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Flavoring Essences.

These preparations are exceedingly useful for the cook's purpose. It is often desired to flavor a soup or potage without the appearance of the material from which it is derived ; in such cases nothing is more fit or simple that to apply a few drops of the plant's essence, the flavor of which is required. An ingenious cook, by a just combination of these materials, will produce a new flavor much in the same way that a perfumer creates a new odor, by altering the proportions of a mixed scent, which, if properly blended, the originals from which it is prepared can with difficulty be recognised. Some of these essences are applicable for soups and made dishes, and others for confectionary. One caution alone is necessary in their use, and that is, to apply them in minute quantities only. If the thing be overdone, it becomes nauseous, and brings discredit instead of praise. The old adage, "we can have too much of a good thing," may be well applied here. The cook's palate is, however, the best guide as to the proportions to be used.

ESSENCE OF MINT, THYME, SAGE, CELERY, AND CINNAMON-Take half a pint of rectified spirits, and dissolve in it half an ounce of the essential oil of any of the above substances.

ESSENCE OF CLOVES, CASSIA, AND NUTMEO-Take half a pint of spirit to one ounce of the oils.

ESSENCE OF LEMON AND ORANGE-Take spirit half a pint, essential oil of orauge or lemon three-quarters of an ounce.

ESSENCE OF ROSE, PEPPERMINT, AND AL-MOND-Take spirit half a pint, oil of rose (called "otto of rose,") oil of peppermint, or of almond, one quarter of an ounce.

All these oils dissolve in rectified spirit if slightly warmed. Instead of spirits of wine supplied to the boiler in proportion to the the best French brandy may be used withad- demand. vantage.

ESSENCE OF VANTILLA-Take half a pint of spirit, or brandy, vanilla pods half an ounce; cut the vanilla very small; and let them digest for a month in a temperate place.

ESSENCE OF GINGER-Takespirit, one pint; crushed ginger, eight ounces; chillies, onequarter of an ounce. Let the whole stand for a month ; then strain, and it is fit for use.

ESSENCE OF ALLSPICE-Take spirit half a sential oil of piment



Figure 1 is a perspective view of an appa- | and n, fig. 1, leading to the tank whence the ratus for supplying steam boilers with water, for which a patent was granted to Benjamin F. Bee, on the first of August last, to which | the rocking shaft, T, and lever, P, fig. 1. It is he has given the title of Hydrostant. Fige. 2 and 3 are sectional views of the apparatus, showing the internal arrangements and the different positions the two valves are made

to occupy, by which contrivance water is



water is supplied. r and r' are the value stems respectively, which are actuated by made to vibrate about 90°, and from 4 to 6

strokes per minute, by suitable connection with any positive mover. When one of the valves is shut the other is open, and vice versa.

Having designated the principal parts we will consider their operation. Suppose the water to be at its proper hight in the boiler, and the ports, c c c, fig. 3, being open ; its



of this arrangement is, that whatever steam the box contained naturally seeks e as its outlet, and is conveyed to the upper part of the tank by its appropriate pipe, while at the same time, water is flowing from the tank through pipe, f, and the box or sheet is immediately filled with water. In due time the lever, P, returns, the valve, d, assumes a position as in fig. 3, the ports, c c c, are opened, presenting the water in the box one half its hight higher than in the boiler, which, however, immediately finds its level by flowing into the boiler, being replaced by steam. By the next change of the valves, the box is again filled, then again emptied, and so on. It will be seen that, by this apparatus, the level of the water in the boiler cannot supersede a certain hight. Suppose for instance, the consumption of water to be checked, this machine being in constant operation, the water will begin to rise into the boiler, and each feed introduced will be proportionably less, until the level of the water in the boiler arrives at the upper surface of the box, where the feed will stop, because the chest or box cannot receive any more. And when the valves change for water to pass to the boiler, it cannot do so, it being al ready on a level. So also should the water fall in the boiler such feed will be proportionably greater, until the whole box full is discharged at each stroke, which is calculated to be ample for all emergencies.

This apparatus is especially adapted to stationary engines where a tank or heater is employed, or where the water is received at a higher level than the boiler. It does not add materially to the cost of such an engine, as it supersedes the necessity of a force pump. For all steam generators, where steam is not employed as a motive power, its adaptation is evident.

This invention is now the property of the American Steam Safety Company, and is the first of a series which they are about to introduce to the public for the accomplishment of the same, and kindred purposes.

For more information, communications addressed to Benjamin F. Bee, consulting engineer, or J. B. Barnaby, at the office of the Company, No. 335 Broadway, this city, will meet with attention.

Simple Invention Wanted.

The greatest annoyance in Southern climates is mosquitoes, and any one who would invent a fan for keeping them off at night, and allow us to dispense with morquito nets, might realize a fortune in New Orleansalone in one summer. All that is wanted is a cheap motive power which will keep two or three broad light fans in motion for eight hours; they might be constructed for a few dollars. The nights at the South would be pleasant enough were it not for the obstruction to the air by the use of mosquito nets, and any one would pay liberally to be relieved from them. SOUTHERN.

Mobile, Ala. [In 1832, Commodore Barron obtained a patent for moving a revolving fan by clock-

pint : mix, and it is ready for use.

SEPTIMUS PIESSE.

London.

To Destroy Rose Bugs.

takes place in less than a week.

work, for the very purpose described by our A is a rectangular box, bolted upon any level will be continued through each section correspondent. We really believe that a of the box, and will stand as represented at convenient part of the boiler, and at such strong clock-work machine, operated by a hight that its center shall coincide with the b. It is evident then, that the lower half of spring or weight, could be made at a cost not The Buffalo Republic says :- When the point at which it is intended the water shall the box will contain water, and the upper exceeding eight dollars, to rotate two fans rose bug first makes its appearance, sprinbe sustained. This box is divided into two half steam. If now the lever, P, be carried for eight hours. It seems singular, howkle your bushes profusely with the pollen of parts vertically by a partition, on the back to the right, the ports, c c c, will be closed. ever, that if a fan can accomplish the desirthe flower of the alanthus tree, or pour upof which, and next the boiler, stands the upand all communication with the boiler shut able results set forth by our correspondent, on the bushes, through a watering pot, a right valve o'. ccc, fig. 3, are ports in this off. By continuing this motion of the lever that Commodore Barron's invention should strong decoction of the same. You will partition corresponding to others in the still further, the valve, d, which had renot have come into general use by this time. presently see hundreds of the bugs falling valve, which afford free communication bemained stationary, as in fig. 3, will assume to the ground, there to die. The operation tween the chest and the boiler. d represents the position as in fig. 2. It will be seen by The average duration of human life may be repeated once or twice a day, until a valve lying horizontally against the upper this fig., that the port, e, commences at the throughout the world is 33 years. One-quarthey entirely disappear, which generally surface of the box corresponding to the ports, valve seat, while the port, f, is continued ter die previous to the age of seven years;

f and e, which communicate with pipes, m through the depth of the valve. The effect one-half before reaching seventeen.



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[Reported Officially for the Scientific American.] LIST OF PATENT CLAIMS

Issued from the United States Patent Office, FOR THE WEEK ENDING MAY 17. 1855.

WOODEN SADDLE TREES-G. B. Ambler, of Trumbull, Conn. I claim providing the slot, B, in the center of the head of a wood saddle tree and the screw thread in the top stran, C', suid slot serving to receive the end. C. of the gui-let hock, and the screw thread serving to firmly hold the screw, substantially as and for the purposes set forth.

[By the method of securing the gullet hook embraced in this claim, and having its flat part form part of the tree itself and its top and bottom stand even with the upper and under suifaces of the tree head, instead of having the gullet hook fastened by nut under the head, the symmetry of the front part of the saddle is improved and made lighter. The liability of the gullet hook working loose is also lessened.]

RAT TRAP-I. B. Bradley, of Watertown, Conn. : I claim the employment of a tilting or swinging plate, E, and bal ancing or connteracting spring, F, in combination with the ordinary spring drop orfail, substantially as and for the pur-pose set forth.

[The balancing spring, F, Is combined with the ordinary spring drop, or fall, for the purpose of ensuring the action of the trap the moment the rat comes upon the tilting bottom, to snap at the bait ; ordinary traps do not always insure the action of the fall.]

STEAM BOILERS-T. G. Boone, of Brooklyn, N. Y.: I claim the arrangement of the vertical water tubes, fre sur-faces, npper and lower water spaces, and non-conducting lining for giving circulation, substantially as set forth.

[The object of this improvement is to obtain a large amoun of heating surface, and to have it always covered with a thin sheet of water, soas to take up the heat of combustion rapidly and economise as much of it as possible during the quick ascent of the heated gases up the chimney ; also the heat of radiation. The heat is applied directly to the up-right tubes which connect an upper and lower chamber, between which the water is thus made to circulate.]

COTTON GINS-Leonard Campbell, of Columbus, Miss. : I lam, first, the combination of the two brush cylinders, E , and brush bar, I, arranged substantially as shown and described. Second, I claim the employment or use of the moteboard, J, when constructed of two planes. d e, placed at such an-gles, or insuch a relative position to each other, as shown and described.

[The brush cylinder, F, picks the cotton off the saws and carries it round, when it is taken off by the other brushcylinder, E. The brushes on the upper concave surface of I are in contact with E, and the ginned cotton is discharged from hetween them. The mote board, J, is placed at the back end of the frame, and hy its construction it separates the heavy or motey cotton from the cleaned and lighter cot ton.]

SEED PLANTERS-I. W. Colver, of Louisville, Ky.: I cloum hunging the bieces, A, which support the wheels, A', at the point, B, this being also the point of attachment of the arm, D, and interposing between A and J, a spring, F, so that said two pieces may radiate from nearly the same centers; said springs tending to hold the wheels into the ground whilst each one of the series may yield to any ine-qualities in the ground without affecting the others, as set forth.

forth. I also claim the arrangement of the sword or divider, such as described upon the tube, I, and projecting it forward in close connect with the flavinge on the wheel, so that it may enterthe ground with said flavinge, and spread and hold open the furrow for the reception of the seed as described.

STOP MOTION OF KNITTING MACHINES AB described. STOP MOTION OF KNITTING MACHINES—Robert Cushman, of Pawtucket, R. I.: Iclaim the finger, W, placed in con-tact with and resting against the fabric is oarranged that when the fabric is too imperfect to support the finger, W, it will vibrate and stop the machine, substantially in the man-ner describ .d.

I am aware that an apparatushas been applied to knit ing I am aware that an apparatushas been applied to knitting machine so throw off or release the driving power wheen he yarn supplied to the machine is brokenor un out, so as o allow the machine to stop; therefore I do not claim broad y the application of a stop motion for that purpose when used without a friction or other clutch to stop the machine n+tantly when the driving power is released. But Claim the lever, f, actuated by the levers, i and i', n combination with the rock shaft, b, and the triction lattch. S and S', when arranged and operated substantially n the manner described, so that the instant the thread, or ne of the threads break, the motion of the machine is ar-ested.

restel. CAREIAGE WHEELS-D. W. Clarke and S. H. Gray, of Bridgeport, Ct. : We claim constructing the wheel as shown and described, viz, having the fellies, C, constructed of mal-leable cast iron, in the form shown, and having the spokes, B, fitted in mortises in the hub, A, and in sockets, a, on the inner surfaces of the fellies. The spokes, B, having sockets, d. secured on them at about their centers, in which the inner ends of short oblique spokes, e, are fitted, the outer ends of said spokes, e, being fitted with oblique sockets, a, on the inner surfaces of the fellies, as shown and described.

[The tire of this wheel, owing to the fellies, being made with flanges, are cast to secure the tire without the aid of bolts. But few mortises are made in the bub, as only about half the usual number of spokes are inserted in it. The short spokes, e, in the second claim, give the necessary sup-port to the fellies, and act as braces to the long spokes.— The improvement is principally designed for light carriage wheels with small hubs. It will enable light small wheels

r, as specified. SwELL FOR MELOPEONS-T. F. Thornton (assignor to G. A. Prince and Thos. Stephenson.) of Buffalo. N.Y.: I do not claim the whole swell when acted upon by the footpedal j, the rod, g, and levers, h h, when it e swell is not divided, as j am aware that it is now so constructed and used. But I claim the divided swell, constructed sub-tartially as set forth, so that one half, or part, may be used separate-ly, when desired, for producing more variety in the tone of read instruments, such as melodeons, melopeaus, seruphines and red organs, all of which are very similar in construc-tion. CARRIAGE FOR STEAM FIRE ENGINES-A. B. Latta, of Cincinnati, Ohio: I claim the combination of the piston rod, contecting rod, and cranks with the shaft, couplings, and driving wheels, as described, so it at the same power that operates the fire engine may at pleasure operate the driving wheels for the locomotion of the carriage, or law-ing them stationary while the engine is performing its du-ty all sub-lamitally as described. SEWING MACHINES—T. J. W. Robertson of New York City: I claim so arrangingand applying thelooper, b, orits equivalent, by which the loop in the needle thread is extend ed or directed, for the purpose of completing the stirch, that it; thall service its movement from the needle, substantially self specially to the device shown and devices the mulpose. Further, I claim the employment or use of the lever or pendants, r, constructed with prejections, n, and placed be-tween the bars of the grates, I, as shown, so that as the filed moles are forced downward from between the grates, I, and friction rollers, j, the stones, should ary be in the moles, will act against said prejections and turn the pend ants, so that a passage or opening is allowed for the stones to drop through. ity all substantially as described. I also chaim connecting the forward guide wheel to the body of the carriage by the large horizontal ring in which it revolves, in combination with the vertical springs and brace aprings for supporting the backs against shocks, experienced in numning over pavements and other longh places, as described. I do not claim either the ring or the springs separately, but only the combination in the manner and for the pur-poses substantially as set for th. I also claim combining hooks, rests, or other equivalents, with the body of the carriage to support the suction hose as described. SEED PLANTERS-Edgar M. Stevens and J. B. Crosby, of Boston, Mass., and J. W. Penrson, of Winchester, Mass.; We claim the application of elastic surfaced feed rollers in sowing machines, in connection with an expanding tube spreader, constructed and arrangedsubstantially in theman-ner and for the purpose set forth. Ox YORES—John Tucker, of Norway, Me.: I clam the blocks in which the bows are set, constructed so as to slide upon the rols, d d, &c., as above set forth, in lieu of having them slide upon the under side of the beam to prevent inju-ry, as set forth. [The first claim relates to an improved mode of feeding of the molds, and their discharge. The second relates to the separating of stones from the molds, which may have with the body of the carriage to support the suction has without detaching them from the induction ports of the pumps, substantially as described. AIR HEATING COOR STOTES-C. B. Loveless, of Hoston, Mass, : I do not claim the airsanging a narrow hot air cham-ber in rear of an oven, and so that the lites which conduct the smoke to the rear part of the oven, shall also carry 11 into contact with one of both of the opposite sides of the said hot air chamber. Nor do I claim the combination of hot air fatures or flues with the heating and culsary apparatus of a cookingrange or stove, because such a combination is well known, and has been used for many years. Nor do I claim merely arranginghot air flues, smoke flues scaped separation in tempering process.] MANDEL FOR CUTTING TAPERING STICKS-Gleorge Tur-ner, ol Edinborough, PA.: I claim the construction of my face plate with the two juwe, K.R., with the cutter, M, on one of them, and made to close together by means of the right and left acrew shaft, H it. moved by means of the cogged wheel, L, and the screw thread, P P P P, on the rim, R R, as described, or by any other construction substantially tue same, and which will produce the intcuded effect. WRISTBANDS OF SHIRTS-R. K. Chandler, of Richmond, Va.: I claim making wristbands with double flaps, sub-stantially in the manner and for the purpose set forth. STATE MACHINE-Daniel Drawbargh, of Eberly's Mill, Pa: I do not claim separately, any part of the above ma-chne, but I claim the combination and arran emeu of the following parts, to wit. Making the frame, F, to whorste on the shaft, G, and hinging it (the frame, F) to the bed, C, so as to operate it with a vibrating motion on the pivots, a 80 50

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a, and slides, P P, with the brace, R, which renders the bed, C, rigid to traverse parallel so as to cut the lumber either curved or statistic, as required for states, heading, or other purposes, sub-tantially we described, the bar, D, being channed or reversed as described. [The bed, C, secured to the vibrating frame, is that on

which the block of timberis placed from which the staves are cut. A gauge is placed before this bed to gauge the thickness of the staves, and a knife above it. The bed, C, with the block, is moved towards the gange, then, by a lev-er, forced up against the knife, and a stave cut out.]

WARM ALR FURFACE—Michael B. Dyott, of Philadel-phia, Pa.: I claim the arrangement of devices described, to wit: The movable fire pot, E, the air fire, J, and chamber, or fire spice, L, constructid and operating in the manuer and for the purpose substantially as set forth.

SEWING MACHINES-Chas. A. Durrin, of New York City: I claim the vibrating hook for holding down the thread during the partial passage of the shuttle through the loop, when arranged and operating substantially in the manner described.

manner described. Umprezizis-Wright Duryea, of New York City: I claim umbrellas with ribs made in two parts, so constructed that one part slides on, or traverses in or heaide the other part, iz: connecting the stretchers to the outer or traversing portions or parts of the ribs, so as to hold the said portions oat in their proper positions when the umbrella is apread, substantially as described : and also that the spring portions of the ribs to which the stretchers and slide as described, when the umbrella is closed.

VALVE GEAR FOR OSCILLATING ENGINES—M. D. DuBois, of Newburg, N. Y.: I claim, first, furnishing the lock shaft, R, by which motion is to be given to the valve or valves with thie e arms, c, f', arranged substantially as described, so that the arm, c, will be brought by the oscil-lation of the cylinder into contact with a fixed stud, g_i and thereby be caused to give a movement to the valve to open the ports, and that, the arms, t, f', will alternately be brought by the same means into contact with hxed agring catches, h h', for the purpose of giving the valve a move ment to close the ports as fully set forth. Second, I cl im furnishing the rok shaft with two arms, d', arranged an bitannia'ly as adjectived, tostrike two fixed pieces, ii, when necessary to throw the arms, f, f, into a po-sition to be caught by the spring cutches, h h', for the pur-pose of moving the valve to close the ports. VALVE GEAR FOR OSCILLATING ENGINES-M. D. DuBois

[The shaft, E, passes transversely through the steam chest, and carries a segment which gears into a rack on the back of a valve; it also carries three arms, c f f. On the bed plate of the engine, there is a standard which carries a sliding piece with a fixed stud, g. This stud operates the arm, c, and opens the ports. The same standard carries the

spring catches, h h', which actuate the arms, f f', and close the ports, all by the oscillations of the cylinder, being very simple devices for this purpose.]

CUTTING SCREWS ON BEDSTEAD RAILS—Henry Gross, of Tiffin, obio: I claim the mechanic-I combination and ar-rangement of the double V cutter, and the manner it is se-cured in the cylinder head when used by the screw head, uid

curea in the cylinder news when used by the screw head, J. Stothe changes from right to left, by which changes right and left handed screws are cut with the same cylinder head and double V cutter. I also claim the mechanical arrangement and combina-tion of the lever, h, the wedge, f, and nut blocks, e, when working together in the manner described, viz: the nut blocks being right and left longitudinal sections of femalie screws, and used to direct the course of the shaft to which the cylinder head is attached, the wedge by which the nut blocks are changed, and the lever which guides the blocks and keeps them in their proper place when the change is made.

and keeps them in their proper place when the change is made. I also claim in combination as above, the double clamp, l, and nut, m, as shown, the screw by which the clamp pis opened and closed, and the rest block for supporting the rail while being cut. All the for-going I claim as a combination and arrange-ment for the purposes adoresuid, new, different, and far nur-passing any machine now in use for cutting these screws. All else, and all other parts of machines designed for the same purpose, I disclaim.

FIRE ARMS-Henry Gross, of Tiffin, Ohio: I claim ombination and arrangement of the cap cylinder with ylindrical rollers as described and shown. All else, and all other parts of said gun, I disclaim.

GRAIN HARVESTERS—Jonathan Haines, of Pekin, III.: I claim so hinging of the platform to the finger bar and frame, asto facilitat the raking, back down the stubile, and leave the gavels in better condution to he gathered by the binders, substantially in the manner set forth.

HULLERS OF BUCKWERT-C. B. Horton, of Elmira, N. Y.: I am aware that conical stones have been used for the grinding of grains, therefore I do not claim that was my in-vention. But I claim the arrangement and combination of the fan, j jj, with the suction spout, J J, the discusage openings K Q, and the stones, B and C, substantially in the manner and for the purposes set forth.

TREE NAIL MACHINE-J. W. Hosgland, of Jersey City, N. J. : I claim, first, the use and employ ment of the citer-lar plate, B, with its diagonal slots, a, to concentrate or ex-pand the cutter, and thus regulate the size of the tree real in the manner described. Second, the use and employment of the follower, H, with

pand the cutter, and thus regulate the size of the treenant the manner described. Second, the use and employment of the follower, H, with its appaardus of hand naw heel to govern the gauge, U, so that the tr. e nails may be made uniform in size, arranged and constructed substantially as described. Third, the use of the levers, R. and their apparatus of ovals, b, to separate the keed rollers or allow them to ap-proach each other for the purpose of holding the tree nail frmly while it is being enlarged or diminished in the man-ner shown Fourth, the use of the pattern gauge, U, and the stem, Y, to govern the circular plate.

CARRIAGE SPRINGS-M. G. Hubbard, of New York City: I claim the employment of a bar extending under the cau-riage, substantially as herein described, which by its tor-sion acts as a spring, ju the manner and for the purpose set forth. forth.

forth. WHIFFLE TREES-Isaac Krebs, of Winchester, Va. : I do not set up any claim to the construction of the usual form of whiffle tree, nor of any of the devices used, separated and apart from each other, being aware that many devices form-ing a whille tree for dissugaging animals from vehicles, have been made and used in many forms, with sliding belrs, and apiral or helical springs, in crubination with separate and distinct levers operated by counseting links or co.ds, but none of these devices or their combinations do I claim. I claim the construction of a wulffictree with the con-tinuous sliding bolts or trace fastenings, rods, bbb b, com municating directly with, and attached to one single and the same lever, together with the staple, d, one single fast; ible spring, e e. clevic lips f, in combination and through slid of which, are actuated and retained in position simul-, taueously at one and the same time, the confinuous sliding bolts, b, austautially in the manner shown, and as de scribed for the purpose set forth. CABRIAGE FOR STEAM FIER ENGINES-A B. Latta of

end one ortwo ovens, so that the smoke, while passing in c muct with thehot air pipes or flues, may also pass against the three or four sides only of either one or both ovens. But I claim my improved arrangement of one continuous smoke flue around an oven and againsthot air flues arrang-ed as dracribed, whereby not only are the hot air flues arrang-the smoke while coursing threugh buch continuous flue, but that the end of the oven and the end of the vetical hot air clamiler, G, are also exposed to be so heated. My inven, ion being an important and useful improvement on the general combination and arrangement of bot air and cultury fixtures relevened to a described.

culinary fixtures referred to and described.

cultuary fixtures referred to and described. I FARM GATES-H. B. Lum, of Sandusky. Ohio: I Claim having the lower ends of the gate, A, secured by pivots or rods, c c, to a sill piece. C, and having a series of strips, d, placed on sleepers or secured in any proper manner on the ground at one side of the gate, spaces being left between said strips to allow the bars or rods, b, to pass therein, the gate having a weight or counterpoise. E, oneor more at-tached to it by a cord or chain, f, which passes over a pul-ley, e, attached to the post, D, one or two posts being eu-ployed, the gate being operated by the levers, 6 G, with the cords or chains, g g h, attached thereto. The above parts being arranged substantially as shown and for the pur-pose set forth.

[This improvement relates to balance gates, which can be opened and closed by a per-on on horseback or in a carriage. The gate is moved vertically up and down by levers which are placed conveniently to be pushed forwards or backwards in a very simple manner.]

SPARE ARRESTERS-David Matthew, of Philadelphia, Pa.: I claim the separating head or cole having the sur-face that is exposed to the current from the chimney formed of cavities or projections and openings for the purpose of separating the sparks from the current of gases. I sloe claim the addle pipe for the purpose of supporting the head and conducting the current of sparks and gases through it, substantially as described.

through it, substantially as described. TOOL FOR GROOVING MOLDIGS-R. J. Marcher, of S isbury Mills, N. Y. I claim tenoning or cutting transve and parallel grooves, g, in concave portions, f, of moldin B, by means of a tool stock. D. attached to a plate. C, a pivot, E, which is at the centre of a circle, of which concave forms a part, the cutter, b, being attached to lower end of a slide, E', which is operated or pressed do when the cutter acts upon the molding by a spring. H, s elevated upon the return moviou of the cutter by raising lever, G, the cutter, a. having a step or guard, c, adjoin it, for the purpose of legulating the depth of the cut, shown and described.

[These devices for cutting parallel and transverse groove in moldings, render the tool very adaptable, in being capa ble of motion verticully and horizontally; and, having a guard, a uniform depth of groove is always insured.]

Tool. FOR GROOVING MOLDINGS—R. J. Marcher, of Sal-isbury Mills, N. Y. I claim the reciprocating tool stock, I, slide, J, with cutter, e, one or more, and top or guard, e', attached to its lower end, and having a spring. K, acting upon its upper end, and the slot, d, in the plate, F, the above parts being arranged substantially as shown and for the pur-pose set forth.

[This tool stock with cutter (and guide and guard) is for he purpose of cutting oblique grooves in moldings, the other being for cutting transverse parallel grooves. The tool has a pin, which is inserted into and moves in a guide curved slot in a plate, which slot (orresponds in form to the curved face of the molding, or that part which is to be grooved. This slot gives an arbit.ary motion to the tool, and causes it to rise and fall, so as to conform to the face of the molding.]

LUBRICATING COMPOUNDS—JACOb Marshall, of Reading, Pat. 1 Claim the combination of ingredients described. 1 do not claim the use of soap, hor the mixture of soap and oils for a lubrication. But I claim the combination of whale or other oils mixed with the cleate of zinc, prepared by mixing a sebunou of soap in ware with a solution of accitate of zinc in water in while the acctate of zinc is separated in a saponaceous mess, while the acctate of soda dissolves in the liquid, in the mau-ner set forth.

SUB-MARINE EXCAVAING MACHINES—J. C. Osgood, of Troy. N. Y. : I do not claim the excavating machinery, the well-hole deposits, the raiway track and dumping cars, or the drags, when taken separately. But I claim, first, the combination of the excavating ma-chinery, the railway track and car, and the well-hole depo-sits of the float or vessel, when combined in the manuer sub-stantially and for the purpose of a self-tending submarine excavating boat, as set forth. Second, I claim the combination of the drags with the vessel of float, constructed as described, said combination being substantially in the manner and for the purposes as set forth.

CORDAGE MACHINERY—Henry Pearce, of Cincinnati, O. I claim the arrangement of a friction or 1 ubbing collar, cp-erated hy a plunger passing unward within the supporting stem, b, and the weighted isver, asdescribed, or equivalent devices for regulating the degree of facility of rotation of the bobbin spindles.

FENCES-J. B. Reyman, of Dubuque, Iowa: I claim the mode of fastening pickets to the rails, in making fences, by means of wire combined and interwoven with the rails, in the munnersubstantially as described. I also claim fastening the brace, k, at its upper end to the standard, H, so as to admit of a hinge unotion, in the man-ner and for the purpose substantially asset forth.

her and for the purpose substantially asset form. DRVING (RAIN-T. F. Rowland, James Stephens, and W. H. Mason, or Brooklyn, N. Y.: We do not confine ourselves to the use of steam tor heating, as hot water may be made to circulate through the apparatus instead of steam. Nor do we wish to be understood as confining ourselves to the special form or construction specified, so long as the same resnits are attained by equivalent means. We claim first, the heating tubes, substantially as speci-feed, in combination with the hopper, as specified, for par-tially heating the grain or other substance as it passes to the kin.

tially heating the grain or other substance as it passes to the kin. We also claim, in combination with the series of perfora ted or wire gauge slaaking pana, the surrounding double me-tallic casing, the opposites dee of which are connected by horizontal tubes passing under thepans and conn cted with a steam boiler for the circulation of hot water or steam though the wholecasing and connecting tubes, substantial-ly as specified the said double casing being gaurounded by masonry, as specified, the said combination being for the pur-pose of more effect tally and economically drying grain or other substances without the dauger of scorching or over-heating it, and to avoid the condeusation of the vapors evol-ved from the grain or other substance, which, it permitted to take place within the kiln, not only re-moisteus thegrain but is otherwise in jurious. but is otherwise in jurious. And we also clam, in combination with a kiln, consisting of the double casing connected with a steam boiler and sur

to be made very strong.] of the noulose casing connected with a steam holter and sub-rounding the perforated wire gauge or shaking pans, sub-stantially as specified, the employment of a blast of heated air introduced at the bottom and lorced to pass upwards through the kiln and through the perforations in the pans and to escept at op, a substantiantially as specified, for the purpose of driving off the molisture and vapors evolved from the grain or other substance, as specified. BRIGE PRESESS-John Chase, of Pequonock, Copn.: I claim, first, the swinging frame, B, constructed, arranged, and ope ating substantially as shown, for the purpose of feednx the empty molds to the press boxes, and discharg-ing the filled molds therefrom. I an aware that devices have been previously employed for preventing stones and hard substances from being press ed against and into the molds by affording facilities for re moving said stones und hard substances from the molds be fore the clay is pressed into them. I therefore confine my-self specially to the device shown and described for that purpose.

hanon, N. H. : I claim combining the hinged lip, b, as de-scribed, with the curb of a water wheel, in such a manner that its inner curved surface forms the termination of the scroll-water-way surronnding the wheel, whilst its straight sunface forms one side of the mouth of the said scroll water-way, for the purposes torth.

SELF ACTING NIPPER BLOCK-Jonathan Whipple, Jr., of Miltord, Mass. : I claim the construction of the nipperblock with one wheel orpuliey combined with a ratchet wheel, pawls, and levers, and jaw or nipper, substantially as set forth.

TELEGRAPHIC KEY APPARATOS-L. S. White, of Chico-pee, Muss, and Lewis White, of Hartford. Conn.: We are aware that it is not n w to close and break an electric cir-cuit by means of a moving piece of metal having strips of ivory or otherelectronon-conducting materialinserted with in it and made to operate against a metallic spring connect ed with one pole of an electric battery, while the said mov-ing piece of metal was connected with the other pole there-of, therefore we do not claim such. But we claim, in combination with a sliding key circuit breaker of such description, a friction slider, a metallicbar, (b, and aninsulated stop bar, 1), or the equivalent thereof, the whole being made to operate together, substally as apecifed.

CLOSING AND OPENING GATES, Ac.—Caleb Winegar, of Union Springs, N. Y.: I claim the opening and shutting of gates or doors, as described, that is, means of a retentive or reserve power, so that a gate or doorway may be opened or closed a succession of times; let it be obtained by winding a spring or weight, or whether gear is used or cords and pulleys

pulleys. I also claim the application of the wires and the swid right angular irons or elbows to the opening and shutting gates, & c. as described, not intending in these claims to limit my-self to the precise arrangement of parts described, hut to vary the same at pleasure while I attain the same ends by means substantially the same.

SPIKES-John Henry Wygant, of Hackensack, N. J. : I claim providing a spike, A, with a bevel orinclined offseton one of its sides, and imploying in connection with the same. a light metal har or locking piece, C, substantially as and for the purpose set forth.

[The object of this improvement is to lock the spikes when employed under circumstances which do not admit of them being clinched. The off set, just before the bar, C, is driven home, bends its end, and causes it to take a lateral instead of a vertical direction, and consequently a firm hold of the timber.]

timber.] BANK LOCKS-Linus Yale, of Newport, N. Y. : I do not claimseparately the rods, e e' working in holes in the bolt B, and a sliding frame, C, br that is an extremely old fast, ening, and used in locks many years since. But I claim thesliding frame, C, and plate, D, in combi-nation with the rods, e e', when constructed and arranged as shown, so that the plate will, during the operation of un-locking the lock, cover the opening or key-hole, E', in the casin before the holt can be thrown back, thereby prevent-ing the lock from being picked, or impressions taken to form a key. I also claim unlocking the lock by means of a segment key, F. which is placed within a corresponding shaped re-cess, g, in the plate, D, by possing said key through the opening or key-hole, E', and moved with said plate so that when the holt, B, is thrown buck, the rectss, g, and key, F, will be in line with or opposite to the opening, k, in the knoh, E, thereby allowing the key to pass out of the reverses, g, though said opening, k, into the hand, as shown and e-scribed. [The segment key, F, is a shooting bolt of cunning adap-

[The segment key, F, is a shooting bolt of cunning adaptation. It is placed within a recess in the lock, and must be shot from the lock before the latter can be opened. It renders the lock unnickable, because there is no room for a burglar to tamper with it, and take an impression in wax to form a key.]

KNITHING MACHINES-J. B. Aiken, (assignor to himself and Herrick Aiken.) of Fvank lin, N. H. ; 1 cleim, first, the needle latch regulator; constructed and operating in the manner substantially as described for the purpo. eset forth. Second, 1 claim the needle latch regulator in combination with the yarn carrier, operating substantially as set forth.

with the yarn carrier, operating substantially as set forth. WATER METER-J. S. Barden, of New Haven, Conn. (8s-signor to Oliver Stow and G. B. Farnam, of Mendon, Conn.) I claim a cylinder of any given size, with a common plung-er within it, open at both ends and secured within a case, divided into two compartments, as set forth, each compart-ment with their heads, acting as heads to the cylinder, and reservoirs to receive the sediment either dawn in, and not thrown onu, or that which may be deposited from the water. Second, I claim the reservoir for the collection of sedi-ment, whether connected with a cylindical or a rotary water meter. Third, I claim the casting or turning of a groove upon 'he circumference of a piston plate and around its entire di-ameter with holes do tilled from the base of the -ame through on the inside, in the manner and for the object set forth. Fifth, I claim the entire combination for theolject, as set forth.

SCREW WRENCHES-F. S. Coburn, of Ipswich, Mass. (as-signors to Ruggles, Nourse. Mason & to., of Worcester, Mass.): I claim arranging and combining with the angular recessed head, C. of a handle, A, a movable notched jaw, operated in manner with respect to the recess of the head, and by means substantially as described, the same render-ing the wrench adjustable to units or screw leads of differ-ent sizes and capable at the same time of embracing them on their fourside.

BURING FLUIDS—Abraham Gesner, of Williamehurgh, N. Y. (assignor to The Asphalte Mining and Kerosene Gas Co., assignor to asid Gesner, and by saud Gesner to The North American Kerosene Gas Light Co. : I claim as a new man-ufacture, or composition of matter, the hurning fluid com-posed of alcohol and A. kerosene, as specified.

HOSE COUPLINGS-I. E. Hicks, (assignor to himself and J. N. Davis.) of Boston, Muss. : I do not claim a common innulus of leather as a packing for the screw joint of a hose

G. N. DAVAE, or BOSTON, MASS. : 1 do not civilin a common annulus of leacher as a packing for the screw joint of a hose coupling. But I claim combining the two parts or halves, A B, of the coupling by means of a locking or bayonet conrection, or the equivalent therefor, and an elastiv (tube, F, possessing sufficientelasticity not only to form by its expansive power, when compressed, a joint under pressure of a liqu d within the hose as explained, but to maintain the locking connec-tions in place when their catch stud is in its recess, as de-scribed. I also claim making the bearing shoulder, r. conical, or so as to cause the circumference of the tube, F, to be borne against the cylinder seat, S, by the expansive power of the tube, acting against such conical part, as described, the same being not only to give support to the tube, F, but to aid in maintaining a close joint, against the pressure of the fluid in such tube, as explained. I also claim the shoulder tube, u, u, as combined with the elastic packing tube, F, and the part A, and used substan-tially in manuer and for the purpose of supporting the tube, F, as specified.

tion. SEWING MACHINES—Joseph Bond, Jr., of Phil.delphia, Pa.: Although I have described the construction and oper-ation of an entire sewing machine, I wish it to be under-stood that I do not lay any claim to the leeding apparatusor to the method of actuating the needle. But I claim, first, the spool case, I, with teeth or their equivalents on its outer edge and the nose, L, for catching the needle thread in combination with the wheel, H. having teeth out away at p, substantially in the mauner and for the purpose specified. Second, the hollowspool case, I, with itsspool, M. in com-bination with the radiating arm, N, or equivalent, as shown and described. MANDREL FOR CUTTING TAPERING STICKS-George Tur-ner, of Editaborough, Pa.: I claim the construction of my face plate with the two jaws, E, R, with the cutter, M, on one of them, and made to close together by means of the right and left screw shaft, H H. moved by means of the cogerd wheel, L, and the screw thread, P P P, on the rim, R R, as described, or by any other construction sufficient the specific the need and the goods, same, and which will produce the intcuded effect. CUERES FOR WATER WHEELS-John Tyler, of West Le-