

At 128 Fulton Street N.Y. (Sun Buildings.) BY MUNN & COMPANY. 8. H. WALES

ederhen & Co., Boston. Dexter & Bro., New York Winch, Philadelphia. E.E. Fuller, Halifax, N. G. Courtenay, Charleston. S.W. Pease Cincinnati, O. Responsible Agents may also be found in all the princip 1 cities and towns in the United States.

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The Seconds of Eternity.

Prof. Mitchell in one of his recent lectures describing the gradual tendency of the earth's orbit to assume a circular form, used the following magnificent illustration :-

"Its short diameterwas gradually lengthening and would continue so to expand until it should become perfectly circular, when it would again contract to its original shape and dimensions. And so the earth would vibrate periodically, and these periods were measured by millions upon millions of years. Thus," said Prof. M., "the earth will continue to swing back and forth, and to and fro in the heavens, like a great pendulum beating the seconds of eternity."

An Irish Toad. The Dublin (Ireland) Medical Express details a case which confirms the opinion that the toad can eject a venomous fluid from its mouth. A boy aged six years, while throwing stones at a large toad, felt something spirted into his eye. He was attacked soon after with spasmodic pain in his eye-then with coma; at times he would try to bite everything near him; at times he was in a state of apathy, and at times in a state of madness.-On the tenth day the only symptoms were stupor and inability to speak, a condition which has lasted for two years.-[Exchange.

[A pretty fair toad story that. To(a) ddyoften attacks grown people much in the above manner, but such young children are generally spared.

Life Preservers.

Inflated life preservers, made of india rubber, or such material, were condemned at the meeting of Steamboat Inspectors held last year. In the case of the burning of a steamboat on the Mississippi, which had a number of them on board, they were found totally useless in the hour of need. At the recent burning of the steamboat Northern Indiana, on Lake Erie, numbers of the inflated life preservers on board, it was discovered, had been rendered useless by being punctured with pins, by ladies using them for pincushions in the cabin on retiring at night.

Metallic life preservers, made of thin sheet copper, are the safest and best. It would be very easy to make every seat, table, and mattrass, used on a steamboat, a life-preserver, and steamboat proprietors should be compelled to do this.

A Great Gun.

rought-iron tured in Liverpool, Eng., which weighs 22 tuns, and sends a ball of 300 pounds weight a distance of 4 miles.

The first exhibition of the Farmers and Mechanics Institute, of Northampton County, Pa., will be held in September next, on the 23d, 24th, 25th and 26th.

A bug resembling the lightning bug, and about the same size is committing serious depredations on the potato crop in Wilson co., Tenn. They get upon the vines by thousands, and strip them of vegetation from top to bot-

Boot and Shoe Sole Machine. Those who have witnessed the movements of a dexterous workman, in cutting out soles, would hardly suppose that there was any room or necessity for the assistance of mechanism. He places the leather upon a thin metallic pattern, and follows it around with a sharp knife; then he skives its edges, cuts the channel for the thread, and it is done. Can anything be better, more simple, or quick? We shall show that there can. Our engraving exhibits an invention which does the work about ten times faster, and in a far superior manner.

Fig. 2

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The leather, A, previously cut out into the usual rough form, is laid upon the block, B, which rests upon the cogged sole carriage, C. D is a driving pinion, which gears with C, and causes it to move around on the surface of the table, E, and bring the leather in contact with suitable knives, as will be presently described. Pinion, D, is put in motion by means of a worm wheel and screw, belowthe table, E, on the fly wheel shaft, F; power is applied to crank G. The sectional view, fig. 3 shows the manner in which pinion D receives motion.

The cutting knives are all attached to a sliding bed plate, H, which is moved up so that the cutters will act on the leather, or back out of the way, by means of the lever, J. I are the guide posts of the bed plate, H. K is an upright knife attached to the front end of bed plate H. This knife cuts out the sole. When bed plate, H, is moved up towards, B, the friction wheel, L, which is attached to the lower side of H, meets the edge of a thin pattern, M, which is placed between B and C. Pressure is maintained by the hand, on lever J, and the friction wheel thus kept constantly against stantial; none of its parts are complicated or pattern M; the knife, K, is, in this manner caused to follow the peculiar form of pattern, M. When a different formed or sized sole is required, a corresponding pattern, M, will be necessary.

N is a pressure pad, which presses lightly upon the leather, so as to keep it smooth while it is being cut. N is raised and lowered by means of the lever eccentric, O. P is a small cutter which does the channeling. It cuts on the top of the leather, and is attached to a plunger which is raised and lowered by eccentric lever Q. R is a spring that presses cutter P down, and S is a set screw by which the depth to which cutter P enters the leather, is is a most effectual disinfectant.

regulated. T is an arm attached to H, which supports the levers and cutters described.

of the sole must not be skived, it is necessary that the skiving knife should lift at the proper movement can be understood we must more fully explain the construction of the sole carriage, C. Figure 2 shows the under side of this device; it contains a path, C', into which two guide pins, C" fit. These pins are attached to table E (see fig. 3) and serve as the fulcrum for C, when it moves about on table E. The heel edge of path C', observe, is not quite as high as the front end.

We now return to the skiver, U, and its movements. It is attached to the front end of a lever, V, which is pivoted to arm T. The back end of lever V connects with rod W, which unites, below the table, with lever X (fig. 3) and the forward end is joined to rod Y, which projects above the table and touches the edge of the follower path, C'. The heel part of the path edge is depressed, as shown, so that when Y reaches that depression it rises, and the skiver knife, U, is thus raised from the leather, leaving the heel part unskived. Z is a spring which pulls down lever V. Immediately below the end of V, where it unites with W, is a screw nut, by which the depth of the bevel which the skiver cuts, may be conveniently changed. The various cutters may be readily adjusted so as to suit different kinds and styles of soles, sewed or pegged work.

This machine operates with great rapidity, does the work with unerring certainty, and imparts a handsome finish. It surpasses handwork in every respect. It is strong and subliable to get out of order. Singlemachines are sold at \$25 and \$30 leaving a large profit to the manufacturer. Invented by Wells and Bray, of Turner, Me., of whom, or of J. A. Knight & Co., 334 Broadway, N. Y., further information can be had. Patented March 11, 1856.

A Cheap Deodorizer.

MESSRS. EDITORS-At this season of the year, when the effluvia from sinks is not only disagreeable, but highly deleterious to health, perhaps it might be of service to some of your numerous readers to know that the refuse lime. from the dry lime purifiers of coal gas works,

In the early part of this spring I had occasion to remove an old offensive place, when U is the skiving knife, and as the heel part the emanations became overpowering. The idea then struck me, to try the effect of gas lime; its action was almost miraculous. Since moment, so as not to cut the heel. Before this that time our workmen are in the habit of sprinkling small quantities of this lime to keep down such emanations. The smell of the lime itself soon disappears. I consider this lime to be an effectual and cheap disinfectant for such putrid odors. THOS. HOADLEY,

TIT Fig.3

Engineer of the Cleveland Gas Co., Ohio.

A Powerful Fire Engine.

Messrs. Wm. Jeffers & Co., Pawtucket, R. I., have lately built a fire engine for the Common Council of Adrian City, Mich. The engine is in possession of Alert Engine Co., No. 1, of that city. It is of the piano style, 10inch cylinders, with changeable stroke of five to nine inches.

At a recent trial of the machine, it threw four 5-8 in. streams, simultaneously, 113 feet high. One, inch and a quarter stream, was thrown 143 feet. One, inch and a half stream, was thrown nearly 113 feet. One, inch and an eighth stream, was thrown 186 feet horizontally. One, inch and an eighth stream, was thrown 202 feet horizontally. One inch stream was thrown 215 feet 6 inches horizontally.

Artificial Formation of Minerals.

Professor Houseman, of Gottingen, Germany, has published an interesting scientific paper on the formation of minerals in and about furnaces, by furnace action. He enumerates the following varieties observed by him : silver, lead, copper, iron, bismuth, lead glance, blend, oxyd of zinc, red copper ore, iron glance, and magnetic iron ore.

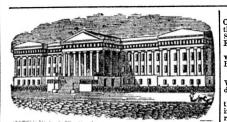
The Atlantic Ocean Telegraph.

We would direct the attention of our readers to the article on the above subject on another page. Its author discusses the feasibility of the project with ability and scientific acumen. All those interested in the success of the ocean telegraph should read it with attention.

The boiler of the cotton factory at Little Falls, N. Y., exploded on the 1st inst. The factory was terribly shattered. One man was killed and three women badly wounded. The boiler was shot to an immense distance from the factory.

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Scientific American.



[Reported Officially for the Scientific American.] LIST OF PATENT CLAIMS Issued from the United States Patent Office FOR THE WEEK ENDING JULY 29, 1856.

SUUTER OFFRATOR-James R. Creighton, of Boston. Mass.: I claim the attachment of the serrated tumbler eatch. T. to the slide, Q.said catch meshing or interlock-ing with a similarly serrated or toched surface. opposed, R. on the side of the slide box or frame box. E. in combi-nation with the square extensionrod, U, and guides, SS', bv which I am enabled to operate the outside blinds or shutters of a house from the inside of the same, and to se-cure said blinds or shutters in any desired position, with-out the linbility of their disledgment from the outside, unless by the exercise of unusual violence.

CHURNS-W. H. Burnham and B. Hibbard, of Cort nd. N. Y.: We claim our improved churn dasher tand, N. Y.: We claim our improved churn dasher composed o'two independent frames combined with each other and with the operating lever, substantially in the manner set forth.

METAIL PLANERS-E. C. Cleveland, of Worcester, Mass.: I claim the friction box, J. attached to the shaft, I, as shown, and provided with adjustable dogs, oo, the box, J. being connected with the shaft. I, by the gearing, jf, and operatize conjointly with the gearing, E F b, and and pawl, ao, on the shafts, c c H, and the arm, h, which projects over the box, J, as shown, for the purpose spe-cified. project cified.

projects over the box, J, as shown, for the purpose spe-cified. SAWING MACHINERY-A. S. T. Copeland, of Pitts-burgh, P.A.: I do not claim that attaching a saw to pit-man is new. Nor do I claim the muley saw, gate, or gash spring, pole or levers, crank pins set in balance wheels, or any other connections on old principles. But I claim the saw heads, II H, and saw strainers, S S. and the combination of said saw heads and strainers with the screw nuts, N N, and screws, Q Q and m m, in any manner substantially the same as shown and de-scribed for the purposes set forth. Also the attaching of saw heads to pitman in any man-ner substantially the same as shown and described, for the purposes set forth. Also the combination of belt reversers, 2 and 3, with the mechanism for starting and stopping saws and revers-ing pitman and circular saw shaft, in any manner sub-stantially the same as shown and described, for the purposes set forth.

stantially the same as shown and described, for the pur poses set forth. Also log reversers, 1 and 1, 2 and 2, 3 and 3 and 4 and 4, operating in the manner shown and described, for the purposes set forth.

HARDESS FOR WEAVING SEAMLESS BAGS-Algernon L. Cole, of Windham, Me.: I claim the application to weavers harnesses the addition of one row of heddle eyes-making two rows instead of one upon each leaf of harness-as described, or any other substantially the same.

same. **P**EGENG JACKS—Alfred Bailey, of A mesbury, Mass I claim, first, the application of a spiral or other spring, c, substantially as I apply it to hold the last, L, firmly in its olace, and at the same time allow the head pieces, F and F, to be put in any desired position without read-justing the last, L, or spring, c. Second, the arrangement by which the vertical head, R, may be turned vertically above the axis upon which it turns horizontally, in the manner and for the purpose substantially as described.

FOLDING TABLES-C. D. Barnitz, of Baltimore, Md. : I claim the movable braces and supports, B, which, when in a horizontal position, brace firmly the legs in an up-right position, and also give support to the lids, A, and when turned into a vertical position permit the legs to close in against the undersurface of the table.

RAKING APPARATUS OF CORN AND CARE HARVEST-RRS-John W. Baison, (assignor to himself and Martin H. Batson,) of Triadelphia, Md.; I claim in combination with the endless rake belts, L L, passing under and over the platform, and thence over the pulleys, K K, the shield, M, placed between them, when said shield re-ceives the corn or cane from the rakes at their highest elevation, and conveys it into a wagon or other recepta-cle alongside, substantially as set forth.

CUTTING APPARATUS OF CORN AND CANE HAR. VETERS-John W. Batson (assigner to himself and M. H Batson), of Triadelphila, Md. : I claim the double angled V-shaped cutters, composed of strips and under supports substantially as represented and for the purposes set

Automatianty as represented and for the purposes set forth. I also claim hanging said cutters to a pivoted bar, so that they may be raised up out of cutting position when the machine is drawn through the stubble, to prevent their catching against the previously cut cane or corn, as set forth.

SAWING STONE IN TAPER FORM-H. J. Behrens, of New York City: I do not claim giving the saw a com-pound motion irrespective of the means. But I claim giving to a saw placed in a line inclined to the line of motion of the saw frame a lateral motion, in-dep-indent of the motion of the frame, or at right angles to the line of motion thereof, by means of the several de-vices, substantially in the manner and for the purposes set forth. set forth.

SOLAR SALT EVAPORATION. - J. F. Boynton. of Syracuse, N. Y. : 1 claim the use and application of the covers. H. of the salt vais. A, for the evaporation of salt water by solar influence, in the manner specified.

water by solar influence, in the manner specified. FOUNTAIN PEN-Austin G. Day, of Seymour, Conn.: I claim the sliding feed tube having an aperture near its upper end whence the ink flows when the pen is in use, the aperture being closed and the ink excluded from the feeding tube by drawing it downwards into the lower end of the ink chamber. I also claim the combination of the air hole or ven with the sliding feeding tube, the enlarged end of which closes the vent hole when the feeding tube is drawn down, to stop the flow of ink to the pen.

down, to stop the flow of ink to the pen. PYROGENOUS LUBRICATING OILS—Samuel Downer and Joshua Merrill, of Boston, Mass. We disclaim the use of all mixtures in which caoutchoue is diffused with application of our discovery to the improvement of the application of our discovery to the improvement of the gualities of the lubricating oils from coals, coal tar, and bitumens solely. Our improvement of these oils depends upon the perfect solution in them of small portions of bitumens of the elastic kind, caoutchoue or guita percha, so as to prevent them from passing off in currents of air at common temperatures without diminishing their lubrica-ting qualities in the slightest degree. What we claim, is the improvement of dissolving elas-tic bitumens, caoutchoue or guita percha in the pyroge-nic oils used as lubricators, substantially as set forth.

SAWING MARBLE-Lewis S. Fisher, of Waynesboro', Pa.: I claim operating the saws, f, by racks, ee, and cog wheel, d, in combination with the guides, z z and m m, when arranged and operated in the manner and for the purposes set forth.

FORE AND AND RIG OF VESSELS—George W. Geran, of Brooklyn, N. Y.: I claim constructing the main sail, A, as shown, and having the lower end of the topsail, D, attached to the outer end of the boom, B, substantially as shown and described.

shown and described. BAKE OVERS-John P. Hayes, of Philadelphia, Pa.: I claim the heating flues, B B. arranged as described, that is, so as to cause the products of combustion to pass from the fire chamber below first into the lower flue, B, at 1, thence behind its partition, f, and out at I', thence into the next flue, B, above at 2 and out at 2', and so on, as shown by the arrowsthrough the successive flues which may be above to the escape flue, G, the said flues, B, be-ing arranged on the two sides of the casing, as described, and divided by the partition, e, and the products of com-bustion being direct thereby, together with the parti-tion plates, f and g, in the wall, substantially as descri-bed.

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SUGAR EVAPORATORS—Samuel H. Gilman, of New Orleans, La. 1 I claim the combination of the long ket-ite, B C, with the train of kettles, L M N O R, and pipe, S, the serpentine channel, T U V, and the fire flues, A D E K, in the manner and for the purposes specified. Second, the combination of the troughs, F G H I and J, with the train of kettles, L M N O R, and the long kettle, B C, in the manner and for the purposes specified.

B G, in the manner and for the purposes specified. DEVICES IN STAVE MACHINERY—Charles Hoyt, of West Aurora, III.: 1 do not claim the cylinders, R &, for dressing the staye, for they have been previously used. But first, I claim adjusting the stayes, T, in line with the feed rollers, H H, and jaws, I I, by means of the slid-ing bed or plate, C, and laterally sliding plates, G G, ar-ranged as shown and described. Second, I claim the feeding block, E, when operated by the spring, e, lever, F, and eccentric, o, substantially as shown, for the purpose of feeding the stayes to the cut-ters.

STEAM BOILER FURNACES—E. T. Ingalls, of Haver-hill, Mass.: 1 claim the improvement in steam boilers which consists in arranging a fire pot of sufficient depth to contain a large quantity of fuel, within, or about and underneath the boiler placed concentrically therewith, in such a manner as to keep the fuel which is in contact with the lower part of the furnace in a full state of com-bustion always, as set forth.

Parchive Rives Shor-Ralph Henry Isham, of Greenwich, Conn. : I claim the use of a leaden ball or bullet of any desirable form with a motullic case or coat-ing of brass or other firm metal in whole or in part, whether plated, washed or galvanized, or by whatever mechanical device the coating or partial coating may be mechanical device the coating or partial coating may be effected, for the use and objects of this invention, as set forth.

forth. CORN PLANTERS—Jamos D. Jeffers, Joseph Sparks, and John H. Jeffers, of Philadelphia, Pa.: We do not claim the tubes. H H, nor do we claim operating inclined planes and vents together in a corn dropping box, irre-spectively of the peculiar construction and arrangement of the same, as described, nor do we confine our claim to any number of boxes. A, upon one carriage, nor to any number of dropping vents in each box. But first, we claim the moving inclined planes, 11, and spring, C C, when constructed and combined so as to operate together within the grainadjusting recesses, E E, substantially and for the purposes set forth. Second, we claim the stationary inclined planes, D D, when operating in combination with the said recesses, E E, substantially and for the purpose set forth. CLAMP FOR PLUMBERS—F. R. Langwith, of New

CLAMP FOR PLUMBERS-F. R. Langwith, of New York (Jity: I claim the combination and arrangement o the clamp box, A B, the clamping levers, C and H, wher either is used, and also in combination therewith the screws for adjusting the cock in a proper position during the process of soldering with the main pipe, when ar-ranged and operating substantially as described.

Tanged and operating substantially as described. PRINTING PRESS.—S. W. Lowe, of Philapelphia, Pa.: I do not claim the employment of a cone-shaped roller for giving impressions, well knowing that the same has been employed before. But I claim, first, adjusting the conical roller, F, by means of the screw, k, as specified. Second, the radiating lever, U, with its conical roller, F, in combination with the tympan and its spring, x, the whole being arranged substantially in the manner and for the purpose set forth.

For the purpose set form, STAYE MACHING-John McMurtry, of Fayette Co., Ky. I claim the combination of the endless claim or its equivalent, with the undulating bed or bearing, and the combination of these two devices with the planer, for dressing the outer surface, and beveling the two edges to suit any size cask required, in the manner substantially as set forth. Second, I claim the obtuse joint in the endless chain, B, at the carrying wheel, for the purposes specified.

INSERTING FAUGETS INTO FLUIDS UNDER PRESSURE. —Patrick Mihan, of Boston, Mass. 1 claim the faucet re-ceiver, as composed of the socket tube, A, and the per-forated thimble, B, applied together by means of screws and operated by the action of the faucet, substantially in manner and for the purpose as specified.

HAND SEED PLANTER-A. C. Miller, of Morgantown, YA. : I claim, in combination with the reciprocating agi-tators, I, the stationary bent adjustable seed bar, B, with its wedge shaped openings, a, and inclined sides, b, for the purpose of sowing seed broadcast, and adjusting the machine to the quality or kind of seeds to be sown, as set forth.

SOAP BOILING—Campbell Morfit, of Baltimore, Md. : I claim the combination of the hollow shaft and tubular arms as a mixing, stirring, and heating twirl for dry steam, either in open or closed vessels, as described.

either in open or closed vessels, as userieued. POTATO PLANTERS—John Moore, of Quincy Point, Mass. : I do not claim a seed planter wherein there is a furrow opener, a contrivance for dropping the seed, and one for covering the furrow. But I claim arranging and combining with the cham-bered cylinder. H, and its spring guards, M, and so as to operate there with, as set forth, a series of acrapers, b the same being for the purpose specified.

COAL SCUTTLESS_James Myers, Jr., of New York City: I claim constructing the scuttle, as shown and de-scribed, with a casi iron chambered or dish-shaped bot-tom, B, having a supporting flange, C, in conjunction with and attached to the sheet or wrought iron aides or body, A, of the scuttle, as and for the purpose set forth.

and attached to the sheet or wrougnt iron sizes or body. A, of the souttle, as and for the purpose set forth. KWITTING MACHINES.—John Nesmith, of Lowell, Mass. I claim the lowering or raising the ends of the needles which receive the threads, so that it the threads will not enter the hooks of the needles when out of their working line, as the carrier passes them, while the other ends of the needles remain connected with the mechanical ar-rangementused for pushing them forward and drawing them back to form the stitch on their working lines, es-sentially in the manner and for the purposes set forth. Second, I claim the slides, N2, or their mechanical equivalents, for taking the needles out of the work for narrowing the fabric, and bringing them back into the work for widening the fabric, essentially as set forth. Third, I claim the metallic rests or guards, d, or their equivalents, for constantly keeping a number of the needles in their working line, essentially in the manner as fully set forth and described. Fourth, I claim the connection of a registering or meas-ting apparatus, constructed as described, or otherwise formed, with the moving parts of my machine, for the pur-pose of bringing into use and taking out of use, the requi-ite needles, at the proper time of shaping the fabric, and for severing the threads when the work is done, and stop-ping the machine when required, essentially in the man-ner as forth.

ping into intermine when required, essentially in the man-ner as set forth. Fifth, I claim the arrangement and movement of the finned bar. W, or its mechanical equivalent, to aid in forming the stitch, also its movement backwards to un-cover the ends of the needles for putting on the new [ab-ric, essentially in the manner and for the purposes set forth.

BINDING GRAIN-W. F. Pagett, of Stone Bridge, Va : I claim the way, A, in combination with the slide J, or its equivalent, when operating in the manner and for the purposes described. Second, I claim the band, G, in combination with the way, A, and slide, J, for the purposes described.

PRINTING PRESS.—Thomas and Alfred Parkes, of Brooklyn, N. Y.: We claim, first, the cylinder, B, having flat surfaces, a.a. on its periphery, to receive the forms, in combination with the printing cylinders, D, placed in sliding bearings, and arranged substantially as descri-bed for the purpose set forth. Second, we claim the reciprocating shafts, 3, 5, 6, and stationary shafts, a a.a. tu v, with the tapes arranged as shown, whereby the two printing cylinders, D D, are fed from one feed board. and the sheets therefrom, when printed on both sides, deposited upon one and the same fly-board.

printed on both sides, deposited upon one and the same fly-board. Third, we claim the sliding frame, M, arranged and op-erating substantially as shown, whereby the motion of the belt, 1, is reversed at the proper time, and also stopped at proper intervals, and the shaft, d, raised and lowered for the purpose of reversing the movement of the sheets and causing them to be printed on both sides.

BEE HIVES-J. S. Brown, of Washington, D. C., assign-or to Joseph Kent, of Balimore, Md. : I claim the pecu-liar construction of the drawer, E, and its arrangement in combination with the basement, D, and bottom, M, of the hive, substantially as set forth, so as to be reversible in position, and to serve the several purposes of a controlla-ble ventilator, filth receptacle, with moth trap, and feed-ing chamber, in the manner specified.

SAWING MACHINE-T. T. Prosser, of Oconomowock, Wis. i claim the levers, E D, pivoted or attached to the uprights, C, the saw, F, being placed at one end of the levers, and the levers adjusted by the bars, J, and set screws, K, at the opposite ends, substantially as described for the purpose set forth.

for the purpose set forth. GUTTA PERCHA WIRE COVERING—James Reynolds, of New York City : I claim, first, providing the cylinder or other vessel, in which the gutta percha is submitted to the pressure with a connection to an air pump or other suitable exhausting apparatus, for the purpose described. Second, the arrangement of the die and core or core pietor, or other device for producing the pressure, sub-stantially as and for the purpose specified. Third, providing the stomach, I, or its equivalent, which contains the die, with a variable escape opening, p, sub-stantially as and for the purpose set forth. Fourth, the continuously revolving water trough, ar-anged relatively to the die, and operating substantially as and for the purpose set forth. Provencyre Durpose set forth.

as and for the purpose set forth. PICKPOCKET DETECTOR—S. W. Ruggles, of Fitch-burgh, Mass. I do not claim in alarm detectors, starting or operating the alarm by pulling or drawing on a cord or its equivalent connected therewith, nor yet in such devices, or itself, the mechanism here employed of a spring bar-rel provided with teeth, and in its rotation operating the spring hammer of a bell to give a repeated alarm. But I claim suspending the alarm detector or instru-ment proper, including the case, A, and its working parts by the cord or chain, D, from or through the spring bar-rel, B, for alternate operation of the cord and bell-ham-mer by said barrel, in relation to the case, as and for the purposes specified. DEVICES IN CLAEVING WOOD_Nalars Burger of Wort

DEVICES IN CARVING WOOD—Nelson Ruger, of West Farms, N.Y.: First, I claim the cutters, cd g, in combi-nation with the bars, I J, having arms, K L N, attached to them, these arms having bars, M O, pivoted or jointed to their outer ends, to which the cutters, e, and tracer, g, are attached, as shown and described. Second, I claim the bar, Q, placed on a rod, P, which is attached horizontally to the vertical bar. O, the ends of the bar, Q, fitting between the arms, K L, as shown for the purpose set forth.

SMUT MACHINES—G. H. Starbuck and L. D. Gilman, of Troy, N. Y. : We claim the combination of the screen, F. plate, H. funnels, I. and disk, e. with spike f, attached when said plates are attached to the shaft, E, and fitted within the case or shell, A, as described, for the purpose

set forth. FORMING HAT BODIES—Alva B. Taylor, of Newark, N. J. I claim the combination of a perforated cone, pick-ing apparatus, and feeding apparatus located and arrang-ed as described. The combination with a main picking cylinder of a se-condary picking cylinder, operating substantially as set forth. The pyramidal draft box constructed substantially as set forth in combination with a fan and fan case for gen-erating the currents of air.

Ox YOXES-Miron Smith. of Sandisfield, Mass. : I do not claim the devices for the simultaneous movement of the bow-slides, as such are not new. But I claim the adjustable folerum block, g, in combi-nation with the bow slides, J J, as, and for the purposes set forth.

BLLIPSOIDAL FORMS-G. W. Walton & H. Edgarton of Wilmington, Del. We claim the feed rollers, K K^{*}, and expanding cutters, I I', one or more, attached or fit-ted to the hollow shaft, B, when the parts are arranged and operated as shown and described, for the purpose specified.

specified. Spools—A, D. Waymoth, of Fitchburg, Mass. : I do not claim combining one or more cutters with a sliding car-riage made to slide horizontally and at right angles to the axis of the work to be turned, but I claim combining the rounding, severing, and body cutters with a carriage made to slide between the chuck and boring carriage, and in line with the latter, and so as to be moved toward the chuck by the boring carriage, while it is moved towards the work, in the manner set forth. I also claim arranging the body and severing cutters, and combining them with the cutter carriage by means of a turning holder, K, as specified, whereby the said cut-ters may be made to operate and be put in operation by means substantially as explained. Wurnow Satur C P. Waxare of Philadelphia Pa. : I

Window Sash-G. P. Weaver, of Philadelphia, Pa. ; I do not claim the employment of a single weight for the balancing of sashes. But I claim the employment, in connection with win-dow frames and sashes of the sliding bars, D and E, the same being arranged and constructed substantially in the manner set forth, for the purpose of removing and repla-cing said sashes with facility.

PURIFYING WHITE OXYD OF ZINC-Joseph Wharton, of Philadelphia, Pa.: I claim cooling white oxyd of zinc and separating it from impurities by causing the products of the furnaces to impinge successively upon a surface of water, in the manner substantially as described.

CLOVER SEED HARVESTER—C. B. Wheeler & A. Bas-com, of Steuben, Ohio: We claim the reel, F, and cut-ters or teeth, b, placed within the sliding or adjustable frame, E, in combination with the endless apron, H. the parts being arranged as shown, for the purpose set forth. SAD IRON HEATERS—B. F. Wheelock, of Mayville, Wis. I do not claim the particular construction and adap-tation of the heater to the use of the ordinary flat or sad-

irons. But I claim the use or application of the chains, g g, ir combination with the table, f, and beds, c c, made to bal ance on the ears, e e e, in the manner substantially as de scribed, for the purposesspecified.

CUTTING OUT SOLES OF BOOTS AND SHOES—Jas. W. Wilder, of Boston, Mass. I claim arranging and vibrating the knives around the cutters, pq. in the manner and for the purpose substantially as set forth.

The purpose substantially as set form. SMOKING MEATS—John Wright, of Wilmington, Del.: I claim the application to furnaces of smoke houses a back plate of iron or other incombustible material form-ing an air chamber which will increase the draft of the furnaces and prevent any smoke from being wasted or lost, and also the application of inclined flues made of brick, iron, earthen ware, or any other incombustible material, together with the smoke spreaders, as descri-bed, for the purpose of smoking meats, &c., the furnaces being upon the outside of the building.

GATES FOR WATER WHEELS-J. C. Shorey, of Roch ester, N H. (assignor to himself and A. J. Webster) + I claim applying the two gates to the wheel and flume, in manner and so as to operate with respect to the discharg-ing opening and the wheel shaft, substantially as speci-fied.

MOLDS FOR HOLLOW PROJECTILES-Ethan Allen, of Worcester, Mass. I do not claim any particular form or arrangement of parts. But I claim cutting off the sprue by means of a cutter working on the curve of the inner surface of the ball, so as to leave the ball smooth and symmetrical, substantial-ly in the manner and for the purposes set forth.

FLOUR BOLTS-S. C. Mendenhall & J. Conner, of Rich-nond. Ind.: We claim, first, the manner described of mond. Ind.: We claim, first, the manner described of varying the action of the revolving brushes, b, by giving to the brush bars, a, any desired backward or forward angular set on the radial arms or bosses which carry the brush bars in relations to the run or travel of the same within the screen cylinder, by means of the links, m, con-necting the inclined pivots or rook, g5, of the brush bars with a turning ring, n, arranged to revolve together with the brush shaft, but made capable of circular adjustment thereon, or the mechanical equivalents of such devices, operating essentially as and for the purposes specified. Second, in combination with the radial expansion and contraction of the brush bars and brushes within or against the screen cylinder for graduating the rub of the brushes, as specified, giving any varied angular set back-wards or forwards, to such graduated rub, by so connect-ing the brush bars and brushes, to adjust, or improve the ac-tion of said radially graduated rub, as set forth. **FACR PLATE FOR LOCKS-T. B.** Atterbury & William

Снимкет DAMPERS—T. F. Engelbrecht (assignor to T. F. Engelbrecht & T. C. Nye.) of New York City: I claim in perforated dampers for anthracite coal grates, the sup-plemental perforations, consisting of the suspended coni-cal deflectors, as set forth.

FAUCET-Joseph Goodridge, (assignor to the Boston Faucet Co., of boston, Mass.: I claim so combining with the valve and its stem the dovetailed recess, d, the ex-pander, h, and a shoulder and screws, or the equivalents thereof, whereby the foot of the spring packing may be fastened into the valve, substantially in manner and for the purpose as specified.

WHIFFLETREES-George Kenny, of Milford. N. H., (assignor to himself and G. N. Davis,) of Boston, Mass.: lelaim the combination of rubber washers with the whif fletrees, and about the king bolt and the boxes arranged with the same, substantially as described so as to protect the rubbar and boxes from the entrance of water, dirt, &c., thus preventing the wear of the parts.

WHIFLETREES—George Kenny, of Milford, N. H., assignor to himself and Geo. N. Davis, of Boston Mass, : I claim the combination of rubber about the bolt on which the whiffletree turns within the cylindrical strap and be-tween the braces, c c dd, so that it may be compressed, and thereby operate as a spring, as specified, as well as serve to keep out the dirt, and prevent the wear and noise.

PEGGING JACKS—Alfred Swingle (assignor to Elmer Townsend.) of Boston, Mass. I believe there is nothing new in sustaining a last by mechanism which will permit it to be revolved in two planes, and that this principle, though common both to my machine and that of Dewitt, was not the invention of the said Dewitt, nor is it claimed by bloc or by machine and

was not the invention of the said Dewitt, not is it claimed by him or by me. I claim the arrangement and application of the tram-mel or grooved cross, its slide bar and guide puns, the last holder and its sustaining arm, the same enabling advan-tages or new and useful effects to be attained, as specified.

CULTIVATORS—Jacob Zimmerman, of Oswego, 111., I claim the ravolving rake and cleaner, in combination with the series of elastic cutters, c, and flat cutters, C, as set forth.

RE-ISSUES.

RE-ISSUES. OPERATING VALVES IN DIRECT ACTION STEAM EN-GINES-W. H. Guild & W. F. Garrison, of Brooklyn, N. Y. Original patent dated March 27, 1855 : We claim giv-ing to the valve the whole or part of the movement ne-cessary to effect the change in the direction of the move-ment of the engine piston, by means of the steam acting upon a piston, E., which is fitted to work perpendicularly to the valve, in a cylinder. D, forming a part of the valve driver, or device employed to drive the valve, and is sup-ported against the pressure of steam by a rocker, e. or its equivalent, by which it is caused to operate on the valve driver, substantially as set forth. DESIGNS.

DESIGNS.

COOKING STOVES-Joseph Hackett, of Louisville, Ky. CLOCK FRONTS-J. & R. Shepherd, of New York City. COOKING STOVES—Benjamin Wardwell, of Fall River, Mass., and Ephraim Barstow, of Providence, R. I ----

Antidote for Strychnine.

We have received a letter from Mr. C. Leavitt, of Rockville, Conn., in relation to the use of coffee in neutralizing the deadly effects of Strychnine. A friend of his had a valuable dog, which was poisoned with strychnine and was fast sinking under its influence-be ing unable to stand-when Mr. L. saw him, and being informed of the cause, suggested that a strong decoction of coffee be given to the animal. About half a pint was administered.and it soon began to get better, and ultimately recovered entirely. We recommend this to the attention of physiologists, who may experiment with strychnine upon animals, for the purpose of discovering an antidote. Let some experiments be made with coffee. It has been said that lard is an antidote for strychnine; but this has been denied by persons who have tried it. Strychnine is sometimes made into pills with lard, for poisoning foxes and wolves.

Dummy Locomotives.

This is the name that was given to a condensing locomotive using a fan blower, which was built about five years ago by Henry Waterman for the Hudson River R. R. Co., to draw their cars through the streets instead of horses. The machinery was all concealed; no smoke was emitted, as coke was used, and it made no noise-hence it was termed the 'Dummy." It was tried and operated satisfactory for some time, but was interdicted by the Street Commissioner. We understand that permission has now been obtained to run the Dummy, and that three such locomotives will soon be placed on this railroad to do the work of about one hundred horses, and effect a great saving in the expenses of the Company These Dummy locomotives can be run with as much safety as horses, as their speed will be as low.

Water for Brooklyn.

Operations have commenced to construct works for supplying Brooklyn with water The principal reservoir will be on Cypress Hills-six miles from the city. A second reservoir will be located on Flatbush hill, 175 feet above tide water, for the supply of the high ground in that neighborhood. The cost of these works is estimated at over four millions of dollars. 10,000,000 gallons are to be supplied daily in two years.

Fire-Proof Boiler Rooms.

On the 1st inst. on motion of Senator Seward a resolution was adopted by the Senate directing the Committee on Commerce to inquire into the expediency of requiring the The proof of said rating graduated rule, as set for in. FACE PLATE FOR LOCKS-T. B. Atterbury & William Warwick (assignors to Warwick, Atterbury & Co.,) of Pittsburg, Pa.: We claim the separate or distinct guard or face plate, of such a form in relation to case or skele-ton frame of a lock or other fastening, that it may be put on either of the sides can be made the face of the said lock or fastening substantially as described. under the state of the said case or frame, where by either of the sides can be made the face of the said lock or fastening substantially as described. under the state of the said case or frame, where the state of the said case or frame, where lock or fastening substantially as described. under the state of the said case or frame, where the state of the said case or frame, where the state of the said case or frame, where the state of the said case or frame, where the state of the said case or frame, where the state of the said case or frame, where the state of the said case or frame, where the state of the said case o boiler rooms of all steamers to be constructed of fire proof materials. The Committee on Commerce should at once prepare a Bill re-