

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

Coloured covers/
Couverture de couleur

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Cover title missing/
Le titre de couverture manque

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/
Transparence

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Includes index(es)/
Comprend un (des) index

Title on header taken from: /
Le titre de l'en-tête provient:

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

Additional comments: /
Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below /
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
								/			

The Canadian Patent Office

RECORD

Vol. I.—No. 10.

JANUARY, 1874.

Price in Canada \$1.50 per An
United States - \$2.00 "

CONTENTS.

INVENTIONS PATENTED,	367
INDEX OF INVENTIONS,	211
INDEX OF PATENTIES,	212
ILLUSTRATIONS.....	213

No. 2931. GEORGE HIBBERD, Wheeling, W. Va., U. S., 10th December, 1873, for 5 years: "Improvements on Pumps." (Perfectionnements dans les pompes.)

Claim.—1st. A pump for elevating water by the action of jets of steam or its equivalent, having two or more steam nozzles J, and two or more water nozzles K, arranged to operate within one and the same pipe or conduit F, G; 2nd. A pump of the general form described, having a plurality of steam nozzles J, and water nozzles K, arranged so as to convey toward a given central point in the force chamber or discharge-pipe, so as to concentrate their jets or streams; 3rd. The combination of the inlet Z, suction-chamber F, force chamber G, perforated diaphragm I, annular steam-chest H, and nozzles J, K; 4th. The flat disc I, Fig. 6, forming the water nozzles diaphragm in combination with the base section A, a, extended to support this diaphragm and to form the walls of the suction-chamber F, and to support the upper section c; 5th. The water nozzles K, Fig. 6, formed in their diaphragm I, by perforations of proper shape, in line with the steam-nozzles; 6th. A water nozzle K, Fig. 6, tapering upward to the middle or thereabouts, and from thence flaring upward.

No. 2932. DAVID MAXWELL, Paris, Ont., 10th December, 1873, for 5 years: "Reversing, Stopping and Reducing the Motion of the Feed Rollers of Straw-cutters." (Renverser, arrêter et ralentir le mouvement des rouleaux d'alimentation des hache-paille.)

Claim.—In combination with the roller shaft P, and cog-wheel O, the arrangement of the gear shaft I, pinions J, K, double pinion L, M, lever N, spring bar v, and quadrant T.

No. 2933. JAMES H. SMITH, London, Eng., 15th December, 1873, for 10 years: "Improvements on Shuttle Sewing Machines." (Perfectionnements aux machines à coudre à navette.)

Claim.—1st. In combination with shuttle sewing machines a thread holder or hook A, so arranged and actuated as to enter the loop of the needle thread as it leaves the shuttle and to carry it to one side so that the needle in descending enters the said loop, 2nd. In shuttle sewing machines the thread holder A, operating in combination with the finger D, spring I, lever E, and cam G, for producing a looped lock stitch or chain stitch. 3rd. The lever L, operating in combination with the lever E, for throwing the thread holder in or out of action as described.

No. 2934. EDWARD GURNEY, Toronto, Ont., 15th December, 1873, for 5 years: "Improvements on Heating Stoves." (Perfectionnements aux poêles de chauffage.)

Claim.—1st. The application to the ordinary base heating arrangement of flues of an upright flue G, and connecting it with the body of the stove, in combination with the dampers I, and T,

whereby the stove can be used either as a direct acting burner, as a base burner, or as both; 2nd. The combination of the stove as described with the iron shaped water reservoir J, as set forth.

No. 2935. JASON L. THURSTON, Douro, Ont., 15th December, 1873, for 5 years: "Elastic Corsets." (Corsets élastiques.)

Claim.—The insertion of elastic webbing on each side of the corset in the part that will be worn under the shoulder blades of the wearer, the webbing either in bands or in one piece to be stitched to the material of which the corsets are made.

No. 2936. ANGUS A. HERRIMAN, Greensborough, N. Ca., U. S., 15th December, 1873, for 5 years: "Turbine Water Wheel." (Turbine hydraulique.)

Claim.—The rotary gate, B, chutes F, and hinged wing- E, combined to admit of the adjustment as described.

No. 2937. GRENVILLE M. STEVENS, Portland, Me., U. S., 15th December, 1873, for 5 years: "Miting Machine." (Machine à onglets.)

Claim.—1st. The mitring machine described wherein either by the movement of a bed or table upon which the article to be cut is placed or by the movement of the cutting instrument controlled by guides the article to be operated upon may be cut at the desired angle as described; 2nd. The conjoint use of the loose rubber rolls k, for the saw guides and the rolls or trucks h¹, at the bottom of the guide. 3rd. The trucks h¹, h², for the purpose of preventing the bed or table from being scorched by the cutting instrument as set forth.

No. 2938. FRANCIS JESSOP, York, Pa., U. S., 15th December, 1873, for 5 years: "Rotary Steam Motor." (Moteur à vapeur rotatif.)

Claim.—1st. The combination of the case A, with the wings C, and the hub B, on the shaft M, 2nd. The relative arrangement of the ingress and egress ports I, and II, in the case A, to the wings C, and hub B. 3rd. The arrangement of two or more steam chambers A, placed eccentrically upon the same shaft having diametrical wings C, in the hub B, placed in the same plane with each other by which a counterpoise is obtained. 4th. The wings or pistons C, in separate recesses in the hub B, and connected by a rod or rods F; 5th. The elliptical-shaped case A.

No. 2939. NARCISSE PHANEUF, Montreal, Que., 15th December, 1873, for 5 years: "Shoe Heel Pressing and Polishing Machine." (Machine à presser et polir les talons de chaussures.)

Reclamation.—1o La roue gaufrée I, avec sa chambre J, pour la chauffer. 2o La combinaison des montants B, B, de l'essieu F, de la roue de garde G, et des roues L, L', avec la roue gaufrée et la chambre I, tel que décrit.

No. 2940. DELOS E. RICE & ANDREW W. MITCHELL, Detroit, Mich., U. S., 15th December, 1873, for 5 years: "Water Gauges for Steam Boilers." (Indicateur d'eau pour les chaudières à vapeur.)

Claim.—The combination of the nipple A, flanged cap B, and glass disc C.

No. 2941. MYRON P. BOULT, Battle Creek, Mich., U. S., 15th December, 1873, for 5 years: "Wood Working Machine." (Machine à tailler le bois.)

Claim.—1st. The mechanism consisting of the levers F, G, stop A, pawl h, and lever o, all arranged for adjusting, and locking the vertically adjustable spindle E; 2nd. A rotary spindle e, combined as described with a head having inclined slot f, and a sleeve having handle c, and pin e; 3rd. The adjusting screw I, pivoted plate l, and stop h, combined to operate as specified; 4th. The vertical cutter B, in combination with the pin guide c; 5th. The plate c, provided with one or more ways a, the slide rest D, B, reciprocating thereon by the sector lever III, and carrying the arm E, and box F, having a traverse movement through the shaft J, and pinion c, engaging with the rack s, on said arm whereby the clamp box F, may be moved toward and away from the cutter B, and traversed in front of it; 6th. The construction and arrangement with relation to the bed plate C, slide rest D, and arm E, of the standard G, sector lever III, rack c, dog A, stop i, latch K, provided with the cam j, spring p, and a detachable or changeable spacer L; 7th. A combined wood working machine wherein is combined the necessary mechanism as described for carrying a moulding and for dovetailing wood as specified.

No. 2942. CHARLES W. PALMER, Cleveland, Ohio, U. S., 15th December, 1873, for 5 years: "Music Rest and Portfolio." (Carton-pupitre pour la musique.)

A portfolio for holding sheet music, which when placed on a piano or music rack is made a sheet music rest.

Claim.—In combination with a portfolio A, A, the hinged shelves B, B, as described.

No. 2943. MELVIN STEPHENS, Brooklyn, N. Y., U. S., 15th December, 1873, for 5 years: "Cement Lined Metal Pipes." (Tuyau métallique doublé de ciment.)

Claim.—1st. The sheet metal cylinder a, lined with cement and provided with a short taper or cone c, at one end, the sheet metal covering the taper or cone of the lining and extending to the inner surface or nearly so, of the lining; 2nd. The thin metallic ring h, applied edge wise to and combined with the metallic tube of a cement lined pipe; 3rd. The metallic socket j, attached to the sheet metal tube of a cement lined pipe, and combined with the tapering or zone shaped end of the tube that enters the recessed end of the next tube and around which the packing is introduced within the socket; 4th. The conical or tapering thimble x, with its flange inside of and connected with the sheet metal tube, and lined with cement for forming the connection to the branch pipe; 5th. The ring gauge made of the metal band p, and lugs r, r, in combination with the lever r, for tightening said band upon the pipe; 6th. The band k, provided with the lugs m, and bolt n, for securing said band in place; 7th. The lever w, to which are hinged the prongs 6 and 7, for drawing together the ends of the band k, when said lever is actuated as set forth; 8th. The socket b, in combination with a screw plug a, made with right and left-handed screw-threads; 9th. A gauge applied to the pipe for positioning the ring band or sleeve k, relatively to the joint between the ends of the pipe as specified.

No. 2944. JAMES H. THORP, Chicago, Ill., U. S., 15th December, 1873, for 5 years: "Portable Burglar Alarm." (Alarmer-voleur portatif.)

Claim.—1st. In combination with the clock mechanism for operating the hammer the inclined tread I, and detent lever G, or its equivalent arranged to operate for causing an alarm; 2nd. The tread I, having a cross head and spike J, adjustably fitting into the opening in the case A; 3rd. The combination of the hinged cover k, slotted arm L, pivoted lever M, and slide H; 4th. The arrangement and combination with the case A, of the slide N, spring O, pivot block P, and spring R, for actuating the hammer of the call bell; 5th. The case A, having a bell B, and a call and an alarm-giving mechanism actuating as set forth.

No. 2945. ISAAC ERB, Buffalo, N. Y., U. S., 15th December, 1873, for 5 years: "Washing Machine." (Machine à laver.)

Claim.—The presser H, constructed of three or more boards, having intermediate spaces, and arranged edge-wise towards the presser board L, in combination with the hinged cover J, arms K, cross bar L, levers c, and arms I, operating as set forth.

No. 2946. JAMES FOLEY, Montreal, Que., 17th December, 1873, (Extension of Patent No. 2614, O. & Q.): "Machine for the Manufacture of the Extract from Hemlock, Oak and other Barks for Tanning and as a Mordant for Printers' and Dyers' Use." (Appareil pour la fabrication des extraits d'écorce de pruche, chêne, et autres, pour le tannage et comme mordant pour l'usage des imprimeurs et teinturiers.)

Claim.—The method of softening the bark in a closed vessel C, by means of a central steam pipe d, covered with a cap; the use

of rollers or one or more sets for the purpose of expressing and macerating the bark preparatory to leaching; the use of a revolving leach h, or any modification of the same in contra-distinction to fixed leaches, open or closed in the covering of the liquor vat g, by a self adjusting gasometer arrangement; the evaporator s, with its drum arrangement of heating surface (in contra-distinction to coils, discs, drums, &c.), and the several parts of the machine in combination or separately and the mode of working the same.

No. 2947. OSWALD MEIJH & HEINRICH VOELTER, Paris, France, 17th December, 1873, for 15 years: "Process for Preparing Wood, &c., for the Manufacture of Paper, &c." (Procédé de traitement du bois, &c., pour la fabrication du papier, &c.)

Claim.—The process which consists in the treating of wood in shreds or in a reduced state and other suitable fibrous vegetable materials in any form with substances in the form of steam or vapour or in the form of gas, such as ammoniacal or other gas for example, that is to say to soften or disintegrate them more or less by means of a lye and to bleach them by employing for the two purposes indicated successively or intermittently alkalies and chlorine in a fluid state and by the aid of a vacuum.

No. 2948. GEORGE LOWDEN, Brooklyn, N. Y., U. S., 17th December, 1873, for 10 years: "Portable Gas Apparatus." (Appareil à gaz portatif.)

Claim.—1st. The novel combination of the carbureting chamber or chambers A, B, absorbent M, supply tank C, pipes e, e, and f, f, cocks 1, 2, and 1, 2, couplings d, d, force pump D, with its pipes S, stop cock n, and rod R, nozzle V, floating valve O, pressure pipe P, all operating together in the manner described; 2nd. The case E, with the bellows L, L, L, shaft N, with revolving bearings S, and X, X, X, windlass and gearing F, rope m, weight Q, stem Y, pressure pipe P, in combination with the carbureting tubes III, 2II, 3, 4, 5, 6, pipes r, r, and O, pipe K, pipes 3, 3I, and tank C, cocks CII, CIII, CIII, wire gratings V, V, pipe I, to burners, all constructed, arranged and operating as set forth.

No. 2949. CHARLES H. KNOWLTON, Rockland, Me., U. S., 17th December, 1873, for 15 years: "Car-coupling." (Attelage de wagons.)

Claim.—1. A sliding frame to hold the springs of the draw-bar combined with such springs and with the draw-bar and platform in such a manner that the frame springs and draw-bar can all be moved backward and forward together at will without changing their relative position to each other; 2nd. In the frame b, draw-bar A, and the springs e, e, e, combined as set forth; 3rd. In the frame b, drum bar Al, and the bar I, having two stops combined and operating as set forth; 4th. In the spring z, in combination with the frame b, and the draw-bar A, and the two stops; 5th. In combination with the sliding frame, the sliding draw-bar and the two stops, a lever or its equivalent so arranged that by means of it the operator standing upon the car platform can disengage the stops from the sliding parts and leave the latter free to move; 6th. A sliding draw-bar, a stop for holding it projected beyond or retracted beneath the platform, and a device for throwing the stop into or out of connection with the sliding parts in combination with a lever or its equivalent extending to the platform so that the whole apparatus can be adjusted and locked by a person standing on the platform; 7th. The lever c, in combination with the sliding frame b, the locking bar I, the lever D, and the draw-bar A; 8th. The sliding draw-head A, and the hook k, in combination with the shoulder of the platform; 9th. In combination with an automatic coupling the spring plate N, and the curved link K, operating the weighted hook h; 10th. The levers F, and E, the curved link K, operating the weighted hook k, so arranged that by means of it a person on the car-platform may raise and lower the hook h.

No. 2950. WILLIAM A. WHEELDON & JOSEPH S. DENNIS, Chicago, Ill., U. S., 23rd December, 1873, for 5 years: "Curtain Fixture." (Ajustage de rideaux.)

Claim.—The metal plates o, having recesses P, and the straining levers G, G, in combination with the guide wires F, attached at their upper end to t, pulleys, or pulley-castings at the upper corners of the window-frame, all constructed as specified.

No. 2951. WILLIAM A. LITTLE, Hammersmith, Eng., 23rd December, 1873, for 5 years: "Process for Preserving Timber." (Procédé de conservation du bois.)

Claim.—1st. The treatment of timber for preservation and surface water-proofing, whether such timber be in its natural condition or previously treated with saline preservative, by boiling it in the pitchy creosote of coal or petroleum tar, or in any other heavy hydro-carbon oil with which there is incorporated resin, pitch or other bituminous matter; 2nd. Combining such treatment of timber with the rectification of tar by boiling the timber in tar during the process of rectification; 3rd. The combination of sulphur with the hydro-carbon preservative material; 4th. Protecting the surface of wood by an artificial bark made and applied as described.

No. 2952. ISAAC S. RUSSELL, New Market, Md., and HENRY R. RUSSELL, Woodbury, N.J., U. S., 29th December, 1873, for 5 years: "Earth Closet." (Latrine à la terre sèche.)

Claim.—1st. A discharger consisting of grate or dispenser G, and two alternately and independently moving slides S, and J; 2nd. A table T, either fixed or loose on a vertical shaft F, for swinging or carrying the receptacle W, to its proper positions under the seat openings and under the reservoir; 3rd. The vertical shaft F, and table T, in combination with seat lid; 4th. A loosely hung table T, attached to a vertical shaft F, in combination with the arm H, catch E, wedge K, and stops G, and C, so that the shaft F, may have a limited motion relative to the table T; 5th. The combination of seat lid, vertical shaft F, table T, and dispenser G; 6th. The agitators on slide S, and the scatterers on slide T.

No. 2953. JOSEPH G. dit TOURANGEAU, Que., 29th December, 1873, for 15 years: "A Kneading Trough." (Un pétrin.)

Réclame.—1o. La machine à faire la pâte, marquée C, D, E, se composant de deux ou trois bras liés ensemble par des barres de fer et un couteau ou gratto; 2o. Les excéntriques A, placées de chaque côté de la charpente G, et les quatre supports K, à l'intérieur de la dite charpente G; 3o. Une des portes B, comme porte secondaire; 4o. L'adaptation des deux grandes roues N, à dents du diamètre du tonneau A, et de leurs noix O, d'un huitième de leur grandeur.

No. 2954. ISRAEL KINNEY, London, Ont., 29th December, 1873 for 5 years: "Instrument for Designing and Cutting Scrolls and Curved Lines." (Appareil à tracer et couper les enroulements et les lignes courbes.)

Claim.—The disc or roller A, supported in the adjustable holder B, in combination with the leg D, of a pair of compasses or their equivalent, constructed to operate as set forth.

No. 2955. PETER ENGLISH, Hamilton, Ont., 29th December, 1873, for 5 years: "Rotary Steam Engine." (Machine à vapeur rotatoire.)

Claim.—1st. The arrangement and construction of the steam block E, dovetailed in the drum C; 2nd. The arrangement of the block B, in four pieces b, E, d, and d', operated by the spring c, and e, c; 3rd. The arrangement of the plate H, in combination with the steam chamber B, operated by the cam Q, through the arrangement and combination of the connecting rods a, o, P; 4th. The arrangement of the rings L, L, in combination with the drum c; 5th. The plate I, with groove K, in combination with the drum c; 6th. The arrangement of the steam ports J, J; 7th. The arrangement and combination of the exhaust pipes S, S', in the projecting portion of the cylinder A', with three way taps T.

No. 2956. CHARLES W. JENKS, Somerville, Mass., U. S., 29th December, 1873, for 5 years: "Improvements on Shirts." (Perfectionnements aux chemises.)

Claim.—An improved manufacture, in a shirt in which the lower half or portion of the bosom is unattached to the shirt front except by the upper portion or ruff of the said bosom being sewed or connected at its edges to the front

No. 2957. CHARLES P. LEAVITT, New York, U. S., 29th December, 1873, for 5 years: "Hot Air Engine." (Machine à air chaud.)

Claim.—1st. The engine cylinder A, and pump cylinder J, of equal working capacities or thereabouts and with their pistons C, K, combined and arranged for operation in relation with each other as set forth; 2nd. The combination with the engine cylinder A, and its piston C, of the fire pot or heater B, and pump for supplying air to be expanded within the engine cylinder as described; 3rd. The valve o, in combination with the passage f, bifurcated at A, B, the cylinder A, and fire pot B; 4th. An automatic fuel feeder composed of a fuel receptacle P, a discharging device R, a clearer S, passage I, a delivery device T, passage D, and plunger U, or their equivalents for supplying the fire pot or chamber B, as specified.

No. 2958. JOHN F. STAIRS, Halifax, N. S., 29th December, 1873, for 5 years: "Process for Preparing Oakum." (Procédé pour préparer l'étoupe.)

Claim.—The process of preparing oakum for use by twisting the sliver or roving and winding it into skeins or hanks of the character set forth for the purposes specified.

No. 2959. JOHN F. STAIRS, Halifax, N. S., 29th December, 1873, for 5 years: "Tarring Tow and Oakum." (Goudronnage des peignons et de l'étoupe.)

Claim.—The means described for tarring tow or oakum consisting of the rollers a, trough b, concentrating tube h, and squeezing rollers k, l, in combination with the tar kettle c, and a pair of rollers in such tar kettle.

No. 2960. SAMUEL SMYTH, East Bridgewater, Penn., U. S., 29th December, 1873, for 5 years: "Stove and Furnace Grate." (Grille de poêle et de fourneau.)

Claim.—1st. The bars d, upon the shaft f, and provided with the segmental end bars e, in combination with the fire pot contracted near the upper ends of the bars e; 2nd. In the two part grates d, with the curved bars e, and each sectional grate mounted on a separate shaft and capable of being rotated.

No. 2961. FLAVIUS J. BOWLES, London, Ont., 29th December, 1873, for 5 years: "Portable Burglar Alarm." (Alarme-voleur portatif.)

Claim.—1st. The lever F, and c, as shown in the drawings and the connection of the same with the hammer and block D; 2nd. The pronged lever A, and pronged wedge A, and perforated arm B, and the prongs c, c', c, c, and B, B.

No. 2962. JOHN LANHAM, London, Eng., 29th December, 1873, for 5 years: "Boot and Shoe Heel Press and Last." (Presse à talons et forme de chaussures.)

Claim.—1st. Forming the heel of a boot or shoe upon the sole and in one piece therewith by making an extension on the sole leather and shaping and joining the same as set forth; 2nd. Forming the heel upon the sole of a boot or shoe by bending an extension on the sole leather into the proper shape and stitching the same at the corner of the heel and afterwards finishing the same by pressing or moulding; 3rd. Forming the sole and heel of two separate pieces of leather and uniting them by a seam or seams at the front of the heel; 4th. Forming the heel upon the sole of a boot or shoe before uniting the same to the upper; 5th. The apparatus for shaping the said heels consisting of the bar d, and the dies f, and v, combined and operating together and with the other parts of the apparatus or their equivalents as set forth; 6th. A last with a recess or cavity formed in its heel as specified

No. 2963. JESSE B. PUGH, Champaign, Ill., U. S., 29th December, 1873, for 5 years: "Hay Press." (Presse à foin.)

Claim.—1st. The arrangement under a platform A, of two bale boxes e, c, with followers D, D, operated from a single head-block; 2nd. The combination of the followers D, D, levers G, G, head block H, and rope b, arranged under the platform A, and the windlass J; 3rd. The arrangement of the top doors E, E', and bottom door E'', the doors E, and E', being connected by a rope or chain z.

No. 2964. ADON D. CROSSBY, Cuba, N. Y., U. S., 29th December, 1873, for 5 years: "Bucket for Chain Pumps." (Seau de pompe à cha-pelet.)

Claim.—1st. A bucket for chain pumps composed of India rubber, provided with an elastic flange e, at the base.

No. 2965. BENJAMIN MORTON & JAMES L. SMITH, Toronto, Ont., 29th December, 1873, for 5 years: "Snow-plough." (Charrue à neige.)

Claim.—1st. The shovel D, having a tilting adjustment on the rail truck A; 2nd. The plough E, having a travelling motion on the shovel D, longitudinally; 3rd. The prop support J, arranged to operate in the manner set forth; 4th. The frame work or tubular casing erected on the shovel for preventing displacement of the plough E.

No. 2966. THOMAS R. WAY, Springfield, Ohio, U. S., 29th December, 1873, for 5 years: "Eccentric Mill Stone Pick." (Marteau à piquer les meules, à eccentricque.)

Claim.—1st. The head or body A, provided with the stud F, in combination with the blade B, and the cam lever D, or equivalent fastening device; 2nd. The head A, provided with the stud F, and cam lever D, in combination with the blade B, and spring plate E; 3rd. A mill stone pick having its handle attached at, or near the upper end of the head or body in order that the weight may be below the handle; 4th. In combination with the body or holder, constructed as described, the double ended reversible blade, provided with a series of holes or recesses to receive the fastening stud.

No. 2967. FRANCIS H. WHITMAN, Harrison, Me., U. S., (Assignee of Elias H. Woodsum), 5th January, 1874, for 15 years: "Gain Cutting Machine." (Machine à entailler.)

Claim.—1st. The cutter-head as described for the purpose of cutting the recess in the improved sleeper and for similar uses; 2nd. The combination of the platform c, stops h, trucks o, guides or tracks m, tracks e, guides d, shaft i, and cutter heads.

No. 2968. JOHN McLARTY, Strathroy, Ont., 5th January, 1874, for 5 years: "Flexible Ladder." (Echelle élastique.)

Claim.—The combination and adjustment of the lines *a, d, d', h,* and *m, o,* to the hooks *b, c,* and *e, f,* and to the ladder *c, f, j, i,* the combination of the hooks *b, c,* and *e, f,* with the brace *n, p,* and the wheels and axle *i, k,* with the ladder *c, f, h, i,* for the purposes set forth.

No. 2969. FREDERICK R. BUTCHER, St. John, N. B., 5th January, 1874, for 5 years: "Improvement on Spring Bed Bottoms." (Perfectionnement des fonds de lits à ressorts.)

Claim.—The combination of slats *D,* and the hinged-joints *E, E,* as set forth.

No. 2970. WILLIAM T. RAND, Fitch Bay, and TIMOTHY B. RIDER, Magog, Que., 5th January, 1874, for 5 years: "Saw Arbour." (Un essieu de scie.)

To centre saws upon their arbours when the central openings of the saws are of greater diameter than the arbours on which it is desired to mount them.

Claim.—1st. The combination of the radial pins or dogs *E, E,* and the sharply pointed and tapering screw *H;* 2nd. The combination with the radial pins *E, E, E,* and the sharply pointed and tapering screw *H,* of the springs *F, F, F,* and the spring caps *G, G, G.*

No. 2971. JOHN T. POOLE, JOHN S. ALLEN, CHARLOTTE M. N. ALLEN, wife of J. S. Allen, JOHN WILLIAMSON, GEORGE N. CLARK, DAVID B. JONES and ELISHA MOORE, Canterbury, N. B., 5th January, 1874, for 5 years: "Life Preserving Dresses and Air Buoys Combined." (Vêtements et bouées à air de sauvetage combinés.)

Claim.—1st. A life dress of undivided parts, having an elastic opening in the hood and closed by outer and inner hoops *B, B,* the latter provided with a tympan furnished with a flat oval rubber ring *E;* 2nd. The hoops *B, B,* receiving intermediately the edge of the hood around the opening and secured together by screws or other contrivance for excluding water; 3rd. In combination with the undivided dress *A,* the air buoys *H,* arranged two in front and two in rear and provided with inflating tubes *I,* and straps *J, K, L, M, N,* as set forth for maintaining the buoys in position.

No. 2972. CHARLES H. BILLINGS, Cleveland, Ohio, U. S., and JEFFERSON T. RAPLEE, Montreal, Que., 5th January, 1874, for 5 years: "Automatic Railway Car-coupler." (Attelage de voiture de railroute automatique.)

Claim.—1st. The bunter head *A,* with recess *E,* in combination with catch block *C;* 2nd. The catch block *C,* with flap *D,* in combination with bell crank *I,* and apparatus for actuating the same; 3rd. The combination of the catch block *C,* and flap *D,* with link or chain *H,* and rod *G,* with elbow *G';* 4th. The combination of the catch block *C,* and flap *D,* with link or chain *K,* rod *L,* with eye *L',* and rod *M,* with crank *M'.*

No. 2973. HARVEY L. LOWMAN & ROYAL M. BASSETT, Birmingham, Ct., U. S., 5th January, 1874, for 15 years: "Swaged Shanks for Shovels, Spades, Hoes, &c." (Douilles estampées pour les pelles, bêches, houes, &c.)

Claim.—1st. The combined process described for making shovels, spades, hoes, scoops, or other analogous articles in one piece from sheet metal by cutting the sheet for the body of the shovel and with a projection from the rear edge thereof which is to form the hollow shank and at one swaging operation between dies giving the form required for the shovels and the half form to the projecting part which is to form the projecting hollow socket and then by the second swaging operation completing the hollow tubular projecting socket for the reception of the handle; 2nd. Shovels, spades, hoes, scoops and analogous articles, such as are made from sheet metal and with a hollow shank when the said shank and blade or body are formed from a single piece of sheet metal.

No. 2974. WILLIAM O. GROVER, Boston, Mass., U. S., 5th January, 1874, for 5 years: "Bird Cage." (Cage d'oiseau.)

Claim.—A bird cage, having the subchamber *b,* covered by the top-plate *c,* in which is formed the passage *f.*

No. 2975. GEORGE CALCOTT, Thorold, Ont., 5th January, 1874, for 5 years: "Base Burner Stove." (Poêle à foyer de base.)

Claim.—1st. The outer cylinder *F,* surrounding the stove above the combustion chamber *A,* and secured in position by the flanged ring *c,* and top *G;* 2nd. The air duct *K,* arranged to combine the base of the stove and ring *C,* for conveying cold air from below the base; 3rd. The close drawer *M,* arranged to slide within the base and resting thereon, for receiving ashes; 4th. The employment of the hot air oven *J,* with a stove having a jacket cylinder for distributing heat as described.

No. 2976. NORMAN P. SLADE, Rockford, Ill., U. S., 5th January, 1874, for 5 years: "Writing Fluid." (Encre à écrire.)

Claim.—A writing fluid composed of water, borax, extract of log-wood, bichromate of potash, prussiate of potash, glycerine, and alcohol, in the proportions set forth and compounded as described.

No. 2977. VINCENT C. MEYERHOFFER, Rutland, Vt., U. S., 8th January, 1874, for 5 years: "A Mail Bag." (Une valise à lettres.)

Claim.—1st. The frame *C,* composed of two long and two short sections connected by the hinges *J, J, J;* 2nd. The cap or apron *B,* composed of one long and one short section connected by the hinge *J;* 3rd. The use of rivets applied to the frame *C;* 4th. Construction of tag plate strap *E,* and spring *I,* which secures the address in place *H.*

No. 2978. JAMES A. WELCH, Hamilton, Ont., 8th January, 1874, for 5 years: "A Flat Brush." (Un pinceau plat.)

Claim.—1st. The double bevel or wedge-shaped ferrule *a,* constructed and stamped out by dies in one piece; 2nd. The arrangement of the two rows of nails *d, d,* on the sides, and the end nail *c,* as specified.

No. 2979. WILLIAM H. PORTER, Bradford, Ont., 8th January, 1874, for 5 years: "Dental Plate." (Plaque dentaire.)

Claim.—The bead or rib *B,* formed upon the surface of dental plates below the ordinary vacuum chamber, and connected at its ends with the rim *c,* formed upon the back edge of the said plates.

No. 2980. WILLIAM FERRIS, Pleasant Plain, Ohio, U. S., 8th January, 1874, for 5 years: "Knife and Pitman Connection for Harvesters." (Manière d'ajuster la lame à la bielle des moissonneuses.)

Claim.—The tapering hole formed through the eye *a,* of the sickle bar *A,* and the branched end *b,* of the pitman *B,* having a screw thread cut in the said hole in one or both of said branches and the wooden pin *C,* to form the connection between the cutter bar and pitman of a harvester and mower.

No. 2981. JOHN O. JONES, Boston, Mass., U. S., 8th January, 1874, for 15 years: "Reversible Rake." (Rateau réversible.)

Claim.—A hand rake head formed of metal in one casting or piece, consisting of the two rows of teeth *A, B,* the one fine, the other coarse, the central bar *C,* and the shank *D,* the same being constructed and adapted to be applied to a suitable handle, as set forth.

No. 2982. JEAN B. GULLY, Montreal, Que., 8th January, 1874, for 5 years: "Method of Preparing Steel Belts for Curing Rheumatism." (Méthode de confection des ceintures d'acier pour guérir les rhumatismes.)

Claim.—Constructing a belt of cast steel forged or laminated and annealed to the blue tint for alleviating and curing rheumatic pains.

No. 2983. WILLIAM DUNLOP, Toronto, Ont., 8th January, 1874, for 5 years: "Stench Trap for Sewers." (Clapet d'égout.)

Claim.—The trap or door *c,* constructed in one piece or with a lower sub-trap *c',* hinged to the end of the drain pipe *a.*

No. 2984. JACKSON RICHARDS, GEORGE W. WAITT, EZEKIEL C. SHAPLEY & CHARLES FENNER JONES, Philadelphia, Penn., U. S., 8th January, 1874, for 5 years: "Locomotive Chimney." (Cheminée de locomotive.)

Claim.—1st. The combination with a locomotive chimney of an obstruction *F,* for contracting the interior of the body of the chimney above the exhaust pipe; 2nd. The combination of an obstruc-

tion F, and screen E, with a locomotive chimney; 3rd. The lower portion of the screen made of the tapering form described, so as to increase the annular space between the chimney and the screen from the obstruction upward, as specified.

No. 2985 ALLAN S. McDONELL, Osgoode, Ont., 9th January, 1874, for 5 years: "Improvements in Cultivators." (Perfectionnements aux cultivateurs.)

Claim.—1st. A cultivator having its frame A, mounted centrally on two wheels with an adjustable castor wheel N, supporting its rear end and having the rotating toothed cylinder J, suspended in bearings from the rear end of said frame in combination with the fixed tooth M, all constructed and arranged to operate as described; 2nd. In combination with the frame A, having the cylinder J, and tooth M, arranged to operate as described, the adjustable seat V, and the tongue U, hinged to the frame at or near its centre, whereby more or less weight can be applied to the cylinder and the frame with its attachments be left free to follow the undulations of the surface as set forth.

No. 2986. BARAK T. NICHOLS, Roselle, N. J., U. S., 9th January, 1874, for 5 years: "Improvement on Nails and Spikes." (Perfectionnement des clous et chevilles.)

Claim.—As a new article of manufacture in a nail or spike formed of sheet metal and grooved, ridged or corrugated longitudinally to stiffen it as described.

No. 2987. ROBERT S. JARVIS, Toronto, Ont., 9th January, 1874, for 5 years: "Quilting Frame." (Métier à piquer.)

Claim.—The combination of the slotted bolt G, with the legs D, D, and the rollers C, C.

No. 2988. PIERSON COPE, Perryopolis, Penn., U. S., 9th January, 1874, for 10 years: "Fence Bar Bracket." (Console de p-rche de palisade.)

Claim.—1st. The fence bracket C, having the pivoted blocks a, in combination with the horizontal bars A; 2nd. The bracket C, pivoted to the post B, and holding the pivoted blocks a.

No. 2989. WILLIAM T. DOREMUS, New York, U. S., 9th January, 1874, for 15 years: "Springs for Furniture and other purposes." (Ressorts de meubles et autres.)

Claim.—An improved spring formed by connecting elastic blocks A, and rigid blocks B, with each other alternately by means of flexible connections C.

No. 2990. FREDERICK E. DIXON, Toronto, Ont., 9th January, 1874, for 5 years: "Sash Fastener." (Arrête-croisée.)

Claim.—The dog C, having fan-shaped wings E, E, in combination with the dovetail-shaped notch G.

No. 2991. JOHN J. LAHAYE, Reading, Penn., U. S., 9th January, 1874, for 5 years: "Car-coupling." (Attelage de wagon.)

Claim.—1st. The combination of the independent partitions or guides D, with the sliding bolt B; 2nd. The combination of the said independent partitions or guides with a hinged retaining and releasing device for the coupling pin as described and illustrated in figures 6, of the drawing; 3rd. The combination of the said independent partitions or guides with the sliding bolt F, and with devices connected therewith or any equivalent of the same through the medium of which the separation of the partitions on the introduction of a link may be caused to release the pin B, and effect an automatic coupling of the cars; 4th. The combination of an arrangement of the said partitions or guides, a sliding bolt and coupling pin connected together at the top or forward of a single bent rod and a catch d, adapted to notches on the sliding rod and having a sleeve r, resting on the uppermost partition; 5th. The combination, with the subject matter of the fourth claim, of a chain and rod or retainer F, arranged as described; 6th. The arm K, adapted to the sliding rod F, or loosely sliding thereon, and arranged in respect to the partitions D, as specified.

No. 2992. ELAM F. AUSTIN, Rochester, N. Y., U. S., 9th January, 1874, for 5 years: "Combined Ottoman and Lady's Companion." (Ottomane et boîte à ouvrage combinées.)

Claim.—An ottoman, constructed with indented vertical rectangular sides A, and provided with a hinged lid E, at top, and a horizontal draw board or slide B, whereby upper and lower compartments C, D, are formed for use as a ladies' work-box as set forth.

INDEX OF INVENTIONS.

Air engine, hot, Charles P. Leavitt.....	2957
Bed bottoms, spring, improvements on, Frederick P. Butcher.....	2969
Bird cage, William O. Grover.....	2971
Foot and shoe heel press and lust, John Latham.....	2962
Brush, flat, James A. Welch.....	2978
Bucket for chain pumps, Adon D. Crossby.....	2961
Buoys, air, and life preserving dresses combined, John T. Poole, John S. Allen, Charlotte M. N. Allen, John Williamson, George N. Clark, David B. Jones, and Ellsha Moore.....	2971
Burglar alarm, portable, James H. Thorp.....	2911
" " Flavius J. Bowles.....	2961
Car coupling, John J. Lahaye.....	2991
" " Charles H. Knowlton.....	2949
Car coupler, railway, automatic, Charles H. Billings, and Jefferson J. Raplee.....	2972
Cement lined metal pipes, Melvin Stephens.....	2913
Chain pump, bucket for, Adon D. Crossby.....	2964
Corsets, elastic, Jason L. Thurston.....	2935
Cultivator, improvements on, Allan S. McDonell.....	2985
Curtain fixture, William A. Wheelton, and Joseph S. Dennis.....	2950
Curved lines, and scrolls, instrument for designing and cutting, Israel Kinney.....	2954
Dental plate, William H. Porter.....	2979
Dyers' and printers' use, machine for the manufacture of the extract from hemlock, oak, and other barks as a mordant for, and for tanning, James Foley.....	2916
Earth closet, Isaac S. Russell, and Henry R. Russell.....	2952
Fence bar bracket, Pierson Cope.....	2988
Furnace and stove grate, Samuel Smyth.....	2960
Furniture, &c., springs for, William T. Doremus.....	2989
Gain cutting machine, Frances H. Whitman.....	2967
Gas apparatus, portable, George Lowden.....	2948
Gauges, water, for steam boilers, Delos E. Rice, and W. Mitchell.....	2940
Harvesters, knife and pitman connection for, William Ferris.....	2980
Hay press, Jesse B. Pugh.....	2963
Hot air engine, Charles P. Leavitt.....	2957
Kneading trough, Joseph G. dit Tourangeau.....	2953
Ladder, flexible, John McLarty.....	2968
Life preserving dresses and air buoys combined, John T. Poole, John S. Allen, Charlotte M. N. Allen, John Williamson, George N. Clark, David B. Jones, and Ellsha Moore.....	2971
Locomotive chimney, Jackson Richards, George W. Waltz, Ezekiel C. Sharpley, and Charles F. Jones.....	2984
Mail bag, Vincent C. Meyerhoffer.....	2977
Mill stone pick, eccentric, Thomas R. Way.....	2966
Mitting machine, Grenville M. Stevens.....	2937
Music rest and portfolio, Charles W. Palmer.....	2912
Nails and spikes, improvements on, Barak T. Nichols.....	2986
Oakum, process for preparing, John F. Stairs.....	2958
Oakum, and tow, tarring, ".....	2959
Ottoman and lady's companion combined, Elam F. Austin.....	2992
Paper, &c., process for preparing wood, &c., for the manufacture of, Oswald Meub, and Heinrich Voelter.....	2947
Pipes, metal, cement lined, Melvin Stephens.....	2943
Printers' and dyers' use, machine for the manufacture of the extract from hemlock, oak, and other barks as a mordant for, and for tanning, James Foley.....	2916
Pumps, George Hibberd.....	2931
Pumps, chain, buckets for, Adon D. Crossby.....	2961
Quilting frame, Robert S. Jarvis.....	2987
Rake, reversible, John O. Jones.....	2981
Rheumatism, preparing steel belts for curing, Jean B. Gully.....	2982
Sash fastener, Frederick E. Dixon.....	2990
Saw labour, William T. Rand, and Timothy B. Raker.....	2970
Scrolls, and curved lines, instrument for designing and cutting, Israel Kinney.....	2954
Sewing machines, shuttle, improvements on, James H. Smith.....	2933
Shanks, swaged for shovels, spades, hoes, &c., Harvey L. Lowman, and Royal M. Bassett.....	2973
Shirts, improvements on, Charles W. Jenks.....	2956
Shoe heel pressing and polishing machine, Narcisse Phaneuf.....	2939
Snow plough, Benjamin Morot, and James L. Smith.....	2965
Springs for furniture, &c., William T. Doremus.....	2989
Steam boilers, water gauges for, Delos E. Rice, and W. Mitchell.....	2940
Steam engine, rotary, Peter English.....	2955

Steam motor, rotary, Francis Jessop	2938	Jones, John O., reversible rake.....	2881
Stench trap for sewers, William Dunlop	2938	Kinney, Israel, instrument for designing and cutting scrolls and curved lines.....	2954
Stove, base burner, George Calcott.....	2975	Knowlton, Charles H., car coupling.....	2949
Stoves, heating, improvements on, Edward Gurney	2934	Lahaye, John J., car coupling.....	2991
Stove and furnace grate, Samuel Smyth.....	2960	Lanham, John, boot and shoe heel press and last.....	2962
Straw cutters, reversing, stopping and reducing the motion of the feed rollers of, David Maxwell.....	2932	Leavitt, Charles P., hot air engine.....	2957
Tanning, machine for the manufacture of the extract from hemlock, oak, and other barks for, and as a mordant for printers' and dyers' use, James Foley	2946	Lowden, George, portable gas apparatus	2948
Timber, process for preserving, William A. Lyttle.....	2951	Lowman, Harvey L., and Royal N. Bassett, swaged shanks for shovels, spades, hoes, &c.....	2973
Tow and oakum, tarring, John F. Stairs.....	2959	Lyttle, William A., process for preserving timber.....	2951
Turbine water wheel, Angus A. Herriman	2936	McDonell, Allan S., cultivator	2985
Washing machine, Isaac Erb.....	2945	McLarty, John, flexible ladder.....	2968
Wood working machine, Myron P. Boulton.....	2941	Maxwell, David, reversing, stopping and reducing the motion of the feed rollers of straw cutters.....	2932
Writing fluid, Norman P. Slade.....	2976	Meijh, Oswald, and Heinrich Voelter, process for preparing wood, &c., for the manufacture of paper, &c	2947

INDEX OF PATENTEEs.

Allen, Charlotte M. N., John T. Poole, John S. Allen, John Williamson, George N. Clark, David B. Jones, and Elisha Moore, life preserving dresses and air buoys combined	2971	Morton, Benjamin, and James L. Smith, snow plough.....	2965
Allen, John S., John T. Poole, Charlotte M. N. Allen, John Williamson, George N. Clark, David B. Jones, and Elisha Moore, life preserving dresses and air buoys combined	2971	Nichols, Barak T., nails and spikes.....	2986
Austin, Elam F., ottoman and lady's companion.....	2992	Palmer, Charles W., music rest and portfolio.....	2942
Bassett, Royal M., and Harvey L. Lowman, swaged shanks for shovels, spades, hoes, &c.....	2973	Phaneuf, Narcisse, shoe heel pressing and polishing machine	2939
Billings, Charles H., and Jefferson T. Raplee, automatic railway car-coupler	2972	Poole, John T., John S. Allen, Charlotte M. N. Allen, John Williamson, George N. Clark, David B. Jones and Elisha Moore, life preserving dresses and air buoys combined	2971
Boulton, Myron P., wood working machine.....	2941	Porter, William H., dental plate.....	2979
Bowles, Flavius J., portable burglar alarm	2961	Pugh, Jesse B. hay press	2963
Butcher, Frederick R., spring bed bottoms.....	2969	Rand, William T., and Timothy B. Rider, saw arbour.....	2970
Calcott, George, base burner stove.....	2975	Raplee, Jefferson T., and Charles H. Billings, automatic railway car-coupler.....	2972
Clark, George N., John T. Poole, John S. Allen, Charlotte M. N. Allen, John Williamson, David B. Jones, and Elisha Moore, life preserving dresses and air buoys combined	2971	Rice, Delos E., and Andrew W. Mitchell, water gauges for steam boilers.....	2940
Cope, Pierson, fence bar bracket.....	2988	Richards, Jackson, George W. Waitt, Ezekiel C. Sharpley and Charles Fenner Jones, locomotive chimney.....	2984
Crosby, Adon D., bucket for chain pumps.....	2964	Rider, Timothy B., and William T. Rand, saw arbour.....	2970
Dennis, Joseph S., and William A. Wheelton, curtain fixture	2950	Russell, Henry B., and Isaac S. Russell, earth closet.....	2952
Dixon, Frederick E., sash fastener	2990	Russell, Isaac S., and Henry R. Russell, "	2952
Doremus, William T., springs for furniture, &c.....	2989	Sharpley, Ezekiel C., J. Richards, G. W. Waitt, and C. F. Jones, locomotive chimney	2984
Dunlop, William, stench trap for sewers	2983	Slade, Norman P., writing fluid.....	2976
English, Peter, rotary steam engine	2955	Smith, James H., shuttle sewing machine.....	2933
Erb, Isaac, washing machine.....	2945	Smith, James L., and Benjamin Morton, snow plough.....	2965
Ferris, William, knife and pitman connection for harvesters.....	2980	Smyth, Samuel, stove and furnace grate.....	2960
Foley, James, machine for the manufacture of the extract from hemlock, oak, and other barks for tanning and as a mordant for printers' and dyers' use.....	2946	Stairs, John F., process for preparing oakum	2958
Grover, William O., bird cage	2974	" tarring tow and oakum	2959
Gully, Jean B., method of preparing steel belts for curing rheumatism	2982	Stephens, Melvin, cement lined metal pipes.....	2943
Gurney, Edward, heating stoves	2934	Stevens, Grenville M., mitring machine	2937
Herriman, Angus A., turbine water wheel	2936	Thorp, James H., portable burglar alarm	2944
Hibbard, George, improvements on pumps.....	2931	Thurston, Jason L., elastic corsets	2935
Jarvis, Robert S., quilting frame.....	2987	Tourangeau, Joseph G. dit, kneading trough	2953
Jenks, Charles W., improvements on shirts.....	2956	Voelter, Heinrich, and Oswald Meijh, process for preparing wood, &c., for the manufacture of paper, &c	2947
Jessop, Francis, rotary steam motor.....	2938	Waitt, George W., J. Richards, E. C. Sharpley, and C. F. Jones, locomotive chimney	2984
Jones, Charles Fenner, J. Richards, G. W. Waitt, and E. C. Sharpley, locomotive chimney	2984	Way, Thomas R., eccentric mill stone pick.....	2986
Jones, David B., John T. Poole, John S. Allen, Charlotte M. N. Allen, John Williamson, George N. Clark, and Elisha Moore, life preserving dresses and air buoys combined	2971	Weich, James A., flat brush	2978
		Wheelton, William A., and Joseph S. Dennis, curtain fixture	2950
		Whitman, Frances H., gain cutting machine	2967
		Williamson, John, John T. Poole, John S. Allen, Charlotte M. N. Allen, George N. Clark, David B. Jones, and Elisha Moore, life preserving dresses and air buoys combined	2971

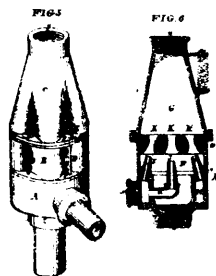
CANADIAN PATENT OFFICE RECORD.

ILLUSTRATIONS.

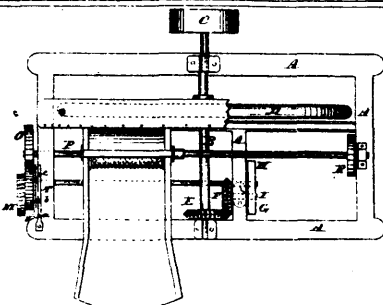
Vol. I.

JANUARY, 1874.

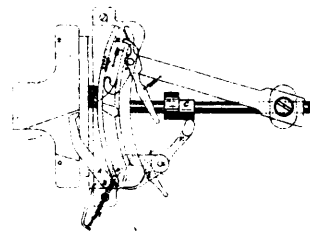
No. 10.



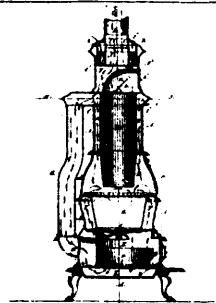
2931 Hibberd's Improvements on Pumps.



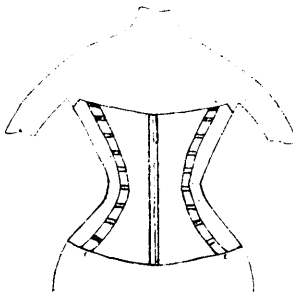
2932 Maxwell's Reversing, Stopping and Reducing the Motion of the Feed Rollers of Straw-cutters.



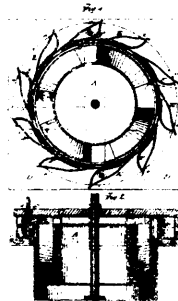
2933 Smith's Improvements on Shuttle Sewing Machines.



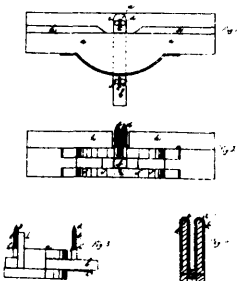
2934 Gurney's Improvements on Heating Stoves.



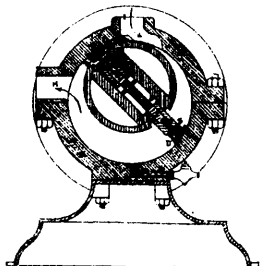
2935 Thurston's Elastic Corsets.



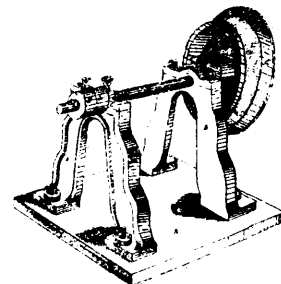
2936 Herriman's Turbine Water Wheel



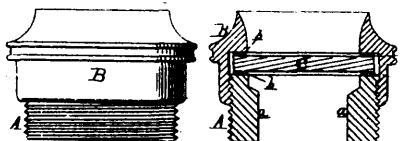
2937 Stevens' Mitring Machine.



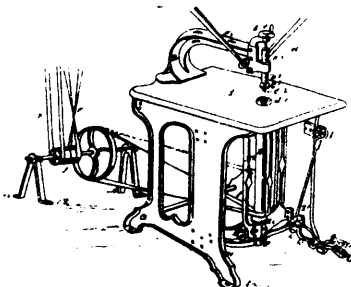
2938 Jessop's Rotary Steam Motor.



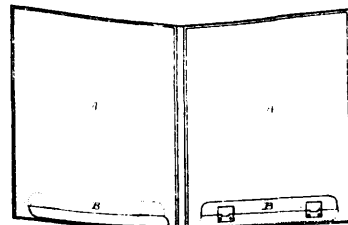
2939 Phaneuf's Shoe Heel Pressing and Polishing Machine.



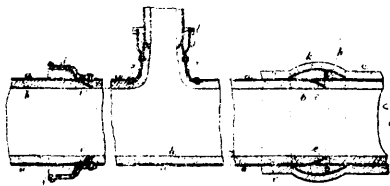
2940 Rice & Mitchell's Water Gauge for Steam Boilers



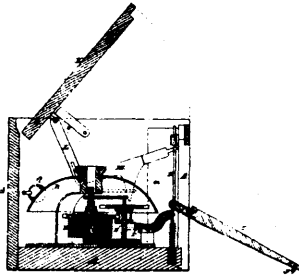
2941 -Boult's Wood Working Machine.



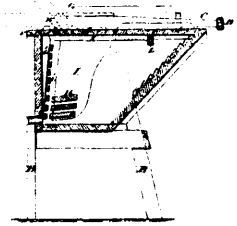
2942 Palmer's Music Rest and Portfolio.



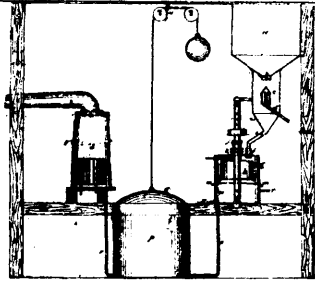
2943 Stephens' Cement Lined Metal Pipes.



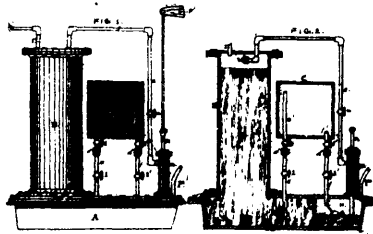
2944 Thorp's Portable Burglar Alarm.



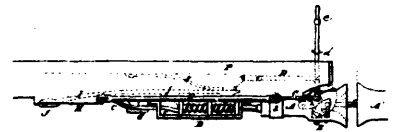
2945 Ebb's Washing Machine.



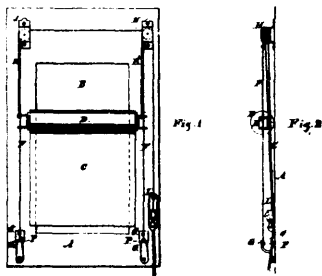
2946 Foley's Machine for the Manufacture of the Extract from Hemlock, Oak and other Barks for Tanning and as a Mordant for Printers' and Dyers' Use.



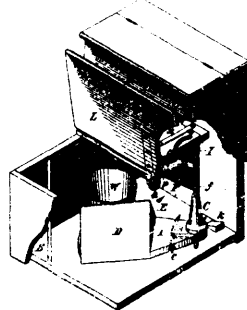
2948 Lowden's Portable Gas Apparatus.



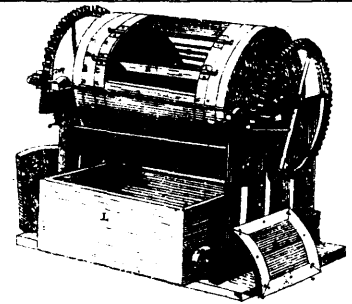
2948 Knowlton's Car-coupling.



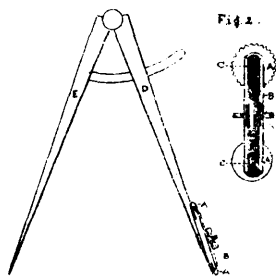
2950 Wheeldon & Dennis' Curtain Fixture.



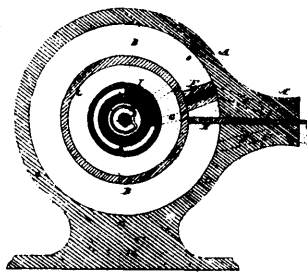
2952 Russell's Earth Closet.



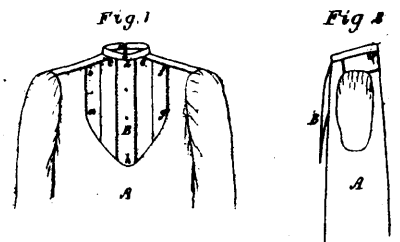
2953 Tourangeau's Kneading Trough.



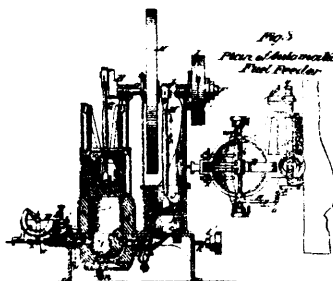
2954 Kinney's Instrument for Designing and Cutting Scrolls and Curved Lines.



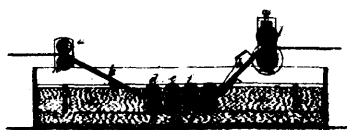
2955 English's Rotary Steam Engine.



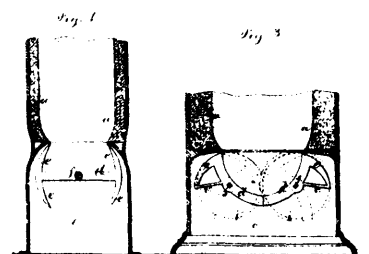
2956 Jenks' Improvements on Shirts.



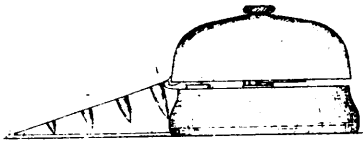
2957 Leavitt's Hot Air Engine.



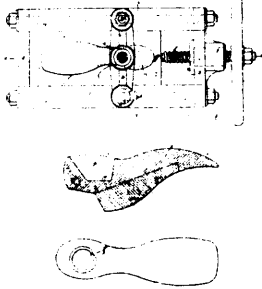
2959 Stairs' Tarring Tow and Oakum.



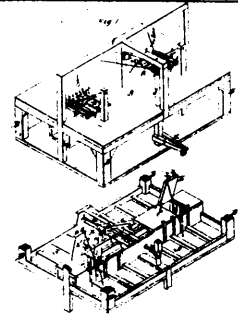
2960 Smyth's Stove and Furnace Grate.



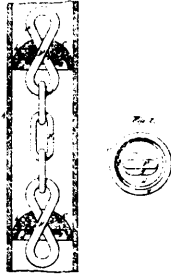
2961 Bowles' Portable Burglar Alarm.



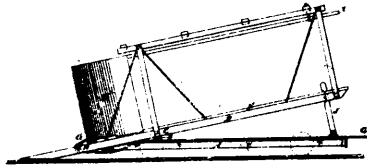
2962 Lanham's Boot and Shoe Heel Press and Last.



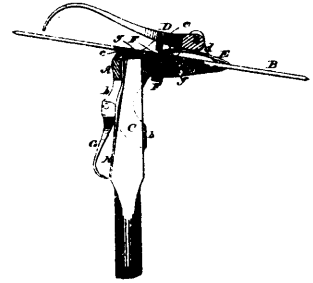
2963 Fugh's Hay Press.



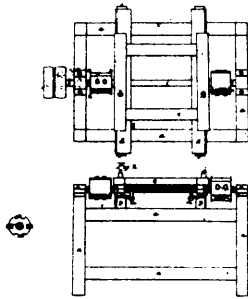
2964 Crosby's Bucket for Chain Pumps.



2965 Morton & Smith's Snow-plough.



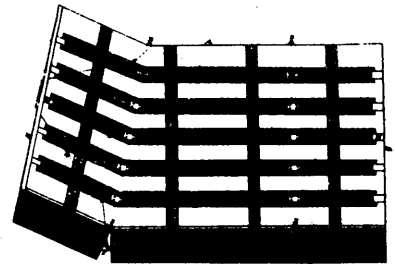
2966 Way's Eccentric Mill Stone Pick.



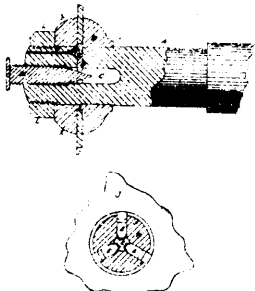
2967 Woodsun's Grain Cutting Machine.



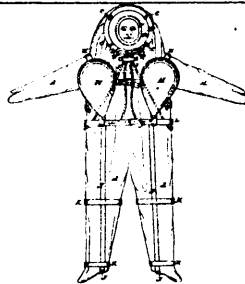
2968 McLarty's Flexible Ladder.



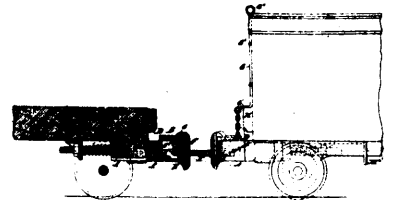
2969 Butcher's Improvements on Spring Bed Bottoms.



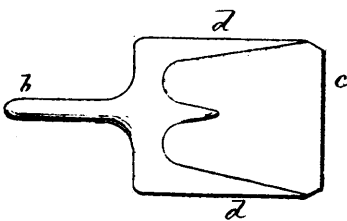
2970 Rand's Saw Arbour.



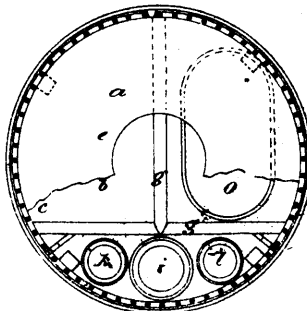
2971 Poole, Allen, Williamson, Clark, Jones & Moore's Life Preserving Dresses and Air Buoys Combined.



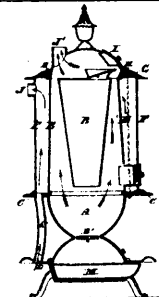
2972 Billings & Raplee's Automatic Railway Car-coupler.



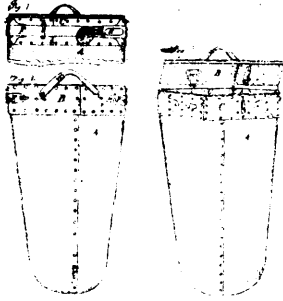
2973 Lowman & Bassett's Swaged Shanks for Shovels, Spades, Hoes, &c.



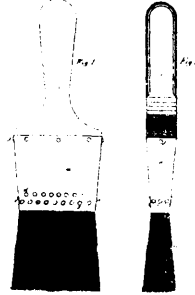
2974 Grover's Bird Cage.



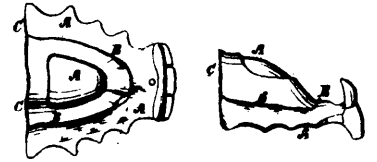
2975 Calcott's Base Burner Stove.



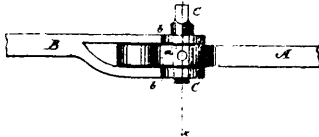
2977 Meyerhoffer's Mail Bag.



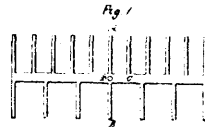
2978 Welch's Flat Brush.



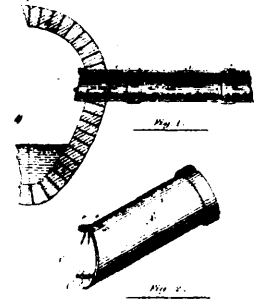
2979 Porter's Dental Plate.



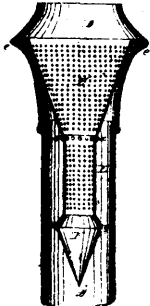
2980 Ferris' Knife and Pitman Connection for Harvesters.



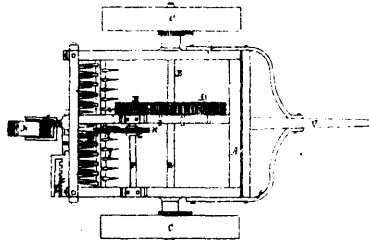
2981 Jones' Reversible Rake.



2983 Dunlop's Stench Trap for Sewers.



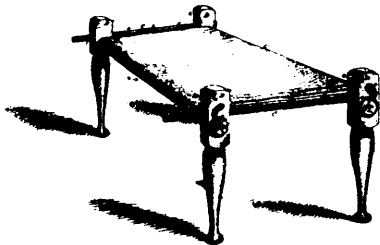
2984 Richards, Watt, Sharpley & Jones' Locomotive Chimney.



2985 McDonnell's Improvements in Cultivators.



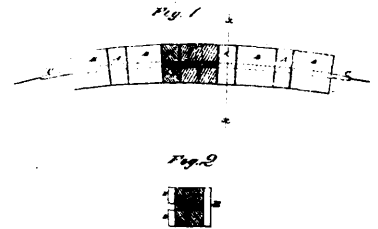
2986 Nichol's Improvement on Nails and Spikes.



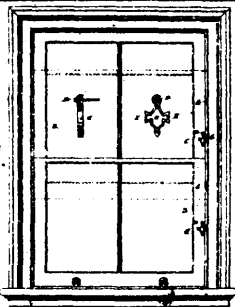
2987 Jarvis' Quilting Frame.



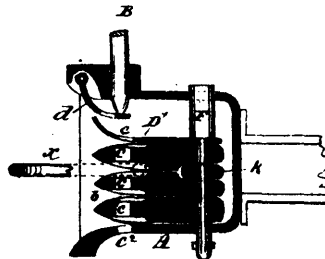
2988 Cope's Fence Bar Bracket.



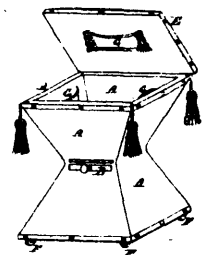
2989 Doremus' Springs for Furniture and other Purposes.



2990 Dixon's Sash Fastener.



2991 Lahaye's Car-coupling.



2992 Austin's Combined Ottoman and Lady's Companion.