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### LIST OF PATENT CLAIMS

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FOR THE WEEK ENDING DECEMBER 7, 1852

**MACHINERY FOR BENDING PAUL BALES, ETC.**—By Robt. Bunker, of Rochester, N. Y.: I claim the combination of the saddles, brake bar, and movable block, all operating as described.

**SEED PLANTERS**—By L. W. Colver, of Louisville, Ky.: I claim making the cells in the tops of the grooves, so that they shall carry single grains, and combining therewith a cleaner, which extends into the groove behind the seed, as each cell in turn arrives at or over the seeding tube, for the purpose of carrying around and depositing with certainty the seeds or grains, singly, substantially as described.

**SAW GUMMERS**—By R. S. Cramer & C. C. Blossom, of Somerville, Ohio: I claim the nut, having gudgeons occupying notches in one of the jaws of a saw gumming apparatus, in which the cutting portion is situated between the power and the fulcrum for the objects explained.

**DRILLING MACHINES**—By Chas. W. Coe, of Ashtabula, Ohio: I claim, first, the peculiar manner of giving the slow automatic feed-motion to the spindle, and the fast receding motion, by means of the sliding pinion, collar, and screw, which is attached to the spindle, combined with the two sets of cogs, or their equivalents, upon the face of the same disc, the several parts above-named being constructed, arranged, and operating in the manner and for the purpose described.

Second, the peculiar method of constructing and arranging the clutch, by which the inclination of the clutch may be changed, as described, and the position of the clutch also moved or changed bodily in a horizontal direction.

**HATS**—By Francis Degen, of New York City: I am aware that metallic rings or bands have been used in helmets and similar articles, for the purpose of a support, but I do not know of any hat in which a strip of foil has been inserted between the leather or sweat and the hat; therefore, I claim the metallic strip or strips, inserted between the leather, or sweat, and the hat, and attached to either or both the hat or sweat, as described.

**TONGUING AND GROOVING APPARATUS**—By Phineas Emmons, of New York: I claim the shaft, connecting rods, cutter stocks, cutters, and slides, in combination with the stationary tonguers and groovers, for the purpose of tonguing and grooving boards, &c., as set forth.

**HOT AIR FURNACES**—By Stephen Gates, of Albion, N. Y.: I claim the combination of the deflecting plates, with the system of upright flues directly over the fire chamber, when such flues are arranged in the manner set forth, so that each flue of itself shall act as a deflector and insure a complete circulation through the whole system, substantially as described.

**BENDING CARPET BAG FRAMES, ETC.**—By E. L. Gaylord, of Newark, N. J.: I claim the employment for the purpose of bending and forming carpet bag frames, or for bending two or more flat metal bars edgewise, for any purpose, of a pair of clamps, each moving independently of the other, in the direction of the width of the bars, and having recesses and self adjusting movable pieces, as described, combined in any way, substantially as set forth, with a table, and bending plate.

**GRAIN AND GRASS HARVESTERS**—C. B. Brown, of Griggsville, Ill.: I claim the combination of the crown wheel, with the shafts, with their respective pulleys, acted upon alternately by the cogs of the wheel, the shafts being connected so as to turn in opposite directions, whereby a vibratory motion is given to the blade.

I do not claim either of these singly, but when combined, for the purposes and in the manner substantially as described.

**GALVANIC BATTERY**—By Louis Drescher, of New York City: I claim the improved arrangement of the old voltaic pile, the same consisting in so separating each galvanic pair from that next it, in the series, and connecting them with short wires, and forming the plates with suitable perforation, as that the strips of leather or flannel, or their equivalent, may be at once saturated with the exciting liquid, by immersing the battery therein.

**HINGE FOR MOULDER'S FLASKS**—By Geo. Grant, of Troy, N. Y.: I claim a hinge for moulder's flasks, constructed substantially in the manner as described, by means of which the cope is raised in the jaws of the hinge, as set forth.

**CHAIRS**—By J. T. Hammit, of Philadelphia, Pa.: I claim operating the leg rest of the chair from the motion of the seat and back, by means of the lever and rod, or their equivalent.

**MACHINES FOR HAT BODIES**—By L. E. Hopkins, of N. Y. City: I claim the feeding belts, constructed substantially as described, with jointed chairs, having cloth stretched between them, as set forth, by which their motion is exactly determined and equal.

Also the combination of the revolving endless planking board or table, with the feeding belts, both moving with the same velocity, for the purpose as described.

**LOOK**—By Richard Ketcham, of Seneca Castle, N. Y.: I claim the circular tumbler or its equivalent, in combination with the slotted collar, which encompasses the spindle of the knob, said collar and tumbler or its equivalent, being constructed and operating as described.

**PADLOCK**—By Rhodolphus Kinsley, of Springfield, Mass.: I claim giving a forward motion to the hasp, and acting upon the tumblers by means of the same key, when the parts are arranged so that the key acts directly upon a portion of the hasp, substantially as described.

Secondly, the double acting spring described, only when used in connection with such a form and arrangement of hasp as will cause it to actuate the tumblers, and not only throw the hasp out, but hold it thrown out and fully open in the manner described.

**MODE OF FROSTING GLASS**—By John Levy & C. Jones, of New York City: We claim, first, frosting and figuring glass, by fixing the plates to be treated in a trough or vessel containing sand, pebbles, and

water, and subjected to a short, quick, vibratory motion, in a longitudinal direction, by any suitable mechanical movement, thus causing the glass to pass through the mass of gritty material, before any considerable momentum is imparted to that mass.

Second, forming ornaments upon the glass by the application of patterns or designs, in connection with the process of frosting by the action of the sand and pebbles, as set forth.

**WOODEN TYPE**—By John McCreary, of Chester, Ohio: I claim the arrangement of the propelling lever, as that, by its return movement, in combination with the feeding lever, spring, dog, and feeding tube, it will move forward as required, the blank wood to receive the impression, as set forth.

**PILL MAKING MACHINES**—By E. H. Pond, of Rutland, Vt.: I claim, first, moulding or forming pills by means of two cylinders, having each a number of recesses in its periphery, the recesses in one cylinder matching with those in the other, and each 'matching pair forming a mould of the required form of the pill, the said cylinders revolving in opposite directions, and the pill mass being conducted between them, as described.

Second, the bands of india rubber, or any sufficiently elastic material passing round or partly round the mould cylinders for the purpose of expelling the pills from the recesses, after the moulds are open, substantially as set forth.

**SHINGLE MACHINES**—By Wm. Stoddard, of Lowell, Mass.: I claim the combination of the rifting knife (connected with the main driver by means of elastic arms) with the inclined planes placed upon the rails, as described for the purpose of enabling the knife to be carried forwards under the block, during the forward movement of the said driver, and then be elevated to the proper height to split off a shingle, during its return movement, as set forth.

Also the arrangement of a secondary driver placed above and acting independently of the main driver, in such a manner that it will drive the rived shingle from under the block and deposit it upon the bed, in such position that it will be carried forwards to be dressed during the forward movement of the said dresser, substantially as set forth.

**SCREW DRIVER**—By J. W. Switzer, of Basil, Ohio: I claim the screw driver, spring catches, attached to the flat portions of the screw driver, and permitting longitudinal as well as lateral adjustment, and the barrel in which the whole is placed, in combination with the brace and stock, or their equivalents, the whole being constructed, arranged, and operating in the manner and for the purpose substantially as set forth.

[See engraving of this invention in No. 6 of the present volume of the Sci. Am.]

**REEL FOR HARVESTERS**—By Warren W. & Clark C. Wright, of Canton, Pa.: We claim, first, extending the axle of the driving wheels, so far beyond the carriage as may be necessary to form a pivot for the reel to turn upon and allow of its rotation, by a band, as described, independent of the rotation of the axle, substantially as set forth.

**SLAGS OF FURNACES**—By Wm. H. Smith, of Philadelphia, Pa.: I claim the process of utilizing the slags of iron and other like furnaces, refining and working the same, substantially as set forth, whereby I bring into successful operation, for useful purposes, a class of hitherto useless products.

**MACHINERY FOR MAKING WOOD SCREWS, ETC.**—By Cullen Whipple, of Providence, R. I. (assignor to the New England Screw Company): I claim, first, the feeder, composed of a sectional trough, with a close bottom and open top, into which the blank drops and arranges itself before a traversing rod, which pushes it into the gripping jaws, substantially as described.

Second, the combination of the traversing rod, actuated substantially as described, with an adjustable stop, for the purpose of setting the blank between the jaws in the exact position required, as set forth.

Third, the method of operating the jaws and holding them closed with the requisite force to hold the blank firmly between them, without end strain upon the mandrel, by means of toggle or knuckle joint levers, which are thrown slightly past centres, when the jaws are closed to hold them closed, when they are used in connection with elastic and long shank nippers, substantially as described, whereby all end strain of the mandrel against its bearings is prevented, during and by the gripping and holding of the blank.

Lastly, the spring discharging punch, constructed and arranged in such a manner that the same shall be compressed by the entrance of the blank between the gripping jaws, and shall throw the blank out of the jaws, the instant they relax their hold of it sufficiently; such pushing out depending upon such relaxation and the force of the spring, and being entirely independent of the motion of any other part of the machine.

#### DESIGNS.

**COOK STOVE**—By Ezra Ripley & N. S. Vedder, of Troy, N. Y. (assignors to Samuel McClure, of Rochester, N. Y.)

**NOTE**—The applications for one-third of the list of patents given above were prepared at the "Scientific American Patent Agency." Besides the great amount of home business, we are securing a great number of patents in foreign countries.

#### Reform of the Patent Laws.—Patent Office and Patent Funds.

**MR. EDITOR.**—I was glad to see your timely recommendation of a reform of the patent laws, whereby the inventor and applicant for a patent would be put on an equal and just level with the Patent Office in the defence of his inalienable rights. I refer to cases of appeal. It is certainly anything but justice—much less republican policy—to make a rejected applicant for a patent pay the expenses of his appeal even when right and the Patent Office wrong. It would be no more than simple justice to alter our patent laws so as to make the Patent Office pay the stated expense of an appeal if its decision has been wrong, not as the law now is, by which the inventor has to pay the expense right or wrong—successful or unsuccessful.

President Filmore, in his message of Monday the 6th inst., recommends by the suggestion of the Secretary of the Interior that "provision be made for the publication and

distribution periodically of an analytical digest of all the patents which have been or may hereafter be granted for useful inventions and discoveries with such descriptions and illustrations as may be necessary to present an intelligent view of their nature and operation. The cost of such a publication," says the message, "could easily be defrayed out of the patent fund, and I am persuaded that it could be applied to no object more acceptable to inventors and beneficial to the public at large."

This is very well in words; the French government does this, and that government also defends patents, so that a poor patentee, can have an able lawyer and an officer to pursue infringers. The great expense of lawsuits is the crying evil that poor patentees labor under. Why does not the President or the Secretary of the Interior recommend a reform in the Judiciary connected with patents? Is it because it would take away some of the lawyer's fees? The President is surely above this although a lawyer, by profession.

There is a surplus fund belonging to the Patent Office, and some people are continually on the look-out for such appropriations as may be beneficial to themselves. I trust that no one so interested has suggested from personal motives, such a plan as that proposed to the Secretary of the Interior; yet when it is taken into consideration that the Patent Office Report for 1851 is not yet printed, the recommendation made by the President is anything but well timed in accordance with the present and past practice of government publishing. I have been informed that the late Commissioner of Patents was an urgent advocate of the government publishing a digest of the patents, but he was favorable to a sum being granted by authority to the "Franklin Journal" for so doing. It is well known that attempts have been made (and glad I am they have all as yet been unsuccessful) to get a grant from the patent fund, by some publishers of magazines. I hope that no movement of this kind is now going on "under the rose." JUNIUS REDIVIVUS.

#### Lecturing Noblemen.

A lecturing mania has invaded the ranks of the nobility of England. The Earl of Carlisle is announced to lecture on Gray, at Sheffield; the Duke of Newcastle is to lecture at Worksop; Sir Alexander Cockburn at Southampton, and Lord John Russell at Manchester. Nobility is looking up.—[Ex.]

[This is no new thing, Lord Mahon delivered a most beautiful lecture four years ago to the mechanics of Leeds, and the Earl of Carlisle (formerly Lord Morpeth), has delivered some lectures every year to the mechanics in different parts of England. The conduct of these men confer dignity upon their position in society. No title but conduct can make a nobleman. The nobility of England at the present day present an amiable and commendable contrast to those of the last century.—Many of them are laboring to lift workingmen to their own positions in all that can make a man noble, viz., morality, intelligence and courtesy.]

We have often been surprised at the want of taste or desire for good information, or want of spirit, we do not know which, manifested by our mechanics in the different large cities of our great country. They would not like to be called ignorant, or stigmatized for exhibiting a want of intelligence, nor would it be just to do so; for they are both spirited and intelligent, but we must blame them for not directing their attention to objects which have a most elevating tendency, and which confer honor and dignity upon men. We allude to useful public lectures by eminent men. We honor the young merchants of the City of New York, because they have the sagacity to perceive and the spirit to carry out the object of obtaining eminent lecturers every winter. Did they not engage the philosophic Nichol to deliver his splendid Astronomical Course, and this winter secure Thackeray, whose fame as an author is world-wide? The gentlemen of the Mercantile Association, with a sagacity which does them credit, understand how to make their Institution popular. The city of New York contains a population of 500,000; the city of Glasgow, Scotland, contains a population of about 365,000; both of them have

Mechanics' Institutes; the latter is the oldest in the world, but at the same time the mechanics there do not possess the same means to maintain a good Institute as do those of our own city, but the following extract from the "Scottish Guardian" will show how that Institute is conducted:—

"The winter session, 1852-53 of this excellent institution is about to commence; classes on the following interesting subjects are already announced—viz., Chemistry, by Dr. Frederick Penny; Natural Philosophy, by Professor J. Scott; Popular Anatomy and Physiology, by Dr. Alexander Lindsay; Arithmetic and Mathematics, by Professor J. Scott; and Mechanical and Architectural Drawing, by Mr. Robert Harvey."

Can our mechanics not learn a lesson about rendering institutions devoted to their benefit popular and honored among the people?

#### Action Against the New Steamboat Law.

It is well known to our readers that a new law for steamboats was passed during the last session of Congress, which law was to take effect on the 1st of next month (January 1853.) We understand by the St. Louis Intelligencer that a petition is on foot in that city for the purpose of getting an extension of the time appointed for this law to go into operation.—The reason offered is, that little or no preparation has been made to meet the provisions of the law, in procuring the required life boats, extra safety valves, &c. One or two boats have made themselves ready to meet the legal demands, but the majority, it is stated, have not; hence quite a number of captains, pilots, and engineers have signed the petition. The real intention of the step is to procure the repeal of the statute.

Congress will no doubt treat the petition as it deserves; if it does not, and consents to act upon and give it countenance, then it will stain its character with a most reprehensible act. Since the law was enacted every steamboat company in our land has had sufficient time to prepare for and meet all its requirements.

#### The Cheap Postage Law

By the Postmaster General's Report, we learn that the gross receipts of the Post Office Department for the last Fiscal year have been \$6,925,971,28, from which \$101,388,59 have to be subtracted as being due to Britain, which makes the real sum \$6,824,582,69. The expenditures have been \$8,745,771,20, leaving a deficit of \$1,921,194,51, to be made up by special appropriation, which can easily be done, as we have a surplus revenue from other sources of \$20,000,000. The receipts from all postages have been less by \$1,431,696,54, than the past year under a higher postage. The reduction is owing to the decreased rates of postage under the new law. This diminution is greater than was anticipated by the Post Office Department, and greater than the friends of cheap postage expected, for it was hoped that there would be such an increase of correspondence as would make up for the reduced rates of postage. This was the case in respect to the penny postage law of Great Britain, and it was anticipated that the same results would be produced by our cheap postage law. No increase of postage, to make up the deficit is recommended; the report says, "all experience warrants the expectation that as the community becomes accustomed to cheap postage, written correspondence will increase." So think we; and as stamped envelopes will soon be ready for sale, no evasion of the law will take place by private correspondence—then letters with these envelopes can be carried by any person without being liable to damages for infraction of law. We hope that no person will ever be found evading the law for the future.

#### Packing Apples.

The following method is practiced in some parts of Maine for packing apples for shipment to California:—Each apple is wrapped in paper, and then placed in the barrel in layers. Between every two layers of apples is a layer of powdered charcoal. The apples are thus prevented from coming in contact with each other, and through the anti-putrescent qualities of the charcoal, the rot, even should it attack a part of the fruit, will be prevented from communicating to the remainder.