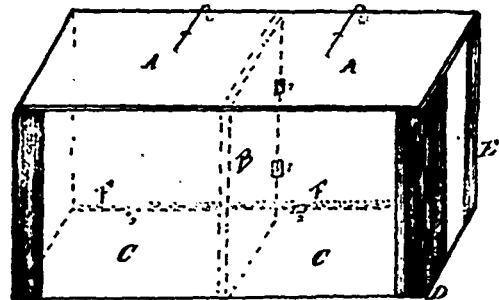
No. 46,479. Shirt and Cuff. (*Chemise et poignet.*)



Carl C. F. Hermann Von Clauson-Kaas, Dresden, and Egon E. Von Nisher, Charlottenburg, all in the German Empire, 4th July, 1894; 6 years.

Claim.—1st. The combination with a shirt of detachable cuffs each forming apparently one piece with the sleeve being adapted to hide the wrist-band the connection between the sleeve and cuff being effected by a doubling of the cuff to form a pocket in which the wrist-band is secured, substantially as described. 2nd. The combination with a shirt of a detachable cuff having a double edge or pocket in which the wrist-band is adapted to be secured by buttons, substantially as described. 3rd. The combination with a shirt of a detachable cuff having a double edge or pocket in which the wrist-band is adapted to be secured by rows of sewing and recesses, substantially as described. 4th. The combination with a shirt of a detachable cuff having a double edge or pocket in which the wrist-band is adapted to be secured by a hooked or folded-over extension, substantially as described. 5th. The combination with a shirt of a detachable cuff having a double edge or pocket in which the wrist-band is adapted to be secured by engaging cuff and wrist-band extensions, substantially as described. 6th. The combination with a shirt of a pocket or bent-over wrist-band and a cuff having a hooked or folded over extension, substantially as described.

No. 46,480. Folding Box. (*Boite pliante.*)

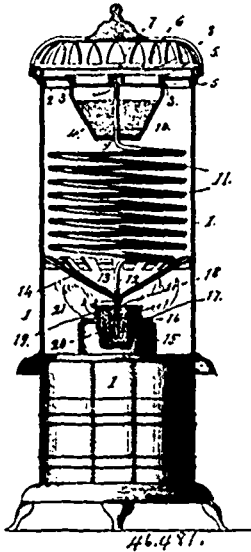


William J. Sharman, Langford, and William J. Hamilton, Neepawa, all in Manitoba, Canada, 4th July, 1894; 6 years.

Claim.—1st. A box with the partition and bottom attached to the sides which will fold to the side of the box, substantially as described. 2nd. A box having hinges on the corners at right angles to each other, the side of the part of the hinges on the end of the box being of such length as the combined thickness of the material used in the construction of the sides, bottom and partition of the box. 3rd. A

box having the opposite corners of the sides and ends of the box bevelled and fastened together by means of hinges, substantially as described. 4th. A box that when the partition and bottom is turned up close to and parallel with the side of the box will fold up to the thickness of the material used in constructing the sides, partition, bottom and lid, substantially as described.

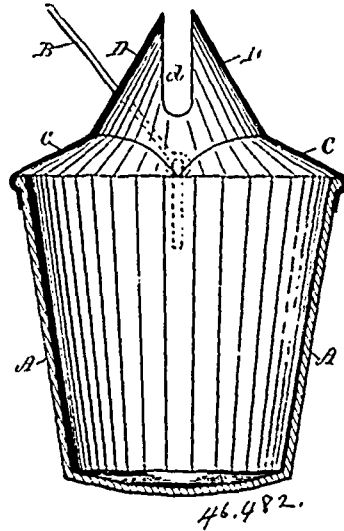
No. 46,481. Stove. (Poêle.)



Ferdinand Meyrose, St. Louis, Missouri, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. In an oil stove, a water reservoir or tank normally held in the upper portion of said oil stove, a coil of pipe leading from said water tank, and a discharge chamber located adjacent the wick of said oil stove and into which said coil discharges, substantially as shown and described. 2nd. In an oil stove, a water reservoir, or tank, located in the upper portion of said oil stove, a series of steam discharge pipes leading from said water tank, said pipes formed into coils immediately below said water tank, one of said pipes discharging into a discharge chamber centrally located within the circular wick of said oil stove, and a ring formed of pipe into which the mating pipe of the series discharged, said ring being located on the outside of the circular wick, substantially as specified. 3rd. In an oil stove, a water tank and steam chamber located in the upper part of said oil stove, a pipe leading from said steam chamber and water tank and formed into a coil immediately below said water tank, a discharge chamber having a series of perforations, or apertures, located adjacent the wick, and into which discharge chamber the depending portion of the coil discharges, substantially as specified. 4th. In an oil stove, a thimble shaped discharge chamber provided with the closed top and a series of apertures located in the upper portion of the wall of said thimble shaped discharge chamber, said chamber being secured to and held within and adjacent the circular wick of the oil stove, substantially as specified. 5th. In an oil stove, a water tank and steam chamber located in the upper portion of said oil stove, a pipe leading from said steam chamber and water tank, a coil formed in said pipe immediately below said water tank and steam chamber, a discharge chamber located adjacent the wick of said oil stove, and into which the depending pipe of the coil discharges, said discharge chamber being provided with a series of apertures, or perforations, in a plane immediately above the upper point of the wick in the manner described and for the purposes specified. 6th. In an oil stove, a water tank and steam chamber located in the upper portion of said oil stove, a pipe leading from said chamber and water tank, a coil formed in said pipe immediately below said water tank and steam chamber, a discharge chamber located adjacent the wick of said oil stove, and into which the depending pipe of the coil discharges, said discharge chamber being provided with a series of apertures, or perforations, in a plane immediately above the upper point of the wick in the manner described and for the purposes specified. 7th. In an oil stove, a water tank and steam chamber located in the upper portion of said oil stove, a cover for said water tank and steam chamber, said cover formed with an annular depression a centrally located upwardly extending portion, substantially as specified. 8th. The stove provided with the water tank and the coil located within the stove and communicating with said tank, the exit opening from said coil being at a point above the flame. 9th. The stove provided with the water tank and the coil leading from the steam chamber therein, which said coil is located within the stove and has an exit port immediately above, and in close proximity to, the flame emanating from the stove.

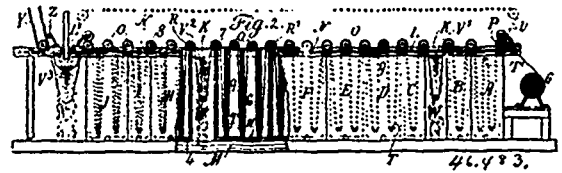
No. 46,482. Fire Pail. (Seau à incendie.)



Frank B. Comins, Providence, Rhode Island, U.S.A., 4th July 1894; 6 years.

Claim.—As a new article of manufacture, the herein described cover and nozzle for fire pails, consisting of a rigid truncated cone-shaped base C, provided with an open annular bottom having a depending flange for engaging the top of the pail and an elongated, flattened and gradually tapering nozzle D, having parallel edges, and an elongated slotted delivery mouth for ejecting the contents of the pails in a broad, flat sheet, substantially as shown and for the purpose specified.

No. 46,483. Apparatus for Developing, Fixing and Toning Photographs. (Appareil à développer, poser et donner du ton aux photographies.)



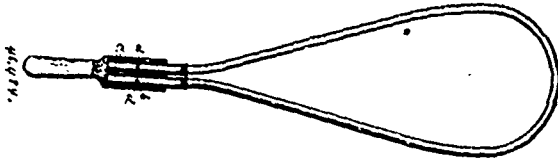
Elmer F. Mackusick, New York, State of New York, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. In an apparatus for developing, fixing and toning photographs, a series of tanks for containing the chemical solutions, a series of rollers crossing the top edges of the tanks, a longitudinal shaft with screw pinions and gears on the axes of the respective rollers for rotating the rollers at a uniform speed, tank rollers in the lower parts of the respective tanks, and an endless belt passing over the upper rollers and below the tank rollers for carrying through the respective solutions the photographic paper from the roll, substantially as set forth. 2nd. The combination in an apparatus for developing, fixing and toning photographs, of a range of tanks for holding the chemical solutions, rollers crossing the upper ends of the tanks, and mechanism for driving the rollers at a uniform speed, a pair of feeding in rollers for the photographic paper, and endless belts composed of strips of rubber encasing metallic wires for carrying the web of photographic paper through the respective solutions, substantially as set forth. 3rd. The combination in an apparatus for developing, fixing and toning photographs, of a range of tanks for containing the chemical solutions, vertically slotted channel bars connected to the interior surfaces of the tanks, tank rollers having their axes extending into the channel bars, and by which the rollers are guided and held in position near the bottoms of the respective tanks, the rollers crossing the upper ends of the tanks, mechanism for rotating the rollers at a uniform speed, and endless belts passing over the upper rolls and below the tank rolls for conveying through the respective tanks the photographic paper, substantially as set forth. 4th. The combination in an apparatus for developing, fixing and toning photographs, of tanks for containing the chemical solutions, rollers crossing the tanks, and mechanism for rotating the rollers at a uniform speed, endless belts passing over such rollers and extending down between one tank and another and to which the photographic paper is connected, and a perforated pipe for spraying water upon the paper between one tank and another, substantially as set forth. 5th. The combination in an apparatus for developing, fixing and toning photographs, of a range of tanks for

containing the chemical solutions, an inclined gutter under such tanks, stoppers in the tanks for allowing the contents to run off, perforated water pipes between one tank and another, rollers crossing the respective tanks, and endless belts to which the photographic paper is connected, and by which the same is carried through the respective tanks, substantially as set forth.

No. 46,484. Carpet Beater.

(Machine à nettoyer les tapis.)

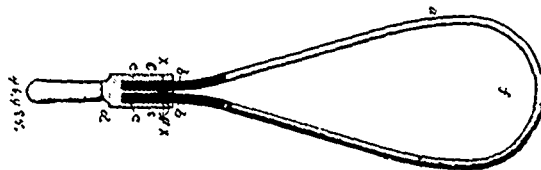


Franklin L. Goodenough, Windsor, New York, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. The herein described whipping loop, provided with flaring mouthed ferrules or sleeves, in combination with a handle portion adapted to receive said ferrules, substantially as described. 2nd. The combination with an inflexible handle provided with longitudinal sockets, a whipping loop having its ends embraced by flaring mouthed sleeves or ferrules projecting beyond the end of the handle, and transverse pins or nails passing through said ferrules and ends, substantially as described.

No. 46,485. Carpet Beater.

(Machine à nettoyer les tapis.)

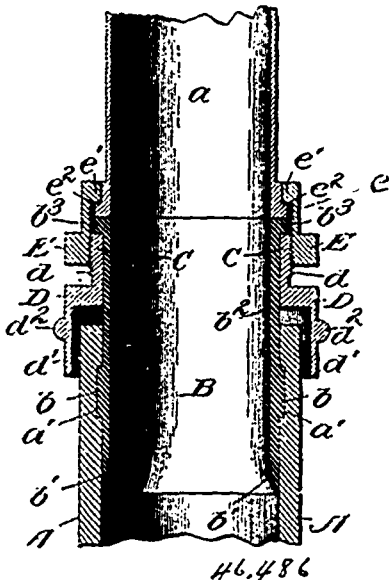


Franklin L. Goodenough, Windsor, New York, U.S.A., 4th July, 1894; 6 years.

Claim.—The combination with a separable and inflexible handle, having parallel sockets extending lengthwise of the handle and located side by side, of a whipping loop made of a rod of flexible wood, having its ends provided with metal cores which extend beyond the end of the handle, a wedge inserted transversely through the handle between the contiguous ends of the rod and in engagement with said ends, substantially as described.

No. 46,486. Flexible Pipe Coupling.

(Joint flexible de tuyau.)

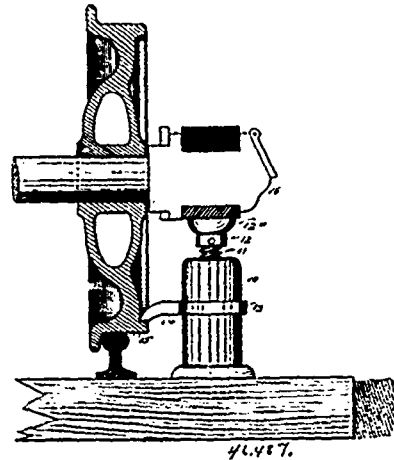


James Andrew Lynch, Saint Louis, Missouri, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. The combination with a water closet bowl, having a horn of a metallic nipple having a hollow side designed to over-

lap and enclose said horn and said flexible nipple for connecting the same to the pipe. 2nd. The combination with a water closet bowl, having a horn, of a metallic nipple having a hollow shield designed to overlap and enclose said horn, a flexible nipple provided with a flange fitting within an interior groove of said horn, and designed to unite the latter and said metallic nipple, and means of engaging the metallic nipple for connecting the same to a pipe, substantially as set forth. 3rd. The combination, with a water closet bowl having a horn, of a metallic nipple having a shield designed to overlap and enclose said horn, and a flexible nipple provided with a flange fitting in an interior groove of said horn, said flexible nipple being also provided with end flanges against which bears the end of said metallic nipple, and means of engaging said metallic nipple for connecting the same to a pipe and binding said flanged end of said flexible nipple, between said metallic nipple and said pipe, substantially as set forth. 4th. The combination, with a water closet bowl, having a horn, of a metallic nipple having a shield designed to fit in said horn, and a coupling nut engaging said metallic nipple and designed to connect the latter to a pipe and to bind said flexible nipple between said metallic nipple and said pipe. 5th. The combination with a water closet bowl, having a horn and a pipe, of a flexible nipple secured to said horn and projecting therefrom, a metallic nipple enclosing said flexible nipple and the coupling nut engaging said flexible nipple and holding the same and said flexible nipple to said pipe, substantially as set forth. 6th. The combination of a water closet bowl having a horn, of a flexible nipple secured to the interior of said horn, a metallic nipple enclosing said flexible nipple and designed to overlap and enclose said horn, a pipe, and a coupling nut engaging said metallic nipple and binding said flexible nipple to said pipe, substantially as set forth. 7th. The combination with a bowl having a horn provided with an inner groove or recess, of a flexible nipple fitted in said horn and having an outer flange corresponding to said groove or recess, the metallic nipple having a shield extended therefrom and enclosing said flexible nipple and the end of said horn, and the coupling nut, substantially as set forth. 8th. The combination with a bowl having its horn provided with an inner groove or recess, and a pipe designed to be connected thereto and having a flanged end, of the rubber or flexible nipple having a circumferential flange fitting said groove or recess and also having an outer flanged end, the metallic nipple enclosing said flexible nipple and having an exterior thread, a cylindrical shell extending from said nipple and enclosing the end of said horn, and the interiorly threaded coupling nut having a flange and designed to bind the flanged ends of said pipe and flexible nipple, substantially as set forth.

No. 46,487. Lifting Jack. (Cric.)



Allan Amander Smith, Grande Island, Nebraska, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. A lifting jack consisting of a body having lifting devices, and a laterally extending device for engaging the car wheel, said laterally extending device being capable of inward and outward movement, substantially as described. 2nd. A lifting jack consisting of a body having lifting devices and a laterally extending flange provided with a spring-acted extension piece, substantially as described. 3rd. A lifting jack for the purpose specified, consisting of an elongated body or base, a lifting device connected therewith, a ring which is slidable vertically on said base and provided with a lateral flange adapted to engage the rim of the car wheel, as and for the purpose specified.

No. 46,488. Burning Fluid. (Fluide à brûler.)

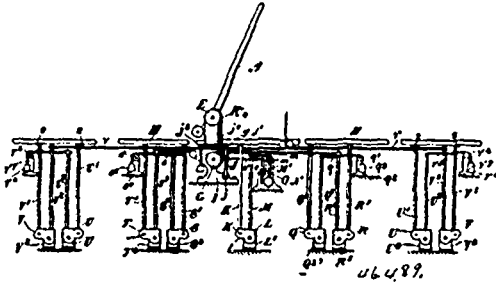
William R. Wales, and Robert A. Buehl, both of Buffalo, New York, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. A non-explosive burning fluid consisting of the following ingredients, viz: Irish potatoes, pulverized copperas, salt,

sulphuric acid, pulverized alum, bi-carbonate of soda, nitrate of soda, and spirits of petroleum combined in the proportions stated and in the manner described. 2nd. A non-explosive and non-odoriferous burning fluid consisting of the following ingredients, viz: Irish potatoes, pulverized copperas, salt, sulphuric acid, pulverized alum, bi-carbonate of soda, nitrate of soda, spirits of petroleum, pyroligneous acid, oil of murvain and gum camphor combined in the proportions stated and in the manner described.

No. 46,489. Automatic Railway Gate and Signal.

(*Barrière et signal de chemin de fer automatique.*)

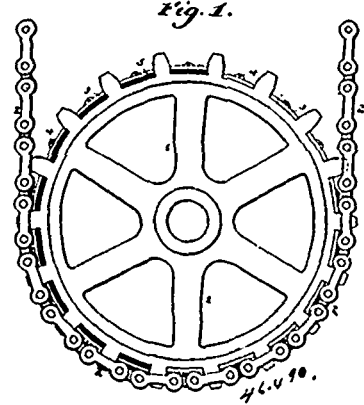


Edward Death and Edward W. Wyatt, both of Toronto, Ontario, Canada, 4th July, 1894; 6 years.

Claim.—1st. In an automatic railway gate and signal, a weighted gate journalled in a suitable standard and having a wheel connected by a belt to a corresponding wheel journalled beneath the road-bed, of a wire or cord having one end partially wound round the wheel and connected at the other end to an upright rigidly attached to a pivoted bell crank which has a vertical plunger pivotally connected to it at one end and extending upwardly so as to abut the bottom of the rail, and so arranged upon the subsidence of the rail the bell crank is tilted on its pivot so that the wire or cord is pulled to partially rotate the wheel journalled beneath the road-bed, as and for the purpose specified. 2nd. In an automatic railway gate and signal, a weighted gate journalled in a suitable standard and having a wheel connected by a belt to a corresponding wheel journalled beneath the road-bed, a wire or cord having one end partially wound round the wheel and connected at the other end to an upright rigidly attached to a pivoted bell crank which has a vertical plunger pivotally connected to it at one end and extending upwardly so as to abut the bottom of the rail so arranged, upon the subsidence of the rail the bell crank is tilted on its pivot, so that the wire or cord is pulled to partially rotate the wheel journalled beneath the road-bed, and means whereby such lower wheel is locked, so as to lock the gate down and unlock it so as to allow the gate to swing upwardly, as and for the purpose specified. 3rd. The combination with the gate A, provided with a weighted end B, pivoted at a, on the standard A¹, and having a wheel E, journalled on the pivot stud, of the belt F, connecting the wheel E, to the wheel G, the cord r, connected to the uprights R², of the bell cranks R, and the plungers R¹, pivoted in the end of the bell cranks and abutting the rail at the top, the bar J, having a tooth j¹, designed to lock the wheel C, by means of the tooth g, being brought underneath the tooth j¹, and having connected to its upper end a cord j², which passes over a pulley j², and is provided with a weight j⁴, as and for the purpose specified. 4th. The combination with the gate A, provided with a weighted end B, pivoted at a, on the standard A¹, and having a wheel E, journalled on the pivot stud, of the bolt F, connecting the wheel E, to the wheel G, the cord r, connected to the upright R², of the bell cranks h, and the plungers R¹, pivoted in the end of the bell cranks and abutting the rail and the top, the bar J, having a tooth j¹, designed to lock the wheel G, by means of the tooth g, being brought underneath the tooth j¹, and having connected to its upper end a cord j², which passes over a pulley j², and is provided with a weight j⁴, and means whereby the bar J, is moved from the wheel G, so as to unlock the teeth g and J¹, as and for the purpose specified. 5th. The combination, with the gate A, provided with a weighted end B, pivoted at a, on the standard A¹, and having a wheel E, journalled on the pivot stud, of the belt F, connecting the wheel E, to the wheel G, the cord r, connected to the uprights R², of the bell-cranks R, and the plungers R¹, pivoted in the end of the bell-cranks and abutting the rail at the top, the bar J, having a tooth j¹, designed to lock the wheel G, by means of the tooth g, being brought underneath the tooth j¹, and having connected to its upper end a cord j², which passes over a pulley j², and is provided with a weight j⁴, and the bell-crank L, provided with plungers K, uprights M, connected by a cord n, to the weighted lever M¹ the lever O, connected by the cord O¹, to the pivoted bar J, the plungers K, being so arranged that upon the subsidence of the rail as the train is passing over them to tilt their respective bell-cranks and thereby raise the weighted lever M¹, and upon the train having passed to allow of the lever M¹, swinging downwardly and striking the lower end of the lever O, so as to draw upon the bar J, and free the tooth g, of the wheel G, from engage-

ment with the tooth j¹, of the bar J, as and for the purpose specified. 6th. The combination, with the gate A, bolt F, and wheel G, all arranged as specified, of the bell-cranks R, provided with plungers R¹, and uprights R², the uprights R², being connected by the cord r, to the wheel G, and the bell-crank Q, plunger Q¹, upright Q², and plungers R¹, connected by the cord q, which passes over the pulley q¹, and provided with a weight q², all arranged to one side of the crossing and operating as specified and corresponding bell-cranks S, plunger S¹, upright S², cord s, pulley s¹, and weight s², pulley crank T, plunger T¹, plunger T², cord t, connected to the upright T² at one end, and to the wheel C at the opposite end, all arranged to co-act as shown and for the purpose specified. 7th. The combination, with the bell-crank U, plunger U¹, and upright U², cord v¹, pulley v², and weight v³, and bell-crank V, plunger V¹, and upright V², connected to the cord v, arranged with one set at each side of the crossing as specified, and the other end of each cord v, passing round the pulleys v², and being connected to the cord v¹, which is connected to the arm by which the bell is swung, as and for the purpose specified. 8th. The combination, with the bell-cranks, plungers and uprights all arranged to operate as specified upon the subsidence of the rail, of the stop blocks 2, arranged to abut each plunger when in its normal position, as and for the purpose specified.

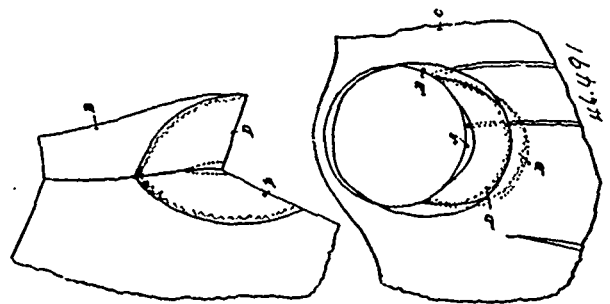
No. 46,490. Sprocket Wheel. (Roue dentée.)



Peter D. Murphy and Edward Kobb, both of Lockport, New York, U.S.A., 5th July, 1894; 6 years.

Claim.—1st. In a sprocket wheel having removable plates secured to the periphery of the wheel adapted to fit between the teeth, for the purpose described. 2nd. In a sprocket wheel, the combination with the wheel, of plates adapted to fit upon the periphery thereof between the teeth and the interposed packing, for the purpose described. 3rd. A sprocket wheel having removable plates secured between the teeth in length equal to the distance between said teeth, for the purpose described.

No. 46,491. Body Garment. (Vêtement.)



Frederick W. Warner, Rochester, New York, U.S.A., 5th July 1894; 18 years.

Claim.—1st. A body garment having an arm opening, and a pocket formed in the garment directly below said arm opening with its mouth in close proximity to it, whereby one side of a dress shield may be inserted in said pocket and the shield removably held directly beneath the arm of the wearer, substantially as described. 2nd. As an article of manufacture, a body garment having the arm opening, the sleeve secured thereon, and a pocket formed in the body directly beneath the arm hole, and a pocket in the underside of the sleeve close to the arm opening, said pocket adapted to

receive the two sides of a dress shield and hold it directly beneath the arm of the wearer, substantially as described. 3rd. A garment such as described having an arm opening and a sleeve secured therein, and pockets in the body of said garment and sleeve respectively opening at the sleeve hole or seam uniting the sleeve and body, and adapted for the reception of the two halves of a dress shield, substantially as described.

No. 46,492. Method of Utilizing Sulphite Liquor.
(Méthode d'utiliser les liqueurs de sulfite.)

Carl Daniel Ekman, London, England, 5th July, 1894; 6 years.

Claim.—1st. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulfite process, which method consists in first making the liquor alkaline, then concentrating it, then adding thereto a colour-improving agent, then adding thereto a soluble salt to separate from said liquor a dextrine-like product, and then after removal of said product, adding gelatine or glue to the said liquor, substantially as and for the purposes hereinbefore described. 2nd. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process, which method consists in first making the higher alkaline, then concentrating it, then adding thereto a colour-improving agent, and then adding thereto a soluble salt to separate from said liquor a dextrine-like product, substantially as and for the purpose hereinbefore described. 3rd. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process, which method consists in first making the liquor alkaline, then concentrating it and then adding thereto a soluble salt to separate from said liquor a dextrine-like product, substantially as and for the purpose hereinbefore described. 4th. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process, which method consists in adding to the liquor a colour-improving agent, and then adding thereto a soluble salt to separate from said liquor a dextrine-like product, substantially as and for the purpose hereinbefore described. 5th. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process, which method consists in adding to the liquor a soluble salt to separate therefrom a dextrine-like product and then after removal of said product adding gelatine or glue to the said liquor, substantially as and for the purposes hereinbefore described. 6th. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process, which method consists in adding to the liquor a soluble salt to separate therefrom a dextrine-like product and then after removal of said product adding gelatine or glue to the said liquor, substantially as and for the purposes hereinbefore described. 7th. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process, which method consists in first making the liquor alkaline, then concentrating it then adding thereto a soluble salt to separate from said liquor a dextrine-like product, and then after removal of said product adding gelatine or glue to the said liquor, substantially as and for the purpose hereinbefore described. 8th. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process which method consists in first concentrating the liquor, then adding a colour-improving agent, then adding thereto a soluble salt to separate from said liquor a dextrine-like product, and then after removal of said product adding gelatine or glue to the said liquor, substantially as and for the purposes hereinbefore described. 9th. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process which method consists in first adding to the liquor a base whereby it is made slightly alkaline and then concentrating the liquor whereby it is rendered fit for use as a paste or adhesive substance, substantially as hereinbefore described. 10th. The method of treating the liquor resulting from the manufacture of cellulose or fibres by the sulphite process, which method consists in first adding to the liquor a base whereby it is made slightly alkaline and then concentrating the liquor whereby it is rendered fit for use as a paste or adhesive substance, and then adding thereto a colour-improving agent, substantially as hereinbefore described.

No. 46,493. Explosive. (Explosif.)

Benjamin Cory Pettingell, Victoria, British Columbia, 5th July, 1894; 6 years.

Claim.—A new and explosive compound composed of nitro-glycerine combined with niterized coal dust as an absorbent base, substantially as described.

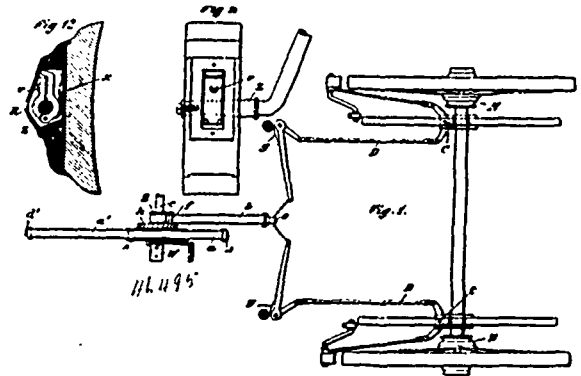
No. 46,494. Process of and Compound for Waterproofing Soles of Shoes. (Procédé et composé pour rendre les semelles des chaussures imperméables.)

Edward H. Lewis, St. Louis, Missouri, U.S.A., 5th July, 1894; 6 years.

Claim.—1st. The process herein described of preventing water or oil from passing through the seams, joints, tack, peg or awl holes of shoe soles, which consists in applying over the welt and insole, or over the seams, joints, tack, peg or awl holes of the shoe, a waterproofing compound, substantially as described. 2nd. The herein described process of preventing water or oil from passing through the seams, joints, tack, peg or awl holes of shoe soles, which con-

sists in applying over the welt or over the seams, joints, tack, peg or awl holes, a waterproofing compound, and then attaching the outer sole, substantially as described. 3rd. The herein described process of preventing water or oil from passing through the seams, joints, tack, peg or awl holes of shoe soles, which consists in applying over the welt and insole, or over the seams, joints, tack, peg or awl holes a waterproofing compound consisting of wax, powdered talc or steatite and rubber, substantially as described. 4th. The herein described compound for waterproofing the seams, joints, tack, peg or awl holes of shoe soles, which is composed of wax, talc, or steatite in a powdered form, and rubber caoutchouc, substantially as described. 5th. The herein described compound for preventing water from passing through the seams, joints, tack, peg or awl holes of shoe soles, consisting of a composition of wax, two and one-half pounds, powdered talc or steatite three pounds, and rubber paste or caoutchouc, four pints, compounded in the manner stated, and substantially in the proportions herein specified.

No. 46,495. Brake for Carriages. (Frein de voiture.)



Ernst Hecht, Paul Rasche and Berthold Krug, all of Tempelhof, Prussia, 5th July, 1894; 6 years.

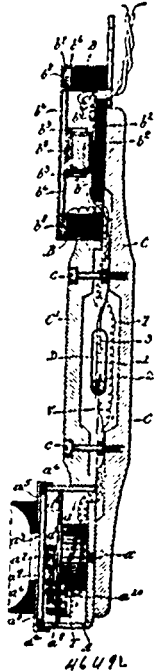
Claim.—1st. The respective combination of parts forming our improved brake apparatus for vehicle wheels, substantially as respectively described and illustrated by the accompanying drawing. 2nd. An apparatus for applying brakes to the wheels of road vehicles, consisting essentially of a drum such as A, of a drum such as B, formed on or attached to the drum A, of a band such as a wound on the drum A, and having a handle such as d at its free end, and of a band such as b wound on the drum B, and connected at its other end to the brake gear, as set forth. 3rd. In a brake apparatus, the use of a band such as a wound on a drum such as A, which band on being drawn off the said drum causes a second drum such as B to rotate and wind up a band such as b connected to and operating the brake gear, as set forth. 4th. In a brake apparatus, the use of two or more bands such as a and a' wound on the same drum A, to provide for the application of the brake from different points, as set forth. 5th. In a brake apparatus, such as is specified in claim 2, increasing the effective radius of the drum B at one point by means of a pin or projection such as f, for the purpose of suitably varying the load leverage of the brake at the proper moment, as set forth. 6th. In a brake apparatus, such as is specified in claim 2, the device for automatically winding the pulling band b on to the drum B, to the required extent to cause the brake shoes to retain a fixed position with respect to the periphery of the wheel, consisting of a movable pawl such as m, of a ratchet wheel such as h', fixed on the shaft c, carrying the drums A and B, and of a spring such as F, adapted to bear at one end against the said pawl, and at the other end against a projection such as r', on the drum A, as set forth. 7th. In a brake apparatus, the use of rocking bars such as C pivoted on the wheel axle, one arm of each of the said rocking bars being connected with the operating band b or its equivalent through suitable connections, and the other arm of each of the rocking bars being connected with the levers carrying brake blocks by means of suitable connections, as and for the purpose set forth. 8th. A brake gear, consisting essentially of a band such as O loosely encircling the hub of the wheel, of a loose band M, located under the band O, and adapted to engage with and to be readily moved around the hub, of a rod such as G connecting the eye M', on the band M with the brake shoe, of a lever such as H, and an operating rod such as D, all combined, arranged and adapted to operate. 9th. In a brake shoe, the use of a clamping friction ring such as R, and of a spring such as X, to keep the brake shoe in its proper position relative to the periphery of the wheel.

No. 46,496. Telephone. (Téléphone.)

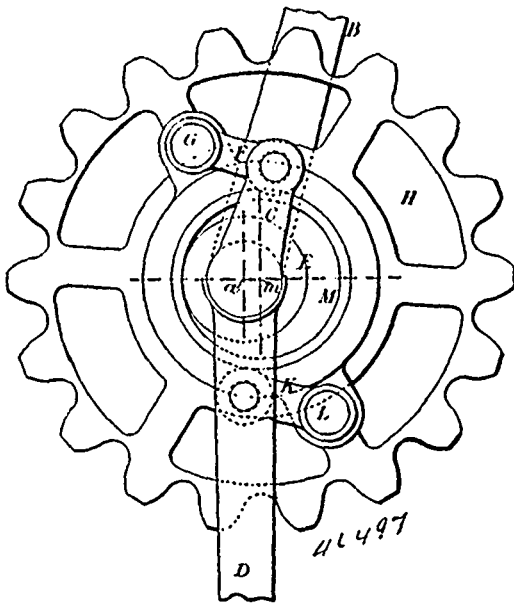
Parnell Rabbidge, London, England, 5th July, 1894; 6 years.

Claim.—1st. As a new article of manufacture, a portable telephone instrument, which consists of a suitable handle carrying a receiver, a transmitter, an alarm or call, and a switch, arranged and combined in one and the same instrument, as set forth. 2nd. A telephone

receiver in which the diaphragm is vibrated by an interrupted or intermittent current of electricity, whereby emitting a sound which serves as an alarm or call, in combination in one and the same instrument, with a transmitter and a switch, all having a common carrying handle as herein set forth. 3rd. The combined electrical alarm or call and receiver for telephones comprising a case or box, a bobbin with extended core and insulated plate, a metal diaphragm, suitable retaining cap carrying ear piece, a spring armature contact breaker situate between the bobbin plate and the diaphragm, a gravity switch and suitable terminals and connections for line and battery, as set forth. 4th. The combination of microphone or transmitter for telephones consisting of an outer casing or box having a base or back plate, an inner open faced metal box secured to such back plate and containing a carbon block, an india rubber ring encircling such inner box and projecting forward beyond the open face of same, a diaphragm suitably secured in close proximity to said ring, and the space between said carbon block and diaphragm containing loose grains of carbon, with suitable terminals and connections for line and battery, as set forth. 5th. In telephonic apparatus, the combination, in one and the same instrument having a suitable carrying handle of a combined alarm or call, and receiver, with a gravity switch all mounted within or upon such handle, as and for the purpose shown and described. 6th. In telephonic apparatus, the combination of a portable transmitter with a gravity switch, as set forth. 7th. An electric alarm or call constructed and arranged as shown and described.



No. 46,497. Driving Mechanism for Velocipedes.
(Mécánisme conducteur pour vélocipedes, etc.)



John Birrell Robertson, Belfast, Ireland, 5th July, 1894; 6 years.

Claim.—In a velocipede or other foot driving machine, mounting the two pedal levers on an axle on which they are free to rotate independently, and connecting them to cranks on a driving wheel the axis of which is eccentric to that of the pedal axle, substantially as and for the purpose set forth.

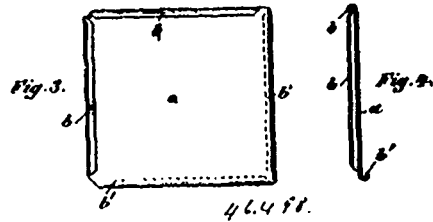
No. 46,498. Metal Folding Plate.

(Feuille métallique pliante.)

Theodor Hildebrand, Gartow, Kingdom of Prussia, 5th July, 1894; 6 years.

Claim.—A tile or plate for roofing of all kinds, made of a quadrangular shape and formed with grooves or channels along each of its sides, the grooves or channels along two adjacent sides being turned to the front of the tile or plate, and the other pair turned to

the rear of the tile or plate so that two or more tiles or plates can be joined together in a firm and tenacious manner by simply interlock-



ing their oppositely disposed grooves or channels, substantially as described and illustrated.

No. 46,499. Dyeing Process. (Procédé pour teindre)

Ernest Heaffely, Barmen, Rhemish, Prussia, Empiro of Germany, 5th July, 1894; 6 years.

Claim.—1st. The process for producing turkey red and rose colour on vegetable yarns in cops, hanks, carded strips and the like which consists in oiling and mordanting them in the usual manner, then dyeing them in a cold solution of alizarine, freeing them from the residual free alizarine and its solvent by a suitable menstrum such as acidulated water, and again oiling them, steaming them and finally clearing them in a bath of hot soap, substantially as described. 2nd. The improvement in the process of turkey red dyeing which consists in immersing the previously mordanted material in a cold solution of alizarine containing an excess of alizarine beyond that capable of being taken up by the mordant. 3rd. In the process of dyeing turkey red, previously mordanting the material, treating it with a cold solution of alizarine, the said alizarine being in great excess, removing mechanically a large part of the excess of uncombined alizarine and its solvent, and then washing the hanks in acidulated water (or other solvent of alizarine from which the alizarine can be again precipitated) whereby there is no waste in alizarine. 4th. In the process of turkey red dyeing, the method of regulating the amount of alizarine which consists in supplying only a given amount of mordant and using an excess of alizarine beyond what the mordant can take up, and afterwards removing that excess. 5th. The improvement in the process of turkey red dyeing, the method of preventing an excess of colour in the outer portion of the hanks beyond what there is in the inner portion, which consists in thoroughly saturating the mordanted hanks with a solution of alizarine much stronger than that required to combine with the mordant, whereby the solution, by the time it has penetrated to the centre of the hank, is still strong enough to saturate all the mordant in that central portion, substantially as described.

No. 46,500. Method of Converting Iron and Steel.

(Méthode de convertir le fer en acier.)

John Alexander Hunter, Philadelphia, Pennsylvania, U.S.A., 5th July, 1894; 6 years.

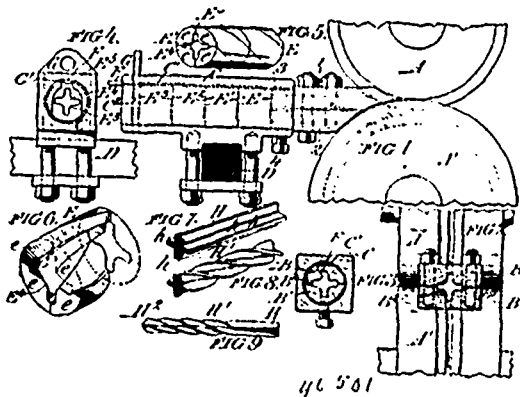
Claim.—1st. The mode herein described of converting cast iron into steel, said mode consisting in subjecting the iron while highly heated or in a molten state to a bath of oxygen, generated by the action of hydrochloric acid upon chloride of lime, with or without the addition of salt, substantially as specified. 2nd. The mode herein described of increasing the percentage of carbon in wrought iron or low steel, said mode consisting in subjecting the iron or steel, while heated or in a molten state, to the action of oxygen, which has previously been brought into contact with carbon, substantially as specified.

No. 46,501. Twisting Machine. (Machine à tortiller.)

George H. Sellers, Wilmington, Delaware, U.S.A., 5th July, 1894; 6 years.

Claim.—1st. As a device for twisting flanged bars, a sectional twist die E made up of parts e, e, e, e, equal to the number of flanges in the bar, and each adapted to lie between adjacent flanges. 2nd. As a device for twisting flanged rods, a sectional twist die E made up of parts e, e, e, e, equal to the number of flanges on the bar, and each adapted to lie between adjacent flanges, in combination with a box C adapted to hold the die sections together while permitting their ready removal with a twisted bar. 3rd. As a device for twisting flanged rods, a series of sectional twist dies E, E', etc., made up of parts e, e, e, e, equal in number to the flanges on the bar to be twisted, and each section adapted to lie between adjacent flanges, in combination with a holder as box C, adapted to hold the dies in position while permitting their removal with a twisted bar. 4th. As a device for twisting flanged rods, a pair of grooved rolls A, A', in combination with a die holder C situated in front thereof, and a twist die or dies E made up of sections e, e, e, e, equal to the number of flanges on the bar to be twisted, and each adapted to lie between adjoining flanges, said sectional die or dies being held in the holder

C, and adapted to be readily removed therefrom. 5th. As a device for twisting flanged rods, a pair of grooved rolls A, A', in combination with a die holder C situated in front thereof, a guide B, B',



leading from the rolls to the die holder, and twist die or dies E made up of sections e, e, e, e, equal to the number of flanges on the bar to be twisted, and each adapted to lie between adjoining flanges, said sectional die or dies being held in the holder C, but adapted to be readily removed therefrom.

No. 46,502. Process of Waterproofing Leather.

(*Procédé pour rendre le cuire à l'épreuve de l'eau.*)

Edward H. Lewis, St. Louis, Missouri, U. S. A., 5th July, 1894; 6 years.

Claim.—1st. The herein described process of rendering leather pliable and waterproof, which consists in applying to its surface a mixture of caoutchouc and a solvent volatile vehicle, which carries the caoutchouc into the pores of the leather, and, by evaporation, deposits and leaves it there, substantially as described. 2nd. The herein described process of rendering leather pliable and waterproof, which consists in spreading upon its surface caoutchouc which is dissolved in a volatile vehicle, permitting the mixture to remain until absorbed by the leather and volatilization takes place, which leaves a deposit of caoutchouc in the pores of the leather, and then powdering or applying to the surface so treated soapstone or other absorbent material to remove the gummy or sticky surface, substantially as described. 3rd. The herein described compound to be applied to the leather for waterproofing purposes, composed of rubber paste or caoutchouc, and a volatile solvent, substantially as described.

No. 46,503. Fertilizer. (Engrais.)

Silvester B. Schenck, Newark, New Jersey, U.S.A., 5th July, 1894; 6 years.

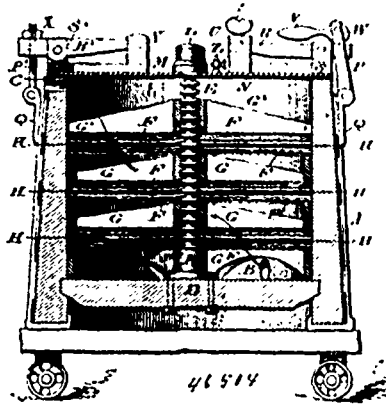
Claim.—1st. The fertilizer compound herein set forth, produced by the combination of skins or their products or other like nitrogenous materials, treated with sulphuric acid, excrement, (night-soil) and ground tobacco, substantially as set forth. 2nd. The fertilizer compound herein set forth, produced by the combination of skins or their products, or other like nitrogenous materials, treated with sulphuric acid, excrement, (night-soil) ground tobacco, and bone-black, substantially as set forth. 3rd. The herein described process of producing a fertilizer, which consists as follows, to wit:—first, boiling skins, or their products, or other like nitrogenous materials, in sulphuric acid, to produce a jelly-like mass, secondly, adding excrement, (night-soil) and ground tobacco, and mixing the same, substantially as set forth. 4th. The herein described process of producing a fertilizer, which consists as follows, to wit:—first, boiling skins or their products or other like nitrogenous materials, in sulphuric acid, to produce a jelly-like mass, secondly, adding excrement, (night-soil) bone-black, and ground tobacco, and mixing the same, substantially as set forth.

No. 46,504. Filter. (Filtre.)

Charles C. Froelich, Pottstown and William Lorey, and Henry Guenther, both of Philadelphia, all of Pennsylvania, U.S.A., 5th July, 1894; 6 years.

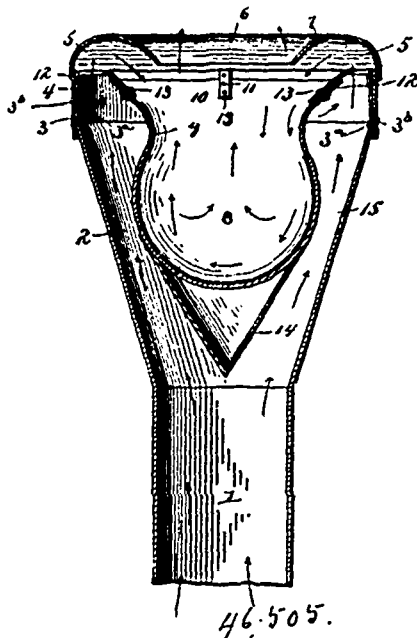
Claim.—1st. A filter consisting of a tank having a screw with a continuous thread rising from the bottom thereof, spiders with hubs adjustable on said screw, and arms with rims integral therewith, said arms having portions of reduced height, screens between said spiders, said tank having an inlet below the lowest spider, said parts being combined substantially as described. 2nd. A filter having a tank with screens and filtering material between the same, and

diaphragms adapted to retain said screens and compress said material, in combination with a screw rising from the bottom of the



tank, and a nut which is fitted on the upper end of the screw and tightens against said lid, said parts being combined substantially as described.

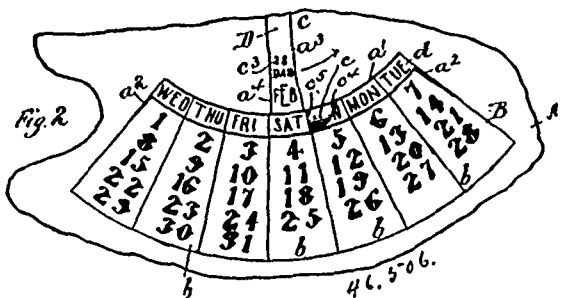
No. 46,505. Spark Arrester. (Arrête-étincelle.)



Arend Hasper, Westfield, North Dakota, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. The combination of a stack having a conical head, of a superposed deflecting hood or cap, a rounded receptacle suspended centrally in the head and having a contracted neck terminating in an upwardly flared mouth or flange to direct the products to the outer side of the hood or cap, substantially as specified. 2nd. The combination with a stack having a conical head terminating in a vertical rim, of a sleeve surrounding and vertically adjustable upon said rim, a deflecting hood or cap connected to and carried by the sleeve, and a receptacle suspended centrally in the head, substantially as specified. 3rd. The combination with a stack, of a sleeve threaded exteriorly upon the upper end thereof, a deflecting hood or cap carried by said sleeve, and a receptacle suspended within the stack, substantially as specified. 4th. The combination with a stack having a conical head terminating in a vertical rim, of a sleeve surrounding and adjustably connected to said rim, a deflecting hood or cap hinged to the upper edge of said sleeve, and a receptacle suspended within the head, substantially as specified. 5th. The combination with a stack and a superposed deflecting hood or cap, of a receptacle arranged centrally within the stack, and having an upwardly flared-mouth and supporting braces fixed at their outer terminals to the side walls of the stack and adjustably connected at their inner ends to the flared mouth of the receptacle, substantially as specified.

No. 46,506. Calendar. (Calendrier.)



William King David, Philadelphia, Pennsylvania, U.S.A., 6th July, 1894; 6 years.

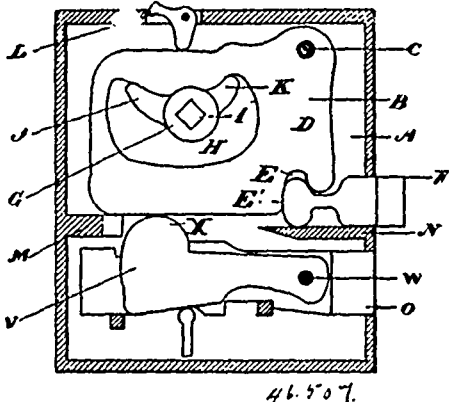
Claim.—1st. In a calendar, a front disc provided with a straight slot extending inward from the outer edge towards the centre and with the two first century figures arranged in a column at one side of said slot, in combination with a back disc having the remaining two figures of the said years arranged in columns on lines corresponding to the century slot in the front disc, and a stationary front provided with a slot, of a width corresponding to the combined width of the slot and figure column of the first disc, whereby the adjustment of one of said discs with reference to the other will bring any one of said columns on the back disc to exposure at the slot in the front disc and so complete the year indications at the slot in the stationary front, substantially as described. 2nd. In a calendar, the stationary front A, provided with the slot *a*³, having substantially parallel edges, in combination with the disc C, provided with slot *c*¹, and column *c*², of half year figures at one side thereof, a back disc D, having upon its face, columns *d*¹, of the two remaining year figures, and mechanism whereby said discs may be adjusted to bring the half year columns together side by side at the opening *a*³, to form complete year indications, substantially as described. 3rd. In a calendar, the stationary front A, provided with a circular slit, *a*¹, a slot *a*², running inward therefrom and a segment B, containing the days of the month, in combination with a front disc C, provided with slot *c*¹, and columns *c*², of half year figures, a back disc D, provided with annular space *d*, containing the days of the week and columns *d*², containing the last two figures of the year, and mechanism whereby the said discs may be rotated together, or one independent of the other, substantially as described. 4th. In a calendar, a back disc D, secured to a pivot pin E, in combination with a front disc C, mounted loosely on said pivot pin, a device connecting the two discs to rotate together positively in one direction and permitting the back disc to be rotated in the opposite direction independent of the former disc, and a stop device to arrest the movement of the front disc at a fixed point when rotated in one direction, substantially as described. 5th. In a calendar, a back disc secured to a turning pin, in combination with a front disc mounted loosely on said pin, but held to the back disc by frictional contact so as normally to revolve therewith, and a stop device arranged to arrest the front disc at a certain fixed point when the discs are moved in one direction, substantially as described. 6th. In a calendar, a revoluble pin E, in combination with a back disc D, secured thereto, a front disc C, mounted loosely on the pin, clamped to the back disc with sufficient force to normally revolve therewith and provided with a projecting stop lug *c*, and a stop or abutment on the calendar front arranged in the path of said lug and adapted to arrest the movement of the front disc at a fixed point in one direction, substantially as described. 7th. In a calendar, a revoluble pivot pin E, in combination with a back disc D, secured thereto, a front disc C, loose on said pin but clamped to the back disc and provided with a projecting stop lug *c*, and the front A, provided with circular slit *a*¹, and short radial slits *a*², at the respective ends of the latter, substantially as described. 8th. In a calendar, the front A, provided with circular *a*¹, and radial slits *a*², at the respective ends of the former, whereby the edge of the front outside of the circular slit may be offset or bent backwards, as at *b*¹, in combination with a revoluble pivot pin E, a front disc C, loose on said pin, and a back disc D, of larger diameter than the front disc, fast on said pin, and having its projecting edge arranged within the said offset *b*¹, on the calendar front, substantially as described.

No. 46,507. Lock. (Serrure.)

George Franklin Elsey, Carman, Manitoba, Canada, 6th July, 1894; 6 years.

Claim.—1st. In a door lock, the combination of the lock case, a weight lever B pivoted at one corner to the lock case, a recess D formed in the lower side of the weight lever B, a locking latch F, lugs E, E¹ on the locking latch, either one of which is arranged to enter the said recess D, an opening H formed in the weight lever B, a tumbler G provided with lugs J, K, one of which is longer than the other to average the throw of the weight lever,

substantially as specified. 2nd. In a door lock, the combination of the lock case, a weight lever B pivoted at one corner to the lock case, a recess D formed in the lower side of the weight lever B, a



locking latch F, lugs E, E¹ on the locking latch, either one of which is arranged to enter the said recess D, an opening H formed in the weight lever B, a tumbler G provided with lugs J, K, one of which is longer than the other to average the throw of the weight lever, a rest M to support the lower end of the weight lever B, and a rest N to support the locking latch F, substantially as specified. 3rd. In a door lock, the combination of the lock case, a weight lever B pivoted at one corner to the lock case, a recess D formed in the lower side of the weight lever B, a locking latch F, lugs E, E¹ on the locking latch, either one of which is arranged to enter the said recess D, an opening H formed in the weight lever B, a tumbler G provided with lugs J, K, one of which is longer than the other to average the throw of the weight lever, a rest M to support the lower end of the weight lever B, a rest N to support the locking latch F, a locking bolt O sliding upon guide stops P, Q, respectively, recesses R, S formed in the upper side of the locking bolt, stops T, U formed on the under side of the locking bolt arranged to bear against the stop Q, a tumbler V provided with a lug Y arranged to enter either one of the recesses R or S, and a notch Z formed in the locking bar O, substantially as specified. 4th. In a door lock, the combination of the lock case, a weight lever B pivoted at one corner to the lock case, a recess D formed in the lower side of the weight lever B, a locking latch F, lugs E, E¹ on the locking latch, either one of which is arranged to enter the said recess D, an opening H formed in the weight lever B, a tumbler G provided with lugs J, K, one of which is longer than the other to average the throw of the weight lever, a rest M to support the lower end of the weight lever B, a rest N to support the locking latch F, a locking bolt O sliding upon guide stops P, Q, respectively, recesses R, S formed in the upper side of the locking bolt, stops T, U formed on the under side of the locking bolt arranged to bear against the stop Q, a tumbler V provided with a lug Y arranged to enter either of the recesses R or S, a notch Z formed in the locking bar O, a lug X connected to or forming part of the tumbler V, and arranged to bear against the under side of the weight lever B, and a night latch L arranged to bear against the top of the weight lever B, and lock the weight lever and locking bolt into position, substantially as specified.

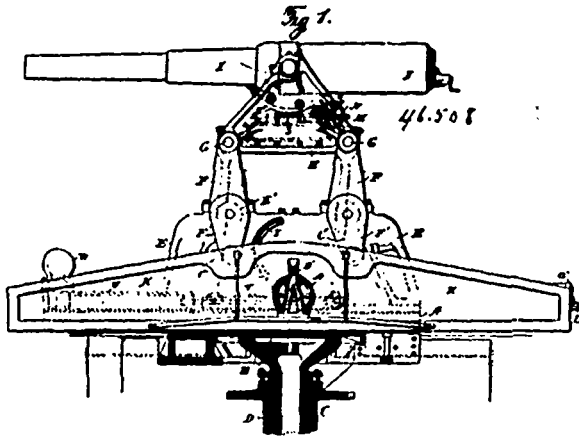
No. 46,508. Method of Operating Ordnance.

(Appareil d'artillerie.)

William Brandon Gordon, Cold Spring, New York, and Thomas R. Morgan, Alliance, Ohio, all in the U.S.A., 6th July, 1894; 6 years.

Claim.—1st. The combination with two pairs of pivoted arms, of a top carriage for a gun, the said carriage supported upon the upper ends of said pivoted arms and counter-weights carried by the opposite ends of said arms. 2nd. The combination with two pairs of crank arms journalled at points between their ends, of a top carriage for a gun, the said carriage mounted on the upper ends of said arms and counter-weights carried by the lower ends of said arms. 3rd. The combination with side frames and two pairs of crank arms journalled therein at points between their ends, of a top carriage for a gun, the said carriage mounted on the upper ends of said arms and counter-weights carried by the lower ends thereof. 4th. The combination with crank arms journalled in side frames at points between their ends, of a top carriage mounted on the upper ends of said arms, counter-weights carried by the lower ends thereof, and gun elevating devices carried by the top carriage. 5th. The combination with a top carriage and counter-weights connected therewith by intervening devices and side frames for supporting said parts, of gun elevating devices carried by the top carriage. 6th. The combination with side frames and crank arms journalled therein at points between their ends, of an upper carriage carried by the upper ends of said crank arms, counter-weights carried by the lower ends of said arms, and transoms connecting the counter-weights.

7th. The combination with side frames and crank arms journaled therein, of shafts secured to the upper ends of the crank arms, a top carriage mounted on said shafts, and counter-weights carried by the

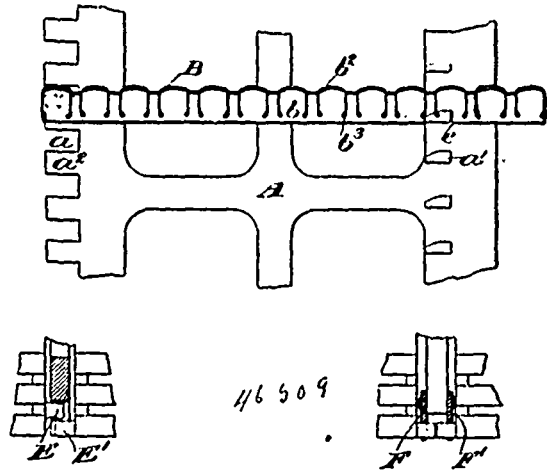


lower ends of said crank arms. 8th. The combination with side frames crank arms journaled therein, a top carriage mounted on the upper end of said arms and counter-weights carried to the lower ends thereof, of segment gears on the side frame and gearing carried by the counter-weights and adapted to engage the segment gears on the side frames, substantially as and for the purpose set forth. 9th. The combination with side frame, crank arms journaled therein, a top carriage mounted on the upper ends of said arms and counter-weights carried by the lower ends thereof, of segment gear secured to the side frame, a sliding toothed wheel adapted to be shifted to engage said segment gear, and gearing for actuating said sliding toothed wheel, substantially as set forth. 10th. The combination with side frames crank arms journaled therein, a top carriage mounted on the upper ends of said arms, and counter-weights adapted to counter-balance the gun and top carriage in all their positions, of segment gear secured to the side frame, a sliding toothed wheel adapted to be shifted to engage said segment gear, means for normally holding the latter out of engagement with the segment gear, substantially as set forth. 11th. The combination with side frames, crank arms journaled therein, a top carriage mounted on said side arms and counter-weights adapted to counter-balance the gun and top carriage in all their positions, of a loading platform carried by the counter-weights. 12th. The combination with side frames, crank arms journaled therein, a top carriage mounted upon the upper ends of said arms and counter-weights adapted to counter-balance the gun and top carriage in all their positions, of a loading platform carried by the counter-weights, a truck on said loading platform and means for locking the truck to said platform. 13th. The combination with side frames, a top carriage and connected counter-weights adapted to counter-balance the gun and top carriage in all their positions, of a loading platform carried by the counter-weights, a truck on said loading platform and means for locking the truck to said platform, substantially as set forth. 14th. The combination with side frames a top carriage and connected counter-weights adapted to counter-balance the gun and top carriage in all their positions, of a loading platform carried by the counter-weights, a truck on said loading platform, means for locking the truck to said platform and means for locking the charge to the truck, substantially as set forth. 15th. The combination with a bed plate and hydraulic devices for elevating same, of side frames on the bed plate, a top carriage and connected counter-weights carried by said side frames, the said counter-weights adapted to counter-balance the gun and top carriage in all their positions, substantially as set forth. 16th. The combination with a bed plate and devices for elevating same for traversing, of side frames on said bed plate and a top carriage and connected counter-weights carried by said side frames, substantially as set forth. 17th. The combination with side frames, crank arms journaled therein, a top carriage carried by said arms, and counter-weights adapted to counter-balance the gun and top carriage in all their positions, of a cylinder containing a resistance medium, a piston in said cylinder and means connecting the piston and top carriage whereby as the top carriage descends the piston is moved against the resistance medium, thus compressing same, substantially as set forth. 18th. The combination with side frames, crank arms journaled therein, a top carriage carried by said arms and counter-weights adapted to counter-balance the gun and top carriage in all their positions, of cylinders, an air chamber connected therewith, pistons in said cylinders, and means connecting the top carriage with said pistons, substantially as set forth. 19th. The combination with side frames, crank arms journaled therein, a top carriage mounted on said arms, and counter-weights adapted to counter-balance the gun and top carriage in all their positions, of two cylinders, a connected air chamber, valves between the cylinders and air chamber, pistons and piston rods, a truck connected to said rods, and connecting rods connecting the truck and top carriage, substantially as set forth. 20th. The combination with side frames,

crank arms journaled therein, a top carriage mounted on said arms, and counter-weights adapted to counter-balance the gun and top carriage in all their positions, of cylinders, pistons and piston rods therein, an air chamber communicating with said cylinders, a truck mounted on wheels and connected to the piston rods, and rods connecting the truck and top carriage, substantially as set forth.

No. 46,500. Shelf Structure and Support.

(Bâti de tablette et support.)



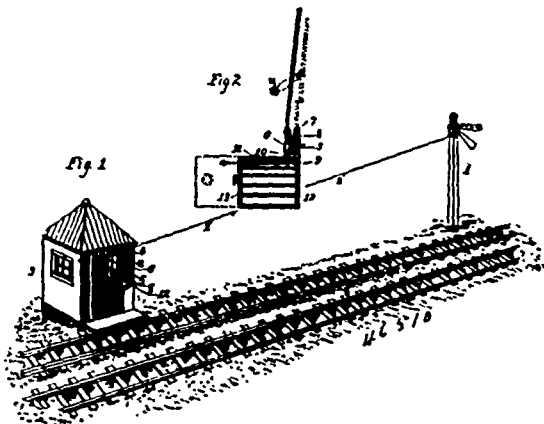
Barnard R. Green, Washington, Columbia, and Adolphe Sneed, William R. Sneed and William M. Burns, all of Louisville, Kentucky, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. The combination, with end supports provided with shelf supporting seats in position to support a shelf at its front edge and to the rearward of its front edge, of a shelf provided with supporting bearings fixed relatively to the shelf and constructed to interlock with the supporting seats on the ends, the shelf being removable from between the end supports in a plane substantially parallel with its adjusted position, substantially as set forth. 2nd. The combination, with the end supports provided with a series of shelf supporting seats at their front edges and with series of supporting seats to the rear of their front edges, of a shelf provided at its ends with supporting bearings fixed relatively to the shelf and constructed to interlock with the supporting seats on the end supports to hold the shelf in removable adjustment, substantially as set forth. 3rd. The combination, with the end supports provided with series of supporting seats at their front edges, and with supporting lugs extending laterally from their sides to the rear of their front edges, of a shelf provided at its front edges with supporting lugs adapted to enter from the front and rest on the seats at the front edges of the supports, the ends of the shelf to the rear of the front edges being adapted to rest on the said laterally extending lugs, substantially as set forth. 4th. The combination, with end supports consisting of sections spaced apart and provided with shelf supporting seats on their front edges and supporting lugs extending laterally from the opposite sides of the sections, of a shelf provided with end lugs and bearings adapted to interlock with the end supports, substantially as set forth. 5th. The combination, with end supports provided with series of supporting seats at their front edges, consisting of recesses formed in the front edges of the supports, and having a horizontal extension corresponding to the thickness of the end supports, said end supports being further provided with supporting lugs extending laterally from their sides to the rear of their front edges, of a shelf provided at its front edges with supporting lugs adapted to enter from the front and rest on the seats at the front edges of the supports, the ends of the body of the shelf to the rear of the front edges being constructed to rest on the said lateral extending lugs, substantially as set forth. 6th. The shelf structure, comprising a series of hollow bars and end girders interlocked with the ends of the hollow bars, substantially as set forth. 7th. The shelf structure, comprising a series of hollow bars having their ends slit, and flanged end girders, arranged to enter the slits in the hollow bars, substantially as set forth. 8th. The shelf structure, comprising a series of hollow bars having their ends slit, and flanged end girders, one of the flanges of the end girder being provided with projecting tongues, the flanges being arranged to enter the slits in the bars and the tongues to enter the interiors of the bars beyond the flange, substantially as set forth. 9th. The shelf structure, comprising a series of hollow bars having their ends slit and their top sides projected beyond the sides, and flanged girders adapted to enter the slits in the ends of the bars to a point where the projecting top sides may be turned down over the edge of the girder, substantially as set forth. 10th. The shelf structure, comprising a series of hollow bars having their ends slit, T-shaped end girders having their upright flanged extended and their horizontal flanges adapted to enter the slit ends of the bars,

the projected flanges of the end girders being adapted to fold over against the side of the edge bar at the end of the horizontal flange, substantially as set forth. 11th. A shelf bar U-shaped in cross-section and having strengthening beads on its edge, substantially as set forth. 12th. The shelf structure, comprising a series of hollow bars connected at their ends, and a bridge bar extending transversely through the sides of the hollow bars, the sides of the bars and the bridge bar being provided the one with a recess, and the other with a lip or lug for locking the hollow bars to the bridge bar against lateral displacement, substantially as set forth. 13th. The shelf structure, comprising a series of hollow bars connected at their ends, and a bridge bar extending transversely through the sides of the hollow bars, the openings for the bridge bar being enlarged to afford the bar a limited lateral movement therein, the shelf bars being provided with lips or lugs at the margin of the bridge bar, openings for locking the bridge bar in engagement with the hollow bars, substantially as set forth.

No. 46,510. Railway Signal.

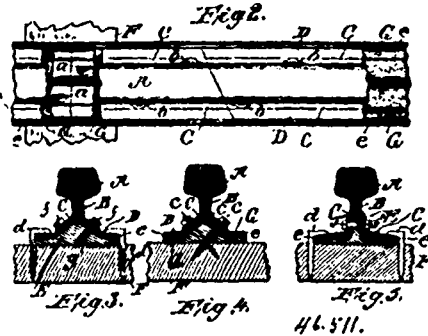
(Signal de chemins de fer.)



Charles C. Kahne, George F. Kahne, Andrew A. Adkins and Alfred Worley, all of Ashland, Kentucky, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. In combination with a railway signal and the cord or connection for operating the same, the herein described indicator consisting of a movable panel having red and white surface and suitably connected with the operating cord or connection whereby the panel is moved in opposite directions simultaneously with the change in the direction of movement of said operating rod or connection, and the detent for holding the operating cord, substantially in the manner and for the purposes set forth. 2nd. In combination with a gravity operating railway signal and the cord or connection for retaining or releasing said signal, the herein described indicator consisting of a movable swinging panel having positive connection with said operating cord which causes said panel to move in opposite directions simultaneously with the change in the direction of movement of the operating cord, a loop in connection with the cord, an opening through which the loop is introduced, and a removable pin for retaining the loop in the opening, as and for the purpose explained. 3rd. In combination with a railway signal and the cord by which it is controlled, a pivoted red and white faced panel having connection with the cord which causes the panel to swing upon its pivot and disclose its opposite faces simultaneously with the change in the direction of the operating cord, the handle for controlling said cord and a detent for the handle, substantially as described. 4th. In combination with a gravitating railroad signal and its operating cord, an indicating panel having different coloured opposite faces, and mounted to swing upon a horizontal axis, connection between the panel and said operating cord, whereby the panel is reversed by the reversal of the movement of the cord, and a detent for the cord for holding the signal in raised position, all substantially as and for the purposes set forth. 5th. In combination with a gravitating signal and its operating cord having a loop, of the order box, and a sliding pin for engaging the loop of the operating cord, under control of the door of the order box, substantially as and for the purposes set forth. 6th. In combination with a gravitating signal and its operating cord, of an order box, an opening in the order box through which a loop on the cord passes, and a reciprocating pin engaging said loop and controlled by the door, all substantially as and for the purposes set forth. 7th. In combination with a gravitating signal and its operating cord, an order box having a door, an indicating panel mounted upon a horizontal axis above the order box, and having connection with said operating cord, a loop on the cord passing through an opening in the top of the box, and a reciprocating retaining pin engaging the loop and connected with the door of the box, all substantially as and for the purposes set forth.

No. 46,511. Railway Rail. (Rail de chemin de fer.)



Charles H. Jenne, Indianapolis, Indiana, and the Mechanical Development Company, New York, State of New York, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. In a compound rail of the type commonly known as a T-rail, the combination with the upper section comprising the ordinary head or ball, the single vertical web and the channelled foot or base, and the under section constructed with a plate to rest upon the ties, and with an upwardly projecting longitudinal tongue adapted to enter and fit the channel in the foot of the upper section, of screws passing through the walls of the channel of the upper section and engaging with holes formed in the tongue on the under section, whereby the under section is adapted to receive and support the entire foot or base of the upper section, and the sections are fixedly secured together, substantially as described. 2nd. In a compound rail of the type commonly known as a T-rail, the combination with the upper section comprising the ordinary head or ball, the single vertical web, and the channelled foot or base, and the under section consisting of a plate adapted to rest upon the ties, and adapted to fit the channel in the foot of the upper section, and adapted to receive and support the said foot or base, of the screws passing through said foot, through the under plate and entering the tie, substantially as described. 3rd. In a compound rail of the character herein set forth, the combination with the upper section comprising the channelled foot, the single web, and the head or ball sustained thereon, and the lower section constructed with a plate to rest upon the ties and with an upwardly projecting longitudinal tongue adapted to enter and fit the channel in the foot of the upper section, of a sound non-conducting strip or packing interposed between the sections and overlying the upwardly projecting longitudinal tongue on the under section, substantially as described. 4th. In a compound rail of the character herein set forth, the combination with the upper section comprising the channelled foot, the single web and the head or ball sustained thereon, and the lower section constructed with a plate to rest upon the ties and with an upwardly projecting longitudinal tongue adapted to enter and fit the channel in the foot of the upper section, of a sound non-conducting strip or packing interposed between the sections and overlying the upwardly projecting longitudinal tongue on the under section, and screws passing through the walls of the channel of the upper section and engaging with holes formed in the tongue on the under section, substantially as described. 5th. The combination, with the under section consisting of a base adapted to rest upon the ties, and provided with an upwardly projecting longitudinal tongue which is wider at its bottom than at its top, and the upper section constructed with the usual head or tread, and with a channelled base which is adapted to fit the upwardly projecting tongue of the under section and extend outwardly on each side thereof to and into engagement with marginal flanges upon the outer edges of such under section, of a series of ties upon which the under section rests, and spikes the heads of which extend over and engage with the base of the upper section to hold the rail to the ties, substantially as described. 6th. In a compound rail of the character herein set forth, the combination with the upper section comprising the channelled foot, the single web, and the head or ball sustained thereon, of the lower section or foot plate adapted to receive and sustain said upper section, the securing bolts passing through the said foot and entering threaded openings provided for them in the base plate, and clamps for engaging with the sections, substantially as described.

No. 46,512. Force Pump. (Pompe foulante.)

John H. Stoll and George Stoll, both of Hutchison, Kansas, U.S.A., 6th July, 1894; 6 years.

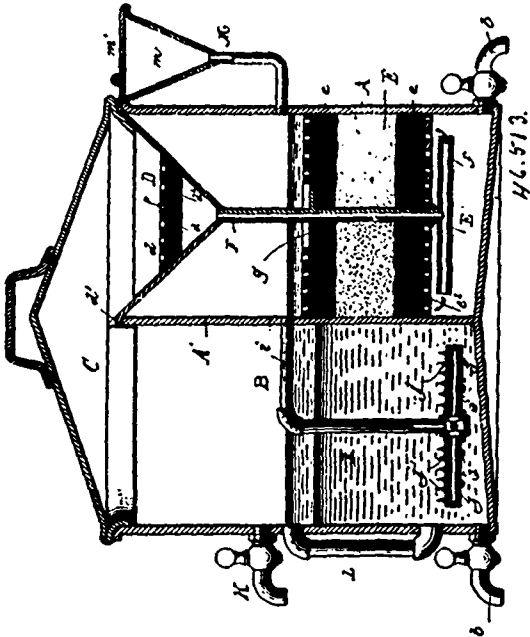
Claim.—In a pump, the combination with the barrel having a valve seat provided with an opening at its lower end, and an egg-shaped valve adapted to close said opening, of a piston rod and means to actuate the same, and an internally cup-shaped plunger

at the lower end of said piston rod, and having a valve seat opening and an egg-shaped valve adapted to close said valve seat opening



provided with spherical cavity and a diaphragm closing said cavity, substantially as described.

No. 46,513. Filter. (Filtre.)

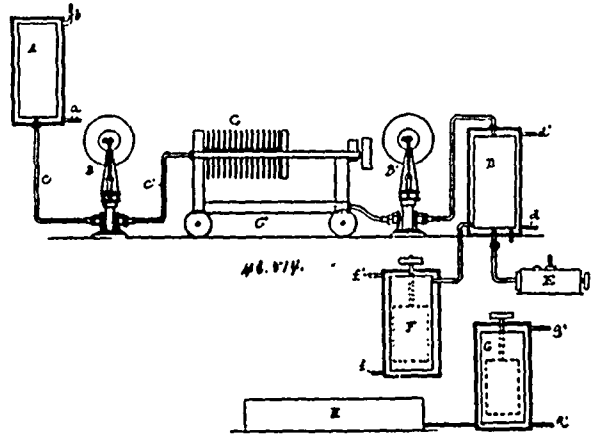


James H. Finley and James Murphy, assignee of Edward Peck Hunt, Buffalo, New York, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. The combination with the casing of the filter containing a filtering chamber, of a receptacle removably supported in the upper portion of said chamber, a depending oil tube secured at its upper end to the receptacle, and provided with a flange or collar and above the latter with a transverse pin, and a filter bed arranged in said chamber below said receptacle, and having a lower supporting plate provided with an opening for the passage of said oil tube, and an upper plate resting on the flange of the tube and having an opening for the passage of the tube, and a slot for receiving the pin of the same, substantially as set forth. 2nd. The combination with the casing of the filter having an upright partition dividing it into primary and secondary filtering chambers or compartments, of a filter bed arranged in the lower portion of said primary chamber and separated from the bottom of the chamber by a settling chamber,

an oil tube or conduit extending from the upper portion of the primary chamber to the settling chamber, an auxiliary inlet arranged outside the filter case and communicating with the upper portion of the primary chamber, and a pipe submerged in the liquid of the secondary filtering chamber and communicating at its lower end with the latter, and at its upper end with the upper portion of the primary chamber, substantially as set forth. 3rd. The combination with the casing of the filter having a filtering chamber adapted to contain a cleansing liquid, of an oil pipe submerged in said chamber and having at its lower portion one or more branches, each provided on its under side with exit openings for the oil, and on its upper side opposite said openings, with solid vertical pins tapering upward to a point, substantially as set forth.

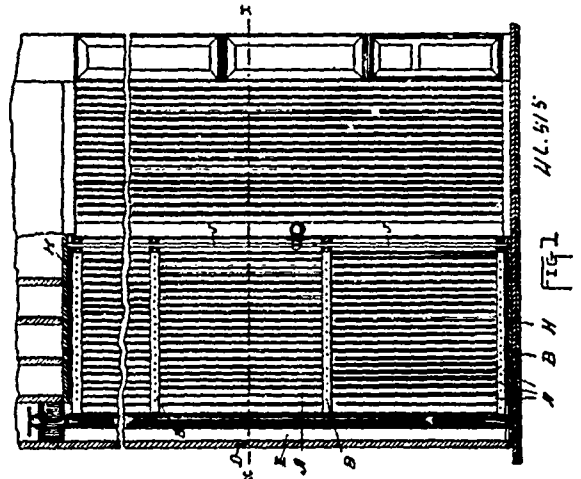
No. 46,514. Process of Treating Butter. (Procédé pour traiter le beurre.)



Joseph H. Campbell and Charles H. Campbell, both of New York, and John B. Finlay, of Kittanning, Pennsylvania, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. The process of improving butter which consists in removing the solid impurities therefrom and treating the residue with an air blast in an alkaline solution, substantially as set forth. 2nd. The process of improving butter which consists in removing the solid impurities therefrom and treating the residue with an air blast, an alkaline solution, and then washing in pure water aided by an air blast, substantially as set forth. 3rd. The process of improving butter which consists in removing the solid impurities therefrom and treating the residue with an air blast, an alkaline solution, and then washing in pure water aided by an air blast, maintaining the mixture in a liquid state by heat during the operation, substantially as set forth. 4th. The process of improving butter which consists in removing the solid impurities therefrom by filtering, removing the soluble impurities therefrom by oxygenating and neutralizing the same, then treating the residue with sour milk or cream at a temperature to yield a plastic mass, then melting the mass and cooling it by an ice cold bath, substantially as set forth.

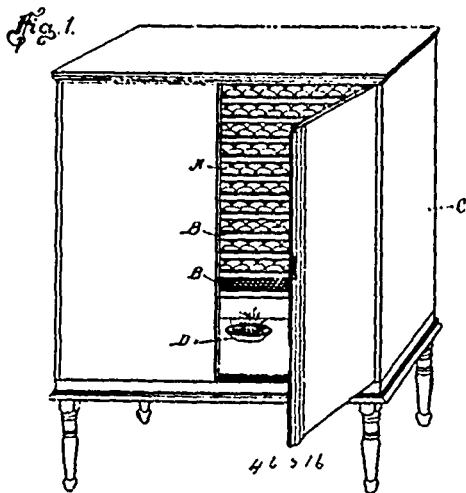
No. 46,515. Coiled Sliding Door. (Porte à coulisse.)



Fredrick August Schluns, Concord, New Hampshire, U.S.A., 6th July, 1894; 6 years.

Claim.—Coiled doors consisting of double series of vertical strips overlapping each other and secured on opposite sides of transverse connecting bands, in combination with metallic clips fixed centrally to said bands and curved outwardly at each end to receive and hold said vertical strips, substantially as set forth.

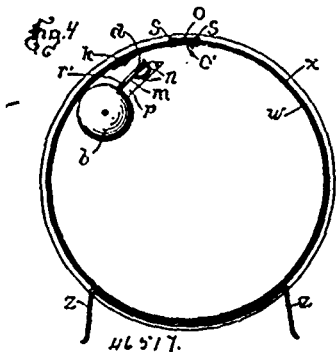
No. 46,516. Compound for and Method of Preserving Eggs. (*Composé et méthode de préserver les œufs.*)



Francis M. Underwood, Pasadena, California, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. The improved compound for preserving eggs set forth, consisting of nitrate of strontium, oil of eucalyptus and pulverized cassia bark. 2nd. The improvement in the art of fumigating eggs which consists in subjecting the eggs to fumes or vapours arising from the combustion of nitrate of strontium, oil of eucalyptus and cassia bark.

No. 46,517. Ballot Box. (*Urne de scrutin.*)



Juan W. Ernest, Los Angeles, California, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. A ballot box comprising the combination of a hollow member provided in its wall with a ballot-receiving slot extending substantially from end to end of such member, an inner member adapted to (by partial rotation) close and open such slot, and a suitable locking device adapted and arranged to lock the inner member in position to permanently close the slot. 2nd. A ballot-box comprising the combination of an outer hollow member open at one end and closed at the other end, and having a curved wall provided with a ballot-receiving slot, and an inner member adapted to close the open end of the outer member and arranged to project into such outer member and by partial rotation to close and open such slot. 3rd. A ballot-box comprising the combination of an outer member and an inner member, each provided with a slot and adapted to move with relation to each other, and, in conjunction with each other to form and close the opening into the box, and means for locking the two members with relation to each other. 4th. In a ballot-box, the combination of the outer member provided with a ballot-receiving slot and the inner member arranged to open and close such slot, an alarm, and mechanism operatively connecting such members, and the alarm to operate the alarm when the members are moved to open or close the slot. 5th. A ballot-box comprising the combination of two hollow members, each of which

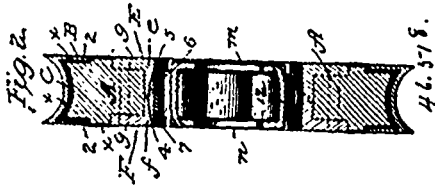
is open at one end and closed at the other end, and provided with a ballot-receiving slot, said members being adapted to telescope together with their closed ends outward to form the ends of the box, and said slots being arranged to form, in conjunction with each other, an opening into the box. 6th. A ballot box comprising the combination of the outer member, provided with a ballot-receiving slot and a locking hole, the inner member arranged to project into such outer member and provided with the locking hole arranged to be brought into conjunction with the locking hole of the other member, a spring secured to the inner member and provided with a staple arranged to be normally held in such hole by such spring. 7th. A ballot box comprising the combination of an outer member provided with a slot and closed at one end and open at the other end, and having a perforation near the open end, and an inner member provided with a slot and open at one end and closed at the other end, and arranged to telescope within the outer member and provided at the closed end with perforations adapted in conjunction with the perforations in the outer member to receive a locking device to secure the two members together. 8th. A ballot box comprising the combination of two hollow cylindrical members, each of which is open at one end and closed at the other, and provided with a ballot-receiving slot, said members being adapted to telescope together with their closed ends outward to form the ends of the box and said slots being arranged to form in conjunction with each other an opening into the box, which is adapted to be closed by the rotation of the cylinders with relation to each other. 9th. In a ballot-box, the combination of the outer member closed at one end and provided with a ballot-receiving slot, an alarm mechanism mounted upon such outer member and provided with the flopper, and the inner member adapted to rotate within the outer member to close and open the slot, and provided with the projection *k*, arranged to engage the flopper to operate the alarm when the inner member is rotated. 10th. A ballot box cylindrical in shape, one end of which is permanently closed, the other end being fitted with an inner box, the same shape as the outer box and just enough smaller to turn inside of it, both boxes provided with an opening on the side through which the ballot can be placed in the box when the two openings are together, but by turning the inner box the opening in it will be carried away from the opening in the other box and both openings be closed, provided with a suitable locking device to hold the boxes together, substantially as and for the purposes set forth. 11th. A ballot-box cylindrical in shape made of two parts, an outer box open at one end and an inner box to rotate inside of it, both provided with a long narrow opening in their sides through which the ballots are placed in the box when the openings are together, in combination with the handle attached to the inner box to rotate it, and by which to handle the whole box, a suitable locking device to hold the boxes together, and an alarm bell attached to inside of the box and provided with a hammer, and suitable mechanism to sound an alarm whenever the opening *o, o'* is opened, substantially as and for the purpose set forth. 12th. The ballot box set forth, comprising the combination of an outer hollow member having a curved wall provided with a ballot receiving slot, an inner member adapted to (by partial rotation) close and open such slot, one of such members being provided with a locking slot, and the other member being provided with the locking hole, adapted in conjunction with each other to receive suitable locking device, and such locking device passed through such hole and slot, and arranged to secure the two members together and allow the partial rotation of the inner member to open and close the slot. 13th. A ballot box comprising the combination of an outer hollow member, having a curved wall provided with a ballot-receiving slot, and having a locking slot arranged in a position transverse to the ballot-receiving slot, an inner member adapted and arranged to close and open the ballot-receiving slot, and provided with a hole arranged to allow a locking device to be passed therethrough and through the locking slot in the outer member, and such locking device adapted to be passed through the lock-receiving hole and the locking slot to allow such movement of the inner member as will cause it to close and open the ballot-receiving slot. 14th. A ballot box comprising the combination of an outer hollow member open at one end and closed at the other end, and having a curved wall provided with a ballot-receiving slot, and having a locking slot arranged near to the end of such member transverse to the ballot-receiving slot, an inner member adapted to close the open end of the outer member, and arranged to project into such outer member, and by partial rotation to close and open the ballot-receiving slot, and provided with a hole arranged to be brought into conjunction with the locking slot to allow a locking device to be passed therethrough, and such locking device passed through such hole and slot, and adapted to allow the partial rotation of the inner member while the two members are locked together.

No. 46,518. Sheave. (*Roue de poulie.*)

Francis Bowen Torrey, Bath, Maine, U.S.A., 6th July, 1894; 6 years.

Claim.—1st. A sheave composed of a centre of fibrous material, having a grooved periphery and a cast metal grooved rim, conforming to the said grooved periphery and provided with interposed heat resisting covering placed within the said grooved periphery, substantially as described. 2nd. A sheave composed of a centre of fibrous material, having a grooved periphery and a cast metal

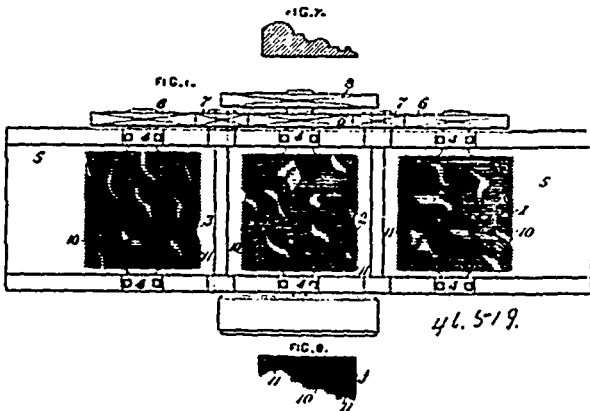
grooved rim conforming to said grooved periphery, and provided with a projecting interposed band between said rim and the said periphery, substantially as described. 3rd. A sheave composed of



a centre of fibrous material having a grooved periphery and a cast metal grooved rim, conforming to said grooved periphery, and provided with an inner covering of heat resisting paint, and an outer covering of metal between the cast rim and the centre, substantially as described. 4th. A sheave consisting of a wood centre having a grooved periphery, with its grain in lines parallel with the axis of said centre, in combination with a metal band covering the grooved periphery and a cast metal grooved rim upon said band, substantially as described. 5th. A sheave consisting of a fibrous centre and an outer metal rim combined with a cast iron divided bushing, having a brass lining, substantially as described. 6th. In combination with a sheave having bushing, a frame for holding the anti-friction rollers, said frame being cast in duplicate parts, each part being composed of a ring having integral bars, the ends of which are fitted to holes in the opposite ring, substantially as described. 7th. A cast metal frame for anti-friction rollers, of a sheave consisting of rings and bars connecting said rings and having conical bearing studs on the rings fitted to and combined with rollers having conical holes, substantially as described.

No. 46,519. Wood Graining Machine.

(Machine pour grencler le bois.)



John Shannon, Pittsburg, Pennsylvania, U.S.A., 6th July, 1894; 6 years.

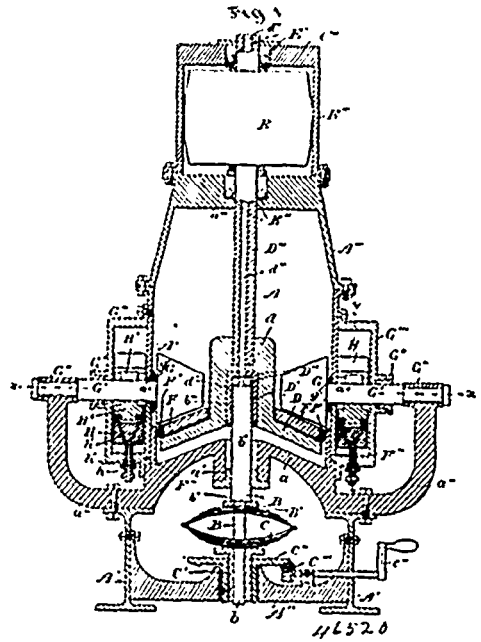
Claim.—1st. In a graining machine, the combination of a series of two or more rollers provided with a series of peripheral cutting edges, said rollers being so arranged with reference to each other that the cutting edges of one roller shall lie in a plane passing between the cutting edges of the other roller, substantially as set forth. 2nd. A roller for graining machine provided with a series of peripheral cutting edges formed by grooving its operative face, substantially as set forth. 3rd. A roller for graining machines, having in combination therewith a series of longitudinal sections removably attached to the periphery of the roller, the operative faces of said sections being provided with a series of transverse cutting edges, substantially as set forth.

No. 46,520. Ore Crusher. (Machine à broyer les minerais.)

James R. Gordon, Sudbury, and Angus W. Fraser, Ottawa, all in Ontario, Canada, 9th July, 1894; 6 years.

Claim.—1st. In an ore crusher, the combination of an enclosed pan with conical bottom, a vertical non-rotative axle passing through a gland in said bottom and through a guide and spring below upon which latter it is supported, a conical disc supported upon the upper flat end of said axle by a ball bearing within the hub of said disc, a vertical hollow shaft secured to said hub extending upwardly and rim in ball bearings at its upper end, a conical disc supported on the disc aforementioned, conical rolls bearing on the last mentioned disc

each mounted on a horizontal shaft, a journal bearing at the free end of each shaft supported on a bracket held by the pan and a roller bearing near each conical roll in a casing secured to the pan and provided with a stuffing box and with adjustably carried blocks in which the rollers are journaled and through which a water supply passes to said journals, substantially as set forth. 2nd. In a

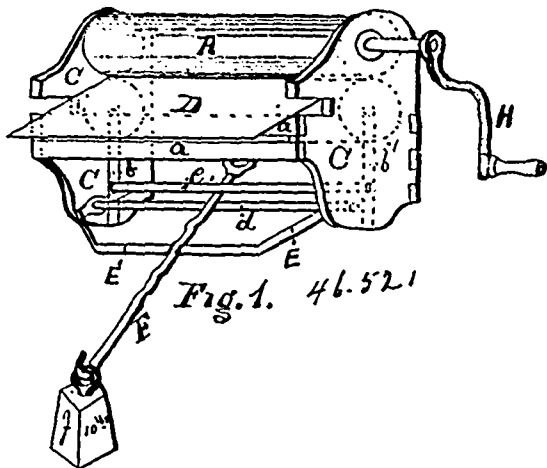


water flushed roller bearing for ore crushers, the combination of a box or casing having a free opening on one side for the shaft, a stuffing box opposite adapted to hold a shaft passing through said opening, necked rollers disposed around and adapted to bear on a shaft passing through said box as aforementioned, blocks each having a cavity in which one of said rollers is journaled provided with water passages ending in said journals, and a hollow stem holding each block adjustably in the rim of the casing, substantially as set forth. 3rd. In an ore crusher, the combination with the pan casing, of a horizontal shaft or axle passing through an opening in the same and carrying a conical roll at the end, and a flexible disc between said roll and said opening, a box or casing around said opening provided at the opposite side with a stuffing box through which said shaft passes, rollers in said box bearing on said shaft, blocks carrying said rollers and having water passages terminating in the journal bearing of said rollers and carried by hollow stems passing adjustably through the rim of said casing, and an outside journal bearing for the free end of said shaft carried by an arm or bracket held by the pan casing, substantially as set forth. 4th. In an ore crusher, the combination with the conical bottom of the pan, of a gland adapted to hold a vertical axle slidingly, a cross-piece below said bottom rigidly connected with the same and having the necked and internally threaded hub of a bevel wheel journaled therein, a threaded thimble in said hub, a spring supported on said thimble, a vertical axle having a shouldered lower part passing through said spring and resting thereon by its shoulder and held slidingly in said thimble its upper part passing through said gland and projecting above the same, and an axle with crank and carrying a bevel pinion gearing in said bevel wheel, substantially as set forth. 5th. In an ore crusher, the combination of a pan casing having a conical bottom, a vertical axle passing through a gland in said bottom and yieldingly supported below and flat ended at the upper end, a hubbed conical disc with upwardly extending vertical hollow shaft journaled in ball bearings at its upper end, a cupped bushing in the lower part of the hub, having its top perforated to form a continuation of the water passage in the shaft, balls between the upper end of the axle and top of the bushing, and escape passages in said bushing and journal of the axle, substantially as set forth. 6th. In an ore crusher, the combination of a pan casing having a conical bottom, a removable cylindrical lining in the lower part of the pan, a conical disc with obliquely ribbed surface supported upon a vertical non-rotative axle yieldingly supported and passing through a gland in the bottom of the pan, a conical disc supported on the upper ribbed surface of the disc aforementioned and a removable rim or hoop upon the edge of said last mentioned disc, substantially as set forth. 7th. In an ore crusher, the combination of an enclosed pan having a vertical driving shaft journaled in its upper part and carrying a conical disc with obliquely ribbed surface yieldingly supported and through which and said shaft a water supply is allowed to enter said pan, a conical disc resting on said ribs, conical rolls on horizontal shafts bearing

on said disc, a roller bearing for each shaft enclosed in a casing covering the opening in the pan through which the roll shaft passes and provided with a stuffing box on the outside, and a water supply introduced into said casing and entering the pan through the opening through which the roll shaft passes, substantially as set forth. 5th. In an ore crusher, the combination of a conical disc with hollow vertical shaft extending upwards and carried by a spring support in a water flushed bearing, a conical disc supported by the disc aforementioned, conical rolls bearing on said last mentioned disc, each mounted on a horizontal shaft having its free end journalled in an ordinary bearing then passing through a stuffing box and being supported near said roll upon rollers in a water flushed box communicating through a space around said shaft with the enclosure in which said rolls rotate, an enclosure or pan casing with conical bottom corresponding to said discs provided with ball bearings for the vertical shaft at its upper part and with means for supporting the same vertically and with arms or brackets carrying the outer bearings of the conical rolls, roller bearing boxes for the conical rolls shafts attached to said pan casing, each provided with a stuffing box, rollers upon which said shaft is carried, water space blocks in which said rollers are journalled and which are provided with water spaced stems projecting adjustably through the casing, substantially as set forth.

No. 46,521. Clothes Mangle.

(Calandre pour habillements.)



George E. Overton, Chatham, Ontario, Canada, 9th July, 1894; 6 years.

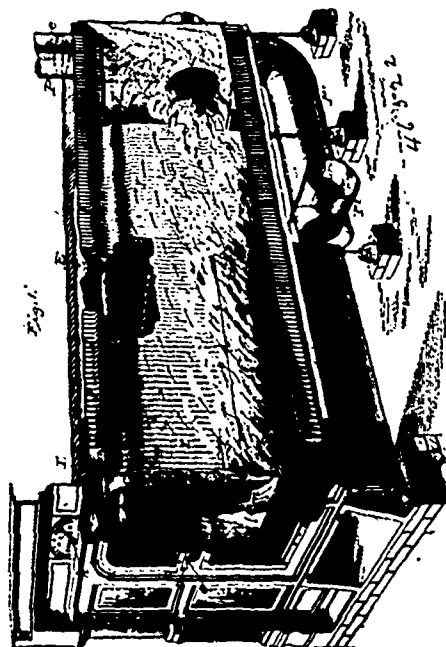
Claim.—1st. The combination of the ends and rollers and the feed cloth, substantially as specified. 2nd. The combination of the ends, rollers and feed cloth, of grooves a^2 in the said ends, and slides b , substantially as specified. 3rd. The combination of the ends C , grooves a^2 , slides b , and the lever E , and the lever arm F , having the weight f , substantially as specified and set forth. 4th. The combination of the ends C , C , rollers A and B , feed cloth D , grooves a^2 , slides b , and the lever E , lever arm F , and weight f , substantially as set forth.

No. 46,522. Furnace. (Fournaise.)

Isaac David Smead, Toledo, Ohio, U.S.A., 9th July, 1894; 6 years.

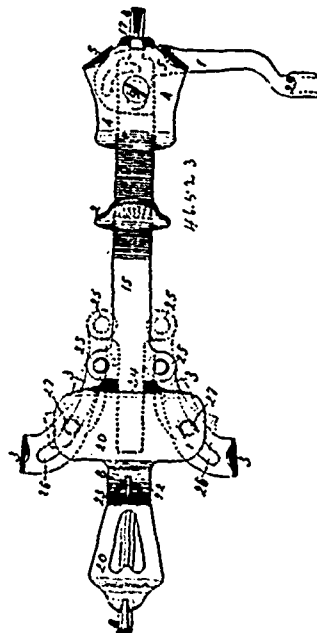
Claim.—1st. The combination in a magazine furnace, of a fuel reservoir and side combustion chambers with grates under the same, said fuel reservoir being located outside of and apart from the combustion chambers, substantially as shown and described. 2nd. The oblong fuel reservoir having openings in its walls and enclosed by a shell or case with a space for the passage of air between them, in combination with combustion chambers at the sides thereof, and a grate or grates underneath the same, the said parts being arranged, substantially as shown and described, whereby the air passing through the fuel reservoir is delivered in a sheet to the burning fuel at the point where the fuel enters the combustion chamber from the reservoir or magazine. 3rd. The combination in a heating furnace, of the central fuel reservoir and its enclosing shell or case, the side combustion chambers, and the chamber J at the rear of and connected to the combustion chambers, substantially as shown and described. 4th. In combination with the longitudinal side combustion chambers with an opening between them at the bottom for the admission of air to be heated, the plate F at the top for confining and conducting the air against the walls of said chambers, substan-

tially as shown and described. 5th. In combination with the separate fuel reservoir and the side combustion chambers having a grate or grates under them for supporting the fuel, the air inlets o



in the front, and the plates m and n arranged to operate, substantially as shown and described. 6th. The combination in a furnace, of a fuel reservoir, side combustion chambers, and a grate having a centrally located section arranged to reciprocate or rotate laterally, for the purpose of working or feeding the fuel from the reservoir laterally onto the grate under the combustion chambers, substantially as set forth.

No. 46,523. Skate. (Patin.)



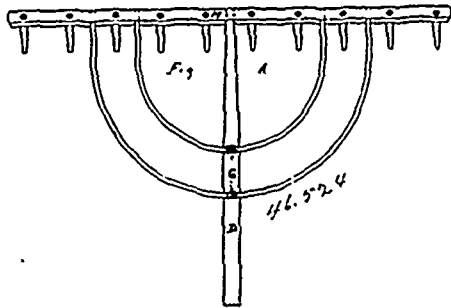
John Forbes, Halifax, Nova Scotia, Canada, 9th July, 1894; 6 years.

Claim.—In a skate, a sole plate, a heel plate, a lever below the heel plate and provided with a cam slot, a pair of sole clamps provided with slots, a pair of pins fastened to the sole plate, one passing through each sole clamp, a connecting bar pivotally attached to the sole clamp, a sliding bar slotted at one end, having

a stop at the other end, a pin inserted in the sliding bar and entering the cam slot in the lever, a pinching heel clamp, by which both bars pass and are locked together, a skate runner having a socket, and a pin passing through the heel plate and through the cam lever, and through the slot in the sliding bar, and removably secured in the socket in the runner, substantially as set forth.

No. 46,524. Hand Hay Rake.

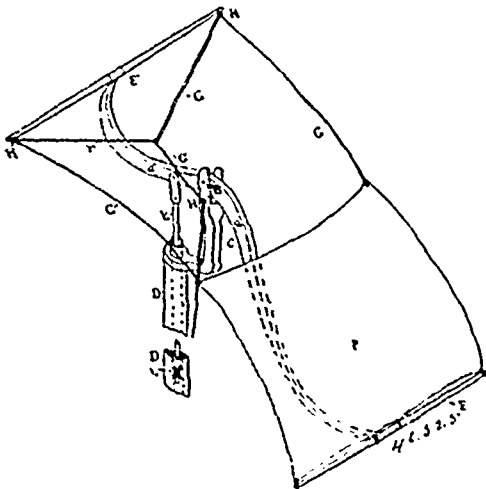
(Rateau à main.)



Samuel Buschlen, Port Elgin, Ontario, Canada, 9th July, 1894; 6 years.

Claim.—In a hand hay rake, the fastening of the bows *c, c*, on the upper side of the handle *D*, as represented in Fig. A, substantially as and for the purpose hereinbefore set forth.

No. 46,525. Wind Mill. (Moulin à vent.)



Elmer E. Milliken, Bridgewater Centre, Maine, U.S.A., 9th July, 1894; 6 years.

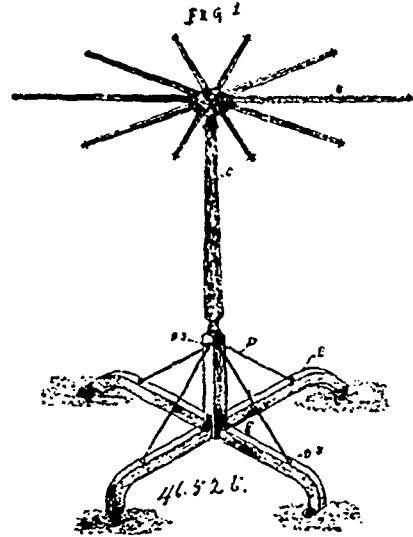
Claim.—1st. In a wind mill, the combination of a beam oscillating perpendicularly upon a standard revolving horizontally upon a fixed support, said beam carrying at right angles to itself a yard upon the outer end of its long arm, a sail bent to said yard, and a sheet attached to the unsecured end of said sail and running through an eye bolt in the short arm of said beam or in said standard, and a cleat upon said fixed support or other point of attachment. 2nd. In a wind mill, the combination of a beam oscillating perpendicularly upon a standard revolving horizontally upon a fixed support, said beam carrying at each end a yard at right angles to itself, a sail bent to the yard upon the long arm of said beam, sheets attached to the unsecured end of said sail and running through eye-bolts in the yard upon the short arm of said beam, and a cleat upon said fixed support or other point of attachment.

No. 46,526. Clothes Bar. (Barre pour vêtements.)

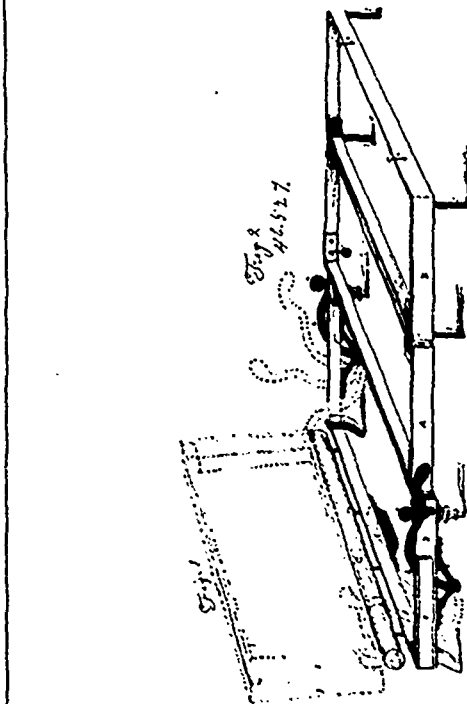
John Henry Stanton, St. Catharines, Ontario, Canada, 9th July, 1894; 6 years.

Claim.—1st. The combination of the flat arm *B*, standard *c*, brace *D*, feet *E*, and hinge *F*, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the standard *c* brace

and feet *D, E*, folding substantially as and for the purpose hereinbefore set forth.



No. 46,527. Divan Bed Frame. (Cadre de lit-divan.)



Patrick Rooney, Montreal, Quebec, Canada, 9th July, 1894; 6 years.

Claim.—1st. The combination of the backs *A* and *B*, and the carriers *G, G*, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the backs *A*, and *B*, and the carriers *G, G*, of the bolster *C*, substantially as and for the purpose hereinbefore set forth.

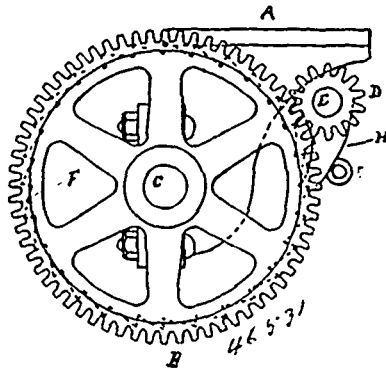
No. 46,528. Driving Chain. (Chaîne sans fin.)

Robert Frederick Hall, of Birmingham, England, 9th July, 1894; 6 years.

Claim.—1st. In driving chain the combination with links having knife-edge contacts, of converging or V-shaped end bearing recesses, keep channels or seatings, wherein the said knife edges take, bear and are there confined by leading sides, substantially as described and set forth. 2nd. In driving chain having knife-edged contacts, forming the said knife edges or knife-edged contacts upon, front, or

casing providing a main gas chamber, a delivery chamber and a secondary gas chamber, the main gas chamber having an inlet and the delivery chamber an outlet, with a communicating passage between such main chamber and delivery chamber, and a secondary inlet from said main chamber to said secondary gas chamber, of a valve to regulate the flow of gas through said communicating passage such valve being carried by a suitable stem, floats also carried by said stem and constituting the tops respectively of said secondary and delivery chambers and sealing troughs for such floats.

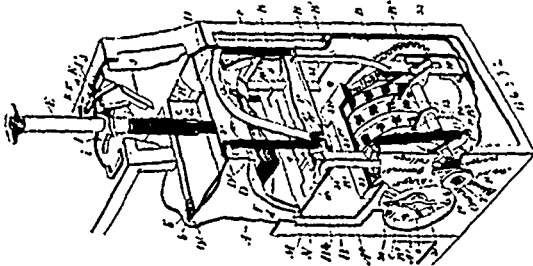
No. 46,531. Crane for Cheese Factories, etc.
(*Grue pour fromageries, etc.*)



William Stafford, Lancaster, Ontario, Canada, 9th July, 1894; 6 years.

Claim.—The spur or driving wheel B, with an integral ratchet wheel F, as described and for the purpose set forth.

No. 46,532. Fare Box. (*Boite à billets.*)



Duncan S. Macorquodale, Toronto, Ontario, Canada, 9th July, 1894; 6 years.

Claim.—1st. The combination with the casing D, having a slot M, made in the bottom of it, guideways to hold it laterally rigid, and spiral springs *d*, to hold the casing in its normal position, of a follower G, situated on top of the tickets F, and provided with a central threaded rod H, which is adjustable within a corresponding threaded collar in the hollow plunger, as and for the purpose specified. 2nd. The combination with the casing D, having a slot M, made in the bottom of it, guideways to hold it laterally rigid, and spiral springs *d*, to hold the casing in its normal position, of a follower G, situated on top of the tickets F, and provided with a central threaded rod H, which is adjustable within a corresponding threaded collar in the hollow plunger, and means whereby upon the downward pressure of the plunger it is caused to take a partial revolution so as to increase the distance of the follower from the bottom of the plunger, as and for the purpose specified. 3rd. The combination with the casings D, having a slot M, made in the bottom of it, guideways to hold it laterally rigid and spiral springs *d*, to hold the casing in its normal position, of a follower G, situated on top of the tickets F, and provided with a central threaded rod H, which is adjustable within a correspondingly threaded collar in the hollow plunger and the disc I, provided with a tooth I', secured to the plunger and co-acting with the vertical plate J, provided with guiding ribs *j*, *j'*, as and for the purpose specified. 4th. The combination with the casing D, having a slot M, made in the bottom of it, guideways to hold it laterally rigid and spiral springs *d*, to hold the casing in its normal position, of a follower G, situated on top of the tickets F, and provided with a central threaded rod H, which is adjustable within a correspondingly threaded collar in the hollow plunger and the disc I, provided with a tooth I', secured to the plunger and co-acting with the vertical plate J, provided with guiding ribs *j*, *j'*, and the pivoted bar K, arranged as and for the purpose specified. 5th. The combination with the casing D, having a slot M, made in the bottom of it, guideways to hold it

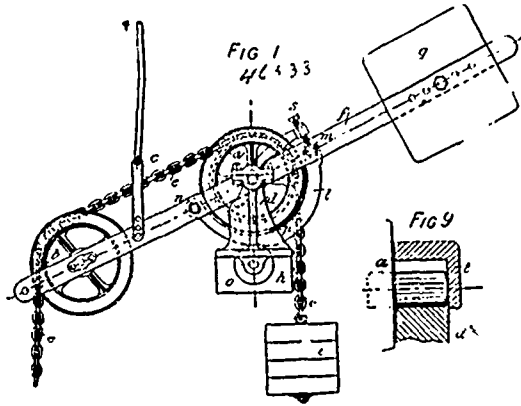
laterally rigid and spiral springs *d*, to hold the casing in its normal position, of a follower G, and plunger to operate it as specified, a slot N, made in one end of the ticket casing and openings made in the frame B, and box, a cross bar O, having a projecting rib *o*, extending into the slot M, and means whereby the cross bar is given a forward movement from the opposite end of the casing immediately upon the plunger being caused to ascend, as and for the purpose specified. 6th. The combination with the casing D, having a slot M, made in the bottom of it, guideways to hold it laterally rigid and spiral springs *d*, to hold the casing in its normal position, of a follower G, and plunger to operate it as specified, a slot N, made in one end of the ticket casing and openings made in the frame B, and box, a cross bar O, having a projecting rib *o*, extending into the slot M, and having the outer ends moving on guide-ways P, and connected by a slotted bracket to pins on the lower ends of the rocking arms R, which are connected to or forms part of the cross bars R', the spiral springs P, attached at one end to the cross bar, and at the other end to a suitable portion of the frame and the contact bracket S, designed to press against the cross bar in its descent, and thereby tilt the rocking arms, as and for the purpose specified. 7th. The combination with the ticket casing D, plunger E, for operating it, slot M, made in the bottom of the casing and follower G, with mechanism connected to the plunger for holding the tickets against the slot, of the printing wheels 1, 2, 3, 4, 5, designed to imprint the particulars on the ticket through the slot, as and for the purpose specified. 8th. The combination with the ticket casing D, plunger E, for operating it, slot M, made in the bottom of the casing and follower G, with mechanism connected to the plunger for holding it against the slot, of the printing wheels 1, 2, 3, 4, 5, designed to imprint the particulars on the ticket through the slot, an inking pad 32, and means for throwing the pad outside the path of the casing as it is caused to descend, as and for the purpose specified. 9th. The combination with the ticket casing D, plunger E, for operating it, slot M, made in the bottom of the case and follower G, with mechanism connected to the plunger for holding it against the slot, of the printing wheels 1, 2, 3, 4, 5, designed to imprint the particulars on the ticket through the slot, and inking pad 32, supported on the ends of the levers 33, spiral springs 34, designed to hold the pad normally against the surface of the type on the printing wheels, arms 35, connected to the ticket casing and designed to tilt the lever 33, and throw the pad outside the path of the casing as it is caused to descend, as and for the purpose specified. 10th. The combination with the street registering wheel Q, loosely journaled on the spindle 6, of the gear wheel 41, gear wheel 40, and spindle T, turning knob T', with pointer T', secured on the outer end of the spindle T, as and for the purpose specified. 11th. The combination with the street registering wheel Q, loosely journaled on the spindle 6, of the gear wheel 41, gear wheel 40, and spindle T, the turning knob with pointer T', adjustably held on the outer end of the spindle by means of its flange, collar and spiral spring T'. 12th. The combination with the polygonal wheel turned as specified, of the wide portion 32', of the pad 32 the bent arm 36, having its upper end extending under the widened portion of the pad and provided with a tooth 36, engaging with the wheel 38', on the end of the spindle T, as and for the purpose specified. 13th. The combination with the frame U, bar W, having the upright portion W², bell crank X, and plunger Y, of the registering wheels suitably journaled in the frame as specified and having a hanger secured to one end of the spindle of the registering wheels, provided with a forked lower end which extends at each side of the pin W², of the upright W², and a spring actuated dog secured on the other end of the spindle and designed to engage with the ratchet wheel on the primary registering wheel, as and for the purpose specified. 14th. The combination with the frame U, bar W, having the upright portion W², bell crank X, and plunger Y, of the registering wheels suitably journaled in the frame as specified and having a hanger secured to one end of the spindle of the registering wheels, the forked lower end of which extends at each side of the pin W², of the upright W², (the front member of the fork being inclined as shown) and a spring actuated dog secured on the other end of the spindle and designed to engage with the ratchet wheel on the primary registering wheel, as and for the purpose specified. 15th. The combination with the frame U, adjustable within the chamber C, as specified, of the flat spring Q, designed to press upon the bottom of the frame U, as and for the purpose specified. 16th. The combination with the frame U, having the bars W, W¹, connected to the bell crank, and the plunger as specified, and the gong V, supported above the bottom of the chamber C, of the arm 57, having the trip 58, and the spring actuated hammer 53, having the lateral extending arm 59, with which the trip 58, is designed to be engaged and be released from upon the forward movement of the bars W, W¹, as shown and for the purpose specified.

No. 46,533. Railway Signal Wire Compensator.
(*Compensateur pour fils de fer pour signaux de chemin de fer.*)

John Fisher, Matlock, Derby, England, 9th July, 1891; 6 years.

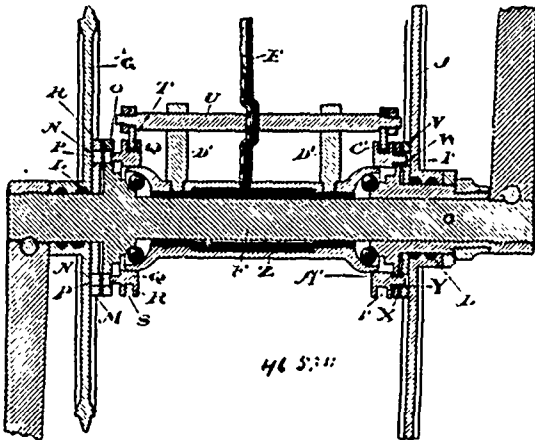
Claim.—1st. In apparatus for actuating signals, the combination of the lever *f*, loose chain wheel *a*, vertically elongated bearings *d*, curved bar *b*, pivoted at *n*, and movable vertically on pivot *m*, friction roller *h*, chain *c*, and weight *i*, arranged and operating substantially

as and for the purpose described. 7th. In combination with the curved bar *l*, loose pulley *a*, and elongated bearings *d*, the friction block or



brake, substantially as described. 3rd. In combination with the lever *f*, and pulleys *a*, *b*, the plates *b*, *d*, against which the ends of the pivots bear, substantially as and for the purpose described.

No. 46,534. Variable Driving Gear for Bicycles.
(Engrenage variable pour bicycles.)

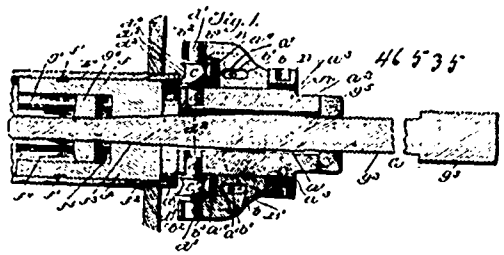


James Canan, Owen Sound, Ontario, Canada, 9th July, 1894; 6 years.

Claim.—1st. In a variable driving gear for a bicycle, &c., consisting of a crank axle, two spur wheels loosely mounted on the crank axle and arranged one at either end thereof, the driving wheel, the axle of the driving wheel, two pinions rigidly mounted one at either end of the said axle, drive chains passing around each spur wheel and its respective pinion, a clutch for each of said spur wheels, and means for throwing either of said clutches into gear, substantially as specified. 2nd. A variable driving gear for a bicycle, &c., consisting of a crank axle, two spur wheels loosely mounted on the crank axle and arranged one at either end thereof, the driving wheel the axle of the driving wheel, two pinions rigidly mounted one at either end of the said axle, drive chains passing around each spur wheel and its respective pinion, a clutch for each of said spur wheels, a clutch member rigidly secured to each of said spur wheels, two clutch discs one located at each end of said axle in close proximity to its respective spur wheel, and sliding clutch members each arranged to mesh with its respective clutch disc and clutch member on its respective spur wheel a shifting bar to move the sliding clutch members and a lever to operate the shifting bar, substantially as specified. 3rd. In a variable driving gear for bicycles, the combination of the crank axle *F*, a spur wheel *G* loosely mounted on the crank axle *F*, a disc *M* rigidly connected to the said face of the spur wheel *G*, a series of recesses *N* formed in the disc *M*, a clutch disc *O* rigidly connected to the crank axle *F*, a series of passages *P* in the disc *O* corresponding in number with the recesses in the disc *M*, a clutch member *Q*, loosely mounted on the crank axle bracket provided with a series of fingers or projections *R*, arranged to pass through the openings *P* in the clutch disc *O*, and enter the recess *N* in the disc *M*, a spur wheel *J* loosely mounted on the crank axle, a disc *V* connected to the side face of the spur wheel, a clutch disc *X* rigidly connected to the crank axle, having a series of passages *Y* corresponding in number and location with the recesses *W*, a clutch member *A* loosely mounted on the crank axle bracket, having a series of fingers *I* arranged to pass through the passages *Y* and

enter the recesses *W*, a shifting bar *U* arranged to move each of the clutch members *M* and *Q* to or away from their respective clutch discs, a lever *E* arranged to operate the shifting bar, the driving wheel, the axle of the driving wheel, and drive chains passing around the spur wheels and respective pinions, substantially as specified. 4th. In a variable driving gear for bicycles, the combination of the crank axle *F*, a spur wheel *G* loosely mounted on the crank axle *F*, a disc *M* rigidly connected to the said face of the spur wheel *G*, a series of recesses *N* formed in the disc *M*, a clutch disc *O* rigidly connected to the crank axle *F*, a series of passages *P* in the disc *O* corresponding in number with the recesses in the disc *M*, a clutch member *Q* loosely mounted on the crank axle bracket provided with a series of fingers or projections *R*, arranged to pass through the openings *P* in the clutch disc *O*, and enter the recess *N* in the disc *M*, a spur wheel *J* loosely mounted on the crank axle, a disc *V* connected to the side face of the spur wheel, a clutch disc *X* rigidly connected to the crank axle, having a series of passages *Y* corresponding in number and location with the recesses *W*, a clutch member *A* loosely mounted on the crank axle bracket having a series of fingers *I* arranged to pass through the passages *Y* and enter the recesses *W*, a shifting bar *U* arranged to move each of the clutch members *M* and *Q* to or away from their respective clutch discs, a lever *E* arranged to operate the shifting bar, and means for holding the lever in any turned position, substantially as specified.

No. 46,535. Flue Expander and Bender.
(Ezpanseur de tube et machine d'emboutissage.)

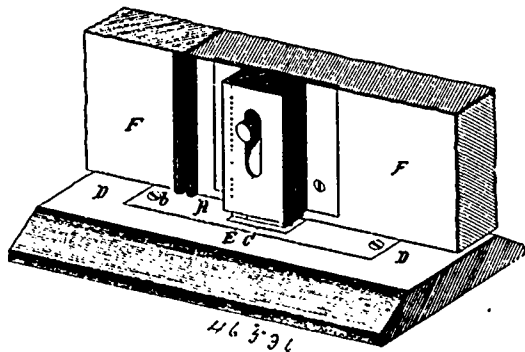


Joseph Coles, Aspen, Colorado, U.S.A., 9th July, 1894; 6 years.

Claim.—1st. A flue expander and beader having differential rollers for successively and conjunctively acting upon the end of a flue, each of said rollers being provided with two tapering walls and a central groove, each of said walls having a different taper, the outer tapering wall of one roller corresponding with the inner tapering wall of another roller, substantially as set forth. 2nd. A flue expander and beader having two differential rollers one of which gives the initial expansion and beading to the end of a flue and is provided with two tapering walls and a central groove, each of said walls having a different taper, the other of said rollers, in conjunction with the former, completing the expansion and beading, and likewise provided with two walls of different taper and a central groove, the outer wall of said latter roller corresponding to the inner wall of said former roller, substantially as set forth. 3rd. A flue expander and beader having differential rollers for successively and conjunctively expanding and beading the end of a flue, and adjustable arms controlling said rollers, as set forth. 4th. A flue expander and beader having differential rollers for successively and conjunctively expanding and beading the end of a flue, sliding arms controlling said rollers and means for adjusting said arms, substantially as set forth. 5th. The herein described improved flue expander and beader, comprising the casting, the arms loosely held to said casting, the rollers held by said arms, and the adjustable ring or collar for moving said arms independent of said casting, substantially as set forth. 6th. The herein described improved flue expander and beader, comprising the casting having ears projecting therefrom and an external screw thread, the arms loosely mounted between said ears, the rollers held by said arms, and the ring or collar having a threaded opening and adjustable on said screw-thread of the casting, as set forth. 7th. The herein described improved flue expander and beader, comprising the casting having apertured ears, and externally screw-threaded, the arms having slots therein, the cross-pins projected through said slots and supported by said ears, the rollers having end studs, the inner ones of which fit in recesses in said casting while the outer studs project into holes in said arms, and the ring or collar working in said screw-thread of the casting and designed to move said arms, substantially as set forth. 8th. A mandrel composed of a series of circularly arranged members designed to bite or engage the inner surface of a flue, and a tapered mandrel rod for engaging said members and forcing them outward into contact with the flue, as set forth, said members being yieldingly held in fixed relation to each other. 9th. A mandrel having a series of circularly arranged members provided with a peripheral flange or swell, and the tapered mandrel rod designed to force said members outward, substantially as set forth, said flange or swell being designed to form an inner corrugation on the flue in the rear of the flue-sheet, as stated. 10th. A mandrel having a central opening and a series of circularly arranged members provided with a peripheral flange or swell, an enclosed holder located within said opening in

rear of the flange or swell and conforming to the shape of said opening, and designed to bear against projecting portions of said members, and the tapered mandrel rod for directly engaging and forcing said members outward and extended through an opening in said holder, substantially as set forth. 11th. The herein described mandrel composed of a series of yielding members or segments and having a central opening, the tapered mandrel rod for forcing said members or segments apart, and a guide located in said opening engaged by said mandrel rod for holding said members or segments expanded, as set forth. 12th. The herein described mandrel composed of a series of yielding members or segments having a central opening and a peripheral flange or swell, the tapered mandrel rod, and the adjustable guide located in said opening and engaged by said mandrel rod for holding said members or segments expanded, as set forth. 13th. The herein described mandrel composed of a series of members or segments having a central squared and circular opening, a nut located in said squared opening, and the tapered mandrel rod having a threaded portion for engaging said nut and adjusting it so as to hold said members or segments expanded, as set forth. 14th. The herein described mandrel, composed of a series of members or segments having a peripheral flange or swell and a central squared and circular opening, a yielding ring or band circling said members or segments, the nut located in said squared opening and having a central threaded opening, and the tapered mandrel rod for forcing said members or segments apart and having a screw-thread engaging said nut, substantially as set forth. 15th. The combination with a mandrel, of an expanding and beading machine having independently pivoted guides projecting therefrom and designed to bear against the flue-sheet while said mandrel is being operated, as and for the purpose stated. 16th. The combination with a mandrel for forming an inner corrugation or swell on a flue in rear of the flue-sheet, of the casting carrying expanding and beading rollers and having studs projecting therefrom, and the guide plates pivoted on said studs and designed to bear against said flue sheet while said mandrel is being operated, substantially as set forth.

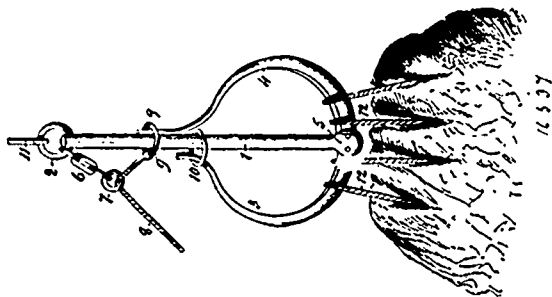
No. 46,536. Bottom Bolt Spring Socket for Folding Doors. (*Douille à ressort pour verroux de portes à deux battants.*)



Benjamin Heymanson, Boise City, Idaho, U.S.A., 9th July, 1894; 6 years.

Claim.—In a bolt socket or strike plate, the combination of plate A, having an opening for the bolt of a flat spring plate B, provided with the filling plate c, for the bolt opening substantially as described.

No. 46,537. Hay Lifter. (*Monte-foin.*)

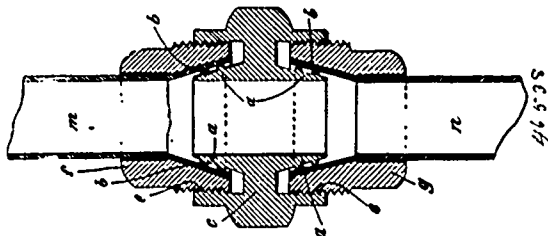


Orson Briggs, St. Louis, Michigan, U.S.A., 10th July, 1894; 6 years.

Claim.—1st. In a hay lifter, the combination of a support having a lifting device attached to the upper end thereof, arms hinged to the lower end of said support, rings mounted on said support, and adapted to engage the upper ends of said arms, and a trip rope, or cord attached to the uppermost of said rings, substantially as

described. 2nd. In a hay lifter, the combination of a support having a ring at the upper end thereof, a lifting device attached to said ring, a guide ring loosely depending from said ring at the upper end of the support, a pair of curved arms hinged to the lower portion of said support, one of which is longer than the other, and a pair of rings loosely surrounding the support and adapted to engage the upper ends of the said arms, and a trip rope, or cord, passing through the said guide ring, and attached to the uppermost of said rings on the support, substantially as and for the purpose specified.

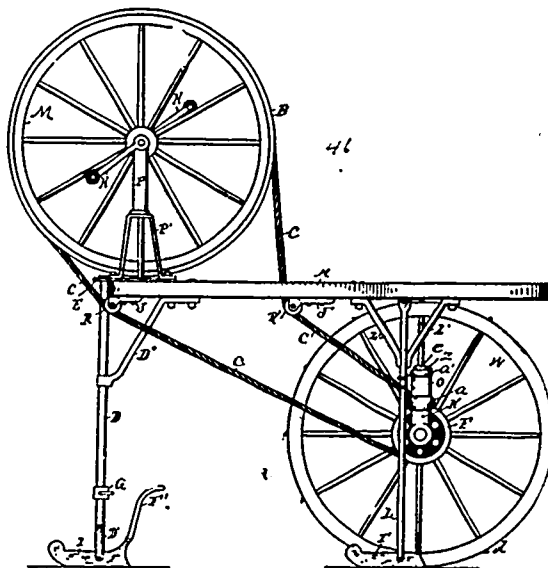
No. 46,538. Pipe Union. (*Tuyau de raccord.*)



Detlev L. R. Rochlitz, and Friedrich E. Wolter, Hamburg, Germany, 10th July, 1894; 6 years.

Claim.—1st. A pipe union consisting of a duplex nut provided with two opposite conical tightening surfaces and two externally screwed ferrules having internally coned surfaces constructed and arranged, substantially as hereinbefore described. 2nd. In the pipe union hereinbefore described, annular ribs b b constructed upon the conical parts, constructed and arranged substantially as hereinbefore described.

No. 46,539. Ice Velocipede. (*Velocipède-traineau.*)

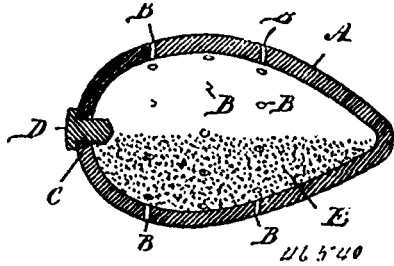


Jacob Kolb, Wichita, Kansas, U.S.A., 10th July, 1894; 6 years.

Claim.—1st. In combination with the seat board A, the fixed legs or standards L, L, provided with the runners I¹, I¹, the boxes o, o, fixed to said standards, the bearings K, K, provided with the shanks placed in said boxes, the rubber cushions a, a, and washer a¹, a¹, placed on said shanks, the propeller wheel w provided with the peripheral spikes or spurs, and with the belt pulleys F, F, and placed with its spindle in said bearings, the pivoted leg or standard D, provided with the runners I, I, and with the foot rest G, the fixed standards P, P, the belt wheel B fixed upon the spindle S, boxed to said standards, the hand cranks H, H, fixed on said spindle, the idler rollers R and R¹, journaled to bearings of the seat-board and the belts c, c, substantially as and for the purpose set forth. 2nd. In the velocipede described, in combination with the seat board A, the fixed legs or standards L, L, and braces L¹, L¹ thereof provided with the runners I¹, I¹, and supported between them the propeller wheel and belt pulleys, the plate E fixed to the forward end of the seat-board, the leg or standard D pivotally connected with said plate and boxed in the brace D¹, and provided with the runners I, I, and foot rest G, the hand operated belt wheel B supported above said seat-board, and the belts and idler rollers, substantially as and for the purpose set forth. 3rd. In the velocipede described, the combination with the legs or standards L, L, and boxes o, o, fixed to said standards of the bearings K, K, provided with the

shanks *c* placed in said boxes, the rubber cushions and washers placed on said shanks, the cotter for retaining said shanks in said boxes, and the propeller wheel *W*, and spindle thereof, substantially as and for the purpose specified. 4th. In the velocipede described, in combination with the seat-board, the plate *E* fixed to said board, the leg or standard *D* pivotally connected with said plate, the runners *I*, *I* pivotally attached to the lower end or fork of said standard, and provided with the rear up extending connection *F*¹, and the foot rest *G* fixed to said standard, substantially as and for the purpose specified. 5th. In the velocipede described, in combination with the seat-board and its supports, the standards *P*, *P*, the belt wheel *B* provided with the spindle boxed to said standards, the hand cranks *H*, *H* fixed to said spindle, the idler rollers *R* and *R*¹ journaled to bearings of the seat-board, the propeller wheel *W*, the belt pulleys *F*, *F*, thereof, and the belt *C*, *C*, substantially as and for the purpose specified.

No. 46,540. Artificial Egg. (Euf artificiel.)

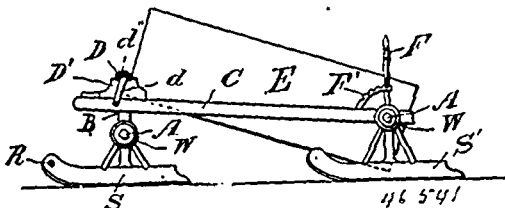


Edward D. Hand, Fenelon Falls, Ontario, Canada, 10th July, 1894; 6 years.

Claim.—1st. A hollow non-porous imitation or artificial nest-egg, composed of a non-porous material, and formed with an opening at one end, and a series of perforations through its body whereby it may be charged internally with an insect powder for distribution in the nest when disturbed, as set forth. 2nd. An artificial nest-egg, having a shell *A* provided with perforations *B*, around an equatorial zone, and an opening *C* closed by a stopper *D*, and containing an insecticide, as and for the purpose set forth. 3rd. As an improved article of manufacture, an artificial nest-egg consisting of a hollow egg-shaped shell *A*, having perforations *B* through the body portion, and an aperture or opening *C* closed by a stopper *D*, as and for the purpose set forth. 4th. An artificial nest-egg or imitation egg, having a hollow interior charged with a dry, chemical powder *E*, destructive to insect life, an opening *C* for inserting said powder, perforations *B* between the ends for escape of said powder when the egg is disturbed, and a stopper *D* closing said opening, as set forth. 5th. An artificial nest-egg or imitation egg, comprising a hollow shell *A*, containing an absorbent material *F*, an opening *C* through said shell for insertion of said material, and perforations *B* through the equatorial zone of said shell, as set forth for the purpose described.

No. 46,541. Dumping Device for Vehicles.

(Appareil à bascule pour voitures.)



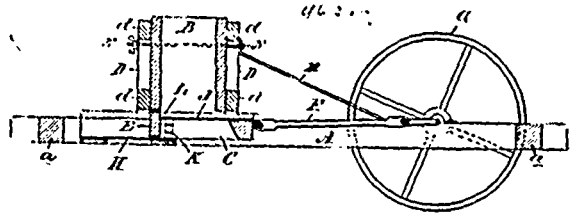
Albert Tracy and William Abbott, both of Ottawa, Ontario, Canada, 10th July, 1894; 6 years.

Claim.—1st. The combination with a straight front axle and a cranked rear axle of a bolster supported by the front axle, two sills framed upon said bolster and journaled upon the arms of the rear axle, a shaft with hand cranks journaled transversely upon the front end of said sills and provided with ratchet wheels and pawls and having chains or ropes secured thereto near the bearings, a box at the front end and having its front suspended on said chains and its rear journaled in the crank of the rear axle, and levers formed on the webs of the rear axle cranks and suitable engaging and retaining devices, substantially as set forth. 2nd. The combination of a straight front axle, a bolster centred upon it, two sills having their front ends framed upon said bolster ends, a winding shaft with cranks journaled transversely upon said sills, winding chains or ropes secured to said shaft, and a box having its front end secured to said winding chains or ropes, substantially as set forth. 3rd. The combination of a crank axle *A*¹, sills *C*, to which said

axle is journaled, levers *F*, on the webs of the crank and suitably engaging and retaining devices connecting said levers and wheels, substantially as set forth.

No. 46,542. Curd Cutter.

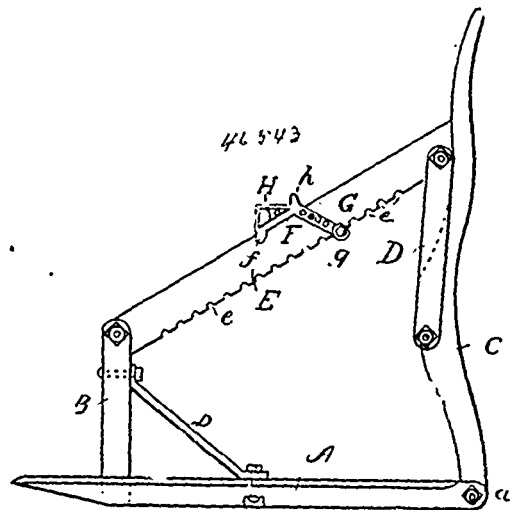
(Machine à couper le caillé.)



Ormand Barnard, Oxford Mills, Ontario, Canada, 10th July, 1894; 6 years.

Claim.—1st. The curd cutter, section *C*, comprising a supporting frame having a lower sub-floor *H*, and an upper sub-floor *J*, extending towards one another from opposite ends of the frame, said floors connected at their inner ends by intersecting knives *K*, as set forth, for the purpose described. 2nd. The cutter section *C*, having upper and lower half floors connected at their inner ends by intersecting knives *K*, in combination with a supporting frame having parallel ways or bars *A*, *A*, on which said cutter section slides, and a bottomless hopper *B*, above said cutter section, whereby the curd fed into the hopper is cut into square oblong lengths, by said intersecting knives and forced therethrough by the reciprocation of the cutter section horizontally, as set forth. 3rd. The combination of the supporting frame having parallel bars or ways *A*, *A*, the bottomless hopper *B*, on top of said ways, the cutter section *C*, having lower and upper sub-floors, *H*, *J*, connected by intersecting knives *K*, said cutter sliding reciprocally upon said supporting frame and under said hopper, and a pitman, wheel or crank operating said cutter section by suitable motive power, whereby the curd is cut into oblong lengths and discharged through the intersecting knives, as set forth.

No. 46,543. Lifting Jack. (Cric.)



Magloire Thibault, Ottawa, Ontario, Canada, 10th July, 1894; 6 years.

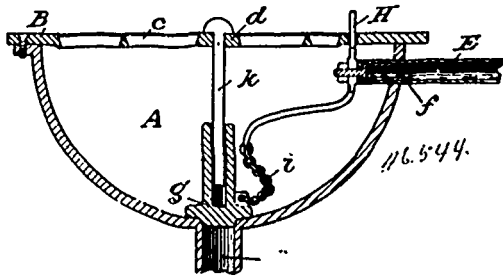
Claim.—In a lifting jack, the combination with the lever *E*, having notches on its underside and means for raising the same, of the chair *F*, having an inclined under surface and an approximately upper surface *H*, a shoulder *h*, lugs *f*, embracing the said notches *e*, substantially as set forth.

No. 46,544. Cuspidor. (Crachoir.)

Cyrille A. Bernard, and Napoleon Desmarais, both of St. Césaire, Quebec, Canada, 10th July, 1894; 6 years.

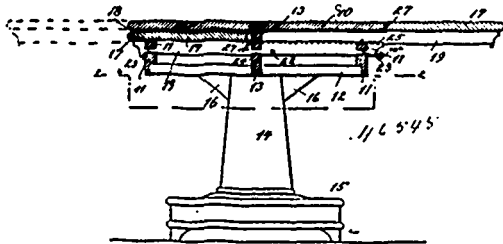
Claim.—1st. In a cuspidor composed of a bowl and having a perforated top secured thereto, the combination of a pipe entering the bowl near its top, provided with a check valve, a lever for operating said valve and projecting through the perforated top, and a drain

pipe from the bottom of the bowl, provided with a plug, substantially as shown and for the purposes set forth. 2nd. In a cuspidor provided with a flow pipe for the admission of water to the bowl, a



check valve in said pipe to regulate the flow of water, a lever attached to said valve and projecting through a perforated top on the bowl, and connected by a chain, of its equivalent, to a plug set in the end of a drain pipe leading from the bowl of the cuspidor, all substantially as shown and for the purposes described.

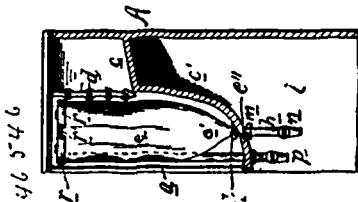
No. 46,545. Extension Table. (Table à rallonge.)



Joseph Bohr, Westphalia, Michigan, U.S.A., 10th July, 1894; 6 years.

Claim.—1st. The combination, with the table top and its supporting frame, the latter having recesses therein, of the leaves, the supporting arms secured to the under sides of the leaves and resting in the recesses of the frame, and the laterally-extending pins on the arms, substantially as specified. 2nd. The combination, with the table top and its supporting frame, the latter having recesses in its upper edge, of a leaf adapted to slide beneath the table top, supporting arms secured to the leaf, and projections on the arms which lie upon the top of the supporting frame, substantially as specified. 3rd. The combination, with the table top and its supporting frame, the latter having a recess on its outer side and upper edge, and a recess in its central portion with a ledge on its upper wall, of a leaf to fit against the edge of the table top, supporting arms secured to the under side of the leaf and adapted to lie in the recesses of the frame, projections on the sides of the arms, to rest on the table top, and means, as a notch in the arms, to engage the ledge on the supporting frame, substantially as specified. 4th. The combination, with the table top and its recessed supporting frame having a cross-piece near the centre, of the extensible leaf, the supporting arms secured to the leaf and extending through the side and cross-pieces of the supporting frame, and the fastening device to engage the rear ends of the supporting arms when they are extended, substantially as specified.

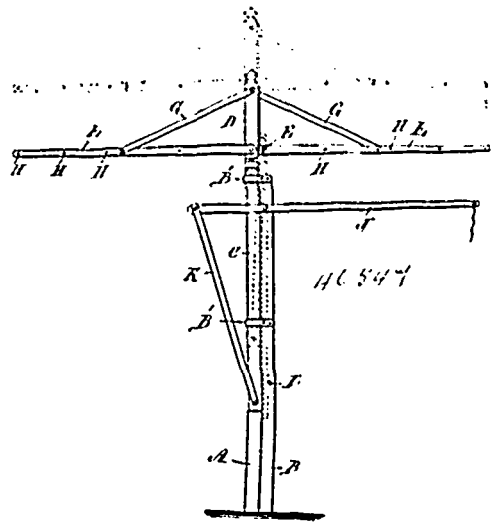
No. 46,546. Milk Cooler. (Garde-lait aérateur.)



Charles L. Kneeland, Lansing, Michigan, U.S.A., 10th July, 1894; 6 years.

Claim.—1st. The combination with the casing, of the water tank therein, having a glass front, the ice chamber above the bottom of the tank and connected to said tank, and a grating between the ice and the water chambers. 2nd. The combination with the casing the water tank therein, and the cans mounted upon the bottom of said tank, of the elastic bands secured to the casing and drawn around the cans, and provided with hooks engaging with the tops of the cans. 3rd. The combination with the casing, the water tank and the cans mounted upon the bottom of said tank, and the ice chamber connected to the water tank, and the grating separating them.

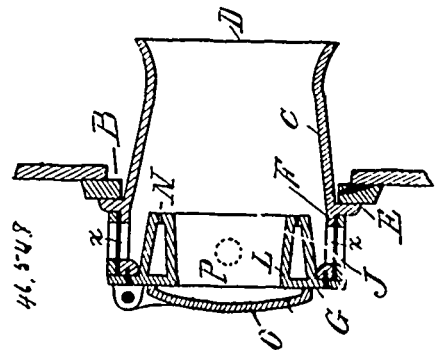
No. 46,547. Clothes Dryer. (Séchoir à linge.)



William J. Coulter, Chesley, Ontario, Canada, 10th July, 1894; 6 years.

Claim.—In a clothes dryer, the combination of the fixed post B, having guides B', the moving post C, sliding in said guides, the rotary reel head D, pivoted to the top of post C, and provided with radial arms E, carrying lines H, and supporting braces G, and the overhead lifting lever J, fulcrumed to post B, and having a projecting end connected by a bar or rod K, to post C, near the bottom, as set forth.

No. 46,548. Air Feeding Device for Furnaces. (Alimentateur d'air pour fournaies.)



Thomas Craney, Bay City, Michigan, U.S.A., 10th July, 1894; 6 years.

Claim.—1st. In an air feed device for furnaces, the combination of the door, a contracting nozzle secured thereto projecting inside and outside the door, a head on the outer end of the nozzle, a steam ring on the head, having a central aperture, a door for the apertures in the nozzle around the steam ring, and a ring damper, controlling these apertures, substantially as described. 2nd. In an air feed device for furnaces, the combination of the door, the contracting nozzle the circumferential flange E by means of which the cone is secured to the door, the apertured cylindrical extension F outside the door, the head G secured to the end of the extension and projecting beyond the edges of the same, the damper H secured on the extension between the flange E and the extension of the head, the steam ring on the inner face of the head having jets at the forward edge, and an exterior door, controlling a passage through the ring, substantially as described.

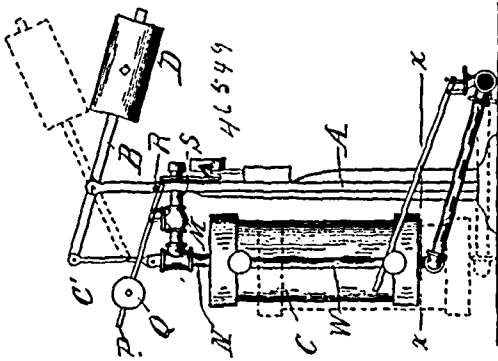
No. 46,549. Steam Boiler Feeder.

(Alimentateur pour chaudières à vapeur.)

James Dean, Detroit, Michigan, U.S.A., 10th July, 1894; 6 years.

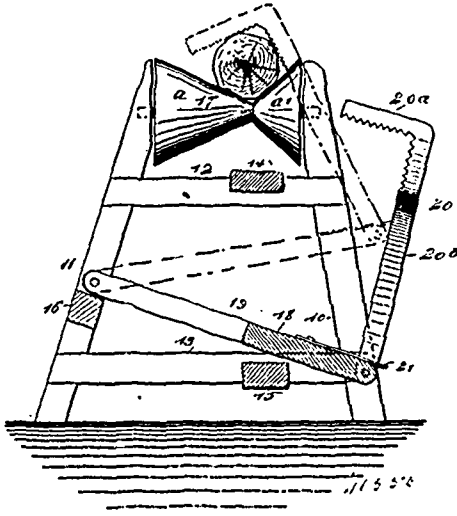
Claim.—1st. In a steam boiler feeder, the combination with a standard of a lever fulcrumed to the top of the standard, having an adjustable counter weight on one end, a water receptacle secured to the opposite end of the lever, means for alternately emptying and filling said receptacle controlled by the movement of said receptacle, and a register secured to the standard adapted to be actuated by the

movement of the water receptacle, substantially as described. 2nd. In a steam boiler feeder, the combination with a water receptacle, means for alternately filling and emptying the receptacle controlled by its upward and downward movement, a water gauge for said



receptacle, and an adjustable counterweight and a gravity latch adapted to delay said receptacle at the limit of said movement, and having an adjustable weight secured thereon, substantially as described. 3rd. In a steam boiler feeder, the combination of a vertically reciprocating water receptacle, means for alternately filling and emptying said receptacle, an adjustable balance secured to said receptacle, a register and lever for actuating the register adapted to be actuated by the movement of said water receptacle, substantially as described. 4th. In a steam boiler feeder, the combination with a support of a reciprocating water receptacle mounted thereon, an adjustable weight for the receptacle, means for alternately filling and emptying the receptacle controlled by the movement thereof, a register, a lever for actuating the same, and a projection on the receptacle for tripping the lever, substantially as described.

No. 46,550. Saw Horse. (Chevalet.)

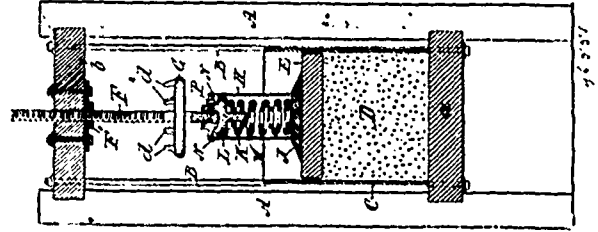


Charles D. Snell, Haverhill, Massachusetts, U.S.A., 10th July, 1894; 6 years.

Claim.—1st. A saw-horse provided with rollers adapted to support a log to be sawed, said rollers comprising two conical surfaces connected at their apexes, one surface being of greater length than the other, as and for the purpose specified. 2nd. A saw-horse provided with rollers journaled therein adapted to support the log to be sawed, the said rollers comprising two conical surfaces connected at their apexes, the conical surfaces being of different lengths, the shorter surface being located at the front of the horse, substantially as and for the purpose set forth. 3rd. The combination, with the frame of a saw-horse, of a platform pivoted to the frame, a clamp comprising an angular toothed head adapted for engagement with the log to be sawed, and a foot section connected with the platform, whereby pressure upon the platform will cause the head of the clamp to hold the log to be sawed in position upon the horse, substantially as shown and described. 4th. In a saw-horse, the combination, with a frame, the front and rear whereof are inclined from the bottom upward and inward, the inclination at the back being greater than at the front, of conical supporting rollers adapted to sustain the log to be sawed, and journaled in the upper portion of the frame, the length of the rollers being in direction of the front and rear of the frame, each of said rollers being provided with two conical surfaces connected at

their apexes, the rear conical surface being longer than forward one, a platform pivoted to the frame and extending to the front thereof, and a toothed clamp carried by the platform and adapted for holding engagement with the log to be sawed, as and for the purpose specified.

No. 46,551. Cheese Press. (Press à fromage.)



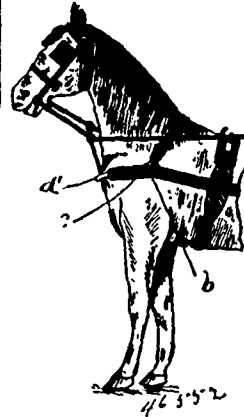
Thomas Morrison, Brockville, Ontario, Canada, 11th July, 1894; 6 years.

Claim.—1st. In a screw cheese press, the combination with the pressure screw F, of the follower L, rotatively connected to the thrust end of said screw, a tubular case H, hung to said follower, the bottom provided with an external flange J, and a spiral spring or springs K, within said case, said springs receiving the thrust of the follower L, whereby said case depresses the follower F, in the cheese hoop, and said springs when under pressure elongate according to the contraction of the cheese while drying in the press, as set forth. 2nd. The combination with the pressure screw F, of the case H, the spiral spring or springs K, within said case, and the follower L, bearing on said spring or springs, and attached to the thrust end of said pressure screw, as and for the purpose set forth.

No. 46,552. Breast Collars for Harness. (Harnais à poitrails.)

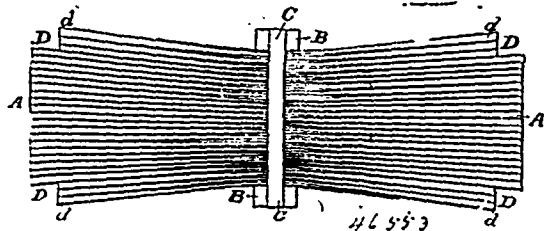
(Harnais à poitrails.)

Quintus P. Watson and Henry Price, both of Kenton, Ohio, U.S.A., 10th July, 1894; 6 years.



Claim.—1st. In a breast collar for harness the combination with the metallic side or shoulder strips having outwardly and upwardly bent shoulder portions as described, of a rounded metallic throat portion jointedly connecting the ends of said shoulder pieces and a flexible casing for said collar, substantially as and for the purpose specified. 2nd. In a breast collar for harness the combination with the metallic shoulder strips a having outward bends d and upward bends e as described, of a throat portion l having as described a hinge connection with said shoulder portions, said throat portion being bent downwardly, substantially as and for the purpose specified.

No. 46,553. Shingle Package. (Caisse pour bardeaux.)

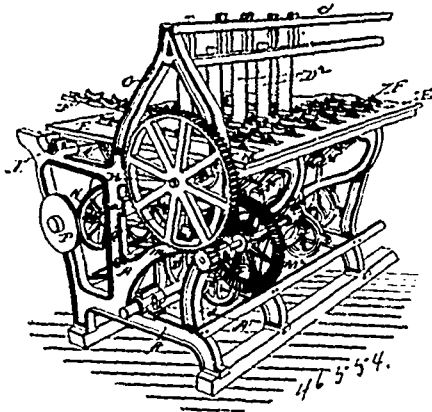


Morgan J. Carkeek, Seattle, Washington, U.S.A., 10th June, 1894; 6 years.

Claim.—1st. The herein described improvement in the art of packing shingles which consists in forming the centre or body of the bunch of layers of shingles having the butts toward each end of the bunch and their tips towards the centre and overlapping, and upon each side a sufficient number of layers of shingles similarly placed but having an increased lap so as to form a recess or rabbet at each of the four end corners of a cross-section approximately equal to half of that of the binding strip, and placing binding strips across the bunch at its centre and securing them together, substantially as shown and described. 2nd. The herein described bunch of shingles composed of superimposed layers of shingles having their butts at opposite ends of the bunch and their tips overlapping, with sufficient

of the outer layers of shingles overlapping more than the others to form a recess, rabbet or notch at each of the four end corners of the bunch which in cross section is approximately that of one-half of the binding strips, and having binding strips secured across the two sides of the bunch at the centre of its length, substantially as shown and described. 3rd. The herein described bunch of shingles composed of superimposed layers of shingles overlapping each other in the centre and having their butts to each end of the bunch with binding strips across the centre of the bunch and bands for securing them to each other, said overlapping of the tips of the shingles at the centre of the bunch being so adjusted that the end corners of the bunch and the outer edge of the binding strips will be in a straight line, substantially as shown and described.

No. 46,554. Machine for Sawing Blocks from Logs.
(Machine pour scier des blocs des billots de bois.)



Franklin Lubin Day, Glen Falls, New York, U.S.A., 11th July 1894; 6 years.

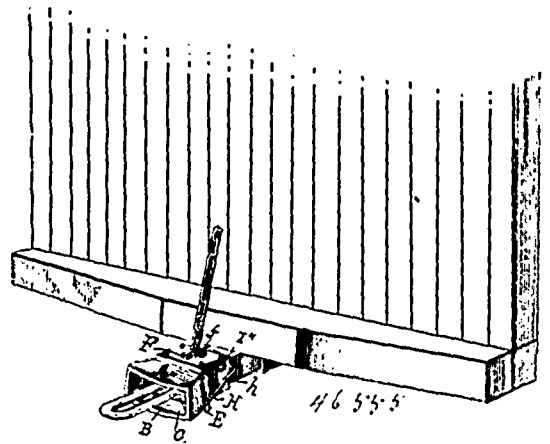
Claim.—1st. In a machine for butting logs, the combination with the frame having the table, and series of vertical guides above said table, of the gangs of vertical alternately arranged opposite reciprocating saws having the upper ends independently guided in said guides, a drive shaft, eccentrics thereon and connections between the eccentrics and saws for reciprocating the same, substantially as described. 2nd. In a machine for butting logs, the combination with the frame having the table, the series of vertical guides above said table and a corresponding series of vertical guides below the table, of the gangs of alternately arranged oppositely reciprocating saws having their upper and lower ends independently guided in said guides, a drive shaft, eccentrics thereon and connections between the eccentrics and saws for reciprocating the latter, substantially as described. 3rd. In a machine for butting logs, the combination with the frame having the table, the series of vertical guides above said table and a corresponding series of vertical guides below the table, of the gangs of independent alternately arranged oppositely reciprocating saws having their upper and lower ends guided in said guides, a drive shaft below the saws, an eccentric for each saw located on said shaft and a connecting rod between each eccentric and its saw, substantially as described. 4th. In a machine for butting logs, the combination with the table, gang of saws and feeding mechanism passing between the saws, of the series of independent movable pressers located between the saws and arranged one adjacent to and on each side of each saw whereby the block between each two adjacent saws is held independently of every other block, substantially as described. 5th. In a machine for butting logs, the combination with the table, gangs of vertically reciprocating saws and feeding chains arranged to pass two between each two adjacent saws, of the series of independent movable pressers located in pairs between each two adjacent saws whereby each section of the log between the saws is held independently of every other section, substantially as described. 6th. In a machine for butting logs, the combination with the table, gang of saws and the pairs of feeding chains passing between each two adjacent saws, of the independent presser rollers arranged between the saws and in vertical planes intermediate the feeding chains, substantially as described.

No. 46,555. Car Coupler. (Attelage de chars.)

James H. Swindell, Reidsville, Georgia, U.S.A., 11th July, 1894; 6 years.

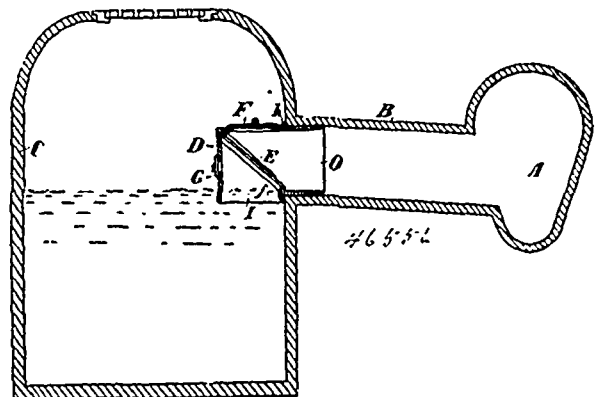
Claim.—1st. The improvement in car couplings comprising the longitudinally movable draw-head, the coupling pin, the link-holder having a crank like arm, and a latch having portions arranged and adapted to support the pin and link-holder in the elevated position and adapted for operation by the longitudinal movement of the draw-head, substantially as set forth. 2nd. The combination with a longitudinally movable draw-head of a latch provided with devices arranged to engage and hold the pin, and the link-holder elevated

and to release the same when the draw-head is pushed rearwardly, substantially as set forth. 3rd. In a car coupling, a latch provided at its sides with projecting lugs to support the arms of the link-holder, and between its sides with a bearing by which to engage and



support the pin elevated, substantially as set forth. 4th. In a car coupling, the combination of a cover plate having a depending flange provided with openings I^1, I^2 , and the latch fitted to said cover and having portions I^1, I^2 , protruding through the said openings I^1, I^2 , substantially as set forth. 5th. In a car coupling, the combination of the cover having a depending rib provided with guide openings, the latch having rods I^1 and I^2 , held and movable in said opening and the actuating spring or springs, substantially as set forth. 6th. In a car coupling, the combination with a longitudinally movable draw-head, and the coupling pin and link-holder of the latch having at its side a projecting portion to support the link-holder, and provided between its sides with a portion to support the pin, and a spring by which to actuate the latch, substantially as set forth. 7th. In a car coupling, the combination of the cover having a rib J^2 , provided with guide openings, the latch having its spring rods movable in said openings and the springs on said rods, substantially as set forth. 8th. The combination of the cover having rib J , provided with openings I^1, I^2 , and the rib J^2 , provided with guide openings, of the latch provided with a stem I^1 , side lugs I^2 , intermediate cross-bars I^3 , the guide rods I^4 , and the actuating springs, all substantially as set forth. 9th. The combination substantially as described of the draw-head, the link-holder having crank like arms provided with hooked ends, the coupling pin provided with a shouldered guide arms, the cover plate having ribs or flanges J^1, J^2 , the latch having cross-bar I^3 , lateral lugs I^4 , stem rods I^5 , and the actuating springs, substantially as set forth.

No. 46,556. Cesspool. (Puisard.)



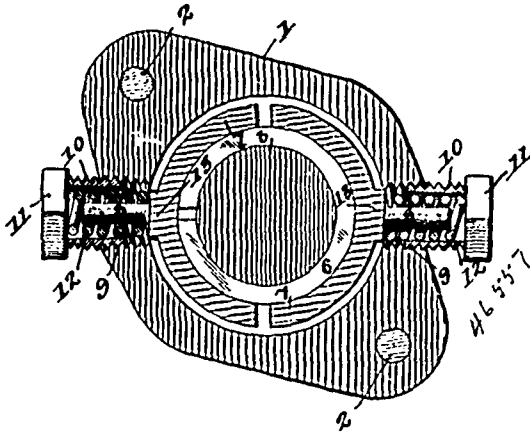
Matthew Moriarty, Bangor, Maine, U.S.A., 11th July, 1894; 6 years.

Claim.—1st. A cesspool-outlet consisting of a case D, having its open end and a portion of its length inserted in the outlet-drain, said case having its opposite end closed and an inlet-opening from its under side next adjacent its closed end, a swing-valve extending from the upper corner of said case diagonally across the inlet-opening, and a clean out-opening provided with a cover, directly above said swing-valve, all for the purpose described and substantially as shown and set forth. 2nd. In combination with a cesspool and its connecting sewer-drain, the improved outlet connecting the cess-pool with said drain, consisting of a case D, having its open end

inserted in said drain and its opposite end closed and provided with an inlet from its under side adjacent said closed end, with a swing-valve covering said inlet, and a cleanout-opening directly over said swing-valve, and a cover for said cleanout-opening, with an end-door and opening for the purpose described, and a rib upon the inside of said case to form a seat for the swing-valve, all substantially as shown and in the manner set forth and described.

No. 46,557. Piston Packing.

(Garniture de piston.)

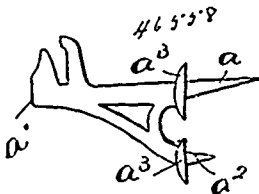


David Spencer, Roanoke, and Philip P. Cooke and Edward D. Quarls, Richmond, all of Virginia, U.S.A., 11th July, 1894; 6 years.

Claim.—1st. The combination with a gland or casing, of compressible packing rings, curved jaws engaging opposite sides of the packing rings, adjustable guide-tubes passed from the outside through threaded perforations in the walls of the gland or casing and accessible from the outside thereof, and tension springs coiled within said guide tubes and bearing at their inner ends against the jaws, substantially as specified. 2nd. The combination with a gland or casing, packing rings and a clamping device therefor, of a hollow bushing threaded into the outer end of the bore of the gland or casing and provided with an oil chamber, an exterior channel and radial perforations connecting said oil chamber and channel, the perforations and channel being closed and covered by the walls of the gland or casing when the bushing is in place, substantially as specified. 3rd. The combination with a gland or casing, of compressible packing rings, approximately semi-circular jaws arranged in contact with the outer surfaces of said rings and provided with radially-disposed stems, adjustable guide-tubes threaded in perforations in the walls of the gland or casing, and tension springs arranged within the guide-tubes and embracing said stems, substantially as specified. 4th. The combination with a gland or casing, of packing rings arranged therein, a clamping device arranged in operative relation with said rings, and an annular bushing threaded into the outer end of the bore of the gland or casing and provided with an inwardly-extending rim or flange to engage said clamping device and packing rings, and having an inner oil chamber communicating by radial perforations with an exterior oil channel, substantially as specified.

No. 46,558. Window Shade Bracket.

(Console de rideaux de fenetre.)

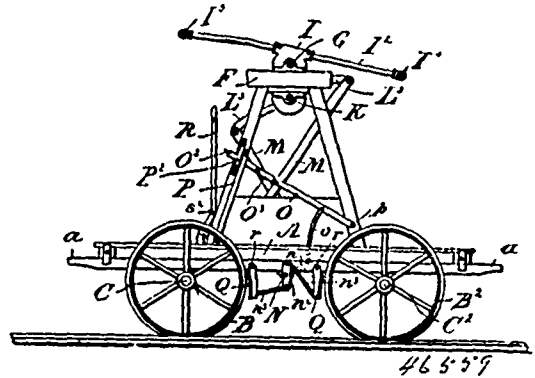


Theodore H. Klein and Frank Henry Gillette, Cleveland, Ohio, U.S.A., 11th July, 1894; 6 years.

Claim.—1st. A window-shade bracket having two embedding points of different lengths, respectively, and shoulders or flanges at the inner ends of the points, the longer embedding point inclining outwardly away from the shorter point and the shoulder or flange at the inner end of the longer point being located somewhat in advance of the shoulder or flange at the inner end of the shorter point, substantially as set forth. 2nd. A window-shade bracket having an upper embedding-point a^1 and a lower and shorter embedding-point a^2 , and shoulders or flanges a^3 at the inner ends of the points, the lower point and shoulder or flange at the inner end of said point

being arranged at right angles or approximately at right angles to each other, and the shoulder or flange at the inner end of the upper point inclining toward the free end of said point and being located somewhat in advance of the shoulder or flange at the inner end of the lower point, substantially as set forth.

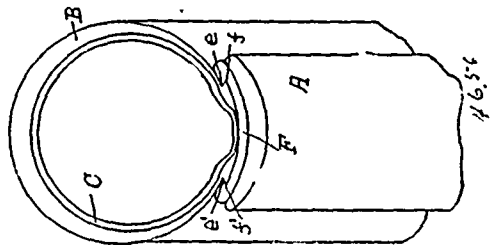
No. 46,559. Hand Car. (Char à bras.)



Thomas Talbot and Bruno Charron, both of Mattawa, Ontario, Canada, 11th July, 1894; 6 years.

Claim.—1st. In a railroad hand car, the combination with a frame, wheels and axles, one of said axles having a pinion secured thereon, of a gear-wheel suitably journaled in said frame and gearing with the said pinion, cranks secured to the axle of the said gear-wheel, pitman or connecting rods connecting the said cranks with arms secured on a rocking shaft, a rocking shaft carrying arms one projecting from either side of the said shaft, a segmental pinion having its teeth on the upper side of said rocking shaft, an operating rocking shaft journaled above the said rocking shaft, a segmental pinion gearing with the aforesaid segmental pinion, a socket carried by the said shaft, a walking beam carried in the said socket and handles on the said walking beam, substantially as set forth. 2nd. In a railroad hand car, the combination with a walking beam, of a rocking shaft journaled in a frame on a hand car, a socket on the said shaft in which the said walking beam is secured, a segmental rack on the under side of the said rocking shaft, a rocking shaft journaled under the aforesaid rocking shaft, a segmental rack carried on the said rocking shaft gearing with the aforesaid segmental rack, arms carried by the said shaft, and means for transmitting the motion from the said arms to the wheels of the car, substantially as set forth. 3rd. In a brake for a railroad hand car the combination with the pivoted brake shoes, of a shaft N, journaled centrally between the two shoes, the cross head n^2 , links n^3 connecting the ends of the cross-head with the said shoes, an arm n at the other end of the said shaft, a link o connecting the said arm with a lever O, the lever O pivoted to the frame of the hand car, a foot piece O^2 at the free end of the said lever, a foot piece O^3 on the said lever between the free end and the link o , a keeper P and spring P^2 , substantially as set forth. 4th. In a railroad hand car, the combination with the main frame of the said hand car of the lever R pivoted at its end to one of the cross-pieces of the said car, a depending bar S pivoted to the said lever, near the pivotal point, the hooks s and s^2 to hold the said lever when in either position, substantially as set forth.

No. 46,560. Process for the Production of Objects in Relief or in Intaglio. (Procédé pour la production d'objets en relief ou intaille.)



Mario Russo and Giovanni B. Zanardo, Rome, Italy, 11th July, 1894; 6 years.

Claim.—1st. The process herein described of reproducing objects in relief or in intaglio, whereby there is obtained the proper relative relief of the various parts of any subject irrespective of its colour or colours, the same consisting in first superposing upon an ordinary negative a positive, or part of a positive, as described, so as to be slightly out of register and in contact with a suitably prepared sensitive plate, then exposing the plate thus arranged to light, then subjecting said sensitive plate to a bath of water, substantially as

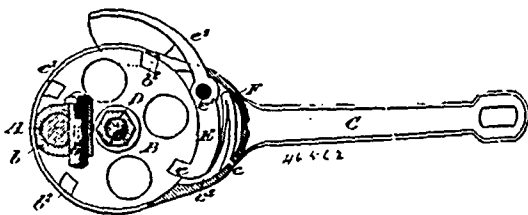
set forth. 2nd. The process herein described of reproducing objects in relief or in intaglio, whereby there is obtained the proper relative relief to the various parts of any subject irrespective of its colour or colours, the same consisting in first superposing upon an ordinary negative a positive, or part of a positive, as described, so as to be slightly out of register, and in contact with a suitably prepared sensitive plate, then exposing the plate thus arranged to light, then subjecting said sensitive plate to a bath of water and then to a hardening bath, substantially as set forth. 3rd. The process herein described of reproducing objects in relief or in intaglio, whereby there is obtained the proper relative relief to the various parts of any subject irrespective of its colour or colours, the same consisting in first superposing upon an ordinary negative a positive, or part of a positive, as described, so as to be slightly out of register and in contact with a suitably prepared sensitive plate, then exposing the plate thus arranged to light, then subjecting said sensitive plate to a bath of water, then to a hardening bath, and then making from the said plate a mould of plastic material, substantially as set forth. 4th. The process herein described of reproducing objects in relief or in intaglio, whereby there is obtained the proper relative relief of the various parts of any subject irrespective of its colour or colours, the same consisting in first superposing upon an ordinary negative a positive, or part of a positive, as described, so as to be slightly out of register, and in contact with a suitably prepared sensitive plate, then exposing the plate thus arranged to light, then subjecting said sensitive plate to a bath of water, then to a hardening bath, then from the same plate making a mould of plastic material, and finally making a relief from said mould, substantially as set forth. 5th. The process herein described of preparing sensitive plates for use in the production of objects in relief or in intaglio, the same consisting in first applying to the ground surface of a glass plate a coating of bichromated gelatine prepared as explained, then applying to the surface thus coated a layer or sheet of dry gelatine prepared as explained, and finally spreading over the surface of the dry gelatine layer a coating of the bichromated gelatine, substantially as set forth. 6th. In a process of reproducing objects in relief or in intaglio, the sub-process which consists in superimposing a negative upon a positive in such a manner that the details are slightly out of register, and the submitting a sensitive plate to the action of light through the so-arranged positive and negative, substantially as described.

No. 46,561. Bicycle Tire. (Bandage de bicycles.)

William A. D. Graham, Owen Sound, and Arthur P. Jamieson, South Dumfries, Ontario, Canada, 11th July, 1894; 6 years.

Claim.—In a tire for cycles, the combination of the air tube the outer covering for the air tube, a locking member formed parallel with each of the edges of the outer covering, a locking band, a locking member formed along each of the edges of the locking band, and adapted to interlock with the adjacent edge of the outer covering, substantially as specified.

No. 46,562. Variable Crank. (Manivelle variable.)



Charles H. Davids, Brooklyn, and John Stewart, New York, State of New York, U.S.A., 11th July, 1894; 6 years.

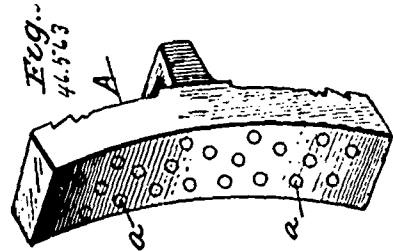
Claim.—1st. The combination with a velocipede crank, of a circular bearing on the axial line of which the crank is pivoted, the said bearing being provided with a plurality of notches along its periphery, a spring actuated locking dog pivoted to the crank with its operating arm accessible to the foot of the rider, the locking dog having an engagement with the notches on the said bearing to lock the crank positively to the bearing, and means for securing the bearing eccentrically to the drive shaft of a velocipede, substantially as set forth. 2nd. The combination with a crank provided with a recess, of a circular bearing adapted to seat within said recess, means for pivoting the crank to the bearing on the axial line of the latter, a spring actuated dog pivoted to the crank in position to engage the bearing, the said dog having an operating arm extended to the exterior of the crank and means for securing the bearing to a shaft, substantially as set forth.

No. 46,563. Brake-Shoe. (Sabot de frein.)

The Union Brake Shoe Company, assignee of Charles L. Pertikin, all of Selma, Alabama, U.S.A., 11th July, 1894; 6 years.

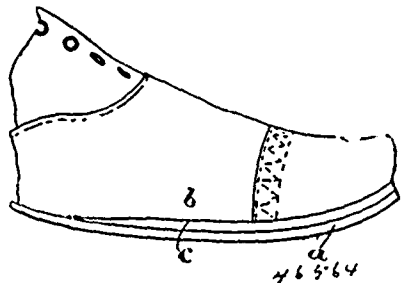
Claim.—The within described improved brake-shoe, composed of

a cast-metal body having notched rods of a softer metal than the



body extended nearly through it from its wearing surface to near its back, as herein described.

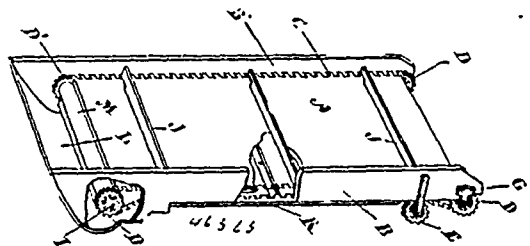
No. 46,564. Boots. (Chaussure.)



The Firm of Whitney & Brown, assignee of Alexander Adams, of Montreal, Quebec, Canada, 11th July, 1894; 6 years.

Claim.—1st. In a boot or shoe, the combination with the sole and upper thereof, of a welt interposed between them for the purpose set forth. 2nd. In a boot or shoe, the combination with the single sole and the upper thereof, of a welt arranged between the sole and the upper, as and for the purpose set forth. 3rd. The method of lasting turned boots and shoes which consists in first placing the sole upon the last, securing a welt strip along the edge of the same, so as to overlap each side thereof, securing the upper to the side of the welt which is uppermost and which when the shoe is turned will be above the sole, and subsequently trimming-off any portion of the welt strip not above the sole for the purpose set forth. 4th. In a boot or shoe, the combination of a sole such as indicated by a, an upper as indicated by b, and a welt as indicated by c, arranged and acting substantially in the manner and for the purpose set forth.

No. 46,565. Carrier. (Distributeur.)

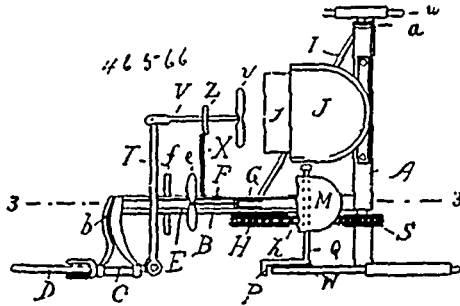


Bell & Son, assignees of William Hickox, John C. Woodward, and Frank K. Bell, all of St. George, Ontario, Canada, 11th July, 1894; 6 years.

Claim.—1st. In a carrier, the combination of the table A, the sides B, B¹, the pocket F, connected to the lower end of the sides B, B¹, the sprocket-wheels D, D¹, the sprocket-chains C, passing around the sprocket-wheels D, D¹, and the slats J connected to the chains, substantially as specified. 2nd. In a carrier, the combination of the table A, the sides B, B¹, connected to the table A, the slides K, K¹, connected respectively to the sides B, B¹, the sprocket-wheels D, D¹, the sprocket-chains C, passing around the sprocket-wheels D, D¹, and the slats J, connected to the sprocket-chains C, substantially as specified. 3rd. In a carrier, the combination of the table A, the sides B, B¹, connected to the table A, the slides K, K¹, connected respectively to the slides B, B¹, the sprocket-wheels D, D¹, the sprocket-chains C, passing around the sprocket-wheels D, D¹, the slats J, connected to the sprocket-chains C, and the idlers E, connected to the sides B, B¹, substantially as specified. 4th. In a carrier, the combination of the table A, the sides B, B¹, connected to the table A, the slides K, K¹, connected respectively to the sides B, B¹, the sprocket-wheels D, D¹, the sprocket-chains C, passing around the sprocket-wheels D, D¹, the slats J, connected to the sprocket-chains, the idlers E, connected to the sides B, B¹, and the pocket F, connected to the lower end of the slides

B, B¹, substantially as specified. 5th. In a carrier, the combination of the table A, the sides B, B¹, connected to the table A, the slides K, K¹, connected respectively to the sides B, B¹, the sprocket-wheels D, D¹, the sprocket-chains C, passing around the sprocket-wheels D, D¹, the slats J, connected to the sprocket-chains, the idlers E, connected to the sides B, B¹, the pocket F, connected to the lower end of the side B, B¹, and the drum M, connected to the sprocket-wheels D¹, substantially as specified.

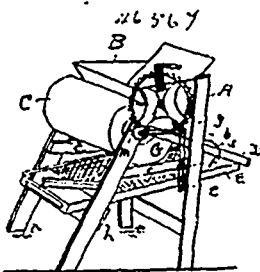
No. 46,566. Tricycle. (Tricycle.)



Moses Lalonde and Alexander McDougall, Ompah, Ontario, Canada, 11th July, 1894; 6 years.

Claim.—1st. In a tricycle, the combination with an axle carrying the driving wheel journalled at one end and a smaller wheel at the other down turned end, the main frame secured by one end to the said axle and carrying the steering wheel at the forward end of a double lever pivoted near its centre in the said main frame, having foot holds at its lower end and handles at its upper end, a pitman pivoted to the said lever, a cranked axle operated by the said pitman, a sprocket-wheel secured on the said cranked axle, a sprocket-wheel secured on the hub of the said driving wheel, and a chain connecting the two sprocket-wheels, substantially as set forth. 2nd. The combination, in a velocipede adapted to be propelled by a double lever, operated by the hands and feet of the driver, of a seat hinged at the front to a leaf spring, and supported at the rear by a spiral spring interposed between the seat and the said leaf spring, substantially as set forth. 3rd. In a tricycle, the combination with a steering wheel held in a forked standard journalled in suitable bearings, and having a rod secured to its upper end, the said rod extending some distance transversely to the machine, of a sliding bar pivoted to the said rod at one end and having handles at its free end, a guide through which the said sliding bar passes, a catch in the said guide, a notch on the under side of the said sliding bar, and a spring latch adapted to press down on the said sliding bar, substantially as set forth.

No. 46,567. Fanning Mill. (Tarare cribleur.)

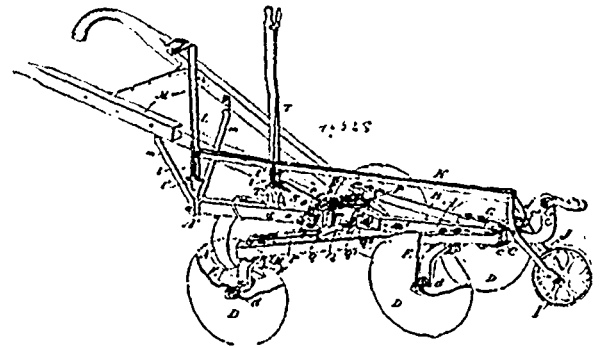


Levi Slipper and George H. Slipper, both of Forest, Ontario, Canada, assignees of Thomas M. Boles, Dublin, Indiana, U.S.A., 11th July, 1894; 6 years.

Claim.—1st. In a grain cleaner, the combination, with the frame having the lateral bars c, c, of the uprights b, b, pivoted intermediately of their ends, one to each of said bars or pieces, the transverse rods connecting said uprights, the upper and lower riddles supported upon said rods, said upper riddle terminating at its inner end directly below a blast opening in the fan casing, means for controlling the blast in said opening, and the inclined frame pieces s forming lateral guards for said upper riddle, substantially as specified. 2nd. In a grain cleaner, the combination with the main frame, having the inclined lateral bars or pieces c, c, of the levers b, b, pivoted intermediately of their ends one to each of said bars or pieces, the transverse rods connecting said levers, the upper and lower riddles supported upon said rods, the inclined frame pieces s forming lateral guards for said upper riddle and pitmen connecting said levers, with the fan shaft, substantially as specified. 3rd. In a grain cleaner, the combination, with the levers b, b, pivoted to the main frame, and the transverse rods connecting said levers and forming the support for the riddles, said levers having their upper

portions bent outwardly and downwardly of pitmen connected at one end to the fan shaft, and at the other end having each a cranked portion engaging a perforation in the downwardly turned portion of the lever, substantially as specified.

No. 46,568. Horse Hoe. (Houe à cheval.)

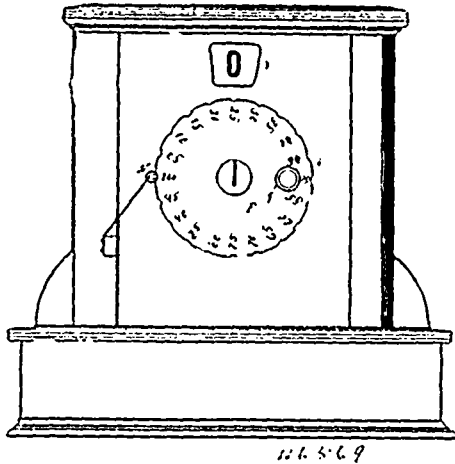


The Cockshutt Plough Company, assignee of George Wedlake and John Muir, all of Brantford, Ontario, Canada, 11th July, 1894; 6 years.

Claim.—1st. In a horse-hoe or cultivator, the combination with the central bar and side bars, pivoted near the front of the central bar, upon the cross-pieces and suitably secured in position at the rear, of the concavo-convex discs, journalled on the studs or bolts d, secured in the lower ends of the bent arms E, and means for adjustably securing the inner ends of the bent arms to the side bars, as and for the purpose specified. 2nd. In a horse-hoe or cultivator, the combination with the central bar and side bars pivoted near the front of the central bar upon the cross-pieces and suitably secured in position at the rear, of the concavo-convex discs, journalled on the studs or bolts d, secured in the lower ends of the bent arms E, and the toothed segments F, the teeth of which are to be held in engagement with the teeth g, by the staple bolts H, passing through the recesses g¹, of the blocks G, which are bolted to the side bars, as and for the purpose specified. 3rd. The combination with the horse-hoe, having a central bar, of the leading wheel J, journalled in the end of a forked arm pivoted at the front end of the machine, and the double connecting bar, pivotally connected to the top end of the forked arm at the front of the machine and at the rear to the lever L, pivoted to the rear end of the central bar, and means whereby the position of the lever may be changed, and held in such changed position, as and for the purpose specified. 4th. The combination with the horse-hoe, having a central bar, of the leading wheel I, journalled in the end of a forked arm, pivoted at the front end of the machine, and the double connecting bar pivotally connected to the top end of the forked arm at the front of the machine, and at the rear to a lever L, pivoted to the rear end of the central bar, and the lever L, provided with a spring-actuated plunger designed to co-act with the notches of a toothed quadrant T¹, connected to the rear end of the central bar, as and for the purpose specified. 5th. In a horse-hoe, the combination with a central bar and side bars pivoted at the forward end in the cross pieces secured to the central bar, of the sliding block O, provided with slotted extensions o, bent levers P, pivoted in the outwardly and upwardly extending portions of the base plate Q, secured to the central bar, and having at their inner ends the bosses p, which extend into the slotted extensions o, and at their outer ends the pivoted links R, pivotally connected to the side bars, and means whereby the block is slid along the central bar, as and for the purpose specified. 6th. In a horse-hoe the combination with a central bar and side bars pivoted at the forward end in the cross-pieces secured to the central bar, of the sliding block O, provided with slotted extensions o, bent levers P, pivoted in the outwardly and upwardly extending portions of the base plate Q, secured to the central bar, and having at their inner ends the bosses p, which extend into the slotted extensions o, and at their outer ends the pivoted links R, pivotally connected to the side bars, and the rod S, connected at one end to the lug o¹, at the top of sliding block, and at the other end to the lever T, as and for the purpose specified. 7th. In a horse-hoe the combination with a central bar and side bars pivoted at the forward end in the cross-pieces secured to the central bar, of the sliding block O, provided with slotted extensions o, bent levers P, pivoted in the outwardly and upwardly extending portions of the base plate Q, secured to the central bar, and having at their inner ends the bosses p, which extend into the slotted extensions o, and at their outer ends the pivoted links R, pivotally connected to the side bars, and the rod S, connected at one end to the lug o¹, at the top of sliding block, and at the other end to the lever T, which has a spring actuated plunger designed to be brought into engagement with the notches of the toothed quadrant T¹, suitably secured to the central bar, as and for the purpose specified.

No. 46,569. Cash Register and Indicator.

(Registre et indicateur de monnaie.)



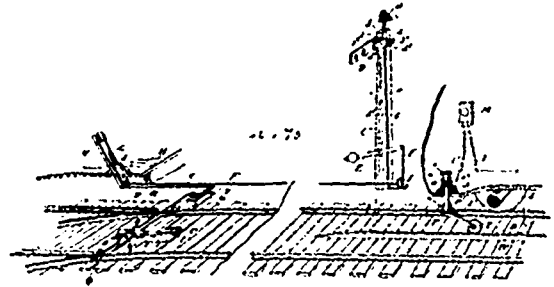
Elmer S. Smith, assignee of Elijah F. Spaulding, both of Bound Brook, New Jersey, U.S.A., 11th July, 1894; 6 years.

Claim.—1st. In a cash register and indicator, the combination of a frame having a shaft B thereon, an indicating dial wheel on said shaft, a units register wheel on said shaft, an operating disk on said shaft, an operating pin carried by said operating disk and movable longitudinally through the same and when pushed in engages the said units wheel and indicating dial wheel, in a manner, substantially as shown, whereby, when said operating disk is moved rotatively the said register and indicating wheels will be moved coincidentally therewith. 2nd. In a cash register and indicator, the combination of a frame A, having a shaft B thereon, a tilting locking frame pivoted on said frame A, and serving to lock the units register wheel, said tilting frame having a circular part that is concentric to said shaft B, an indicating dial wheel on said shaft, a units registering wheel on said shaft, an operating disc on said shaft, an operating pin carried by said operating disc and movable longitudinally through the same, and when pushed in engages the said units wheel and indicating wheel and contacts with said tilting locking frame and moves it out of engagement with said units wheel. 3rd. In a cash register and indicator, the combination of a frame having a shaft B, thereon, a tumbler on said shaft that operates the drawer bolt and the bell hammer and carries the zero indicator, an indicating dial wheel on said shaft, a units registering wheel on said shaft, an operating disc on said shaft, and an operating bolt or pin that is carried by said operating disc, is movable longitudinally, and when pushed inwardly engages said register wheel and indicator or dial wheel, and is in position to contact with said tumbler and serves to move said wheels and tumbler rotatively, substantially as and for the purposes set forth. 4th. In a cash register and indicator, the combination of a frame A, having a shaft B thereon, a tilting frame pivoted on said frame A, and serving to lock the units registering wheel, said tilting frame having a circular part that is concentric with said shaft B, a tumbler movable on said shaft that operates the drawer bolt and the bell hammer that carries the zero indicator, an indicating dial wheel on said shaft, a units register wheel on said shaft, an operating disc on said shaft, and operating pin that is carried by said operating disc is movable longitudinally, and when pushed inwardly engages said register wheel and indicator wheel, contacts with said tilting frame and moves it back and is in position to contact with said tumbler and move it. 5th. In a cash register and indicator, the combination of a primary or units wheel mounted on a shaft, a secondary or hundreds wheel mounted on the same shaft, two pawls a^2 and a^3 that act upon said secondary wheel alternately, each pawl moving the wheel a half space, the notch D^1 in the primary wheel for moving the pawl a^2 , the pin a^1 on the primary wheel for moving the pawl a^3 , said pin being movable longitudinally, and a spring a^4 for acting upon said pin, substantially as and for the purposes set forth. 6th. In a cash register and indicator, the combination with the wheel D, the operating pin K, the locking frame J, having the pin stopping notch r^2 , of the pivoted bridging piece J, and the tumbler G having means on the arm g for moving said bridge piece, substantially as set forth. 7th. In a cash register and indicator, substantially as herein shown, the combination with the indicator wheel C, having a stop lug e^2 , thereon, of a tripping stop device on the frame work A, for the purpose mentioned. 8th. In a cash register and indicator, substantially as herein shown, the combination with the indicator wheel C, having a dial rim e , a reacting spring m , and a stop device for stopping, the wheel when reacted, of a tumbler G having a shutter or zero indicator carried by its arm g^1 , and means for normally holding said shutter in front of the figures 100 on the dial or the indicator wheel when said wheel is in normal position. 9th. In a cash regis-

ter and indicator, substantially as herein shown, the combination with the operating disc having spaces corresponding with the spaces of the register and the indicating wheels and notches opposite said spaces, of indicating dog N on the case of the machine and contacting with said wheel and engaging the notches thereof. 10th. In a cash register and indicator, substantially as shown, the combination with the drawer bolt H, having the catch notch h at its upper end, of the tumbler G having a lug for engaging said catch h , and lifting said bolt, and a following lug for pushing the bolt so as to disengage it from the tumbler and allow it to drop.

No. 46,570. Danger Signal and Lock for Switches.

(Signal et serrure pour aiguilles.)



George Edward Edwards, and William Hartwell, Brantford, Ontario, Canada, 11th July, 1894; 6 years.

Claim.—1st The combination with the semaphore board and a storage battery, and spring contact plate on the post of the semaphore, and a spring contact plate on the board, and means for raising and lowering the board, of an electric bell situated in the tender of the engine, and means whereby the circuit is completed through the rails to and through the contact plates on the board and post when the board is up as the train passes along the track, as and for the purpose specified. 2nd. The combination with the semaphore and board, and a storage battery and spring contact plate on the post of the semaphore, and a spring contact plate on the board and means for raising and lowering the board, of a wire leading from the storage battery to one rail, and a wire leading to the central strip between the rails, so as to complete the circuit through a trolley wheel and arm secured underneath the tender, electric bell in the tender, axle and wheel as shown and for the purpose specified. 3rd. The combination with the post C, board D, pivoted on the rod d , crank d^1 , rod e , weighted lever E, cord F, and lever G, and quadrant I, of the spring contact plate j^2 , wire k , rail A, wheel L, axle L^1 , wire l , bell M, wire l^1 , bearing N, post O, arm P, trolley wheel p , strip B, wire k^1 , and plate d^2 , all arranged as shown and for the purpose specified. 4th. The combination with the post C, board D, contact plates j^2 , and d^2 , and storage battery and circuit wires all arranged to complete the circuit through the bell in the tender of the engine when the board is up as specified, of the crank d^1 , on the pivot rod of the board, rod e , weighted lever E, wire F, lever G, having a lateral extension g , quadrant I, and lever W, and means for locking the switch by the operation of such lever, as and for the purpose specified. 5th. The combination with the post C, board D, contact plates j^2 , and d^2 , and storage battery, and circuit wires all arranged to complete the circuit through the bell in the tender of the engine when the board is up as specified, of the crank d^1 , on the pivot rod of the board, rod e , weighted lever E, wire F, lever G, having a lateral extension g , quadrant I, and lever W, rod r , bell-crank V, rod u , bell-crank U, link t , belt T, sleeve T^1 , cross-bar Q, with holes q , q^1 , and socket S, all arranged as and for the purpose specified.

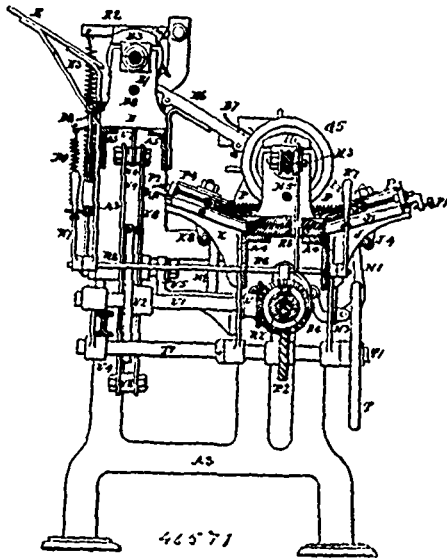
No. 46,571. Lathe for Making Spools or Bobbins.

(Tour pour faire des fuscaux ou bobines.)

William McCrossan and John Paul, both of Paisley, County of Renfrew, Scotland, 12th July, 1894; 6 years.

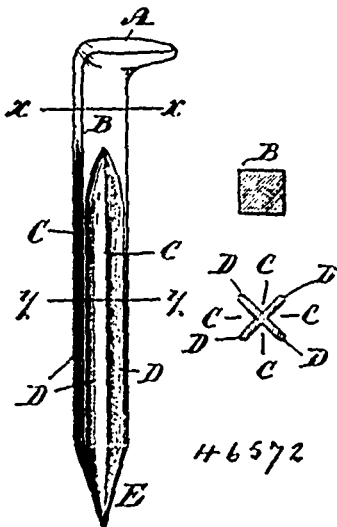
Claim.—1st. In apparatus for making spools or bobbins, the combination with the framing forming front and back bench portions, the latter being at a higher level than the other portion, of blank boring mechanism carried by the back bench portion and comprising a horizontally movable spindle with boring drills, turning or shaping mechanism comprising carrying spindles, adjustable slides and cutting tools, self acting appliances in the form of a rotary carrier, guides, yielding pressure devices and actuating means for moving the blanks into and for holding them in position for being bored and for transferring them to the turning or shaping mechanism, together with the self acting appliances of the turning or shaping mechanism comprising a movable support carrying spindles and a releaser with their actuating mechanism, for receiving the bored blanks placing them in position and afterwards doffing them, all substantially as herein described. 2nd. The arrangement of the blank boring mechanism comprising a horizontally movable spindle with boring drills, in connection with the turning or shaping mechanism comprising

carrying spindles, adjustable slides and cutting tools, with self acting appliances in the form of a rotary carrier, guides, yielding pressure devices and actuating means for moving the blanks into and



for holding them in position for being bored and for transferring them to the turning or shaping mechanism, substantially as hereinbefore described. 3rd. The self acting appliances of the turning or shaping mechanism comprising a movable support, carrying spindles and a releaser with their actuating mechanism for receiving the bored blanks, placing them in position and afterwards doffing them, combined with the actuating mechanism of the cutters or shaping tools, substantially as hereinbefore described. 4th. The combination of the shaft (R) placed longitudinally to serve for actuating two or more sets of mechanism with the tubes (R 4), cylindrical cams (R 2) and clutches (R 5) arranged to allow of each set of mechanism being separately engaged or disengaged, substantially as hereinbefore described. 5th. The improved combination comprising the turning tool slides J¹, K¹, with their actuating parts in the form of cam operated levers acting upon projections from the slides, and springs P, substantially as hereinbefore described. 6th. The combination of appliances comprising a movable support, carrying spindles and a releaser, for receiving, holding, and doffing the bored blanks and shaped spools, in connection with the turning mechanism comprising the tool slides J¹, K¹ with their actuating parts in the form of cam operated levers acting upon projections from the slides, and springs P, substantially as hereinbefore described.

No. 46,572. Spike. (Cheville.)

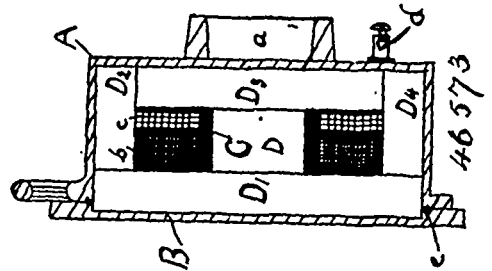


James S. Palmer, Sherbrooke, Quebec, Canada, 12th July, 1894; 6 years.

Claim.—A spike having a hooked or other shaped head A, a plain four-square body B, from said head, said body having a v-groove on each side to the end, said grooves forming cruciform flanges D, and the end tapered to a point E, substantially as set forth.

No. 46,573. Alternating Current Transformer.

(Transformateur de courant alternatif.)

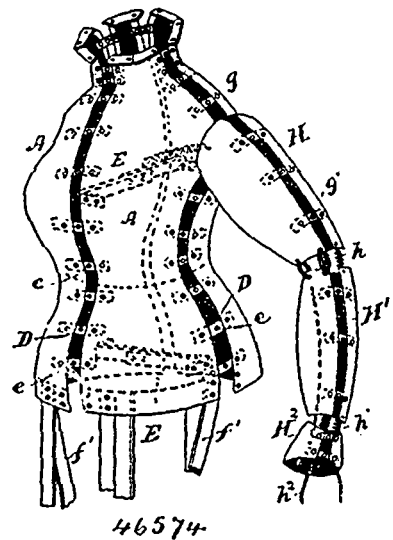


Frank H. Sleeper, Coaticook, Quebec, Canada, 12th July, 1894; 6 years.

Claim.—In an alternating current transformer, the combination of the case A, back B, the blocks D, D', D'', D', D''', and the spool C, substantially as and for the aforesaid purpose herein before set forth.

No. 46,574. Bust Former.

(Formateur de buste.)

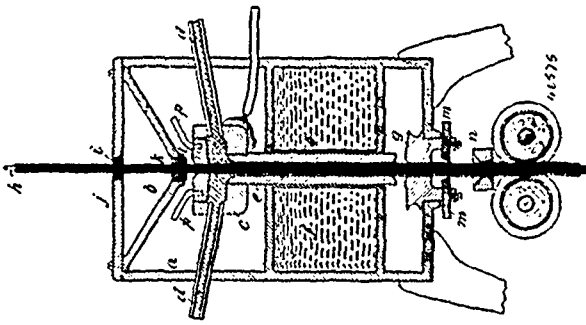


Natalie Schell, San Francisco, California, U.S.A., 12th July, 1894; 6 years.

Claim.—1st. In a bust former, the combination with the sections thereof adjustably secured together, said sections consisting of a suitable base united to a stiff backing, and of the strengthening strips or ribs for maintaining the form in position as and for the purpose set forth. 2nd. In a former, the combination with the sections thereof adjustably united, the strengthening ribs secured to the inside thereof, and of adjustable or sliding cross braces for strengthening the completed bust form, as and for the purpose set forth. 3rd. The combination with a former composed of a series of sections adjustably connected, of the movable arms secured thereto, said arms adapted to permit of movement corresponding in curve to the natural arm, as and for the purpose set forth. 4th. The combination with the bust former, of the arms movably connected thereto, said arms composed of sections adjustably secured together and having the upper and lower sections of the arm proper, movably fastened so as to allow the natural bend of the arm to be imparted, as and for the purpose set forth. 5th. The combination with a bust former, substantially as set forth, of the arms movably connected thereto, said arms composed of sections adjustably secured together, the upper and lower part of the arm and wrist being secured by a spring connection, as and for the purpose set forth. 6th. A bust form composed of a series of independent sections, each section comprising two plies of material, the inner ply being of greater rigidity than that of the outer, said plies being separably attached to the reinforcing ribs, and means for adjustably connecting together the edges of the sections. 7th. A bust form composed of a series of independent sections, each section comprising two plies of material, the inner ply being of greater rigidity than the outer, of the reinforcing ribs, and of means for adjustably connecting the edges of sections.

No. 46,575. Art of Covering Insulated Wire.

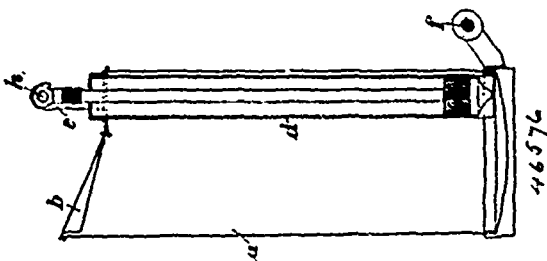
(Art de couvrir les fils isolés.)



Thomas Wood Norman, Boston, Massachusetts, U.S.A., 12th July, 1894; 6 years.

Claim.—1st. The improvement in the art of covering insulated wire which consists in treating the insulated wire so as to render it proof against being burned or damaged by a few seconds' contact with molten metal, passing the same centrally through a chilling mould, and pouring molten metal around the insulated wire treated as aforesaid, as the latter is fed through the mould, substantially as described. 2nd. The improvement in the art of covering insulated wire which consists in passing the same centrally between chilling surfaces and pouring molten metal around it as it is fed forward between said surfaces, as set forth. 3rd. The improvement in the art of insulating and covering insulated wire which consists in passing the wire through an insulating fire-proof compound, then passing the wire so treated between chilling surfaces and pouring molten metal around it as it is fed forward between said surfaces, as set forth. 4th. The improvement in the art of insulating and covering insulated wire which consists in passing the wire through an insulating fire-proof compound, then passing the wire so treated between chilling surfaces and pouring molten metal around it as it is fed forward between said surfaces, and then finishing the covered wire by passing it in contact with a hot soldering surface, as set forth. 5th. As a means for covering insulated wire, a reservoir for molten metal, feed-tubes therefor, a chilling tube connected with the bottom of said reservoir, and guides for maintaining the wire centrally in said chilling tube, substantially as described. 6th. As a means for covering insulated wire, a reservoir for molten metal, feed-tubes therefor, a chilling tube connected with the bottom of said reservoir, guides for maintaining the wire centrally in said chilling tube, and a finishing hub or wheel located below said chilling tube, substantially as described. 7th. The combination with the hopper *b*, of the molten metal reservoir *c*, the chilling tube *c*, and guides for maintaining the wire centrally in the said tube, substantially as described. 8th. The combination with the molten metal reservoir *c*, chilling tube *c*, chilling chamber *f*, and guides for maintaining the wire centrally in said tube, substantially as described. 9th. The combination with the molten metal reservoir *c*, chilling tube *c*, chilling chamber *f*, and guides for maintaining the wire centrally in said tube, the said guides and tubes being removable, substantially as described.

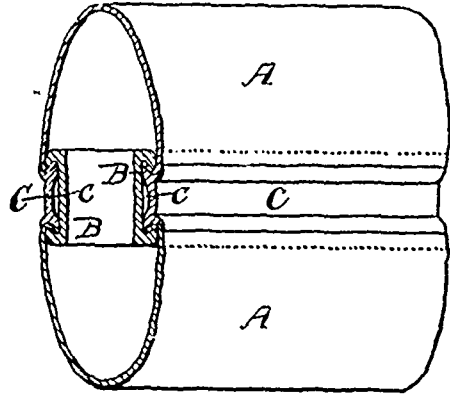
No. 46,576. Fire Extinguisher. (Ezincteur d'incendie.)



Martin Wielandt, Berlin, Kingdom of Prussia, 12th July, 1894; 6 years.

Claim.—1st. The improved apparatus for extinguishing fires, constructed and arranged substantially as hereinbefore described. 2nd. An apparatus for extinguishing fire, consisting of a can having a fixed handle at its lower end, a hinged cover at its top, the said cover having an inclined inner surface, and having fixed in it a hand pump, the piston rod of which carries a handle capable of being engaged with hooks on the can to so fix it that it serves as the other handle of the can, constructed and arranged substantially as hereinbefore described.

No. 46,577. Means of Joining the Edges of Sheet Metal. (Moyen de joindre les bords des feuilles métalliques.)

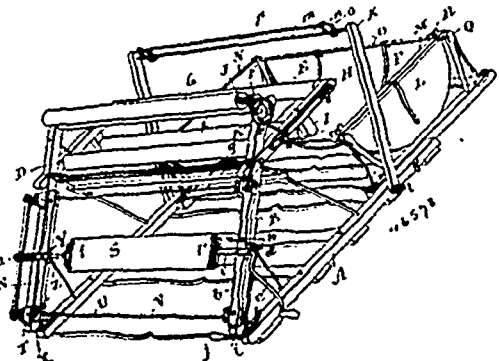


Frank A. Williams, Church Road, Albrighton, County of Salop, England, 12th July, 1894; 6 years.

Claim.—1st. The means of joining edges of sheet, strip, or thin plate metal which comprise a channel piece or female holder, to receive the edges of the metal to be joined, and a key or male holder which is expanded or widened within the channel, and is thereby caused to grip and securely hold the edges of the sheet, strip, or plate metal between its sides and the sides of the channel, substantially as described. 2nd. The means of joining edges of sheet, strip, or thin plate metal which comprise a channel piece, or female holder, to receive the edges of the metal to be joined, and a key or male holder formed of an arched or analogous shape in transverse section, which is opened out or expanded throughout its whole depth within the channel by pressing or hammering down the back or crown thereof, and thereby caused to grip and securely hold the edges of the sheet, strip or plate metal between its sides and the sides of the channel under an elastic tension due to the hollowed form of the key, substantially as described. 3rd. The means of joining edges of sheet, strip or thin plate metal which comprise a channel piece, or female holder, having undercut sides to receive the edges of the metal to be joined, and a key or male holder placed within the channel and between the edges of the sheet, strip or metal plate, and formed hollow at its inner face, and with the back thereof formed of an arched or outwardly bent shape, which is expanded widthways throughout its entire depth, but chiefly at its inner face, by elongating the back in a direction transversely of the key by pressing or hammering the arch or outwardly bent part in a direction tending to straighten it, whereby the edges of the sheet, strip or plate metal, are firmly gripped between the sides of the key and the sides of the channel, substantially as described.

No. 46,578. Cloth Measuring and Stretching Machine.

(Machine à auner et étendre les draps.)

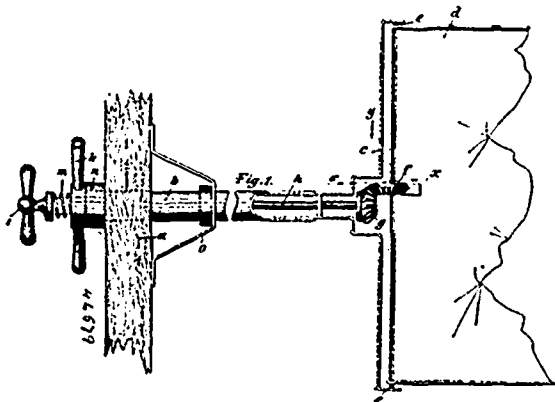


Robert U. Irwin, and Henry Dixon, both of Shelburne, Ontario, Canada, 12th June, 1894; 6 years.

Claim.—1st. In a cloth measuring machine, in combination with the measuring apparatus of a slidable block holder adapted to be moved sideways to take up any unevenness of the ends after passing through the measuring apparatus, substantially as described. 2nd. In a cloth measuring machine, a blocking device consisting of a slidable frame adapted to be moved sideways to the proposed traverse of the cloth, means connected to the frame for removably

holding the block, and means of revolving the block when winding the goods, substantially as described. 3rd. In a cloth measuring machine, a blocking device consisting of a slidable frame composed of two parallel side bars U, slidingly connected to the framework of the machine, end bars connecting together the said side bars at each end, a block holder revolvably connected to one of the end bars, a crank connected to the outer end of the block holder, a cross-bar movably connected to the side bars, a block holder revolvably connected to the cross-bar, a guide connected to and moving with the said frame, the face of which is parallel with that face of one of the block holders, which will be contiguous to its respective end of the block, substantially as described. 4th. In a cloth measuring machine, a blocking device consisting of a slidable frame comprised of two parallel side bars U, slidingly connected to the framework of the machine, end bars connecting together the said side bars at each end, a block holder revolvably connected to one of the end bars, a crank connected to the outer end of the block holder, a cross-bar movably connected to the side bars, a spring operated block holder revolvably connected to the cross-bar, a guide connected to and moving with the said frame, the face of which is parallel with that face of one of the block holders, which will be contiguous to its respective end of the block, and a lever adapted to move the said slidable frame, substantially as described. 5th. A cloth measuring machine, consisting of a suitable frame comprising of two supporting pieces to which are connected two horizontal arms, a first tension roll journalled in the said arms contiguous to the supporting frame, and a second tension roll journalled in the said arms near the extremity thereof, two lugs depending from the said arms, a guide roll journalled in said lugs, a measuring roll journalled in the supporting frame and above the first tension roll, a pressure roll bearing upon the measuring roll, means for indicating the number of revolutions of the measuring roll, and a sliding blocking frame, substantially as described. 6th. In a cloth measuring machine, in combination with the measuring apparatus of a tension device comprised of two adjustable arms connected one to each side of the machine, a cross-bar connecting together the free ends of the said arms, two blocks sliding upon said cross-bar and arranged to be adjusted independently of each other, and a bar carried by said blocks, arranged to be adjusted parallel to the cross-bar carried by the arms or at an angle thereto, substantially as described.

No. 46,579. Adjustable Reflector. (Réflecteur mobile.)



Peter W. A. Paasch, Hamburg, Germany, 12th July, 1891; 6 years.

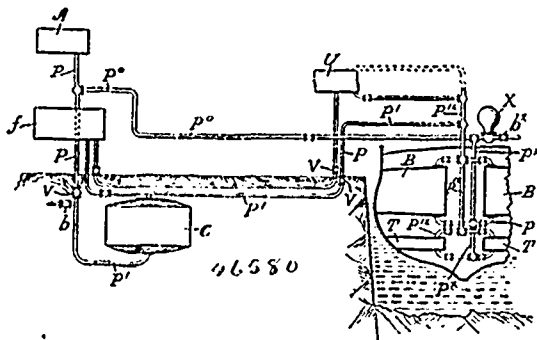
Claim.—1st. An improvement in adjustable reflectors, consisting of the reflecting mirror *d*, pivoted by the pins *c*, in the supporting frame *e*, secured at the end of the guiding tube *b*, and means for adjusting the position of the mirror *d*, through a turning rod extending through the tube *b*, by suitable gearing co-actively attached to the mirror and rod, as and for the purpose specified. 2nd. The combination, with the reflecting mirror *d*, pivoted by the pins *c*, upon the supporting frame *e*, of the tube *b*, and the bevel wheel *f*, pinion *g*, spindle *h*, handle *i*, square *j*, thumb nut *k*, pins *l*, recess *n*, and spring *m*, all arranged, as and for the purpose specified.

No. 46,580. Hydraulic Apparatus for Transferring Hydrocarbon Oil Between Tanks or Ships. (Appareil hydraulique pour transférer l'huile hydrocarbonnée des citernes ou vaisseaux.)

William Bucknell, Aspra, Sabina, Kingdom of Italy, 12th July, 1894; 6 years.

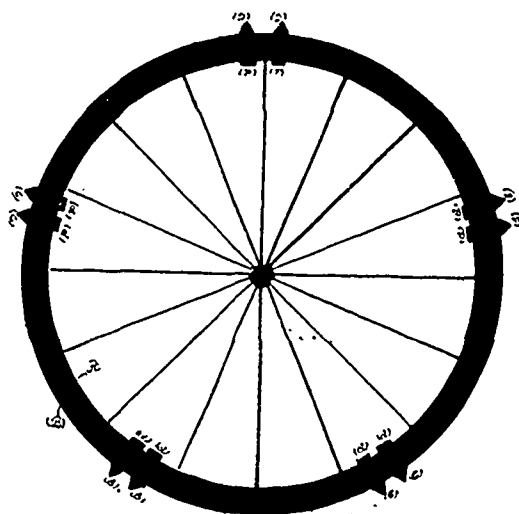
Claim.—1st. In apparatus for hydraulic transference of hydrocarbon oils, to or from ships, or ship tanks, the combination with the said tanks, of the water pressure tank A, pipe P, container C, with oil supply cistern *f*, pipe P¹, and valves *b* and V, V, whereby oil may be transferred to or from the said marine vessels, or their tanks, and the lodgment of liquid, or the formation of air spaces effectually prevented, as set forth. 2nd. In apparatus for hydraulic

transference of hydrocarbon oils, to or from ships or ships' tanks, the combination in such apparatus, essentially composed of water-pressure tank A, water pipe P, oil pipe P¹, and ships tanks B, T,



of the container C, constructed for general use, cylindrical shaped with slightly truncated coned top and bottom, and having the said oil and water pipes proceeding from the lowest and highest part of the container respectively, whereby the interior of the container C, presents a smooth even surface, preventing the lodgment of liquid, and the formation of air spaces, as set forth. 3rd. In apparatus for hydraulic transference of hydrocarbon oils, to or from ships or ships' tanks, the combination with the said tanks, and with the high level secondary reservoir U, of the water pressure tank A, pipe P, container C, with oil supply cistern *f*, pipe P¹, and valves *b* and V, V, whereby it may be transferred to or from the said marine vessels or their tanks, and the lodgment of liquid or the formation of air spaces effectually prevented, as set forth.

No. 46,581. Portable Engine. (Machine portative.)



William Drain, Prince Albert, North-west Territories, Canada, 14th July, 1894; 6 years.

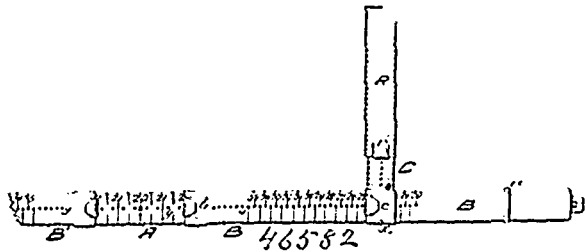
Claim.—The V-shaped casting bolted on the outside of the ground wheels of portable engines which will divide the snow and allow the wheel to travel on hard bottom, and at all times keep the wheels from clogging with snow and mud and to prevent racking of machinery by frozen clods of snow and mud adhering thereto, substantially as and for the purpose hereinbefore set forth.

No. 46,582. Tailor's Measure. (Mesure de tailleur.)

Paul Ogulnik, Montréal, Québec, Canada, 14th Juillet 1894; 6 années.

1^o.—La combinaison des pièces A, B et B¹ munies de graduations spéciales et de bandes rectangulaires avec et sans fermeture, tel que ci-dessus décrit et pour les fins indiquées. 2^o.—La combinaison de la pièce graduée C¹, du fourreau R à fermeture r¹, de la bande rectangulaire à fermeture C¹ et de la pièce P munie d'une pointe, à l'aide desquelles pièces on obtient, de chaque côté du corps, la hauteur entre la ceinture et le dessous de l'emmanchure, tel que ci-dessus décrit. 3^o.—La combinaison des pièces D, E et F pourvues de graduations spéciales et de bandes rectangulaires avec et sans fermeture, ainsi que la pièce C munie d'une bande rectangulaire à fermeture et glissant à angle droit le long de la pièce F, tel que décrit et pour les fins indiquées. 4. La combinaison de la pièce graduée H terminée

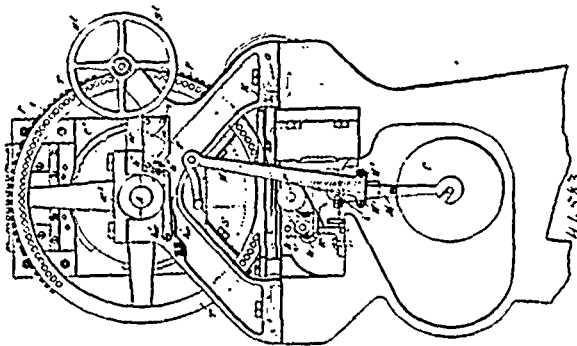
par la pièce *h*¹, du fourreau *l* à fermeture *z*¹, et de la pièce graduée *K* glissant librement dans une rainure pratiquée à cet effet dans la pièce ou fourreau *l* tel que ci-dessus décrit et pour les fins indiquées.



5°. La combinaison de la pièce graduée *M* munie de petites bandes rectangulaires des deux pièces *N* et *N*¹ pourvues de fermetures *n*, *n*¹, et d'index *O* *O*¹ tel que ci-dessus décrit et pour les fins indiquées.

No. 46,583. Machine for Producing Type Matrices.

(Machine pour la production de matrices stéréotypes.)

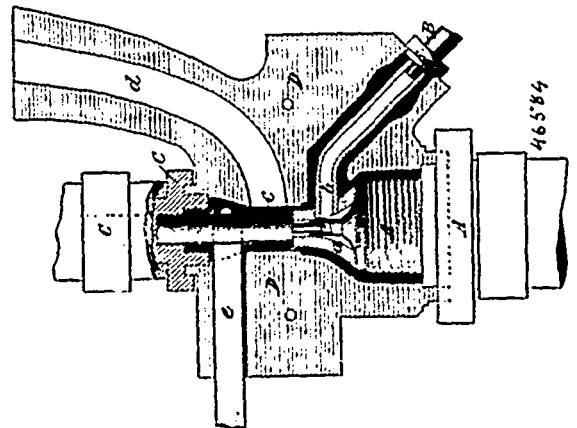


Charles Méray-Horvath, Arad, Hungary, 14th July, 1894; 6 years.

Claim.—1st. A type impressing machine, in which the types or punches are carried in holders adjustably arranged in a rotating type-wheel and parallel to the axis of the same, and which according to the sentence which is to be impressed, can act on a matrix which is suitably moved for forming lines, when each holder carrying the type, which is to be impressed, is actuated by a mechanism (hammer) arranged over the type-wheel, for actuating such holders, this hammer being in turn influenced, in connection with the rotating type-wheel (by means of a combination disc) by a moving strip of non-conducting material, which strip contains the sentence in the form of rows of holes, the hammer then acting on each given holder when it comes beneath it during the rotation of the type-wheel which carries such holder, constructed and arranged, substantially as described. 2nd. In a type impressing machine, of the character described, the type holders *P*, which in a normal position are held in the rotating type-wheel which carries them, and on their release (actuating) by means of a hammer *H*, spring sideways under the action of a spring *a*, by which means a projection *c*, attached to these holders comes into a curved groove *l*, which during the rotation draws the actuated holder so much further sideways that the type *t* carried by it is moved by a cam disc *D*, against the matrix *m* in order to produce the impression, after which holder and type owing to the form of groove *l*, and cam disc *D*, do then return to their original position, and the holder is again held fast, constructed and arranged substantially as described. 3rd. In a type impressing machine, of the character described, the matrix roller mechanism consisting of the rollers which carry the paper matrix, and which are arranged in a frame oscillating on its axis *i*, which together with the matrix is moved by the holder, which at the moment is in the printing position against the impressing punch *t*, so that the whole matrix roller mechanism oscillating on *i*, is carried along by *t* with the latter in order to make a more exact impression and then swings back again, constructed and arranged substantially as described. 4th. In a type impressing machine, of the character described, a device for adjusting the matrix for producing the space which is to remain between two types, consisting of a set-screw *m*, arranged on each type holder *P*, which set-screw when the holder which carries it is in an active position engages in such a way, a lever *E*, that this lever after the impression of a type has taken place, can move forward a carriage *G*, which carries the matrix roller mechanism, and which is adjustable vertically to the axis of rotation of the type-wheel, this moving forward being done by a suitable mechanism *j* *z* to *z*¹ to an amount to correspond to the type just impressed plus a type space, constructed and arranged substantially as described. 5th. In a type impressing machine, of the character described, a device for returning again the matrix at the end of a line to the extent of the length of the same,

and for moving the matrix forward to the extent of two lines consisting of a holder, similar to the other type holders *p*, which holder is adjustably arranged on the rotating type-wheel *T*, and which, when in a stopped position, causes a lever *K*, to swing outwards by means of a projection *L*, on such holder, so that this lever, by the engagement of the constantly rotating coupling *N*, and a worm *U*, sets this latter in rotation, which then by means of a suitable device *u*, *z*¹, *z*², pushes back the carriage carrying the matrix roller mechanism and therewith also the matrix *M*, whilst at the end of this adjustment, a pawl lever *x*, movable on the frame *k*, *w*, of the matrix roller mechanism, is moved in such a way that it rotates the rollers *k*, which draw out the matrix, to the extent of two lines, constructed and arranged substantially as described. 6th. In a type impressing machine, of the character described, a mechanism for actuating the holders, in which a hammer *H*, which actuates the holders, is operated by means of a number of lever keys *H*¹¹, and a divided combination disc *C*¹¹, when these lever keys *H*¹¹, all fall simultaneously into suitable indentations *E*¹¹, of the combination disc, the passing over and return combination of the lever keys from one side *B*¹¹, of the combination disc to the other *b*¹¹, with the object of producing as large a number of combinations as possible, taking place by the action of electro-magnets *M*¹¹, and a disc *S*¹¹, provided with a guide groove *s*, constructed and arranged substantially as described. 7th. In a type impressing machine of the character described, the adjusting of the hammer *H*, parallel to the plane of rotation of the type-wheel *T*, by means of one of the two holders *P*², which, when in a stopped condition, pushes forward a carriage (*h*², which carries the hammer *H*, by means of a suitable lever device (*d*¹¹, *D*¹¹, *D*²), to the extent of two holders on the type-wheel, with the object of rendering capable of employment each combination on the combination disc *C*¹¹, for each two holders, constructed and arranged substantially as described. 8th. In a type impressing machine of the character described, a device for bringing into action the separate electro-magnets *M*¹¹, which influence the lever keys *H*¹¹, for producing the combinations, consisting of a strip of electrically non-conducting material perforated to correspond to the combinations, which strip is carried over a contact roller or which is in electrical connection with all the above-named electro-magnets and causes the excitement of separate electro-magnets, in order to influence the lever keys *H*¹¹, when a metallic contact takes place between the contact roller *r*, and the contact springs *c* *f*, of resting thereon, the number of these contact springs being arranged to correspond to the number of the electro-magnets, by means of the perforations in the above-named strips, constructed and arranged, substantially as described. 9th. In a type-impressing machine of the character described, a device for automatically justifying the lines, consisting of a number of holders or sockets *P*³, *P*⁴ and *P*⁵, which are usually retained by plates *Y*, *Y*¹¹, and actuated by the hammer *H*, and which push forward the matrices, as per claim 4, when the plates *Y*, *Y*¹¹, which retain them, are moved away therefrom according to the amount of extra space which it is desired to add to the normal space between the words, this moving away of the plates *Y*, *Y*¹¹, taking place by means of the strips of electrically non-conducting material, described in claim 5, with the assistance of an electro-magnet *x*¹¹, a pawl lever *h*¹, *h*², the contact roller *r*, as well as a contact spring *c*⁷, and the return of the plates *Y*, *Y*¹¹, that is, the retaining of the holders *P*³, *P*⁴, *P*⁵, taking place by means of projections as *a*¹¹, attached to these holders, which projections act on the pawl device *e*¹¹, *p*¹¹, which holds the plates *Y*, *Y*¹¹, in their advanced position, constructed and arranged substantially as described.

No. 46,584. Method of Manufacturing Lined Taps for Mineral Water Syphons and Seltzogenes. (Fabrication de robinets.)



Henry James Nichol, of London, England, 14th July, 1894; 6 years.

Claim.—The method of manufacturing lined taps for syphons and

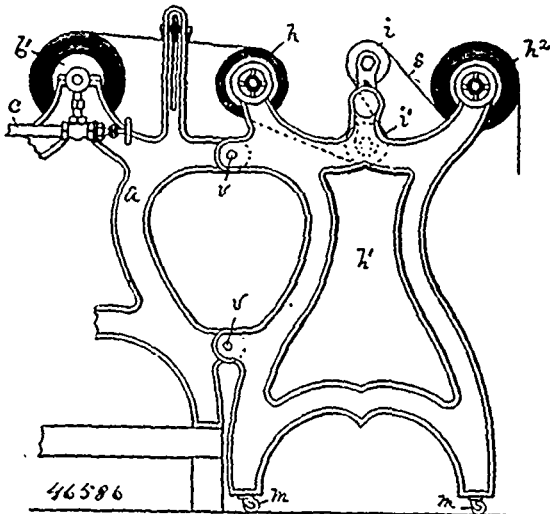
seltzogenes hereinbefore described consisting in casting the metal around the lining held in a mould, substantially as set forth.

No. 46,583. Treatment of Ores. (Traitement des minerais.)

Henry L. Sulman, London, England, 14th July, 1894; 6 year.

Claim.—1st. The method of treating slimes or analogous deposits so as to render them permeable to liquids, which consists, essentially, in first mixing with the slime a solution of coagulable matter, then precipitating the same by the admixture of a suitable precipitant, substantially as and for the purpose specified. 2nd. The method of treating slimes of analogous deposits so as to render them permeable to liquids, which consists, essentially, in first mixing with the slime a solution of soap, and then precipitating the same by the admixture of quick lime made into a milk or cream with water, substantially in the proportions and for the purpose specified.

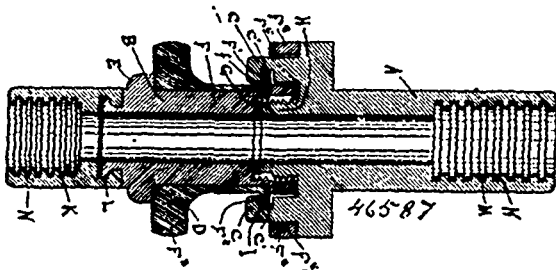
No. 46,586. Method of and Machine for Finishing Cloth. (Méthode et machine pour finir le drap.)



William Heddon, Boston, Massachusetts, U.S.A., 14th July, 1894; 6 years.

Claim.—1st. The improved process of finishing cloth, consisting in first sponging and heating the cloth in open width, and then cold-rolling it while hot and under tension in a pressing-sheet, substantially as described. 2nd. The improved process of finishing cloth, consisting in first sponging the cloth in open width, cold-rolling it while hot and under tension in a pressing-sheet, and unrolling the cloth and pressing-sheet while another piece of cloth is cold-rolled in the pressing-sheet. 3rd. A cloth-finishing machine, comprising in its construction a movable frame, a pair of cold cylinders supported thereby, a dry pressing-sheet attached to said cylinders and adapted to be wound on one while unwound from the other, and a tension device to act on said sheet. 4th. A cloth-finishing machine, comprising in its construction a cylinder on which the cloth is wound, tension-rollers supported by heads which are pivotally mounted, one of said heads having a perforated hub, a supporting-frame having a stud engaging said hub and provided with a depression to register with the perforations in the hub, and a pin to engage said perforations and the depression in the stud.

No. 46,587. Hose Coupling. (Joint de boyau.)

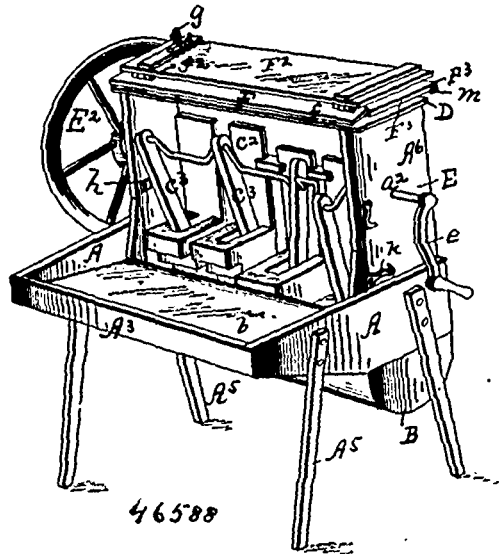


Jules Doster, Montreal, Quebec, Canada, 14th July, 1894; 6 years.

Claim.—In a hose coupling the combination of a rapid coupling composed of two portions A and B, the one B having the projections c provided with the grooves e, piece H, and the one A having the piece F with a pin F¹ sleeve D having the two inclined planes F²

and F² slot D¹ and milled head F³, gasket G, joint J, and piece K, with the ordinary male and female pieces H and I and grooves N, substantially as described and for the purpose set forth.

No. 46,588. Washing Machine. (Machine à blanchir.)

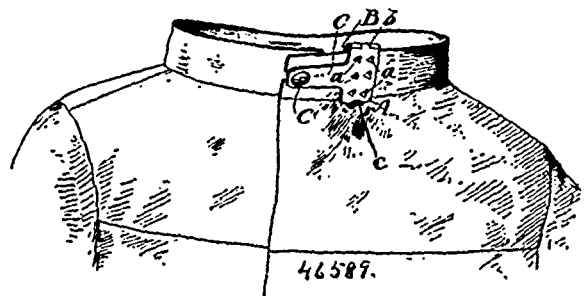


Lars Grondahl, Red Wing, Minnesota, U.S.A., 14th July, 1894; 6 years.

Claim.—1st. In a washing machine the combination of vertically operated pounders, a stationary tank B having a semi-cylindrical bottom under said pounders, and in front of said tank, a receptacle having an inclined bottom and a covering sheet of metal b constituting a part of the stationary tank, substantially as described. 2nd. In washing machine the combination of vertically operated pounders, a stationary tank B having a semi-cylindrical bottom under said pounders, and in front of said tank a receptacle having an inclined bottom and a covering sheet of metal b constituting a part of the stationary tank, with a secondary tank B² within the tank B and having its ends b² extend' d up to the level of the top of the tank and retained therein, substantially as described. 3rd. In a washing machine the combination of a multiple crank shaft, vertically operated pounders, connecting rods uniting them to the crank shaft, a stationary tank having a semi-cylindrical bottom under said pounders, and in front of said tank a receptacle having an inclined bottom b with a cover for said tank, and pounders, consisting of top boards D and F hinged together, a front shutter F² hinged to the top board F and bottom shutter F¹ resting on said bottom, substantially as described. 4th. In a washing machine the combination of vertically operated pounders, a stationary tank B having a semi-cylindrical bottom under said pounders and in front of said tank a receptacle having vertical sides A, an inclined bottom, and upon said bottom a covering sheet of metal b constituting a part of the stationary tank, with hinged shutters F² and F¹ the latter being provided with a wood strip f¹ to retain the tank B² within the tank B, substantially as described.

No. 46,589. Button Hole Attachment.

(Attache pour machines à faire les boutonnières.)



Herbert S. Cawthorn, New York, State of New York, U.S.A., 11th July, 1894; 6 years.

Claim.—1st. An attachment for shirts and other garments, comprising a strip having an aperture therein, and means for securing the strip to a garment, substantially as shown and described: 2nd. An attachment for shirts and other garments, comprising a metallic strip having an aperture therein and adapted to detachably

secured upon a garment, substantially as shown and described. 3rd. An attachment for shirts and other garments, comprising a strip of rigid material having an aperture therein, and a fastening upon the strip opposite the aperture, substantially as shown and described. 4th. An attachment for shirts and other garments, comprising a metallic plate having spurs projecting therefrom, an aperture in the end of the plate, and means for causing the spurs to engage with the fabric of a garment, substantially as shown and described. 5th. An attachment for shirts and other garments, comprising plates, means for clamping the same together upon a garment, and a strip secured to one of the said plates having an aperture therein, substantially as shown and described. 6th. An attachment for shirts and other garments, comprising two plates hinged together at one end and engaging at the other, spurs upon one of the said plates, and a strip projecting from the said plate, having an aperture therein, substantially as shown and described. 7th. An attachment for shirts and other garments, comprising a plate of metal having spurs struck upon its under face adapted to engage with the neck-band of a shirt, a strip or flange formed integrally with the said plate and projecting therefrom at right angles thereto, the said strip having an aperture in the end thereof adapted to receive a button, an inner plate hinged at the top to the first, and a spring lug upon the free end of the inner plate adapted to lock the two together and secure the device to the garment, substantially as shown and described.

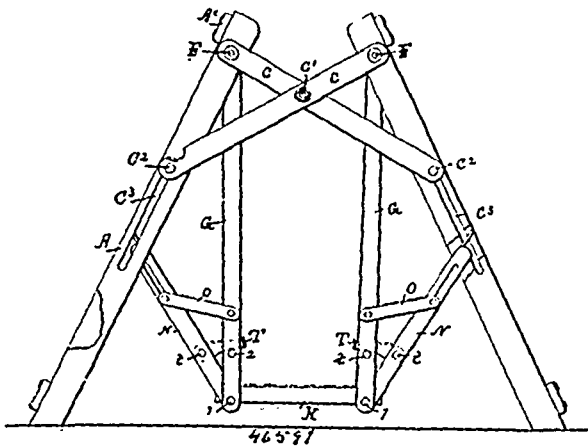
No. 46,590. Medicinal Compound.

(Composition medicinale.)

John M. McLeod, Goderich, Ontario, Canada, 14th July, 1894; 6 years.

Claim.—A medicinal compound composed of water, lemons, onions, extract of gentian, granulated sulphate of iron, re-crystallized sulphate of ammonia, sulphate of quinine, sulphuric acid, tincture of asafoetida, tincture of camphor compound, extract of luclu fluid, tincture of cinchona compound, extract of belladonna fluid and tincture benzoine compound, mixed and prepared and in the proportions hereinbefore set forth.

No. 46,591. Swing. (Balancoire)



Reuben A. Shorey, and George E. Shorey, Fairfield, Maine, U.S.A., 16th July, 1894; 6 years.

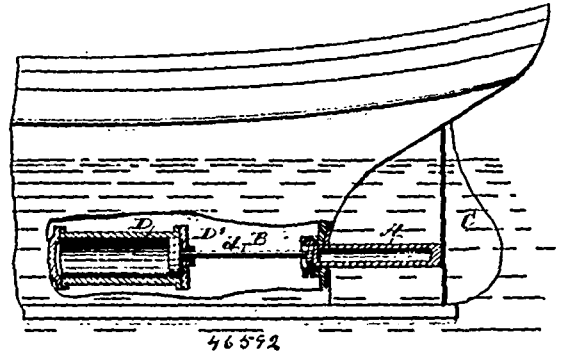
Claim.—1st. The herein described swing, consisting essentially of two frames adapted to be set at an inclination one to the other, hangers G pivotally mounted on said frames, and provided with seat and with platform supports, two backs each pivoted with relation to one of said hangers, seats connected to each of said backs and adapted to be sustained at or near one end on supports of said hangers, a detachable platform connecting the said hangers, arms to connect said backs and hangers, and means to brace said inclined frames, substantially as described. 2nd. The herein described swing, consisting essentially of two frames adapted to be set at an inclination one to the other, hangers G pivotally mounted on said frames and provided with seat and with platform supports, two backs each pivoted with relation to one of said hangers, seats connected to each of said backs and adapted to be sustained at or near one end on supports of said hangers, a detachable platform connecting the said hangers, arms to connect said backs and hangers, and means to brace said inclined frames, and braces being pivoted one on the other and crossed from one to the other of said frames, and being fixed to one frame and adjustably connected to the other, to operate, substantially as described.

No. 46,592. Propellor. (Propulseur.)

Lorenzo Julia-Y-Puig, Guayaquil, Ecuador, South America, 16th July, 1894; 6 years.

Claim.—1st. A propellor of uniform cross-section and of a weight equal to that of the water it is intended to displace, as and for the

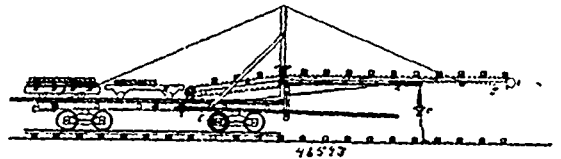
purpose described. 2nd. The combination, with the hull, having an opening, of a reciprocating propeller of uniform cross-section fitting tightly into the said opening, and adapted to be alternately



forced out of the said opening into the water to propel the vessel, and then returned by the pressure of the water, substantially as described. 3rd. In a propelling mechanism for vessels, the combination with the hull having an opening in its stern, of a propeller consisting of a cylindrical body, of a weight essentially equal to the weight of water it is intended to displace, and fitted tightly into the said opening to slide therein, and a driving mechanism applied to the propeller upon its outward stroke only, the water serving to return it, substantially as shown and described. 4th. In a propelling mechanism for vessels, the combination with the hull provided with an opening in its stern, and a propeller consisting of a hollow cylinder, of a weight equal to the weight of water it is intended to displace, and fitting tightly into said opening to slide therein, of a steam cylinder, the piston of which is connected with the propeller, steam being admitted at the front of the head of the piston only, whereby power is applied to force the propeller out of the said opening into the water to propel the vessel, the water upon which it acts serving to return the propeller within the hull, substantially as described.

No. 46,593. Track Laying Machine.

(Appareil pour le posage des rails.)

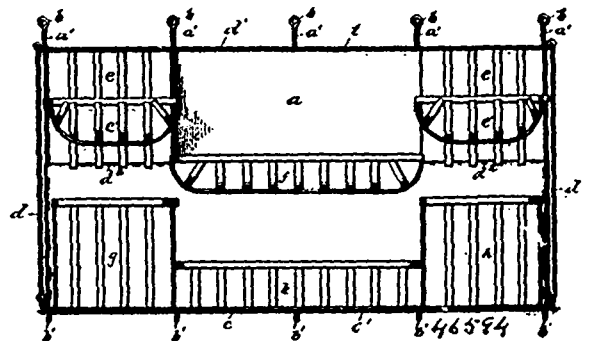


Thomas Wilson Paterson, Victoria, British Columbia, Canada, 16th July, 1894; 6 years.

Claim.—1st. The combination in a track laying machine, of the sproket wheel b, chain C, wheels d, f, f, chains g, g, beds h, h, cars j, R, R, for laying the ties, substantially as and for the purpose hereinbefore set forth. 2nd. The combination in a track laying machine, of rollers r, brackets t, traveller u, track x, substantially as and for the purpose hereinbefore set forth.

No. 46,594. Kitchen Cabinet.

(Cabinet de cuisine.)



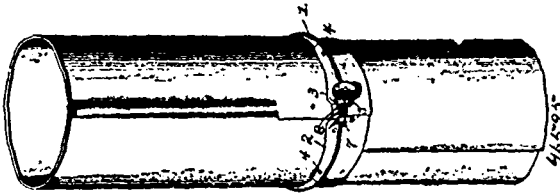
Minnie S. Thomas, Waterville, Washington, U.S.A., 16th July, 1894; 6 years.

Claim.—1st. A kitchen cabinet comprising a body portion provided with means for hanging it to the wall, a series of baskets secured to the body and adapted for the reception of cooking uten-

sils, a shelf hinged to the lower end of the body and stay rods pivoted to the body and having a detachable connection with the shelf, whereby the shelf may be held horizontally or allowed to hang vertically, substantially as described. 2nd. A kitchen cabinet comprising a body portion, a series of rods secured thereto, and extending its entire depth, the upper end of the rods being formed into eyes for supporting the cabinet, and the lower ends formed into hooks for holding cooking utensils, baskets secured to the body and stay rods pivoted to the cabinet and provided with a detachable connection with the shelf whereby the shelf may be held horizontally or allowed to hang vertically, substantially as described.

No. 45,595. Stove Pipe Joint.

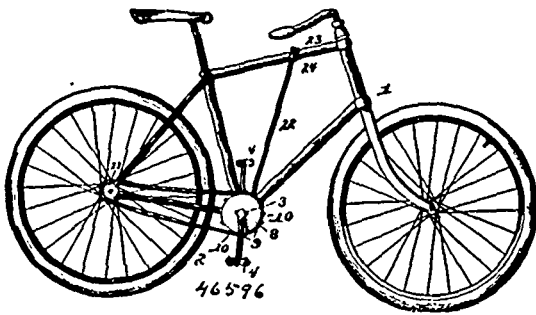
(Joint de tuyau de poêle.)



Frank R. Braman, Saltville, Indiana, U.S.A., 16th July, 1894; 6 years.

Claim.—In a pipe joint, the combination of a section or length of pipe constructed of sheet metal, having its edges secured together to within a short distance of the receiving end of the section or length to form an expansible receiving end provided with an encircling exterior head 1, and a clamp having relatively adjustable members secured to the said head adjacent to the free edges of said receiving end, and connected by an adjusting screw the inner ends of the securing devices for the members being arranged in the concavity of the head to avoid obstructing the bore of the section of pipe, substantially as specified.

No. 46,596. Multiple Gearing. (Engrenage multiple.)

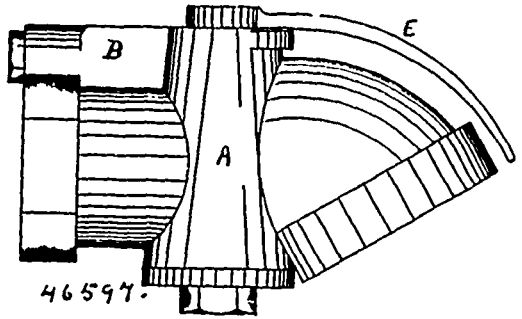


William H. Bright, Washington, C. H., Ohio, U.S.A., 16th July, 1894; 6 years.

Claim.—1st. The combination with a treadle shaft, of a fixed internal gear, a rotary sprocket disc loosely mounted upon said shaft and provided with internal clutch-teeth, planetary gears carried by the sprocket-disc and meshing permanently with the internal gear-teeth, an adjustable pinion slidably mounted upon the treadle shaft and adapted to engage either the clutch-teeth or the planetary gears, and means for operating said pinion, substantially as specified. 2nd. The combination with a treadle shaft, of a stationary plate, an internal gear carried by said plate, a sprocket-disc loosely mounted upon the treadle shaft and having a peripheral flange to meet the outer edge of the internal gear, clutch-teeth arranged in a cavity in the sprocket-disc, planetary gears carried by the sprocket-disc and permanently engaging the internal gear-teeth, an adjustable pinion feathered upon the treadle shaft and adapted to engage either the clutch-teeth or the planetary gears, said planetary gears and adjustable pinion being beveled upon corresponding sides to enable the latter to occupy a position between the clutch-teeth and said gears, and means for operating the adjustable pinion, substantially as specified. 3rd. The combination with a treadle shaft, of fixed internal gear, a loose sprocket-disc provided with clutch-teeth, planetary gears carried by said disc, and an adjustable pinion feathered upon the treadle shaft and adapted to engage either the clutch-teeth or the planetary gears, of a rack connected to said pinion, a shifting rod provided with a spur-gear in engagement with said rack, and a locking device consisting of a plate carried by the shifting-rod and provided with spaced sockets or depressions, and a spring-actuated locking pin to engage said sockets or depressions successively to hold the adjustable pinion in either of its adjusted positions, substantially as specified.

No. 46,597. Angle Cock for Trains.

(Robinet à angle pour trains de chemin de fer.)

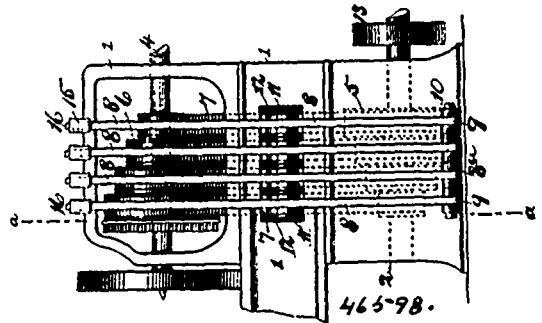


Isaac Dryell, St. Thomas, Ontario, Canada, 16th July, 1894; 6 years.

Claim.—1st. The combination with the angle cock A, of the air cylinder B and the air port C, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with angle cock of the air cylinder B, the piston P, and the spiral spring O, substantially as and for the purpose hereinbefore set forth. 3rd. In an angle cock the combination of an air cylinder B, a piston P, a spiral spring O, and a pin X, substantially as and for the purpose hereinbefore set forth.

No. 46,598. Driving Mechanism for Machinery.

(Mécanisme conducteur pour machines.)



Francis H. Crafts, Buffalo, New York, U.S.A., 16th July, 1894; 6 years.

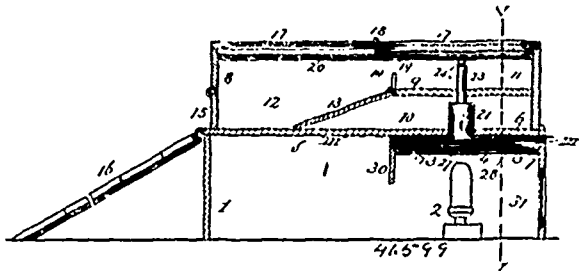
Claim.—1st. Driving mechanism for instantaneously changing or regulating the speed of machinery, consisting of power shaft an operative shaft, cone pulleys located on said shaft, belts located on and connecting the respective steps of said pulleys and reciprocal belt-tightening devices adapted to independently engage the respective belts, substantially as and for the purposes set forth. 2nd. As an improvement in mechanism for changing the speed of machinery, the herein described means consisting of a shaft connected to the source of power, a shaft connected with the tool or mechanism to be operated, stepped pulleys reversely positioned upon said shafts, belts or bands connecting, individually, the respective steps of said pulleys, discs equal in number with and having reciprocal bearing adjacent to each belt, levers connected with said discs and adapted to reciprocate the same into tightening contact or away from said belts, and means for locking said levers in their several positions, substantially as set forth. 3rd. The means herein described for transmitting power to and driving belt machinery and changing and regulating the speed thereof, consisting of a power connected shaft and a shaft connected with the mechanism to be operated, a plurality of either plain or stepped pulleys located on said shafts, belts connecting the respective pulleys or steps thereof, independent belt-tighteners adapted to independently engage each individual belt, and levers adapted to reciprocate each belt tightener, individually, into or out of frictional engagement with the respective belts, substantially as for the purposes set forth. 4th. As an improvement in drive mechanism for machinery, a pair of parallel shafts, stepped cones located thereon, a plurality of drive belts located on the respective steps of said cones and connecting the same, a plurality of discs, and a series of pivoted levers connected with said discs, and a series of pivoted levers connected with said discs, and adapted to reciprocate the same into or out of contact with said belts, substantially as and for the purpose set forth.

No. 46,599. Incubator. (Incubateur.)

George Ertel, Quincy, Illinois, U.S.A., 16th July, 1894; 6 years.

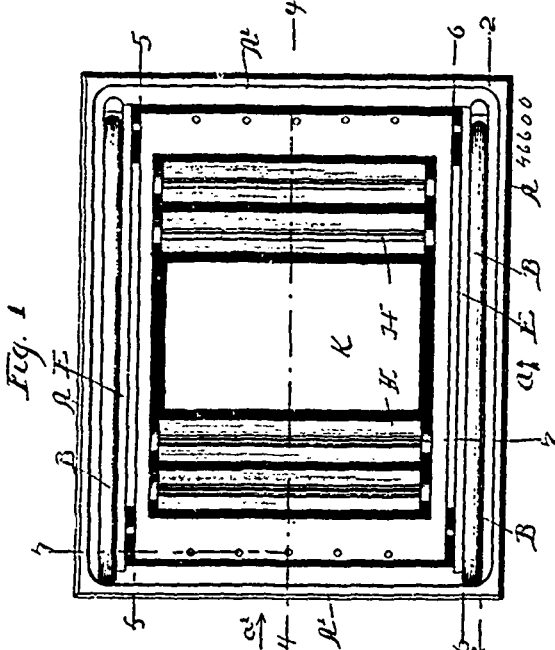
Claim.—1st. In a brooder, the combination of the lower box, a lamp, and a water tank contained in said box, a drum resting on the

tank, a pipe extending from the tank through said drum, and an upper box having a partition forming an upper and lower brooding chamber, said drum extending into said lower brooding chamber,



and said pipe extending into said upper brooding chamber, substantially as and for the purposes set forth. 2nd. In a brooder, the combination of the lower box, a lamp, and a water tank contained in said box, said box having an air passage between its top and said water tank a drum having a notched bottom and perforated top and resting on said water tank, a pipe mounted on said tank and extending through said drum, and an upper box divided into an upper and lower brooding chamber, said drum extending into said lower brooding chamber and communicating through said notches with said air passage between the top of the lower box and the water tank, and said pipe extending into the upper brooding chamber, substantially as and for the purpose set forth. 3rd. In a brooder, the combination of the lower box, a lamp and a water tank contained in said box, said box having an air passage between its top and said water tank, strips 28 forming the walls of said air passage, a drum having a perforated top and notches in its bottom on one side only, a pipe mounted on said tank and extending through said drum, and an upper box divided into an upper and lower brooding chamber, said drum extending from the tank into the said lower brooding chamber, and communicating through said notches with said air passage, and said pipe extending into the upper brooding chamber, substantially as and for the purpose set forth. 4th. In a brooder, the combination of the lower box, a lamp and a water tank, contained in said box, an upper box having a partition extending part way only of the length of the box, a running board and strips secured to said partition, and means for conducting heat from said tank into the upper box, said upper box forming an upper and lower brooding chamber, and a running chamber, substantially as and for the purpose set forth. 5th. In a brooder, the combination of the lower box, a lamp and a water tank contained in said box, an upper box having a partition forming a running chamber and an upper and lower brooding chamber, glass doors hinged together and forming the top of said box, and a sliding screen 19, substantially as and for the purpose set forth.

No. 46,600. Thermostatic Regulator for Incubators.
(*Régulateur thermostatique pour incubateurs.*)



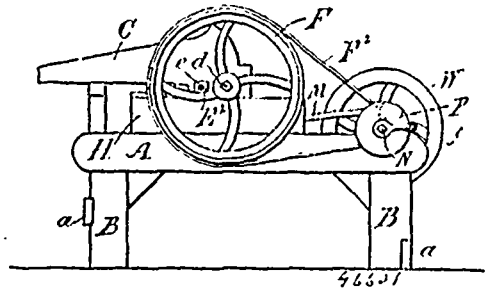
George Ertel, Quincy, Illinois, U.S.A., 17th July, 1894; 6 years.

Claim.—In an incubator, a thermostatic regulator therefor

comprising a movable strip, an expansible thermostatic bar, secured at its ends to the said strip, and a valve operated by the thermostatic bar and adapted to control the temperature of the incubator, substantially as described.

No. 46,601. Straw Cutter. (Hache-paille.)

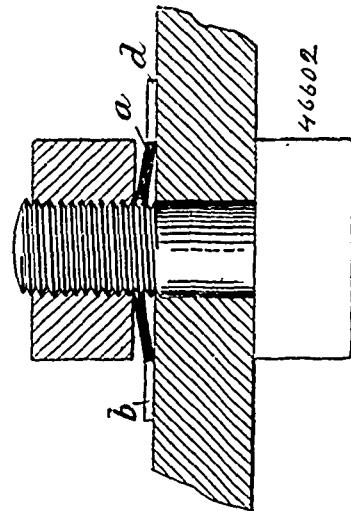
Fig. 1.



Auguste Voisine, St. Paschal, Quebec, Canada, 17th July, 1894; 6 years.

Claim.—1st. In a straw cutting machine, the combination with the main frame of the device carrying feed mechanism and a grooved slide-way, having two knives set in the upper edge of the groove of a sliding frame adapted to be reciprocated in the said slide-way, a knife set slightly diagonally in the said sliding frame, the said knife having a double cutting edge. 2nd. In a straw cutter, the combination with suitable cutting mechanism of the feed rollers D and E, the pinion D³ secured on the shaft d of the roller D, suitable fixed bearings for the said shaft d, the pinion D³, a flexible coupling e², connecting the axle e², of the said pinion with the shaft e of the roller E, sliding bearings E², for the shaft e, and springs E⁴, substantially as set forth.

No. 46,602. Nut Lock. (Arrête-écrou.)



James Walsh, jr., Philadelphia Pennsylvania, U.S.A., 17th July, 1894; 6 years.

Claim.—1st. The within described nut lock consisting of a dished or bowled washer provided with one or more nut locking fingers, and having a central opening with opposite reversely facing semi-circular sets of teeth for embracing and engaging with the opposite sides of the stem of the bolt when the washer is flattened, each of said teeth having an abrupt forward side, substantially as specified. 2nd. The combination of the dished or bowled washer having a central opening with teeth for engaging with the opposite sides of the bolt when the washer is flattened, and a nut locking finger hung to a bearing on said washer and having a projecting tongue serving as a spring to retain the finger in locking position, substantially as specified.

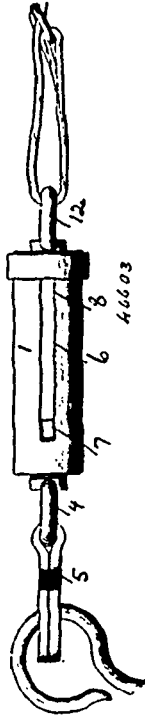
No. 46,603. Check Rein Attachment.

(*Attache pour fausses-rènes.*)

Thomas C. Maggs, Detroit, Michigan, U.S.A., 17th July, 1894; 6 years.

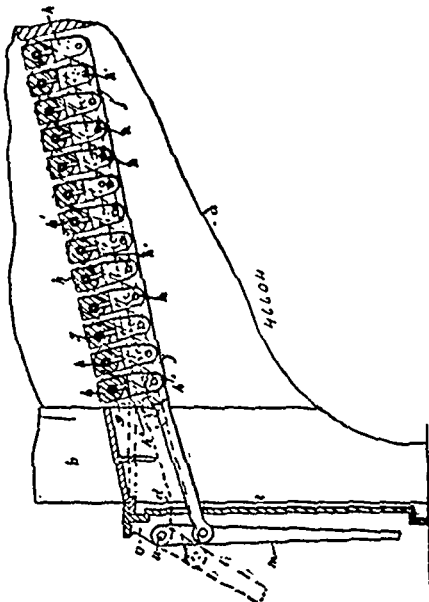
Claim.—A spring tension socket for check reins comprising the

slotted cylinder, having one end closed and provided with a screw threaded stud, the loop connected therewith, the slidible sleeve



located in said cylinder having lugs engaging with said slots, the screw threaded stud and loop, and the coiled spring having its ends passing through holes in the ends of said cylinder and sleeve and twisted around the said studs, substantially as described.

No. 46,604. Furnace Grate. (Grille de fournaises.)



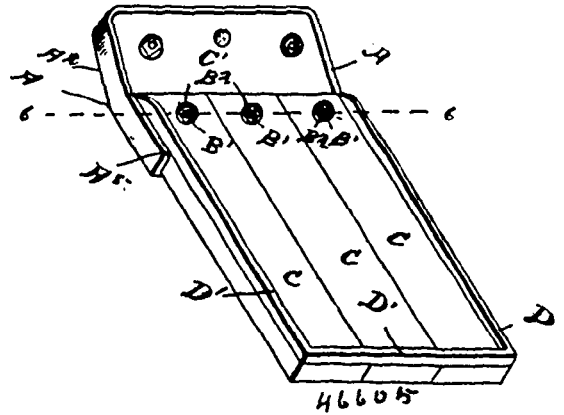
Charles Thackeray, Montreal, Quebec, Canada, 17th July, 1894; 6 years.

Claim.—1st. The combination with the movable grate bars of a furnace, of one or more connecting rods to which each bar is connected, and which protrudes through an aperture or apertures in the front of the furnace to allow of a reciprocating movement being imparted to same for the purpose set forth. 2nd. The combination with the oscillatory grate bars of a furnace, of one or more connecting rods to which each bar is pivotally connected, and which protrudes through an aperture or apertures in the front of the furnace, and a lever or levers fulcrumed outside of the furnace and connected to such rod or rods for the purpose of imparting a reciprocating

movement to same. 3rd. The grate bar cored longitudinally and having air slits or openings through its underside for the purpose set forth. 4th. The oscillatory grate bar cored longitudinally to receive a bearing bar, having air slits or openings through its underside and formed with projecting arms for attachment to a reciprocating connecting rod for the purpose set forth.

No. 46,605. Metallic Crook for Stone Boats.

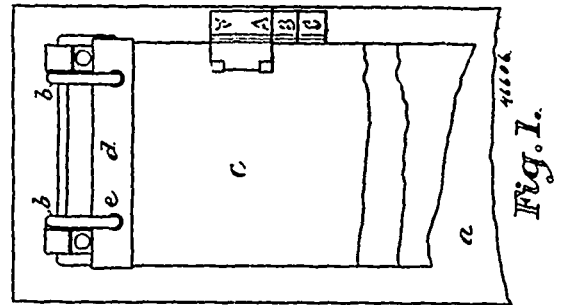
(Crochet métallique pour traineaux à pierre.)



William Allen, Greenwich, New York, U.S.A., 17th July, 1894; 6 years.

Claim.—1st. The stone boat consisting of a metallic crook having one end inclined to the other and provided with a strengthening and defending flange A², a front cross-plank C¹ and lengthwise plank C abutting against said plank within the side members of the flange, substantially as set forth. 2nd. A metallic crook for a stone boat having one end inclined to the other and each end provided with bolt-holes for securing planks thereto and having a strengthening and wood-defending flange A² on each end, substantially as set forth.

No. 46,606. Drill. (Foret.)



John William McGivern and George Parker Clapp, both of Montreal, Quebec, Canada, 18th July, 1894; 6 years.

Claim.—1st. A double pointed drill, for the purpose set forth. 2nd. A drill having two forwardly projecting points upon its cutting end, for the purpose set forth. 3rd. A drill having the usual longitudinal grooves and cutting surfaces with auxiliary grooves between such cutting surfaces, for the purpose set forth. 4th. A twist drill having the usual longitudinal grooves and the usual bevelled surfaces at the cutting end with auxiliary grooves between the extreme forward ends of the bevelled surfaces for the purpose set forth.

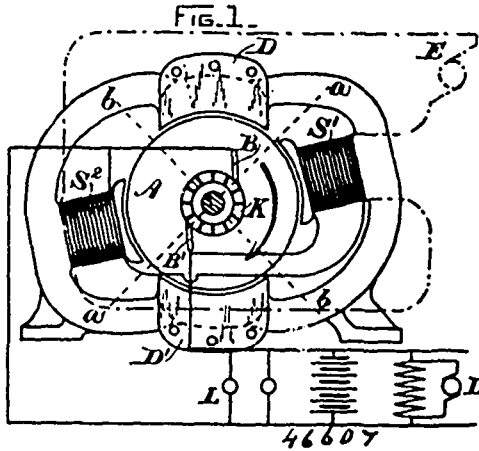
No. 46,607. Dynamo Electric Machine.

(Machine dynamo-électrique.)

The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Elihu Thomson, Swampscott, Massachusetts, U.S.A., 18th July, 1894; 6 years.

Claim.—1st. The method of sustaining or increasing the electro-motive force of a dynamo-electric machine, which consists in magnetizing pole pieces adjacent to the polarized part of an armature by induction from the armature itself. 2nd. The method of sustaining or increasing the electro-motive force of a dynamo-electric machine, which consists in inducing polarity in the pole pieces adjacent to the polarized part of an armature by means of the current flowing in the conductors upon the armature itself. 3rd. The method of sustaining or increasing the electro-motive

force of a dynamo-electric machine, which consists in causing currents in the conductors upon an armature to induce in an unwound field magnet a field of force in which the armature moves. 4th.



The method of automatically sustaining or increasing the electro-motive force of a dynamo-electric machine, which consists in rotating the armature in a compound field composed of a normal field and a supplementary field produced by induction from the armature so as to vary in correspondence with the current therein. 5th. The method of sustaining or increasing the potential of the generated current of a dynamo-electric machine during an increase of load, which consists in dividing the magnet poles, magnetizing one pole of each division to approximately full strength and inductively magnetizing the other pole by the armature magnetism in correspondence to the increase of load. 6th. The method of sustaining or increasing the potential of a dynamo-electric machine in correspondence to an increase of load, which consists in placing masses of iron having no conductor thereon adjacent to those parts of the armature lying between the diameter of commutation and the diameter of neutrality. 7th. A dynamo-electric machine having masses of iron with no conductor thereon adjacent to those parts of the armature lying between the diameter of commutation and the diameter of neutrality. 8th. A dynamo-electric machine having two or more sets of poles co-acting to develop electro-motive force in the armature winding, one pole of each set being energized by the current in a circuit extended from the armature winding, and the other pole of each set being inductively magnetized by the armature. 9th. A dynamo-electric machine having its field magnet poles, of each polarity divided, one division of such pole being energized to full magnetization, and the other division arranged adjacent to the polarized portion of the armature, whereby on an increase of load the second division is strengthened by magnetic induction from the armature in correspondence with the increase of load, thus acting to sustain or increase the electro-motive force of the generated current. 10th. A dynamo-electric machine, having near each of its field magnet poles a "dead pole," substantially as described. 11th. A dynamo-electric machine having near each of its field magnet poles and adjacent to the armature, a "dead pole," arranged on the same side of the diameter of neutrality of the armature as the field magnet pole to which it is adjacent, as set forth. 12th. A dynamo-electric machine, having a shunt wound field magnet, and two "dead poles" magnetically connected and arranged between the diameter of commutation and the diameter of neutrality of the armature, substantially as set forth. 13th. A dynamo-electric machine having "dead poles" alternating with its field magnet poles, all of said poles being magnetically connected, substantially as described.

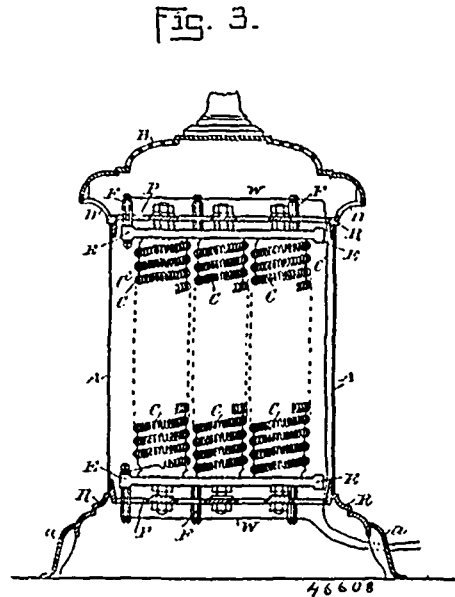
No. 46,608. Electric Heater.

(Appareil de chauffage électrique.)

The Consolidated Car Heating Company, assignee of James McElroy, all of Albany, New York, U.S.A., 18th July, 1894; 6 years.

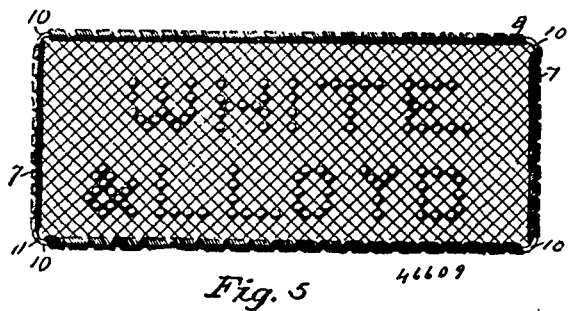
Claim.—1st. An electric heater consisting of a casing, a series of cylinders within said casing, a resistance coiled about each of said cylinders, each end of said cylinders provided with a contact-rod, said contact-rods connected with each other, an opening at each end of said casing allowing for the passage of air therethrough, substantially as described and for the purpose set forth. 2nd. In an electric heater, a casing open at the top and bottom, a series of resistance-pieces within said casing, said resistance-pieces suitably connected with each other at each end thereof, one end of said resistance-pieces connected with the positive, and the other end with the negative pole of the battery, substantially as described and for the purpose set forth. 3rd. In an electric heater, the combination of a casing, a resistance-carrying cylinder, a resistance-coil mounted on said cylinder, communication between the interior of said cylinder

and the apartment in which it is placed at the top and at the bottom thereof, a means for connecting each end of said resistance-carrying cylinder with the poles of a battery, substantially as described and



for the purpose set forth. 4th. In an electric heater, the combination of a resistance-carrying cylinder, a resistance placed thereon, an insulated cap at each end of the cylinder, a casing within which said resistance-carrying cylinder is placed, a plate at each end of said casing, said resistance-carrying cylinder mounted in said plate, communication between the interior of said casing and the apartment in which it is placed at the top and bottom of said casing, each end of said cylinder connected with the poles of a battery, substantially as described and for the purpose set forth.

No. 46,609. Wire Fabric. (Tissus métalliques.)

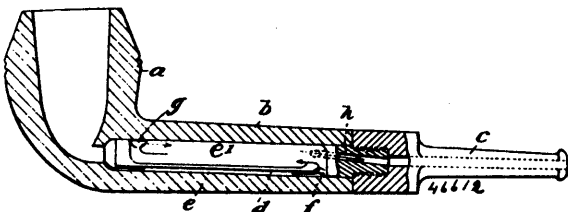


The White Manufacturing Company, assignee of Clarence O. White, all of Minneapolis, Minnesota, U. S. A., 18th July, 1894; 6 years.

Claim.—1st. The combination, in a wire fabric, of a series of interlocking primary coils, with one or more transverse coils interlocked therewith at the intersections of said primary coils, substantially as and for the purpose set forth. 2nd. The combination, with a series of interlocking primary coils, of one or more transverse coils arranged at right angles to the axes of the primary coils and interlocking therewith at the intersections thereof, and said coils being flattened to prevent the loosening of the same, substantially as and for the purpose set forth. 3rd. The combination, in a woven wire fabric, of a series of interlocking primary coils, with one or more coils woven therethrough at right angles to the axes of said primary coils, and interlocked with and at the intersections thereof, and the ends of said primary coils being curled back upon the transverse coil or coils, substantially as and for the purpose set forth. 4th. The combination, in a woven wire fabric, of a series of interlocking primary coils, with one or more coils woven therethrough transverse to the axes thereof, the ends of said primary coils being curled about said transverse coil or coils, and said primary coils and said transverse coil or coils being flattened, substantially as and for the purpose specified. 5th. The combination, in a woven wire fabric, of a series of interlocking primary coils, with one or more transverse coils woven through said primary coils at right angles to the axes thereof and interlocked therewith at the intersections of said primary coils, the ends of said primary coils being curled about said

or trackway, a carriage to travel thereon, a rope carrier supported at one side of the vertical plane of the rope, and means whereby the lower part of said rope carrier is deflected onto the opposite side of said plane as it is passed by the carriage, substantially as described. 2nd. In a conveying apparatus, in combination, a cable or trackway, a carriage to travel thereon, a rope support upon said carriage, a rope support at one end of the cable or trackway, a rope carrier and means whereby said rope carrier is suspended with capacity for vibrating at one side of the vertical plane passing through said rope supports thereby giving the rope carrier a tendency to rest laterally of the said plane, against the side of the rope, substantially as described. 3rd. In a conveying apparatus, a cable or trackway, means whereby the same is supported at each end of the span, a carriage to travel thereon, an outward hauling rope, sheaves at opposite ends of the span and below the cable supports whereby the outward hauling rope is supported, a drum at the engine whereby the outward hauling rope is actuated, and a support for said outward hauling rope mounted upon said carriage above the central level of the cable or trackway, and constructed to encompass said rope on two sides, whereby the outward hauling rope is extended from below the cable at each end to above the cable at the carriage, and is thereby held and steadied comparatively straight notwithstanding the sagging of the cable, substantially as described. 4th. In a conveying apparatus, in combination, a cable or trackway, a carriage to travel thereon, a rope support on said carriage, a rope support upon one end of the cable or trackway, a rope carrier and means whereby said rope carrier is suspended with capacity for vibrating at one side of the vertical plane passing through said rope supports thereby giving the rope carrier a tendency to rest laterally of said plane against the side of the rope, and means for causing the deflection of the rope carrier, substantially as described. 5th. In a hoisting and conveying apparatus, in combination, a cable or trackway, a carriage to travel thereon, having a side frame and a fall rope sheave mounted thereon, a fall rope, a fall rope carrier, and means whereby said carrier is deflected between the said fall rope sheave and the carriage frame, substantially as described. 6th. In a conveying apparatus, in combination, a cable or trackway, a carriage to travel thereon, a hauling rope extending to the carriage, a rope carrier supported at one side of the vertical plane of said rope, and means whereby the lower part of said rope carrier is deflected onto the opposite side of said plane as it is passed by the carriage, substantially as described. 7th. In a conveying apparatus, in combination, a cable or trackway, a carriage to travel thereon, a rope carrier, a supplemental cable side by side with the first named cable or trackway, whereby said rope carrier is supported independently of the first named cable or trackway, a wheel mounted upon said carriage and running upon said first named cable or trackway and a wheel mounted upon the carriage side by side with the first named wheel and running upon said supplemental cable or trackway, substantially as described. 8th. In a hoisting and conveying apparatus a load carriage, a fall rope whereby the rope is suspended from said carriages, a cable stretched between two supports, an auxiliary rope disconnected from the cable and stretched above the fall rope, between the cable supports parallel or nearly so with the cable and a fall rope carrier engaging with said auxiliary rope whereby the carrier is supported independently of the cable, substantially as described. 9th. In a hoisting and conveying apparatus, a load carriage, a fall rope whereby the load is suspended from said carriage, a cable or trackway whereby said carriage is supported, an auxiliary rope parallel or nearly so with the cable or trackway, a fall rope carrier engaging with said auxiliary rope whereby it is supported independently of said cable and means upon the load carriage whereby said auxiliary rope is depressed as the cable is depressed under the load, substantially as described.

No. 46,612. Pipe. (Pipe.)

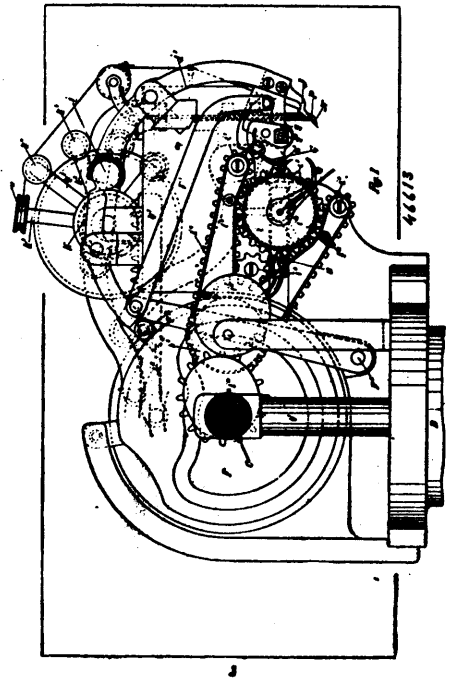


Edwin Barron, London, England, 18th July, 1894; 6 years.

Claim.—1st. A pipe for smoking tobacco having in the stem a series of passages which communicate with each other and one of which is in communication with the bowl and another with the mouth-piece of the pipe, whereby the smoke in passing from the bowl to the mouth-piece, will be caused to travel several times the length of the stem, substantially as described. 2nd. In a pipe of the kind hereinbefore described a mouth-piece having connected to it a shank provided with a series of longitudinal grooves which communicate with each other and one of which extends to the end

of the said shank whilst another is connected with the bore in the mouth-piece, substantially as described.

No. 46,613. Sewing Machine. (Machine à coudre.)



Oliver Bellefeuille, Montreal, Quebec, Canada, 18th July, 1894; 6 years.

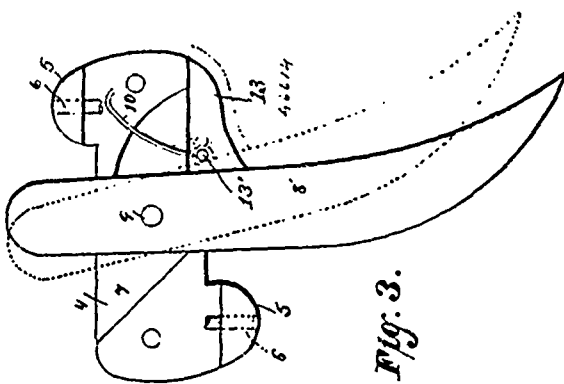
Claim.—1st. In a sewing machine, the combination of a shuttle *i*, composed of two sprocket-wheels *i*¹ and *i*², separated by pieces *i*³, top *i*¹¹, piece *i*¹⁶, spring *i*¹⁷, and spring hook *I*, set in motion by the sprocket chain *i*⁴, kept in position by means of a suitable number of rollers *i*¹¹, and passing over the double sprocket wheels *i*⁵, *i*⁶, *i*⁷ and *i*⁸, propelled by wheel *i*⁹, and spur-wheel *i*¹⁰, with a curved needle *G* acting as a loop spreader, the holding hook *h*¹, and looper *J*, having the ball joint *j*, substantially as described and for the purposes set forth. 2nd. In a sewing machine, the combination of an ordinary curved needle *G*, secured to a head *g*, oscillating around the shaft *g*¹, through the crank *g*², which is provided with the projecting guide bar *g*³, and set in motion by means of the ordinary mechanism, through lever *F*¹, and acting as a spreader by being pushed out by means of lever *g*⁴, trundle roll *g*⁷, and cam groove *e*, with the holding hook *h*, worked by the sleeve *H*, having the slot *h*⁵, and spring *h*⁶, through the projection *h*⁴, lever *F*², cam groove *F*³, and stopper *h*³, all substantially as described and for the purposes set forth. 3rd. In a sewing machine, the combination of a take up composed of the wheel *K*, having the arms *k*², provided with the guide-wheels *k*³, all mounted on a shaft *k*, with the wheel *k*⁴, having the recesses *k*⁵, on its periphery into which work the projections *k*⁶, of the piece *k*⁷, set in motion by means of the lever *k*⁸, and trundle roll *k*¹⁰, with a thread-giving device worked by the back gage and composed of the grooved wheel *L*, having one flange of the groove provided with teeth so as to form a pawl wheel, sliding piece *i*¹⁰, provided with the ratchet *i*¹⁸, piece *i*²¹, springs *i*¹³ and *i*¹⁵, lever *i*¹⁴, having springs *i*²³, and trundle rod *i*¹¹, depression *e*¹, double lever *i*⁷, lever *i*⁸, slotted lever *i*⁹, piece *i*, which is provided with the projection *i*¹, and joined to the back gage *M*, slotted piece *i*⁸, sliding on the projection *i*⁹, piece *i*²⁰, provided with trundle roll *i*¹⁹, projection *e*², and the back gage *M*, all substantially as described and for the purposes set forth. 4th. In a sewing machine, the combination of a feeding device composed of theawl *P*, set in vertical motion by means of the lever *p*¹, and trundle roll *p*⁴, and in horizontal motion by means of the piece *A*, which slides along the piece *a*, and turns around the axis *a*¹, both of the latter being joined to the piece *a*², through the lever *a*³, and trundle roll *a*⁵, with the ordinary channel guard *N*, joined to the piece *A* and set in motion by means of the lever *a*⁶, and trundle roll *a*⁷, all substantially as described and for the purposes set forth.

No. 46,614. Plough Coulter. (Coutre de charrue.)

Charles A. Wren, Coral, Maine, U.S.A., 18th July, 1894; 6 years.

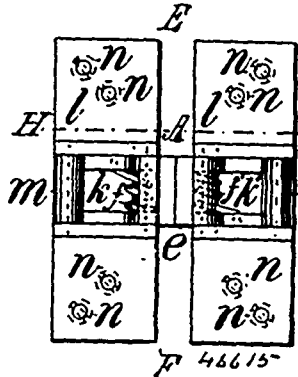
Claim.—In a plough coulter, the combination with a frame having

a transverse opening, and a guide-way extending at an angle there- to, and having means for attaching it to the plough beam, of a blade pivoted in said transverse opening in the frame, a slide plate



arranged in the guide-way in the frame and bearing at its free end against said blade, and a spring connected to said slide plate whereby it is held elastically against said blade, said transverse opening in the frame having a width greater than the width of the blade, substantially as specified.

No. 46,615. Hinge. (Penture.)

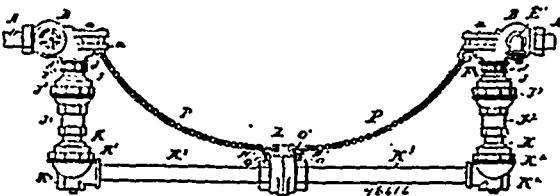


Alfred Augustus Out, Sr., Philadelphia, Pennsylvania, U. S. A., 18th July, 1894; 6 years.

Claim.—1st. In a concealed hinge, the combination of the two leaves 1, 1', having sockets 3, 3', with the double segmental curved link 2, having stops 5, 5', said link having one end pivoted on a fixed centre in one socket and capable of rotating or oscillating segmentally therein, the other end of said link being similarly pivoted on a fixed centre in the other socket, and also capable of rotating or oscillating

in the latter, said sockets being attached to frames and doors or lids, as and for the purposes shown and described. 2nd. In a concealed hinge, the combination of two leaves each having a socket, of a double segmental link pivoted therein at their respective centre, with springs attached to each half of said link, the other ends of said springs being each attached to its respective socket and leaf, as and for the purposes shown and described.

No. 46,616. Pipe Coupler. (Joint de tuyau.)

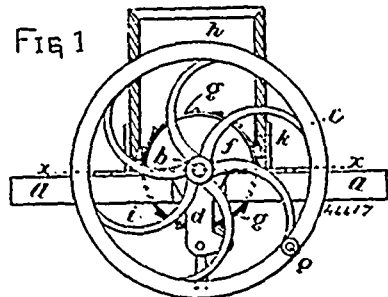


Thomas W. Moran, Louisville, Kentucky, U.S.A., 18th July, 1894; 6 years.

Claim.—1st. The herein described coupling for steam pipes between adjacent railway cars, said coupling comprising a relief valve A, connected to the train pipe of each car, vertical pipe sections C connected at their upper ends one to each of said relief valves, a hollow spherical ball C¹ on the lower portion of each of said sections C, the vertical sections D¹, having spherical sockets D in which said balls C¹ have universal bearings, the annular rings E securing said balls in said sockets, a hollow ball or sphere in the lower portion of each of said sections D¹, the angular sections G having a socket and ring F¹ in which works the ball F, the horizontal pipe section H connected at one end to the horizontal arms of the respective sections G, and the couplings on the meeting ends of said pipe sections H, substantially as specified. 2nd. The herein described coupling for steam pipes between railway cars, said coupling comprising a relief valve A connected to the train pipe of each car, the vertical pipe

sections E having each a threaded connection at its upper end with one of said relief valves, a hollow spherical ball C¹ on the lower end of each section C, the vertical sections D¹ having spherical sockets D in which said balls C¹ have loose bearings, the annular rings E securing said balls in said sockets, a hollow ball or sphere F on the lower end of each section D¹, the angular sections G having a socket and ring F¹ in which works the ball F, the traps in said angular sections, the horizontal pipe sections H connected at one end to the respective sections G, the interlocking couplings on the meeting ends of said sections H, and the tripping chains for said coupling, substantially as specified. 3rd. The relief valve, comprising the casing A, having the opening a for connection with an inlet pipe, a chamber B into which said opening leads, a second chamber C, a port c connecting said chambers B and C, a threaded opening leading outwardly from said chamber C, a bearing plug D¹ seated in said opening, and having a valve seat on its inner end, a port b¹ leading outwardly from said chamber B, a valve seat in said port, and a valve stem having a screw-bearing in the bearing plug D¹, said stem carrying a double seating valve H, and a second valve I, and an escape passage through said bearing plug, substantially as specified. 4th. In a relief valve, the combination with the casing having the chambers B and C connected by a port c, having a spherically bevelled valve seat c¹, the inlet a, and outlet F¹, the elbow E¹, the port b¹ leading from the chamber B into said elbow, and the bearing plug D¹ having a threaded opening therein and a relief passage, and spherically bevelled valve seat h, of the valve stem having a seat in said threaded opening, the double seating spherically bevelled valve carried by said stem, and the valve I also on said stem, substantially as specified. 5th. The herein described pipe coupling, comprising the opposing casings having the cylindrical chambers or boxes therein, the cylindrical hollow piston sections telescoping said chambers or boxes, and having each a surrounding annular flange, the facing rings E surrounding the outer portions of said piston sections and having a threaded connection with the walls of said chambers or boxes, the chambers 2' between said rings E and the flanges on the piston sections, the drain openings leading outwardly from said chambers through the walls of the casings, the movable rings D at the inner portions of said boxes or chambers, and the packing rings D¹, between said movable rings and the flanges of the piston sections, substantially as specified. 6th. In a pipe coupling, the combination, with the opposite casings, having the boxes or chambers therein, the hollow sliding piston sections working in said chambers or boxes, their annular flanges, the rings E, the movable rings D, and the packing rings D¹, of the opposite interlocking hooks and eyes g, g¹, on the lower meeting faces of said casings, the lug or projection G on the upper portion of each of said casings, the latches G¹ pivoted to said lugs or projections, the engaging lugs or projections h, and the springs H, substantially as specified. 7th. In a pipe coupling, the combination, with the opposing casings, and the interlocking opposite hooks g, and eyes g¹, on the meeting faces of said casings, of the lugs or projections G on the upper portions of said casings, the latches or catches G¹ pivoted to said lugs or projections, the lugs h for engagement with said latches or catches, and the clevis rings or links secured one to each of said lugs or projections G by a movable pin, substantially as specified.

No. 46,617. Card Mill. (Moulin à cardé.)



Arthur Stafford, Lancaster, Ontario, Canada, 18th July, 1894; 6 years.

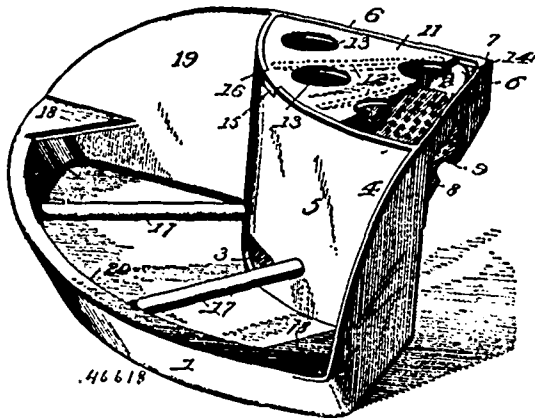
Claim.—1st. A card mill frame, in combination with an eccentric m, as described and for the purpose hereinbefore set forth. 2nd. A hollow cylinder rim g, having holes t, t, in combination with cutters i, i, as described and for the purpose hereinbefore set forth.

No. 46,618. Feed Trough. (Auge.)

Jared G. Davis, Lee, Massachusetts, U.S.A., 18th July, 1894; 6 years.

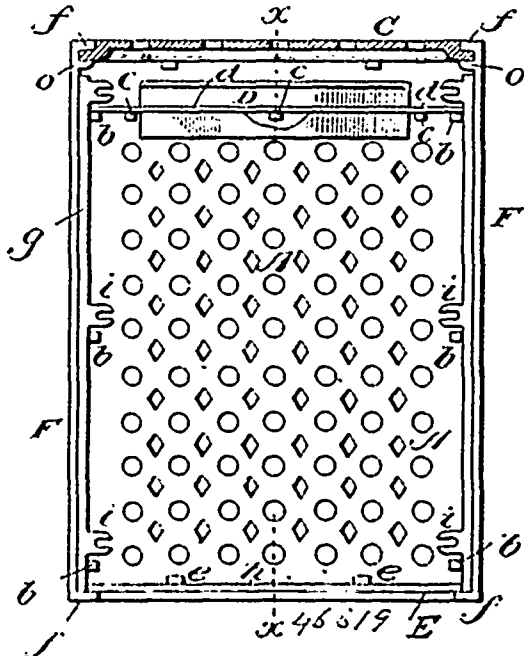
Claim.—1st. The within described feed trough comprising a vertical partition having an opening in its lower part, a feed trough proper on one side of said partition, side pieces extending rearwardly from the upper portion of said partition, so as to leave a space open at the back and sides to the rear of said partition and beneath said

side pieces, said trough, partition and side pieces being formed in one piece, and a bottom of suitable material shaped to form a concave interior and applied to said partition and rearwardly extending



side pieces to form the rear portion of the trough into a feed receiving compartment the interior of which converges to the opening in said partition, substantially as and for the purposes described. 2nd. The within described feed trough comprising the vertical partition with an opening in its lower portion, a feed trough proper on one side of said partition, and a feed receiving compartment on the other side of said partition said compartment having a concave bottom supported by a rib or head, and the interior of said compartment converging to the opening in the partition, substantially as and for the purposes described. 3rd. The within described feed trough comprising a feed receiving compartment, a feed trough proper, a partition separating said trough proper from said compartment, and having an opening in its lower portion for communication between the trough and compartment, rods extending from the front to the rear of the trough proper above its bottom and on opposite sides of the opening in the said partition, substantially as and for the purposes described. 4th. The within described feed trough comprising a feed trough proper formed with shields located at its forward opposite corners and provided with rods extending from the front to the rear of the trough and above the bottom thereof, a feed receiving compartment, and a partition separating said feed trough proper from said compartment and having an opening in its lower portion for the passage of feed from the compartment into the trough, substantially as and for the purposes described.

No. 46,619. Attachment for School Desks.
(Attache pour pupitre d'école.)

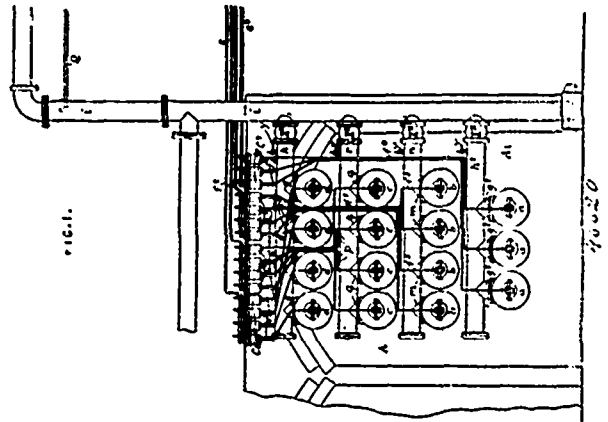


Josiah C. Gooding, Covington, Indiana, U.S.A., 18th July, 1891; 6 years.

Claim.—1st. A case or holder for books and the like constructed of the front and back portions each having an inwardly projecting

flange all around, and having inwardly projecting lugs the bottom having an inwardly turned flange on its edges, the side portions having their top and bottom edges turned inwardly and their vertical edges formed with inwardly turned flanges and notched lugs, and a removable top or cover provided with a suitable lock, the whole being arranged together and secured by screws and nuts, substantially as shown and for the purpose described. 2nd. A case or holder for books and the like constructed of the front and back portions each having an inwardly projecting flange all around, and having inwardly projecting lugs, the bottom having an inwardly turned flange on its edges, the side portions having their top and bottom edges turned inwardly and their vertical edges formed with inwardly turned flanges and notched lugs, a removable top or cover provided with a suitable lock, and a removable chalk holder, the whole being arranged together and secured by screws and nuts, substantially as shown and for the purpose described.

No. 46,620. Apparatus for Distilling and Gasifying Hydrocarbon Oil. (Appareil pour distiller et gazifier les huiles hydro-carbures.)



Edwin Tatham, Lewisham, Kent, England, 18th July, 1891; 6 years.

Claim. 1st. Distilling or cracking and gasifying hydrocarbon oils, shales or the like by subjecting the hydrocarbon oil shale or the like and the deposited products of distillation therefrom to different degrees of heat according to their specific gravities in retorts or vessels which are heated to different temperatures, substantially as described. 2nd. In apparatus for distilling or cracking and gasifying hydrocarbon oils, shales or the like, the combination with retorts or vessels heated to different degrees of temperature of a condenser having separate compartments into which the heavy products of distillation deposit according to their different specific gravities and pipes or passages for conducting the deposited products from the said compartments into the said retorts or vessels, the heaviest deposited product being conducted to the hottest retort or retorts, the next lighter deposited product being conducted to the retort or retorts heated to a lower temperature, the next lighter product being conducted to the retort or retorts heated to a still lower temperature and so on, substantially as described. 3rd. In combination with retorts and means for heating as described and a condenser with compartments for the reception of the deposited products of different densities and passages or pipes for conducting them back to the retorts as described, of means for supplying oxygen in regulated and proportionate quantity to the gases, substantially as described. 4th. In apparatus for distilling or cracking and gasifying hydrocarbon oils or the like, a tube which is made in longitudinal parts which can be separated as explained. 5th. A condenser constructed, substantially as described, in which condensable products of distillation of different specific gravities are separately condensed and with separate chambers in which the said products are received, substantially as described.

No. 46,621. Production of Nitric Acid, Caustic, Alkali, and Ferric Oxide. (Production d'acide nitrique, alcali caustique et fer hydro-orydé.)

Dr. George Lunge, Zurich, Switzerland, and Farnham M. Lytle, London, England, 19th July, 1891; 6 years.

Claim. 1st. The herein described process of decomposing an alkaline nitrate in admixture with ferric oxide in sufficient quantity to maintain the porosity of the mass, by subjecting the heated mass intimately to the action of heated air and steam, the temperature of decomposition being such that the whole of the alkaline base will be converted into a ferrite of the alkali, with evolution of nitrous fumes almost wholly convertible into nitric acid in the ordinary way. 2nd. The herein described process of producing nitric acid and caustic alkali, and recovering ferric oxide in a finely divided

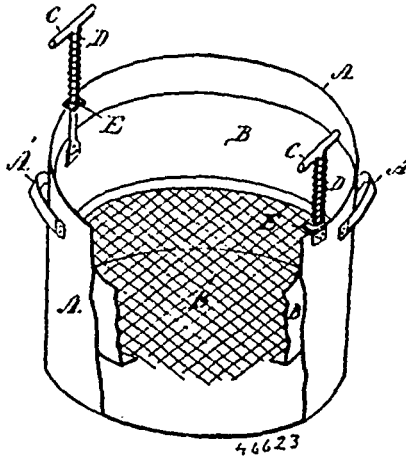
state, which consists in decomposing an alkaline nitrate in admixture with crude ferric oxide in sufficient quantity to maintain the porosity of the mass, by subjecting the heated mass intimately to the action of heated air and steam, so as to convert the whole of the alkaline base into an alkaline ferrite, at a temperature which permits of the evolution of nitrous fumes almost wholly convertible into nitric acid, and decomposing the alkaline ferrite by hot water for recovery of the caustic alkali and ferric oxide, as herein specified.

No. 46,622. Production of Caustic Alkali, and Chloride of Lead for Conversion into Chlorine and Refined Lead. (*Production d'alcali caustique et chlorure de plomb pour la convertir en chlorure et plomb raffiné.*)

Farnham M. Lytle, London, England, and Dr. George Lunge, Zurich, Switzerland, 19th July, 1894; 6 years.

Claim.—The herein described improvement in the process of forming caustic alkali and chloride of lead from an alkaline chloride and oxide of lead, and of recovering the nitric acid used as a vehicle for the lead, which consists in decomposing the alkaline nitrate (formed by double decomposition of nitrate of lead and alkaline chloride) in admixture with ferric oxide in sufficient proportion to maintain the porosity of the mass, by subjecting the heated mass intimately to the action of heated air and steam, the temperature of decomposition being such that the whole of the base of the alkaline nitrate is converted into a ferrite of the alkali, with evolution of nitrous fumes almost wholly recoverable as nitric acid, as specified.

No. 46,623. Dish Washer. (*Lavense de vaisselle.*)

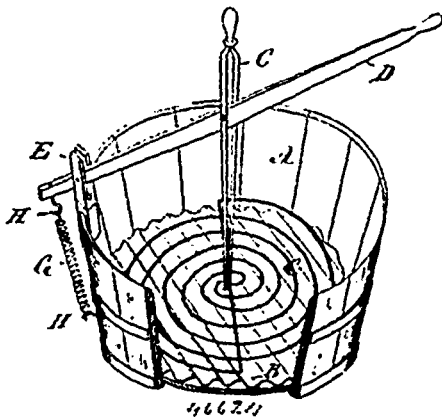


Walter C. Ellis, Picton, Ontario, Canada, 19th July, 1894; 6 years.

Claim.—The combination with the suds tub A, of the dish tray B, having an open or perforated bottom and fitting loosely within said tub, and provided with handles C, the lugs E, attached to said tub, and having a bifurcated hinged section extending over the edge, and coiled wire springs D, surrounding said handles and bearing on the lugs to suspend the tray in the tub, as set forth.

No. 46,624. Clothes Washing Machine.

(*Machine à laver.*)



Walter C. Ellis, Picton, Ontario, Canada, 19th July, 1894; 6 years.

Claim.—The combination with the tub A, provided with a corrugated false bottom B, of the swivel cleat E, straddling the edge of the tub, the operating lever D, fulcrumed to said cleat, the spiral spring G, connecting the end of the lever and tub, and the ponder having the shaft C, pivotally hung from said lever near the middle and connected to a head C, formed of a spiral scroll of wire, as set forth.

No. 46,625. Method of Treating Lead Ore.

(*Méthode de traitement de minerais de plomb.*)

Ambrose G. Fell, New York, State of New York, 19th July, 1894; 6 years.

Claim.—1st. The herein described method of treating native lead, salts or ores direct for the production of merchantable lead compounds, which consists in first decomposing the ground lead ores and converting the lead therein into insoluble lead salts by subjecting said ore to the action of any acid solution containing free sulphuric acid, then separating the lead salts from the solution, and subjecting them, under the influence of a moderate heat, to a compound containing an alkaline base for a time, and finally separating the insoluble lead salts from this solution. 2nd. The herein described method of treating native lead salts or ores direct for the production of merchantable lead compounds, which consists in first decomposing the ground lead ores and converting the lead therein into insoluble lead salts by subjecting said ore to the action of an acid solution containing free sulphuric acid, then separating the lead salts from the solution and subjecting them, under the influence of a moderate heat, to a compound containing an alkaline base for a time, then separating the insoluble lead salts from this solution, and finally roasting said salts. 3rd. The herein described method of treating lead ores direct for producing lead oxide, which consists in first subjecting the ground ore for a time to the action of an acid solution containing free sulphuric acid and separating the undissolved residue from the solution of soluble salts, then removing any silver that may be contained in the said residue, then subjecting the residue, with heat, to a solution of a compound containing an alkaline base, for a time, and removing the solution of soluble salts, and then roasting the undissolved residue. 4th. The herein described method of treating lead ores direct for the production of lead oxides, which consist in first subjecting the ground ore for a time to the action of an acid solution containing free sulphuric acid and separating the undissolved residue from the solution of soluble salts, then subjecting said residue for a time to the action of a solution of a compound containing an alkaline base, with heat, and separating the undissolved residue from the solution of salts, and then mixing with the residue nitric acid or nitrate, drying and roasting. 5th. The herein described method of treating lead ores direct for the production of lead oxides, which consists in first subjecting the ground ore for a time to the action of an acid solution containing free sulphuric acid and separating the undissolved residue from the solution of soluble salts, then removing any silver that may be contained in the said residue, then subjecting said residue for a time to the action of a solution of a compound containing an alkaline base, with heat, and separating the undissolved residue from the solution of salts, and then mixing with the residue nitric acid or nitrate, drying and roasting. 6th. The herein described method of treating lead ores direct for the production of soluble salts, which consists in first subjecting the ground ore for a time to the action of an acid solution containing free sulphuric acid and separating from the undissolved residue the solution of salts, then subjecting said undissolved residue to the action of a compound containing an alkaline base for a time, with moderate heat, and separating the solution of salts from the undissolved residue, and finally subjecting the residue to the action of a solvent and by crystallization or evaporation, recovering from the solution of the lead salt. 7th. The herein described method of treating ores containing lead sulphide direct for the production of lead oxides or salts, which consists in first mixing together the ground ore, sulphuric acid, another inorganic acid, as nitrate or nitric acid, a sulphate and water, then heating the mixture until the evolution of sulphuretted hydrogen, practically ceases, and then drawing off the solution of salts, second, subjecting the undissolved residue to the action of a solution of an alkaline carbonate, with moderate heat, until the mixture shows a permanent alkaline reaction, and then separating the solution from the undissolved residue.

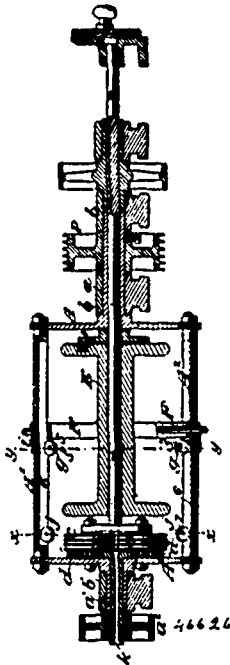
No. 46,626. Flier for Spinning.

(*Bobinoir pour filage.*)

The John Good and Machine Company, Jersey, New Jersey, assignee of John Good, Far Rockway, New York, all in the U.S.A., 19th July, 1894; 6 years.

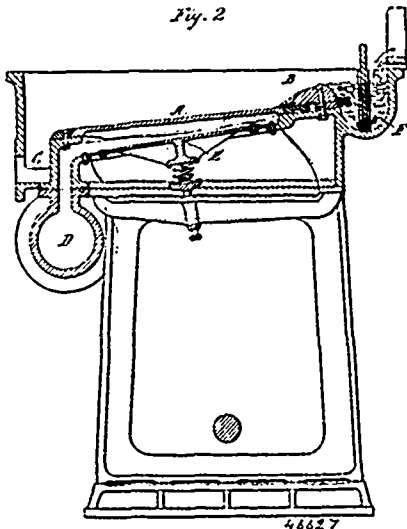
Claim.—The combination with a closed flier having hollow side bars, of a transverse ring with sockets to slide upon said bars, and a yarn guide sheave pivoted within a slot in one of said

sockets and entering the cavity in one of said bars, substantially as herein set forth.



No. 46,627. Pulp Strainer. (*Couloir pour la pulpe.*)

Fig. 2



David N. Bertram, Edinburgh, Scotland, 20th July, 1894; 6 years.

Claim.—1st. In pulp strainers of paper making machines, mounting the strainer plates at an angle, and in such a manner, that the stuff is caused to flow down over the same from the apex or top thereof, as and for the purpose described, and shown in the drawing. 2nd. In pulp strainers of paper making machines, mounting the diaphragm at an angle relatively with the strainer plates, as and for the purposes described and shown in the drawing. 3rd. In pulp strainers of paper making machines, so mounting the discharge channel or outlet D, that it extends from side to side of the machine, as and for the purposes described and shown in the drawing. 4th. In pulp strainers of paper making machines, in which the strainer plates are on an angle, arranging or forming the slits of the strainer plates in angular rows, or in an equivalent form, as and for the purposes described and shown in the drawing. 5th. In pulp strainers of paper making machines, the means whereby the stroke of the diaphragm may be altered, as and for the purposes described and shown in the drawing.

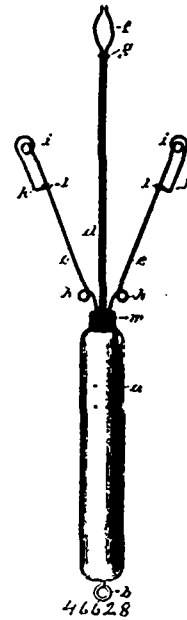
No. 46,628. Lamp Chimney Cleaner.

(*Machine à nettoyer les cheminées de lampes.*)

Peter Teeple, Watertown, New York, U.S.A., 20th July, 1894; 6 years.

Claim.—1st. In a lamp chimney cleaner, side arms or wires having

coils near their base, coils upon the outer ends of the wires, the extreme ends of said wires being bent back and provided with a hook for engaging the main wire, whereby the cleaning material may be



securely held on the same, substantially as described. 2nd. In a lamp chimney cleaner, side arms or wires having coils near their base, coils upon the outer ends of the wires, the extreme ends of said wires being bent back and provided with a hook for engaging the main wire, whereby the cleaning material may be securely held on the same, a longer central arm consisting of two wires having curved portions near their outer ends, and a slip ring on the wires for drawing the same nearer together, substantially as described.

No. 46,629. Method of Separating Metals from Ores.

(*Méthode de séparer les métaux des minerais.*)

Edward R. Besemfelder, Breslau, Silesia, Germany, 20th July, 1894; 6 years.

Claim.—The herein described method of or process in the separation of metals from ores and other similar materials, which consists in exposing them to heat under pressure in contact with ammonium chloride or a similar salt, constructed and arranged, substantially as hereinbefore described.

No. 46,630. Process of Extracting Gold and Silver.

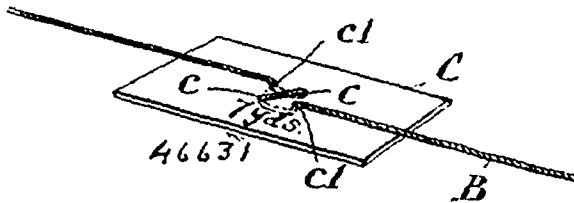
(*Procédé pour extraire l'or et l'argent des minerais.*)

John C. Montgomerie, Dalmore, Stair (County of Ayre, Scotland, 20th July, 1894; 6 years.

Claim.—1st. The improved process of extracting gold and silver from ores or compounds containing the same, substantially as herein described, and consisting in mixing with the pulverized ore or compound sodium dioxide or other alkaline dioxide, and charging this mixture into a barrel or vessel containing water, holding in solution cyanide of potassium or other cyanide together with sodium oxide or other alkaline oxide or a hydrate of an alkaline oxide, and nitrate of soda or other nitrate or nitrite, and allowing the chemicals to act on the ore until the precious metals are sufficiently dissolved. 2nd. The improved process of extracting gold and silver from ore or compounds containing the same, substantially as herein described, and consisting in charging the pulverized ore or compounds into a barrel or vessel containing water, holding in solution cyanide of potassium or other cyanide, sodium oxide or other alkaline oxide or a hydrate of an alkaline oxide, and nitrate of soda or other nitrate or nitrite, and allowing the chemicals to act on the ore until the precious metals are sufficiently dissolved. 3rd. The improved process of extracting gold and silver from ores or compounds containing the same, substantially as herein described, and consisting in mixing with the pulverized ore or compound sodium dioxide or other alkaline dioxide, charging the mixture into a barrel or vessel containing water, holding in solution cyanide of potassium or other cyanide, sodium oxide or other alkaline oxide or a hydrate of an alkaline oxide and nitrate of soda or other nitrate or a nitrite, closing the barrel or vessel and forcing in air, oxygenated air or oxygen, the contents being then agitated until the precious metals are sufficiently dissolved. 4th. The improved process of extracting gold and silver from ores or compounds containing the same, substantially as herein described, and consisting in charging the pulverized ore or compound into a barrel or vessel containing water, holding in solution

cyanide of potassium or other cyanide, sodium oxide or other alkaline oxide or a hydrate of the alkaline oxide, and nitrate of soda or other nitrate or a nitrite, closing the barrel or vessel and forcing in air, oxygenated air or oxygen, the contents being then agitated until the precious metals are sufficiently dissolved. 5th. The improved method of working a charcoal filter employed for separating precious metal from a solution, the same consisting in regenerating the charcoal, without removing the precious metal therefrom, by heating the charcoal *in situ* or otherwise, in order to drive off volatilisable matter, substantially as herein described. 6th. In the extraction from auriferous and argentiferous solutions of the precious metals contained therein, repeatedly employing the same body of charcoal for filtering successive charges of solution and until that body becomes saturated with the precious metals, the active properties of the charcoal being occasionally restored or regenerated by subjecting it to a suitably high temperature. 7th. In the treatment of auriferous and argentiferous cyanide solutions for the extraction of the precious metals and of the cyanide contained therein, the employment of a charcoal filter or series of charcoal filters, substantially as herein described, and whereby the said metals and the cyanide may be either simultaneously or successively extracted from the solution, the active properties of the charcoal being occasionally restored or regenerated as herein set forth.

No. 46,631. Length Indicator. (Indicateur de longueur.)



James W. Woods and David T. Barnett, both of Toronto, Ontario, Canada, 20th July, 1894; 6 years.

Claim.—The combination with the web A, of a length indicator comprised of a cord or twine B, having arranged on it at regular intervals tags C, and indicated on the tags C, specified quantities to represent the length or quantity of material in the web, eyelets c, formed in each of said tags, through which passes the said cords or twine, and eyelets c', also formed in the said tag through which the said cord or twine is laced back upon itself to form a lock to hold the tag stationary on the cord or twine, substantially as specified.

No. 46,632. Artificial Stone. (Pierre artificielle.)

(Pierre artificielle.)

Pierre A. Moreau, Meung-sur-Loire, France, 20th July, 1894; 6 years.

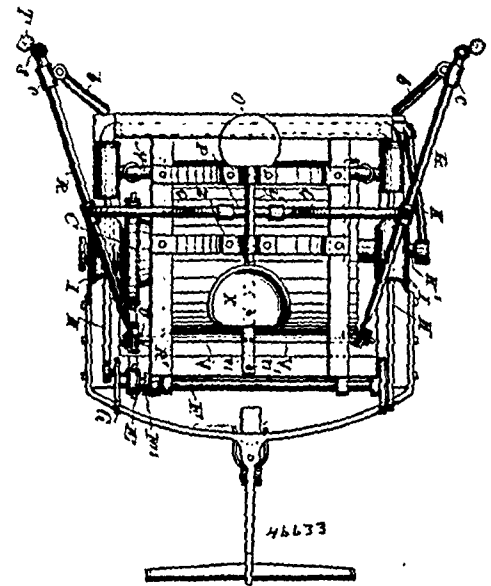
Claim.—1st. The manufacture of variegated or veined artificial stone by the preparation of diversely coloured compositions of a semi-liquid or pasty consistency, and the intermingling of such compositions in the semi-liquid or pasty state, so as to produce the required variegation of colour and afterwards allowing such compositions to set, substantially as described. 2nd. The manufacture of variegated or veined artificial stone and imitations of natural marbles by the preparation and intermingling of diversely coloured compositions made of powdered chalk or Portland or Bath stone or similar porous stones mixed with water, sulphate of zinc and suitable colouring matters, substantially as described, the variegated compositions being afterwards allowed to set and subsequently to harden by immersion in a bath of sulphate of zinc or in any other suitable manner, substantially as described.

No. 46,633. Sprayer. (Eclabousseur.)

Albert G. Province, Puyallup, Washington, U.S.A., 20th July, 1894; 6 years.

Claim.—1st. In a spraying machine, vertical pipes having discharge nozzles, and supply pipes leading thereto and adapted to rock, substantially as described. 2nd. In a spraying machine the combination with a vertical nozzle-carrying pipe, and a supply pipe connected therewith, adapted to be rocked, of a swinging driver's seat, and connections between said seat and the said supply pipe, for causing the nozzle-carrying pipe to respond to the movement of the seat, thereby maintaining the nozzle-carrying pipe in the vertical position, substantially as described. 3rd. In a spraying machine, the combination with the pumps and a source of supply therefor, of a longitudinally ranging pipe at each side of the machine, to which the pumps discharge, said pipes being pivotally supported at their front ends and provided with vertical pipes provided with discharge nozzles, the pivoted pipes being also adjustable toward and from each other, substantially as described. 4th. The combination with the pumps and a source of supply therefor, of longitudinally ranging pipes at the sides of the machine, adjustable toward and from each

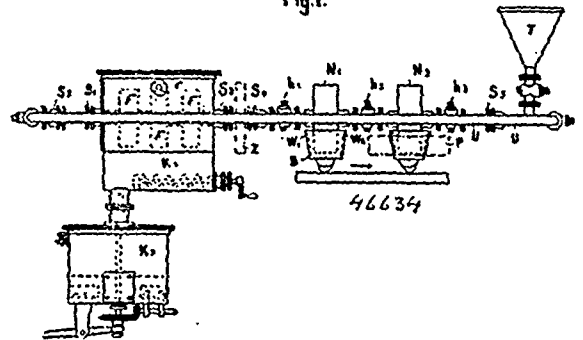
other, pivoted bars connected with said longitudinal pipes, adapted to move the same, guide bars for guiding the pivoted bars, and means for locking the parts in the adjusted position, substantially



as described. 5th. The combination of the hollow roller, the pumps, the suction pipes of which have connection with the hollow roller, discharge pipes, including the usual air chamber, a blow-off valve, a flexible hose, adjustable pipes supporting vertical nozzle-carrying pipes, and means for moving the adjustable pipes, substantially as described. 6th. In a spraying machine, the nozzle-carrying pipes disposed vertically at each side of the machine and having each the vertical series of discharging nozzles, whereby the pressure of the pumps will be concentrated, the vertical series of nozzles and the concentrated pressure thus increasing the efficiency of the machine, substantially as described.

No. 46,634. Filter. (Filtre.)

Fig. 1.

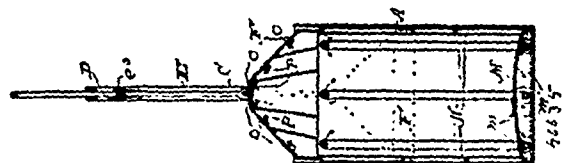


Hugo Kohl, Euskirchen, Prussia, 20th July, 1894; 6 years.

Claim.—A continuous filtering apparatus with automatic mud remover, consisting of first-filters with several compartments, rotating in a tank, which conduct the pure juice through the hollow axle alternately from the right and from the left to the after-filters which also consist of several compartments, are disconnected and turn on the axle, while the mud, remaining in the first-filter tank, is intermittently removed by transport-spirals.

No. 46,635. Washing Machine. (Machine à laver.)

(Machine à laver.)



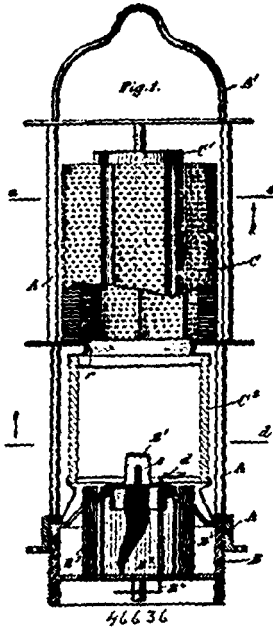
Peter Neukirchen, Chicago, Illinois, U.S.A., 20th July, 1894; 6 years.

Claim.—1st. In a washing machine, the combination with an up-

right outer vessel, and a pair of parallel braces of inverted U-shape rising from the upper end of said vessel, of a lever pivoted between said braces at one side with its body extending between and guided by them at the other side, and a plunger movable connected with the lever and moving within said vessel, as and for the purpose set forth. 2nd. In a washing machine, the combination with an upright outer vessel, and a pair of parallel braces of inverted U-shape rising from the upper end of said vessel, of a lever pivoted between said braces at one side with its body extending between and guided by them at the other side, an upright rod whose upper end extends between and is guided by the braces at the top, and whose body is movably connected to the lever, and a plunger carried by the lower end of the rod, and moving within said vessel, as and for the purpose set forth. 3rd. In a washing machine, the combination with a vessel and a pair of parallel braces, of inverted U-shape rising from the upper end of said vessel, and a series of vertical pipes therein, of a lever pivoted between the braces at one side with its body extending between and guided by them at the other side, and a plunger connected with the lever and moving within said vessel, substantially as described. 4th. In a washing machine, the combination with a vessel having a series of vertical pipes in its interior, extending from its top to bottom and open at each end, of a pair of parallel braces rising from the upper end of the vessel, a lever pivoted between the braces at one side, with its body extending between and guided by them at the other side, a perforated false bottom for the vessel having recesses for the reception of the pipes, and a plunger connected with the lever, and having valve controlled openings in its upper part and adapted to move within the vessel, substantially as described.

No. 46,636. Safety Mining Lamp.

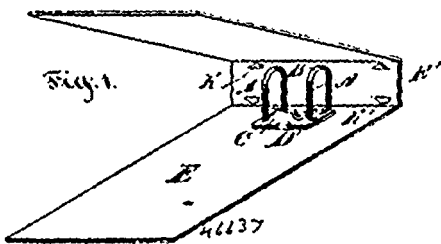
(Lampe de sûreté pour mines.)



Hugo Wolff, Karlsruhe, Germany, 20th July, 1894; 6 years.

Claim.—A mining safety lamp, consisting of an addition or onset B³ of separate tubular trusses or supports, arranged round the burner, and a similarly arranged body C situate over the burner, constructed and arranged substantially as hereinbefore described.

No. 46,637. Letter File. (Serre-papier.)



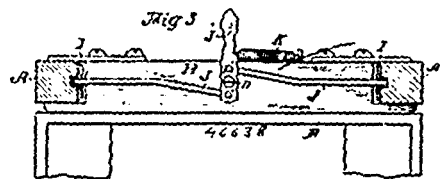
The Eclipse Office Furniture Company, assignee of William O. Gottwals, both of Ottawa, Ontario, Canada, 24th July, 1894; 6 years.

Claim.—1st. In a letter and bill file, the combination of a flat

bottomed and flat edged stamped base C adapted to hold the filing and transfer wires, the filing wires A each having a foot by which it is rigidly attached in one of the recesses of the base, and having a tubular end bevelled off downwardly from rear to front, transfer wires B on a journalled cross shank b which is provided with an inward bend b¹, to form a foot at such an obtuse angle as to keep the arches open when unlocked, a clasp D consisting of a plate provided with attachment lugs formed by curved incisions and having its ends turned up forming grooves to overlap the side edges of the base and its front edge provided with a lug to overlap the front edge of the base, and a backing E to which said base is secured, substantially as set forth. 2nd. In a letter and bill file, the combination of a flat bottomed and flat edged base C stamped with recesses to receive the arched filing wires and bearings for the movable transfer wires, the filing wires A each having a flat foot a rigidly secured in one of the recesses in the base and a downwardly and forwardly bevelled tubular upper end a¹, and the transfer wires B formed on a cross-shank journalled in bearings on said base and provided with an inwardly or forwardly projecting crank or bend b¹, at such an obtuse angle to the uprights as to bear on the base and cause the wires to be slightly sprung when points b¹ and a¹ are interlocked, substantially as set forth. 3rd. In movable transfer wires of letter and bill files, the combination of a cross shank b, having an inwardly or forwardly projecting bend or crank b¹, forming a foot rest at an obtuse angle with the upright shanks and said cross-shank adapted to be journalled at each side of the bend, upright shanks at a right angle with the cross-shank and terminating in forwardly projecting arches with pointed ends b¹, substantially as set forth. 4th. In a letter and bill file, the combination of a base adapted to carry rigid filing wires and movable transfer wires, rigidly secured filing wires having their upper ends a¹, made tubular and bevelled downwardly and forwardly and movable transfer wires formed on a cross-shank with an inwardly projecting bend forming a foot at an obtuse angle with the upright shanks and having arches with pointed ends b¹, adapted to interlock with the bevelled faces a¹, substantially as set forth. 5th. In a letter and bill file, the combination with the backing E, of a clasp D, having its ends overlapped to form grooves or channels for the reception of the edges of a flat bottomed base, the front ends of said overlaps checked out to form abutments, the front edge of the plate provided with a lug d¹, adapted to overlap the front edge of the base and provided with lugs d¹, formed by curved incisions for attachment to the backing, substantially as set forth. 6th. In a letter and bill file, the combination with the backing E, of a clasp D, and base C, carrying filing and transfer wires A and B, a back E¹, flexibly secured to said backing E, and a label holder H, consisting of a metallic rim having turned up edges on three sides forming channels h, and provided with lugs h¹, for attachment to said back, substantially as set forth. 7th. In a label holder for letter and bill files, the combination of a metallic rim H, having its edges turned up on three sides to form channels h, to receive a label and pliable lugs h¹, for attachment to the back of the casing, substantially as set forth.

No. 46,638. Combined Truck and Bag Holder.

(Camion et accroche-sac combinés.)

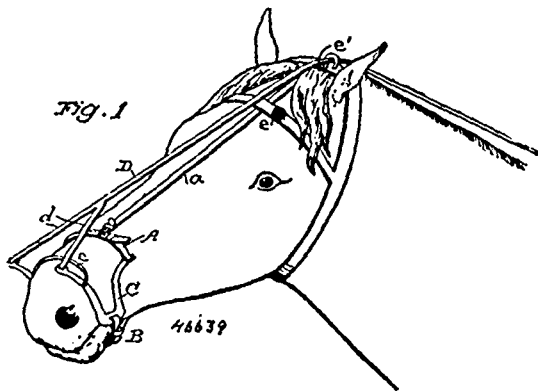


Edward Snell, Kalamazoo, Michigan, U.S.A., 24th July, 1894; 6 years.

Claim. 1st. In a bag and truck holder, the combination, with the vertical supports A, hinged legs G, a hopper B, detachably attached to the standards by rods J, lever J¹, and spring K, acting on the perforated plate I, and the lever E¹, pivoted to the ears E, lugs O, against which the inner ends E¹¹, of the levers drop to hold the bag, all co-acting together, substantially as described for the purpose specified. 2nd. The combination with a hand truck, of a hopper B, the bar H, at the back of said hopper, the rods J, J, the lever J¹, the spring K, and the perforated plates I, I, on the inside of the handle for the purpose of detachably attaching said hopper, and a suitable bag holder at the lower end of said hopper, all substantially as described. 3rd. The combination, with a hopper adapted to be attached to a hand truck, of the levers E¹, E¹, pivoted to the ears E, with inwardly projecting portions E¹¹, to strike against the sides of the hopper to hold the bag, substantially as described. 4th. The combination, with a hopper, of an ear E, the lever E¹, with inwardly projecting portions E¹¹, the lugs O, against which the inwardly projecting portions strike to hold the bag, substantially as described. 5th. In a bag holder, the combination with hopper, of short levers pivoted to each side of said hopper on suitable supports and projecting inwardly towards the hopper to drop down against the same to retain the bag in position, for the purpose

specified. 6th. The combination, with the truck adapted to be tipped back to a convenient angle, of the hopper B, attached to the upper front side of said truck with the bag holder at the bottom, and suitable cross support at the bottom of the truck so that the truck can be placed at an angle to receive the grain from a shovel or scoop, substantially as described for the purpose specified. 7th. The combination, in a truck, of the standards A, the hinged leg supports G, the hopper B, attached to the upper front side of the same so that the truck can be tipped back to a convenient angle for filling the bag, substantially as described for the purpose specified.

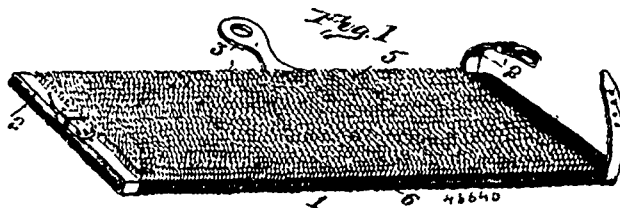
No. 46,639. Chin Check. (Fausses-rênes.)



Thomas Raymond, Walla Walla, Washington, U.S.A., 24th July, 1894; 6 years.

Claim.—1st. A chin check attachment, comprising the U-shaped side pieces adapted to lie upon each side of the horse's nose in a substantially upright position, a strap secured to the bases of said side pieces, and passing under the horse's chin, a strap secured to their rear upper extremities and passing over the horse's nose, and a check strap secured to the upper forward extremities of said side pieces, substantially as described. 2nd. A chin check attachment, comprising the U-shaped side pieces adapted to lie upon each side of the horse's nose in a substantially upright position, a strap secured to the bases of said side pieces, and passing under the horse's chin, a strap secured to their rear upper extremities and passing over the horse's nose, a check strap secured to the upper forward extremities of said side pieces, and a spreader bar to hold the side pieces separated, substantially as herein described. 3rd. A chin check attachment, consisting of the approximately U-shaped side pieces, to the forward extremities of which the check strap is adapted to be attached, the nose strap secured between the rear extremities of said side pieces, the chin strap secured to and extending between their base, and a spreader bar between the forward arms of said side pieces, substantially as herein described. 4th. A chin check attachment, consisting of the approximately U-shaped side pieces, to the forward extremities of which the check strap is adapted to be attached, the nose strap secured between the rear extremities of said side pieces, the chin strap secured to and extending between their bases, and the holding strap *a* of the nose strap, substantially as herein described. 5th. A chin check, consisting of the approximately U-shaped side pieces, the nose strap secured between the rear extremities of said side pieces, the chin strap extending between their bases, and the check strap secured to the forward extremities of said side pieces, substantially as herein described.

No. 46,640. Harness Pad. (Coussinet de harnais.)



Edward Murby, St. Louis, Missouri, U.S.A., 24th July, 1894; 6 years.

Claim.—1st. As a new article of manufacture, a harness pad composed of a fabric having a thickly arranged set of independent loops, substantially as set forth. 2nd. As a new article of manufacture, a harness pad having a thickly arranged set of independent loops upon both faces, and having loopless edges 6, substantially as set forth.

No. 46,641. Pneumatic Tyre. (Bandage pneumatique.)

Fig. 1.

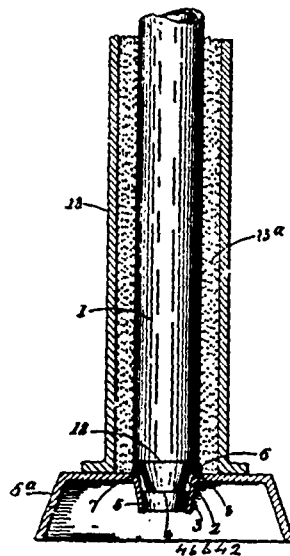


J. B. Dunlop and J. B. Dunlop, Jr., both of Blackrock, Ireland, 24th July, 1894; 6 years.

Claim.—1st. For a pneumatic tyre, an inexpandible cover having diagonal threads on or composing its centre or tread portion, transverse threads (and not diagonal threads) at its sides, and without diagonal threads composing its edges. 2nd. For a pneumatic tyre, an inexpandible cover or cloth or fabric the longitudinal threads of which extend circumferentially around the wheel, the transverse threads being perpendicular to said longitudinal threads, and having its edge strengthened by or composed of cloth or fabric having diagonally extending threads.

No. 46,642. Pattern for Casting Pipe.

(Patron pour le coulage des tuyaux.)



Henry Henderson and Louis J. Kenngott, Buffalo, New York U.S.A., 24th July, 1894; 6 years.

Claim.—1st. A pattern for moulding pipe provided with a tapering portion, or ring guide, at one end and an elastic ring on said tapering portion, adapted to be expanded or contracted in diameter by being moved up or down on said ring guide during the operation of constructing a mould, for the purposes described. 2nd. In a pattern for moulding pipe, a double tapering portion 2 and 15, in combination with an elastic ring mounted thereon and adapted to be enlarged or contracted in diameter by being moved up or down on said tapering portion, substantially as and for the purposes described. 3rd. In a pattern for moulding pipe, tapering ring guide enclosed between two shoulders, in combination with an elastic ring mounted thereon and adapted to be enlarged or contracted in diameter by being moved up or down between said shoulders on said ring guide during the operation of constructing a mould, substantially as described.

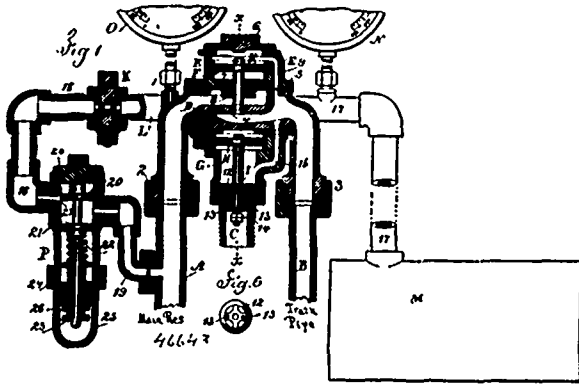
No. 46,643. Valve for Air Brake.

(Soupape pour freins atmosphériques.)

Nathaniel B. K. Hoffman, New York, State of New York, assignee of Jeremiah F. Voorhees, Philadelphia, Pennsylvania, U.S.A., 24th July, 1894; 6 years.

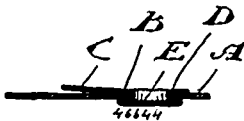
Claim.—1st. In the engineer's valve, of an air brake apparatus, the combination with the cylinder and piston, and the air discharge valve controlled thereby, of a movable seat for the smaller air discharge valve, which movable seat forms the main air discharge valve, and has through it air passageways that are opened and closed by the smaller air discharge valve, there being a passageway

or port for admitting air under pressure from the train pipe to lift the air discharge valve, and means for controlling an air pressure acting upon the piston to close such air discharge valve, substan-



tially as set forth. 2nd. The combination in an air brake apparatus with the pipe for supplying air under pressure, and the train pipe, of a valve to admit air to the train pipe, a cylinder and piston connected with the valve for moving the same, a port for admitting air at one side of the piston from the train pipe, a storage reservoir and a connection from the same for admitting air to the other side of the piston, a valve for admitting air under pressure to the storage reservoir, and a gauge for indicating the pressure, whereby the pressure in the train pipe will correspond substantially to that indicated by the gauge, substantially as set forth. 3rd. The combination in an air brake apparatus, of a pipe for supplying air under pressure from a reservoir, a small storage reservoir, a pipe from the main supply pipe and a pressure regulator for limiting the pressure of air admitted to the storage reservoir, a valve under the control of the engineer for regulating the pressure in the small storage reservoir, a train pipe, an air inlet valve, an air discharge valve for the same, and automatic mechanism controlled by the pressure of the air in the storage reservoir for regulating the action of the valve, substantially as set forth. 4th. In an air brake apparatus, the combination with the train pipe and the pipe that supplies air under pressure, of an intermediate valve body having a seat between the air supply and the train pipe, a removable cylinder bolted to the body of the valve, an air supply valve and its piston within the cylinder, ports for supplying air at opposite sides of the piston to open and close the valve, substantially as set forth. 5th. In an air brake apparatus, the combination with the train pipe and the pipe that supplies air under pressure, of an intermediate valve body having a seat between the air supply and the train pipe, a removable cylinder bolted to the body of the valve, an air supply valve and its piston within the cylinder, ports for supplying air at opposite sides of the piston to open and close the valve, an air discharge valve, a piston for moving the same, and a cylinder for the piston connected to the body of the valve, there being ports for the admission of air to act upon the piston and regulate the discharge valve, substantially as set forth.

No. 46,644. Metallic Shingle. (Bardeau métallique.)



The Metallic Roofing Co., of Canada, assignee of Carleton Comer, all of Toronto, Ontario, Canada, 25th July, 1894; 6 years.

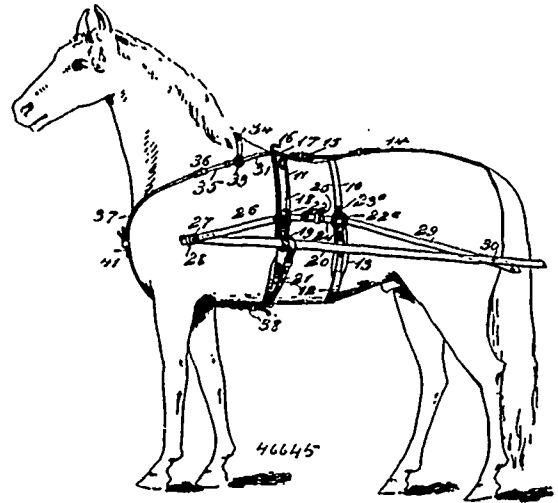
Claim. 1st. A metallic shingle having a hole formed therein, in combination with a clip having the central portion of its body suitably shaped and passed through the hole and upset or turned to clasp the shingle between itself and the body of the clip, substantially as and for the purpose specified. 2nd. A metallic shingle having a hole formed therein, in combination, with a clip having a projection stamped or drawn in the body thereof without perforating the metal, which projection is passed through the hole and upset or swaged to clasp the shingle between itself and the body of the clip, substantially as and for the purpose specified. 3rd. A clip for a metallic shingle having a projection stamped or drawn in the body thereof so as to leave the metal unperforated, substantially as and for the purpose specified.

No. 46,645. Harness. (Harnais.)

Agula M. Darr and Scott F. Keller, assignees of Isaac N. Darr, all of Mounticello, Illinois, U.S.A., 25th July, 1894; 6 years.

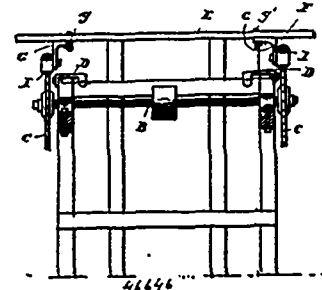
Claim.—1st. A harness comprising a saddle proper and its girth, the rings at the opposite sides of the saddle, the strap or surcingle 10 in the rear of the saddle and also having opposite rings, transverse

straps 21 adjustably connecting the two sets of rings, hold back straps extending forwardly from the forward rings, and draft straps or traces, extending rearwardly from the rear rings, substantially as



described. 2nd. A harness comprising a saddle proper 11, the parallel strap or surcingle in the rear thereof and having an elastic section 13, rings carried by the saddle and surcingle, and the forwardly and rearwardly extending straps 26 and 29, substantially as described. 3rd. The combination, with the harness, of the strap detachably secured to the saddle top, adapted to embrace the neck of a horse and provided with a terminal loop to engage the belly-girth, substantially as described. 4th. The combination, with the harness, of the strap detachably secured to the harness top, divided so as to embrace the neck of a horse, and merging in a single strap arranged to extend between the horse's legs and terminate in a loop to engage the belly-girth, substantially as described. 5th. The combination, with a harness, of a strap having at one end a loop to engage the check loop of the saddle, and at the other end a loop to engage the belly-girth of the saddle, a longitudinally adjustable divided section to embrace the neck of the horse, and a cross-strap connecting the members of the divided section and adapted to lie on the withers of the horse, substantially as described.

No. 46,646. Saw Guard. (Garde-scie.)



Louis Corbeille, Francois H. Cote and Fred Krause, all of Everett, Washington, U.S.A., 25th July, 1894; 6 years.

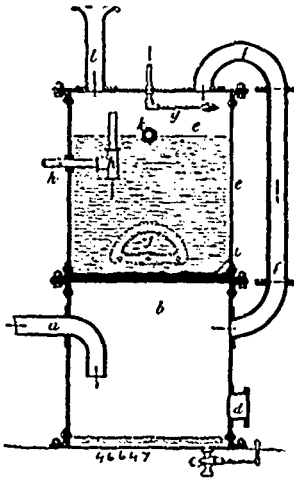
Claim.—The combination with a knot sawing machine having the circular edging saws and the material receiving table directly over and slightly in rear of the saws, of a saw guard attachment consisting of a stationary attachment plate provided with a horizontal flange adapted to be secured to the under side of the receiving table and a vertical flange provided with vertically disposed slots and adapted to be located at one side of the saws, a longitudinally and vertically adjustable guard plate adapted to flatly abut against the vertical flange of said attachment plate and provided with longitudinally disposed slots J, crossing those of the attachment plate, a horizontal top flange L, overhanging the top edge of the saws under the receiving table, and a curved guard hood or cap M, extended from the front end of said top flange to embrace the exposed front and top portions of the saws beyond the receiving table of the machine and being substantially U-shaped in cross-section, and single bolts engaging the crossing slots of both plates to hold the same together and to provide for the adjustment thereof, substantially as set forth.

No. 46,647. Water Heater and Purifier.

(Réchauffeur et épurateur d'eau.)

George E. Hudson, George Sanderson and William J. Baker, all of Scarborough, England, 25th July, 1894; 6 years.

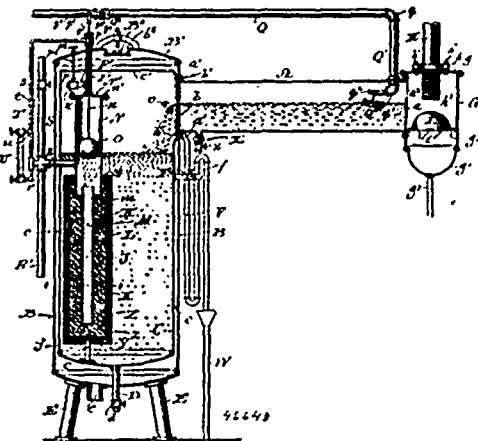
Claim.—1st. A condensing and depositing chamber interposed between the exhaust pipe of the engine and the steam condensing chamber of water heating and purifying apparatus such as herein



described and for the purpose specified. 2nd. The combination with the exhaust steam pipe and the chamber for condensing and collecting oil and grease therefrom, of the steam condensing line depositing and hot water supply chamber and the pipe for supplying jet of cold water located in the oil chamber, all the parts being constructed, combined and operated in the manner described. 3rd. The general arrangement and combination of the various parts of our improved condensing and purifying apparatus, consisting of the two chambers for their respective purposes, whether such chambers are fixed together or at a distance from one another, the exhaust pipes, cold water jet pipe, feed pipe, mud-holes and outlet valves, all the respective parts being constructed and operating in the manner described and for the purpose specified. 4th. The combination with the exhaust pipe *a*, and chamber *b*, and pipe *f*, of the chamber *c*, having a cold water jet pipe *g*, situated beneath the upper end of the pipe *f*, and the feed pipe *h*, arranged as shown and for the purpose specified. 5th. The combination with the oil or grease separating vessel, of a receiving tank and inlet pipe from the cylinder or valve-chest of a steam engine and the outlet pipe, valves, vent pipe, float and indicator, all constructed, arranged and operating as shown and for the purpose specified. 6th. The combination with the exhaust pipe *a*, and chamber *b*, the flat vertical coil *y*, and pipe *f*, of the receiving chamber provided with a valve at the bottom as shown and for the purpose specified. 7th. The combination with the exhaust pipe *a*, and chamber *b*, the flat vertical coil *y*, having a perforated bottom plate *y1*, of the receiving chamber provided with a valve at the bottom as shown and for the purpose specified. 8th. The combination with the exhaust pipe *a*, and chamber *b*, having a funnel shaped bottom, and valve, the flat vertical coil *y*, having a perforated bottom plate *y1*, of the receiving chamber having a funnel shaped bottom and provided with a valve at the bottom as shown and for the purpose specified.

No. 46,648. Feed Water Heater, &c.

(*Réchauffeur d'eau d'alimentation.*)



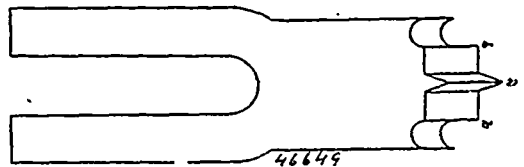
James E. Crawley, and Thomas F. McGregor, Milwaukee, Wisconsin, U.S.A., 25th July, 1894; 6 years.

Claim.—1st. The combination, in a filtering device adapted for

use in feed-water heaters, of an inner perforated pipe, and a surrounding perforated tube composed of sections separately secured together, of a filling of coke or analogous filtering material between said pipe and tube, and an external covering of burlaps or analogous coarse textile material wrapped around the described sectional tube in series of continuous layers. 2nd. The combination, with a feed-water heater, comprising a vertical outer shell and vertical inside tank supported therein, and of less diameter than that of said shell to afford a steam-space all around the said tank, of a horizontally disposed condensing chamber, and cold water receiver secured to and communicating with the upper end of said tank, a casing secured to and communicating with the other end of said chamber, an exhaust steam inlet within said casing, and a cold water supply pipe entering said chamber adjacent to the passage therein from the said casing and terminating in an open topped and close-ended trough located above the water line of said chamber. 3rd. The combination, with the condensing chamber and cold water receiver of a feed-water heater, of a casing secured thereto, and having a steam-passage communicating therewith, an exhaust steam inlet entering the upper part of said casing, a dished-head forming the lower part of said casing, a drain pipe leading from said dished-head, and a half round disc supported within said casing at some distance from the inner wall thereof, and located immediately below the said exhaust steam inlet, to receive the oil and grease from said exhaust steam, and convey the same to the said dished-head and drain pipe. 4th. The combination, in a feed-water heater of a suitable tank, a vertically arranged filter supported within said tank, a tubular receiver communicating with said filter, and having a vertically extending pipe projecting from its upper end, a cold water receiver and condensing chamber communicating with the upper end of said tank above its water-line, an exhaust steam inlet, and a cold water supply pipe communicating with said chamber, a valve within said last named pipe, a float within said tubular receiver, a rod projecting from said float, and passing up and out through said tubular receiver and its vertical pipe, and linked to the journal of said valve to automatically control the flow of water in said pipe, a pressure equalizing pipe leading from the pipe above the tubular receiver, and opening into the space within the tank above its water-line, a valve in said pipe, and outlet for the purified hot water leading from said tubular receiver, a four-way coupling connected to said pipe, a live-steam pipe, and a pipe leading to the boiler connected to said coupling, another pressure equalizing pipe, also connected to said coupling and leading to the vertical pipe above the tubular receiver, and a water-gauge connected to said last named pressure equalizing pipe. 5th. The combination, with an open-topped feed-water tank of an outer shell surrounding the same with a steam space between the two, a condensing chamber and water receiver communicating with the upper end of said tank, a cold water supply pipe having an outlet within said chamber, a casing at the end of said chamber opposite the tank containing an inlet for exhaust steam, and a receiver for oil and grease beneath said inlet, and having a steam passage into said chamber adjacent to the cold water outlet, a filter in said tank, a closed tube communicating with said filter and forming a receiver for filtered water, and a surface water-trap, a vertical pipe projecting up from said tube, a float within said tube, a rod extending up from said float and passing through said pipe, and linked to a valve in the cold water supply pipe, an outlet for the purified hot water leading from said tube, pressure equalizing pipes communicating with said tube, and its vertical pipe and with the interior of said tank above the water-line, and a water gauge communicating with one of said pressure equalizing pipes.

No. 46,649. Double Matching and Cutting Knife.

(*Couteau à deux lames pour assemblage, etc.*)



Paul F. Bolton, Trenton, Ontario, Canada, 25th July, 1894; 6 years.

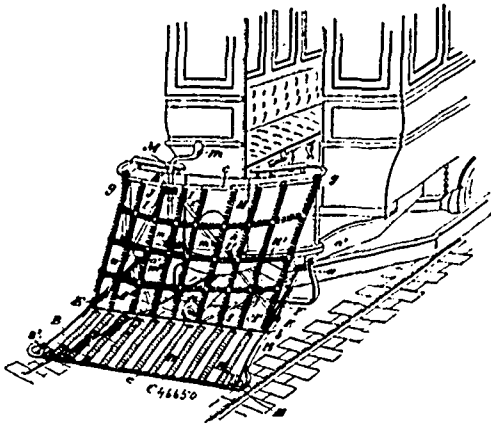
Claim.—The combination cutting point *a*, with the cutting blade *b*, *b*, substantially as and for the purpose hereinbefore set forth.

No. 46,650. Car Fender. (Défense pour chars.)

Duncan S. Macorquodale, Toronto, Ontario, Canada, 26th July, 1894; 6 years.

Claim.—1st. In a fender, the combination, with the frame suitably hinged at the front of the car, of the brake-rod and handle having a threaded sleeve secured on the same and a nut co-acting with said sleeves and means for supporting the frame of the fender from the nut, as and for the purpose specified. 2nd. The combination, with the rectangular channel bar *A*, hinged at *a*, and extending forward as specified and supported by the springs *H*, upon the upper bar *G*, which rests in the hooks *y*, of the brake-rod *n*, and handle *m*, having

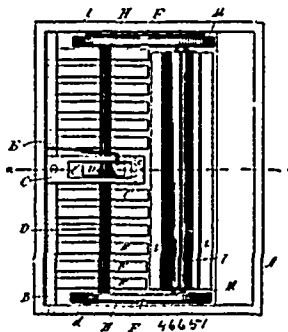
secured to it a treaded sleeve L, and the nut K, abutting the dash-board and connected by the rods I, to the sides of the bar A, as and for the purpose specified. 3rd. The combination, with the



rectangular channel bar A, hinged at a, and extending forwardly as specified and having pivoted to the sides near the front, the side bars B, which are supported by the rollers B², and are connected together by the cushion front bar C, which has spiral springs D, extending from it to the bar A, of the telescopic rods I, connected at the lower end to the channel bars by the bolts i, and nuts i², and at the upper end to the nut K, and the brake rod M, having the threaded sleeve L, and handle M, as and for the purpose specified. 4th. The combination, with the rectangular channel iron bar A, hinged at a, and extending forwardly as specified, and having pivoted to the sides near the front side bars B, which are supported by the rollers B², and are connected together by the cushion front bar C, which has spiral springs O, extending from it to the bar A, of the telescopic rod I, connected at the lower end to the channel bars by the bolts i, and nuts i², and at the upper end to the nut K, the brake-rod M, having the threaded sleeve L, and handle M, and the spiral springs H, H¹, connected by the rings h, to the bar A, and to the bar C, which is supported in the looks g on the dash-board, as and for the purpose specified. 5th. The combination, with the rectangular frame A, hinged as specified, the side bars B, hinged at b, and having the front ends connected together by the cushion bar C, and the rear ends supported by the springs F, and held in position by the L-shaped bolts E, the springs D, filling up the front portion of the frame between the side-bars B, and means for supporting the channel bar A, from the front of the dash-board and for raising and lowering the same, as and for the purpose specified. 6th. The combination, with the fender hinged at the rear beneath the dash-board, of the supporting rods I, connected to the nut K, by the removable frame J, provided with a pin k, and the brake-rod M, provided with a threaded sleeve L, arranged, as and for the purpose specified. 7th. The combination, with the fender hinged at the rear beneath the dash-board, of the supporting rods I, connected to the nut K, as specified, and the brake rod M, provided with a threaded sleeve L, having stop pins l, and a crank handle M, all arranged as specified.

No. 46,651. Carpet Beater. (Baltoir à tapis.)

Fig 1

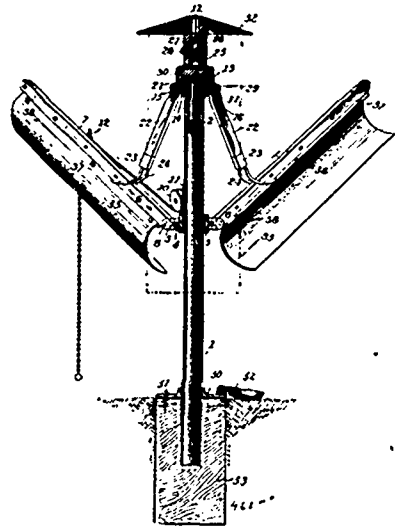


Charles S. Chaffee, Alvin S. Huffman, and Frank A. Green, all of Birmingham, Connecticut, U.S.A., 25th July, 1894; 6 years.

Claim.—1st. In a carpet-beater, the combination with the case thereof, of a beater-shaft located in the forward end of the said case, beaters attached to the said shaft, and extending rearward therefrom, a brush located adjacent to the rear ends of the beaters, a driving-shaft, located between the brush and the beater-shaft, and connection between the driving-shaft and the beater-shaft,

whereby the latter is actuated, and connection between the driving shaft and the brush, whereby the same is rotated, substantially as described. 2nd. In a carpet-beater, the combination with the case thereof, of a beater-shaft located in the forward end of the said case, beaters attached to the said shaft and extending rearward therefrom, a brush located adjacent to the rear ends of the beaters, a driving-shaft located above the beaters, and between the brush and the beater-shaft, and operating-arm rigidly connected with the beater-shaft, lugs or projections located upon the driving-shaft and engaging with the said arm to oscillate the beater-shaft, and connection between the driving-shaft and the brush, whereby the latter is rotated, substantially as described. 3rd. In a carpet-beater, the combination with the case thereof, of a beater-shaft located in the forward end of the said case, beaters attached to the said shafts and extending rearward in the case, a brush located adjacent to the rear ends of the beaters, a driving-shaft located above the beaters between the brush and beater-shaft, and provided with lugs or projections, a pivotal finger connected with the beater-shaft, and constructed and arranged to resist the said lugs or projections when they impinge on one of its faces, but yielding to let them pass it when they strike its other face, and connection between the driving-shaft and the brush for rotating the latter, substantially as described, and whereby the beaters are only operated when the device is being moved forward. 4th. In a carpet-beater, the combination with the case thereof, of a beater-shaft journaled in the forward end of the said case, beaters attached to the said shaft, and extending rearwardly in the case, a driving-shaft located above the beaters, means whereby the beater-shaft is oscillated by the driving-shaft, two arms pivotally hung on the driving-shaft, and extending rearward therefrom, a brush journaled at its ends in the rear ends of the said arms, and means for rotating the brush, substantially as described. 5th. In a carpet-beater, the combination with the other instrumentalities thereof, of a brush, comprising a shaft, rings or heads applied to the ends thereof, and constructed with radial slots closed at their outer ends, folded sheet-metal holders interposed between the said heads which prevent them from longitudinal displacement, and having their ends cut-away to form fingers adapted to be inserted into the slots in the said heads, and each holder consisting of a single strip of sheet metal longitudinally folded upon itself to form two leaves or members, and strips of felt clamped in the said holders directly between the leaves thereof, substantially as described.

No. 46,652. Clothes Drier. (Séchoir à linge)



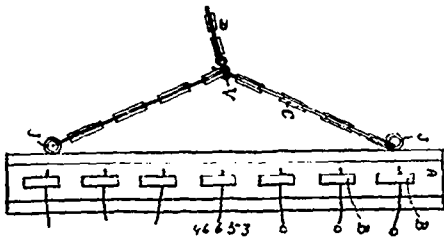
Cyrus F. Rich, Saratoga Springs, New York, U.S.A., 25th July, 1894; 6 years.

Claim.—1st. In a clothes drier, a hollow supporting post of thin metal, a lower movable hub, and an upper rotatable hub, a series of spreader arms loosely attached at their lower ends to the lower hub, guide flanges at the top of the post between which the upper hub works, and the upper pulley and block and tackle for spreading the arms and links or braces, substantially as described. 2nd. In a clothes drier a supporting post of thin metal, a lower movable hub, and an upper movable hub, a series of spreader arms loosely attached at their lower ends to the lower hub, links or braces movably connecting said arms with the upper hub, double flanges at the top of the post which support and guide the upper hub, a dome or block surmounting the post and upper hub, and connections between the latter and said dome, and the elevating devices, substantially as described. 3rd. In a clothes drier, a supporting post threaded at its upper end, a lower movable hub, and an upper movable hub, a series of spreader-arms loosely attached at their lower ends to the lower hub, links or braces movably connecting said arms with the upper

hub, a double flanged nut screwing onto the upper end of the post beneath the upper hub, and an additional similar nut screwing onto the post above said hub, and means for elevating the lower hub to spread the arms and links or braces and to secure the same, substantially as described. 4th. In a clothes-drier, a supporting post of thin metal screw-threaded at its upper end, a lower movable hub, and an upper movable hub, a series of spreader arms loosely attached at their lower ends to the lower hub, links or braces movably connecting said arms with the upper hub, a double flanged nut-screwing onto the post below the upper hub, and an additional similar nut screwing onto the post after the said hub is placed thereon, a dome or block surmounting the post and supporting a pulley, a cap or cover spreading over the dome, wires or ears attached to fastenings connecting the dome with the upper hub, and an elevating cord attached to the lower hub and passing upwardly over said pulley, the whole to operate, substantially in the manner described and shown. 5th. In a clothes-drier, a supporting post of thin metal, a lower movable hub, and an upper movable hub, a series of spreader-arms loosely attached at their lower ends to the lower hub, links or braces movably connecting said arms with the upper hub, double flanges of a supporting cap at the top of the post which flanges support and guide the upper hub, curved wings or sections of equal length to the arms and loosely attached to the latter by means of staples, means for locking said sections together when the arms and links or braces are closed, and means for elevating the lower hub and securing the same, substantially as described. 6th. In a clothes-drier as herein described, the combination with the post and upper movable hub provided with side ribs, of the dome or block, and the connecting wires inserted into the block and turned or bent at their lower ends beneath or around said ribs, as shown. 7th. In a clothes-drier as herein described, the supporting post of metal, the lower hub having radial bifurcated brackets, and the upper hub having the pairs of brackets in corresponding position, the spreader-arms loosely attached at their lower ends to the brackets of the lower hub, the links or braces tipped at their lower ends with metal and formed with curved wire portions movably connecting with said arms, bolts uniting the upper ends of the links or braces to the brackets of the upper hub, and a pulley and block and tackle for elevating the lower hub to spread the arms and links or braces, substantially as described.

No. 46,653. Wire Stretcher.

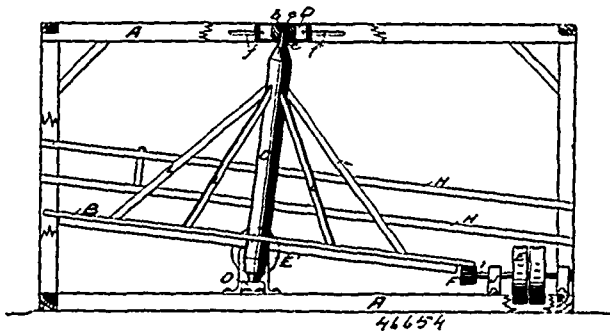
(Tendeur de fil de fer pour clôtures.)



Joseph Carlie Duguay, Baie du Febvre, Québec, Canada, 25 juillet, 1894; 6 ans.

Résumé.—Dans une serre pour tendre le fil métallique maillé, la combinaison d'une pièce mobile A, munie de boulons à tête de crochets B, ayant des écrous à clef L, deux anneaux J, J, et une chaîne C, le tout tel que décrit et pour les fins indiquées.

No. 46,654. Horse Power Machine. (Mandye.)

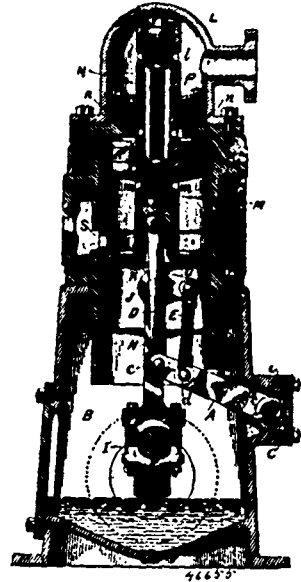


Joseph Casgrain, Montréal, Québec, Canada, 25 juillet, 1894; 6 ans.

Résumé.—Dans un manège, la combinaison du cadre D, glissant librement dans les rainures j et f, avec le bloc b, destiné à recevoir le bout supérieur de l'axe C, et oscillant autour de son petit axe e, tel que ci-dessus décrit et pour les fins indiquées.

No. 46,655. Steam Motor or Pump.

(Moteur à vapeur ou pompe.)

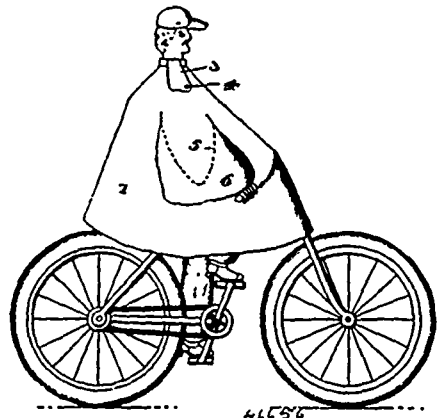


Charles E. Beaumont, George P. Wallington, London, and Lawrence A. Wallington, Clapham Common, Surrey, all in England, 25th July, 1894; 6 years.

Claim.—1st. Fulcruming one end of a radial arm to a non-moving part of a high speed engine at a predetermined point thereon, and connecting same by links to the central valve and a projection or projections on the main connecting rod or rods, in the manner and for the purpose described. 2nd. In steam, or other fluid motors or pumps, pivoting one end of an arm to a non-moving part of an engine, connecting the other end of same by a link to the central valve, and connecting a lever or levers projecting at approximately right angles from the main connecting rod or rods by a link to said arm at any predetermined point between its two ends for the purpose described, and in the manner substantially as shown. 3rd. In steam, or other fluid motors or pumps, pivoting one end of an arm to a non-moving part of an engine, connecting the other end of said arm by a link to a lever projecting at approximately right angles from the main connecting rod, and connecting the distributing or central valve by a link to said arm at any predetermined point between its two ends, for the purpose described, and in the manner substantially as shown. 4th. In central valve high speed engines, the combination of an arm pivoted to any predetermined fixed point, a link actuated by a lever on the connecting rod, and a link actuated by the radial movement of said arm for imparting a differential movement to the central valve, as described.

No. 46,656. Waterproof Garment.

(Vêtement imperméable.)

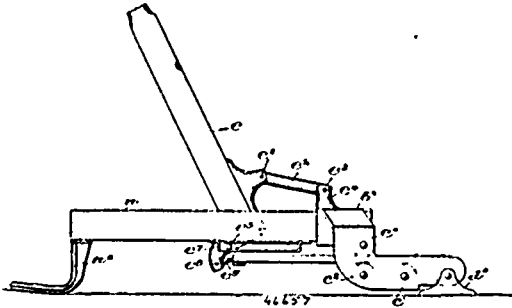


John W. Orr, Cortland, New York, U.S.A., 25th July, 1894; 6 years.

Claim.—1st. A waterproof garment for bicyclists, comprising a body or skirt provided at opposite sides with enlarged elongated sleeve-openings, and loose flowing sleeves covering the openings and

extending a short distance below the same, substantially as and for the purpose described. 2nd. A waterproof garment for bicyclists, comprising a body portion and loose sleeves, and having the arm-holes thereof vertically elongated and extending to within a short distance of the lower ends of the sleeves, substantially as described. 3rd. A waterproof garment for bicyclists, comprising a body portion having closed front and back and provided at opposite sides with elongated arm-holes and provided, at the top adjacent to one shoulder with a slot or opening, the loose enlarged flowing sleeves extending below the arm holes and covering the same, and a flap for covering the opening or slot at the top of the garment, substantially as described.

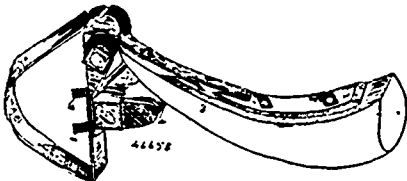
No. 46,657. Wagon Jack. (Cric pour wagons.)



Charles H. Dwelly, Hanover, Massachusetts, U.S.A., 25th July, 1894; 6 years.

Claim. 1st. In a wagon jack, a horizontally pivoted wheel lifting frame adapted to be placed under a wheel and turned about its pivot to raise the same, combined with a wheel-sustaining frame movable on said lifting frame, and actuating device under the control of the operator for and to positively move said wheel-sustaining frame upon and with relation to its lifting frame, substantially as and for the purposes specified. 2nd. In a wagon jack, a horizontally pivoted wheel lifting frame adapted to be placed under a wheel and turned about its pivot to raise the same, combined with a wheel-sustaining frame mounted to slide on said lifting frame, a lever pivoted to said lifting frame and connected with and to positively slide said wheel-sustaining frame upon its lifting-frame, substantially as described. 3rd. In a wagon jack, a pivoted lifting frame provided with a foot lever, combined with a wheel-sustaining frame mounted to slide on said lifting frame, and a lever pivoted to said lifting frame and normally lying in position against said foot lever and connected with and to slide said wheel-sustaining frame, substantially as described. 4th. In a wagon jack, a pivoted lifting frame provided with a foot lever comprising two members, combined with a wheel-sustaining frame mounted to slide on said lifting frame, and an actuating lever therefor normally lying in position between the members of the foot lever, substantially as described. 5th. In a wagon jack, a pivoted lifting frame provided with a foot lever comprising two members, combined with a wheel-sustaining frame mounted to slide on said lifting frame, a lever *c*, pivoted to the link *c*², connected with and to slide said wheel-sustaining frame, and the guide-pins *c*³, and guide-ways therefor, all to operate, substantially as described. 6th. In a wagon jack, a pivoted lifting frame comprising the two side bars *b*, *b*¹, a connected yoke *b*², and a centrally located foot lever secured thereto, combined with a wheel-sustaining frame mounted to slide on or with relation to said lifting frame, to operate, substantially as described.

No. 46,658. Shaft Holder. (Tuteur de limonière.)



Henry J. Johnstone, Neepawa, Manitoba, Canada, 25th July, 1894; 6 years.

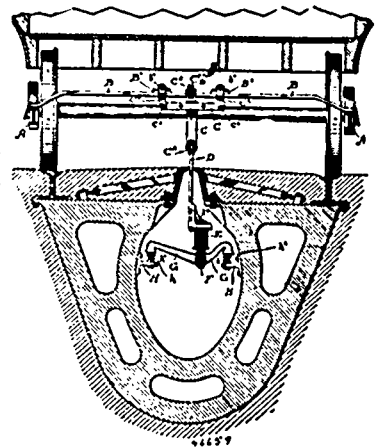
Claim.—1st. The stock so shaped as to act as a ratchet (fig. 2), substantially as and for the purpose hereinbefore set forth. 2nd. The spring (fig. 3), substantially as and for the purpose hereinbefore set forth.

No. 46,659. Electric Railway. (Chemin de fer électrique.)

Charles D. Jenney, Center Township, Indiana, U.S.A., 25th July, 1894; 6 years.

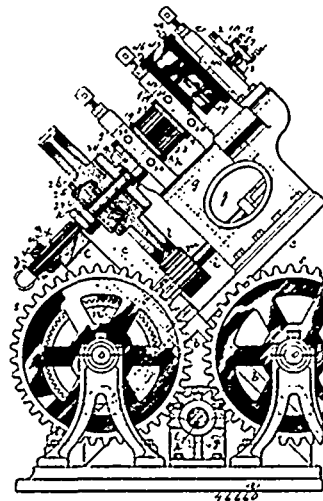
Claim.—1st. The combination, in an electric railway system, of the frame *C* supported on swinging links, whereby it is enabled to

swing freely in one direction, and provided with the flanged trucks between which the conductor bar is placed, and said conductor bar, substantially as set forth. 2nd. The combination, in a conduit electric railway system, of a conductor bar mounted to permit a vertical movement, a frame-work carrying said conductor bar and capable of a lateral movement, and springs attached to said conductor bar and to said frame and operating to support or carry a portion of the weight of said conductor bar substantially as shown and described. 3rd. The combination, in an electric railway system, with the conductor bar leading from the car structure, of the conductor rail within the conduit, arms leading from said conductor rail toward the sides of the conduit, brackets upon the sides of the conduit, and an insulated connection between said brackets and said arms. 4th. The combination, in an electric railway system, of the conductor bar leading from the car structure into the conduit, the conductor rail in said conduit, and insulating arms supporting said rail and leading at an upward inclination from said rail towards the sides of the conduit, where they are supported, substantially as set forth. 5th. The combination, in a conduit electric railway system, of the conduit, the conductor rail located therein to one side of the center of said conduit, and insulating arms supporting said conductor rail from the sides of the conduit, substantially as set forth. 6th. The combination, in a conduit electric railway system, of the conduit, the conductor rail located therein, the arms *G* leading from said conductor rail toward the sides of the conduit at a proper inclination, and having bell-shaped sockets in the undersides of their ends, brackets secured to the sides of the conduit, upwardly extending points on said brackets, and insulating material surrounding said points and fitting into the sockets on the under sides of the ends of the arms, substantially as set forth. 7th. The combination, in a conduit electric railway system, of a conductor rail situated in a conduit and having a broad substantially flat top, metallic supports extending from said conductor rail and insulated from the conduit structure, a car structure including the motor, a conductor bar leading from the car structure to the rail and provided with a contact device on its lower end, and a swinging or yielding support for said conductor bar carried by the car structure, whereby contact between the contact device on the lower end of the conductor bar and the upper flat surface of the conductor rail may be maintained notwithstanding the vibrations or oscillations of the car in use.



No. 46,660. Wire Rolling Mill. (Laminoir pour fil de fer.)

(Laminoir pour fil de fer.)



Henry A. Williams, Boston, Massachusetts, U.S.A., 25th July, 1894; 6 years.

Claim.—1st. The combination of the bed frame, a plurality of triangular base supports for the housings having one side extended beyond the other and set upright on said bed frame with the extended sides in the reverse inclinations alternately, the roll housings

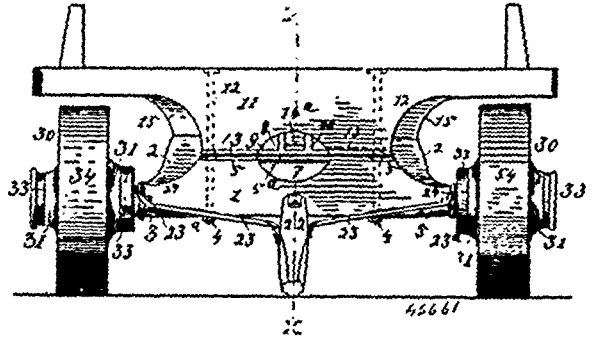
mounted on said base supports and rolls therein, said rolls geared with the driving shafts at the lower sides of the inclinations, substantially as described. 2nd. The combination of the bed frame, a plurality of triangular base supports for the housings having one side extended beyond the other and set upright on said bed frame with the extended sides in the reverse inclinations alternately, the housing supporting benches on said sides, the intermediate driving shaft located between said sides and benches, and line shafts along the lower sides of each range of rolls and geared therewith through the intermediate shafts respectively, substantially as described. 3rd. The combination in a train of rolls of a plurality of triangular base supports for the roll housings having one side extended beyond the other and set upright on a suitable bed frame with the extended sides in the reverse inclinations alternately, the roll housings located on the upper parts of said base supports, the rolls mounted in said housings, the intermediate shafts between the rolls and said base supports, and the line shafts along the lower sides of the base supports geared with the intermediate shafts and rolls, substantially as described. 4th. The combination, with the roll housings and rolls, of the lower roll shaft extended through the driving gears and rolls, and having the adjusting step bearing at the lower end and the adjusting thrust bearing at the upper end, substantially as described. 5th. The combination, with the lower roll shaft having the water circulating passage through it, of the axially perforated step bearing for the lower end having the pipe connecting nipple, the cap and the extension of the bearing standard having the cap secured to it for securing said step, substantially as described. 6th. The combination, with the lower roll shaft having the water circulating passage through it, of the axially perforated step bearing for the lower end having the pipe connecting nipple, the packing rings between the shaft and said step bearing, the cap and the extension of the bearing standard having the cap secured to it for securing said step, substantially as described. 7th. The combination, with the roll shafts having a water circulating passage through them, of the adjusting end thrust bearings consisting of pipe elbows and adjusting screws, substantially as described. 8th. The combination, with the roll shafts and rolls, of the flanged lengthwise adjustable journal bearings, and adjusting screws or wedges interposed between said flanges and the housings to adjust the rolls for alignment of the passages, substantially as described. 9th. The combination with the roll shafts and rolls, of the flanged lengthwise adjustable journal bearings, pointed adjustable studs in the recesses of the housings, and the pointed adjusting screws acting against the points of the adjusting studs to adjust the rolls for alignment of the passes, substantially as described. 10th. The combination with two pairs of rolls arranged in line, of the rod or wire guide consisting of the funnel-mouthed divided tube of which one part is fastened in position, and the other part is hinged to the fixed part, and fastening devices to secure the two parts together when closed, substantially as described. 11th. The combination with two pairs of rolls arranged in line, of the rod or wire guide consisting of the funnel mouthed divided tube of which one part has arms, and is fastened thereby in position and the other part is hinged to the fixed part, and fastening devices to secure the two parts together when closed, substantially as described. 12th. The combination with two pairs of rolls arranged in line, of the rod or wire guide consisting of the funnel-mouthed divided tube of which one part has arms, and is fastened thereby in position, and the other part is hinged to the fixed part, and the detachably fixed reducing-guide in the leaving end of said tube consisting of a plurality of parts which are secured in the tube when closed, said guide tube having fastening devices to secure it when closed, substantially as described. 13th. The combination with the reducing rolls, of the sizing rolls located in advance of the reducing rolls, substantially as described. 14th. The combination with the reducing rolls, of the sizing rolls located in advance of the reducing rolls and adapted to open independently of the adjusting screws for inserting the rods, substantially as described. 15th. The combination with the reducing rolls, of the sizing rolls located in advance of the reducing rolls, the swinging frame, adjusting boxes and the adjusting screws, one of said rolls being mounted in the swinging frame, and the boxes subject to the adjusting screws. 16th. The combination with the reducing rolls, of the sizing rolls located in advance of the reducing rolls, the swinging frame, adjusting screws, adjusting boxes, and the springs under said boxes, one of said rolls being mounted in the swinging frame, and the boxes being subject to the adjusting screws and the springs substantially as described.

No. 40,661. Wagon. (Wagon.)

Charles W. Robinson, Reed City, Michigan, U.S.A., 26th Jy., 1894; 6 years.

Claim.—1st. In a wagon, the combination with the forward axle thereof, having a vertical hole therein to receive the king-bolt, of a piece inserted in the said axle, and projecting forwardly therefrom, the said piece having an eye in its rear end in alignment with the said vertical hole in the said axle, and having an eye in the projecting part thereof, and a pole, having a downwardly opening hook in its rear end adapted to engage the eye in the projecting end of the said piece, substantially as described. 2nd. In a wagon, the combination with the forward axle thereof, and with a bolster mounted thereon, the said bolster and axle having a vertical hole therein, of a fifth wheel consisting of two castings, one of the

said castings being secured to the top of the said axle, and the opposite casting having longitudinal and transverse grooves formed in its upper surface, the said transverse groove receiving the base of



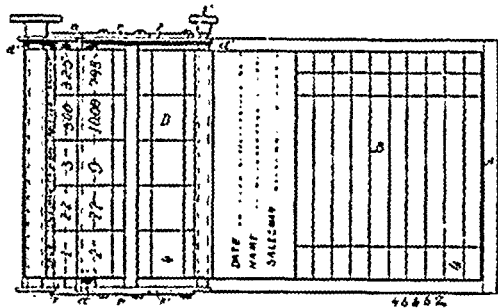
the said bolster, a reach having its forward end contained in the longitudinal groove in the said fifth wheel, and extending therein through and in front of the said axle and bolster, and a king-bolt contained in the vertical hole in the said axle and bolster, and passing through the said fifth wheel, and the said reach, substantially as described. 3rd. As a new and improved article in manufacture, the hereinbefore described one-half of a fifth wheel, consisting of a suitable casting, having shoulders upon its top, forming transverse and longitudinal grooves, which intersect each other at their centres, and at the centre of the said fifth wheel, which is apertured at the said centre for the passage of a king-bolt, substantially as described. 4th. In a wagon, the combination with the forward axle thereof, and a bolster mounted on the said axle, the said bolster and axle having a vertical hole therein to receive a king-bolt, of a piece inserted in the said axle and projecting forwardly therefrom, the said piece having an eye in its rear end, in alignment with the said vertical hole in the said axle, a fifth wheel consisting of two castings, one of the said castings being secured on the said axle, and the opposite casting having shoulders upon its top, forming transverse and longitudinal grooves, which intersect each other at their centres, and at the centre of the said fifth wheel, which is apertured at the said centre for the passage of the said king-bolt, the said transverse groove receiving the said bolster, and a reach having its forward end inserted in the said longitudinal groove, and extending therein through and in front of the said bolster, substantially as described. 5th. In a wagon, the combination with the front and rear axles of bolsters mounted on the said axles, a reach, a fifth wheel, consisting of two castings, one of the said castings having shoulders upon its top forming transverse and longitudinal grooves, which intersect each other at their centres, and at the centre of the said fifth wheel, the said transverse groove receiving the said bolster, and the longitudinal groove receiving the forward end of the said reach, the opposite casting being secured on the upper surface of the forward axle, a king bolt passing through the said bolster, axle, reach, and through the centre of the said fifth wheel, and a metallic rod, having an eye formed in its centre to lock the said reach, and bolts passing through the opposite ends and through the rear axles and bolster thereon, substantially as described. 6th. In a wagon, the combination with the front and rear axles thereof, of bolsters and wheels mounted on the said axles, the former projecting over the latter, the forward axle and bolster having vertical aligned holes therein, of a piece inserted in the said forward axle, and projecting forwardly therefrom and having eyes in its opposite ends, the rear eye therein being in alignment with the said hole in the said axle, of skains mounted on the ends of the said front axle, and having eyes cast thereon, a pole having a downwardly opening hook on its rear end adapted to engage the forward eye on the said piece, and having rearwardly projecting flared arms secured on its sides and provided with downwardly opening hooks adapted to engage the eyes upon the said skains, a fifth wheel consisting of two castings, one of the said castings having shoulders upon its top, forming transverse and longitudinal grooves, which intersect each other at their centres, and the centre of the said fifth wheel, the said transverse groove receiving the said forward bolster, the opposite casting being secured on the upper surface of the front axle, a king-bolt passing through the said front axle, bolster mounted thereon, and through the centre of the said fifth wheel, a metallic rod having an eye formed in its centre, bolts, passing through the opposite ends of the said rods and through the rear axle and bolster thereon, and a reach, having its forward end contained in the longitudinal groove in the said fifth wheel, and adapted to be secured to the said eye in the said rod, and having a downwardly projecting apertured brace thereon adapted to receive the lower end of the said king-bolt, substantially as described.

No. 40,662. Order Book. (Livre de commandes.)

Samuel Shoup, Clifton Heights, Pennsylvania, U.S.A., 26th July, 1894; 6 years.

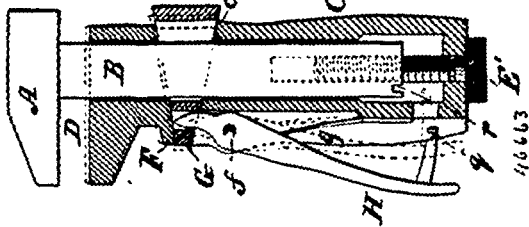
Claim.—1st. The combination of a check sales-book or other such book, with a superimposed independently movable tally or record

sheet in combination with manifolding means to duplicate the tally or record sheet entries upon the leaves of the book, substantially as set forth. 2nd. The combination of a check sales-book or other



such book with a superimposed independently travelling tally or record sheet and means for moving the successive entry spaces of the tally or record sheet into position over a portion of the book, and manifolding means to duplicate the tally or record sheet entries upon the leaves of the book, substantially as set forth. 3rd. The herein described device for a check sales-book or other such book, comprising a tablet for the reception of the book and a frame upon the tablet carrying rollers upon which a tally or record sheet may be wound with spaces for entries to be brought successively over a portion of the book and the entries duplicated on the leaves of the book by manifolding, substantially as set forth. 4th. The herein described device for check-sales books or other such book, consisting of a tablet for the reception of the book and a frame in two parts, of which one is movable and carrying rollers for the tally or record sheet to be superimposed upon a portion of the book for the duplication of tally or record sheet entries on the latter by manifolding, substantially as set forth. 5th. A check sales-book or other such book, having leaves for the entry of sales, orders, or such items, and also spaces corresponding with the tally sheet spaces for the independent manifolding of the tally or record sheet entries onto the leaves of the book, substantially as described.

No. 46,663. Wrench. (Clé à écrou.)



James Allen Lowe, North Branch, New Jersey, U.S.A., 26th July 1894; 6 years.

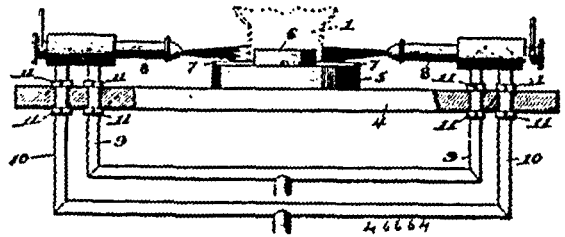
Claim.—1st. The combination of a wrench stock having a permanently attached jaw and provided with an abutment, a loose jaw, a wedge applied between said abutment and loose jaw, and a lever or eccentric applied to the stock for operating said wedge, substantially as and for the purpose herein set forth. 2nd. The combination of a wrench stock having a permanently attached jaw and provided with an abutment, a loose jaw, a wedge applied between the said abutment and loose jaw, and a lever connected with the stock and engaging with the said wedge for setting up the loose jaw and a spring between said lever and stock for drawing back said wedge, substantially as herein set forth. 3rd. The combination of a wrench stock having a permanently attached jaw and provided with an abutment, a loose jaw, a screw for adjusting one jaw relatively to the other, a wedge applied between the said abutment and the loose jaw, and a lever connected with the stock and engaging with the wedge for setting up the loose jaw, substantially as herein set forth. 4th. The combination of a wrench stock having a permanently attached jaw and provided with an abutment, a loose jaw, and a wedge applied between said abutment and loose jaw and connected with the said abutment and jaw by tongues and grooves whereby the said wedge operates both to set up and loosen the loose jaw, substantially as herein set forth.

No. 46,664. Lamp Chimney. (Cheminée de lampes.)

Walter E. Mayo, Chicago, Illinois, U.S.A., 26th July, 1894; 6 years.

Claim.—1st. The herein described improved lamp chimney, the same having its lower end at intervals provided with air inlets, the stock at the edges of which is provided with strengthening thickened ribs, substantially as specified. 2nd. The method of producing air-inlets in lamp chimneys, the same consisting in heating the

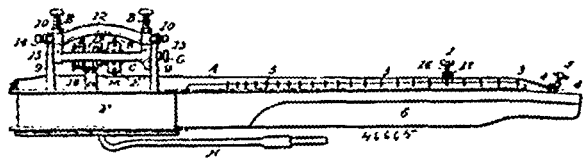
chimney to a fusing point at the point at which the opening is desired, and crowding the stock away from said fused point whereby an opening or inlet having an upset strengthening rib is produced



therearound, substantially as specified. 3rd. The herein described method of notching glass chimneys consisting in heating the edge thereof in spots to a fusing point and forcing it against ridges on which the chimney is held, substantially as and for the purpose set forth. 4th. The herein described device for notching glass chimneys, consisting of an anvil having a series of radial ribs, and a central core adapted to receive a chimney, combined with blow-pipes or burners arranged outside of said anvil and radially opposite the respective ribs for the purpose of heating the edge of the chimney in spots while resting and forced against said ridges and onto the anvil, substantially as and for the purpose set forth.

No. 46,665. Apparatus for Treating Disease.

(Appareil pour le traitement des maladies.)



Emory J. Godman, Baltimore, Maryland, U.S.A., 26th July, 1894; 6 years.

Claim.—1st. An apparatus for the treatment of diseases consisting of a vibrating object, means for imparting a continued series of uniform vibrations to said object, and a conductor as a column of air interposed between the said object and the part to be treated, substantially as set forth. 2nd. The combination in an apparatus for treating diseases of a vibratory object, means for imparting a continuous series of vibrations to said object, means for varying the number of vibrations as desired, and a conductor as a column of air between the object and the part to be treated, substantially as set forth. 3rd. The combination in an apparatus for treating diseases of a diaphragm, a string stretched in proximity to said diaphragm, and means for vibrating the string to produce a series of uniform, continuous vibrations, and a conductor as a column of air between the diaphragm and the part to be treated, substantially as set forth. 4th. The combination of the diaphragm, the strings, a wheel for operating upon the strings, and means for adjusting the wheel to and from the strings, substantially as set forth. 5th. The combination of the diaphragm, two or more strings, a wheel for operating upon the strings, a carrier for the said wheel, and means for adjusting the carrier to bring the wheel to operate upon one or other of the strings, substantially as set forth. 6th. The combination of the diaphragm, the strings and operating wheel E', a frame supporting the shaft of said wheel, and means for adjusting the said frame vertically, substantially as set forth. 7th. The combination of the diaphragm, two or more strings, the wheel E', and frame for supporting the same, means for adjusting the frame vertically and horizontally, substantially as set forth. 8th. The combination with the diaphragm, the strings, the wheel and frame supporting the same, of a cross-bar resting upon horizontal guides and adjustable thereon, and supports, adjustable vertically for connecting the frame to the cross-bar, substantially as set forth. 9th. The combination with the diaphragm, of a striker L, and means for imparting intermittent movements thereto, substantially as set forth. 10th. The combination of the diaphragm, strings, wheel, and adjustable supports for the said wheel, of a frame supporting the diaphragm, an electro-motor supported by part of said frame, and means for adjusting the said motor, substantially as and for the purpose described. 11th. In an apparatus for treating diseases, the combination of the frame, diaphragm, strings, frets 5, 5, and an adjustable yoke and means carried by said yoke for depressing the string against the fret, substantially as set forth.

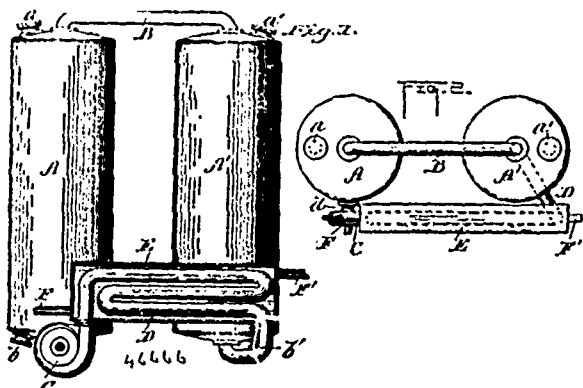
No. 46,666. Apparatus for Producing Paper Stock.

(Appareil pour la production de la pâte à papier.)

Sidney W. Rowell, Albany, New York, U.S.A., 26th July, 1894; 6 years.

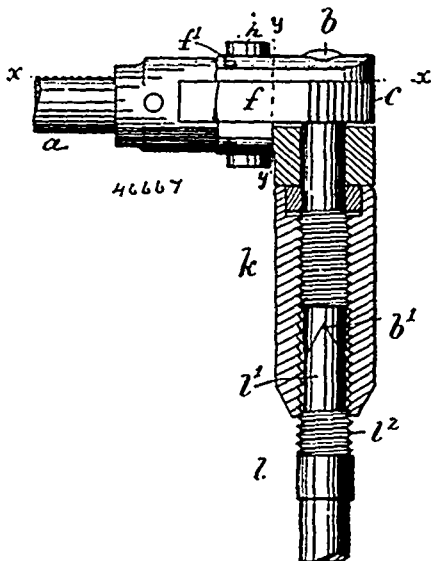
Claim.—1st. In an apparatus for producing cellulose or wood fibre, a digester consisting of one or more internally unobstructed circular

tion and digesting chambers, adapted to receive the fibrous material and the chemical liquor and provided with means for causing a direct forced circulation together or at the same time, of both the



fibrous material and the chemical liquor, and a cooking means outside the digester, substantially as and for the purpose described. 2nd. The combination of one or more directly connected circulating and digesting chambers which are unobstructed internally, a pump, circulating pipes and an externally heating or cooking coil for heating the mass while in circulation from the outside of the digester, said mass consisting of fibrous material and the chemical liquor, and a steam chamber enclosing the coil, substantially as described. 3rd. The within described method of mixing the chemical liquor and the fibrous material within the digester, forcibly and directly circulating together the said liquor and fibrous material and heating the same by means outside the digester while in circulation, substantially as described.

No. 46,667. Tool Holder. (Porte-outil.)



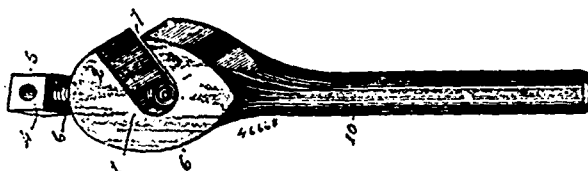
Henry V. Smith, Hartford, Connecticut, U.S.A., 26th July, 1894; 6 years.

Claim.—1st. In a ratchet mechanism, in combination with a stock or lever, a rotary tool holder bearing a ratchet-wheel, pawls arranged with holding jaws on opposite sides of the ratchet-wheel with cam surfaces on their adjacent sides, and a sliding bolt having cam surfaces and a recess and located between the pawls, all substantially as described. 2nd. In a ratchet mechanism, in combination with a stock or lever, a rotary tool holder bearing a ratchet-wheel, swinging pawls arranged to engage opposite sides of the ratchet-wheel and having cam surfaces on their adjacent sides, and a sliding bolt having the shoulders, the cam surfaces and the recess to receive the cam lugs, said bolt being arranged between the pawls, all substantially as described. 3rd. In a ratchet mechanism, in combination with a stock or lever, a rotary tool holder bearing a ratchet-wheel, the swinging pawls pivoted to the stock, the spring located between the pawls and acting normally to press their outer ends towards each other, the cam lugs on the adjacent sides of the pawls, and a sliding bolt having cam surfaces co-operating with the cam lugs on the pawls and located between the latter, all substantially as described. 4th. In a ratchet mechanism, in combination with a stock having the transverse socket, a rotary tool holder pivoted on the stock and bearing a

ratchet-wheel located in said socket, the swinging pawls pivoted to the stock on opposite sides of said transverse socket, the spring thrusting against the opposing pawls and operating to hold their outer ends in engagement with the ratchet-wheel, the cam lugs formed on opposite edges of the respective pawls, the sliding bolt having the shoulders with cams adjacent to the shoulders and a recess between the cams the bolts being arranged between the adjacent faces of the pawls beyond the pivots, all substantially as described. 5th. In combination with a tool handle, a stem having a threaded end, a V-shaped socket in the end of the stem, a tool having a shank with a wedge-shaped engaging part adapted to fit the socket in the stem and having a threaded shank of different pitch from that on the stem, and a coupling sleeve having an internal thread fitting the threads on the ends of the stem and shank respectively, all substantially as described. 6th. In a coupling device, two members adapted to be secured together and provided on their adjacent ends with screw threads and with engaging means whereby the rotation of one part independent of the other is prevented, the thread on one part being finer in pitch than that on the other part, and a sleeve provided with interior threads fitting the respective threads on the said parts, all substantially as described. 7th. In a coupling device, two members adapted to be secured together and provided on their adjacent ends with screw threads and with engaging means whereby the rotation of one part independent of the other is prevented, the threads on the two parts extending in the same direction and that upon one part being finer in pitch than that upon the other, and a screw threaded sleeve fitting the respective screw threads upon said parts, all substantially as described.

No. 46,668. Combined Wrench and Rod-Vise.

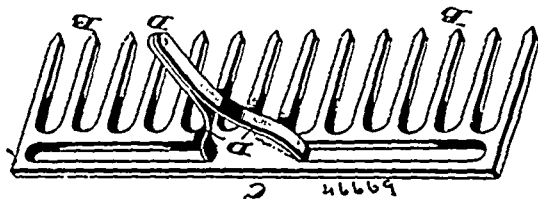
(Clé à écrou et étau combinés.)



John W. Wulff, Blair, Nebraska, U.S.A., 26th July, 1894; 6 years.

Claim.—1st. In a combined wrench and rod vise, a head consisting of a pair of oppositely disposed integral jaws, with a suitable handle, in combination with a set screw having on its point end concentric, annular, V-shaped ridges, and so threaded through one of the jaws that the point bears toward the bottom of the space between the jaws, substantially as shown and described. 2nd. In a combined wrench and rod vise the combination of the head 1 having the integral jaws 2 and 3 and the handle 10 with the set-screw 6 having the head 4, and perforation 5, the point 6, provided with the concentric annular V-shaped ridges 9 and 9, the set-screw so placed in the head that its point bears toward the bottom of the opening between the jaws, substantially as shown and described.

No. 46,669. Rake Head. (Tête de rateau.)



William R. Jenkins, Bellefonte, Pennsylvania, U.S.A., 26th July 1894; 6 years.

Claim.—1st. The improved rake-head, consisting of the body carrying the teeth, and the attaching tang formed of tongues cut from such body, by longitudinal cuts below the upper edge thereof, so as to be connected with the same only at their inner ends, and having their unattached portions bent forward from the body and inward toward each other, so as to bring their outer portions together, substantially as and for the purpose specified. 2nd. The improved rake head, consisting of the body carrying the teeth, and the attaching tang formed of tongues cut from such body by longitudinal cuts below the upper edge thereof, so as to be connected with the same only at their inner ends, and having their unattached portions bent forward from the body, and inward toward each other, so as to bring their outer portions in contact, and such portions welded together, substantially as and for the purpose described.

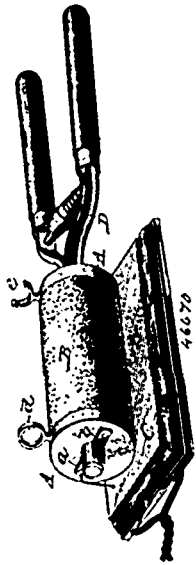
No. 46,670. Electric Heating Device.

(Appareil de chauffage électrique.)

Joseph A. G. Trudeau, Ottawa, Ontario, Canada, 26th July, 1894; 6 years.

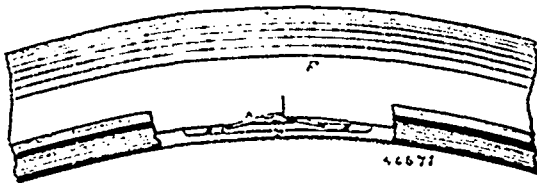
Claim.—1st. An electric heating device, consisting of an insulated

wire coil adapted to receive a current of electricity, and a metallic implement to be heated, said implement being combined with the coil, and so placed with reference thereto that it shall constitute a



core for the coil, and be heated by the eddy currents formed in it by the electric current in the coil. 2nd. In combination with an insulated coil adapted to receive a current of electricity, a metallic implement inserted into but removable from said coil, whereby the implement is adapted to be directly heated by eddy currents, and to be removed to any required place of use. 3rd. In an electric heating device, the combination of an interrupted coil, metallic terminals for the separated ends of the coil, and an implement to be heated, said implement being removably placed within the coil and serving both as a core therefor, and as a connection between the coil terminals. 4th. The herein described heater, consisting of an insulated wire coil B, and a removable metallic core D, constituting part of an implement to be heated. 5th. In combination with interrupted coil A, terminals a, b, and removable core D, constituting part of an implement to be heated. 6th. The herein described electric tongs-heater, comprising the following elements in combination, a spool or bobbin A, provided with rests d, e, an insulated coil B, provided with terminals a, b, a base C, and a removable core D, substantially as shown. 7th. In combination with coil B, and removable core D, a pyro-insulating body c interposed between them to protect the coil.

No. 46,671. Pneumatic Tire. (Bandage pneumatique.)



Andrew C. Davidson, Yarmouth, Ontario, Canada, 26th July, 1894; 6 years.

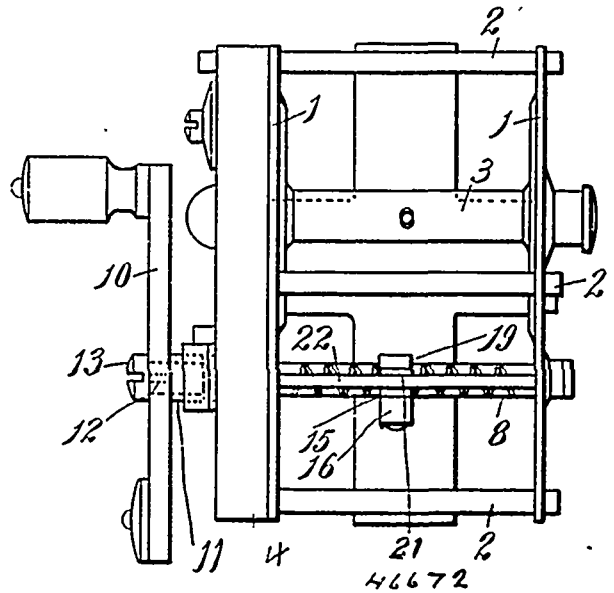
Claim.—1st. In a pneumatic tire for bicycles and other vehicles, the combination with the outer cover, rim, tube, and wires of a jointed lever, substantially as and for the purpose hereinbefore set forth. 2nd. The combination in a pneumatic tire with the rim, outer-cover, retaining wires, and air-tubes, of a lever, either jointed or rigid, provided with a lug or lugs at its extremity or extremities to preserve the alignment, substantially as and for the purpose hereinbefore set forth.

No. 46,672. Fish Line Reel. (Rouet de pêche.)

Nelson H. McGregor and Cornelius Wheeler, Milwaukee, Wisconsin, U.S.A., 27th July, 1894; 6 years.

Claim.—1st. In a fish line reel, the combination of a supporting frame, a fish line shaft or cylinder journaled therein, said shaft or cylinder having a pinion fixed thereon, a reverse spirally grooved shaft, having a large gear fixed thereon meshing with the pinion of the line shaft or cylinder, a crank applied directly to the reverse spirally grooved shaft, and a line guide engaging the grooves of the shaft and reciprocated thereby, substantially as set forth. 2nd. In a fishing line reel, the combination of a supporting frame, a fish line

shaft or cylinder, journaled therein said shaft or cylinder having a pinion fixed thereon, a reverse spirally grooved shaft having a large gear fixed thereon meshing with the pinion of the line shaft or



cylinder, one end of said shaft provided with slits, a crank provided with feathers adapted to engage the slits, and a line guide engaging the grooves of the shaft and reciprocated thereby, substantially as set forth. 3rd. In a fish line reel, the combination, of a supporting frame, a fish line shaft or cylinder journaled therein, said shaft or cylinder having a pinion fixed thereon, a reverse spirally grooved shaft having a gear fixed thereon meshing with the pinion of the line shaft or cylinder, one end of the grooved shaft terminating in a tubular slitted portion, a crank provided with inward-extending hub or sleeve having feathers adapted to engage the slits of the tubular end of the grooved shaft, and a line guide engaging the grooves of the shaft, and reciprocated thereby, substantially as set forth. 4th. In a fish line reel, the combination, of a supporting frame, a fish line shaft or cylinder journaled therein, a reverse spirally grooved shaft, a guide-rod, a ring loose on the grooved shaft, said ring provided with a projecting apertured finger for the passage therethrough of the fish line, said finger provided with a recessed end fitting the guide-rod, and the ring further provided with a projecting apertured boss, a pin loose in the aperture of the boss, the inner end of said pin adapted to project into and travel in the grooves of the shaft, a gearing for rotating the shafts, and a crank for operating the gearing, substantially as set forth. 5th. In a fish line reel, the combination, of a revoluble reversely grooved shaft, a guiding ring loose on the grooved shaft, said ring provided with a projecting boss having a threaded aperture therethrough, a pin loose in and projecting from the aperture of the boss to engage and travel in the grooves of the shaft, means for holding the pin to the grooves, said means engaging the threaded aperture of the boss, and adapted to permit of the entire removal of the pin, and means for holding the guiding ring against revolution, substantially as set forth. 6th. In a fish line reel, the combination, of a revoluble reversely grooved shaft, a guiding ring loose on the grooved shaft, said ring provided with a projecting boss having an interiorly threaded aperture, a pin loose in and projecting from the aperture of the boss, and engaging and travelling in the grooves of the shaft, a screw plug engaging the threads of the aperture of the boss, and adapted, when screwed inward, to bear against the end of the pin, and hold said pin to its work, and when unscrewed, to permit of the removal of the pin, and means for holding the guiding ring against revolution with the grooved shaft, substantially as set forth.

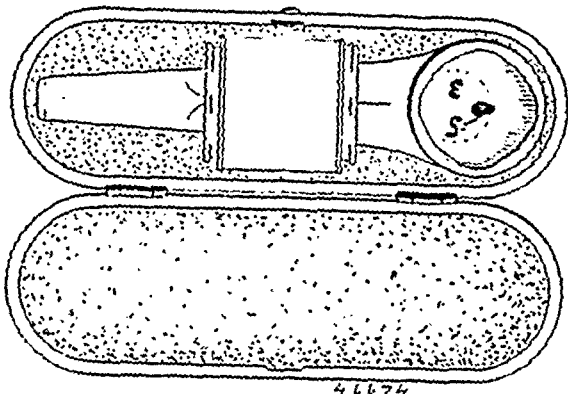
No. 46,673. Manufacture of Nickel and Cobalt.

(Fabrication de nickel et de cobalt.)

Pierre Manhès and the Société Anonyme de Métallurgie du Cuivre, Lyon, France, 27th July, 1894; 18 years.

Résumé. 1° Le procédé de traitement des mattes sulfureuses de nickel, dans un convertisseur à garnissage basique, le fer et le soufre étant successivement éliminés au moyen du l'emploi des divers réactifs spécifiés, pour les fins décrites. 2° Le procédé de traitement des fontes de nickel, pas ou très peu sulfureuses, dans un convertisseur à garnissage basique, le fer étant éliminé à l'état de scories fluides par l'emploi des réactifs spéciaux, désignés, tel que décrit.

No. 46,674. Tobacco Pipe. (*Pipe à tabac.*)

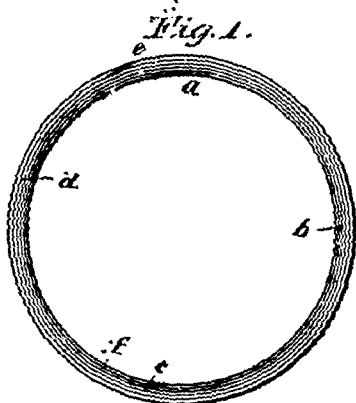


Samuel D. Mott, Passaic, New Jersey, and Detlef C. Rensch, New York, State of New York, all in the U.S.A., 27th July, 1894; 6 years.

Claim.—1st. A pipe in which is comprised a separable, reversible bowl, said bowl being open at both ends, both ends of the bowl being provided with means for joining to the stem, in combination with a stem having a flattened enlargement at the extremity opposite to the mouth piece, forming the bottom of the bowl, and means for securing the bowl thereto, and having also a smoke passage leading therefrom into the bowl, substantially as shown and described. 2nd. In a pipe, a removable bowl, and a stem, having an enlarged extremity forming the bottom of the bowl, the passage through said stem and enlargement being in a straight, unobstructed line, when the bowl is removed, substantially as shown and described.

No. 46,675. Rim for Bicycle Wheels.

(*Jante de roue de bicyclette.*)



The Raleigh Cycle Company, Nottingham, England, assignee of Albert C. Fairbanks, Sumerville, and Peter J. Berlo, Boston, both in Massachusetts, U.S.A., 27th July, 1894; 6 years.

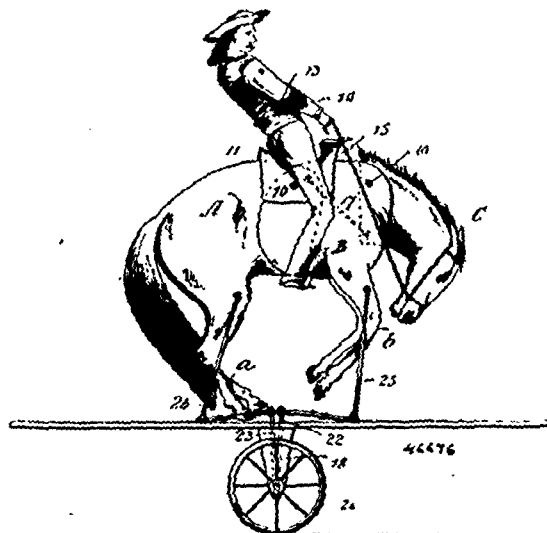
Claim.—A rim for bicycle wheels comprising in its construction a series of sections or piles of wood of varying course or direction of grain, cemented together, the ends of each section breaking joints with the ends of adjacent sections, and the inner surface *f* being of convex form, and the outer surface *g* of concave form, as set forth.

No. 46,676. Toy. (*Jouet.*)

Elmo F. Kellum, and Levi Ballard Kellum, Cripple Creek, Colorado, and Nathan A. Kellum, Missoula, Montana, all in the U.S.A., 27th July, 1894; 6 years.

Claim.—1st. In a toy, a horse, the body of which is made in two sections pivotally connected, the rear legs forming a portion of one section and the forward legs a portion of the other section, the neck

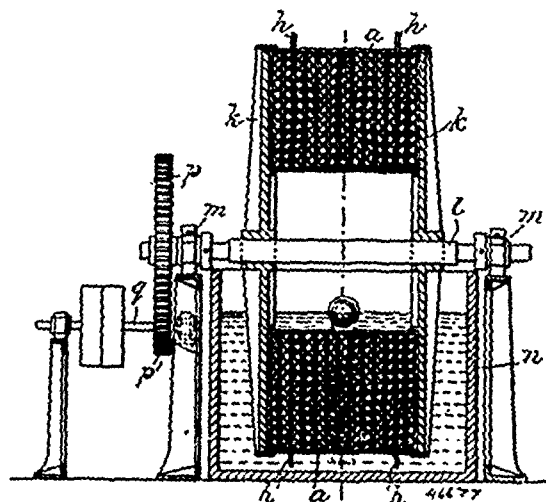
being connected with the head, and the neck pivoted in the forward section of the body, a link connection between the neck below its pivot and the rear body section above its pivot, a crank shaft, and a link and lever connection between the crank shaft and the forward and rear sections of the body, whereby the said sections are made to



alternately move downward and upward, as and for the purpose specified. 2nd. A toy representing a bucking broncho, the said toy comprising a representation of an animal the body of which is made in two sections, said sections being pivotally connected near the upper central portion of the body, the rear legs forming a portion of the rear body section and the forward legs a portion of the forward body section, the neck and head of the animal being integral and the neck pivotally connected near the upper portion thereof with the upper portion of the forward body section, a link connecting the neck below its pivot with the rear body section above its pivot, a crank shaft, links projected upward from the crank shaft, bell crank levers connecting the links with the forward and rear body sections of the animal, and a driving mechanism connected with the crank shaft, as and for the purpose specified. 3rd. A toy representing a bucking broncho and its rider, the same consisting of the representation of an animal the body of which is in two sections pivotally connected near the central portion of the body, a neck and head section, the neck being pivotally connected at its upper inner portion with the forward body section, a link connection between the neck below its pivot and the rear body section above its pivot, a saddle containing the representation of a man seated thereon, the saddle being secured to the extremities of the body pivot, a crank shaft, wheels secured thereon, links projected upward from the crank arms of the crank shaft, and angled levers connected pivotally with the link and the body sections of the animal, as and for the purpose set forth.

No. 46,677. Process of Treating Fibrous Vegetables.

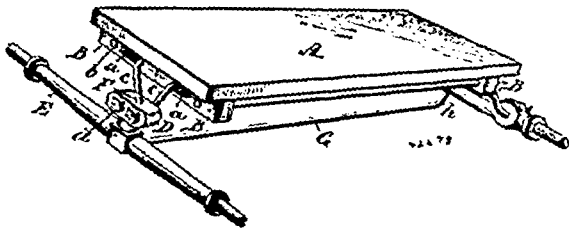
(*Procédé de traitement de légumes fibreux.*)



Henry C. Fellowes and William R. Crozier, London, and Henry Ferguson, Leytonstone, Essex, all in England, 27th July, 1894; years.

Claim.—1st. The process of treating fibrous vegetables consisting of placing and holding them immovably in open work receptacles, boiling them so packed in an aqueous alkaline solution until the extraneous matters and impurities are properly loosened, subjecting them to the action of warm water by spraying or immersion until the extraneous matters and impurities are completely separated, rinsing them in cold water until all extraneous matters and impurities are removed and immersing them for a short period in a cold composition of vegetable oils, alkalis and water, then removing the finished fibre from the open work receptacles and drying them, substantially as set forth. 2nd. In a process of preparing vegetable fibres for spinning, placing and holding them immovably in open work receptacles, boiling them so packed in an aqueous alkaline solution, subjecting them to the action of warm water, and rinsing them in cold water, substantially as set forth. 3rd. In a process of preparing vegetable fibres for spinning, their immersion in a composition of oil, alkalis and water after all the extraneous matters and impurities have been removed, substantially as set forth. 4th. A new and improved fibre from Rhea and like grasses obtained by packing said grasses in open work receptacles, boiling them in an aqueous alkaline solution, subjecting them to the action of warm water, rinsing them in cold water, immersing them in a composition of oil, alkalis and water and drying them, substantially as set forth. 5th. In a process for treating Rhea and other grasses, a solution consisting of 90 to 168 lbs. of hydrate of sodium and 5,000 gallons of water or thereabouts in which said grasses are boiled, substantially as set forth. 6th. In a process for treating Rhea and other grasses, a composition consisting of 2.82 parts of palm oil, 8.82 parts of coconut oil, 3.47 parts of linseed oil, 13.65 parts of alkalis and 471.24 parts of water or thereabouts, in which the cleansed fibre is immersed, substantially as set forth. 7th. A receptacle used for the treatment of Rhea and other grasses, consisting of a frame covered with open work, parallel ridges *d* dividing it into compartments, hinged lid *b*, means for holding the same closed, lugs *f* adapted for suspension, substantially as set forth. 8th. An apparatus used in treating Rhea and other grasses, consisting of open work receptacles *a* with lid or cover, divided into compartments by parallel ridges, lugs *f* for suspending them, and a boiler having ledges adapted to have said receptacles suspended therein, substantially as set forth. 9th. An apparatus for treating Rhea and other grasses, consisting of open work receptacles divided into compartments by parallel ridges and provided with lid or cover, a shaft with driving wheel having two circular heads mounted thereon which are provided with radial grooves on their inner faces adapted to receive and hold said receptacles and a tank adapted to receive said shaft and provided with means adapted to give motion thereto, substantially as set forth.

No. 46,678. Gear for Vehicles. (Train de voiture.)



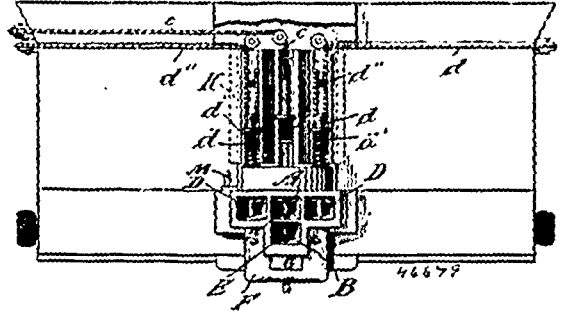
William Kyle, Brockville, Ontario, Canada, 27th July, 1894; 6 years.

Claim.—1st. The combination, in a vehicle running gear, of the torsional spring-rods rigidly secured at one end to the vehicle bed and bent at right angles at their opposite ends and loosely connected with the axles, substantially as described. 2nd. The combination, in a vehicle running gear, of the torsional spring-rods having their ends secured to the front end of the body or bed of the vehicle, and their rear ends bent and loosely supported in bearing blocks and connected loosely with the rear axle, substantially as described. 3rd. The combination, in a vehicle running gear, of the torsional spring-rods having their ends secured to the rear end of the body or bed of the vehicle, and their opposite ends bent and loosely supported in bearing blocks at the front end thereof, a socket joint supported by said spring-rods, and an axle pivotally attached to said socket joint, substantially as described. 4th. The combination, in a vehicle running gear, of the torsional spring rods *C*, loosely attached to the rear axle at one end and rigidly secured to the front end of the body of the vehicle, the torsional spring-rods *C*, rigidly secured to the rear end of the body of the vehicle, the socket joint loosely connected to said springs *C*, the fore axle pivotally connected with said socket joint, and a reach connecting said axles, substantially as described.

No. 46,679. Car Coupler. (Attelage de chars.)

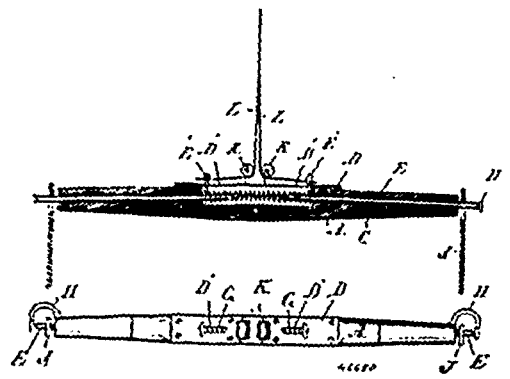
Levi Moore, Baraboo, Wisconsin, U.S.A., 27th July, 1894; 6 years.

Claim.—1st. The combination with a draw-head, of a vertically adjustable bar playing through the draw-bar in rear of the pin openings, and adapted to take the inner end of the link, and hold the same in coupling position, a spring for raising said bar, and means for depressing it, substantially as described. 2nd. The combination of the draw-head, the link adjusting bar, and the movable block for



shifting said bar, substantially as described. 3rd. The combination of the draw-bar, a movable slotted block below the same, and a link adjusting bar playing through said draw-bar and the slot in said block, and the devices whereby when the block is projected the bar is depressed, substantially as described. 4th. The combination of the draw-head, the link adjusting bar, and the movable block for shifting said bar, and the devices for shifting said block form the side of car, substantially as described. 5th. The combination of the draw-bar, a movable slotted block below the same, and a link adjusting bar playing through said draw-bar and the slot in said block, and the devices whereby when the block is projected the bar is depressed, and means for shifting said block form the side of car, substantially as and for the purpose specified. 6th. The combination of the draw-head, the vertically movable link adjusting bar playing through the draw-head, the spring for raising said bar, and devices for depressing said bar, and for automatically releasing it when the coupling is effected, substantially as described. 7th. The combination of a draw-bar, a movable spring cushioned bumper, the coupling pin, and a pin catch bolt adapted to uphold the pin when raised, and devices substantially as described, whereby the catch is caused to release the pin when the bumper is pushed inward, substantially as and for the purpose set forth. 8th. The combination of the draw-head, the coupling pin, the pin catch bolt is rear of the pin openings, and the pivoted hand lever adapted to disengage the catch from the pin, substantially as described. 9th. The combination of the draw-bar, a bumper above the same, having slots over the pin openings in the draw-bar, and the coupling pins engaging the pin openings in the draw-bar through the slots in the bumper, substantially as described. 10th. The combination of the draw-head, the link adjusting bar, the coupling pin, the spring for depressing said pin, and the ropes for lifting said pin, substantially as described. 11th. The combination of the draw-head, the coupling pin, the pin catch bolt, the link adjusting bar, and the movable spring cushioned bumper and connections between the same and catch bolt, substantially as set forth.

No. 46,680. Whiffletree. (Palonnier.)

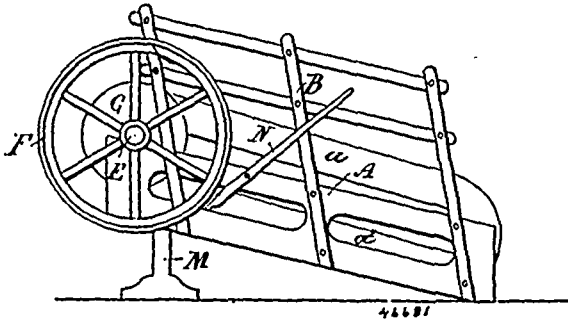


Pulemon C. Heath, Talcville, New York, U.S.A., 27th July, 1894; 6 years.

Claim. The combination, with a whiffletree having a cavity *D*, and bores *C* therefrom to the ends of the whiffletree, and provided with hooks *H*, of the trace bolts *E*, having arms *E'*, the continuous coiled spring *G*, intervening said bolts, the slotted plate *D*, covering said cavity and guiding said arms, pulleys *K*, *K*, carried by said

plate, and the strap or straps *L*, connecting said arms and passing under said pulleys, as set forth.

No. 10,681. Horse Power. (Manège.)



J. B. Pelletier, St. Paschal, Quebec, Canada, 27th July, 1894; 6 years.

Claim.—1st. In a horse power, the combination, with a suitable frame, having tracks or shelves formed on the inner sides of the upper and lower side pieces, of a shaft journaled at one end of the said frame, flanged sprocket-wheels secured on said shaft, an endless belt, formed of slats connected by hinge joints, flanged rollers journaled on either side of the hinge pins, the said rollers engaging the teeth in the said sprocket-wheels, substantially as set forth. 2nd. In a horse power, the combination, with an endless belt formed of slats connected by hinge joints of the rollers *K*, having flanges *L*, the said flanges being adapted to run on tracks and bear the weight of the said belt, substantially as set forth. 3rd. In a horse power, the combination, with the flanged sprocket-wheels *G*, on the shaft *E*, of the rollers *K* carried on the ends of the hinge pins uniting the slats of an endless belt, the slats *H*, straps *I* secured to the underside of the said slats, eyes *i* at the ends of the said straps, and hinge pins or rods *J* uniting the said slats, substantially as set forth.

*CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO
THE FOLLOWING PATENTS.*

3530. SAMUEL TROTT, 2nd five years of No. 31,774, from the 22nd day of July, 1894. Improvements in Conduits for Electric Railways, 4th July, 1894.
3531. WILLIAM SAMUEL BROOKS, WILLIAM HYSLOP AND HANS JAMES CAULFIELD, 2nd and 3rd five years of Patent No. 37,856, from the 26th day of November, 1896. Improved Saddle for Bicycles or Tricycles, 5th July, 1894.
3532. EDWARD HUBBARD RUSSELL, 2nd and 3rd five years of Patent No. 31,767, from the 19th day of July, 1894. Improvements in Treating Ores and Metallurgical Products, 5th July, 1894.
3533. EDWARD HUBBARD RUSSELL, 2nd and 3rd five years of Patent No. 31,801, from the 23rd day of July, 1894. Improvements in Treating Ores and Metallurgical Products, 5th July, 1894.
3534. PATRICK HENRY GRIFFIN, 2nd five years of Patent No. 31,785, from the 22nd day of July, 1894. Improvements in Expansible Mandrels, 7th July, 1894.
3535. FRANKLIN LUTHER CHAMBERLIN, 3rd five years of Patent No. 19,787, from the 14th day of July, 1894. Improvements on Cartridge Loading Machines, 10th July, 1894.
3536. THE CANADIAN GENERAL ELECTRIC CO., (assignee) 2nd five years of Patent No. 31,770, from the 20th day of July, 1894. Method of Regulating Current or Potential on Secondary of Transformers, 10th July, 1894.
3537. THE CANADIAN GENERAL ELECTRIC CO., 2nd five years of Patent No. 31,771, from the 20th day of July, 1894. Improved Induction Coil and Self Inductive Apparatus, 10th July, 1894.
3538. THE CANADIAN GENERAL ELECTRIC CO., 2nd five years of Patent No. 31,849, from the 1st day of August, 1889. Apparatus for Regulating Current or Potential Secondary of Transformers, 10th July, 1894.
3539. MILTON H. GARLAND, 2nd five years of Patent No. 38,037, from the 2nd day of January, 1897. Improvements in Filling Cans for Filling Lamps, 10th July, 1894.
3540. WILLIAM WEBSTER, 2nd five years of Patent No. 31,730, from the 16th day of July, 1894. Improvements in the Treatment of Sewage and other Impure Liquids and Water for the Purification thereof, and for Obtaining Products therefrom, and in Apparatus for these Purposes, 11th July, 1894.
3541. THE ONEIDA COMMUNITY, (assignee) 2nd five years of Patent No. 31,903, from the 2nd day of August, 1894. Improvements in Swivels, 14th July, 1894.
3542. THE ONEIDA COMMUNITY, (assignee) 2nd five years of Patent No. 31,928, from the 2nd day of August, 1894. Improvements in Swivels, 14th July, 1894.
3543. THE UTICA STEAM GAUGE CO., 2nd five years of Patent No. 31,822, from the 25th day of July, 1894. Improvements on Radiator Valves, 14th July, 1894.
3544. HARVEY CORTLAND, 2nd five years of Patent No. 32,097, from the 14th day of August, 1894. Improvements in Thermostats, 14th July, 1894.
3545. GEORGE R. KING, 2nd five years of Patent No. 32,450, from the 5th day of October, 1894. Improvement in Compounds to Restrain the Setting of Plaster and the Like, 18th July, 1894.
3546. WILLIAM J. COPP, 2nd five years of Patent No. 31,834, from the 26th day of July, 1894. Improvements in Hot Air Heating Stoves, 18th July, 1894.
3547. ADOLPH LEPAGE, 2nd five years of Patent No. 31,779, from the 22nd day of July, 1894. Improvements in Fyles for Papers, 19th July, 1894.
3548. STEPHEN PASCHALL MORRIS TASKER, 2nd five years of Patent No. 31,783, from the 22nd day of July, 1894. Improvements in Roller Mandrels, 21st July, 1894.
3549. STEPHEN PASCHALL MORRIS TASKER, 2nd five years of Patent No. 31,867, from the 1st day of August, 1894. Improvements in Rolling Mills for Making Tubes from Hollow Metal Ingots, 21st July, 1894.
3550. THE CONSOLIDATED CAR HEATING COMPANY OF ALBANY, (assignee) 2nd five years of Patent No. 32,092, from the 14th day of August, 1894. Improvements in Car Heating Apparatus, 21st July, 1894.
3551. THE CONSOLIDATED CAR HEATING COMPANY OF ALBANY, 2nd five years of Patent No. 32,244, from the 11th day of September, 1894. Improvements in Pipe Couplings, 21st July, 1894.
3552. SAMUEL EDWARD HASKIN, 2nd five years of Patent No. 31,916, from the 2nd day of August, 1894. Improved Method of Vulcanizing Wood, 23rd July, 1894.
3553. HENRY AUGUST GOETZ, 2nd five years of Patent No. 31,868, from the 1st day of August, 1894. Improvement on Beam-end Protectors, 23rd July, 1894.
3554. ANDREW ANDERSON, 2nd five years of Patent No. 31,985, from the 3rd day of August, 1894. Improvements in Horse-shoes, 23rd July, 1894.
3555. GOTTLIEB DAIMLER, 2nd five years of No. 32,040, from the 8th day of August, 1894. Improvements in Gas and Petroleum Motor Engines, 23rd July, 1894.
3556. JOHN FOSTER ROSS, 3rd five years of No. 20,002, from the 16th day of August, 1894. Improvements in Sheet Metal Plugs for Metal Vessels or Packages, 23rd July, 1894.
3557. CHARLES G. FLICK, 2nd five years of Patent No. 31,823, from the 25th day of July, 1894. Improvement in Glass Polisher, 24th July, 1894.
3558. MILTON CHASE, 2nd five years of No. 31,840, from the 26th day of July, 1894. Improvement in Nail Machines, 24th July, 1894.
3559. THE HEINE SAFETY BOILER COMPANY, (assignee) 2nd and 3rd five years of Patent No. 31,864. Improvements in Steam Generators, 25th July, 1894.
3560. JOSIAH ROSS, 2nd five years of No. 31,924, from the 2nd day of August, 1894. Improvements in Wood Planing Machines, 26th July, 1894.
3561. WILLIAM D. BEST and PETER HAMILTON, 2nd five years of No. 31,846, from the 1st day of August, 1894. Improvements in the Binding mechanism of a Harvester Binder, 28th July, 1894.
3562. ABEL KLEINSTIVER and BENJAMIN S. VAN TUYL, 2nd five years of No. 31,926, from the 2nd day of August, 1894. Improvements on Threshing Machines, 28th July, 1894.
3563. JOHN A. WILLIAMS, 2nd five years of No. 31,955, from the 3rd day of August, 1894. Improvements on Vending Apparatus, 30th July, 1894.
3564. WILLIAM B. TURNER and CORNELIUS C. BEARD, 2nd five years of No. 31,857, from the 1st day of August, 1894. Improvements in Reversible Ratchet Clutch mechanism, 31st July, 1894.
3565. JAMES G. PAVYER, 2nd five years of No. 32,129, from the 20th day of August, 1894. Improvements in Printers' Type, 31st July, 1894.

TRADE - MARKS

Registered during the month of July, 1894, at the Department of Agriculture—
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4984. KAY BROTHERS' LIMITED, of Stockport Chester County, England. A Transparent Cement, 3rd July, 1894.
4985. T. KINGSFORD & SON, of Oswego, New York, U.S.A. Laundry Starch, 3rd July, 1894.
4986. THE S. S. WHITE-DENTAL MANUFACTURING COMPANY, of Philadelphia, Penn., U.S.A. Dental Goods and Materials of all kinds, 3rd July, 1894.
4987. THE SMILLIE COUPLER AND MANUFACTURING COMPANY, of Newark, New Jersey, U.S.A. Car couplers and parts thereof, 3rd July, 1894.
4988. JEREMIAH MULLEN & COMPANY, of Ottawa, Ont. General Trade Mark, 4th July, 1894.
4989. W. D. & J. W. PACKARD, of Warren, Ohio, U.S.A. General Trade Mark, 4th July, 1894.
4990. THE CANADA SCREW COMPANY, of Hamilton, Ont. General Trade Mark, 5th July, 1894.
4991. JAMES R. CROMPTON & BROTHERS, of Elton Mills, near Bury, Lancaster County, England. Tissue Paper, 5th July, 1894.
4992. THE CUDAHY PACKING COMPANY, of Chicago, Illinois, and Omaha, Nebraska, U.S.A. Beef Extract, and other animals preserved food products, 5th July, 1894.
4993. NAPOLEON THOMAS TURGEON, of Brompton Falls, Que. Cigars, 6th July, 1894.
4994. THOMAS CARLYLE & JOHN MARK CARLYLE, trading as THOMAS CARLYLE, of Lower Portland Street, Aston, Birmingham, England. Buttons, Buckles, Clasps, Dress Fasteners, and hooks and eyes of all kinds, and articles of a similar nature, 9th July, 1894.
4995. EDGAR F. HANSON, of Belfast, Maine, U.S.A. A medicine, 9th July, 1894.
4996. LAMBERT VIOLET, Thuir, Pyrénées orientales, France. Un Apéritif, 9 juillet, 1894.
4997. THE CHARLES E. HIRES' COMPANY, of Philadelphia, Pennsylvania, U.S.A. Hires' Root Beer, 12th July, 1894.
4998. EMIL PEWNY & COMPANY, of Montreal, Que. Kid Gloves, 24th July, 1894.
4999. EDWARD L. DREWRY, of Winnipeg, Manitoba. Aerated carbonated and mineral waters and temperance beverages, 18th July, 1894.
5000. JOSEPH ALLEN & SONS, of Ecclesall Works, Buckingham Street, Sheffield, England. Knives, Forks, Scissors, Razors and Cutlery, Files, Saws, Shears, Seythes, Sickles and Tools having a cutting edge, 21st July, 1894.
5001. WILLIAM EDWARDS PRICE, of Montreal, Que. Toilet Soap, 20th July, 1894.
5002. NAVIGENS MAILHOT, de Trois Rivières, Que. Cigars, 21 juillet, 1894.
5003. JOSEPH GAUDIN, de Trentemout les Nantes, Loire Inférieure, France. Liqueur des Benedictines de Notre Dame du Calvaire de Machecoul, 21 juillet, 1894.
5004. HENRY CORBY, of Belleville, Ont. Rye Whiskey, 24th July, 1894.
5005. } THE AMERICAN TOBACCO COMPANY, of Newark, New Jersey,
5006. } U.S.A. Cigarettes, Snuff and Chewing and Smoking Tobacco,
24th July, 1894.
5007. THE AMERICAN TOBACCO COMPANY, of Newark, New Jersey, U.S.A. Cigarettes, 24th July, 1894.
5008. THE AMERICAN TOBACCO COMPANY, of Newark, New Jersey, U.S.A. Cigarettes, Snuff and Chewing and Smoking Tobacco, 24th July, 1894.

5009. } LOUIS BRANDT & FRÈRE, of Bieme, Switzerland. Watches and
5010. } Watch Cases, 24th July, 1894.
5011. THE MONTREAL ROLLING MILLS COMPANY, of Montreal, Que.
Horse-shoes, 25th July, 1894.
5012. ALFRED DOLGE & SON, of New York, N.Y., U.S.A. Stringed Musical
Instruments, 26th July, 1894.
5013. THE J. W. MANN MANUFACTURING COMPANY, LIMITED, of
Brockville, Ont. Agricultural Machines (drills, cultivators and
seeders), 28th July, 1894.
5014. NAPOLEON THOMAS TURGEON, Brompton Falls, Que. Cigars, 28th
July, 1894.
5015. LYMAN JONES WOODWARD, of Toronto, Ont. A Nerve Tonic, 28th
July, 1894.
5016. THE EMPIRE TOBACCO COMPANY, of Montreal, Que. Cigars, 28th
July, 1894.
017. THE WINDSOR SALT WORKS, of Windsor, Ont. Salt, 28th July, 1894.

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7480. ON THE MIDWAY PLAISANCE. Words and Music by James Woods. Whaley, Royce & Co., Toronto, Ont., 3rd July, 1894.
7481. THE ONTARIO REPORTS, VOLUME XXIV. The Law Society of Upper Canada, Toronto, Ont., 3rd July, 1894.
7482. OTTAWA CITY DIRECTORY INCLUDING HULL, P. Q., 1894-95. The Night Directory Company of Toronto, Limited, Toronto, Ont., 3rd July, 1894.
7483. LE CATÉCHISME DES PROVINCES ECCLÉSIASTIQUES DE QUÉBEC, MONTRÉAL, OTTAWA. Pruneau & Kirouac, Québec, Qué., 3 juillet, 1894.
7484. THE BELL TELEPHONE COMPANY OF CANADA, LIMITED, OTTAWA EXCHANGE, SUBSCRIBERS' DIRECTORY, JULY, 1894. The Bell Telephone Company of Canada, Limited, Montreal, Que., 3rd July, 1894.
7485. INSURANCE PLANS OF MONTREAL ISLAND AND VICINITY. Charles Edward Goad, Montreal, Que., 4th July, 1894.
7486. ONTARIAN FAMILIES, GENEALOGIES OF UNITED EMPIRE, LOYALIST AND OTHER PIONEER FAMILIES OF UPPER CANADA, Volume I. Part 1. Edward Marion Chadwick, Toronto, Ont., 6th July, 1894.
7487. THE CHALICE OF LOVE. Words and Music by J. P. Stanley. A. & S. Nordheimer, Toronto, Ont., 6th July, 1894.
7488. BLACK BEAUTY. The Autobiography of a Horse, by A. Sewell. Wm. Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 9th July, 1894.
7489. A TREATISE ON THE INVESTIGATION OF TITLES TO REAL ESTATE IN ONTARIO, with a Precedent for an Abstract. Second Edition. By Edward Douglas Armour, Q. C., Toronto, Ont., 11th July, 1894.
7490. ROLLING STONES. Words and Music by Malcolm John McCarthy, Toronto, Ont., 12th July, 1894.
7491. BELL TELEPHONE COMPANY OF CANADA, LIMITED, MONTREAL EXCHANGE, SUBSCRIBERS' DIRECTORY, JULY, 1894. The Bell Telephone Company of Canada, Limited, Montreal, Que., 13th July, 1894.
7492. REAL PROPERTY STATUTES OF ONTARIO, being a Selection of Acts of Practical Utility, by Alfred Tylour Hunter, LL.B. The Carswell Co., Ltd., Toronto, Ont., 14th July, 1894.
7493. IN PACE PARATUS. March for Piano, by Carl Bendel. Whaley, Royce & Co., Toronto, Ont., 14th July, 1894.
7494. ROSALIE WALTZ, by Geo. R. Joseph. Whaley, Royce & Co., Toronto, Ont., 14th July, 1894.
7495. LAUNDRY DAY BOOK. Robert James Lovell, Toronto, Ont., 16th July, 1894.
7496. CHRIST WILL NOW FORGIVE. Words and Music by J. M. Whyte.
7497. COME THIS WAY, MY FATHER. Music by J. M. Whyte.
7498. CONFESSING JESUS. Words and Music by J. M. Whyte.
7499. DE LIGHT AM A-SHININ ON DE WAY. Words and Music by J. M. Whyte.
7500. FOR THY SAKE. Words and Music by J. M. Whyte.
7501. HAVE MERCY ON ME. Words and Music by J. M. Whyte.
7502. HOLY SPIRIT HELP US. Words by Jay. Music by J. M. Whyte.
7503. HOW MUCH, MY SAVIOUR. Words by Frank Hogg. Music by J. M. Whyte.
7504. I COULD NOT DO WITHOUT THEE. Words by F. R. Havergal. Music by J. M. Whyte.

7505. JESUS CALLING YOU HOME. Words by E. C. S. Music by J. M. Whyte.
7506. JESUS, CRUCIFIED AND RISEN. Words by Joseph Scriven. Music by J. M. Whyte.
7507. JESUS IS RISEN. Words by E. C. S. Music by J. M. White.
7508. LITTLE CHILDREN, ABIDE IN HIM. Words by Joseph Scriven. Music by J. M. Whyte.
7509. THY LOVE, O CHRIST! TO ME. Words by J. Mills. Music by J. M. Whyte.
7510. UNDER HIS SHADOW. Words by Lillian Jackson. Music by J. M. Whyte.
7511. WHAT I WANT IN JESUS. Words by Mrs. J. C. W. Daly. Music by J. M. Whyte.
7512. WHEN I GO HOME. Words and Music by J. M. Whyte.
7513. YE RANSOMED SING ON. Words and Music by J. M. Whyte. John Marchant Whyte, Toronto, Ont., 16th July, 1874.
7514. COUNTING MADE EASY, by Charles Johnstone, A. Mus., L. C. M., St. Catharines, Ont., 17th July, 1894.
7515. LOVELL'S MONTREAL DIRECTORY FOR 1894-95. John Lovell & Son, Montreal, Que., 17th July, 1894.
7516. LA GRANDE CAUSE ECCLÉSIASTIQUE. Le Canada-Revue vs. Mgr. E. C. Fabre. Aristide Filatreault, Montreal, Que., 17th July, 1894.
7517. TORONTO. A Souvenir of the Queen City—Illustrated. Davis & Henderson, Toronto, Ont., 23rd July, 1894.
7518. CYRIL WHYMAN'S MISTAKE, by Carrie J. Harris. Wm. Bryce, Toronto, Ontario, 24th July, 1894.
7519. FORM OF MORTGAGE. (Marked A.) The Birkbeck Investment, Security and Savings Company, Toronto, Ont., 24th July, 1894.
7520. FORM OF MORTGAGE. (Marked B.) The Birkbeck Investment, Security and Savings Company, Toronto, Ont., 24th July, 1894.
7521. PLAN OF THE CITY OF ST. JOHN, NEW BRUNSWICK, by Wm. Murdoch, C. E. D. McAlpine & Sons, St. John, N. B., 24th July, 1894.
7522. FROTHINGHAM AND WORKMAN, MONTREAL, PRICE LIST, 1894. Frothingham & Workman, Montreal, Que., 26th July, 1894.
7523. THE GREAT REDEMPTION. In Songs New and Selected, by J. M. Whyte, et al. John Marchant Whyte, Toronto, Ont., 28th July, 1894.
7524. TORONTO AND ADJACENT SUMMER RESORTS. Edited by E. Herbert Adams, M. D., C. M., etc. Frederick Smiley, Toronto, Ont., 30th July, 1894.

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