



IMPORTANT NOTICE.

When an individual has made an invention, the first inquiry that naturally suggests itself is, "Can I obtain a Patent?" A positive answer to such questions is only to be had by presenting a formal application for a patent to the government, embracing a petition, and oath, specification, model, two drawings, and the payment of the official fees. Aside from these steps, all that the inventor can do is, to submit his plans to persons experienced in the business of obtaining patents, and solicit their opinions. If they are honorable men, he may confide to them his ideas with perfect safety, and they will inform him whether or not they regard his invention as patentable.

Those who wish to consult with ourselves on such matters, are at liberty so do so, either in person, at our office, or by correspondence through the mails. For such consultations we make *no charge*. We shall be happy, at all times, to examine inventions, and will give conscientious opinions as to their patentability.

Pen and ink sketches of the improvement, and a written description of the same, should be sent. Write plain; do not use pencil or pale ink, and be brief. Remember that all business committed to our care, and all consultations are kept by us secret and strictly confidential.

Parties wishing to apply for patents are informed that they can have the necessary drawings and documents promptly prepared at this office, on the most reasonable terms. It is not necessary for them to go to the expense of a journey in order to be personally present. All the required business can be just as well arranged by correspondence. Models may be sent by Express.

We have been engaged in the business of procuring patents for years, and have probably had more experience than any other firm in the country, owing to the fact that the amount of business done by us equals, if it does not exceed, that of all other professional patent agents in the United States combined. A large proportion of all the patents annually granted by the American government, are prepared and conducted by our firm.—We have in constant employment an able corps of examiners and draughtsmen, whose duties are so systematically arranged, under our own personal supervision, that every case committed to our care, receives the most careful study and attention, and the most prompt dispatch. In every instance we endeavor so to draw up the claims and prepare the whole case, that the patent, if granted, will stand the test of the courts, and be of value to the owner. Patents secured through our agency are scattered all over the country, and in this respect they speak for themselves.

In addition to the advantages which the long experience, great success, promptness and moderate charges of our firm, in obtaining patents, present to inventors, they are informed that all inventions patented through our establishment, are noticed editorially, at the proper time, in the *SCIENTIFIC AMERICAN*, without charge. This we are enabled to do from the fact that, by preparing the case, we become familiar with its peculiarities. Our paper is read by not less than 75,000 persons every week, and has a wide-spread and substantial influence. Inventors, we believe, will generally promote their own interests by confiding their patent business to our care.

Address MUNN & CO.,
128 Fulton street, New York.

[Reported Officially for the Scientific American.] LIST OF PATENT CLAIMS Issued from the United States Patent Office FOR THE WEEK ENDING OCTOBER 28, 1856.

PUPPET VALVE—Robert P. Bradley, of Cuyahoga Falls, Ohio: I do not confine myself to the spiral arrangement of the grooves, b, b, up the sides of the valve. But I claim, first, the construction of a puppet valve of the form of a cylinder, of the full size of, or larger than the exterior of the face of the valve, with its face at the bottom, and with grooves in the sides, substantially as described.

Second, when the outlet of the valve chamber is at the side thereof, I claim forming a passage round the valve by making a groove around the interior of the chamber, and a similar groove around the exterior of the valve, to form a passage around the grooved cylindrical puppet valve, to form a passage, f, of an area sufficient for the escape of water, at the outlet of the chamber, substantially as described.

[This invention relates, firstly, to a certain construction of the valve, whereby it is prevented wearing loose in its guide; and secondly, to a certain method of providing for the free escape from the valve chamber of the water or other fluid which passes the valve.]

MAKING BRASS KETTLES—Edward C. Blakeslee Enoch Platt, Jr., and Edmund Jordan, of Waterbury, Conn.: We claim the combination of the revolving female die, A, and its disk or rim, B, with the male die, E, when these are combined with the adjustable reducing rollers, a, a, and the whole is constructed, arranged, and made to produce the result, substantially in the manner and by the means set forth.

LOCKS—William H. Butler, of New York City: I do not confine myself to any precise arrangement of the bolt, b, nor tumblers, or mechanism connected therewith, for the parts shown may be modified in various ways.

I claim placing the case, A, on an arbor or pin, H, which is secured in the jamb or casing of the door, the parts being arranged as shown, or in an equivalent way, so that said case may be secured or locked on the arbor or pin, or allowed to be detached therefrom without the aid of a key, whereby the device may be used as a lock or as a button, as described.

[This invention relates to a new and improved lock, which is designed to serve the purpose of either a lock or button. It is simple in construction, not liable to get out of repair, and may be made at a small cost.]

BENDING SHEET METAL—George W. Burling, of Trenton, N. J.: I claim, first, the combination of the bars, A and B, with the sliding bar, C, the same being arranged and operating substantially in the manner and for the purpose set forth.

Second, the loose plates, e and m, in combination with the bars, E A and B.

APPLYING FREEZING MIXTURES TO THE TEETH—Isaac B. Branch, of Galena, Ill.: I claim the employment in instruments for applying cold as an anesthetic of the lip or lips described, substantially as and for the purpose set forth.

Also the combination with said instrument, or the application thereto of the spiral spring, g, and follower, h, or of their equivalent, substantially as and for the purpose set forth.

TOOTH EXTRACTOR—Hazen J. Batchelder, of West Fairlee, Vt.: I claim the described improved dental instrument or combination of forceps, the latching mechanism, the supporting shank and handle applied and arranged together, substantially as specified.

PADDLE WHEELS—Matthew A. Crooker, of New York City: I claim the method of arranging the buckets or floats of a paddle wheel when the buckets are to be broken into sections, that is to say, by arranging each set or section of buckets along four arcs which circumscribe the periphery, and which arcs are struck with a radius greater than the semi-diameter of the wheel, each set of buckets when placed upon the shaft being arranged so that the place where the arcs of the one set meet shall stand opposite to the center of an arc in the adjoining set, if the wheel be composed of but two sections, or when more than two sections shall be divided proportionally.

MOLD CANDLE MACHINES—Wm. C. Childs, of Boston, Mass.: I claim arranging the wick centering plate, d, in the trough of the candle molds, and on the bottom of said trough, as specified.

I also claim so applying the front board to the bottom board of the trough that said front board may be turned down or removed from the trough, in order that the vertical edge or front part of the surplus fat in the trough may be exposed, for the purpose of facilitating the removal of said surplus fat from the candles.

PASTERING JEWELRY—John B. Coppinger, of New York City: I claim the method of fastening jewelry, &c., substantially as set forth.

CURRENT WHEEL—Plumer Chesley, of Candia, N. H.: I claim, first, the regulators as described and arranged.

Second, I claim the entire arrangement for starting and stopping the wheel, as I have made known.

COOKING STOVES—John W. H. Doubler, of Lena, Stephenson Co., Ill.: I do not claim as new the sliding grate, nor yet the method of elevating or lowering it by means of rack and pinion or equivalent devices.

Neither do I claim the mere use of a draft slide or damper to a stove door.

But I claim the arrangement of the upper stationary doors, A, set back as described, and lower set of doors, B, the latter being attached to the rising and falling grate, and hung and arranged so as to slide upwards over or against the upper doors when elevating the grate to raise or reduce the size of the fire, said lower sliding doors being provided with a damper or slide, m, whereby the same relative position of front draft opening of the fire is maintained, whatever the varied set in altitude of the sliding grate, and whereby, while a large amount of door surface is provided the furnace or stove, but a portion only of the weight of said doors has to be lifted in elevating the sliding grate.

PRESERVING DEAD BODIES—John A. Gaussardia, of Washington, D. C.: I claim injecting the body with a mixture of arsenical pyroigneous acid, and then charging it with a current of electricity, for the purposes described, and then filling the coffin in which the body is placed, and which is afterwards hermetically sealed, with an alcoholic mixture of arsenic, together with the oils of cicutia and caryophyllus aromaticus, substantially as described.

GAS GENERATOR—Charles A. Howard, of Pontiac, Mich.: I claim the series of inclined retorts, constructed and arranged substantially as described.

EVAPORATORS FOR SALTS—John R. Hopkins, of Auburn, N. Y.: I claim the apparatus for the evaporation of solutions whose solvent capacities are increased by application of heat, and diminished by cooling, consisting of a closed boiler in combination with one or more vats or reservoirs, arranged substantially in the manner described.

HANDLES OF AGRICULTURAL FORKS, SHOVELS AND HOES—Keuben M. Mine, of Throopville, N. Y.: I do not claim any mode of fastening the handle to the piercing or cutting part of a fork, shovel, or hoe. Neither do I claim any mode of constructing the head-piece, or of attaching it to the handle; and I disclaim making the handle of any implement whatever of metal, or of an unfilled metallic tube.

But I claim making the handle of an agricultural fork, shovel, hoe, or equivalent implement of a metallic tube filled with wood, as described, whereby the advantage specified is secured.

WATER WHEEL—George E. W. Herbert, of Cohocton, N. Y.: I claim the flanges, l, constructed as described, in combination with the inclined position of the buckets, a, substantially as specified and for the purposes set forth.

SMUT MACHINES—Harvey B. Ingham, of Camptown, Pa. Ante-dated June 24th, 1856: I claim, first, the receptacle, B, arranged and operating in combination with the blast tubes and beating cylinder, substantially as specified.

Second, I claim the arrangement for discharging the grain by its centrifugal action at an aperture on the upper side of the beating cylinder, and through a channel eccentrically around the blast pipe, whereby the grain is thrown into the blast higher in the pipe, and is distributed more evenly therein, as set forth.

WASHING MACHINES—Josiah Mumford and John W. Wilson, of Clarksville, Ohio: We are aware devices for washing one portion of a garment more than another portion have been used; this we do not claim independent of our special means of accomplishing this object.

But we claim, in combination with a rotating tub having radial ribs on its bottom, a stationary rubbing board also provided with radial ribs and radial slots between them, through which any particular portion of the soiled clothes may be protruded to be washed without washing the entire piece, which lies on top of said rubbing-board, as set forth.

SUSPENSION HOOK AND INSECT INSULATOR—Joseph C. Moulton, of Pithburg, Mass.: I am aware it is not new to surround a tree, or the foot of a bed post, or a meat safe with a trough or dish for holding a fluid, and therefore I do not claim such.

My invention combines with the insulating cup a screw and a hook, or the equivalent thereof, for the purpose of attaching one article to another, or of so suspending or isolating it as to protect it from insects, as described.

I claim a new or improved article of manufacture composed of a screw rod, cup, and a hook, the hole being arranged and applied together, substantially as specified.

IVORY BLEACHING APPARATUS—John Phylfe, of New York City: I do not claim the exclusion of air from the ivory during the bleaching process, and I do not confine myself to the construction of the apparatus in such a manner as to exclude the air during the process, or to any particular construction of the apparatus.

But I claim the bleaching of ivory by exposure to the rays of the sun on a glass table, with a reflector below it, substantially as described.

[The above invention consists in placing the ivory upon a glass table or bed which is exposed to the direct rays of the sun, and has a reflector below it, to reflect back again the light passing through the ivory, and through the table or bed. The bleaching of the undersurface and lower part of the ivory is thus effected by reflected light. By the present method of bleaching it is necessary to turn the pieces of ivory by hand in order to expose their undersurfaces to the light, and this operation is quite laborious.]

STOVES AND FURNACES—S. T. Savage, of Albany, N. Y.: I am aware that many stoves and furnaces have been made with a view to economize fuel, by the admission of atmospheric air above or beyond the coal, to inflame the combustible gases evolved from the coal under combustion.

I do not wish to be understood as making claim broadly to the use of air chamber to supply air to the combustible gases above or beyond the coal or other fuel.

Nor making claim to the combination of a throat or narrow aperture in the flue space supplied with air for the combustion of the inflammable gases.

I claim the use of the throat aperture or passage surrounded by an air chamber and pierced with numerous small holes, through which atmospheric air passes in numerous small jets to the said throat, substantially as described, when the said throat is located between the fire chamber and a flue chamber leading to the exit pipe or chimney, and combined with a perforated plate interposed between the said throat and the fire, substantially as and for the purpose specified.

SEED PLANTERS—Jesse D. Havis, of Perry, Ga.: I claim the vibrating hopper, B, in combination with the pin, g, constructed and arranged substantially in the manner and for the purpose set forth.

HUSKING CORN—Wm. H. Smith, of Newport, R. I.: I claim the combination of the toothed disk wheel, C, elastic endless apron, L, and brush cylinder, A, arranged and operating conjointly, as shown, for the purpose specified.

[This invention consists in the employment or use of a revolving toothed disk, elastic or yielding endless toothed apron, and stripping brush, the above parts being arranged and operating conjointly, so as to strip the husks from the ears in a rapid and perfect manner.]

OIL CANS—James M. Thompson, of Holyoke, Mass.: I do not claim arranging a chamber at or under the bottom of a can, and having a tube to extend therefrom through the oil can and into its spout, the said chamber having an air tube passing transversely into it, or instead of the connecting tube with the oil reservoir, and the tube by valve openings provided with valves, as these contrivances or oil cans have had no drip or catching cup or recess to catch the oil which may flow down outside of the discharging spout, whereas my improved oil can is provided with such cup, and it makes an element or part of its combination.

Nor do I claim that combination and arrangement of a catching cup or recess, a chamber and two tubes with the oil reservoir and discharging spout of an oil can, as the whole is explained and represented in letters patent granted to me.

But I claim my described improved arrangement of oil catching cup or recess, e, tube, D, chamber, B, tube, C, reservoir, A, and discharge tube, E, the same being productive of advantages as stated.

PERCH COUPLING FOR CARRIAGES—Wm. S. Lord, of Pulaski, Tenn.: I claim coupling the fore axle-tree of a carriage or other vehicle to the perch, by means of a cross bar, M, attached to the perch at a suitable distance in rear of the axle, in combination with connecting links, C, arranged and operating substantially as described.

SOAP MIXTURES—George C. Lawrence, of Winchester, Mass.: I claim the combination of the soap compound described, with borax in a pulverized or granular state.

DUMPING WAGON—Wm. B. Twiford, of Hornstown, Va.: I claim the hinging of the reach bars, F, F, and the bed, I, to a bent axle, as that when said axle is allowed to turn in one direction in the hubs, the wagon body shall dump, and when turned in the opposite direction be raised up horizontally, without one part being disconnected to slide or run on the other part, as set forth.

SECURING SHEET METAL COVERINGS FOR ROOFS—Wm. H. Trissler and John Stewart, of Fairview, Pa.: We claim the double lapping joint, c, for uniting the sheets of metal without solder, substantially as described.

We also claim the combination of the scroll and wing edges, a, b, for uniting the strips of covering, substantially as specified.

WASHING MACHINES—Moses D. Wells, of Morgantown, Va.: I claim the reciprocating clothes rack, guided as described, in combination with the wings, arranged and operating substantially as and for the purposes set forth.

BREECH-LOADING FIRE-ARMS—Thornton A. Washington, U. S. Army: I make no claim to the removal of the breech-piece so as to expose the base of the bore to receive the cartridge, as such construction would be inconsistent with my mode of closing the joint.

Neither do I claim, of itself, a revolving perforated breech.

But I claim the revolving cylinder breech, C, having the funnel passage, F, and the interior flanged cylinder, I, in combination with the chamber, D, and breech seat, arranged and operating substantially as and for the purposes specified.

SHAFT TUGS—Wm. Wentz, of Geneva, N. Y.: I claim the new manufacture of shaft tug described, to wit, a metal shaft tug provided with a buckle for the back strap and a loop for the trace, either with or without a loop for the belly band.

METALLIC PENS—John Wilcox, of Philadelphia, Pa.: I claim the double-pointed pen, in combination with the flanged swivel plate, f, and slide piece, m, constructed, arranged, and operating substantially as and for the purposes set forth.

BACK BAND HOOK FOR PLOW HARNESS—Noah Warlick, of Chambers Co., Ala.: I claim the reverse hook, H, in combination with the guard, G, enclosing the same, constructed, arranged, and operating as and for the purposes specified.

BREECH-LOADING FIRE-ARMS—George W. Morse, of Baton Rouge, La.: I claim inserting the rim, N, or it equivalent, without contact into the chamber, o, substantially in the manner and for the purpose described, contact being attained through the medium of a cartridge case.

I also claim the nipples, S, and the mode of operating them by the pins, r, and the shoulders, 7, on the hammer, or equivalents therefor, substantially in the manner and for the purpose described.

I also claim the combination of movable parts or their equivalents, whereby I retract or deliver the gun of a cartridge, drop it, open and clear the way for the insertion of another cartridge, whether the previous charge was fired or failed to fire, and cock the hammer automatically at one motion, substantially in the manner described.

CARTRIDGES—George W. Morse, of Baton Rouge, La.: I claim the combination and arrangement of the cartridge case as constructed, with the priming apparatus as constructed, or their equivalents, whereby I effect the entire exclusion of any, and all escape of the gas produced by the combustion of the powder of the cartridge and priming, except by the one channel and the bore of the barrel of the gun—the breech joints and priming vent being thereby so effectually sealed and closed that no air can escape at these parts of the gun after the charge is fired, until the cartridge case is withdrawn from the bore, although air blown in at the muzzle before firing the charge might escape through these joints, as it would in the case referred to.

R.R. CAR COUPLING—D. Lynahon and C. J. Wing, (assignors to D. Lynahon,) of Buffalo, N. Y.: We claim the construction of the coupling as shown, viz., having the cross bars, C, with pins, D, attached and embraced by springs, b, the bars and springs being placed in the boxes, B, as described, and the shackles, B, formed with inclined planes, d, d, at their ends, for the purpose set forth.

[This invention consists in a peculiar construction of the coupling, whereby the cars may be readily connected and disconnected, and without danger, as there is no occasion for a person to pass between the cars in order to adjust the pins. The device is simple, not liable to get out of repair, and not expensive to manufacture.]

WORKING OVER VULCANIZED INDIA RUBBER—Henry Forstrick, of Hoboken, N. J.: I claim the manner of extracting uncombined matter from vulcanized india rubber, gutta percha, and other gums or their compounds, by the application of diluted nitric acid and the use of fusel oil (grain oil) either in a heated state, mixed with the gum, or in the shape of vapors, for the restoration of the cleansed gums to the state of cohesion.

PROJECTILE FOR ORDNANCE—John B. Read, of Tuscaloosa, Ala.: I claim the attachment to elongated shot or shells of a cylinder of wrought-iron fastened to the body of the shot or shell, by having its bottom or sides more or less imbedded in the cast metal of which the shot may be composed, the cylinder to be attached to the butt of the shot or shell, and its sides to project beyond, being thinned down, after a short bevel, to such a degree as exactly to fit the bore of the gun when the charge is fired, so as to save windage in all cases, and impart rotation when rifle grooves are employed.

BILLIARD TABLE CUSHIONS—Wm. B. Carpenter, of Brooklyn, N. Y.: I distinctly disclaim the use of the metallic spring strip or facing in the construction of billiard cushions.

But I claim the mode described, or its equivalent, of the fastening of the metallic spring strip or facing firmly at or near its entire lower edge, c, c, substantially as and for the purposes as described.

REVERSIBLE HORSE POWER—Philip H. Kells, of Hudson, N. Y. Patented July 8th, 1856: I claim con-

structing the horse power so that the converge gear may be shifted to and secured upon either end of the main shaft, so that by reversing the pulley and pinion with their shaft, and placing the converge gear upon the proper end of the main shaft the machine may be converted from a right to a left hand one, or vice versa, without removing the main shaft.

HEATING BY GAS—Wm. F. Shaw, of Boston, Mass. Patented Feb. 26th, 1856: I claim the combination and arrangement, substantially as described, of air and gas burners or distributors, chambers, A' and B', and their flue and air supply conductors, F C C, the whole being made to operate essentially as specified.

I also claim, in combination with the gas burner, the perforated or wire gauze tube, g, operating as specified.

HARNESS SADDLES—O. B. North & Co., (assignors—through immediate assignment—of A. H. Gazlay, dec'd.) of New Britain, Conn.: What is claimed in the manner of constructing harness saddles is making the jockey skirts and saddle of metal cast in one piece, substantially as and for the purpose specified.

Reform of the British Patent Laws

Aristocratic though England may be in the form of its government, there are still some points of true democratic nature in her nobles, for which we must give them honorable credit. Thus, for example, great interest has been manifested by some of the greatest nobles in that country for the interests of inventors, and they have placed themselves, in relation to equal social terms with mechanics and artists.

At the meeting of the British Association for the Advancement of Science, held in Glasgow in 1855, a committee was appointed, on the recommendation of the mechanics, for the purpose of making the British patent system more efficient, and to render the surplus Patent Fund available as rewards for inventors and the advancement of science, instead of being absorbed in the general fund of the government. That committee consisted of the Earl of Harrowby, the Duke of Argyll, Wm. Fairbairn, engineer, Sir David Brewster, optician and philosopher, Col. Sabine, of the Army, T. Graham, Master of the Mint, chemist, and Thomas Webster, Patent Advocate.

This committee petitioned the Lord Chancellor, Lord Cranworth, on the subject, and he returned an answer to the effect that he was willing to comply with the memorial whenever the means were fully matured and set forth, whereby the reforms suggested could be carried out.

At the late meeting of the British Scientific Association in Cheltenham, in August last, the same committee was re-appointed to take such steps as were necessary to arrange the best method of rendering the patent system more beneficial to inventors and the cause of science, and we have no doubt but the result will yet be a great reduction of the British patent fees, and a more simple method of securing patents, and all through the efforts of the members belonging to the Association for the Advancement of Science.

From the proceedings of our American Association for the Advancement of Science, held in Albany in August last, no person can learn that such a class of persons as mechanics and inventors exist.

Pettingell's Pistol.

"We understand that a company has been organized with a capital stock of one million dollars, (all of which has been taken) to manufacture "Pettingell's telegraph revolving pistol," a new invention, which combines simplicity, strength and rapidity of execution. It is said to be an extraordinary weapon, and destined to supersede all other revolving pistols, and that it will be adopted by the army and navy.

"It is alleged that this pistol is self-cocking—an important improvement—and that it can be fired six times in a second and a half of time. The hammer is enclosed, and there is no strain on the main spring except at the moment of discharge. There are but seven pieces in the lock, (two less than a market lock,) and these are so simple that a blacksmith can repair them.

"It has received the commendation of some of the most scientific officers of the army and navy. The capital stock of the company is not for sale. The office of the company is at No. 7 Wall st."—*New York Evening Post*.

[One million of dollars is a very large sum to be invested in any new invention, although we believe Mr. P. has a capital improvement in fire-arms. His patent was secured through this office.

Foreign papers state that all the English mechanics are to be dismissed from the Russian service, and Americans to be employed.