Scientific American.



[Reported officially for the Scientific American.] LIST OF PATENT CLAIMS Issued from the United States Patent Office FOR THE WEEK ENDING MARCH 17, 1857.

ENEMA-Giving Appearum.—B. T. Babbitt, of New York City: I do not claim, in the abstract, the employment of hydro tatic pressure, to give injections.
But I claim the combination of the portable reservoir, A, the flexible tube, c, and the nozzle, d, substantially as described. to form a portable apparatus for the purpose of giving enemas or injections by hydrostatic pressure.

[Phis simple improvement consists in giving a pressure to the fluid, by conducting it from an elevated reservoir A sufficient hight is readily attained by suspending the reservoir from a nail or other fixture near the ceiling of a room. Its convenience can be readily appreciated.]

MACHINERY FOR FELTING HAT BODIES—J. B. Blaks lee, of Newtown, and E. R. Barnes, of Brookfield, Conn. We claim giving to the endless rotating bed of felting ma-chines, periods of rest during the continuous motion of the upper deck, substantially as described.

Power Looms—J. L. Cheney, of Lowell, Mass.: I do not claim supporting the picker staff by a rocker and horizontal rail or stand.

orizontal rail or stand.

Nor do I claim applying to the picker staff, and its sup-orting bracket, a curved slotted guide and a roller, a: he same is shown in Albert C. Williams application for

the same is shown in Albert C. Williams application for a patent.
Nor do I claim applying to the picker staff a spring for the purpose of retracting such a staff.
Nor do I claim applying to the rocker and its stand a spring to bring the rocker back to its place after having picked, and also to secure it to the rail while in the act of picking.

picked, and also to secure it to the rail while in the act of picking.

Nor do I claim making the striking point of the picker staff to travel in a straighth orizonal line.

I claim may improved picker motion or mechanism as made with a guard stand and Locker, a stationary guide, Q, and a stud or roPhy, P, and with reference to the picker staff. I, substantially as described.

Also, so arranging the top bearing surface of the stand of the rocker that it may incline downward as specified, and so as to obtain all the advantages of a spring without the actual application or use of the same, meaning to claim such an arrangement of the top surface with respect to the rocker and staff, as an improved equivalent to the spring.

LARD LAMPS—I. N. Coffin, of Washington, D. C.: I disclaim the arrangement of flat inclined wick tubes at right angles to each other, that having been done by H. W. Revely.

But I claim the combination of the flat inclined wick tubes at right angles to each other, with the concave reflector, as described, for the purposes mentioned.

ROTARY PRINTING PRESS.—J. C. Davis and William Miller, of Elizabeth, N. J.: We do not claim the separate parts of the machine as new.

But we claim the combination of the rollers, g g, with the shoes, i, 2, and the inclination of the ways, or planes, d d, and the upright screws, h, for operating the type bed, as substantially as described.

bed, as substantially as described.

Venegating the Walls of Buildings—George B. Field, of St Louis, Miscouri, and Benj. F. Field, of Beloit, Wisconsin: We are aware that veneering of walls and buildings with iron and stone plates of itself is not new, and we therefore do not claim it.

But we claim the mode or manner described of securing these thin plates of slate or marble to the walls and ceilings of buildings which have been previously built, meaning the combined arrangement of the strips of twood, cement and screws, or the alternative method of the angle irons or window and door casings, plasters, cornice string courses, or other ornamental attachments, combined with the cement for the same purpose.

TELEGRAPHIC REPEATERS—M. G. Farmer, of Salem Mass., and A. F. Woodman, of Portland, Maine: We claim the use of a mechanical obstacle essentially in the manner as set forth, whereby, when the independent circuit has broken the dependent circuit at the instrument, the dependent circuit is prevented from breaking the independent circuit.

BILL HOLDER—E. F. French, of Franklin, Vt.: I claim the pockets, B, placed between the two lids or covers. A. A, the pockets and lids being connected by a cord. b, and having a rod or axis, C, passing through them at one end, substantially as shown andforthe purpose set forth.

enclose and protect the bills when the holder is shut, and to plainly expose the endorsement on the back of each when the file is opened, so that the finding of any particular one is accomplished very readily. The cord, by regulates the amount of motion allowed]

GAS GENERATOR—A. M. Giles, of Boston, Mass.: lclaim the inner door. E, operating in the manner substantially as described, whereby the heat of the retort is rendered much more intense and uniform, as set forth. Second. I claim the pipes, D, in combination with the inner door, E, arranged and operating in the manner substantially as set forth.

Hings—Kingston Goddard, of Philadelphia, Pa.: I claim, first, the socket in the end or (adjusted to the end so as to form part thereof) of the hings to be acted upon directly by a torsion bar, as specified.

I am aware that torsion bars are used in various ways to close doors, I therefore do not claim the torsion bar, but only the hinges as specified.

Pranoporer Action—J. A. Gray, of Albany, N. Y..
I do not claim the general arrangement of the action composed of the various parts, a shown, which is known as the French action, and in common use.
I claim the application of a spring to the hammer butt and jack fly, causing the hammer to be so raised and kept, in position, that it will allow the Jack-Ily free play under the shoulder of the hammer butt, when the key is pressed do wn and the action in motion, as specified.
I also claim the application of the hook to the hammer butt and jack-fly, as herein described, so as to cause them to work together with more precision, and also to bring

released.

Machinery for Cleaning and Separating Cotton. Wool, Fur. and Other Fibrous Materials—Isaac Hayden, of Lawrence, Mass.: I claim, first, increasing the area of the trunk above the screen, or making it larger towards its rear end by increasing thight or width, or both, as may be desirable, so that the blast of air which conveys the materials into or through the trunk will move gradually slower, so as to allow the light and fine. or such portions as are intended to be separated, time to be precipitated and pass through the screen, before the air, which holds them in suspension, escapes from or passes out of the trunk.

Second, And in combination with a trunk made gradually larger towards its rear end, as above claimed, I claim a screen of woven wire or twine arranged upon a series of partitions, as set forth.

MACHINES FOR STUFFING HORSE COLLARS—W. H. Haworth, of Philadelphia, Pa.: I claim, fir t, the employment of two stuffers, stuffing against each other from both ends of the collars, when such stuffers are made to recede automatically as set forth.

Second, I claim the employment of two alternating sets of such stuffers for stuffing both rolls of the collars, as set forth.

HERNIAL TRUSSES—A. J. Hardin, of Shebby, N. C. I claim the position and application of the lever, H, in the manner and for the purpose specified.

HARVESTERS—C. Halloway, of Petersburg, Va., assignor to J. B. Maney, of same place: I am aware many devices have been arranged for raising and lowering the cutters from the tongue of the machine. This I do not claim, independent of my special manner of accomplishing this end.

But I claim, in combination with the cam, P. connected to the frame by a link, Q. and to the tongue by a strap or yoke, the slot O, at front, and the lever connections, L M, at the rear, so that the machine may swing forward and back ast its lowered or raised, but be rigid when the draught is on, as set forth.

draught is on, as set forth.

PRINTIMG PRESSES—Horace Holt, of Winchester, Mass.: I claim operating the "platen," G, by means of the cam, C, slide D, and arm E, connected with the platen by the rod F, and also operating the plate J, to which the form, I, is attached by means of the rod, e, connected with said plate, and made to bear against the face of the cam, when said parts are arranged as shown, I, may be operated conjointly by the cam, C, as described for the purpose set forth.

I also claim, in combination with the means above mand for operating the platen, G, the rotating and vibrating ink-distributing roller. M, when operated as shown and described.

I further claim throwing the printed cards from the platen, G, by means of the levers, NO, attached respectively to the platen G, and plate J, arranged as shown and described, or in an equivalent way.

[This press is designed more particularly for printing

[This press is designed more particularly for printing cards, and as all the movements are derived from a simple motion of a cam, it is susceptible of being worked either by hand or by power.]

METHOD OF CLEANSING FIBROUS MATERIALS—John Howarth, of Salem, Mass. I claim the described proces of cleansing fibrous materials, as set forth.

BRICK MACHINES—A. V. Hough and R. W. Jones, of Green Castle, Ind.: We claim the use and application of two horizontal shafts, provided with oval or flanged wings, V. on one side, and arms or beaters, V. on the opposite side, in the lower perforated chamber, O, and in combination there with, for the purpose of moulding and pressing the brick in the manner and for the purpose set torth.

HARVESTERS—M. G. Hubbard, of Penn Yan, N. Y.: I claim a shifting seat, when constructed, arranged and combined with a harvester, substantially in the manner and for the purposes set forth.

PHOTOGRAPHIC PLATE VISE...J. W. Jarboe, of New York City: I do not claim the employment of a cam to bring the moveable jaw up and to tighten it upon the work.

work.
But I claim the combination of the screw, F, and its
attached cam, G, with the moveable jaw, E, and the
sliding piece D, the said jaw and sliding piece working
inseparate grooves or their equivalents, and the whole
operating substantially as described.

[This novelarrangementenables the moveable jav be very readily and rapidly adjusted to any size of plate and to be tightened upon the plate in a very expeditious manner. It will commend itself to photographers as one of the best and simplest devices for the purpose.]

COMPENSATING THE LOCAL ATTRACTION OF THE MAGNETIC NEEDLE ON SHIPS—Calvin Kline, of New York City: I claim the surrounding metallic ring or rings, r, or the modifiartions thereof, constructed, combined and arranged with the needle of a compas, substantially in the manner and for the purpose set forth.

FIRE ARMS—S. K. Lovewell, of Gardner, Mass. I claim the use of the spindle as above described, and in the manner above described, applied to guns of any size and calibre.

CONVERTIBLE CIDER MILL—Samuel Males, of Cincinnati, O: I do not claim as new any improvements in the separate machines.

But I claim rendering the machine readily convertible from a cider mill to a corn sheller, and vice versa, by making the concaves, D K I, hoppers, H, n, and cross beam, m, in the described form, the "cylinder" and driving gear being the same in both cases as set forth.

GAS BURNERS—John McHenry, of Cincinnati, O.: claim the removable disc, e, as a means of varying their of the throat of the burner, as and for the purposet forth.

MACHINE FOR PLANING TAPERING STAVES.—Valentine Munck, of Carrolton, La.: I claim the adjustable table, n., and n. 2, and making said table guide the cutting head, t, substantially as and for the purposes set forth.

I also claim, in combination with the table, n and n 2 and cutting head, t, the angular side cutting heads, W 2 to secure from the variation of the table. n 2, tapered planing on the edges of the lumber, substantially as specific the secure of the secur

Sewing Machines—'I. J. W. Robertson, of New York City: I do not claim the broad idea of pulling the cloth through a sew ing machine, independent or any tool or com kivance for so doing.

Neither do I claim the broad idea of moving cloth by means of hooks in all kinds ofmachines, for an example of such a movement is seen in the weaving temple of J. C. Tilton, patented 1855.

But I claim feeding the cloth in sewing machines by means of a hook, having one or more points constructed, and operated substantially as described.

CAST IRON WHEELS FOR RAILROADS—J. M. Ross, of Springfield, Mass.: I claim nothing in Mr. J. M. Sigourney's mode of constructing his wheel. But I claim my mode of constructing the plate, A. viz, by gradually increasing the thickness of the disc, as it recedes from the hub and tread of the wheel, in the manner and for the purposes substantially described.

ner and for the purposes substantially described.

FLUID LAMP BURNERS—R. W. Sargent, of Philadelphia, Pa.: I do not claim the burner tube, chamber A, the arrangement of the main wick or tube, a.

I claim first, the making of the chimber for the heating flame in lamps, in which burning fluid, spirit gas, or other highly volatile fluid is used, so that it nearly or wholly surrounds the chamber in which the gas is generated, in order that the heating flame being sheltered from the outerair and confined within the outer chamber, and in immediate contact with the inner chamber being substantially as above, and as represented in the annexed drawings.

Second, I claim surrounding the tube with a wick and packing, substantially as above described in order to supply the heating flame with fluid and the making of the burner tube with a flange and shoulder as described, in order to afford space for said wick and packing, and the periorating the burner tube with a pretures, through which said wick may be supplied with fluid.

Third, I claim the regulator substantially as above described, moveable up and down upon the burner tube, in order to regulate and control the heating flame.

Cutting and Bending Sheet Metal—Elliot Sa-

Otderto regulate and control the healing fame.

Cutting and Bending Sheet Metal—Elliot Savage, of East Berlin, Conn.: I do not claim so applying the clamps and cutters to separate frames or a low and half bow that the cutters jointly be moved either towards or away from the clamps, without any disturbance of the positions of the cutters relatively to one another.

But what I do claim is constructing and arranging the frame which carries the clamps with respect to that which carries the cutters, substantially as described, that is so that while the clamps are being forced together or made to seize a plate of metal they shall not spread the cutters apart.

I also claim the mode of constructing the compound lever of the bending rollers, and arranging the rollers thereon, the said compound lever being composed of a bent lever and arm, and the rollers being applied to them respectively in manner asabove explained

I also claim combining with the clamps, their crank shaft and the bending rollers, the auxiliary crank shaft, or equivalent means by which the bending roller, M, may be rotated independently of force applied through the clamps, and so that the middle of the metallic plate shall not be subjected to injurious strains by the bending rollers. rollers.

METALLIC SEALS—Joseph Wappenstein, of Philadelphia, Pa.; I claim a metallic seal, wafer, or fastening, for securing letters, packages, &c., composed of two pieces of the shape described, and united together, and to the thing to be fastened, subtantially in the manner set forth.

Reciprocating Circular Sawing Machine—Osborn E Stephens, of McCall's Ferry, Pa.: I claim a saw arranged to traverse horizontally, so as to cut a score in one side of the log to be sawed, and then moved perpendicularly, so as to traverse horizontally in the opposite direction, to cut a score in the opposite side of the log, to correspond with, and cut into the first score, and cut off a portion of the log, substantially such as are described, I claim the devices substantially such as are described, for changing automatically or by hand the motion of the carriage which traverses the saw horizontally in each direction, for the purposes set forth.

I claim the devices, substantially such as are described, for changing automatically or by hand the motion of the carriage that traverses the saw perpendicularly, for the purposesset forth.

I also claim the latches arranged to fill the scores in the guide, e, so as to let it slip by the locking lever, h, as described.

MOWING MACHINES—John Taggart, of Roxbury, Mass.: I do not claim a series of cutters in their application to grain and grass harvesters,
Neither do I claim a knife sharpener.
But I claim a series of rotary cutters workingin recesses or guides, & S', in combination with a knife sharpener, T, when the said parts are constructed and arranged for operation in the manner and for the purpose as set forth.

GRADUATING CARPENTER'S SQUARES.—Hem an Whipple, of Shaftsbury, *t: I claim, first, the scale index, m, mounted upon the carriage. B, and regulating the extent of motion given to said carriage from the truck, v, and pusher point, whereby the length of the division mark is determined, and the cut made from the edge of the square, substantially as specified.

Second, I claim the arrangement of the rack, r, lever, k, and its actuating cam or pin, pawl, 7, rod, n, and weight, x, or its equivalent, for inoving and adjusting the index, m, to be acted on by the pusher, v, substantially as specified.

Third, I claim arranging the graver stocks, g, within the carriage, ti, substantially in the manner and for the purposes specified, when said graver stocks are governed by the levers. L, adjusting rail, h, and springs and rods, S, or equivalents, for pressing down the gravers in cutting, and thus lifting the same up off the square while returning, as specified.

Fourth, I claim the arrangement of the scroll cam, D, anvil or bed, c, rod, a, lever, b, latch, i, inclined wedge, f, and clutch or friction lever, p, for moving said bed, c, and its square endwise the required integral part between each stroke of the gravers, and then stopping the machine when the divisions are completed, substantially as specified.

Fifth, I claim the manner of securing the gravers, e,

chine when the divisions are completed, substantially as specified.

Fifth, I claim the manner of securing the gravers, e, in place, and bringing them to the exact position in the stocks, g, by means of the mortise bolt, b, constructed and operating substantially as and for the purposes specified.

and operating substantially as and for the purposes specified.

I do not claim regulating the extent of motion given to the graver stocks in drawing back by means of came, as these have been used, it being understood that I do not claim a mortise bolt to secure a bar or tool, as this has before been used.

But I am not aware of any mortise bolt having before been constructed with the mortise for the tool eccentric, or one side of the mortise partially removed, so that the flat side of the graver is pressed to the side of the mortise in the graver stock, by the turning of said mortise bolt, and brings the same correctly to its position, irrespective of the thickness of the graver itself.

UNMAKING ROPE OR CORDAGE—Joseph Wood, of Brooklyn, N. Y.: I disclaim the invention of the revolving roller head itself, and its use for any other purpose than that of unmaking rope.

But I claim the combination of the rotating roller head and the pointed mandrel, to operate in the manner and for the purpose set forth.

[This is a very valuable machine for performing the first stage of the reduction of old rope to the loose fibrous condition in which it takes the name of "oakum," and

is used for calking. The machine separates the strands by conducting the rope between rollers, the rotation of which in the head gives the rope a rotary motion in a di-rection opposite to the lay of the rope at the same time that it drives it upon the point of a mandrel.

COMBS.—Thomas I. Calkins, (assignor to himself and J. W. Bliss,) of Hartford, Conn.: I claim the use of the sheath, substantially as and for the purpose set forth and described.

described.

PISTON FOR MUZZLE-LOADING GUN—John T. Foster and Jacob J. Banta, of Jersey City, N. J., (assignor to the miselves and James H. Banta, of Piermont, N. Y.: We do not claim a piston actuated by a rod passing through the breech of the gun, as the same has before been used. But we are not aware that conical packing rings have ever before been applied to said piston for the purpose of cleaning and s raping off all scale and soilage from the interior of the gun, and delivering the same at the muzzle, and also providing for the instantaneous insertion into the barrel of the said packing rings. And we are not aware that the barbed fingers have ever before been applied to said piston to sieze and draw in the ordinary fiannel cartridge, as specified.

We also claim the barbed fingers, e. in combination with the piston, d, to sieze and draw in the ordinary cartridge, substantially as specified.

Hand Privating Press—Francis S. Coburn, of Ips-

HAND PRINTING PRESS.—Francis S. Coburn, of Ipswich, Mass., (assignor to W. W. Messer, of Boston, Mass., and Geo. F. Gray, of Albany, N. Y.): I do not claim combining the inking roller arm, F. and its spring, I, with a lever, K. applied to the frame, A. and the vertical shaft, c. and operated by the latter substantially as described.

described.

But I claim the application or arrangement of the stops, M and b, and the spring, I, with respect to the frame, A, and the lever, K, and so as to arrest the upward movement of the roller, under circumstances as stated.

ROPE MANUFACTURE—Michael H. Johnson, of St. Louis, Mo.: I do not claim the condensing rollers.

Nor do I claim, of themselves, the bobbin and calender roller.

But I claim the combination of the condensing rollers with the callender roller and bobbin, as described, whereby the sliver may be condensed to a greater degree than is admitted under the ordinary circumstances governing the aforesaid manufacture with advantages

PARING APPLES—Benjamin F. Joslyn, of Worcester, Mass.: I claim the spurs, i, either rotating or stationary, attached or connected to the cutter rod, and pl'ced obliquely or angularly with the apple, or its axis of rotation, when said spurs are used in connection with a sliding mandrel, C. substantially as shown and describ the purpose of feeding the apple to the cutter, forth.

[This is an admirable feeding device for parers. Th spur wheel is set obliquely to the axis of the fork shaft, and by the rotation of the apple which it presses on feeds it ahead without any necessity for other mechan-

ism.]

BABY WALKERS—Joseph Thomas, (assignor to himsel and C, A. Durgin.) of Brooklyn, N. Y.: I am aware that a circular cushion or annular table constructed in halves and hingedtogether to lock the child therein, and placed upon vertical yibrating springs, has been used in the patent of Euclid Rice, of Oct 28th, 1851; and I therefore disclaim the use of his invention.

But I claim the combination and arrangement of a circular cushion, having attached thereto straps, as described, for confining the child in a vertical position, and also allowing it to turn at will within the cusnion, which is placed upon vertical adjustable legs, for the purpose of sufting the hight of the child, whereby I am enabled to make a cheap and useful article of furniture, protecting the child from injury and assisting it in walking, substantially as specified, and for the purpose set forth.

Schew Wrench—Beni. F. Joslyn. of Worcester.

Screw Wrench—Benj. F. Joslyn, of Worcester, Mass.: I do not claim a hollow shank.
Neither do I claim a screw for operating the sliding jaw, irrespective of the arrangement shown.
But I claim the hollow shank, B, with the bar, F, of the sliding jaw, E, fitted therein as shown, when the parts are used in connection with the screw, G, placed within the hollow shank, and by the side of the bar, F, the screw passing through the projection, f, on the end of the bar, F, substantially as described, for the purpose set forth.

FIREMAN'S MASK AND RESPIRATOR—Israel P. Nelson, (assignor to himself and Geo. N. Dayis,) of Cambridge. Mass.: I claim the described mask, with its tubes C. and yalves, d, operating in the manner substantially s set forth.

COMBING WOOL—Michael H. Simpson of Boston, Mans Ante-dated Sept. 17th, 1836: I claim the combination and arrangement of an extra doffer L, and stripper M, or equivalents therefor, with the main card cylinder, the combing doffer, L and the combing belt. N, the whole being substantially in the manner and for the purpose as specified.

specified.

I also claim the described improved arrangement and construction of the draft rollers, U V, with respect to each other and the combing belt, N.

I also claim making the wires of the fringe belt, W, to extend below the table, Z, and to run through a passage, c, formed between the part, Z, and the combing belt, or in the table, as specified.

I also claim combining with the curved plate, R, when such is employed in connection with the doffer I, and the combing belt, N, as team heating chamber, S, or other suitable means of heating such plate, a set forth.

COMBING FIBROUS MATERIALS—Milton D. Whipple, of Charlestown, Mass., (a signor to A. B. Ely, of Boston, Mass.): I claim inclining the comb teeth to the axis of the cylinder, and covering them with the guard at the point of draft, in the manner substantially as set forth, for the purpose specified.

HARROWS—Sidney S. Hogle, of York, Ohio: I am aware that horizontal harrows have been so constructed that they could be rotated upon their axes.

I claim causing the forward movement of a pivoted horizontal harrow to impart a rotary motion thereto by means of the auxiliary action of a weighted roller, or its equivalent, upon one side or the other of said harrow, substantially as set forth.

RE 138UES.

Weaving Pille Farrices—Erastus B. Bigelow of Boston, Mass. Patent dated Dec. 18th, 1855: I claim, first, successively drawing the pile wires from the cloth by a latch or hook, substantially as described.

I also claim constructing and operating said latch or hook so that after drawing said pile wires from the cloth it successively delivers them to a carrier or other apparatus, which completes their movement, substantially as specified.

I also claim in combination with a latch or hook for drawing the pile wires from the cloth, a carrier or apparatus to successively receive said pile wires from said latch or hook, and transfer them to the fell of the cloth, substantially as specified.

And I firally claim the method of inserting the pile wires into the upper shed of the warps, while the shuttle is passed through the lower shed, ubstantially in the manner and for the purpose specified.

Running Gear of Carriages—Gustavus L. Hans-

manner and for the purpose specified.

RUNNING GEAR OF CARRIAGES—Gustavus L. Hanssknecht, of New Haven, Conn. Patent dated Jan. 13th, 1852: I am aware that carriages have been described where the pivot which connects the front running gear with the hind part or body thereof, is placed behind the fore axle, and combined with two segments of circles resting and sliding, the one on the other, and the center point of which rests over and some distance above the center of the front axle, and it therefore do not claim this as my invention.

But I claim first, the combination and arrangement of the pivot in the rest of the fore axle, and the segments with the perch and head-block or perch cross bar of carriages having perches, as described, or the equivalents thereto, for the purposes of enabling carriages to turn in a shorter scace than by the common mode of coupling, with perfect safety.

Second, Iclaim the additional set of segments, or their equivalents, the pivot placed perpendicularly above the lower turning point, to be employed where the springs are fastened to the axle, and move with the same.

Sawing off Loss—Cornelia Waterman, of Brooklyn,

are fastened to the axle, and move with the same.

Sawing off Logs—Cornelia Waterman, of Brooklyn,
N. Y., (administratrix of Stephen Waterman, dece..sed,
of Greenwich, Conn., assignee of Isaac D. Russell, of
New York City). Patent dated May 19, 1843. We claim
revolving a log or block while being sawed, in order that
the pieces sawed off may be of uniform thickness on
all sides, and the mechanism described, or its equivalent,
for ra sing and lowering said block, that it may be sawed
into pieces of any desired thickness without being removed for the machine, said block being centered but
once in sawing up the entire log, substantially as set forth.

moved for the machine, said block being centered but once in sawing up the entire log, substantially as set forth.

Sugar Works—Noebert Rillieux, of New York City. Patent dated Aug. 26, 1843-1 Ido not desire to claim the application of the rapor arising from one heated fluid to the heating of fluids contained in other vessels, if in such cases the fluid in the second vessel is not under a vacuum or partial vacuum.

I claim, first, the employment of a vacuum pan or pans, in combination with an evaporating pan or pans or boiler in which the saccharine juice or other fluid is chapt the same of the presence which last mentioned particularly and the same of the property which last mentioned particularly are offered to complete the evaporation or concentration of yrup, &c. in the vacuum pan or pans, and at the same time supplies the exact mention of yrup, &c. in the vacuum pan or pans, as fully described.

Second, I claim the employment of a weighted throttle or other regulating valve in the main steam pipe, arranged and operating in the manner and for the purpose as described.

Forming the Web for Cloth of Wool, Hair, or

as described.

FORMING THE WEB FOR CLOTH OF WOOL, HAIR, OR OTHER SUITABLE SUBSTANCES WITHOUT SPINNING OR WEAVING—The Union Manufacturing Company, (assignees of John Arnold and Geo. G. Bishop), of Norwalk, Conn. Patent dated Oct. 29, 1836. Extended by Compress March 28, 1851: We claim the mode of operation substantially as described, by means of which the slivers of the weft fibres are kept properly distended until their entire surface is in cortact with the surface of the sliver of warp fibres, substantially as described.

Saw Mill Wheels.

At what angle should water fall on the wheel of an undershot saw mill, with 25 feet fall? And what size wheel should be employed to make 150 revolutions per minute when cutting? R. N. B. McL.

The angle must depend on the construction of the wheel, and may be a matter of discussion. It is really immaterial so long as the water is ranged so as to act fairly on the floats. The velocity of the water striking the floats under a 25-feet head is very nearly 2,400 feet per minute; and allowing your wheel a reasonable breadth of float, so that the water shall spend its force on points considerably give you very near the speed desired.

The daily papers have asserted that the new style of valves tried on the Adriatic steamship have been abandoned, and that common balance puppet valves will be substituted, a change which will involve another long delay. We think this has not been absolutely determined on, but simply to commence making patterns for puppet valvechests, anticipating a possibility of the final failure of the rotary valves. The condenser and other parts are to be quite extensively changed, and considerable time will be consumed.