

wheat, by shaking them on a table or tables, made slightly concave or rough, substantially as specified, in combination with a current or currents of air blown over the surface of such table or tables, to carry off the hulls, whilst the kernels are retained or held back by the form of the surface of the table or tables, as specified.

8,683.—Ring Spinner.—Martha A. Dodge, Bedford, Mass., Administratrix of the Estate of Geo. H. Dodge, deceased. Patented Jan. 27, 1852:

I claim the combination of the standard or projection, B, with the ring and traveler, substantially in the manner and for the purpose of removing or loosening waste from the latter, as specified.

8,720.—Harvester.—B. Densmore, New York City. Patented Feb. 10, 1852. Reissued Jan. 28, 1862:

I claim, First, Hanging the driving wheel in a supplementary frame or its equivalent, which is hinged at one end to the main frame, while its opposite end may be adjusted and secured at various heights, or be left free, as desired, whereby the cutting apparatus may be held at any desired height for reaping, or be left free to accommodate itself to the undulations of the ground, for mowing, substantially as described.

8,724.—Grass Harvester.—Louisa R. Ketchum, Buffalo, N. Y., Administratrix of Estate of Wm. F. Ketchum, deceased. Buffalo, N. Y. Patented Feb. 10, 1852. Reissued Feb. 28, 1854. Re-reissued Jan. 2, 1857:

I claim, First, Extending the shoe, H G, from the heel of the rack or finger bar upward and forward, and firmly connecting its continuation with the draught when the finger bar is located as set forth, so that the power by which the machine is drawn, shall, through the shoe, be communicated to and draw forward, the heel of the rack or finger bar thus relieving the great strain which would otherwise come upon the lateral connections of the rack or finger bar with the wheel frame, while the heel is enabled to slide over obstructions, substantially as shown.

8,851.—Moth Trap to Beehives.—E. W. Phelps, Elizabeth, N. J. Patented April 6, 1852:

I claim the peculiar construction of the moth trap, as herein described, composed of a slide having the center groove and two side grooves, and the metallic hinge cover, arranged, all as set forth in the specification.

8,888.—Capping of Screws.—Charles T. Grilley, New Haven, Conn. Patented April 20, 1852:

I claim the attachment of a brass, copper, or other suitable metallic cap to, and its combination with, an iron-wood screw, substantially in the manner and by the process described in the foregoing specification (which I conceive to be the only practicable method in which the same can be usefully effected), whereby, and by means of the successive operations of punching or stamping, the neck is first cut through the shell, and then, after being adjusted to the groove or slot in the head of the screw, the sides thereof are driven down into and made to press closely against the sides of the slot, leaving the bottom of the groove or slot uncovered, so that the cap when closed round the head of the screw, will preserve its hold without liability to be turned or displaced by the screw driver, which works upon the iron surface at the bottom of the slot, and against the covered sides thereof, thereby furnishing to the public, at a comparatively small cost, a better screw having all the beauty and superior strength of an iron one. The invention is equally applicable to steel screws, which may be capped in a similar way.

8,881.—Feed Apparatus of Planing Machines.—Joel Whitney, Winchester, Mass. Patented April 13, 1852:

I claim the arrangement by which the upper feed roll is allowed to yield to any inequalities in the board, and at the same time draw down upon the surface to which it has yielded, in proportion to the resistance to the cutting tools; that is, connecting the fixed shaft with the vertical sliding bearings of the upper feed roll, by means of the swinging, inclined, and vertical arms, n and k, the gears on the fixed shaft operating the lower feed roll, and also playing into the gears which move the upper feed roll, set a latter gear having their bearings in the intersection of joint of the said arms, the arrangement being substantially as herein above set forth.

8,769.—Drying Grain.—Henry G. Bulkeley, Kalamazoo, Mich. Patented March 2, 1852. Reissued June 27, 1854:

I claim the method of seasoning or kiln-drying substances, by using steam in a vessel, which has an opening communicating with the atmosphere to limit the pressure for the purpose of transmitting caloric to the substances to be seasoned or kiln-dried, or the vessel or vessels containing them, substantially as specified.

8,756.—Manufacture of Zinc White.—Martha M. Jones, Staten Island, N. Y., Administratrix of Estate of Samuel T. Jones, deceased. Patented Feb. 24, 1852:

I claim the use of a porous or fibrous bag or receiving chamber, with porous sides or bottom, or an air-tight chamber with a straining or porous bag adapted to the inside thereof, and used in connection either with a blowing or exhausting apparatus, so that the products of the distillation and oxygenation of zinc or other volatile metals may be separated from the accompanying air and gases, which latter will be forced, or otherwise drawn through the pores of the cloth bag or chamber, and escape into the atmosphere.

8,778.—Machines for Printing Floor Cloth.—Simeon Savage, Pomfret, N. Y. Patented March 2, 1852:

I claim the arrangement of the printing mechanism, the stamping down mechanism, and the mechanism for advancing the piece or strip of cloth, or of material to be printed and pressed, or stamped, such arrangement being as exhibited in the drawings, and as above described.

8,789.—Canal Lock Gate.—Charles Neer, Brooklyn, E. D., N. Y. Patented March 9, 1852:

I claim, First, The opening of the lower gates of a canal or river lock, outwardly or down stream, in combination with the means described, or their equivalent for operating them, for the double purpose of saving length in the lock chamber with the same water level, and of opening the gates to be opened before the chamber is entirely empty, so that the escaping water may carry out with it the boat, raft, or other thing being passed through, with the least possible delay.

8,810.—Pattern Card for Jacquard Looms.—Samuel F. Thomas, Laconia, N. H., and Eliza A. Adams, Townsend, Mass., Administratrix of Estate of Edward Everett, deceased. Patented March 16, 1852:

We claim the combination of the buttons with the metallic card, as described, the buttons being so riveted or attached to the card as to allow of their being turned for the purpose of closing or opening the holes, to which they are respectively attached.

8,848.—Smoothing Iron.—Nicholas Taliaferro, Augusta and William D. Cummings, Marysville, Ky. Patented March 30, 1852:

We claim the application (substantially as described) to a self heating smoothing iron, of a tube or chamber, J, at the bottom of the fire box, provided with a registered mouth or inlet, at some distance above the bottom, and at its lower portion with distributing apertures, K, communicating with the fire, whereby the draft is applied from beneath and equally at every part, and placed under the control of the operator, without permitting the escape of ashes, or other refuse of combustion.

8,828.—Cracker Machine.—John McCollum, New York City. Patented March 23, 1852. Reissued May 31, 1859:

I claim the combination of adjustable springs with a cracker roller and its resisting surface or bed, substantially as herein before described and substantially for the purposes herein before set forth.

8,832.—Air-Heating Stove.—J. M. Thatcher, New York City. Patented March 23, 1852. Reissued Sept. 11, 1855:

I claim making the bottom plates of the flue spaces of air-heating furnaces or stoves, for the passage of the products of combustion outward or inward, and around the air passage, inclining inwardly and downward towards the chamber, substantially as described, for the purpose of facilitating the increase of the heating surface, without the inconvenience of the accumulation of ashes, soot, and other solid matter, in such plates, as set forth.

8,861.—Smut Mill and Grain Separator.—Daniel Shaw, Elkhart, Ind. Patented April 6, 1852. Reissued Nov. 3, 1863:

I claim the offset, that is to say enlarging the space of the hollow trunk on the opposite side thereof from that at which the grain is admitted, in the manner herein described, for the purpose of effecting the separation of the dust, etc., into the fan case, whereby the chest and light grain, which will pass up the spout with the impurities, is effectually separated and delivered through the spout, substantially as herein fully set forth.

8,851.—Moth Trap to Beehives.—E. W. Phelps, Elizabeth, N. J. Patented April 6, 1852:

I claim the peculiar construction of the moth trap, as herein described, composed of a slide having the center groove and two side grooves, and the metallic hinge cover, arranged, all as set forth in the specification.

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REISSUES.

2,234.—Cartridge Extractor for Fire-arms.—Henry Reynolds, Springfield, Mass. Patented Nov. 22, 1854:

First, I claim a cartridge shell ejector, consisting of a lever attached to the frame of the fire-arm, and so constructed and arranged that by a suitable movement, a portion of it is made to enter an opening in the chamber or chambers between the breech or rear end thereof, and the bottom of the cartridge shell, substantially as herein before described.

Second, So beveling the bottom of the chamber of the fire-arm as to provide for the entrance of the lever between it and the rear end of the cartridge shell, substantially as herein described.

2,235.—Self-loading Fire-arm.—Spencer Repeating Rifle Company (assignees by Mesne assignments, of C. M. Spencer), Boston, Mass. Patented March 6, 1860:

First, I claim the combination of the rolling breech, E, the lever, G, and sliding locking bolt, F, the whole fitted and applied substantially as herein set forth.

Second, The slide, H, applied to the rolling breech, and operating in combination with the hammer, substantially as described.

Third, The rolling breech, E, constructed as described, to operate as a carrier block, to receive the cartridge from the magazine and deposit it in the chamber in the end of the barrel, and also to cut off all communication between the chamber and magazine when the piece is loaded.

Fourth, The serrated projection, u, constructed, arranged, and operating as described.

2,236.—Breech-loading Fire-arm.—Rollin White, Lowell, Mass. Patented April 3, 1855:

First, I claim the movable breech, connecting with, and operating with the tumbler and hammer, and on the same tulerum pin, substantially as herein described.

Second, The plate applied, substantially as described, to serve as a guide to conduct the cartridge into the open chamber, and as a guard to prevent the cartridge falling out at the rear of the chamber before the breech is liberated, as herein set forth.

Third, I claim making an aperture into the chamber, and constructing the hammer, or its equivalent, so that it will ignite the charge by striking the cartridge in front of the rear end thereof, substantially as and for the purpose specified.

DESIGNS.

2,295.—Frame of a Sewing and Embroidering Machine.—Joseph W. Bartlett, New York City.

2,296.—Picture Frame.—John H. Bellamy, Charlestown, Mass., assignor to self, Sylvus W. Stout, Boston, and Benj. Brown, Somerville, Mass.

2,297.—Weather Boarding.—John H. Clark and John Rhinesmith, Fort Wayne, Ind.

2,298.—Trade Mark.—Franklin O. Day and William S. Stewart, St. Louis, Mo.

2,299.—Trade Mark.—Franklin O. Day and William S. Stewart, St. Louis, Mo.

2,300.—Trade Mark.—Franklin O. Day and William S. Stewart, St. Louis, Mo.

2,301.—Hand Stamp.—H. H. Grosskoff, Philadelphia, Pa.

2,302.—Cook's Range.—Jno. Martin, Jacob Beesley, and John Currie (assignors to J. S. Clark), Philadelphia, Pa.

2,303.—Railing.—John McArthur, Philadelphia, Pa.

2,304.—Tobacco Pipe.—Louis Saarback, Philadelphia, Pa.

TO OUR READERS.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and inclosing \$1 as fee for copying. We can also furnish a sketch of any patented machine to accompany the claim, at a reasonable additional cost. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

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STATE RIGHTS of Chappell's Patent Toilet Glass, for sale. "One of the most ingenious inventions of the age; is a complete arrangement, designed for examining the sides and back part of the head, back, and shoulders, and is particularly for the use of ladies while making their toilets. It consists of an adjustable mirror, so arranged as to make the compound reflection complete, thus obtaining the necessity of having aid in dressing, etc."—From the Highland Democrat. Address G. CHAPPELL, Peekskill, N. Y.

NOTICE TO WHOM IT MAY CONCERN. All parties interested in the sale, or manufacture, of a so-called "Auxiliary Jaw," to be used in combination with ordinary wrenches, and which is claimed to be invented by T. C. Page of Rochester, N. Y., are hereby notified to desist from such sale or manufacture, the article being a direct infringement upon the patent granted by the United States, to William Webster of Morrisania, N. Y., February 9th, 1854, for an "Improvement in Wrenches," and under which patent the undersigned are now and have for some time been manufacturing. WEBSTER & CO., Sole owners and patentees of "WEBSTER'S PATENT ORDINARY WRENCH" for screwing-up and cutting-off pipes, rods, etc. No. 17 Dey street, New York.

SALE OF PUBLIC PROPERTY. OFFICE OF ARMY CLOTHING AND EQUIPAGE, NEW YORK, May 5th, 1866.

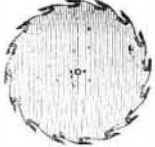
WILL BE SOLD AT PUBLIC AUCTION AT DEPOT of Army Clothing and Equipage, corner Light and Washington streets, New York City, on TUESDAY, the 16th day of May next, commencing at 10 o'clock A. M., certain quantities of non-regulation and condemned Clothing and Equipage, consisting of say about: 9,000 Uniform Coats, 5,000 Uniform Jackets, 7,500 Great Coats, 600 Trousers, 100 Caps, 130 Shoes, 4,000 Stockings, 20 Gaiters, 3,000 Leggings, 16,000 Knit Blouses, 600 Flannel Frocks Coats, 1,000 Blankets, Woollen, 60 Blankets, Rubber, 40,000 lbs. Hospital Tents and Flies, 7,500 Knapsacks, 8,000 Haversacks, 8,000 Canteens, 1,400 Leather Stocks, 20 Drawers, 100 Shirts, 500 Bedsacks, 400 Mittens, 250 Cap Covers, 20 Pickaxes, 2,0 Mess Pans, 100 Camp Kettles, 30,000 lbs. Common Tents, 36,000 lbs. Shelter Tents, etc. 30,000 lbs. Wall Tents and Flies. and various small articles of clothing and equipage. Samples of the above articles can be seen at the depot, and further information obtained. Terms cash in government funds. Ten per cent down, and the balance before the goods are taken from the depot, which must be within three days of sale, under forfeiture of the goods and ten per cent.

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VAN DE WATER CELEBRATED WATER WHEEL for sale at the Eagle Iron Works, Buffalo, N. Y. Send for Circulars. [19 3] DUNBAR & HOWELL.

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Improved Valve Gear.

The following description from the inventor will explain the nature and object of the invention illustrated in the annexed engraving very clearly:—

“The object of this invention is to reverse steam engines of any size, instantly, without shutting the throttle valve, and by a single eccentric, as in reversing, the valves are changed so that one edge of each valve is raised for one motion, and the opposite edges for the opposite motion, as in passing the valves over from one motion to the other, the exhaust ports in the valves open to the receiving ports in the cylinder, and consequently exhaust the steam that is in the cylinder at the time of changing, so that there is no steam shut up in the cylinder, and there are no sudden jars on the machinery in reversing instantly. In changing over from one motion to the other, the valves can be so stopped as to give them a small opening; by stopping the lever that moves the valves, at a little more than midway between the two motions; or it can throw the full working pressure instantly against the piston without danger to the machinery. By stopping on the center it will shut the steam entirely from the cylinder so that the engine can be stopped, started, or backed by the use of a single lever. In very large engines I balance the valves and gear by letting the end of the movable column run into the steam

chest, and fitted with stuffing box, the same as a piston; so that there will be no trouble in working the engines, from locomotive to ocean steamers. Aside from the reversing, I consider it the most economical slide in use. In the first place, it is nearly balanced by taking steam on the inside of the valve as soon as it commenced to open to the steam, as there is no lap on the receiving side of the valves. In the second place, they take steam through two recesses in the seats on the opposite edge of the valves, both in the exhaust and receiving side of the valves, so that it gives a full opening on the commencement of the stroke, and remains the same to nearly the end, as the steam goes to the piston from the inside of the valve at the same time it takes from the outside; the opening receiving the same after the valve gets one-third of its throw; for after that it is closing on the inside as it opens on the outside; and by that means get the full rise of the steam through the whole length of the stroke with the same opening.

“I claim another advantage in exhausting: as there is no lap on the receiving side of the valve it is left full open to the exhaust as soon as it cuts off, and the exhaust port is made longer than the receiving port, thereby giving more opening to the exhaust, with the same throw of the valve. I also use an exhaustion slide or movable seat on the exhaust side, so that by moving it above or below the line of the receiving part, I can exhaust the steam at any part of the stroke, without interfering with the working of the valve in any other respect, and making a variable expansion without any lap on the valve.

“In order to make a variable cut-off to work both ways alike, I would use two eccentrics with a short link, one set for full stroke and the other as short as desired, and to be used only for a cut-off, as the reversing is done by shifting the valves. This valve is useful for locomotives, as it gives a full port of steam when cutting off at less than one-third of the stroke, without giving the valve lead. The link can be short, as the eccentrics are so set that they work nearly in

the same direction, driving most of the throw. The link can be so arranged as to leave it stationary while reversing, so as to throw back on to full stroke when reversed, without moving the link.

“The arrangement consists in angular slide valves, A, working at right angles with the piston, one for the induction and eduction of steam at one end of the cylinder, and the other for the same purpose at the other. The valves are worked by means of a rock shaft supported on a movable column, D, running into the steam

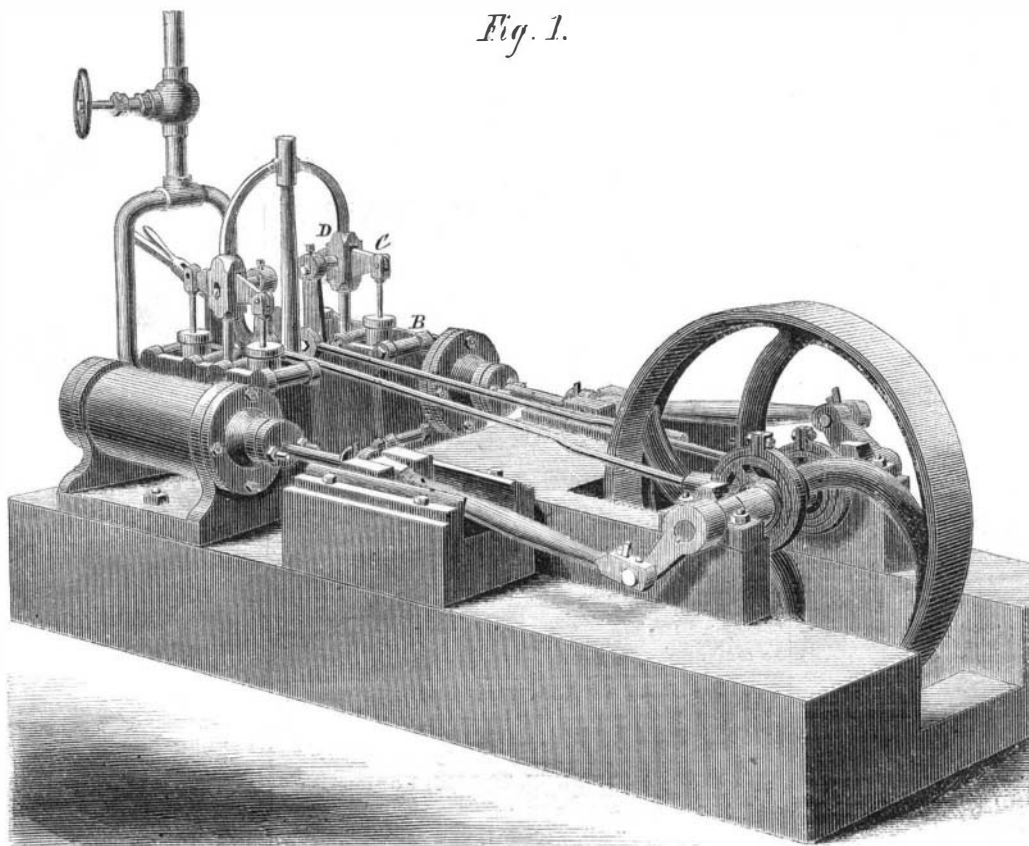


Fig. 1.

WOODRUFF'S VALVE GEAR.

chest midway between the valves, with arms, C, extending so as to connect the valve rods at either end of the cylinder. The top, or opposite end of the movable column is supported by moving through an arched guide. The reversing consists in moving or passing the valves over the ports so that one end of each valve is used for going in one direction, and the opposite edge for the other direction. The operation is performed by connecting a lever to said column and working across the cylinder, or any other suitable

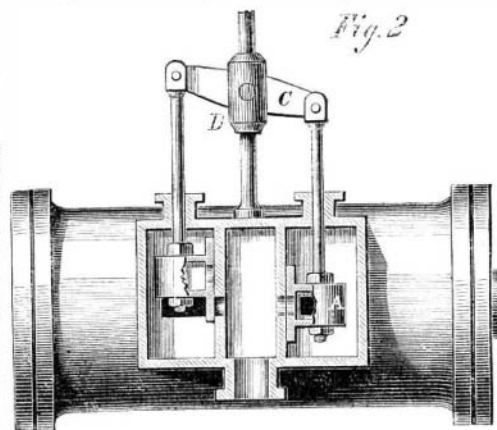


Fig. 2.

position, and the opposite end working through a segment with notches, so as to take a catch or spring to hold the valves when moved to the position for stopping, backing, or slowing the engine. A small model of a double engine is shown in the engraving, that was made simply for exhibition, and the reversing gear was arranged to accommodate the working of it. The cylinders stand only sixteen inches apart, from outside to outside, and are 2 inch bore and 4 inch stroke.”

For further information, address the inventor, A. H. Woodruff, at Lansing, Iowa, by whom it was patented, through the Scientific American Patent Agency, on Dec. 27, 1864. Application for patent is pending in other improvements.

Water Fuel.

Few persons are aware of the large percentage of actual moisture that abounds in most fuels. The careful housewife, desirous to economize her fire, “backs” it up with cinders. The poor employ wet tan. And there are not many, I suppose, who have not watched the nailer with curious interest, when, after a good sprinkle with his handbroom, previously dipped in water, he had made his smithy fire glow again with a very few blasts of his bellows.

The Rev. M. Moule, of Dorchester, has had constructed a cooking stove, in which the combustion, to a certain extent, of water is attempted, but with what success I have no exact means of knowing. A year or two back some trials, in respect to the combustion of wet fuel, were reported in *Chambers' Edinburgh Journal*. The results were perfectly marvelous. Fuel containing actually, I believe, 70 per cent. of moisture was burnt in an arched brick stove or furnace. The heat produced was so intense as, it I recollect rightly, the thick wrought iron door having been previously closed, to raise to whiteness the arch of the oven. The fire, indeed, in the first instance, was lighted with dry fuel; but afterwards the wet fuel was exclusively resorted to. Surely, here are indications of no little importance in a country where the normal state of our natural fuel is one of excessive moisture.—

Cooking, heating, drying, lime and brick burning, wherein indeed vast quantities of water are burnt as it is, besides various other economic processes involving the application of heat, might probably be effected by the employment of wet fuel.—*London Morning Journal*.

[“Water burning stoves” are no novelty. It has been shown by experiment that the heat obtained from the decomposition of water is exactly equal to the heat required to decompose it.—Eds.]



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