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- 44,586.—Ball Screw for Fire-arms.—John J. Alises, Washington, D. C.:
I claim the nippers, A, A, and gouges, B B, in combination with the horns, C C, substantially as and for the purpose set forth.
- 44,587.—Ejector for Oil Wells.—J. D. Angier & Frederick Crocker, Titusville, Pa.:
We claim the discharge pipe with its contraction and open lower end substantially as described, in combination with the blast pipe having its lower end turned up and provided with a nozzle, and inserted in the lower open end of the discharge pipe, and below the contraction thereof, substantially as and for the purpose specified.
- 44,588.—Fuse for Explosive Shells.—Clifford Arick, St. Clairsville, Ohio:
I claim, first, The formation of an annular fire-chamber within the radius of a Bormann or curved fuse, by combining a grooved head to its screw-pin or by combining the grooved head of a screw-plug with the inner wall of its soft metal case, substantially as described.
Second, A packing disk, for an annular fuse having on one side of it the necessary wedge or wedges for packing it, and on the other a magazine, as described.
Third, The combination of an annular fire-chamber, situated within the radius of a Bormann fuse with an independent primer, so that the flame generated by the primer is instantly injected into such fire-chamber, from whence escaping at the cut it will ignite the fuse, substantially as described.
Fourth, So combining with a soft metal fuse case, a fuse plug, or a concussion or percussion fuse case, as to securely hold the former in the projectile, by the combined action of the screw thread, and flanged head of the latter.
- 44,589.—Composition for Pavements, etc.—Richard Atkinson, Mount Vernon, N. Y.:
I claim combining broken stone gravel, boiling coal tar and by draught cement, in about the proportions specified, to form a composition for the paving of highways, carriage ways and sidewalks.
- 44,590.—Wire Toaster or Broiler.—Samuel Ayres & Henry J. Chamberlin, Worcester, Mass.:
We claim the combination of the collars, bars, and frame, when constructed and operating in the manner and for the purposes above set forth.
- 44,591.—Method of repairing Casks and Barrels.—Charles A. Baldwin, Boston, Mass.:
I claim as a new article of manufacture the chine blank having a formation, substantially as described.
- 44,592.—Petroleum Lamp.—Wm. B. Billings, Brooklyn, N. Y.:
I claim the combination of all the parts of my burner, in the manner substantially as described and for the purposes represented and set forth.
- 44,593.—Water Elevator.—J. S. Brown, Washington, D. C.:
I claim the curved link, G, constructed and operating substantially as and for the purpose herein specified.
I also claim the chain, I, or its equivalent operating in combination with the curved link, G, or its equivalent, substantially as and for the purpose herein set forth.
- 44,594.—Device for transmitting Motion.—John W. Browning, Mattoon, Ill.:
I claim the combination of the cranks, C F, eccentric, D, shafts, B B', and fly-wheel, G, (one or more) constructed and operating in the manner and for the purpose set forth.
- 44,595.—Churn.—Ebenezer Buel, Sheridan, N. Y.:
I claim, first, In combination with the brackets, F, a rectangular shaped churn with a hollow journal, for the purpose of admitting air into the cavity of the churn, the churn having an inclination upon its axis, the several parts being constructed, arranged and operating as specified.
Second, I also claim in combination with the churn, A, and the frame, B, the brackets, F F, when constructed and used for the purposes set forth.
- 44,596.—Faucet.—G. F. Burkhardt, Roxbury, Mass.:
I claim the sleeve, B, with handle, C, fitting loosely into the tubular socket, A, and operating in combination with the same and with the tube, D, or its equivalent and plug, E, substantially in the manner and for the purpose herein shown and described.
The object of this invention is a faucet which can be fastened to or unfastened from the head of a barrel or cask without straining said head by blows and which will be closed, while the faucet is removed so as to prevent the cask or barrel from getting musty.]
- 44,597.—Steam Generator.—George B. Brayton, Providence, R. I.:
I claim in an apparatus in which steam is generated in tubes having a constant supply of water in combination with said tubes the surrounding of the same with tubes capable of being highly heated so that complete combustion of the gases emanating from the fuel, and while in contact therewith may be effected while its temperature is transmitted to the steam generating tubes, as herein set forth.
- 44,598.—Steam Generator.—George B. Brayton, Providence, R. I.:
I claim the use of plates in the furnace of a steam generating apparatus, substantially as and for the purpose specified.
- 44,599.—Steam Generator.—George B. Brayton, Providence, R. I.:
In combination with a steam generator I claim the employment of a vessel substantially as described operating as a steam drum and feed water reservoir, substantially as shown and described.
In combination with the above I claim forming an exhaust steam chamber under the body of the feed-water so that it shall be heated both from above and from below, substantially as set forth.
- 44,600.—Steam Generator.—George B. Brayton, Providence, R. I.:
In a tubular steam generator substantially as described I claim controlling the supply of water and regulating its action by combining by means of a contracted tube the said generator with a reservoir the water in both being under like pressure, substantially as described.
- 44,601.—Steam Generator.—George B. Brayton, Providence, R. I.:
I claim the combination of a tubular steam generator with a water

- reservoir under the arrangement described so that the water shall be maintained therein at a temperature less than 212° Fah., and be entered the generator by condensing to equilibrate hydrostatic pressure between the generator and the reservoir, substantially as set forth.
- 44,602.—Curtain or Shade Fixture.—Wm. Campbell, New York City:
I claim the wedge, E, and pulley, D, in combination with the spring roller, A, all arranged substantially as and for the purpose herein set forth.
[This invention relates to a new and useful improvement in that class of fixtures for window shades in which the roller on which the shade is wound is provided with a spiral spring to render the roller self-acting in winding up the shade. This invention consists in a new and improved stop mechanism for holding the roller or preventing it from winding up the shade so that the latter may be held or retained at any desired height.]
- 44,603.—Horse Shoe.—Morgan Chittenden, Danbury, Conn.:
I claim as a new improved article of manufacture an animal shoe, the upper, a, band, e, sole, b, substantially as and for the purpose as described.
- 44,604.—Loom Shuttle.—Thomas Clark, Ware, Mass.:
I claim the weight resting upon the filling yarn within the shuttle, constructed as herein described and for the purpose specified.
- 44,605.—Finishing Leaves Trough.—C. A. Codding, Battle Creek, Mich. Antedated Sept. 30, 1864:
I claim the combination with the bed or platform, A, and concaves, B and C, of the adjustably pivoted levers, D, and hooks, E, the whole being constructed and arranged in the manner and for the purpose herein set forth.
- 44,606.—Saw Mill.—Wm. S. Colwell, Pittsburg, Pa., and Utillis Baird, Alleghany, Pa.:
We claim, first, The arrangement of the cone pulley, 10, endless screw, I, wheels 161 23 4 5 and 6, leaders, 7 and 8, rollers, f and f', constructed, arranged, operating substantially as herein described and for the purpose set forth.
Second, The arrangement of the screw, s, swivel nut, y, disk, r, spring, t, strip, g, screw, v, and spring, u, when used in connection with the rollers, f and f', as herein described and for the purpose set forth.
- 44,607.—Watch.—Simeon Coon, Havre de Grace, Md.:
I claim, first, Placing the barrel wheel, A, on the center of the main watch-plate, G, and turning the barrel wheel to wind up the watch by means of the hinged stationary winder, B, as herein described.
Second, I also claim the flanged rim, E, for securing the barrel wheel, A, to the main plate, G, as described.
Third, I also claim attaching the main spring, I, to the center wheel, J, the outer end attached to the rim of the barrel wheel, A.
Fourth, I also claim the arrangement and combination of the barrel wheel, A, hinged winder, B, flanged rim, E, and center wheels, J and C, for winding a watch and setting the hands at the center of a watch.
- 44,608.—Hinge.—Joseph V. C. Crate, Waterbury, Conn.:
I claim a stop composed of a separate metal plate bent or curved, and inserted in a space between the two eyes of the hinge and between the pin and the inner edges of the leaves which abut against said stop, and all constructed and arranged in the manner substantially as and for the purpose herein set forth.
[This invention relates to a new and improved butt hinge and it consists in providing the hinge with a stop arranged in such a manner as not to augment the cost of construction over the ordinary butt hinge, and still be equally as strong and durable as the ordinary butt hinges without stops.]
- 44,609.—Sawing Machine.—Jonathan Creager, Cincinnati, Ohio:
I claim, first, The rests, I, attached at their lower ends to the back of the feeding-table, G, and passing up in rear of the saw, the same being constructed and operating as set forth.
Second, The provision in rear of a circular saw, of the inclined gravitating apron or flap, M, whose lower edge is connected by means of a hinge, m, to the chute, D, and whose upper edge is supported in near proximity to without touching the saw blade, substantially as set forth.
- 44,610.—Lifting Pump.—Frederick Crocker, Titusville, Pa.:
I claim combining with a piston of a lifting pump a sustaining valve, whose lower end is placed above, concentric and free to play on the rod of the piston and has its seat in the barrel of the pump, substantially as and for the purpose specified.
- 44,611.—Weighing Apparatus.—Samuel Darling, Bangor, Maine:
I claim the improved scale beam as made with a series of separate fulcrum and scales of divisions arranged therewith, and to be used with one or more movable weights, and a rod or its equivalent, substantially as explained.
I also claim the movable beam weight as made with the index arm and so as to straddle and be capable of sliding on the beam, as specified.
And with the scale beam as made with a series of separate fulcrum and scales of divisions as described, I claim the construction of the saddle box, x, with the two notches, X s, the same being used in manner and for the purpose as specified.
- 44,612.—Cooking and Heating Stove.—Henry Decker, of Duncansville, Pa.:
First, I claim the combustion chamber, C C', formed in front of the fire-chamber by the continuation and junction of the vertical flues, 4 and 5, with the flue, 6, so as to expose the smoke and gases to an intense heat, and thereby cause them to be consumed before they escape from the stove, substantially as described.
Second, The metallic caps, II and 12, in the front wall of the fire chamber, constructed and applied substantially as and for the purpose described.
Third, The combination of the lime drawers, 3 and 8, or either of them, with the flues of a heating or cooking stove, substantially as described.
[This invention is designed for stoves wherein bituminous coal is burned, although it may also be fitted for other fuel. One of the objects of the invention is the consumption of the smoke, and another is the absorption of the carbonic acid gas evolved by the combustion of the fuel.]
- 44,613.—Weather Strips.—Abraham Dodder, of Washington, Iowa:
I claim the hinged or pivoted plate upon the door strip or bed of the frame of the door, in combination with the plates or strips attached to the door, the parts being constructed and arranged in relation to each other and operated as herein set forth.
- 44,614.—Churns.—Harrison Doolittle, of Aurora, Ind.:
First, I claim the arrangement of horizontal dash, B C b', driving arbor, D, d, furring undercut and grooved recess, a, J, and tapering dovetail key, E, the whole being arranged and operated substantially as set forth.
Second, The arrangement of the removable horizontal brake, L, I, cavity, M, ledge, N, and pin, O, as described.
- 44,615.—Folding Paper Collars.—Merriman P. Dorsch, of New York City:
I claim preparing paper collars for making the fold in a curved line, by subjecting the paper, while resting on a table or equivalent surface, to the action of a greasing wheel on a radial vibrating arm, substantially as described.
And I also claim the method of folding of paper collars which are folded in a curved line, by drawing them between two rollers which are free to turn on independent studs, when one of the said rollers is shorter than the width of the outer or folded part, substantially as described.
- 44,616.—Leather-pressing Machine.—Gerhard F. Dressing, of Buffalo, N. Y.:
I claim the iron frame, A, having journal boxes formed in the top thereof, for the support of the upper roller, and slots, g, for grinding the lower roller, and forked fulcrum lever, D, in combination with

- the convex and concave rollers, B C, pedal, E, and connecting rod, F, for the purposes and substantially as set forth.
- 44,617.—Camp Stove.—Jacob Dunton, of Philadelphia, Pa.:
I claim the hood or casing, B, employed in connection with the boiler, A, to adapt the same to be heated by a fire built upon the ground, and to protect the fire in the manner and for the purposes explained.
- 44,618.—Machine for Shearing Sheep.—Wm. M. Eccles, of Oberlin, Ohio:
I claim the combination of the cam wheel, the ratchet, the pulley, the cutters and spring as above described and for the purpose set forth.
- 44,619.—Apparatus for Evaporating Saccharine Liquids.—George E. Evans, of Boston, Mass.:
I claim, first, The combination of the perforated pipes or their equivalents for conveying steam equally to all parts of the heating chamber with a separate vessel or steam trap, so arranged and operating as to prevent the presence of water in the said heating chamber.
Second, In combination with rotating disks or plates a revolving pan or pans, operating substantially as described.
- 44,620.—Reefing and Furling Sails.—George H. Felt, of New York City. Antedated Sept. 25, 1864:
I claim the combination of ropes in form and manner of lacings, for the purpose of reefing and furling sails, the said lacings remaining stationary and the sail being reefed by the yard being lowered, all arranged and combined as specified.
- 44,621.—Anchor Clutch.—Henry Fleming, of Chicago, Ill.:
I claim the bed piece, A, the slide, B, and the prongs, D, when arranged and operating substantially as and for the purpose set forth.
- 44,622.—Furnace-grate Bar.—Henry Gerner, of New York City:
I claim, first, The groove, a, extending in a longitudinal direction, throughout the upper edge of the grate bar, A, in combination with the transverse holes, b, constructed and operating substantially as; and for the purpose set forth.
Second, In combination with the aforesaid groove, a, and holes, b, I claim the diamond-shaped corrugated projections, c, c, constructed and operating as specified.
[This invention consists in the arrangement of a groove, extending in a longitudinal direction through the entire upper edge of a grate bar, which is provided with holes passing transversely through the same near its upper grooved edge in such a manner that by the ashes accumulating in said groove, and by the current of air passing through the transverse holes and through the ashes in the groove, the upper edge of the grate bar is kept comparatively cool, and the burning out of the same is obviated or prevented.]
- 44,623.—Machines for Making Bolts.—Moore Hardaway, of St. Louis, Mo.:
I claim the combination of the die box, b, header, k, and clamp dies, d d', in a bolt or rivet-heading machine, when operating in the manner and for the purpose herein set forth.
- 44,624.—Curtain Fixture.—Stewart Hartshorn, of New York City:
I claim a pawl, E, attached to the bracket or other fixture, near a shade roller, to engage with a notched hub, E, attached to one end of said roller, when said parts are used in connection or combination with a spiral spring, C, placed within the shade roller, and all arranged to operate substantially as and for the purpose herein set forth.
- 44,625.—Grain Screen.—James Hatfield and John Wall, of Ogden, Ind.:
We claim the hopper, H, and reel, B, when constructed and arranged substantially as shown and described, and operating in the manner and for the purposes set forth.
- 44,626.—Bucket for Preserving Butter, Fruit, etc.—E. G. Hoffman, of St. Louis, Mo.:
I claim the bucket, A B C D, constructed substantially as herein described, and represented as a new article of manufacture and trade, for the purposes set forth.
- 44,627.—Pumps.—Benjamin J. C. Howe, of Syracuse, N. Y.:
I claim the construction and operation of the valve, c, within a hollow piston, as shown and described.
I also claim the extension of the valve, d, in combination with the piston, b, and valve, c, substantially as shown and described.
- 44,628.—Mowing Machines.—M. G. Hubbard, of Syracuse, N. Y.:
I claim the curve, D, in the corner plate, substantially as and for the purpose set forth.
- 44,629.—Mowing Machines.—M. G. Hubbard, of Syracuse, N. Y.:
I claim the manner of conducting and strengthening the cutter bar, substantially as and for the purpose set forth.
- 44,630.—Percussion Locks for Discharging Mining Blasts.—E. Hughes, of McCartysville, Cal. Antedated Oct. 4, 1864:
First, I claim the barrel, A, provided with a hammer, D, tip, B, nipple, C, trigger, G, with cog, H, all constructed and operating substantially as herein shown and described.
Second, The combination of the trigger, G, catch, F, and hammer, D, with the prop, I, dog, H, and cord, J, substantially as and for the purpose set forth.
- 44,631.—Submarine Shot Conductor.—E. H. Hull, of Millersburgh, Ohio:
I claim the tube, and valve, G, together with the metallic lining, F F, when arranged and operating in the manner and for the purpose set forth.
- 44,632.—Slide Valves for Steam Engines.—William Huson, of Wilmington, Del.:
I claim a valve, D, with channel, d, and apertures, e e' f, arranged in combination with the seat, A, and ports, a' b' c', substantially as and for the purpose set forth.
Also, the exhaust, c, applied in combination with condenser exhausts, b b', and valve, D, or its equivalent, in the manner and for the purpose substantially as described.
[This invention consists in a valve with a double exhaust—one into the chimney or open atmosphere and the other into a condenser, in such a manner that through the first or ordinary exhaust the pressure of the steam in the exhaust-end of the cylinder is reduced to that of the ordinary atmosphere, or nearly so, and the condensation of the remaining steam can be effected in the same manner and by the same means as by a common low-pressure-condensing engine.]
- 44,633.—Machines for Cutting Files.—James Jervis, of Baltimore, Md.:
I claim, first, The combination of the regulator, Y, with the movable conical cam, whereby the thickness of the shape is made to regulate the force of the blow of the chisel.
Second, The combination of the regulator aforesaid with the levers, through the action of which as described in the specification the thickness of the shape is made to impart a lateral movement to the conical cam.
Third, The arrangement of the devices, whereby the shape is kept upon the anvil, as described, and the regulator is made to impart a longitudinal rocking motion to the shape, and is moved forward under the chisel, so as to secure a perfect resistance to the blow of the latter, notwithstanding the shape and the flatness of the anvil.
Fourth, I also claim the combination of the saddle-shaped anvil proper, permitting the screw moving it to be placed beneath it with the rest on which it slides another clasp, f, f, on the endless screw, T.
Fifth, The combination of the endless screw on bolt, g, Fig. 4, and cogwheel, f, with the regulator, whereby the parallelism of the latter with the edge of the chisel may at all times be secured.
Sixth, I also claim the combination of the chisel with the adjustable block, D, arranged as described, whereby the tooth of the file may be cut sharper or blunter, as required.
Seventh, I also claim the arrangement of the chisel frame with the

