lars, but the loss sustained from the fire will not exceed $75,000. The engine and engine house are uninjured. Two of the converters are also uninjured.

The gold product of Nova Scotia for the last eight year amounts to nearly $3,000,000.

Improvements amounting to $1,200,000 are being made upon the Chicago docks.

The Scotch iron works produced in 1867 over a million of tuns of pig iron.

English capitalists have $90,000,000 invested in East India Railways.

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

HAY AND COTTON PRESS.—Stephen Q. Carey, Waxahatchie, Texas.—The object of this invention is to provide a press which shall be simple and neat in construction and appearance, which can be conveniently and rapidly worked, and the operation of which shall be such that the platen in starting moves quickly, but as it approaches the end of its movement its velocity decreases and its power proportionately increases.

HYDRANT.—Robert Reilly, Baltimore, Md.—This invention is a durable but simply and easily operated hydrant, which can be detached and removed from the water pipe by means of its own handle, and without the use of a wrench. It is constructed in a peculiar manner for convenience in taking it apart for repairs; and it is provided with an apparatus by which it indicates any leak within, and at the same time protects the working parts from dust and dirt.

APPARATUS FOR MANUFACTURING MEDICAL EXTRACTS.—Edward E. Burrough, Baltimore, Md.—This invention has for its object the construction of a simple, cheap, and convenient apparatus, with which, by the application of hot water to the walls and bottom of the vessel that contains the materials to be heated, essences, medical extracts, etc., may be rapidly, conveniently, and thoroughly extracted from either liquid or solid substances.

ANIMAL TRAP.—W. A. Stack, Hillsborough, Md.—This invention relates to the class of self-setting traps, and consists in a new and improved arrangement of the bait box with the trap door and passage way for the animals, by which they can be enticed more readily to the middle of the trap door, before it falls and precipitates them into the receptacle below.

FEED CUTTER.—Norman McLeod, Clio, S. C.—This invention contains several important improvements in feed cutters, among which may be mentioned the following, viz.: first, the knives can be sharpened on the machine; secondly, it does not waste the straw or grain; thirdly, it can be operated equally well by hand or horse power, in doors or out; fourthly, it is simple, light, portable, and cheap; fifthly, the sheat box or feed table can be easily removed for convenience in transporting the instrument and in carrying it through small doors.

DERRICK FOR STACKING HAY.—J. B. Drake and W. H. Hutson, Montoursville, Pa.—The object of this invention is to provide a light, cheap, and convenient portable derrick for elevating and stacking hay, which when used in combination with a horse hay fork or other equivalent device, will raise the hay from the load, convey it to the proper position, and drop it upon the stack, and will then automatically return the hay fork to the load to receive another burden.

TOOL HOLDER FOR LATHES.—Wm. O. Hickok and Geo. W. Reisinger, Harrisburg, Pa.—This invention consists in a novel construction of the holder, whereby the tools may be fitted or applied to the holder with far greater facility than usual, and adjusted in proper position to suit the work required of them, with any trouble or difficulty whatever.

SLED BRAKE.—Jacob Latta and Lewis Snyder, Bethlehem Center, N. Y.—This invention consists in constructing a sled brake in such a manner that it may be rendered operative and inoperative when desired, and when applied or rendered operative admit of the sled being readily turned without subjecting the draft pole or thills to any undue strain.

SUSPENDER FASTENING.—Wendell Wright, Bloomfield, N. J.—This invention relates to a new and improved suspender fastening, and is designed to supersede the ordinary flexible straps provided with button holes to fit over buttons on the pantaloons and retain the latter in a proper elevated state on the wearer.

KITCHEN UTENSIL.—Warren Cook, Arsenal, Pa.—This invention consists in so constructing a rolling pin as to render it available in several different culinary operations.

METALLIC BRIDGE.—James B. Eads, St. Louis, Mo.—This invention relates to a new and useful improvement in the construction of metallic arch bridges, whereby a strong and substantial bridge is obtained with a comparatively light weight of metal.

PISTON FOR DEEP WELL PUMPS.—Charles Jarecki, Erie, Pa.—This invention relates more particularly to oil wells, which are usually sunk deep and which require the piston and working parts of the pumps to be of the most permanent and durable character.

LUBRICATOR.—Timothy Holland, New York city.—This invention relates to useful improvements in vessels for lubricating journals with oil or other lubricating liquid, whereby the ordinary glass lubricator is rendered more efficient than it has hitherto been.

POCKET TOBACCO CUTTER.—Edward L. Gilman and Theophilus S. Smith, Somerville, Mass.—The object of this invention is to provide a convenient pocket machine for the use of tobacco smokers, whereby they may cut their tobacco without resorting to their pocket knives for that purpose, and in combination a match box.

BAG FASTENER.—Charles H. Nye, Vineland, N. J.—This invention relates to an improvement in the method of fastening the mouths of bags for holding grain, or other products or articles, and it consists in securing to the bags, by a rivet and washer, leather straps containing a buckle of any suitable size and form, whereby the strap is buckled around the bag and the contents secured.

TOY WATCH.—Joseph Laubereau, Paris, France.—This invention relates to a motor obtained by the tension of an elastic string, with variable self-acting brake proportionate to the work that the motor is able to yield. This variable self-acting brake motion is applicable to various uses, where little force is required; viz., to regulators, toys, and more especially toy watches.

CAR COUPLING.—D. D. Howe, Beaver Dam, Wis.—This invention consists in constructing the buffer of two parts, one of which, provided with three walls of the opening for the hook, is rigidly secured to the framing of the car; the other, constituting the top half of the said opening, is connected to a yoke which is supported upon the end of a lever, whereby it may be raised when desired; it may also be raised by the hooks when the cars come together for coupling. It is arranged to be held in a downward or closed position by a spring. The said stationary part is provided with a round bolt against which the hook draws, which bolt is arranged so as to be readily removed for the substitution of another when worn, and a sliding rod is connected to the said lever, which serves as a plunger for throwing off the hook for uncoupling the cars.

STAYS FOR PAPER AND LINEN COLLARS.—Simon Kaufman, Fairbury, Ill.—This invention relates to improvement in the method of staying and supporting paper and linen collars whereby their durability is greatly increased.

POTATO AND CORN PLOW.—Charles F. Noftz, Toledo, Ohio.—The object of this invention is to construct a plow for cultivating corn, potatoes, rice, and other plants, which plow shall be of simple construction, cheap, durable, and adjustable to the width of furrows, and hight of rows.

HYDRANT.—James Allison, Cincinnati, Ohio.—The nature of my invention relates to improvements in hydrants, whereby it is designed to simplify and improve the construction of the same, and adapt them for use either as hydrants or fire plugs, and to provide them with detachable caps, whereby when it is designed to use them also for hitching posts, a cap or head indicative of such use may be readily attached to the post or projecting part above the ground.

MACHINE FOR PACKING TEA, COFFEE, ETC.—John Garsed, and Clayton Dunn, Frankford, Pa.—This invention relates to a new and improved machine for packing tea, coffee, etc., in paper bags, with a given weight of the article in each bag. The object of the invention is to obtain a means for the purpose specified, which will admit of the work being performed rapidly and in a perfect manner, and without the employment of skilled labor.

MILK CAN.—T. W. Akin, Patterson, N. Y.—This invention relates to a new milk can, which is made of iron, and provided with an iron bottom that rests upon a hoop riveted to the under side of the lower part of the can.

RAILROAD CHAIR AND SUPPORT.—Aaron Van Guysling, West Albany, N.Y.—This invention has for its object to improve the construction of railroad chairs and their supports, so as to furnish a substantial, reliable, and elastic support for the rails, which will hold said rails securely in place, and at the same time prevent the jar now so universally felt in railroad riding.

SELF-ADJUSTING HOOK.—William Bisbee, and Fleming G. Hearn, Yreka, Cal.—This invention has for object to improve the construction of the improved hook patented by the same inventors December 31, 1867, and numbered 72,784, so as to make it more convenient and effective in operation.

COMBINED LIFTING JACK AND CANT HOOK.—Daniel Fasig, Rowsburg, O.—This invention has for its object to furnish a simple and convenient machine for raising wagons, and for raising and turning, or canting timber, and which shall be so constructed and arranged that it may be easily adjusted to wagons of any hight, or timber of any size.

PROCESS FOR CASTING CAR WHEELS.—Henry M. Woodward, St. Louis, Mo.—This invention relates to improvements in the process of preparing cast iron, whether in the condition of pig or scrap, for making or casting car wheels, the object of which is to provide car wheels of a better and more uniform quality than can be produced by the common mode.

DRIVE WELL.—John S. Armstrong, Delaware, Ohio.—The object of this invention is to furnish an improved drive well. It consists of a conical point, having helical feathers or threads, which are cast on the point when the latter is made. The point is hollow a portion of its length, and the bore or cavity fits with easy contact on the end of the lower joint of the ordinary drive well tube, which is of the size of common gas pipe. The lower end of tube is formed with numerous perforations, which are closed against the entrance of sand, while the point is being forced down into the ground. When, however, it is desired to ascertain if there be water present, at any part of the descent, the tube is raised a few inches to raise several of the holes from out the barrel of the point, and water entering and rising to the surface of the ground will announce its presence.

VENTILATING APPARATUS.—Wilhelm Scharrath, Bielefeld, Prussia.—This invention relates to a new ventilating apparatus to be applied to all temporary or constant habitations of men or animals, and consists in the arrangement of porous walls and ceilings or either to the rooms of houses or cars, or to the cabins of ships, so that fresh air, either in a heated or cooled state, may freely enter the said room or cabin, while the foul air can as freely escape.

MACHINE FOR CUTTING SLATE.—Thomas R. Drummond, Hartford, Conn.—This invention relates to a new and improved method of cutting slates for roofing and other purposes, and consists in forming a box knife corresponding in size to the superficial area of the slate, and in a weighted cushion connected therewith, and also in a cushioned spring bed surrounded by a metallic shell

TICKET AND TAG HOLDER.—James Bramble and Albert H. Nirdlinger.—Fort Wayne, Ind,—The object of this invention is to provide a convenient method for holding railroad and other tickets or fastening tags to goods or packages whereby the same may be exposed to view and still be securely fastened to the dress or package.

MACHINE FOR DRESSING HOP POLES.—C. D. Brown, Bainbridge, N. Y.—The object of this invention is to provide a simple and effective means for sharpening and dressing hop poles. It also consists in the arrangement of three cutter wheels on a shaft in such a manner that the poles to be sharpened or dressed may be passed between the said wheels, and be cut by cutters or knives affixed on the radial arms of the wheels, which latter are formed with reference to bearing the said knives and presenting their cutting edges to the wood in the most effective manner

IRON FENCE POST.—Wm. Merrell, Kent, Ohio.—The object of this invention is to furnish a fence post which is simple, durable, cheap, and efficient. It also consists of a flat, metallic fence post, usually of iron, and provided with groups of studs for receiving and holding the planks or horizontal parts of the fence.

PUNCHES.—Geo. C. Wilder, Lawrence, Kansas.—This invention relates to a new and improved method of constructing punches for the punching of nuts and washers whereby the washers or nuts are more rapidly and economically made. It also consists of a follower forced upwards against the washer or nut after the same has been formed by the force of a spring whereby the washer or nut is freed from the punch. It consists also of a central stationary punch over which the movable outer punch works whereby a center hole is punched in the nut or washer at the same time that the washer or nuts is punched out of the bar.

PUMP.—J. A. Shanner, Plainview, Ill.—This invention consists in a lift pump rod provided with a forked lower termination, wherein a two-lever valve is hinged, the said lever being partly composed of leather and partly of metal, and actuated by springs to open the same for lifting. It also consists in a peculiar arrangement of a toothed rack upon the pump rod and a pair of gear wheels for operating it.

NUT CRACKERS.—Charles Hayden, Collinsville, Conn.—This invention consists in providing one of the pins with a clamp, whereby it may be firmly clamped to a table in a stationary position and in providing two different points of application between the jaws, one for small and one for large nuts.

BRONZE DRESSING FOR LEATHER.—M. S. Cahill, Boston, Mass.—The object of this invention is to provide a fluid which will give a reasonably permanent bronze color to leather, and is more particularly designed as an accessory article in the boot and shoe trade, inasmuch as it will enable dealers to renovate their bronze shoes and boots when the same have become shopworn and tarnished, as in the case when this class of goods have been kept on hand for considerable time or much handled.

OPERATING THE SAILS OF VESSELS.—Frederick B. Dunton, Center Lincolnville, Me.—The object of this invention is to provide a sail, or sails, of a square rigged vessel, so-called, with devices by means of which the said sail or sails may be set, reefed, or furled in a quick and thorough manner from the deck; thereby lessening the labor of handling the sails, and dispensing with a portion of the attendants requisite for handling sails as ordinarily made and rigged.

MACHINE FOR BUNDLING WOOL.—H. F. Laroy, Richmond, Ill.—This invention consists of a table, the top of which is made in sections, the central and corner sections being secured to the table, while the four sections between the corners are hinged to the central sections and connected by levers and a belt to a foot lever, so arranged that, by the application of pressure to the foot levers, the said movable sections will be folded up like a bag, enclosing and compressing the wool or other article which is placed on the table in a compact bundle that may be tied by cords previously laid across the said movable sections.

SPINNING FRAMES.—J. L. Johnson and J. W. Foust, Evansburgh, Pa.—This invention consists in an arrangement of apparatus for moving the spindle carriage and a means of preserving the proper tension on the belt.

MOP WRINGER.—Geo. Wells and S. A. Haynes, Island Pond, Vt.—The object of this invention is to provide a simple and convenient apparatus for wringing mops. It consists of a pail having a bail or handle which acts as a lever to bring together or separate the squeezing rollers when the handle is lowered or raised.

Answers to Correspondents.

CORRESPONDENTS who expect to receive answers to their letters must, in all cases, sign their names. We have a right to know those who seek information from us; besides, as sometimes happens, we may prefer to address the correspondent by mail.

SPECIAL NOTE.—This column is designed for the general interest and instruction of our readers, not for gratuitous replies to questions of a purely business or personal nature. We will publish such inquiries, however, when paid for as advertisemets at $1 00 a line, under the head of "Business and Personal."

☞ *All reference to back numbers should be by volume and page.*

E. W., of Ohio.—A full description of the two wheeled velocipede with engravings is to be found on page 120, No. 8, of the current volume of the SCIENTIFIC AMERICAN.

G. A. D., of N. Y.—We see no objection to your using spectacles whose glasses are ground to different foci, in order to adapt them to the different conditions of sight in each eye.

J. P. J., of Ohio.—We can give you a recipe for making boots water proof, as, for instance: Beef tallow, 4 oz; rosin, 1 oz; beeswax, 1 oz; melted together. Add, when cold a quantity of neats-foot oil equal to the mass. Apply with a rag, warming the boots before a fire, to the soles as well as uppers, and rub in well with the hand. Two applications will make the boots thoroughly water proof and still keep them soft. We, however, do not approve of such preparations, as the feet generally perspire more than any other portions of the body, and any water proof preparations applied to boots prevent the perspiration from escaping and keep the feet wet and cold.

P. S., of Mass.—Good glue is the best cement for splicing new belts; the best belt makers use it in preference to any other preparations. All cemented joints in belts should be strengthened by a row of rivets on each cross edge. Better buy your belts of some manufacturer than attempt to make them yourself. It is cheaper. Measure the length of your belt by a string or twine and order accordingly. We have before published the plan of laying out belt holes through floors. We can give you the method by mail, if desired.

J. H. T., of Ill.—"What pressure must the feed pipe to a 14-H. P. boiler be able to stand without bursting, the water being forced with a two-inch pump, through a one-inch pipe, the pressure of steam never to be raised higher than 60 lbs.?" It should stand the pressure of 60 lbs. Can it have any greater pressure put upon it than the resistant of that in the boiler? It makes no difference what the capacity of your boiler, and you will find your one-inch pipe able to stand all the pressure per square inch your 14-H. P. boiler will.

E. W. K., of Mass.—On the subject of the use of divining rods, for ascertaining the true source of water supply, we have already published all that we desire to say on the subject. We have very little faith in the theory or practice. We regard it as an amusement rather than a settled science.

Business and Personal.

The charge for insertion under this head is one dollar a line. If the Notices exceed four lines, an extra charge will be made.

Inventions Patented in England by Americans.

[Compiled from the "Journal of the Commissioners of Patents."]

PROVISIONAL PROTECTION FOR SIX MONTHS.

2,874.—WASHING APPARATUS.—C. H. Hudson, New York city. Sept. 18, 1868.

2,923.—PAINT OR COMPOSITION FOR PROTECTING SHIPS' BOTTOMS, PRESERVING SUBMARINE WOOD WORK, ETC.—Wm. F. Babcock, San Francisco, Cal. Sept. 23, 1868.

2,968.—CONVERTING CAST IRON INTO WROUGHT IRON, AND UNITING OXIDES AND FLUXES WITH MOLTEN CAST IRON.—Thos. S. Blair, Pittsburg, Pa Sept. 28, 1868.

2,980.—GAS BURNER.—Wilbur F. Parker, Meriden, Conn. Sept. 29, 1868.

2,996.—TREATING METALS FOR THE PURPOSE OF SEPARATING FROM IMPURITIES.—Norman Cutter, Cincinnati, Ohio. Sept. 30, 1868.

2,998.—MANUFACTURE OF WHITE LEAD, AND THE PRODUCTION OF CARBONIC ACID GAS FROM SAID MANUFACTURE, ETC.—Henry Hannen, B. F. Pine, and Thos. Woods, Philadelphia, Pa. Sept. 30, 1868.

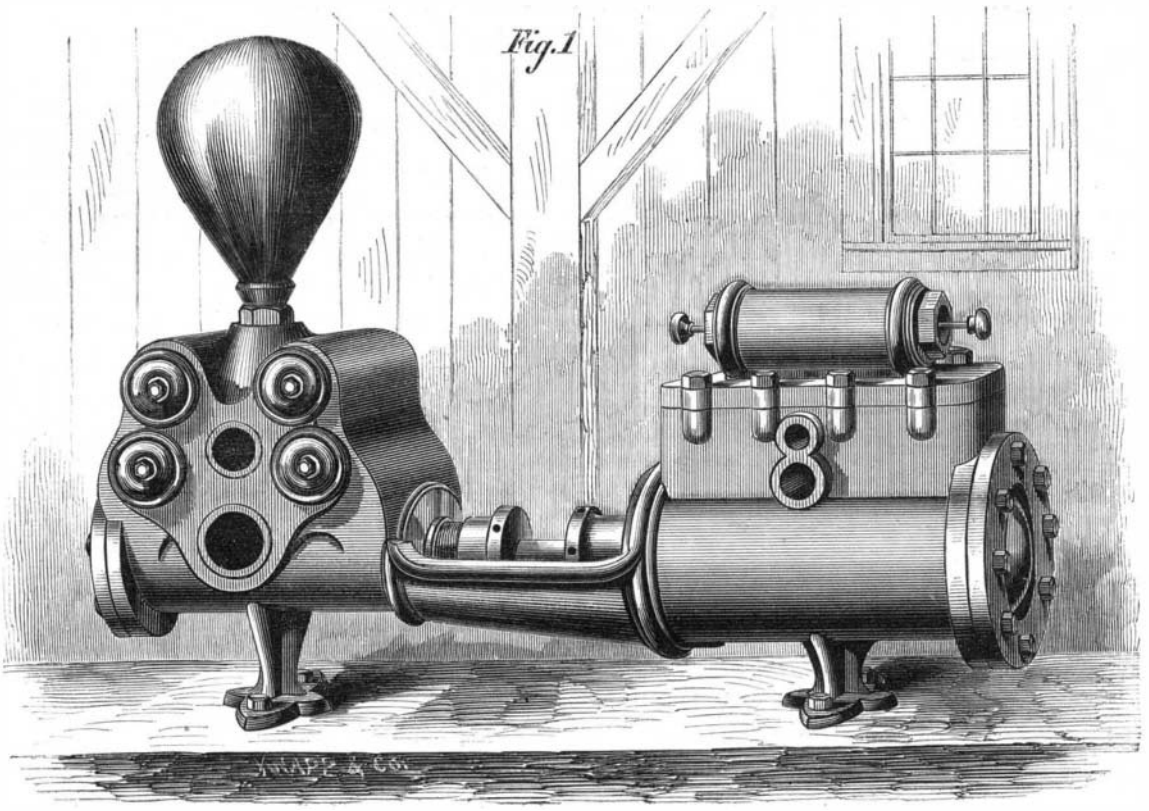
3,000.—IMPROVEMENTS IN SEWING MACHINES, APPLICABLE TO OTHER MACHINES WORKED BY FOOT POWER.—Greenleaf Stackpole, New York city. Sept. 30, 1868.

CHANDELIER.—Miram Tucker, Newton, Mass. Oct. 5, 1868.

Improvement in Steam Pumps.

The unequal action of most of the steam pumps now employed, their liability to get out of order, and the excessive wear of the working parts, constitute objections to their general adoption, and offer opportunities for improvement. Such improvement has been attempted in the construction of the pump herewith illustrated, which is operated by steam alone, without the aid of tappet arms, eccentrics, or any of the complicated contrivances heretofore considered essential.

Fig. 1 is a perspective view, and Fig. 2, a vertical section, with letters of reference showing its internal construction, passages, valves, etc. In construction, the machine consists of an ordinary cylinder, A, and piston, B, the latter operated by steam admitted at either end by means of a cylindrical piston valve, C, which is moved by means of steam let on by the secondary valves, D, they being operated by the main piston, B, so that when the piston arrives near the end of its stroke, it lifts one of these valves and allows steam to pass into the valve chest through small passages connecting the live steam with the ends of the main valve, thus moving it and reversing the motion of the piston. This arrangement of the valves is peculiarly advantageous from the fact that these small valves being very nearly balanced by the pressure above and below, (just sufficient difference being made between the diameter of the stem and the diameter of the valve to make the pressure on the top of the valve slightly greater than below so as to keep the valve on its seat), they are easily lifted from their seats by the movement of the piston, and, being started, the current of steam immediately carries the valve up so that there is no wear between the hardened surface of the piston and the end of the valve stem. The manufacturers say:



SUTHERLAND'S PATENT STEAM PUMP.

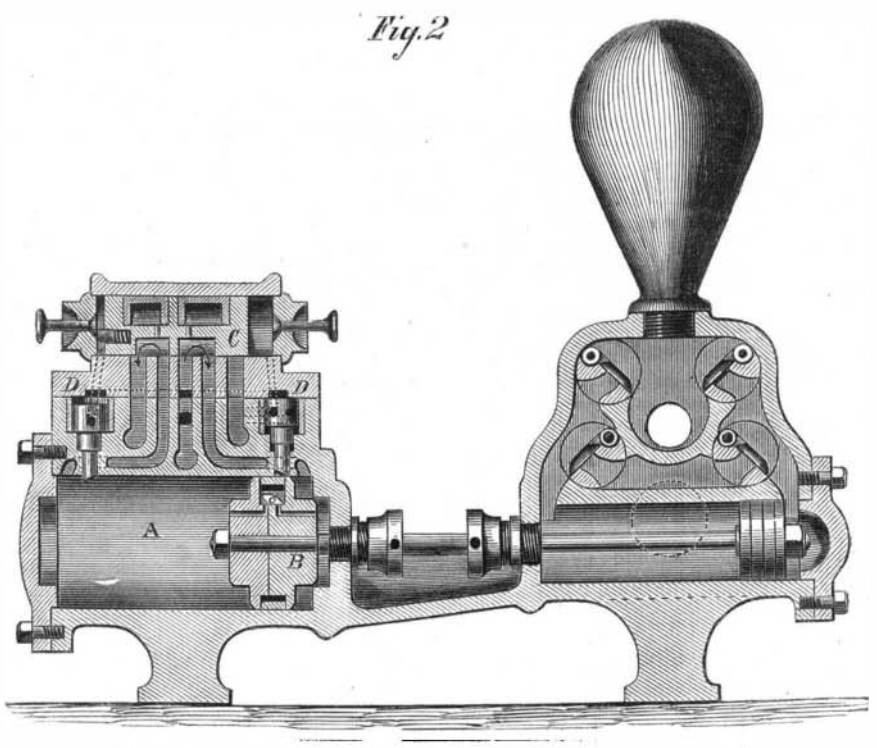
By the peculiar structure of these valves, we are enabled at the same instant, and by the same action, to admit live steam upon one end of the cylindrical valve, and to exhaust from the other end, thus insuring positive, true, and certain motion.

The pump is double-acting, and has two hinge valves communicating with the suction pipe, and two similar valves communicating with the delivery pipe. These valves are hung singly or in pairs, or all together, in a plug or cylinder, which is inserted in an opening made for the purpose, and fastened there. The object being, in such arrangements, to place the valves in such a manner that they may be readily removed and examined.

When these valves are hung in pairs, the arrangement of the lower plug consists merely of a single cavity communicating with the suction pipe, and having an opening on each side which the valves alternately open and close, allowing the water to flow into either end of the cylinder as the piston is moved, and preventing it from being forced out from the other end in the manner of ordinary valves in similar situations.

The upper plug is formed into three compartments by a longitudinal and lateral partition, so that the water may not, when forced, flow through the opposite valve back into the cylinder, but may have a free passage out into the delivery pipe, or up into the air chamber.

By dispensing with so much complicated mechanism, and thus relieving the pump of all unnecessary friction, it has great power, steadiness of motion, and velocity. Perfect surety of operation—it always starts readily. No dead points. Of great durability. Very compact, and from twenty to fifty per cent heavier than other steam pumps. Requires no skill to operate it. Small number of parts. Will pump water of all temperatures, even to boiling; and all other liquids for which other steam pumps are used.



The pumps are manufactured by the Easthampton (Mass.), Pump and Engine Co., Hon. Samuel Williston, President.

Patented in U. S., Aug. 14, 1866; reissued March 26, 1867. Patented in England, through the Scientific American Patent Agency, Oct. 8, 1868. For further information address Washington Iron Works, office 57 Liberty st., New York city.

Manufacture of Steel from Ore---The Heaton Process.

The Heaton Process, of which we shall shortly give full details, is, according to the *Mining Journal*, attracting much attention. That journal says:

"It will be recollected that the process consists in the use of an improved purifying agent, which appears to exercise a most important influence in the removal of the sole impurities which have prevented the ores of Cleveland and Northamptonshire being used in the production of the best quality iron. The Heaton process has been described by Robert Mallet, F.R.S., as one of those metallurgic advances which, both with respect to economy of production and utilization of inferior pig-iron, leave their mark indellibly on great national industries. The report of Prof. Miller, of King's College, is quite as satisfactory as that of Robert Mallet. It appears that Prof. Miller visited the works in order to be enabled to report upon the process, and certify that the metal analyzed by him was really the result of the process. The "converter" consists of a wrought-iron pot, lined with fire clay; into the bottom of this a suitable quantity of crude nitrate of soda, combined with silicious sand, is introduced, and the whole covered with a cast-iron perforated plate. The molten pig is now poured in, and in about two minutes the reaction commences. At first brown nitrous fumes are evolved, and these are followed by others of a more watery nature. After the lapse of five or six minutes a violent deflagration occurred, attended with a loud roaring noise, and a burst from the top of the chimney of brilliant yellow flame, which, in about a minute and a half, subsided as rapidly as it commenced. When all had become tranquil, the converter was detached from the chimney, and its contents were emptied upon the iron pavement of the foundery. Professor Miller took samples of the various materials used, and carefully analyzed the iron, both before and after it had been submitted to the process; and, as the result of his experiments, he states that it was proved that the reaction of the nitrate of soda had removed a large proportion of the carbon, silicon, and phosphorus, as well as most of the sulphur—the phosphorus retained was not sufficient to injure the quality of the steel produced. Steel made by the Heaton process has been tested, and the results obtained afford strong evidence that uniformity of quality is practically attainable. With regard to the principle of the process, Prof. Miller considers it to be good, and the mode of attaining the result both simple and rapid. The nitric acid in the nitrate, in this operation, imparts oxygen to the impurities always present in cast iron, converting them into compounds, which combine with the sodium, and these are removed with the sodium in the slag. The action of the sodium is one of the peculiar features of Heaton's process, and gives it an advantage over former methods."

The Chemistry of Furniture.

An unknown writer has promulgated the following facts from well known chemical laws, which every housekeeper should remember:

The substances from which furniture is chiefly exposed to injury are water, oils, alcohols, and acids. Acids act on marble. Marble is itself composed of carbonate of lime; that is, it is a compound of carbonic acid and lime. Now, the carbonic acid has a comparatively weak affinity for lime, and most other acids will prevail over it and take its place when brought in contact with it, thus destroying the texture of the stone, liberating the carbonic acid, and leaving nitrate of lime, or muriate of lime, or sulphate or acetate of lime, as the case may be, in the form of a white powder, in its place. But oils, alcohols, and water produce no effect on marble. All varnished or polished surfaces of wood, on the other hand, while not injured by acids, are attacked by alcohol.

Varnishes are composed of different gums and resins, which are generally soluble in alcohol. Many of them are made by dissolving the materials in alcohol so as to liquify them, and then, when they are applied, the alcohol evaporates, leaving the gum or resin a thin even coating over the surface. If now any alcoholic substance comes upon such a surface, whether it be alcohol itself, as used for lamps, or spirits of any kind or even wine, which contains but a small per centage of alcohol, a portion of it is dissolved, and the brilliancy of the surface is destroyed. Oils will not attack either marbles or varnished surfaces, and will do no injury except to naked wood or other porous substances which admit them into the pores, from which they cannot afterward be easily expelled. Water affects no substances except such as have open pores exposed, in which case it enters and causes the substance to swell, or such as are soluble in water, as glue in joints, and mucilage or gum-arabic, used sometimes for attaching superficial ornaments to fancy work.

REMOVAL OF THE BROADWAY BRIDGE.

Ever since its erection the bridge over Broadway, New York city, connecting Fulton street, east and west, has been an outlook for visitors and citizens who desired to get an idea of the crowd and jostle, the jam and tumble, the dangers and excitements of the Broadway passage. It has also served a good and probably profitable purpose to a photographer adjacent, who must have taken thousands of negatives of the bridge and its throngs. The bridge is to be removed in consequence of an injunction prayed for by a Broadway hatter, whose windows were darkened and whose custom 'was diminished, as he asserts, by its propinquity. Although the court limited the time of its removal to days, if its demolition or removal occupies a tithe of the time spent in its erection, weeks will elapse before the Leow Bridge ceases to be a notable object on Broadway, sharing the admiration of the strangers who visit the city with historic St. Paul's, the elegant Park Bank, and the substantial *Herald* office.

Few who have the least particle of artistic taste will regret its removal. At the time of its erection we spoke of its seeming massiveness, and suggested a much lighter and more graceful structure of iron or steel wire. But if passages for the convenience of foot passengers must be made across our most crowded thoroughfares, we cannot see why a tunnel with a descent of ten or a dozen steps would not serve the same purpose at a much less cost than an elevated bridge, the level of which must be reached by as many steps as the second floor of our most lofty buildings. But better than either would be some system of intercommunication that would relieve the streets now overcrowded, and distribute the mass of vehicles compelled to use only two or three main avenues of traffic.

Cure for Rattlesnake Bite.

The *Sun* says the following receipe is claimed to be an unfailing remedy, and has been tried with success in two instances where soldiers have been bitten by rattlesnakes on the Plains: Ribron's antidote to the poison of the rattlesnake —R. Iodide potassii 4 grains; Hydrarg. Chlor. Corros. 2 grains (corrosive sublimate); Bromine 5 drachms. Ten drops of this mixture diluted with a tablespoonful or two of brandy or wine, or whiskey, constitute a dose, to be repeated if necesary. It must be kept in glass-stoppered vials, well secured, as the air will affect it. This is an invaluable remedy.

DIRT wears out tools by slow oxidation. The attrition of cleanliness preserves them.