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To Mechanics, Manufacturers, Inventors, and Farmers.

In announcing the Thirteenth Annual Volume of the SCIENTIFIC AMERICAN, which commences on the 12th of September, the Editors and Publishers embrace this opportunity to thank their numerous friends and subscribers for the encouraging and very liberal support heretofore extended to their journal, and they would again re-assure their patrons of the determination to render the Scientific American more and more useful, and more and more worthy of their continued confidence and good will. The undersigned point to the past as a guarantee of their disposition to always deal justly and discriminatingly with all subjects of a Scientific and Mechanical character which come within their legitimate purview.

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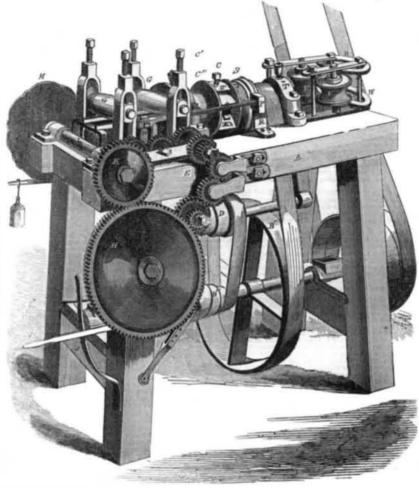
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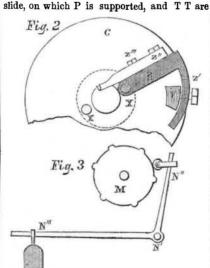
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and compact automatic lathe, for the production of beaded work of any kind, invented by G. W. Walton and H. Edgarton, of Wilmington, Del., and patented on July 7, 1857. The cutter head is hollow, and the cutters are mounted in such manner that, by a very simple movement, the edges are removed from, or brought nearer to, the axis of motion, the movement being governed by a cam outside. This cam may be made in any required form, and the configuration and disposition of the beads are thereby under complete control. Fig. 2 is a transverse section of the cutter head, and Fig. 3 a diagram of the cam or pattern, with the lever which controls the movement of the cutters being kept in contact with its periphery by a weight.

A is the frame of the machine, B the pulley which receives the motion from a belt, B' a larger pulley, which transfers the motion of the first shaft to the hollow cutter head, and B" cone pulleys, which give the feed motion. C C represent the cutter head, the acting portion of which is embraced between the two disks shown. D represents cone pulleys to receive the feed motion from B" by a belt, and E represents a train of gearing which conveys the motion of D to grooved feed wheels denoted by F. G G are smooth rollers mounted above the feed wheels, and pressed down by rubber springs, which are fixed in the housings represented. H is a movable gear wheel, which may be thrown into or out of gear, by properly manipulating the lever or handle, I. J is a spring, with notches to hold I in or out of gear, at pleasure. The object of this movable wheel is to start and release the pattern wheel at pleasure. K is a gear wheel mounted on one extremity of the shaft, L. M is the pattern wheel or cam. N represents one of two levers, mounted on the rock shaft, N', seen in Fig. 3; and on the extremity of this rock shaft is the longer lever,

Fig. 1 is a perspective view of an ingenious | which is held in contact with the periphery of N, by the gravity of the weight, N", suspended on an additional arm. These parts, although very important, are necessarily shown but imperfectly in the perspective view, but may be readily understood by comparing the latter with Fig. 3. O" represents one of the horizontal rods which extend from N N to lugs, P, one of which is fixed on each side of the movable collar, S, which surrounds the hollow axis of the cutter wheels. R is a



bearings, which support C C. V V represent small guide rollers, which aid in supporting the work as it issues from the lathe. W W are india rubber springs, which hold V V in contact with the work. The material is supplied to the machine by inserting pieces previously split or sawed in suitable size, between the feed wheel. F. and the smooth rollers, G. By these rollers it is fed forward into the hollow axis of C C, subjected to the action of the cutters, and escapes at the other extremity, between the guide rollers, V V. The N", Fig. 3. N" carries a small friction wheel, irregular form of the pattern wheel, M, by the known of checking disease.

device described results in giving a more or less regular longitudinal motion to the collar, S. which motion moves the cutters outward and inward, by means which will now be described :-

From the front side of the collar, S, project two short rods, S' S', into which are inserted screws, S". The cutters, two in number, are shaped like the ordinary gouge employed in turning, and are mounted on pivots or centers, X X, Fig. 2. Z represents the tool and tool holder, which are free to rotate around X. Z' represents a curved projection extending from the outer extremity of Z, which is perforated by a slot which extends obliquely through it. The screw, Y', which is fast in Y, stands in this oblique slot, and as the collar, S, is moved, compels the tool holder and tool, Z, to swivel round on the centers, thus bringing the cutting edge closer to the axis of motion, or removing it further therefrom, according as S is moved. The effect of the whole is to make the position of the cutters dependent entirely upon the position of the rock shaft, N', and this latter being entirely dependent upon the form of the pattern wheel, M, it follows that any number or form of bead desired may be produced.

We have seen the lathe in operation in this city, executing plain cylindrical and beaded work, as broom handles, &c., with great rapidity, and presenting, of course, absolute uniformity in the product.

For further particulars address Henry Edgarton, Baltimore, Md., or George W. Walton, Crook's Hotel, 80 Chatham st., New York.

Hæmatinone.

Under the name of hæmatinone, a kind of glass was in use among the ancients, for the purpose of making ornamental vessels, mosaics, &c. It has been found very abundantly in the excavation at Pompeii. This glass is distinguished by its beautiful red color. It is opaque, harder than ordinary glass, susceptible of a fine polish, of conchoidal fracture, and its specific gravity is 3.5. By fusion it loses its red color, which cannot be restored. Hæmatinone contains no tin, or any other coloring matter, besides sub-oxyd of copper. All attempts of the moderns to imitate it had entirely failed, until the successful result of experiments made by M. Pettenkoffer, who not long ago brought forward a method of producing the material in large quantities, so that with requisite precautions, it was alleged the material might be cast into plates of any size, and worked into articles of every description. It was generally anticipated that this discovery would furnish a clue to many of the processes of the ancients in the manufacture of colored glass, but the anticipation does not appear to have been realized .- Exchange.

Oil vs. Hydropathy.

We have on several occasions invited attention to the ancient practice of anointing with oil, and to the fact that oil makers and oil porters, whose clothing is presumed to be more or less oily, are often singularly free from contagious diseases which sweep off In exchange takes up the ject, and remarks that in the East Indies, children are rarely washed with water, but they are oiled every day. A child's head can be kept much cleaner if oiled, than without it; and many young people with hectic cheeks would probably never know the last days of consumption, if their parents would insist on having their cheeks, back, and limbs anointed with sweet oil two or three times a week. The Hebrew physicians seemed to have considered oil as more efficacious than any other remedy. The sick were always anointed with oil, as the most powerful means that was

Scientific American



Reported officially for the Scientific American. LIST OF PATENT CLAIMS Issued from the United States Patent Office FOR THE WEEK ENDING AUGUST 25, 1857.

FILTER—Wm. W. Ayres, of Worcester, Mass.: I claim the combination of cylinders, B and C, with the spindle, S, when constructed with reception and discharge cavies, df, openings, eg, and channels, m n m'n, arranged and operating substantially as and for the purposes set forth.

WETTING AND CUTTING PAPER—Moses S. Beach, of Brooklyn, N. Y.: I do not, therefore, claim broadly the wetting of paper by means of wet or moistened roll. ers applied to one side of the paper, and not to the other. Neither do I claim broadly the cutting of paper by means of a saw-edged knife, whether the knife be attached to a stationary fearm.

Neither do I claim broadly the cutting of paper by means of a saw-edged knife, whether the knife be attached to a stationary frame or to a cylinder, and whether projected against the paper by means of cam and lever or springs.

But I claim first, Simultaneously wetting or moistening both sides of the paper in the manner substantially as described.

Second, Leaving the paper dry at the point or line of cutting, substantially as described.

Third, Catching the knife when retired within the circumference of the cylinder, retaining it while so retired, and releasing it from the operation of cutting, by means of the catches, ef, the springs, j, and the tripping pins, I, in the manner substantially as described.

Fourth, Combining the cutting apparatus with the wetting cylinders or rolls, substantially as described.

Manufacturing Hat Bodies—Joseph Booth, of

watting cylinders or rolls, substantially as described.

MANUFACTURING HAT BODIES—Joseph Booth, of Newark, N.J.: I claim the rotating flat hurdle, having its perforated surface divided, substantially as set forth, in combination with a picking or bowing apparatus, and air exhausting apparatus, the whole constructed and operating substantially as set forth.

I also claim the arrangement of the fan shaft upon the spindle of the revolving hurdle, sübstantially in the manner and for the purpose set forth.

HERMSTIGALLY SEALING CANS—Wm. Borrman, of Cincinnati, Ohio: I claim the mode, substantially as set forth, of hermetically scaling cans by means of the central screwstem, c, and sheath, e, in the described combination, with the pliable lid, fg h j, nut, d, and gaskets i and k.

UMBRELLAS AND PARASOLS—Sheldon Canfield, of Derby, Conn: I claim the form and construction of the clasp, E, described, it being made of a single piece of thin sheet metal, so folded in the middle, either by a machine or otherwise, as to form on the under side of the clasp, two flanges, e and f, each consisting of a double thickness of the sheet metal.

I claim the clasp, as a pplied to umbrellas and parasols. I claim nothing else described as my invention.

PIERCING BLIND SLATS—John Carpenter, of Stonington, Conn.: I am aware that machines have been constructed for cutting the tenons simultaneously at both ends of blind slats, as in the machine patented by Hastings, Bumsey & Chamberlain, Feb. 20, 1855; and also for cutting the tenons and piercing the slats for wire staples simultaneously, as in the machine patented to T. G. Stagg, March 28, 1854; but I do not claim any device or action included in either of these machines referred to, I do not claim the application of a sliding dog to clamp and hold the slat while another dog, or other device independent of this, is used for piercing the slats for the staple.

and not the sat white another dog, to ther vertee in-dependent of this, is used for piercing the slats for the staple.

But I claim the application of the piercing points, h, to the sliding dog, so that the slat may be pierced for the wire staples by the same action as that by which they are held secure, for forming tenons thereon, as descri-bed.

bed.

SEPARATING ORE—Thomas J. Chubb, of New York City: I do not claim the broad process of agitating substances in a receptacle, for the purpose of causing the heaviest to settle to the bottom thereof, irrespective of the means specified and described.

Nor do I claim separating substances of different specific gravity by a current of air applied on the old and well known winnowing process.

Neither do I confine my improvement to any specific arrangement of mechanism.

But I claim effecting a separation of a thin layer of finely pulverized ore into layers or strata of different specific gravity upon a perforated bed, or its equivalent, by means of applying light minuer puffs of air up through the interstices of the said bed, and through a thin layer of ore evenly spread, and resting thereon, as described, for the purpose of gently agitating the said layer of ore, and floating the lightest substances therein to the top thereof, and allowing the heaviest substances therein to gravitate to the bottom of the said layer on the said bed.

I'here are a number of channels formed by narrow

There are a number of channels formed by narrow rips of metal across the inclined perforated (the material having been previously assorted by screen ing, so that all the particles introduced at one time shall be of pretty nearly a uniform size,) by each of the puffs of air the dirt rises and again descends in lines nearly perpendicular to the face of the bed; but the heaviest particles being more likely than the light ones to leap over the strips of metal, it follows that, at the end of a certain period, the solid metal will be nearly all collected in the lower grooves, while the light dirt remains in the upper grooves. It is an ingenious and admirable improvement on the means horetofore in use for the purpose.]

SETING SAW TEETH—Pearson Crosly, of Fredonia, N.Y.: I do not wish to be understood as limiting my invention to the special mode of constructing the stock, or of holding the two parts of the swage together, or the entire swage in the stock, as other and equivalent modes may be substituted.

I claim forming the acute angle of the acting face of the swage to bring the cutting edge of the saw teeth to a sharp angle by making the said swage in two parts, substantially as specified.

BRICK MACHINES—P. S. Devlan, of Reading, Pa.: I claim, in combination with a clay receptacle supplied by a positive feed, and a rocking or partially rotating mold wheel, H, the plungers, G and t, the first for pressing, and the second for delivering the pressed brick, the parts being so arranged as that said wheel will rock or roll from one plunger to the other, and be held in the manner and for the purpose set forth.

Washing Machines—Hiram F. Everitt, of Benton Pa.; I make no claim to any of the parts composing my machine, when separately considered.

But I claim the combination as described of the adjustable reel fluted concave, and swinging rubber, constructed, arranged and operating substantially as and for the purposes specified.

SELF-WAITING TABLES—Wm. B. Farrar and Jona nan H. Farrar, of Evans' Mills, N. C.: We make no laims to a table made with a central revolving part, C at the in company.

SELF-WAITING TABLES—IV. II.

than H. Farrar, of Evans' Mills, N. O.: We make no claims to a table made with a central revolving part, C, as this is common.

But we claim the central revolving disk, C, when fitted down into the circular hole, a, constructed with a thin lip, F, projecting horizontally from the upper portion of its circumference, and with a rib of ring form projecting from its under side, and near its circumference, substantially as and for the purposes set forth.

[This enables the persons sitting around a table to serve themselves with great ease, and deserves an ex tensive introduction.]

PIN STICKING MACHINE—Thaddeus Fowler, of Waterbury, Conn.: I claim first, The endless chain with its racks, in combination with the fianged cylinder, (whether with or without the revolving hopper) when constructed, arranged and made to produce the result, substantially as described.

Second, I also claim the combination of the endless chain with the revolving hopper, when the whole is constructed and combined substantially as described.

SHIPS' BERTHS—Henry Getty, of Brooklyn, N. Y.: I claim providing at each end or side of a state room of a steamer or vessel, a pivoted bracket, d, which is capable of vibrating in the path of a circle a certain distance, and connecting the berth to said brackets through swinging vertical screw rods, g, metal or rubber springs, t t, and hollow standards, b b, substantially as and for the purposes described.

[This saves passengers from being affected by the rolling and pitching of the ship, and thus prevents seasick ness. In the day-time, when not in use, it can be turned

WASHING MACHINES—Wm. M. Hammond, of Jones-ville, Mich.: I do not claim either the tub or recipro-cating follower to be any part of my invention, since they have been used, as in Wisners', and other improvements

have been used, as in Wisners', and other improvement (patents)

Neither do I claim anything of the nature of floating balls, as the balls in my improvement practically do not float, and should be made of some heavy material.

Nor do I claim anything like rollers, conical or otherwise, requiring pivots upon which to turn, for the reason that the balls are a marked improvement, having no pivots either to rust, or wear out, or to injure the clothes.

But I claim the bed formed of loose weighted balls covering the tub bottom, in combination with the cellular disk rubber, arranged and operating substantially as and for the purposes set forth.

Beweredge Trunks Water-Tight—Charles H.

RENDERING TRUNKS WATER-TIGHT—Charles H. Hinckley, of Stonington, Conn.: I am aware that the expanding jointed clasp waspatented by Sellers & Pennock, June 12, 1840, and that india rubber packing has been used in various forms, other than that of the inflated ribs for securing water-proof joints; and that separate tongued and grooved jaws or clasps for crimping in the material of the bag, and thus form a water-tight connection, and patented by Robbins & Allen, Sept. 7, 1852, but without the inflated ribs; but neither of these do I claim.

But I claim the application of the inflated casements or ribs, as described, composed of india rubber or other suitable material, to the sides of contact of clasps for bags or cases, so that by their yielding contact the clasp may be closed so as to be impervious to water.

HAV AND MANURE FORES—Wm. Jones, of Speedsville, N. Y.: I claim casting the ferrule, B, upon, or otherwise securing it, firmly to the outer end of a soctet, in which are slots for the reception of the tangs of the tines of a fork, to prevent lateral working, when in connection with a wedge, cast or otherwise formed, between the recesses made for the tangs, to prevent end play, and screws, a, for the securing of the tines, socket and handle to each other, substantially as set forth.

STEAM PRESSURE RESULATORS—Lucius J. Knowles, of Warren, Mass.: I claim supporting the disk, C, by concentric rings, I, and rods, p, in the manner substantially asset forth.

concentric rings, I, and rods, p, in the manner substantially as set forth.

PROJECTILE FOR RIFLED CANNON—Theodore T. S. Laidley, of U. S. Army: I do not claim, of course, as my invention, the attachment to elongated shot or shells of a cylkider of wrought iron fastened to the body of the shot by imbedding its bottom or sides in the cast metal of the shot, the cylinder attached to the butt of the shot or shell, and its sides to project beyond.

Neither do I claim the arrangement of a belt or packing of soft metal which is to be forced out by the gas passing into certain vacant spaces between it and the main body of the shot.

But I claim the formation of a cast iron shot or shell with a wrought iron covering of a portion or whole, which is fastened to the main body of the shot at or near both ends, by imbedding one or both turned in ends in the cast metal of the shot or by means of dowels, pins or rivets imbedded in the cast metal, and joining the two metals, the body with the covering, firmly and securely, or by a combination of these methods, leaving an intermediate portion of the covering free to be expanded by the action of the gases, of the discharge passing through certain channels or passages between the covering and the body of the shot made or left for that purpose.

I also claim making the wrought iron covering thicker at its rear end, which admits of annular spaces being cut into it to hold grease, or for the action of the atmosphere to keep the ball true in its flight as in the improved ball for muskets, and also throws the bearing parts of the projectile nearer the center of gravity, insuring greater accuracy.

Washing Machine—Justin Loomis, of De Ruyter N. Y.: I claim the tubular guide piece, P. forked braced, b b, joint, a, swivel pin, d, and socket, e, in combination with braces, B B, and the rubber shaft, S, constructed, arranged and operating substantially as and for the purposes specified.

CUPOLA FURNACES—Philip W. Mackenzie, of Jersey City, N. Y.: I do not claim the beshing or outside air chamber.
But I claim forming a continuous sheet of air as indicated at a' a', where it is brought in contact with the fuel, in combination with the elongated form and increased size below, a' a', where the blast enters the fuel.

HARVESTERS—Pells Manny, of Waddam's Grove, Ill.; I claim the method of constructing the fingers of the cutting apparatus of harvesting machines of two members, B and E, and securing them upon the finger bar in the manner as set forth.

I also claim the recesses, r and z, in the inner faces of the fingers, in combination with the supplementary inclined cutters, u and v, projecting above and below the sickle, substantially as set forth

sickle, substantially as set forth

Ships' (Capstans—Charles E. Marwick, of Portland,
Me.: I do not claim a capstan having its barrel fitted to
rotate either with or independently of a hand spike or
wheel, as this is not new.

Neither do I claim the application of gearing to a capstan, for the purpose of increasing the power by which
the same may be put in operation.

But I claim the combination of the key ring, D, the recessed lip, O, and the socketed head, E, as constructed,
arranged together, and applied to the capstan barrel, A,
and the driving shaft, F, of the multiplying gearing, and
operated by means substantially as specified.

WATER VESSELS FOR HOT AIR FURNACES—William Moultrie, of New York City: I do not claim the placing of a water vessel within a furnace chamber simply, for the purpose of imparting humidity to the air therein. Nor do I claim to have discovered the utility of vapor draft for the support of combustion.

But I claim the stucture, location, and application of the water vessel, M, whereby either or both of said objects are attained, substantially as described, in connection with furnaces and other heating apparatus.

COOKING RANGES-Samuel Pierce, of Troy, N. Y. : claim the combination of the recess, p. between the ovens, having a division plate therein open at the top, with the bottom flue, as set forth, so as, by the action of the draft of said bottom flue, to cause a circulation in said recess, p, in the manner and for the purpose described.

Photogalvanographic Printing—Paul Pretsch, of Austria: I claim the peculiar adaptation of the photographic process to the production of metallic and other surfaces suitable for printing, and for various other useful and ornamental purposes, as described, or substantially similar thereto.

BORING MACHINE—Emmett Quinn, of Trenton, N. J. I claim the combination of the sliding guide, a a, with the levers, ff, and timber carriage, C, operating as and fo the purpose set forth.

BENDING MACHINE—Lewis Raymond, of New York City: I claim the combination of three rollers, convex and concave, substantially as set forth, so as to bend sheet metal transversely and longitudinally at one operation In combination with the above, I also claim a supporting roll, located, arranged, and driven substantially as set

Glass Furnaces—Samuel Richards, of Philadelphia, Pa: I claim the arrangement of the drying ovens, C, the flue, F F', and the endless carrier, I I I, and the chutes, M M' M' M'' in combination with the glass furnaces, in the manner and for the purpose substantially as described.

LOOMS—Edwin A. Scholfield, of Westerly, R. I.: I am aware that the star gears under a modified form have been used for changing the position of the shuttle box, and also the pattern chain which governs the order of succession of the harness, as in the patents of Samuel Eccles, of March, 1852; but these are for totally different objects from that contemplated in this.

I do not claim the construction or use of star gears for any purpose except to drive a cam wheel to spring the harness in weaving.

But I claim the driving or revolving cam or tappet wheel, which acts to spring the harness or produce a shed in weaving by an intermittent or variable motion, by the use of star gears, substantially as above described.

Washing Machines—Isaac A. Sergeant of Spring-

WASHING MACHINES—Isaac A. Sergeant, of Spring-field, Ohio: I claim first, The employment within a water-tight tub, B, of an adjustable rotating perforated platform or secondary tub, E, in the manner substan-tially as described. Second, Providing the outer end of roller M, with a shoulder, n', of larger diameter than the body of the roller, substantially as and for the purposes set forth.

[In this machine the clothes are mounted in a rotating frame or open tub within the principal tub, and can be

raised at pleasure to examine or arrange the same with PACKING ROTARY ENGINES — Gerard Sickles, of Brooklyn, N Y.; I claim the application of loose metal rings, gg, in the manner substantially as described, to pack the revolving heads which carry the pistons to the stationary head of the cylinders of rotary engines and pumps. out stopping the machine

[These rings are fitted cheaper than the usual packing and are so arranged that the pressure of the steam makes tight joints thoreby on the steam side of the pistons or revolving wings, but leaves the joint more or less loose or open, and consequently frictionless, at the points which are at the moment on the exhaust side of the pis-

and where it is required to be tight.] FENCE FOR POULTRY YARDS—Wm. P. Thomas, of Whitewater, Ind.: I claim, first, The combination of the swinging frame, C D E E F G, with posts, A A, in the manner and for the purposes set forth.

Second, I claim the swinging board, F, in combination with the swinging frame, C D B E G, in the manner shown and described.

tons. In other words, the packing is only tight when

VIRRATING SHEARS—John Toulmin, of New Worcester, Mass.: I claim hanging the movable blade of a pair of shears by two adjustable center pivots upon an adjustable pillar block, substantially in the manner described, and for the purpose of so adjusting the movable blade of said shears as to give it the most effectual shearing position in relation to the stationary blade, as set forth.

CLAMPING LOGS IN SAWING MACHINES—Stephen Woodard, of New London, N. H.: I claim holding the wood to be sawed by means of the described arrangement of holders, X, acted upon by the toggle joints, Z, weighted at their centers, or an equivalent arrangement, essentially in the manner and for the purposes fully set forth.

WATCH KEY FINGER RING—Elihu Bliss, of Newark N. J.: I claim a watch key and finger ring combined, substantially as set forth.

INKSTAND—Thomas Robjohn, of New York City: claim the arrangement for flexing the elastic diaphrage

claim the arrangement for flexing the elastic diaphragm by so attaching a mechanism in connection with a cover, for the ink cup, that the opening and closing thereof shall effect the raising or discharge of the ink or other fluid into or from said cup, as described.

WASHING MACHINE—Abram Wood, of Camden, N. Y.: I claim the hinging of the board, F, at G G, so that the disk, C, and its shaft, may be conveniently raised out of the tub and thrown back while the clothes are handled, and again conveniently let down by the operation, and by which arrangement the whole machine, including the bench, may be lifted and moved from place to place, as described, the whole being arranged and combined substantially in the manner set forth.

bined substantially in the manner set forth.

SEWING MACHINES—Win. Wickersham, of Boston, Mass. Patented in England Dec. 29, 1854: I claim, first, A fast stitch made by one thread which is formed by having the loop or double of the thread pass through from one side of the cloth to the other and back again in another place to the first side of said cloth, and around the same thread of which the loop is formed by means of a shuttle carrying said thread through said loop, substantially as specified.

Second, I claim a thread guide with a notch or opening, e, in one side of it to receive the thread, and formed and arranged substantially as described, so that the thread may pass into it, when said thread is to be guided into the eye or hook of the needle and pass out of said notch in the thread guide at other times.

Third, I claim the use of a double hooked needle, as described, in taking the thread both ways through the cloth one way or up through the cloth, by means of one hook, and the other way or down through the cloth by means of the other hook of the same needle, all substantially as above described.

SEWING MACHINESE—Win. Wickersham, of Boston.

SEWING MACHINES—Wm. Wickersham, of Boston, Mass. Patented in England, Dec. 29, 1851; I claim, first, The method of taking up the slack thread above the cloth by means of the shuttle—that is, when the needle descends after having taken the thread up through the cloth, and to its greatest distance above said cloth, drawing down through the cloth the end of the thread connected with the shuttle by means of the shuttle receding from the needle as the needle descends, thereby preventing the liability of the thread getting under the point of the needle, as said needle passes down into the cloth by thus keeping said thread straight or nearly so until said needle point is sufficiently near said cloth that there is no further liability of the thread passing under it.

said cloth that there is no further mainty of the interpossing under it.

Second, I claim the formation of a seam of one thread which cannot be unraveled, of stitches each of which is made by having the loop or double of the thread passed through from one side to the other of the cloth, and back again in another place to the first side of said cloth, and a loop formed by means of a hook needle, and then by having the same thread of which said loop is formed passed through said loop, and the loop drawn up to the cloth around the thread thus passed through it by means of the shuttle as specified.

RAKES FOR HARVETERS—J. W. Brokaw, (assignor to Warder, Brokaw and Child.) of Springfield, O.: I claim the arrangement of the spring guide. P. and double guide bar, R, in combination with the rake head, I. carrying friction rolls, h and h'. constructed, arranged and operated in the manner substantially as set forth
I also claim the friction rolls, g, in combination with the sleeve, f, rake head, I, and guide rod, o, as arranged and operated for the purposes set forth.

SEWING MACHINES—Henry Behn (assignor to himself and Thos. Sewall) of New York City: I claim the specific pointed bars, the one moving in a plane above the plane of motion of the others and perating in combination with the needle in such manner, that the loop is formed and held open by bending the thread out of a straight line in opposite directions, as described.

SEWING MACHINES—Samuel Larkin, (assignor to Wheeler & Wilson Manufacturing Company,) of Bridgeport, Ct.: I am aware that springs or spring frictional brakes of various descriptions have been used to control the tension of the thread in sewing machines, and therefore I do not claim the employment of a spring for such a

purpose.

Nor do I claim any arrangement or combination spring and other devices which operates upon a crent principle from the combination devised by me.

But I claim a spring force as constructed, substant as herein set forth, in combination with a spool spin or equivalent means of supporting the spool.

CULTIVATORS—C. H. Sayre, of Utica, N. Y., assignor to himself and Saml. Remington, of Ilion, N. Y.: I claim a combined horse hoe, and double mold board plow, constructed, arranged and operated substantially as set forth.

as set forth.
FOLDING PAPER—C. P. Wiggins, A. H. Nordyke and Benj. Strawbridge, of Richmond, Ind.: We claim, first,

The combination of the cam wheel, L, with lever H', pinion g', shaft g, drum G, cords c', and blade C tor purposes shown.

Second, The combination of the cam wheel, L, with levers, H'H', pinions f' g', shafts fg, and drums F G, for the purpose of producing an alternate movement of blades C D, as set forth.

Third, The combination of jaws or clamps, N O, and lever P, with blade D, to prevent retraction of the paper.

Boot CRIMPS—Wm. W. Willmott (assignor to himself, Amos H. and Chas. H. Brainard) of Boston, Mass.: I claim, first, The device herein described for operating the pincers, consisting essentially of the block, K, the screw, L, the spring N, ratchet O, and pawl p, operating in the manner and for the purpose set forth.

Second, The device herein employed for the purpose of securing the jaws to the stand, consisting essentially of the slit g, with its shoulders i, and the tenon h, with the shoulders, k, operating in the manner set forth.

RE-ISSUES.

GLASS JOURNAL BOX-Edward Campbell, of Columbus, O. Patented Aug 21, 1855: Having thus fully described my new compound journal box, I wish to be understood as not claiming the union of glass and iron or other metal while the former is in a plastic state, and the latter highly heated to form a union between them. But I claim as a new manufacture a journal box composed of a metal shell or body, and anti-friction lining surface of vitreous material, when said vitreous material is combined with its metal back, substantially as and for the purposes set forth.

REGULATOR FOR WIND WHEELS—Joseph Dunkley, of Carrollton, Mo. Patented Jan. 30, 1857: I claim, first, The combination and arrangement of the air passags. F, with the pseuliar devices herein fully described for the purpose of making a self-regulating wind whoel as set forth. Second, I claim the swinging wing, g, and slidel, arranged as set forth, and operating in the manner described.

scribed.
Third, I claim the peculiar arrangement of slats s, cord d, and weight c, when operated in the manner and for the purpose set forth

Ovens—Wm. E. Treadwell and Wm. Hustace, executors of E. Troadwell. deceased, late of New York City. Patented July 19, 1853: What is claimed as the invention of Ephraim Treadwell is, first, The combination of flues and furnaces, substantially such as are herein before specified, with an endless apron or its equivalent, subtantially in the manner before described, whereby the amount of heat imparted to either side of an apron or chain may be regulated independently.

Second, In combination with an endless apron and oven or their equivalents, discharging and charging apertures, located substantially as before set forth, in such manner that dough may be charged, and withdrawn in lines, perpendicular or nearly so to the line of motion of an endless apron

STEAMBOATS—John Schaffer, of West Manchester, Pa. Patented Oct. 21, 1853. 1 claim the drum C, on the shaft of the capstan, B, av arranged, the capstan being steam driven by geared shafting connecting it with the "little nigger." and the whole being combined and made operative through the pulley 1, substantially in the manner and for the purpose described.

STOVES-Thomas Barry, of New York City. Six Patents.

STOVES-Samuel H. Ransom, of Albany, N. Y Six Patents.

CLOCK CASE Fronts—Pietro Cinquinni, of West Meriden, Ct. This is a very elegant and chaste combination of

crolls, vines and basket.]

BRICK-G. W. Shoil and Chas. Stewart, of Cincinnati, Ohio.

STOVES-Thomas D. Worrall, of Lowell, Mass.

ERRATA.—In the List of Claims issued on the 11th of August is one to Jesse Shilling, of Troy, N. Y. The official report to us was incorrect; it should have read Jesse Shilling, of Troy, Ohio.

An Interesting Patent Decision.

In answering questions on certain law points referred to that functionary by the Secretary of the Interior, the Attorney General has rendered the following as his opinion,

1. The payment of a duty upon a patent or caveat to the credit of the Treasury is not a pledge or deposit of the money, but an absolute and unconditional payment.

2. If the patentee or caveator afterward demand the money to be repaid to him, he must show that his demand for it is founded in some law, within whose terms he can bring his case distinctly and clearly.

3. There is but one provision in the act of July, 1836, authorizing a duty once paid to be refunded, and that provision is found in the seventh section.

4. That sentence authorizes twenty dollars to be returned, not to a caveator nor to one who has made an incomplete application, but only to one who has made an application which is perfect enough to be examined, and which, in point of fact, has been examined and rejected.

5. It follows that a party who merely files a caveat, paying the legal duty of twenty dollars, cannot withdraw the caveat and demand a return of ten dollars.

The construction of this tunnel through the Green Mountain ridge, to facilitate connection of Boston with the West, has been brought to a temporary stand-still, in consequence of the contractors not receiving aid which had been expected. They have penetrated the mountain 1.030 feet—720 feet from the eastern end, and 410 feet from the western end.

Franklin Institute.

We are informed that this old and respectable institution is obliged to omit its usual 🕻 annual exhibition this year, for want of a suitable building in which to hold it.