PESTLES FOR CLEANING CLOTHES—Ezra Pollard, of Albany, N. Y., assignor to himself and B W. Seeley of New York City: I do not claim a pestle formed of a series of parallel and solid cylindrical projections fitted in a head or stock, for that, or its equivalent, has been previously used.

But I claim as an improved article of manufacture, a clothes pounder or pestle composed of a stock, A, handle, C, tubes, D, and openings, a, as shown and described.

[The subject of this patent is a clothes pestle or pounder, constructed of a series of parallel tubes fitted in a suitable head or stock, and having apertures made through them at their upper parts, thus rendering it a very effective instrument for washing clothes.]

BURNISHING ATTACHMENT FOR LATHES—James S. Ray, of East Haddam, Conn.: I claim the arrangement and combination of the plate, E, plate, F, spring, K, mandrel, C, and tool, G, as and for the purposes shown and described.

[The object of this invention is to facilitate the manipulation of the burnishing tool to such a degree that apprentices, females, and comparatively inexperienced persons, may perform the desired work equally as well as the experienced workmen now required. The invention is applicable to all burnishing that is performed with the aid of a lathe—such as the burnishing of metal buttons, coffin screw-heads, &c.]

STEERING APPARATUS—Jesse Reed, of Marshfield, Mass.: I claim, first, The duplex screw shaft, E, in combination with the nuts, G, and guide rods, H, the rods being each permanently connected with one of the nuts, and passed through the lug, d2, on the other nut, and operating in the manner substantially as specified.

Second, I claim in combination with the above, connecting the nut, G, to the rudder-head by means of the arm, I, bulb, K, and rod, b, operating substantially as described.

TRACE FASTENINGS—Nil J. Reynolds, of Webster, N. Y.: I do not claim the face plate, A, or bolt and spiral spring, E, as new.

But I claim first, the formation of the eye, d, which receives the tongue, E, for the purpose described and set forth.

Second, I claim the tongue, E, in combination with the tube, c, spiral spring and bolt, E, which fastens tongue, E, in the eye, d, as described.

RAILROAD CAR BRAKES—J. W. Rice, of Springfield, Mass.: I claim, first, The suspension bar, H, crotch bolt, J, and nut, J, when arranged and operating in the manner and for the purposes substantially as described.

Second, I claim the continuous rod, V, and loose pulley, K, in combination with the suspension bar, H, and crotchet bolt, I, and nut, J, when arranged and operating substantially as and for the purposes set forth.

Third, I claim the loose collars, P P, on the standard, q, when applied in the manner and for the purposes substantially as set forth.

BEDSTEAD FASTENING—Oliver Robinson, of Rochester, N. Y.: I claim the combination and arrangement of the hooked locking bolt, A, with the circular wrench and eccentric, B, constructed as described, for holding the bolt by means of the lip, i, in the proper position for entering the post and tightening the connection made with the pin, f, or its equivalent, substantially as and for the purpose set forth.

APPARATUS FOR WALKING ON THE WATER—Henry R. Rowlands, of Boston, Mass.: I claim the construction and use of the apparatus by the arrangement of the metal floats, o o, the metal ballast boards, m m, and the wooden stanchions, H H, in a manner substantially as and for the purpose described.

DREDGING MACHINE—James Stewart, of New London, Ct.: I claim the arrangement of the three series of dredging buckets in the same dredging machine, substantially as described and shown, for the purpose of excavating a channel in the earth throughout the entire width of the boat.

I claim arranging the windlass barrels which raise the dredging apparatus out of the water, on the same shaft that operated the dredging chains, so that they may be locked to the shaft to raise the dredging apparatus without stopping the chains of dredging buckets, substantially as described.

BURRING MACHINE—O. W. Stow, of Southington, Ct.: I do not claim the rollers, G H, nor the manner of adjusting the upper rollers H, nor do I claim the gage I, in itself considered, nor the manner of adjusting the same on the lower roller, G, by the screw rod, J, for these parts are well known and have all been previously used.

But I claim the arrangement and combination of the spring, K, gage, I, and rollers, G H, substantially as and for the purpose shown and described.

[The object of this invention is to prevent the difficulty attending the wear of the journal of the lower roller shaft, and the consequent separation of the lower roller from the gage, whereby the latter is frequently rendered useless, or prevented from performing its proper functions. It consists in a novel manner of applying the gage to the implement, whereby the gage is permitted to adjust itself with the lower roller, and compensate for all wear of the journal of the lower roller shaft.]

MANUFACTURE OF STARCH—S. T. Stratton, of Philadelphia, Pa.: I disclaim the use of cold alkalies or alkaline liquors for steeping the material.

What I claim is, steeping the material from which the starch is extracted, either whole or crushed, in an alkaline or caustic alkaline liquor of a suitable strength and artificially beaten to a temperature of from 70° to 130° Fah., as specified.

WASHING MACHINE—G. W. Swigert, of Monmouth, Ill.: I claim as an improved article of manufacture, a washing machine provided with a cylinder of brushes C, a concave, J, supported on spring, d, guard, k, attached to rod, e, pounders, L, tappet drum, M, and otherwise constructed as shown and described.

[In this invention, a rotating brush, elastic concave and guard are employed placed in a suitable box or case, and so arranged that clothes may be washed in an expeditious and perfect manner without injury or breaking any buttons that may be attached to them.]

CLOSET FOR SEWING MACHINES—William P. Uhlinger, of Philadelphia, Pa.: I am aware that sewing machine stands have already been made with a view to hide the machine from sight, when standing idle, which end is, in those, accomplished by means of a separate covering or cap, the platform of the machine being stationary; but this I do not claim. I think, however, it must be evident from the description that parts of my improved sewing machine closet may be modified, or equivalents substituted, without imparing my invention; as, for instance, an arrangement of levers, or of gearing, may be employed in place of the cords or chains and pulleys described, all of these being well known mechanical devices, and, in this instance, giving the same result; or the platform, G, may, instead of sliding bodily up and down, be made to turn on pivots; I therefore do not desire to confine myself to the described construction or combination of the various parts in every minutia.

But I claim combining the sewing machine platform, G, with the lid, B, of the closet, that the opening and shutting of said lid shall operate the platform, G, substantially in the manner and for the purpose set forth.

RAILROAD CAR SEATS AND COUCHES—Nathan Thompson, Jr., of Brooklyn, N. Y.: I claim, first, The combination of longitudinal seats, with a raised platform and berths, or reclining places beneath the seats and platform, substantially in the manner described.

2d, In combination with berths or reclining places beneath a seat and a raised platform serving as a footstool to such seat, I claim a back to that seat capable of being moved, or of change of place, substantially as specified, so that it may serve, at will, as a back or as a couch above the main seat.

3d, I claim making the top of the platform, or footplace, pertaining to the main tier of seats movable, substantially in the manner and for the purposes specified.

4th, I claim arranging within a railroad car longitudinal couches along or upon the floor, and other couches or seats above these, with backs, which may be converted into couches and passage ways, or a passage way, from which free access may be had to all the seats and couches, the arrangement of the whole being substantially such as set forth.

5th, I claim combining with longitudinal passage ways, or a longitudinal passage way, longitudinal seats when those seats have backs so constructed, substantially as specified, that they may be converted into couches, or when those seats are free to slide transversely substantially in the manner described, the combination, as a whole, being as set forth.

Sixth, I claim adjustable or movable end seats, substantially such as described, and serving, if necessary, as steps, in combination with longitudinal car seats, having backs capable of conversion into couches, substantially in the manner specified.

APPARATUS FOR GENERATING ILLUMINATING GAS—Charles A Tyler, of Washington, D. C.: I claim, first, The peculiar arrangement and combination of the retort for generating the hydrogen gas with the main retort for the generation of the illuminating gas, substantially as set forth.

2d, Elongating and contracting the rear end of the main retort in the manner and for the purposes substantially as set forth.

3d, Connecting the rear end of the hydrogen retort with the contracted end of the main retort in the manner and for the purposes substantially as set forth.

BURNERS FOR VAPOR LAMPS—Sigourney Wales, of Boston, Mass.: I claim, when the wick is supported on and around an inner wick tube and within an outer wick tube, and the jet-cap is made separate from and so as to screw or fit on the outer wick tube as described, the application of a rod, F, to the movable jet-cap, D, and the inner wick tube, E, in such manner as to be fastened to the cap, D, and extend into and fit the bore of the tube, E, so as not only to enable the jet-cap to be raised and supported above the wick in manner to allow such wick to be inflamed and the flame thereof to heat the said jet-cap and rod, but to serve as a means of conducting heat from the jet-cap into the inner tube, by which such heat may be conducted into the wick in order to aid in vaporizing the liquid contents thereof.

MAKING EDGE TOOLS—William White, of Newark, N. J.: I am aware that ingots of steel and iron are now formed by pouring the melted liquid into molds; I do not claim for the purpose of forming the ingot: I do not claim the manufacture of iron or steel, nor the remelting of the same, either new or old.

But I claim the use of wrought iron and steel separately or combined, while in a melted or liquid state, for the purpose of forming into shape axes and other articles, without the process of forging, welding or swaging, by the use of a mold, the cavity of which is the shape or form of the articles desired, as set forth in my specification.

LIFE-PRESERVING TRUNK—Oliver Evans Woods, of Philadelphia, Pa.: I do not confine myself to the precise form of valise represented in my drawings, but the same construction may be applied with equal advantage to all kinds of trunks; the stays may be placed upon the inside or the exterior of the valise or trunk as may be found most desirable.

I claim, as an improved article of manufacture, a valise or trunk, made substantially as shown and described.

[This valise, trunk, hat-box or other similar article used by travellers for carrying clothes, is constructed out of three separate frames, which are connected by a flexible waterproof covering, the middle frame being provided with pivoted stays, so that the valise is expanded when these stays are turned on their pivots into an upright position; but when the stays are turned down, so as to fall in the same plane with the middle frame, to which they are attached, the valise can be compressed like a pair of bellows.]

THE CUTTING APPARATUS OF HARVESTERS—William A. Wood, of Hoosick Falls, N. Y.: I claim the manner described of constructing the guards and uniting them to the finger bar, as set forth.

DOOR FASTENER—Gilbert Yates, of West Dresden, N. Y.: I am aware that there is quite a number of fasteners already patented, all of which I disclaim.

But I claim a door fastener constructed of the pieces, A A' A'', bolt, B, keeper, C, and slot, D, operating as set forth.

TURNBUCKLE FOR WINDOW BLINDS—Joseph L. Chapman, (assignor to himself and George Chapman,) of Philadelphia, Pa.: I claim the turnbuckle, E, and sliding collar, D, provided with the flanch, b, and the spring, E, placed on the spindle or arbor, A, the whole being arranged to operate substantially as and for the purpose set forth.

I also claim, in combination with the above named parts, the washer, C, placed on the arbor, A, for the purpose set forth.

[The object of this invention is to obtain a fastening that will secure window shutters or blinds in an open state, without allowing them to play or rattle, and at the same time accommodate itself to shutters or blinds of different thicknesses, and one also that will not be liable to work loose in a building by the action of the shutter or blind upon it when thrown open.]

RAILROAD CAR SEATS—George L. Dulaney, (assignor to himself and Solomon R. Moore,) of Mount Jackson, Va.: I claim the combination and arrangement of the movable seat bottoms, C, hinged folding cushions, G, sliding slat blind frames, H', and hinged cushioned frames, I, and cushioned flaps, K L, on the backs, E, of the seats and slides or panels, M.

[The nature of this invention consists in so constructing the seats and securing them to the floor of the car as to enable them to answer all the purposes, and have all the advantages of the ordinary reversible car seat and yet admit of their being turned parallel with sides of the car, and their several parts altered and so adopted to each other as to convert them into comfortable double sleeping couches, one above the other, with suitable partition blinds between the lower ones, and entirely enclosed from outside observation, and thus insure their occupants the privacy, ease and facilities for sleep that are obtainable from the ordinarily arranged berths for steamboats.]

EXPANDING BIT—Harley Stone, (assignor to Paul P. Todd,) of Blackstone, Mass.: I claim the mode and application of the slide cutter, B, the slits, C and D, the bolt, E, and the graduated scale, F f, and constructed and operating as set forth and described.

METHOD OF BLASTING OR REMOVING SUBMARINE BODIES—Samuel Eakins, assignor to himself and U. S. Wickersham, of Philadelphia, Pa.: I claim the combination with a piece of ordnance to be employed under water for the removal of rocks or other bodies, by the operation described of a series of adjustable legs, applied and operating substantially as and for the purpose specified.

[In this method of blasting or removing submarine bodies, a very heavy cannon, loaded with powder and ball, is sunk with its muzzle in contact with, or as close as possible to the face of the rock or other body to be removed, and fired by a galvanic battery, to project the ball against the rock. The weight of the column of water above the cannon, added to the weight of the cannon itself, prevents recoil, and causes the ball to be projected with immense force. The cannon has adjustable legs, which support it or attach it to the body to be removed, and enable it to be set at such angle as might be desirable to split off a ledge of rock. When the cannon has been fired, it is raised by chain tackles attached to it. Experiments show this to be a very effective method of blasting.]

STACKING AGRICULTURAL PRODUCTS—Carlos W. Glover, of Farm Ridge, Ill., assignor to himself, Bronson Murray and J. Van Doren, of La Salle county, Ill.: I claim making a stack out of two or three, four or more lengths of straw or other material, that overlap or break joint with each other, and which are laid with their seed ends pointing to a common center, and commencing at the apex and ending at the base, and drawn together and secured substantially as represented, using, as a foundation to build upon, an apron or the binding cords or chains as set forth.

STACKING AGRICULTURAL PRODUCTS—John Van Doren, of Farm Ridge, Ill., assignor to himself, Bronson Murray and Carlos W. Glover, of La Salle county, Ill.: I claim the so placing of two, three or more layers of straw or straws in a box or former is that they shall break joint with each other, beginning at the apex and so continuing until one half of the stack is formed, and then reversing the operation and laying them from the base to the apex for the other half of the stack, so that, when bound up, they shall form a stack shingled on its outside to protect the interior, substantially as described and represented.

CAST IRON MERCURY BOTTLE—Moses Wrangle, assignor to Hunter, Keller & Co., of New York City: I claim molding iron mercury bottles, with concave bottoms, by means of the patterns, substantially as described.

RE-ISSUES.

SHEARS—Joseph A. Braden, of La Grange, Ga. Patented Sept. 21, 1858: I claim the construction of scissors or shears, with their blades in separate pieces from the handles, and fitted to the handles with stems and sockets.

[We noticed this invention on page 26 of the present volume of the SCI. AM., and the same description equally applies to the re-issued patent.]

LOOMS FOR WEAVING FIGURED FABRICS—Geo. Crompton, of Worcester, Mass. Patented Nov. 11, 1854: I claim, combining with hook jacks which are connected with the harness, and with the mechanism for operating them to open the shed, a pattern chain or cylinder constructed with two or more petterns, and operated so that either of the patterns can be made to act on the hook jacks to place them in the required position to be operated upon by the mechanism for operating the shed.

I also claim, in combination with a pattern chain, arranged with two or more patterns in the direction of its length, the mechanism for changing the movements of the chain to effect the changing of the pattern.

I also claim placing two or more patterns upon the rods of a pattern chain side by side, and operating them in succession by vibrating the chain laterally.

I also claim pivoting the lifting and depressing rods at one end, the other being made adjustable.

And I also claim moving the rods or jacks out of contact with the rollers on the pattern chain before the chain, the chain is moved by means of what are termed the vibrating fingers, or the equivalents thereof.

STEAM STOVE—J. L. Sutton, of Norristown, Pa. Patented July 20, 1858: I claim combining two or more concentric chambers, connected together and arranged in respect to each other, with a boiler attached to an ordinary stove, for the purpose specified.

MACHINERY FOR CUTTING SCREWS—H. A. Harvey, assignee (through mesne-assignment) of Thomas W. Harvey, late of New York City. Patented May 30, 1846: I claim the combination and arrangement of two inclined rollers, one or both rotating, and placed at a sufficient distance apart to permit the shanks of the blanks to hang therein freely suspended by their heads, and for the purpose or arranging the blanks (when presented in a promiscuous mass) all in a row, with their heads up, and causing the row to travel to the lower end, and to be delivered one by one.

2d, Combining with the delivery end of the inclined rollers, or equivalent ways, for supplying the blanks in order, a delivery and check slide and a receiving and conducting tube, or equivalent therefore, to receive the blanks from the row, deliver them one by one, and conduct them to the place where they are required for after operations, and at the periods required.

3d, Combining with the receiving and conducting tube, a transferer, or equivalent therefore, to receive the blanks from the conductor and transfer them to the mandrel or place where they are to be subjected to the cutting action.

4th, Combining with the mandrel or spindle, and with suitable means for holding the screw blanks in line, a sliding twin screw and spring, or equivalent therefore.

5th, Governing the motions of the chaser towards and from the axis of the blank, by combining the chaser with a carriage and sway bar moved by a cam, and also connecting one end of the sway bar with an adjusting slide, when this is combined with a chaser, or chaser head, whereby the amount of taper to be given to the screw can be regulated at pleasure.

6th, Changing the directions of the various cam grooves by means of sliding switches, operated by sliding rods within the hollow cam shafts, and shifted by an index cam, by which the various changes of the motions of the machines are effected.

And, finally, Making the cam which operated the sway bar adjustable on its shaft, for the purpose of adjusting the motions of the chaser to the length of the blank, to insure the proper formation of the point of the screw.

GAS BURNERS—J. R. Foster, of Boston, Mass., assignee of A. H. Wood. Patented Sept. 21, 1858: I claim, first, The flame spreaders, consisting of the ring pieces, extending outwardly from the gas orifice.

2d, I claim the heaters, combined with the jet gas burners.

3d, I claim, combining with the jet gas burner, a draft cone, the top of which terminates at or near the level of the gas orifice.

INVENTIONS EXAMINED at the Patent Office, and advice given as to the patentability of inventions, before the expense of an application is incurred. This service is carefully performed by Editors of this Journal, through their Branch Office at Washington, for the small fee of $5. A sketch and description of the invention only are wanted to enable them to make the examination. Address MUNN & COMPANY,

No. 128 Fulton street, New York.

Sergeant's Improved Governor.

This governor is suitable for marine or other engines, and consists of a smaller steam engine which works independently of the engine whose speed is to be governed, and which is so applied as to drive certain mechanism that offers an unvarying resistance to its motion. The small engine is also so combined with mechanism driven by the engine to be governed, and is in combination with the whole of this mechanism, that is so applied to a regulating valve which controls the supply of steam to the large engine, that any variation in the load of that engine, and consequent tendency to an increase or diminution of its velocity, as compared with the velocity of the smaller engine, causes the opening of the regulating valve to be diminished or increased in a proper degree to overcome such tendency, and causes the velocity of the large engine to be always, notwithstanding the greatest variation in the load upon it, in exact proportion to that of the smaller engine, which latter velocity can be controlled without any difficulty. The inventor is Henry C. Sergeant, of Columbus, Ohio, who has procured patents in foreign countries. The patent for the United States was granted last week.

Hugh Miller's Monument.

The foundation stone of the monument to Hugh Miller was laid at Cromarty, the birthplace of the eminent geologist and author, on the 5th ult. The monument will consist of a pillar 50 feet high, surmounted by a statue of Mr. Miller; the base is to be of old red sandstone taken from the quarry which was the first scene of Miller's geological researches. The inscription will be engraved on the base: "In commemoration of the genius and the literary and scientific eminence of Hugh Miller, this monument is erected by his countrymen. He was born at Cromarty, 10th of October, 1802, and died 24th December 1856."

Wooden Water Tubes.

The *Rural New Yorker* states that a piece of wooden tubing laid down in 1816, on the farm of E. Morse, of Eaton, N. Y., was recently lifted, and was nearly as fresh as when it was first taken from the forest. It was placed ten feet deep in the soil at the lowest point, and gradually approached the surface. The wood was pine; the bore two inches, and the whole tube four inches in diameter. This shows that wooden tubes in some situations are more durable than those of iron.

Literary Notices.

ARABIAN DAYS' ENTERTAINMENTS. Translated from the German by Herbert Pelham Curtis. Phillips, Sampson & Co., Boston; Sheldon, Blakeman & Co., New York. This is indeed a pleasant gift book, for this present-making season, and although not equal to the great original, (as, indeed, what could be) it is still the best collection of pleasant stories for children of all ages that we have seen for a long time. Its tone is genial, and the illustrations by Hoppin are lively and graphic.

THE SOCIABLE: OR, ONE THOUSAND AND ONE HOME AMUSEMENTS. Illustrated with engravings and diagrams. Dick & Fitzgerald, Ann street, New York. It is a genial substitute for the theatre, the ball room, and similar places of amusement. Every man who is surrounded by a home circle of some magnitude, or who is accustomed to share in the innocent social enjoyments of others, must have actually felt the want of choice and variety exhibited in the games and other parlor performances usually gotten up to while away, in a pleasant manner, a long winter evening.

THE COSMOPOLITAN ART JOURNAL. December, 1858. 548 Broadway, New York. This splendid quarterly contains much excellent matter from the pens of distinguished *litterateurs*, and the mechanical execution is perfect. For the engravings we cannot say much, and think that fewer and more perfect ones would be an improvement that would be appreciated. The object of the journal—the cultivation of art in America—is noble, and should be encouraged in all quarters.

THE ATLANTIC MONTHLY, for January, contains the following table of rich literary viands:—"Olympus and Osgard," "Juanita," "Left Behind," "Coffee and Tea," "Men of the Sea," "Chicadee," "The Illustrious Obscure," "The New Life of Dante," "At Sea," "Bulls and Bears," "The Professor at the Breakfast Table," "The Minister's Wooing," "White's Shakespeare." Publishers: Phillips, Sampson & Co., Boston

THE BUILDER. Wiley & Halsted, New York. This excellent periodical has some good engravings illustrative of architectural and decorative improvements in Europe, and much information that no person having taste for the progress of art should be without.

GRAHAM'S HANDBOOK OF AMERICAN PHONOGRAPHY. Andrew J. Graham, author and publisher, 348 Broadway, New York. To all who wish to attain a knowledge of the art of phonography, this book will be a valuable companion, and the already proficient will find in it many hints by which they may profit in reporting. It is, we think, a successful attempt to systematize phonography and place it beyond the chance of future change, so that any person acquiring it now will not have to be continually altering, correcting and unlearning what he has already acquired. This book will, we have no doubt, be largely sold to the flying artillery of the press (reporters), who will thank Mr. Graham for its production and the lessons it teaches. The author should, however, have given more credit to Mr. Isaac Pitman, the inventor of the art.