



Patent Claims
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* Pamphlets giving full particulars of the mode of applying for patents, under the new law which went into force March 4, 1861, specifying the size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

935.—E. H. Bailey, of Philadelphia, Pa., for an Improved Key Fastener:

I claim connecting the handle to the key of the lock by the pieces, E and G, or their equivalents, arranged for attachment to and detachment from the handle and key of a lock, substantially as set forth for the purpose specified.

936.—Calvin Auburn, of Watertown, N. Y., for an Improvement in Cheese Presses:

I claim, first, The toothed operating segment or sector and platen pressing cam, combined to form but a single device, and the one being concentric and the other eccentric to or with the shaft which carries them and otherwise peculiarly constructed for operation by a lever and pawl to communicate pressing force to the platen, essentially as shown and described.

Second, The combination of the peculiarly constructed and combined toothed operating segment and platen driving cam with the rollers which serve to guide the platen at its sides or ends and the roller interposed between the cam and platen and against which the cam is made to bear, all for operation together, as set forth.

937.—D. N. Allard, of McConnellsville, Ohio, for an Improved Horse-shoe Machine:

I claim the combination of a vertical and a horizontal wheel working together and furnished with dies, for the purpose of swadging out a horse-shoe, substantially in the manner set forth.

I also claim, in combination with a vertical and horizontal die-wheel, the tipping bar, K, for the purposes described.

938.—Ransom Bartle, of Independence, Iowa, for an Improvement in Water Elevators:

I claim the arrangement of the sliding treble-flanged drum, constructed as shown with the brake lever, G, shaft, D, straps, h l, separated strips, N N, and bucket, K, all in the manner and for the purposes shown and described.

[This invention consists in combining with a plunged drum which turns loosely on a crank shaft, and which is allowed to receive an end play on said shaft, a friction brake and rest, and a clutch wheel, arranged whereby the drum may be kept under perfect control in winding up the bucket strap, and also in lowering the bucket into the well. It consists in attaching the strap by which the bucket is hung to the flanged drum by a strip of some elastic material of a suitable length and strength for the purpose of preventing the bucket strap from breaking should the bucket descend suddenly into the well.]

939.—J. B. Bausman, of Rochester, Pa., for an Improved Car Ventilator:

I claim the arrangement of the self-acting fans, D, with the tanks, C E, and curved trunk, B, in the manner and for the purposes shown and described.

[The object of this invention is to supply railroad cars while in motion or during the course of travel with pure air or air deprived of dust and light impurities, which are thrown up by the motion of the cars.]

940.—A. L. Bayley, of Amesbury, Mass., for an Improvement in Shaping and Embossing Hats and Caps:

I claim the shaping or embossing of hats or caps by placing them in a suitable die, A, filling them with sand, or other granular or pulverous material, and subjecting such material to pressure, substantially as specified.

941.—J. A. Bazin, of Canton, Mass., for an Improvement in Bobbins for Spinning Machines:

I claim, first, The improved bobbin, constructed substantially in the manner and for the purposes described.

Second, I also claim the method of holding the coils of yarn or strands, so that they can be safely removed from the spindles on which they are wound, and applied to the creel or other part of the machine in which they are to be used, by means of connecting the movable heads of the bobbin with clamps, or their equivalents, substantially as and for the purpose set forth.

Third, I also claim combining the movable heads with the core, or its equivalent, in the manner and for the purposes described.

942.—Henry Beagle, Jr., of Philadelphia, Pa., for an Improved Safety Hook for Harness:

I claim the arms or bars, A A, connected together by a pivot, a, and provided with curved ends, b, in connection with a ring, B, arranged to fit within the curved ends, b, and form a lock for the arms or bars, substantially as and for the purpose set forth.

[The object of this invention is to obtain a hook that cannot be casually detached or unfastened, and thereby serve as a safe fastening or snap for harnesses and other articles which require a simple but secure means for fastening or attaching their parts together.]

943.—Joseph Bell, of Belleville, Ill., for an Improvement in Bolting Chests:

I claim the interior construction of the chest, shown and described with the ventilators, arranged substantially as described for the purpose specified.

944.—Samuel Boorn, of Lowell, Mass., for an Improvement in Pickers for Looms:

I claim the improved manufacture of raw hide picker as made with a tapering cushion, a backing plate, a and the case, b, arranged and applied together, substantially as specified.

945.—Edward Brown, of Waterbury, Conn., and H. Van Gieson, of Paterson, N. J., for an Improved Machine for Making Butt Hinges:

I claim, first, The combination of the swages, 21, yielding supporting plate, 20, and fixed stop, 24, substantially as described for the purpose set forth.

Second, The combination of the fixed stop, 33, dies, 30, and sliding support, 29, substantially as and for the purpose set forth.

Third, The combination with the files, 45, operating substantially as described, of the overhanging stop, 51, and support, 44, substantially as and for the purpose set forth.

Fourth, The combination of the vibrating support, 44, set screw, 47, and springs, 60, arranged substantially as described for the purpose set forth.

Fifth, The combination with the swages and files described for turning and finishing the joint of the hinge of the fingers, 8, 9 and 10, substantially as described for the purpose set forth.

Sixth, The combination in the manner described of the clutch for disconnecting the power from the machine, with the fingers for moving the blanks forward into position, the fingers being so connected to the clutch lever as to cause an undue strain upon the fingers, 8, 9 and 10, or any one of them to release the clutch lever, 70, and thus disconnect the driving power, substantially as described and shown.

Seventh, The guides, 76, so constructed and arranged in connection with the slides, 76, 77, as to turn the parts of the hinge over and deliver them upon the slides, 76, 77, substantially as and for the purpose set forth.

Eighth, The construction of the slides, 76, 77, 79, 80, and their arrangement in connection with the apparatus for driving the wire by which the parts of the hinge are brought into and held in the proper position to receive the wire, which forms the axis of the hinge, substantially as and for the purpose set forth.

Ninth, The combination with the said slides, 76, 77, 79, 80, of the guide, 84, substantially as and for the purpose set forth.

Tenth, The combination with the driving clamp, 93, of the supporting slides, 104, 105, and springs 106, substantially as and for the purpose set forth.

Eleventh, The combination of the supporting slides, 76, 77, 79, 80, or other support, for the hinge during the operation of driving the wire, and with the clamp, 93, or other device for driving the wire, to form the axis of the hinge, of the stop, 114, said stop being connected with the disengaging apparatus in such a manner that an undue pressure in driving the wire will disconnect the driving power, substantially as and for the purpose set forth.

Twelfth, The combination with each other and with a machine for making hinges of the pliers or cutting nippers, 107, and chisel, 108, operated and operating substantially as described for the purpose set forth.

946.—G. W. Brush, of Brooklyn, N. Y., for an Improvement in Floating Derricks:

I claim the float or vessel, A B C, which carries the derrick or hoisting or lifting apparatus, constructed of two or more movable sections which can be brought into line with each other to form a navigable vessel, or to a position parallel with or at a suitable angle with each other to make their bow and stern ends counterbalance the derrick or hoisting apparatus, substantially as specified.

[This invention consists in so constructing in two or more parts or sections, a float or vessel carrying a boom derrick or other hoisting or lifting apparatus that the said sections may be brought in line with each other, and in that condition present a suitable form for navigation from place to place like any ship or other vessel propelled by sail, steam power or other means, or may be brought to positions parallel or at any requisite angle to each other to produce the stiffness or steadiness in all directions necessary for the purpose of using the derrick or other lifting or hoisting apparatus.]

947.—A. A. Burlingame, of New York City, for an Improvement in Apparatus for Making Extracts under Pressure:

I claim the arrangement of the globe, A, pipes, C D E F, and steam boiler, B, in combination with the extracting vessel, G, pipes, f g, and receiver, H, constructed and operated substantially in the manner and for the purpose specified.

948.—C. W. Cahoon, of Portland, Maine, for an Improvement in Seeding Machines:

I claim the combination of a hopper, centrifugal seed discharger, and their appurtenances, with a breast plate, substantially as set forth.

I also claim the combination of a centrifugal seed discharger with a bag hopper by means of a conductor that receives the seed from the bag and conducts it to the seed discharger, substantially as set forth.

949.—Caroline H. Carnes, of New York City, for an Improvement in Reels:

I claim a reel composed of double pivoted levers, E E, collars, d, e, slide, D, and shaft, A, and otherwise made as shown and described.

[The object of this invention is to obtain an article for the intended purpose (the winding of silk), of much greater utility than those previously constructed, and which may be manipulated with greater ease, and also folded more compactly.]

950.—G. E. Chenoweth, of Baltimore, Md., for an Improvement in Raking Attachments to Harvesters:

I claim, first, The combination of the endless belt or chain, F, and operating mechanism, as described, with a reciprocating rake head, H, for the purpose described.

Second, The combination with the belt, F, of the wrist pin, L, and slotted rod, K, substantially as and for the purpose described.

Third, The depositing apron, O, constructed as described and operated by means of the connecting rod, K, on the endless belt, F, substantially as and for the purpose specified.

951.—J. B. Cooper, of Brooklyn, N. Y., for an Improvement in Plows:

I claim, first, The attaching of the land side, I, to the standard, E, by means of the screw, g, and strap, H, substantially as shown, to admit of the adjustment of the land side, I, as described.

Second, The described arrangement of the foot or standard, L, sector arm, N, bar, K, and pin, l, operating in connection with a plow in the manner and for the purpose set forth.

[This invention relates to improvements in that class of plows which are designed for very general use, that is to say, those plows which may be adapted to perform various kinds of work, such as turning the sod, loosening the subsoil, or performing the work of an ordinary shovel plow or cultivator.]

952.—George Copeland, of North Gray, Maine, for an Improvement in Looms:

I claim the employment, in connection with the lever, E, of the inclined plate, g, the springs, f and h, and the tripping piece, i, the whole applied and combined to operate substantially as and for the purpose specified.

953.—Herbert Curtis and Albert Tufts, of Charlestown, Mass., for an Improvement in Door Alarms:

We claim the escutcheon, d, and the disk, E, in combination with an alarm apparatus operating substantially as described, when the disk, E, is used not only to sound the alarm, when it is revolved in either direction, but also as a fastening for the door, as specified.

954.—Ezekiel Daniels, of Owego, N. Y., for an Improvement in Fracture Bedsteads:

I claim, first, The combination of the hinged frame, G, with the thigh plane, D, and back plane, H, in the manner and for the purpose shown and described.

Second, The arrangement of the axis, C, with the thigh plane, D, leg planes, F, frame, G, and back plane, H, in the manner shown and described.

Third, The combination of the sliding bar, J, and rods, I, or their equivalents, and screw, K, with the thigh plane, D, parts, F, H, and axis, C, in the manner and for the purpose substantially as shown and described.

Fourth, The construction of invalid bedsteads or ambulances with the thigh plane, back plane, and leg pieces made simultaneously adjustable, in the manner substantially as shown and described.

[This invention relates to an improvement in invalid bedsteads for which Letters Patent were granted to this inventor bearing date May 29, 1855. The object of the invention is to perfect and simplify the patented machine above alluded to, and render the same capable of being manipulated and adjusted to suit the patient with greater facility.]

955.—W. E. Dawson, of Lynchburg, Va., for an Improvement in Soaps:

I claim the combination of ingredients forming the composition set forth, which I believe is a new and useful composition of matter.

956.—T. B. De Forest, of Birmingham, Conn., for an Improvement in Thread-winding Guides:

I claim a portable thread-winding guide, substantially as described.

957.—William Dripps, of Coatsville, Pa., for an Improvement in Waterwheels:

I claim, in combination with a spiral cased water wheel, the making of a water chamber between the bottom of the wheel and the bottom of the case that is supplied by ingress at the joint, for the purpose of raising the toe of the wheel, as set forth.

I also claim the converting of that part of the casing, e, into a spring, so that it, as well as the continuation of it, d, may yield to any hard substance that may get into the wheel, substantially as described.

I also claim, in combination with the buckets of a water wheel, the flanges, f, for the purpose of preventing the water, when there is but a small supply, from rising up on the bucket, and thus wasting much of its force, substantially as described.

958.—H. W. Eastman, of Baltimore, Md., for an Improved Portable Folding Bedstead:

I claim the arrangement of the bed frame, A, sliding posts, B, the head board, C, slot plates, G, bolts, F, and thumb nuts, E, substantially as described for the purposes specified.

959.—W. T. Farrar, of Concord, Mass., for an Improved Adjustable Ladder Hook:

I claim a removable ladder hook to be clamped to a ladder when required, one of its clamps being made adjustable, substantially as specified.

960.—Peter Faver, of New York City, for an Improvement in Mill Picks:

I claim the arrangement of the head, A, sockets, a, slots, C, set screws, D, chisels, B B', and handle, F, when these several parts are constructed and combined in the manner and for the purpose specified.

961.—G. C. Flagg, of Tanktown, Ohio, for an Improvement in Gates:

I claim a gate, constructed substantially as described, with the hinge bar inclined to the gate post, in combination with a double jointed hinge, arranged as described, to connect the upper end of the bar with the gate post, for the purpose as set forth.

962.—W. C. Ford, of West Salem, Ohio, for an Improvement in Corn Planters:

I claim, first, Lever, a, plow, b, and sliding discharge spout, c, when combined and operated in the manner and for the purpose set forth.

Second, The combination of lever, d, spring, e, main rod, f, and lever, g, when operated in the manner and for the purpose described.

Third, Grain slides, m, m', regulators, n, n', main rod, f, levers, h, d and g, spring, e, and slide, i, when the whole shall be constructed, arranged and operated in the manner and for the purpose set forth.

963.—Tilmon Gilbert, of Natchez, Miss., for an Improvement in Cotton Presses:

I claim the arrangement of the sliding rack, F, and hinged bars, H, H', with each other and with the follower, I, and gearing, h k l, all in the manner and for the purpose shown and described.

964.—Anderson Godley, of Ithaca, N. Y., for an Improved Refrigerator and Water Cooler:

I claim the combination of a water cooling reservoir, G, and pipe, H, with a refrigerator, A, when located in the ice chamber thereof, so that the ice shall be packed around and in contact with them, substantially as and for the specified.

965.—W. H. Gray, of Dover, N. H., for an Improved Let-off for Looms:

I claim the combination of the balanced rod, D, the arm, B5, disk, B4, and jaw, B6, or their equivalents, for determining the tension of the loom which the loom shall operate and the amount of let-off to be effected after each beat of the lay.

966.—Suspended.

967.—J. O. Haight, of Albany, N. Y., for an Improvement in the Pistons of Steam Engines:

I claim the combination of a divided packing ring or rings with a piston, by means of a spring made out of a flat bar or ribbon of steel bent into a Z-shape, substantially as described, so as to attain the advantages set forth, the spring used in the combination being as an entirety, substantially such as described.

968.—Charles Hardy, of Biddeford, Maine, for an Improvement in Lubricators for Spinning Machinery:

I claim the oil can or feeder having upon its exterior projecting guides or gages, so placed with reference to the saturated cloth, or other fibrous substance that covers the oil hole, that, as the guides traverse upon the fixed parts of any machine, the oiled cloth may cover in contact with those parts of the machine that require to be lubricated.

969.—E. F. Herrington and Josiah Herrington, of West Hoosick, N. Y., for an Improvement in Mowing Machines:

I claim the adjustable lateral brace rod, K, applied and operating in connection with the shoe brace, J, substantially as and for the purposes set forth.

Second, The foot rack, N, operating in combination with the segment, L, or other suitable hoisting device, to hold the heel of the finger bar while raising the point, as explained.

Third, The spring bar, n, operating to hold the aforesaid foot rack out of gear when not in use, to permit the finger bar to rise and fall freely with the uneven surface of the ground.

Fourth, The reversible wedge-shaped plate, i, applied between the finger bar and shoe, in the manner and for the purpose explained.

Fifth, The combination of the spring pins, d, disks or yokes, d2, bosses, c, and loose ratchet pinions, B, operating in the manner and for the purposes explained.

Sixth, The wedge, d5, operating in connection with rods, d4, clutch levers, d3, and yokes, d2, to retract the pins, d.

970.—Chas. Hoffman and Wm. Graichen, of Clinton, Mass., for an Improvement in Temples:

We claim the described loom temple, as constructed, with two separate toothed rollers arranged on one spindle, and having the lesser or salvage roller supplied with a ratchet and pawl, as specified, the other roller being free to revolve on the spindle independently of the said salvage roller.

971.—B. W. Hood, of Pawtucket, Mass., for an Improvement in Thimbles:

I claim a thimble, such as described, having its shell, A, made of several sections, a, covered with enamel and secured together by a ring, b, and cap, C, in the manner and for the purpose specified.

[By the aid of this invention thimbles of an exceedingly rich and beautiful appearance can be produced at a comparatively small expense.]

972.—Edward Horalek, of New York City, for an Improvement in Boilers for Hot Water Apparatuses:

I claim the cast metal head, b, and flange, e, provided with the groove, d, receiving the metallic cylinder or casing, a, combined with the wrought iron ring, e, shrunk on the purposes and as specified.

973.—Jonathan Howard, of West Bridgewater, Mass., for an Improved Garden Hoe:

I claim the said weeding hoe, as constructed, with the guides, d, d, and the handle, B, arranged and combined with the peculiar salient and re-entering angular blade, A, essentially in the manner and for the purpose as specified.

974.—J. W. Howlett, of Greensboro, N. C., for an Improvement in Transmitting Motion:

I claim the employment in transmitting motion from one wheel to another of a beveled elastic wheel, constructed and arranged upon its shaft with compressing collars, in the manner shown and described, so that the diameter of said elastic wheel may be increased or diminished at pleasure, and the transmission of the power may be thus regulated as desired, all as set forth.

[This invention consists in clamping, between two suitable plates, an india-rubber (gutta-percha or other like material) double-beveled wheel, in such a manner that the diameter of the wheel may be increased, and thus made to bear upon the sides of a corresponding grooved driving wheel, or driven wheel, for the purpose of increasing the rolling friction of the two wheels, so that casual slipping will be prevented.]

975.—Eli Huddleston, of Lawrence, Kansas, and B. M. Harrison, of Terre Haute, Ind., for an Improvement in Presses:

We claim the particular arrangement of the follower, F, screws, H H H, gearing, J J K K, and rods, L L, with the box, A, top, f, screws, d d d, bars, b b, and nuts, e, head, E, and bars, D, as and for the purposes shown and described.

[The object of this invention is to obtain a very simple and powerful press for general purposes, and one that will not monopolize much space, and may be manipulated by any one of ordinary ability.]

976.—Duane Hull, of Newburgh, N. Y., for an Improved Clothes' Dryer:

I claim the concave surfaces of said block, B, in combination with said four pieces or arms and line or cord, substantially as and for the purpose specified.

977.—Andrew Hunter, of Solano county, Cal., for an Improvement in Grain Separators:
I claim a vibrating trough, B, suspended by adjustable chains, in combination with screws, c, c', and screen, D, adjustable by means of plate, d, and box, F, and spout, G, arranged in relation to each other, as described, and for the purpose of separating grain.

978.—J. J. Johnston, of Alleghany, Pa., for an Improvement in the Distillation of Hydro-carbon Oils:
I claim the process and method of purifying, decolorizing and deodorizing rock or petroleum oil by distilling it with common wood charcoal, in proportions substantially described.

980.—Anson Judson, of Brooklyn, N. Y., for an Improvement in Lamps:
I claim the contraction of the cone, A, or its equivalent of glass or other transparent material, as and for the purpose described.

980.—J. K. Kilbourn and E. E. Kelbourn, of Norfolk, Conn., for an Improvement in Knitting Machines:
We claim, first, The combination of a traveling needle in a knitting machine, with automatic mechanism for causing it to travel along the gang of needles of the machine, substantially as set forth.
Second, The combination of a traveling needle with mechanism for withdrawing the needle, whose place the traveling needle is to occupy from the gang at work previous to the substitution of the traveling needle in its place, substantially as set forth.
Third, The combination of a traveling needle with mechanism for reinserting the other needle of the gang, whose place the traveling needle has occupied after the traveling needle has been removed therefrom, substantially as set forth.
Fourth, The combination of a traveling needle with a mechanical instrument for transferring the stitch from the needle that is withdrawn from the gang at work to an adjacent needle, substantially as set forth.
Fifth, The combination of a traveling selvaige needle with a thread guide, by means of devices which cause the thread guide to vary its delivery of yarn in correspondence with the change in the position of the traveling selvaige needle relative to the other needles of the machine, substantially as set forth.
Sixth, The combination of a traveling needle with a series of needles which move to and fro past a thread guide, but do not travel laterally to each other, substantially as set forth.
Seventh, The combination of a traveling selvaige needle with mechanism for reversing the movement of the needle carriage in such manner that the time at which the movement is reversed depends upon the position of the traveling selvaige needle, substantially as set forth.
Eighth, The combination of the series of sinkers of a knitting machine with a traveling instrument for withdrawing the sinkers which happen to be at the selvaige of the fabric from their positions in the series, substantially as set forth.
Ninth, The combination of the series of sinkers of a knitting machine with a traveling instrument for withdrawing a portion of the sinkers outside of the gang at work from their positions in the series, substantially as set forth.
Tenth, The combination of instruments for gripping the yarn with mechanism, that causes them to act at the time the selvaige needles are forming their loops, substantially as set forth.
Eleventh, The combination of gripping instruments with mechanism for operating them and the needles in such manner that the gripe is relaxed in time to prevent the breaking of the yarn by the action of the needles, substantially as set forth.
Twelfth, The combination of the thread guide with mechanism for depressing it immediately after the last needle in the series at work has been fed with yarn and before the needle is withdrawn into its nosing, substantially as set forth.
Thirteenth, The combination of traveling temples with a knitting machine for forming work of variable width in such manner that the position of the temples is varied as the number of needles at work increase or diminish, substantially as set forth.
Fourteenth, The combination of a whip roll of unequal diameter at different parts of its length with the take-up rolls of a knitting machine, substantially as set forth.
Fifteenth, The combination of instruments for varying the strain upon the fabric between the place where the knitting is effected and the take-up rolls with a knitting machine for forming work of variable width, substantially as set forth.
Sixteenth, The combination of under supports, having bearings for the needles outside of the sinkers, with a depressible thread guide, constructed and operated substantially as set forth.

981.—John Laing, of Hoboken, N. J., for an Improved Gas Generating Steam Boiler:
I claim, first, Combining one or more retorts, A, with a steam boiler, C, substantially in the manner and for the purpose specified.
Second, The arrangement of a series of gas pipes, E, and air holes, d, in combination with the secondary fire-chamber, D, of a steam boiler, G, constructed and operating substantially in the manner and for the purpose shown and described.
Third, The arrangement of the three-way-cock, N, and conical vessel, Q, in combination with the tanks, P, P', and retort or retorts, A, constructed and operating substantially in the manner and for the purpose set forth.
Fourth, Mixing the oil and water before it passes into the retort or retorts, as and for the purpose described.
Fifth, The arrangement of the two gasometers, L and O, rod, m, weighted arm, p, or its equivalent, three-way-cock, N, and rockshaft, o, in combination with the supply tanks, P, P', and retort or retorts, A, constructed and operating substantially in the manner and for the purpose specified.

982.—Mark Levy, of New York City, for an Improvement in Retorts for the Manufacture of Gas from Wood:
I claim the arrangement and use of the elliptic-shaped retort, A, with the central unremovable reheating flues, E, E', &c., dividing said retort into two parts, constructed and combined together in the manner and for the purpose substantially as described.

983.—R. B. Light, of Dunkirk, N. Y., for an Improved Machinists' Instrument for Determining Geometrical Lines, Centers, &c.:
I claim the combination of devices arranged substantially as described, so as to constitute one instrument, whereby the several operations referred to and illustrated may be executed as set forth.

984.—W. A. Lightfall, of New York City, for an Improvement in Feed Water Apparatuses for Steam Boilers:
I claim the combination of the delivery pipe, F, and the feed pipe, H, when arranged and located, in relation to each other and to the hot well, G, as described and for the purposes set forth.

985.—Linus Merrill, of Janesville, Wis., for an Improvement in Grain Separators:
I claim the screens, C, D, when subdivided into smaller screens, a*, provided with central troughs, F, G, and chutes, a, and used in connection with a screen, E, to operate as and for the purpose set forth.
[The object of this invention is to obtain a simple and efficient machine whereby foreign substances may be thoroughly separated from grain, and different kinds of grain separated from each other, such as oats from wheat, &c.]

986.—Alexander Millar, of New York City, for an Improvement in Cork-cutting Machines:
First, I claim the laterally adjustable bed plate, G, arranged on table, A, and combined with the blank holder, c, and its accessories; and, in combination therewith, the second adjustable plate, G', arranged on bed plate, G, and pivoted at one end, f, substantially as set forth, for the purpose of adjusting the blank holders during the operation of the knives in cutting the corks.
Second, I claim, in combination with the horizontal reciprocating knife frame, B, the inclined plate, P, pivoted arm, n, shaft, m, arm, h, and the grooved collar, P', an arbor, v, with the pivoted arm, l, horizontal bar, s, on frame, A', spring, 6, and the bar, 7, on knife frame, B, all arranged and operating in harmony substantially as described and represented.
Third, I claim securing the horizontal knives, D, D', to the knife frame, B, substantially in the manner set forth, so that these knives may be adjusted vertically and at the same time, so that they may be pitched to any desirable angle with a vertical line.
Fourth, I claim the extension arms, 20 and 21, adjustable stem or post, 17, tube, 23, and blank carrier arm, 24, adjustable pivoted arm, 30, pulley wheel, v, with its weight and cord, 27, 25, in combination with a cam, K, on knife frame, B, all arranged and operating as and for the purposes set forth.

987.—Henry Napier, of Brooklyn, N. Y., for an Improvement in Apparatuses for Manufacturing Turpentine and Resin:
I claim the arrangement together for joint operation, in the manner substantially as shown and described, of the jacketed vacuum strain-

ing vessel, A, retort, B, boiler, C, and condenser, D, for the purposes set forth.
[The object of this invention is more especially to obtain a very superior and colorless resin.]

988.—John Nobbitt, of Philadelphia, Pa., for an Improvement in Hair Cloth Looms:
I claim driving the nippers in a hair cloth loom, by means of the rod, J, and rockshaft, I, when the latter is caused to oscillate by a crank on the same shaft which drives the lay, substantially as described.

989.—Samuel Orr, of East Springfield, Ohio, for an Improvement in Apparatuses for Dressing Feathers:
I claim, first, The combination with the steam jacket of a feather-dressing machine, of screens covered with slides, arranged and operating substantially as described.
Second, The combination with a steam chamber and steam jacket, arranged as described, of the pipes, B, F, and cocks, C, f, arranged and operating as described.
Third, The combination with a feather-dressing machine, constructed as described, of a fan arrangement, and operating in the manner set forth.

990.—Henry Pennie, of Brooklyn, N. Y., for an Improvement in Roller Skates:
I claim a roller skate provided with two rows of tubular adjustable rollers, and the whole constructed and operating as shown and described.
[The object of this invention is to increase the rolling surface laterally without materially increasing the friction thereof, thereby giving the skate a firmer bearing than has been obtained by the employment of a single line of rollers, and enabling the beginner in the art of skating to balance himself and stand on the skates with perfect ease. It also has for its object a novel mode of applying two sets of rollers to the foot stand, whereby said rollers may be adjusted transversely, and brought nearer together or set farther apart, for increasing or diminishing the lateral bearing surfaces, according to the degree of proficiency which the wearer has attained in using the skates.]

991.—C. H. Perkins, of Providence, R. I., for an Improved Toe Calkin for Horseshoes:
I claim the improved toe calkin described, consisting of a steel piece, A, provided with one or more tapering steel spurs, b, placed midway between the two extremities, or nearly so, for the purposes described.

992.—Alois Peteler, of New Brighton, N. Y., for an Improved Apparatus for Disinfecting Foul Air in Vessels:
I claim, first, The arrangement of a fan blower, B, or its equivalent, in combination with the refrigerating chamber, F, and tubes, C and H, passing through the deck, A, of a vessel or other closed space, substantially in the manner and for the purpose set forth.
Second, The arrangement of the rotary hollow shaft, E, with channels, e, apertures, g, g', and drums, G, with abutments, h, in combination with the fanblower, B, or its equivalent, tubes, C and H, and with the refrigerating chamber, F, constructed and operating in the manner and for the purpose described.

993.—Thomas Phillips, of Ann Arbor, Mich., for an Improved Handle for Hammers, &c.:
I claim dividing the handle into two parts, and applying a spring (either lever or spiral) in such a manner as to spread the two parts of the handle apart, allowing them to spring together, and vice versa, when a blow is struck, and the surrounding of the whole with some pliable or springy substance, as india-rubber, the whole being arranged as described for the purposes specified.

994.—Abraham Quinn, of New York City, for an Improvement in Apparatuses for Distilling Oils:
I claim the rectifier, composed of the inverted siphon, E, F, with its faucets and other appendages, substantially as described, applied in combination with the still and condenser, in such a manner as to be capable of effecting the several operations and purposes set forth.

995.—G. P. Reed, of Roxbury, Mass., for an Improved Watch Escapement:
I claim so applying the lever, in combination with chronometer escapement, that the whole impulse given to the balance in one direction is transmitted through the lever, and the whole impulse in the opposite direction is transmitted directly to the "chronometer impulse pallet," substantially as described, locking and unlocking the scape wheel but once at each and every impulse given by said wheel.

996.—M. T. Ridout, of Milwaukee, Wis., for an Improved Railroad Indicator:
I claim described combination and arrangement of reversible dial plate, and hand, with its actuating mechanism, substantially as set forth.

997.—Horatio Rodd, of Chestnut Hill, Pa., for an Improved Linen Smoother:
I claim the combination and arrangement of the frame, a, a, a, cross bars with springs, B, B, the bed, C, C', the roller, D, the bars, E, E, the drums, F, F, and the bands, G, G, substantially as and for the purpose specified.

998.—Benj. Russell, of Brooklyn, N. Y., for an Improved Door Bolt:
I claim the arrangement of the sliding button, C, with the locking pin, e', and inclined plane, d, in combination with the drop catch, D, and ratchet teeth, e, on the edge of the bolt, A, constructed and operating in the manner and for the purpose specified.
[This invention consists in arranging the button which serves for sliding the bolt in and out in such relation to a drop catch, which, by entering into ratchet teeth on the edge of the bolt, retains the same in any desired position, that, by pushing in said button, the drop catch is made to release the serrated edge of the bolt, thus allowing the latter to slide freely in either direction, and that by turning said button after the bolt has been pushed out, it, together with the bolt, is firmly locked.]

999.—E. B. Savage, of Cromwell, Conn., for an Improved Mode of Attaching Gun Stocks to Pistols:
I claim the lever-like and longitudinally-moving hooked clamping dog, C, and its set screw, D, applied in connection with the lock frame of a pistol, to operate in combination with suitable locking devices on the neck piece of the stock, substantially as and for the purpose specified.
[This invention consists in an improved mode of applying and operating a clamping dog arranged within the lock frame of the pistol, in combination with suitable holding devices on the neck piece of the stock and in or on the lock frame, whereby a very firm attachment of the gun stock is made and facility for discharging it is provided.]

1,000.—I. D. Seely, of Milford, N. Y., for an Improvement in Water Wheels:
I claim the stop or cut-off, E, in connection with the buckets, a', c', and chute, F, arranged relatively with each other for joint operation as described.
[This invention relates to an improved water wheel of that class in which it is designed to obtain power from both the direct and reacting force of the water; or, in other words, by impact and reaction. The object of the invention is to obtain a very simple wheel of the kind specified; one that may be economically constructed, and will give a large percentage of the power of the water employed to operate it.]

1,001.—O. W. Seely, of Albany, N. Y., for an Improvement in the Construction of Salt Kettles:
I claim the combination of the central arch, B, containing the fire grate, with the two inverted arches at b, to form the bottom part of the boiler in the shape represented and described, and for the purpose set forth.

1,002.—Porter Seward, of Chaseville, N. Y., for an Improvement in Wagon Brakes:
I claim the arrangement of the crank, G, pulley, e, chain, f, and adjustable rod, H, with the draft pole, F, lever, I, spring, K, brake bars, J, J, rods, g, g, and pivoted rubbing blocks, n, n, all in the manner and for the purposes shown and described.
[The object of this invention is to so combine the brakes with the pole of the wagon that when the driver checks the horses, the brakes will be automatically applied, and when the horses are started the brakes will be released from the wheels.]

1,003.—H. L. Shaw, of Milan, Ohio, for an Improvement in Sewing Machines:
I claim the special arrangement of the slider, O, operated as shown, with its pins, P and Q, for the purpose of operating therewith either the looper shown in Fig. 4 or that shown in Fig. 5, to make a single or a double chain stitch, in the manner substantially as described.

1,004.—W. H. Short, of Brooklyn, N. Y., for an Improved Inlet for Sewers:
I claim the cast iron basin head, formed of the trap box, D, the mud sill, E, and arched curb, G, constructed and combined in the manner substantially as described for the purposes set forth.

1,005.—D. E. Somes, of Biddeford, Maine, for an Improvement in the Method of Preserving Meat:
I claim the described mode of curing meats, &c., by cutting off side currents of air and introducing into the building a cooler, a drier and a purer air than that near the surface of the earth, substantially as and for the purpose specified.

1,006.—J. A. Spear, Jr. (assignor to Wm. J. Kane), of Manchester, Pa., for an Improvement in Cultivators:
I claim the arrangement of the draft beam, a, second beam, e, scraper, d, and slots, 1, 2, 3 and x, when constructed substantially as described, for the purpose set forth.

1,007.—David Stewart, of Annapolis, Md., for an Improvement in Coffee Pots:
I claim combining such a biggin with a chamber of decoction and chamber of condensation, in which the water of condensation is returned to the magma in the manner set forth.

1,008.—J. I. Storer, of Philadelphia, Pa., for an Improvement in Desulphurizing Coal and Ores:
I claim the employment, in the manner specified, of ammonia in connection with steam in the process of desulphurizing coals and ores.

1,009.—C. F. Taylor, of New York City, for an Improvement in Apparatuses for Reducing Spinal Curvatures:
I claim, first, The combination of the bench, 1, adjustable supports, 3, and adjustable pad or strap, 4, substantially as described, and in such a manner as to accomplish the purpose set forth.
Second, The head rest represented in Fig. 4, constructed as described, by which the weight of the head is made to exert a pressure upon the shoulder and a lifting force under the other, substantially as described.

1,010.—C. F. Taylor, of New York City, for an Improvement in Apparatuses for Reducing Spinal Curvatures:
I claim, first, The combination of the posts, 1 and 6, with their adjustable supports, 8 and 2, one being hinged to the floor to allow of lateral adjustment, and the other either hinged to the floor or stationary, as may be desired; the whole being constructed, combined and arranged substantially as set forth.
Second, The combination with the two posts, 1 and 6, and their adjustable supports, 8 and 2, above referred to, of a third post, 16, constructed in a similar manner to the first two and hinged at the bottom, as and for the purpose set forth.

1,011.—C. F. Taylor, of New York City, for an Improvement in Apparatus for Reducing Spinal Curvature:
I claim the combination of the vibrating upright or support, 2, pad, 6, and handles, 7 and 8, substantially as described for the purpose set forth.

1,012.—W. R. Thomas and M. Emanuel, Jr., of Catsaugua, Pa., for an Improvement in Composition for Blasting Powder:
We claim the composition or blasting powder made of nitrate of soda, flower of sulphur, ground bark, and water, in the proportions and manner set forth.
[This invention consists in the employment of a composition made of nitrate of soda or Chili saltpeter, mixed with sulphur and ground bark, for blasting purposes.]

1,013.—G. B. Turner and J. A. Vaughn, of Cuyahoga Falls, Ohio, for an Improvement in Grain Separators:
We claim the combination of the series of screens inclined in one direction and the series of directing boards inclined in an opposite direction, with the receiving boxes and fan blast, and a shake motion, substantially as and for the purpose set forth.
We also claim a device for giving a rapid shake motion to the riddles or screens, without jarring them, an eccentric and yoke, constructed, arranged and operating as described and represented.

1,014.—T. G. Voorhis and W. B. Whitman, of New York City, for an Improved Mosquito Net:
We claim the combination of the cam catch, D, with the jointed frame and netting, as described and for the purpose set forth.

1,015.—S. H. Walker and M. C. Walker, of Boston, Mass., for an Improvement in Gas Retorts:
We claim a horizontal retort formed with a flat bottom and cylindrical flanged ends, and tapering gradually in size from the center toward each end, in the manner shown and described, and for the purposes explained.
[This improvement is more particularly designed for retorts for generating gas from melted resin or other hydrocarbons which are in a naturally liquid state or become liquefied by heat. Its object is to obtain a more equal distribution of heat throughout the whole length of the retort, and to this end it consists in making the retort of larger caliber and with greater generating surface at the middle of its length or decreasing in caliber from the middle toward either or both ends.]

1,016.—G. R. Wilmot, of West Meriden, Conn., for an Improved Head for Screws and Tacks:
I claim the screw or tack described, as a new article of manufacture when constructed in the manner described and involving the features of advantage and novelty set forth.

1,017.—J. S. Winson, of Providence, R. I., for an Improvement in Machines for Tentering and Drying Cloth:
I claim a machine for tentering textile fabrics, constructed substantially as described, combined with and traveling in a hollow vertical shaft, through which a continuous current of heated air is passed, substantially as described.

1,018.—S. E. Woodworth, of Murphy's, Cal., for an Improved Amalgamator:
I claim an airtight vessel, A, partially filled with mercury, in combination with two concentric tubes, B, E, and table, C, all constructed as and for the purposes described.

1,019.—Theodore Burr, of Battle Creek, Mich., assignor to himself, Augustus Rower, and Parcel Brinkerhoff, Michigan, for an Improvement in Sewing Machines:
I claim the combination of the cam, G, the levers, H and I, operating upon the horizontal shaft, K, having forked prongs, d and l, b, and spiral twist, and the fork, a, as described and for the purpose set forth.
And also the cog or spur, F, in combination with the shaft, B, provided with feathers, R, R, and hook for F, operated upon by spring, o, substantially as and for the purpose set forth.

1,020.—J. A. De Brame (assignor to himself and Benjamin Gurney), of New York City, for an Improvement in Skates:
I claim, first, The hook or hooks, a, turned backward, as shown and described in Fig. 1 of the drawings, in combination with the heel spur or spurs, c, fitting loosely into a hole made in the heel of the boot, for the purpose of retaining the hook, a, in its place, as set forth.
Second, Combining with the hook, a, and heel spur, c, the spring latch, d, e, when the latter is arranged on the back part of the heel of the boot and catches into a recess in said heel, as set forth.



1,021.—John Fowler, Jr., of Leeds, England, assignor to W. P. Tatham, of Philadelphia, Pa., for an Improvement in Machinery for Plowing and Tilling Land. Patented in England Sept. 8, 1856:

I claim combining the pulley on the anchor carriage which receives motion from the engine by the pulling of the plows or other implements, with the drum that operates the anchor rope, by means of the intermediate mechanism described, or any equivalent therefor, as described and for the purpose set forth.

1,022.—John Fowler, Jr., of Leeds, England, assignor to W. P. Tatham, of Philadelphia, Pa., for an Improvement in Machinery for Plowing and Tilling Land by Steam. Patented in England Sept. 8, 1856:

I claim combining with the central pair of sustaining wheels and with the frame which carries the two gangs of plows or other tilling instruments, a steering apparatus, substantially as described.

1,023.—John Fowler, Jr., and David Greig, of Leeds, England, assignors to W. P. Tatham, of Philadelphia, Pa., for an Improvement in Machinery for Plowing and Tilling Land. Patented in England Feb. 28, 1856:

We claim mounting two gangs of plows or other tilling instruments in suitable framework, and connecting them with a pair of sustaining and gaging wheels interposed between the two gangs, substantially as described, when this is combined with the pulling ropes or chains and suitable means of attachment thereto, substantially as described, so that by the operation of an engine on one side of a field and suitable anchoring apparatus at the other side, the said instruments can be drawn across the field alternately in opposite directions, as described.

And we also claim mounting the frame which carries the two opposite gangs of instruments on a central axis, so that it may be tilted thereon, substantially as described, in combination with the mode of connecting the ropes or chains with the said tilling frame, or the equivalent thereof, on opposite sides of the axis of vibration, as described, so that by reversing the pull on the ropes, the frame shall be tilted to lift one gang out of action at the end of each course, and draw down into action the other gang for the return course, as set forth.

1,024.—B. F. Hooper, of Birmingham, Conn., assignor to E. N. Baldwin, of Huntington, Conn., for an Improved Machine for Making Braces for Carriage Tops:

I claim the clamping dies in combination with the swaging or shaping dies working in succession, substantially as described, for the purpose set forth.

1,025.—C. L. Johnston, of Little Falls, N. Y., assignor to A. M. Colver, of Albion, Mich., for an Improvement in Rotary Pumps:

I claim the pistons, H H, passing through the cylinder, I, and revolving around a center, G, in the manner specified, when said pistons, H H, are formed thinner in the middle, and with the curved sides, for the purposes and as specified.

1,026.—G. W. Martin, of Morrisania, N. Y., assignor to himself and William Sheppard, of Tremont, N. Y., for an Improvement in Pumps:

I claim the pipes, b and c, valves, n and o, arranged as specified, in combination with the air vessel, d and piston, e, for the purposes and as set forth.

And, in combination therewith, I claim the arrangement of the deflectors, l and m, in the reservoir, h, for the purposes specified.

1,027.—A. C. Mason (assignor to himself, H. H. Mason and D. M. Smith), of Springfield, Vt., for an Improvement in Hooks and Eyes:

I claim the forming of the snaps or spring guards, c, with bent ends, d, which extend into openings, e, in the hooks at the back of the bills, substantially as and for the purpose set forth.

1,028.—J. H. Merrill (assignor to the Merrill Patent Fire-arm Manufacturing Company), of Baltimore, Md., for an Improvement in Breech-loading Fire-arms:

I claim the combination of the shoulders upon the levers and upon the casing of the gun, to take the recoil of the breech plug up, instead of allowing it to come entirely upon the pivots, and for security against the springing up of the lever, substantially as described.

1,029.—J. H. Merrill (assignor to the Merrill Patent Fire-arm Manufacturing Company), of Baltimore, Md., for an Improvement in Breech-loading Fire-arms:

I claim, first, in combination with the lever by which the breech is opened and closed, a projection upon or over which the hammer rests when down upon the nipple, to prevent said lever from rising or opening the breech accidentally, substantially as described.

Second, I also claim, in combination with the lever by which the breech of the gun is opened and closed, a projection which extends under the cap when on the nipple, so that the raising of said lever preparatory to recharging the gun shall throw off the exploded cap and leave the nipple free for a fresh cap, substantially as described.

1,030.—Langdon Sawyer, of Springfield, Vt., assignor to himself, and A. M. Billings, of Wethersfield, Vt., for an Improved Shade or Curtain Roller:

I claim making the rod or roller, G, so that it can be extended or contracted longitudinally, when the same is combined with the other fixtures, for operating the shade or netting, substantially as and for the purposes described.

[The object of this invention is to so construct the bar under which the netting or shade passes from a spring roller which winds up the netting or shade, as the case may be, that the whole fixture may be applied to window frames varying in widths, and secured therein with very little labor, without employing the usual fixtures which are secured to the window casing and mutilate it. The nature of the invention consists in making said rod under which the netting or shade passes, adjustable longitudinally, and in securing to the ends of this rod the plates or brackets on which the spring roller has its bearings, whereby the roller and bearing plates may be thus extended and thus adapted to, and secured within any ordinary window frame in a substantial manner.]

1,031.—J. O. Whitcomb (assignor to himself and Joseph Dodin), of New York City, for an Improvement in Hemmers for Hand Sewing:

I claim, first, The plate, A, with its rest, e, tongue, c, and thumb strap, B, for holding the folder, C, and supporting the fabric while the hem is folded, substantially as described.

Second, Providing an opening, i, in the scroll of the folder for the admission of the end of the thumb, substantially as and for the purpose specified.

Hunter Davidson, of the United States Navy, for an Improved Hook for Attaching and Detaching Boats to their Davits:

I claim the catch, C, the strap, S, and the particular form of hook, H, so that it may be fitted to the boat's stem or stern post, so as to be used with their usual outlines; the whole combined and arranged as described.

RE-ISSUE.

N. Wyckoff, of Brooklyn, N. Y., and T. M. Fell, of Charlottesville Mines, Va., for an Improvement in Gold Amalgamators. Patented July 26, 1859:

We claim the process of separating gold or silver from other substances by mixing the whole with water, combining it together with mercury within suitable containing vessels, and there by the action of heat commingling the mercury throughout the entire body of water and substances containing the precious metals, substantially as set forth.

[The nature of this invention consists in a process by which the metals gold and silver can be more economically and effectually separated from their ores or the earthy matter in which they are found than has yet been done.]

DESIGNS.

Charles Prosbtt, of Hudson City, N. J., for a Design for Window Glass.

W. W. Stanard (assignor to Jewett & Root), of Buffalo, N. Y., for a Design for Stoves (3 cases).

J. W., of N. Y.—Good copal varnish is the best known to us for coating the seams of tin buckets used for carrying maple sap, to prevent them from rusting. The varnish, after being applied, should be dried in a warm place, such as an oven heated to a temperature of boiling water. Put it on in two or three successive coats, and dry each time.

F. H. A., of Mass.—It would require volumes of our paper to enumerate all the "wants of the world in the way of chemical processes and manufactures." Any improvement in dyeing, tanning, sugar making, or any of the chemical arts; in the process of making paints, cements, bread, beer, wine, cider, and thousands of other articles, the world is ready to pay for it as soon as it is produced. The field is boundless.

H. R. S., of Pa.—No. 2 of your minerals is red hematite, a good iron ore. No. 1 is magnesian limestone in process of disintegration. The little crystals in it are quartz.

E. R. R., of Ill.—The characters on the slab are merely accidental; similar ones are quite common on mica.

J. B. D., of Mass.—Your idea about the employment of the metallic in air engines is not new. You will find that it has been used for this purpose by reading page 21 of the present volume of the SCIENTIFIC AMERICAN.

U. B., of Pa.—The boiler feeder to which you refer as having been seen at Chester is Giffard's injector. You will find it illustrated and described on page 260, Vol. II. (new series), of the SCIENTIFIC AMERICAN.

W. N., Jr., of Mass.—The silver soap to which you refer has been patented. Sand mixed with soap is not a patentable feature, as some soaps are now made in which there is a mixture of ground pumice stone.

M. M., of Mo.—Lard oil is not an artificial mixture; it is obtained from lard by submitting it to severe pressure in presses constructed for this purpose. You will find the process fully described in Moritt's work on soaps and candles. It requires a peculiar apparatus to manufacture it.

E. W., of N. Y.—For a complete equation of time several circumstances must be taken into account, such as the change in the earth's orbit, the precession of the equinoxes, &c.; but the most important of these, next to the elliptical form of its orbit, is the inclination of the earth's axis to the plane of its orbit.

C. S. P., of N. Y.—We have never seen an explanation of the twinkling of the stars that was at all satisfactory.

P. H. W., of N. Y.—We also have observed that corn-shaped rifle bullets make a smooth round hole in a target.

W. N. R., of Wis.—We should perhaps be better able to give the reason of water rising in your wells during a south wind, if we were familiar with the topography of the region.

J. S. M., of N. Y.—The yeast plant will produce fermentation in suitable liquor. If the fermentation is allowed to continue, it first turns starch into sugar, then the sugar into alcohol, and lastly the alcohol into vinegar.

J. P., of Ala.—We do not remember the particulars relating to the anesthetic effects of the oxyd of glycerine, but we consider it a very unsafe substance to tamper with.

A. H. S., of N. Y.—We have not seen a weighing device such as you describe, and we think a patent may be obtained for it.

A. H. P., of Iowa.—We are not aware that any machine has ever been constructed for punching metal, for the purpose you describe, although the work could undoubtedly be done by machinery provided the demand would warrant it.

T. D., of Pa.—We advise every person who wishes to purchase advertised machines, to examine them for himself and not trust altogether to the opinions of others, as regards their qualities. There is no patent on the common mode of making enameled cloth. You will find a detailed description of the French process for making it on page 265, Vol. XIV. (old series), of the SCIENTIFIC AMERICAN.]

F. D. H., of Md.—Boil a strong solution of fustic and add a very minute quantity of the sulphate of copper and a little log-wood, and apply it warm to the leather with a sponge; it makes a good dark olive-green color.

H. & V., of Ind.—The portable engine illustrated on page 408, Vol. I., present series, of the SCIENTIFIC AMERICAN, affords an answer to your inquiries respecting the advantages of securing the mechanism to a bed plate. You surely have not examined it carefully, or you would have perceived that the power is taken equally from both sides of the boiler, so as to prevent racking on one side.

Money Received

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, April 13, 1861:—

- S. E. A., of N. Y., \$15; J. D. B., of N. Y., \$15; E. B., of N. Y., \$40; M. J. K., of N. Y., \$15; J. N. D., of Iowa, \$15; L. H. D., of Iowa, \$15; G. B., of N. Y., \$25; L. S. B., of N. Y., \$25; S. M. S., of Iowa, \$30; F. F., of N. Y., \$15; S. F., of Ohio, \$25; S. W., of Mass., \$35; L. F. B., of N. H., \$10; S. S. H., of N. Y., \$40; T. C., of N. Y., \$20; M. & L., of Conn., \$15; L. A. B., of N. Y., \$10; J. J. K., of Ill., \$25; J. A. H., of Ind., \$20; E. R. B., of Ill., \$20; W. B., Jr., of N. Y., \$100; F. C., of N. Y., \$20; J. R., of N. Y., \$20; G. W. S., of Maine, \$20; I. P., Jr., of N. Y., \$25; J. G. W., of N. Y., \$40; G. G. C., of Mich., \$15; E. G., of Mass., \$12; H. L. B., of Conn., \$25; J. T. S., of Wis., \$100; A. B. C., of N. Y., \$15; E. H., of Vt., \$10; D. S., of Mass., \$15; G. S. R., of Ill., \$15; S. P. H., of Maine, \$10; C. R., of Ill., \$25; A. M., of Pa., \$25; H. L. P., of Mich., \$15; S. C. D., of Conn., \$25; C. C., of Ind., \$20; C. & P., of Ill., \$10; M. L. P., of Ind., \$15; W. C. F., of Maine, \$15; H. W., of N. Y., \$15; W. K., of N. Y., \$20; B. D. H., of N. Y., \$25; K. & T., of N. Y., \$30; G. of N. Y., \$30; H. Y., of N. Y., \$40; N. C., of N. Y., \$20; J. W. H., of N. J., \$15; D. E. S., of Maine, \$15; F. G. L., of Iowa, \$15; J. H., of N. Y., \$15; C. R., of Vt., \$15; N. L.

- A., of N. Y., \$25; S. D. L., of Mass., \$10; T. C. H., of N. Y., \$15; C. & W., of Maine, \$16; D. O. F., of Mass., \$40; R. R., of N. Y., \$15; J. L. A., of N. Y., \$15; J. G., of N. Y., \$15; L. O. W., of N. Y., \$25; H. W., of N. Y., \$15; G. W. D., of Ohio, \$25; J. E. M., of Pa., \$25; E. D. C., of Vt., \$10; A. H. T., of N. J., \$50; J. H., of N. J., \$10; C. E. L. H., of Conn., \$22; A. B. C., of N. Y., \$15; J. R. R., of Mass., \$40; J. H. F., of Ky., \$50; W. W., of Cal., \$25; A. E. K., of Pa., \$25; P. H. S., of Cal., \$106; W. C. & J. D., of N. Y., \$25; C. H. C., of Mass., \$25; F. B. B., of N. Y., \$25; R. W., of Vt., \$25; J. A. W., of N. Y., \$25; H. N., of N. Y., \$25; E. W. G., of Mass., \$25; L. F. L., of Cal., \$20; J. K. P., of Mich., \$15; S. P., of N. Y., \$25; T. H., of Cal., \$75; P. S. of N. Y., \$25; C. W. S., of Maine, \$15; A. C. K., of N. Y., \$28; I. W. H., of N. J.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending April 13, 1861:—

- K. & T., of N. Y.; G. B., of N. Y.; W. & F., of Tenn.; E. H., of Vt.; F. W. L., of N. Y.; C. R., of Ill.; C. W. C., of N. Y.; N. C., of N. Y.; B. D. N., of N. Y.; C. & P., of Ill.; L. A. B., of N. Y.; J. S. McC., of N. Y.; J. H., of N. Y.; S. D. L., of Mass.; G. & S., of Ohio; L. S. B., of N. Y.; I. P., Jr., of N. Y.; S. F., of Ohio; A. M., of Pa.; S. C. D., of Conn.; J. J. K., of Ill.; J. E. M., of Pa.; J. J. II., of Ky.; C. E. L. II., of Conn.; E. G., of Mass.; H. L. B., of Conn.; C. F., of N. Y.; H. Y., of N. Y.; R. R., of N. Y.; J. R. M., of Texas; P. C., of N. Y.; H. W., of N. Y.; C. C., of Ind.; G. R. B., of Ill.; G. W. T., of N. Y.; W. C. & J. D., of N. Y.; A. H. T., of N. J. (2 cases); R. W. of Vt.; P. A. M., of France; S. P., of N. Y.; J. A. W., of N. Y.; W. W., of Cal.; A. E. K., of Pa.; A. C. K., of N. Y.; I. W. H., of N. J.

New Books and Periodicals Received.

THE BIBLIOTHECA SACRA. Published by Warren & Draper, Andover, Mass.

The number of this most able theological review for the present quarter contains a profound article by the Rev. James McLane, D.D., of Brooklyn, on "Geology and the Bible." It is one of seven essays by different learned authors on as many subjects.

THE TRIUMPHS OF INVENTION AND DISCOVERY. By J. Hamilton Fyfe, published by Nelson & Sons, London, Edinburgh and New York.

This is a very neatly printed and illustrated volume, containing short biographies of the great European inventors of modern times, justly commencing with Coster and Guttenberg, the inventors of printing with single movable types. The histories of printing; the steam engine; the iron manufacture; the electric telegraph; the cotton manufacture, &c., are given briefly and written well, but Mr. Fyfe does not seem to be acquainted with American inventions, which is a great loss to himself and his countrymen.

CHANGE IN THE PATENT LAWS.

NEW ARRANGEMENTS—PATENTS GRANTED FOR SEVENTEEN YEARS.

The new Patent Laws, recently enacted by Congress, are now in full force, and promise to be of great benefit to all parties who are concerned in new inventions.

The duration of patents granted under the new act is prolonged to SEVENTEEN years, and the government fee required on filing an application for a patent is reduced from \$30 down to \$15. Other changes in the fees are also made as follows:—

- On filing each caveat.....\$10
On filing each application for a Patent, except for a design.....\$15
On issuing each original Patent.....\$20
On appeal to Commissioner of Patents.....\$20
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