



Reported Officially for the Scientific American  
**LIST OF PATENT CLAIMS**  
 Issued from the United States Patent Office  
 FOR THE WEEK ENDING APRIL 20, 1852

**SUBMARINE AUGERS**—By Norman Blake, of Ira, N. Y.: I claim forming a pod auger with a hinge joint, in combination with connecting wires, substantially in the manner and for the purpose set forth.

**MATRESSES**—By T. G. Clinton, of Cincinnati, O.: I claim the use of the hair of hides of cattle, treated after the manner of or steeped with the hides of cattle in the lime vats of a tan yard, or other suitable place, as described, with or without other animal or vegetable matter, treated or not treated conjointly therewith, or separately, in the same way; and the use of other animal or vegetable matter, under like treatment and circumstances, as described, whether used conglomerately, conjointly, or separately, or their equivalents, when such animal or vegetable matter is of the kind used for upholstering or sleeping purposes, in the articles of mattresses, ottomans, cushions, sleeping sofas, sacking bottoms, or analogous articles, whereby a new result is attained, viz., an article obnoxious to bed bugs, without the necessity of any temporary application of poisonous mixtures thereto, thus furnishing the world with a harmless antidote to a great nuisance, and abolishing the necessity for a great peril to human life in the domestic circle.

**WINNERS**—By T. J. Doyle, of Winchester Va.: I claim, first, in combination with the side openings, discharge outlets, or passages, the invention, use, and application of the sliding diaphragm, with double sloping bottom. This diaphragm bottom, as shown and used, has a double slope, or is a double inclined plane, outward, inclining from each side of its elevated longitudinal centre. Secondly, I claim the use, application, and arrangement of an adjustable or sliding cheat or smut board in combination with a screen, with side apertures or outlets, for the purpose specified.

**SASH STOPPER AND FASTENER**—By C. C. Felton, of DeWitt, Mass.: I do not claim the combination of a rocking or vibrating friction plate, a lever spring and notched plate, as they are arranged in the drawings of the patent granted to B. S. Hadaway; but as I dispense entirely with a lever separate from the rocking friction plate, and make the said plate to operate itself.

I claim my improvement of combining the rocking plate and lever in one single piece, and extending it below the part which rocks on the part of the notch of the catch plate, all essentially in manner as described, whereby I greatly simplify the construction of the window catch, and thereby render it not only cheaper in construction, but less liable to get out of order.

**PROTECTING WHEELS AND AXLES OF CARS BY INCASING THEM**—By A. L. Finch, of New Britain, Ct.: I claim incasing the axles and wheels of rail cars within a metallic casing, substantially as specified.

**KEYS OF PIANOFORTES, ORGANS, etc.**—By Wm. F. Furgang, of Albany, N. Y.: I claim the finger keys of organs, pianofortes, or any other musical instrument played in a similar manner, by constructing a part of every key, in such manner that when in position on the key board, such part of every key shall be both level and in range with the similar parts of the other keys, so that the running of a finger over the keys of the whole chromatic scale on the key-board, may be capable of producing similar effects to those that can now be produced by a similar running of a finger over the lower range of keys of pianofortes as now constructed, substantially in the manner and form as set forth.

**CAPPING SCREWS**—By Chas. T. Grilley, of New Haven, Ct.: I do not claim the adaptation, simply, of a cap of sheet metal to the particular configuration of any regular or irregular form, by compression, or in whatever other manner the same may be produced; but 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 (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 nick 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 wood screw having all the beauty and finish of a brass, copper, or plated screw, in combination with the greatly superior strength of an iron one. The invention is equally applicable to steel screws, which may be capped in a similar way.

**MACHINE FOR DRAWING SPIKES**—By Daniel Hale, of Hinsdale, N. Y.: I claim the shackle, with the arrangement for clamping the head of a spike, for the purpose of drawing it from the cross-tie of a railroad track, in combination with a clevis and lever, substantially as set forth.

**APPARATUS FOR RAISING WATER**—By N. H. Leiby, of Charleston, S. C.: I claim constructing the wheel, or turbine, with exterior ribs, of any suitable number, size, or shape, the said ribs operating in combination with a cover, or its equivalent, in the manner and for the purpose set forth.

**REFRIGERATORS**—By Andrew Marsh, of Cincinnati, Ohio: I am aware that ice safes have been made with hollow shelves for water; but these are practically objectionable on account of their costliness, cumbersomeness, difficulty of cleaning, and liability to bursting, either from the congelation of the water, in the event of the discharge becoming choked, or from the hydrostatic pressure. I claim the application, as described, to an ice safe or refrigerator, of a crimped, convoluted, or corrugated form to the shelves, in order (in addition to combining strength with lightness of construction) to capacitate them for the collection, retention, and discharge of the water which results both from the ice and the atmospheric moisture within the case.

**BRICK MACHINES**—By Jesse Samuels, of Allentown, Pa.: I claim the manner of feeding the clay to the moulds, by means of the cut-off in the hopper case, with the scraper for heaping the clay under the plunger, in connection with the plunger, operated as described, for partially condensing the clay into the moulds, preparatory to pressing, substantially as described.

I also claim the "carrier" for clamping and removing the brick from the moulds, consisting of the clamp and back plate for clamping the brick, and the spring and tumbler shaft and trigger or their equivalents, arranged substantially as described and operated upon by three stationary pins, as set forth.

**ROTARY PUMPS**—By H. C. Spalding & Gage Stickney, of Hartford, Ct.: We claim the spiral flanch working within a circular case, said flanch being constructed as described, in combination with the sliding valve, the spiral flanch and valve operating in the manner and for the purpose substantially as specified.

**BALANCE GATES**—By William C. VanHoesen, of Leeds, N. Y.: I claim the method of opening and closing the gate, substantially as described, viz., by means of the ropes or cords passing over the semi or half pulley, and attached to the small upright, said pulley being attached to one of the side pieces of the gate, the gate being hung upon pivots and balanced by the weight or counterpoise, the several parts being operated as set forth.

**TAILORS' MEASURES**—By Wm. T. Wells, of Shelbyville, Tenn.: I claim the graduated straps in connection with the several centres about which they respectively turn, and with the graduated arcs—the said centres being arranged substantially as set forth and for the purposes specified, using for that purpose the aforesaid instrument, or any other substantially the same, and which will produce the intended effect; but I disclaim having invented the tape measure, or the elastic square designated as No. 3 underneath the main instrument.

**NAME TUGS**—By R. B. Whipple, of Cleveland, O.: I claim the formation of the name tug, by means of the two metallic plates, fitted together so as to embrace the buckle, loop, and cleft, substantially in the manner set forth.

**REFLECTING SPIRIT LEVEL AND SQUARE**—By F. Wilbar, of Roxbury, Mass.: I deem the cubical block, with its two mirrors and two spirit levels, arranged as shown, and it is this instrument or combination of block or frame, two mirrors, and two spirit levels, or, what is equivalent to the two levels, a spherical surface level, I claim as my invention.

**DEVICES FOR CASTING CIRCLE PLATES, ROSES, ETC., WITH DOVETAILED GROOVES**—By Nathan Matthews (assignor to R. Edwards, D. A. Morris & Nathan Matthews), of Pittsburgh, Pa.: I claim forming the dovetails in circle plates, by dovetail pieces, which are withdrawn lengthwise from the recesses, the said withdrawing being performed by attaching the dovetail pieces to levers within the cylinder or body of the mould, the said levers being moved by a rod passing through the side of the cylinder, or body of the mould, substantially as set forth.

**RAILROAD CAR BRAKES**—By Benj. Kraft, of Reading, Pa.: I do not claim the mere application of friction rollers, as such are not new, nor yet do I claim, independent of the means and manner shown, the employment of a stop, to prevent the advance rubber from being raised by the wheel, or exclusively of itself, the adoption of a spring to reduce the shock.

I claim the combination and arrangement of the sliding bar, B, made as described, with the rollers and suspended frame attached to a hanger by a centre pin, on which is adjusted the spiral spring, said frame being made, arranged, and operated in the manner and for the purpose set forth.

**DESIGN.**  
**COOKING STOVES**—By A. J. Gallagher & J. J. Baker, of Philadelphia, Pa. Antedated January 17, 1852.

[Five of the patents in the above list of claims were obtained through the Agency of the Scientific American. The claim of Mr. Leiby, of Charleston, S. C., for Water Raising Apparatus, is for the Wheel, which has been so successfully applied in the Rice Fields of South Carolina.—Ed.]

#### Bill for Reforming the Patent Laws.

The Bill of Senator Norris, which we noticed two weeks ago, has had two readings, and according to present appearances it will become a law with all its objectionable features. We would again call the attention of the Senate to the 8th and 12th sections; the Bill, if it becomes a law with these sections in it, will, we are positive, lead to the most unfortunate results. The 8th section is, perhaps, one of the greatest oversights introduced into a bill.

We have now before us a most able article, published in the Philadelphia Argus, of the 21st inst., from the pen of Wm. W. Hubbell, attorney, and one who has a profound knowledge of patent principles and laws, and he takes the same view of the question that we do, and he shows conclusively that section 8, if carried out, will contravene our commercial laws, and may, in many cases, do great injustice to every class of our citizens. His views of the said section shows us, also, the benefit of a multitude of counsellors, for he takes one view of the question which we overlooked. He asserts that the section is unconstitutional. It is, and we particularly direct the attention of Senator Norris to this point. A section of the Constitution says, "Congress shall have power to secure to inventors for limited times the exclusive right to their discoveries," now, as the new section in the Bill grants to inventors the exclusive right in that which they have not discovered, it must be unconstitutional. It would therefore be wise and prudent to strike out this section, rather than it should become a law to be declared unconstitutional if carried to the United States Supreme Court, to the humiliation of our Senate.

Unless there had been a great deal of lobbying at Washington, such a clause would never have been introduced; we appeal to Senators themselves, if this be not true. It is a great pity that outside legislation, should have led to the introduction of this principle in any Bill relating to a reform of our Patent Laws

#### Petition for Extension of a Patent.

On the petition of Ezra L'Hommedieu, of Chester, Conn., praying for the extension of a patent granted to him, for an improvement in machinery for manufacturing double twist screw augers, for seven years from the expiration of said patent, which takes place on the twenty-fourth day of July, eighteen hundred and fifty-two, (24th July, 1852.)

It is ordered that the said petition be heard at the Patent Office on Monday the 5th of July, 1852 at 12 o'clock M.; and all persons are notified to appear and show cause, if any they have, why said petition ought not to be granted.

Persons opposing the extensions are required to file in the Patent Office their objections, specifically set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing, must be taken and transmitted in accordance with the rules of the office, which will be furnished on application.

THOS. EW BANK, Com. of Patents.

Washington, April 19th, 1852.

#### Recent Foreign Inventions.

**DELINEATING OBJECTS**—James Palmer, of Paddington, Eng., has patented the following method of delineating objects:—

The purpose of this invention is to furnish the means of producing drawings of all descriptions of objects in a much simpler and more perfect manner than is effected by the camera lucida, camera obscura, graphic telescope, and other instruments hitherto proposed for that purpose.

A plate of glass is mounted in a frame or easel, which is furnished with suitable adjustments, for supporting the glass in a vertical position at any convenient height. On one side of the plate of glass, and at a distance of several inches from it, is fixed the frame of a pair of spectacles, which is also capable of adjustment in position. One of the apertures of the spectacle frame is closed by a plate or shutter. The operator applies his face to the spectacle frame, and looks with one eye through the glass at the object which he wishes to delineate, and he then traces over the outline of the objects on the glass, with a pencil formed of a mixture of wax, soap, shellac, and lamp-black, which is capable of marking very distinctly on the smooth surface of the glass. In this way, an exact drawing of the object, in true perspective, is obtained with great facility. The spectacle frame preserves the position of the eye without interfering with freedom of vision. The instrument is very convenient, and its use is readily acquired, which can scarcely be affirmed of any of the instruments hitherto proposed for the purpose, as is shown by the very slight use which is made of such instruments.

The drawing on the glass is transferred to paper by tracing it, or by pressing a moistened sheet of paper upon it.

The same apparatus is used in a similar manner for drawing with an etching needle on a sheet of gelatine supported by the glass, or on a sheet of glass coated with gelatine. The drawings thus made may be printed from the gelatine as from a copper plate. To enable the gelatine to be used for printing on moistened paper without adhering to it, it is rendered insoluble by immersing it in a solution of alum, borax, and acetate of lead. Gelatine thus prepared does not adhere to the paper, and may be immersed in cold or warm water without injury. The prints from the gelatine may be transferred to the stone or zinc, and printed in the ordinary manner of lithographic printing. The invention is applicable to making drawings and engravings of buildings, machinery, landscapes, flowers, or any other stationary objects. For taking portraits, a rest is provided to keep the head of the person in a stationary position.

These drawings or delineations are necessarily smaller than the real objects, and their size may be varied by varying the relative

distances of the glass, and the object from the eye of the spectator. When it is required to increase the size of the drawings, a drawing on glass or gelatine is placed in an instrument somewhat similar to a magic lantern, by which a magnified image is thrown on a disc of glass ground on both sides. A sheet of gelatine is fixed on the back of the glass disc, and the magnified image traced upon it with the etching needle, or with the pencils above mentioned.—[London Mechanics' Magazine.

**PRESERVING ANIMAL SUBSTANCES AND CURING CERTAIN DISEASES**—Armand Lecomte De Fontainemoreau, of France, has recently taken out a patent in England for the employment of metallic salts, but principally of sulphate of zinc in aqueous solution, for the preservation of corpses, and anatomical parts, and animal substances generally, and to the cure of wounds and external diseases.

For the preparation of the sulphate of zinc, any salt of that metal may be employed; but the patentee prefers to employ metallic zinc in a granulated state. This he dissolves in such a proportion of dilute sulphuric acid as to produce a solution of a strength of about 30° to 40° Baume. After allowing the solution to stand for a time sufficient to cause the deposition of the foreign matters held in suspension, he decants the clear, and employs it in the preservation of corpses by injecting through an artery. If the subject is to be exposed to the air, or kept in a naked state, the patentee recommends that a third part by weight of spirits of turpentine should be mixed with the solution; he employs also other essences when odors of any particular kind are required, and colors the fluid red.

When animal substances are to be preserved by immersion, the solution is made in the same way as above mentioned, only that it is employed at a strength of 20° to 25° Baume. If the solution is to be employed for purifying rooms from the taint of decomposing organic matters, it is used of a strength of about 10° Baume.

For the cure of wounds, the solution is prepared in a highly concentrated state, and reduced to 3° to 4° Baume, by the mixture therewith of decoctions of linseed, marsh-mallow, and other emollient herbs. In this state it is used by saturating lint, and applying it to the wound. The solution may also be reduced to 2° or 3° Baume, and used as a wash for the hands.

#### Hindoo Letters.

In external appearance and construction of expressions, a Hindoo letter is worthy of notice. It is written on a palm leaf, with an iron stile, four to six inches long, sharp pointed at the end. In writing, neither chair nor table is needed, the leaf being supported on the middle finger of the left hand, and kept steady with the thumb and forefinger. The right hand does not, as with us, move along the surface, but after finishing a few words, the writer fixes the point of the iron in the last letter and pushes the leaf from right to left so that he may finish his line. This becomes so easy by long practice, that one often sees a Hindoo writing as he walks the street. As this species of penmanship is but a kind of faint engraving, the strokes of which are indistinct, they make the character legible by besmearing the leaf with an ink-like fluid. A letter is generally finished on a single leaf, which is then enveloped in a second, whereon is written the address. In communicating the decease of a relative, the custom is to singe the point of the leaf upon which the afflicting news is written. When a superior writes to an inferior, he puts his own name before that of a person to whom he writes, and the reverse when he writes to a superior.

#### Another Dreadful Explosion.

On the 9th inst., the steambot Saluda exploded her boilers at Lexington, Mo., and it is supposed that about 100 persons were killed; they were Mormon passengers bound for Salt Lake. The Mormons were from England and Wales. The negligence of the engineer, it is said, was the cause of the disaster. When shall we have an end of these murderous scenes, and yet our Congress sits deliberating in debate, old about who shall have the spoils next year.