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cal stores in this city, Brooklyn, and Jersey City.

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Compressing the Bulk of Flour.

The Albany Journal states that Louis Napoleon, in 1853, conceived the idea that it would be practicable to compress flour so as to diminish the bulk, and yet not injure its quality. In July of that year, an experiment was made by his command to test his views. Flour, subjected to a hydraulic pressure of 360 tuns, was reduced in volume more than twenty-four per cent. On close examination it was found to possess all the qualities it had previous to its violent treatment. It was then put into zinc boxes and sealed up. At the same time, other flour manufactured from the same wheat, but not compressed, was sealed up. In October, thereafter, several boxes containing both kinds of flour, were opened and examined. The pressed was pronounced to be the best. Twelve months after this, in October, 1854, another examination took place, and with the same result. The two kinds were kneaded into loaves and baked. The pressed flour made the best bread. In March, 1855, more of the zinc boxes were opened, and on examination, the loose flour showed mouldiness, while the pressed was sweet, and retained all its qualities. Made into bread, the same differences were observable.

Useful Cement for Cast Iron Joints.

Take two ounces of salammonia, one of sul phur, sixteen of cast-iron borings or filings and bray them well in a mortar, and keep dry. When required for use, take one part of this powder and mix it with twenty parts of clean iron filings or borings, and mix them in a mortar into a stiff paste, with a little water, and it is then ready for use. A little of the fine sand obtained in the box of a grindstone improves this cement. This cement is pressed into the joint, cold, with a chisel, like putty, and allowed to stand three days, at least, before the vessel or article is used.

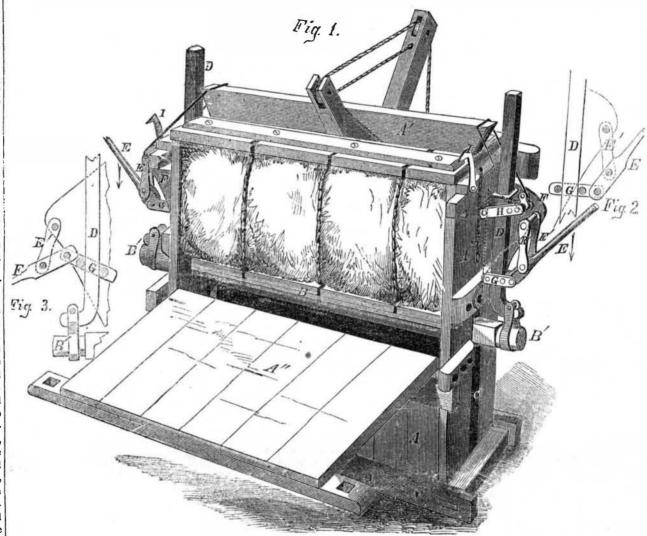
Filling around Cellar Walls,

To the remarks on page 209, on the above subject, E. Lowe, of Bangor, Me., states, in a letter, that they may lead to the adoption of a practice better than the one intended to be superseded, but still an unsafe and bad plan also. He states that for fifteen years no cellar walls have been packed around with gravtrance of water, consequently it does not condoes not expand by frost. It has been found to be the best filling that can be used for cel lar walls.

large deposits of malleable native iron exist in a state of great purity. This iron does not contain a trace of carbon, and it is distin- clearly in the diagrams, figs. 2 and 3. The guished from that which is called meteoric purchase obtained at each move of the levers, iron by the absence of nickel in it.

of white paper pulp.





New Press for Hay, Cotton, &c.

In this improvement the box or frame, A, in which the material is placed to be compressed, engraving. The box is filled from the top, for which purpose the lid, A', opens, being drawn up by the pulley ropes. After the bale has been tied, it is removed by letting down the side door, A". The compression is effected by elevating the platform follower, B, and this is done through the medium of leverage applied at the ends, B', of the platform. In the ends of the frame, A, there are slots, C, in which the ends, B', of the follower platform, B, traverse. The follower rods, D, are attached by means of streps at their lower ends, to the platform ends, B'; if, therefore, the rods, D, are lifted, platform B, will rise correspondently and compress the hay. When the press is to be filled, the platform, B, is lowered to the bottom of the box.

The follower rods, D, are lifted by means of the levers, E, which have swinging, changeable fulcrums in the straps, E', the latter bewhich the follower rods, D, pass.

When power is applied to the levers, E, the their bolts grasp the follower rods, D, with a In Siberia and on the west coast of Africa force corresponding to the power applied at E, and the followers, D, rise. The operation of the levers and clamp straps is shown more E, is held by another clamp strap, H, constructed on the same principle as G, but re-The stalk of sugar cane gives forty per cent. versed in position, so as to bind on the follower rods, in their descent; every iota of com- about 45 miles east from Columbia, at the foot out 7,500 feet of boards in 11 1-4 hours.

pression is therefore securely held, as fast as of a flat three-fourths of a mile in length and new hold; the position of strap G, in this movement, is shown in diagram, fig. 2.

During the first stages of compression, the throws of lever E, may be made full and long, and the pressing platform, B, will rise rapidly; but towards the close of the operation, where greater power must be applied, the strokes of the lewr will be necessarily shortened, and the lever will not move far from a horizontal position; when the levers are in this position their fulof straps, G, are brought nearer the weight to be lifted, and the power is applied with great-

It will be observed that this press is extremely simple and cheap in construction, while at the same time it is strong and pow-

the inventor; the Farmers and Mechanics clamp straps, G, are slightly thrown up, and | Manufacturing Co., of that place, being the assignees. Address the Company for further information.

Great Dams for Gathering Water.

The Columbia, Cal., Gazette, gives a description of a dam, of immense proportions, which is in progress of construction by the Tuolumne Water Company. This dam is situated on the South Fork of the Stanislaus river,

obtained. The straps, H, have small cords, J, half a mile in widthin the widest part, through attached to them, by which the follower rods, which the river takes its course. The mounis made in the usual form, as shown in our D, are liberated at pleasure by the operator, so tains rise on both sides of the flat, at a very as to descend. When the lever, E, is thrown steep angle, and are chiefly composed of bare up, the clamp strap, G, becomes loose on the granite. At the lower end of this flat the follower rods, D, and descends so as to take a bed of the river passes through a narrow channel of naked rock, about sixty feet at the bottom, and rising nearly perpendicular on each side of thirty feet, and then sloping back gradually to an immense hight. In this pass the dam is being constructed, and its object is to back and hold a large body of water, which is to be kept in reserve for use when the river gives out. Hundreds of acres will be covered and a supply sufficient for 50 or 60 days kept in the dam or reservoir. Its bottom is 100 crums, in consequence of the upward incline feet in the direction of the base of the river, and when finished will be 50 feet high; its length on the top will be about 300 feet. It is built of logs, (cut and barked in the vicinity,) laid crossing at right angles at a distance of eight feet, notched down and securely pinned to each other. The compartments ing attached to supporting plates, F, which erful; it is also very compact and convenient, thus formed are filled with rocks. This done, doned for clay filling. The clay is beaten project from the box; one of the plates is redown close to the wall, and it resists the en- moved, in the cut, in order to show the parts. may be employed for pressing cotton and oth- with hewn logs, laid close together, securely The inner ends of levers, E, are attached to er substances, with the same facility as hay. fastened down, the seams and joints caulked, tain moisture like gravel, or sand, or mold, and the clamp straps, G, between the bolts of We regard it as a very excellent improvement. and a stratum of sand and gravel laid on top. Mr. Simon Ingersoll, of Greenpoint, L. I, is The gates for letting out and regulating the water will slide on the face of the dam, and move by cast-iron rack work and pinions.

Six weeks' supply can be had, during the summer season, when heretofore mining has been entirely suspended. The average depth of water will be twenty-five feet, and the supply one hundred tom streams, day and night.

What one Saw did.

At the saw mill of Warren & Co., Georgetown, Cal., one circular saw recently sawed

Scientific American.



[Reported Officially for the Scientific American.] LIST OF PATENT CLAIMS Issued from the United States Patent Office

FOR THE WEEK ENDING MARCH 25 1856.

PROPELLING VESSELS—Lambert Alexandre, of New York City: I do not limit myself to the use of my propeller in any particular part of the vessel, nor to the size or shape of the buckles themselves, nor to any particular character of motive power.

But I claim regulating the motion of the propelling buckles by the combined action of the spring blocks, K, inclines, L, rollers, I I and M, and inclines, H H, subsantially as specified.

NEEDLE Guns.—Gustay A. Blittkowski and Frederick Wm. Hoffman, of New York City: We make no claim to the method of withdrawing and rotating the cylinder, inasmuch as that it is embraced substantially in another application submitted by us.

But we claim, firstly, the method of withdrawing the needle bya positive bree applied thereto by means of the knob upon the needle stock, in combination with the claw upon the end of the hammer, so arranged that, becoming engaged at the moment of giving the blow, it shall cause the withdrawal of the needle in the operation of cocking, as described.

Secondly, the guide tupe for the double purpose of guiding the needle and acting as a stop around the touch hole, as described.

Detaching Boats from their Tackle—Charles H. Key, administrator of S. F. Blunt, deceased, late of Baltimore, Md.: I claim the use of the weight of the boat when out of the water to keep in place the contrivance for sustaining it, so that it shall no longer be sustained when the boat takes the water, and the weight is transferred to the latter, and for this purpose I claim as the invention of the said Simon F. Blunt, deceased, the contrivances described, and any others analogous thereto, whereby the same object is accomplished in a v/ay substantially the same.

Stantially the same.

CUTTING LOAF SUGAR—Adolph Brown and Felix Brown, of New York City: We claim, first, the application and use of two or more rollers having brushes around their circumferences, and acting upon both sides of slabs of sugar, for the purpose of cleaning off the dust adhering to the same by the process of sawing, thereby reproducing the appearance of the crystals, as described.

Second, we claim the application of drums or rollers, connected together by gearing, having steel knives inserted and attached around their circumferences, forming squares and corresponding to each other, and acting on both sides of sugarslabs simultaneously, like pincers. for the purpose of cutting up said slabs into regular cubical morsels, in the manner specified.

BREFER LOADING FURE ARMS—Ambrose E. Runn.

morsels, in the manner specified.

BRECH LOADING FIRE ARMS—Ambrose E. Burnside, of Bristol. R. I. I claim, first, the use of a cartridge case, made partially or wholly of soft metal, in combination with a beveled mouth in rear of the barrel and the movable chamber of a breech-loading fire arm, for the murpose of packing the joints thereof, and operating in the manner substantially as set forth.

Second, I claim the movable cone seat or breech pin in combination with the softmetal cartridge case, operating in the manner substantially as described to eject the empty cartridge case, as set forth.

CARCEL LAMPS—Abraham Coates, of New York City: I claim in lamps in which the oil is forced to the wick so as to overflow, regulating the supply of oil to the burner by means of the self-emptying drip cup, operating upon the supply valve as set forth.

PRESSES FOR PUNCHING—G. H. Corliss and Elisha Harris, of Providence, R. 1.: We do not claim of itself an oscillating connection between the eccentric and the plunger and follower, for the reason that an oscillating connection in the form of a common pitman has been employed.

But we claim the oscillating box, F, applied and operating in the manner substantially as set forth,

FRUIT AND GRAIN DRYERS—Charles W. Davis, of Newark, N. J.; I do not claim the separate parts of the above apparatus as my invention; but I believe their combination as applied for the purpose of drying fruit or grain to be novel and useful.

I claim the inverted earthern cone, D, fig. 2, having an adjustable parabolic rim, C, with or without the hosp, F, operating substantially as described and for the purposes specified.

STONE-DRILLING MACHINES.—Josephus Echols, of Columbus, Ga.: I claim, 1st, the cylinder, A, with the apertures, c c, in its heads, the double valve, D, with its hollow stem, d, and the tube, B, with its cups, g g, all combined arranged and operating substantially as set forth.

combined arranged and operating substantially forth.

2d. The gripper, F, constructed as described, and operating in combination with a ring, H, as set forth, to gripe and let go the drill bar.

3d. Furnishing the interior of one of the metal cups, g g, with spiral vanes to be acted upon by the water for the purpose of turning the bar at every stroke, substantially as set forth.

Our paper.]

Paddle Wheels—Calvin Fletcher, of Cincinnati, O.:
I do not claim the curvilinear shape of the buckets as in itselfnew and patentable.
But I claim the construction of propellors with a series of narrow buckets of curvilinear or parabolic shape,combined and arranged in the manner set forth, or its equivalent, for the purpose of combining the greatest propeling force with the least possible resistance to the ingress and egress of the buckets in their pussage through the water.

WATER COOLERS AND FILTERERS—John S. Galla her, Jr., of Washington, D. C.: Disclaiming originating and inventing or discovering the principle of cooling wa-ter by the application solely of a saturated cloth as here-

and inventing or discovering the principle of cooling water by the application solely of a saturated cloth as heretofore employed.

I claim. 1st. the application of combined chemical refrigerative agents, sait, charcoal, and gypsum, and a mechanical evaporating or air chamber, e.e., formed with a convex inverted conical sloping or tapering cover or top, and a corresponding bottom part combined in use with a saturated cloth, and through all of which means the ascending diffuse vapor is condensed, accumulated and returned into its original volume purified and cooled at one and the same time, simultaneously, in the manner described.

scribed.

2d. I claim in combination with the condensing medium, e.e., and chemical refrigerative agents as described, the purifying or filtering devices, c. c. d. d. daxd.xx f ff J.J. W. W., with the capillary agents and porous disks, through all of which chemical action and mechanical devices is produced a compact individual or unity cooling filtering apparatus, substantially as set forth and for the purpose specified.

Explosive Shells. Wm. W. Hubbell, of Philadelphia, Pa.: I do not claim spirally winged elongated shells, nor elongated shells with cylindrical body and spherical hinder part, either with or without tails or wings behind, nor with enlarged head, for I am aware that they have been long known, and I have many years ago experimented with them.

I claim combining or forming a series of oblique or propeller surfaces uniformly around the finger-hole, on the extreme front face of the metal, an enlarged or thickened head of an elongated shell with cylindrical body and mooth semi-spherical hinder part, substantially as decribed.

STEAM RADIATOR COCKS—Stephen J. Gold, of New Haven, Conn.: I claim the automatic closing of the cock on the filling of the radiator with steam, by means of a loose disk in the head of the cock acted upon, substantially as set forth.

LATH MACHINE—Jesse Gilman, of Nashua, N. H.: I claim the clutch, H, operated by or through the medium of the lever and cams, E. E. in combination with the rods, ff, carriage, W, and pulleys V, the pulleys being connected respectively with the carriage, W, and rod, f, by the cords, c h, substantially as described, for the purpose specified.

specified.

MINIATURE CASE—Halvor Halverson, of Boston, Mass, assignor to Slocum & Watkinson, of Hartford, Conn.: I claim the combination of the metallic dished bearing plate, c, the leather or embossed covering, d, and the two frames, a b, the whole constituting one pertion or half of the case, as specified.

And in combination with the metallic confining frame and the velvet covered glass holder and frame, g, I c aim the frame, h, made of paste-board or other equivalent, and applied for the purpose as specified.

and applied for the purpose as specified.

PILE DRIVER—J. W. Hoard, of Providence, R. I.: I am aware that in direct action steam hammers and india rubber packing has been introduced between the hammer and piston rod to avoid injury (on the hammer striking) to the piston, cylinder and machinery. Also that the piston rod has been provided with a helical spring, and the hammer or block at the limit of its top stroke had been made to hit a padded spring beam to prevent injury and assist the return of the hammer; but in all case has the striking block proper been made of a solid character; none of such, therefore, or the mere application of a spring to a hammer—irrespective of its arrangement—do I claim.

But I claim the sectional ram B of the delivered.

claim. But I claim the sectional ram, B, of the driver, con-structed substantially as described, for operation in the manner specified.

FAN ROCKING CHAIRS—Konrad Kiefer, of New York City: I claim, 1st, the fans, G, when made adjustable, and when arranged and operated substantially as set forth for the purpose specified.

Second, the employment of a fan beneath the seat, constructed and arranged substantially as described and for the purposes specified.

FAN ROCKING CHAIRS-Benjamin M. Leroy, of Montgomery, Ala.: I claim a pendulum or relfacting driver so applied to any rocking chair or cradle or other rocking article of furniture that it will act by its inertia to drive the fans.

SPRING PLATFORM FOR RAILROAD CARS—Charles H. Lewis, of Malden, Mass.: I claim connecting the guard to the box platform, by elastic band springs and a check chain or its flexible equivalent, arranged substantially in manner as described, and so as to enable the guard to adapt itself to the movement of the platform, as stated.

PIANOFORTE ACTION—N. M. Lowe, formerly N. L. Murphy, of Boston, Mass.: I claim the peculiar manner in which I have arranged the spiral spring, g, upen the rod, f, as applied between the hammer and the key for the purposes set forth.

VENTILATING ROOMS—A. S. Lyman, of New York City: I claim as my improvement in cooling, drying, and disinfecting rooms the combination of a descending conduit or cold air flue with a reservoir for containing cooling materials, substantially in the manner and for the purposes described.

ing materials, substantially in the manner and for the purposes described.

Wardrobe Bedsteads.—Henry R. and James L. Plimpton, of We-tfield, Mass.: We do not confine our invention to the particular form or forms of anyone or more of the parts as set forth, as many variations may be made therefrom without deviating from the principal or main features of our invention. For instance, the portion J may be used only as a support for the foot of the bed stead, and the cap or cornice to the secretary may be made separate so as to take off an form a top to the toilet table may be wholly dispensed with and some other article substituted in its place.

We do not claim any particular manner of constructing the base or portions A B C and c upon which the bed stead and portions of the secretary combined are supported and made to turn.

Neither do we claim the spiral springs for sustaining the bedding, or the pieces i i, or any of the catches or fastenings described.

Neither do we claim simply the device of a bedstead made to turn upor fold up into the semblance of a secretary wardrobe or other like article of furniture, as that may be and has been done in various ways without interfering with our invention.

But we claim constructing a bedstead with suitable parts attached thereto, in such a manner that when not nues as a bedstead it may be folded up and turned upright, and when in that position by placing therewith a tollettable or washstand or any other article of similar appearance, the whole apparently will form a secretary, book-case, wardrobe, cupboard, or any other similar piece of furniture, as set forth.

Carperters? Berch—J. W. Mahan, of Lexington. Il. 1 do not claim the principle of vunning a plane with

CARPENTERS' BENCH—J. W. Mahan, of Lexington, Ill.: I do not claim the principle of running a plane with slides on it in a box, or the slides on the edges of a box.

But I claim the construction of a work bench substantially as shown, together with the peculiar construction of the planes for jointing and facing.

SWEEFING STREETS—Joseph Miller, of Boston, Mass. I claim arranging the main driving shaft, its clutch lever and clutch in the upper and front part of the cart body, in order that the shaft may not only be unobstructed by the earth piled in the body, but have its clutch lever disposed within easy reach of the driver.

GUN LOCKS—Edwin P. Monroe, of Charlestown, Mass I claim the pins, i and m, in combination with the colle spring, D, operating in the manner substantially as s forth.

forth.

Levers of Railroad Car Brakes—Lucius Paige, of Cavendish, Vt.: I claim the described improved arrangement of levers and springs and their application to the brakes of a railway carriage, having swiveling truck frames, the same consisting in arranging two levers, S U U, so that they shall cross one another and work on one common fulcrum, applying springs between said levers and on opposite sides of the fulcrum, respectively, connecting both arms of the one or the longer of said levers with the draft chain or rods of two windlasses situated at opposite ends of the carriage body or platform and respectively connecting the two arms of the other levent to the draft rod or chains of the brake levers.

Valve Morgon—Hurstig O, Perry of Buffalo N V. J.

the draft rod or chains of the brake levers.

Valvz Morrow—Horatio O. Perry, of Buffalo, N. Y.: I
do not claim rotating or partially rotating valves loosely
connected to shafts in the steam chest, nor the opening
and closing of ports by the oscillating motion of the cylinder,
nor the working of valves partly by the motion of the
cylinder and partly by the aid of eccentrics, irrespective
of the peculiar form and arrangement described.
Iclai minoscillating engines the valve motion described
as arranged in relation to and in connection with the
loosely-attached hollow-throated and partially rotating
valve, substantially as described and for the purposes set
forth.

GRAIN SEPARATORS—Cyrus Roberts and John Coxe of New Hope, Pa.: We claim, first, the method of facilitating the separation of the grain from the straw by means of diverging bars, substantially as described.

Second, constructing the rear portion of the conveyor with a solid ridged bottom in such manner as to form a series of diverging channels to spread the grain preparatory to delivering it to the winnower, as set forth.

Third, the employment of shaking fingers, arranged and operating in such manner that they will rise on the for ward movement of the conveyor, and thus lift and shake the straw as it is thrown forward, in combination with the carrying bars, whereby certain advantages are attained, as set forth.

Fourth, the arrangement of shaking fingers in a recess, M, in the bottom of the conveyor in such manner that they can be alternately protruded above and retraced below the carriage bars to shake the straw thoroughly, and at the same time not to interfere withits conveyance, as described.

Fifth, the adjustable turning-tail spout, P, arranged substantially in the manner and for the purposes set forth.

PORTABLE FIELD FENCES.—James Rowe, of Tampa Bay, Fla.: I claim the construction of field fence panels with shouldered laps perforated as described, and with upright battens on opposite sides of the string-pieces, operating as and for the purposes set forth.

Post Driver—James M. Sampson, of Waynesville, Ill.: I claim the segmental wheel, B, constructed as described, in combination with painion, A, and wheel, C, operating the drum, I, upon the shaft of C, substantially in the manner and for the purposes set forth.

Sizing Har Bodies—Albert Spencer, of New York City. The disk wheel having been patented I disclaim the use of it irrespective of my combination, and therefore limit myself to the combination set forth.

I claim, therefore, the application and use of the combination of the disk wheel and the rubber bed when the bed receives a vibratory motion, substantially in the man ner and for the purposes described.

PLANKING SHIPS—Solon Staples, of Bath. Me.: I do not claim the described parts separately considered.

I claim the combination of the shank, a.arm, b, screw, d, and brace, k, with the riged sliding tie, f, constructed and arranged substantially as described for the purpose specified.

STEAM BOILERS—O. M. Stillman and Stephen Wilcox Jr., of Westerly, R. I.: We claim, firstly, such arrangement of a series of vertical coils of different diameters that when placed the one within the other spaces shall be left between, thereby forming flues which allow the fire to act upon each of the said coils as described.

Secondly, the arrangement in combination with the coils of a reservoir or boiler placed within the inner coil, in such manner that the greatest effect of the heat upon both will be obtained, as set forth.

SYRINGE BOTTLE—John Stull, of Philadelphia, Pa.: I do not confine my claim to either of the particular modes described of constructing the apparatus. I claim the combination and arrangement of a syringe

and bottle, so that the latter shall serve as a protection case for the former as well as a receptacle for the medi-cament to be used thereby, substantially as described.

WATER METER—Andrew J. Sweeney, of Wheeling, Pa.: I claim the combination of the two cylinders and two pistons with one head common to both, having the ports thereto attached as described, forming a cheap and effective meter, with but little liability to get out of or-der.

CLCK FOR STEAM, WATER, &c.—Wm. Thomas, of New York City, assignor to Abner Van Horn: I do not claim any part of the invention patented to J. Griffiths, Feb. 14th, 1854, it being no part of my improvement.

Neither do I claim the fixed screw thimble, c, or the fixed screw nut, e, of itself; which are in common use for the support of the faucet stem, and are made by others as well as ourselves; I therefore wish to be understood as not claiming the combination set forth and used by J. Griffiths.

But I claim the position in which the method is employed to raise or lower the valve, viz.; in lawing the screw thread cut upon the opposite end from the hand wheel and inner end of the valve stem, 5 at 6, and a corresponding screw thread cut within the fixed screw upon the stem to work sufficiently far as to raise and lower the valve without disconnecting itself, whereby the whole arrangement can be more easily and substantially constructed, kept in order, and operated as set forth and fully described.

CREEPERS TO PREVENT SLIFPING ON ICE—Wm. H.

described.

CREFFERS TO PREVENT SLIPPING ON ICE—Wm. H.
Towers, of Philadelphia, Pa.: I claim forming the creeper of three plates, having calkinsor pins on their lower
surfaces and bent at their outer ends and jointed together
at their inner ends in such relative position to the sides
and tack portion of the heel of the boot or shoe for which
they are designed as will enable their outer ends to
move eccentric with the curves of the said side and back
portion to secure the creeper to the heel, and their security of attachment to be increased by the act of planting
the foot of the wearer in walking, as set forth.

WRENCHES—Wm. Warwick, of Pittsburg, Pa.; I do not claim the rock nor the applying of a spring pawl, as these davices have been used before and are well known.

these dayles have been used before and are well known.

But I claim providing shank, A, with a recess whose one side, d. d. is toothed and the other, e. e. is smooth, in combination with a pawl, D. placed into said recess on the imide of the sliding jaw. C, in the manner substantially as described.

as described.

COTTON SEED PLANTERS—A. W. Washburn, of Yazoo City, Misa. I claim, first, the peculiar shape and arrangement of the ridge former. C. and the adjustable channel former, F. by which their forward movement enables them, when loaded, to unerringly form a perfectly smooth channeled ridge, substantially as set forth.

I also claim the combination of the inclined flanche, k, with the inner periphery of the rotating reed dropper, G, when they are placed in such positions with relation to the discharging apertures, and have such a degree of inclination that the said flanches prevent the seeds from being discharged out ofthe front or descending side of the said seed dropper, and cause the seeds to be freely discharged through the apertures in the rear or ascending side of said seed dropper in view of the operator, substantially as set forth.

Butters Wooks — Lames H. Bennett of Bennington.

BUTTER WORKER—James H. Bennett, of Bennington, Vt. 1 claim the rotating bowl, B, in combination with the horizontal bar, H. and spatula, J, when arranged and operated for the purpose specified.

Self-Setting Rat Trap.—Samuel Beaumont, of New York City: I claim attaching the door, H, to the platform, C, and supporting said platform when elevated or inclined by means of the swinging rods or arms. D, which are connected to the bait-hook, F, by the levers, B is. The above parts being arranged substantially as shown or in an equivalent way, and having springs, G J, attached so that the platform, when the animal nibbles the bait, will have its supports drawn from underneath it and be allowed to descend and close the door, H, the door and platform rising to their original position when the animal passes off the platform into the compartment, c, of the box.

Machines for Sawing Marrie—John A. Bailey, of Dewoit, Mich.: I claim the peculiar means employed for gradually moving the spws. If H. laterally or apart in the saw frame, C. as said saw frame descends, viz.: having the pulley. J. attached to the center of the right and left screwrod, I. and a chain, j. passing around said pulleys, K. K., at the outer end of the pitman, K. the ends of the chain, j. being attached to the upper and lower ends of therod, L. to which the outer end of the pitman is atached and on which it slides. Motion being communicated from one screw rod to the other by any known means.

CULTIVATING PLOW—Micajah Crenshaw, of Springfield, Tex.: I am aware rotating hoes have been used in connection with plows and cultivators in various forms, this I do not claim.

But I claim in combination with the series of cutting plates of disks the series of reciprocating lices when the boes are so arranged as to work in lines parallel with the cutters or disks and so inclined downward and rearward as to readily rise up over any obstructions without danger of clogging or choking, as set forth.

FIGURING MOROCCO-Samuel Greene. I claim making figuring tools for leather of agate, glass, flint, or other similar silicious materials, substantially as described,

WATER WHEEL—John Hazeltine of Goffstown, N. H.; I claim making the water partition, f, of the floats, radial; the second portion. C, tangential; and the last portion. C; to incline downwards from the shaft, D, and from the tangential portion, C, when the same or the several parts are constructed, combined and arranged substantially as described, so that the water will act against the two first by propulsion and upon the latter by its weight.

Sawing Marble in Obelisk form, Issachar A. Heald, of Springfield, Mass.: I claim the rockshafts, N. N. provided with arms. h. having friction rollers, i. at their ends, the rock shafts being operated by the bar, o. having pins, k k, upon it between which the roller, t. on the pin, m. works, said pin being attached to the reciprocating frame, F. substantially as shown and described, for the purpose of raising and lowering the saws at each end of their stroke so that the sand may be admitted into the saw kerfs, FIELD FENCE—J. B. Reyman, of Salem, Ind.: I do not claim forming a notch or bearing for the support of fences, by means of angularly placed stakes, as such are well known; nor dol claim of itself the angular position of the stakes, n n, separately and alone considered.

But I claim forming a support for fences by means of angularly placed stakes, r, in combination with the mode of connecting them together and to the fence by means of the wire, S, or its equivalent, the stakes and wire being so proportioned and arranged that the act of driving the stakes into the ground shall tighten the wires and bind the whole together, the different parts being arranged substantially as described.

MOLD FOR EARTHEN VESSELS, POTS, &c.—Philip Schrag, of Washington, D. C.; I do not claim the turning of earthen vessels in molds by chablons, northe mere use of a lining to prevent adhesion of the clay to the mold. But I claim the combination of the mold made in two separate parts, one for the sides the other for the bottom of the vessels, with the lining of the same, with indiarubber or any suitable material, which is fastened on both parts of said mold, in the manner and for the purpose substantially as described.

RAKING AND LOADING HAY—D. H. Thompson, of Fitchburgh, Mass.: I claim the combination of levers, k, with rakes, E and G, when operated substantially as shown for the purpose specified.

COTTON HILLERS—A. W. Washburn, of Yazoo City, Miss.: I cla mthe lifting up plates, e.e. of my improved cotton hiller or their equivalents, when arranged and operating in conjunction with the governing plates, d.d. and the hillurg plows, c.c., substantially in the manner and for the purpose set forth.

COTTON SCRAPERS—A. W. Washburn, of Yazoo City, Miss.: I claim the bevel wheels for supporting and guiding the machine when they are arranged in conjunction with the side scrapers, I l, and the thinning out cutters, G, or either of them, substantially in the manner and for the purpose set forth.

Grain and Grass Harvesters—Abner Whiteley, of Springfield, O. I do not claim the segmental plates, D. D., separately, as used to change the hight of cut in relation to the frame. B. B', or their use when attached to the main frame for the purpose of rendering the cut adjustable in hight.

But I claim, first, forming a joint at a, by means of the plates, D. D., plates, E. E. and the lugs as described, of sufficient strength to support the ground wheel, A, and retain the driving cog wheel in gear while running, without any other connection with the main frame, C. C.

Second, I claim placing the drivers' seaton the opposite end of the frame, B. B', from the joint at a, in such a manner that the driver's weight, when seated on it, shall balance some portion of the frame work and c of the machine, and throw the weights thus made to balance each other on to the wheel, A, while the angle of the cutters and fingers is presented.

Third, I claim bracing the finger piece so as to make it relf-supporting as described, and for the purposes set forth.

PRINTING CYLINDER—Justus Webster, of Boston.

PRINTING CYLINDER—Justus Webster, of Boston, Mass., and Samuel H. Folsom, of Lowell, Mass.: We claim the construction of the printing cylinder, consisting of metallic rings or disks placed upon a shaft side by side, the longitudinal marks upon the paper that, is printed by it being produced by those disks having an unbroken perimeter, while the intermediate disks which produce the cross lines have a broken or toothed surface, the combined disks being secured to the shaft by a spline with suitable collars and nuts at the ends as described.

HAND CORN PLANTERS—Wm. Jenks, of Alexandria, Va.: I claim the bolsters, E, and distributor, F, in combination with the point, C, when arranged and operated for the purpose specified.

Ash Sifters—Chas Jones, of Brooklyn, N.Y.: I claim the use of the seive in combination with the double acting cranks and rods for suspending the seive, for the purposes and in manner of arrangement of parts in any suitable ash box, substantially as set forth.

SCYTHE FASTENING—Thos. C. Ball, of Walpole, N.H., assignor to Nath'l. Lamson, of Shelburne, Mass., I claim the cylinder, E., constructed arranged and operating substantially as set forth.

HARVESTER CUTTERS—John H. Manny, of Rockford, Ill., assignor to Peter H. Watson, of Washington, D. C. : I claim the reversible duplex sickle, substantially as described.

REGULATING VARIABLE CUT-OFFS FOR STEAM ENGINES—Henry S. Hopkins, (assignor to Hopkins, Hendrick & Peckham,) of Providence, R. I.: I claim combining the reversed inclined plane, S. with the main inclined plane of the regulator and valve mechanism described, the same being to operate in manner and for the purpose substantially: s specified.

I also claim combining the movable stop block, T., or its mechanical equivalent, with the two inclined planes, B and S, the same being for the purpose as set forth.

Horse Power-Richard Hunt, of Freeport, Ill.: I claim the combination of the central pivot and annular track secure to the ground as described, with a master wheel fitted with a central eye and an annular series of conical supporting wheels, whereby the usual supporting frame to combine these several parts is dispensed with, while the site and steadiness of the master wheel is maintained, as set forth.

CISTERNS—Wm. D. Bartlett, of Amesbury, Mass. Ante-dated Feb. 19th, 1866: I have described the construction of my cistern for obtaining water from the earth. I claim a cistern constructed substantially as described or in any equivalent manner, for the purposes set forth.

RE-188UES.

WORKING AND STOPPING CHAIN CABLES—Thomas Brown, of London, Eng. Patent dated July 25th, 1854. Patented in England April 20th, 1847: I claim the arrangement of the capstan, the removable rollers, and the sockets for said rollers in such a rianner and having such relations to the hawse holes, chain rocker, deck pipes, and under lifting stoppers that the chain cable can be continuously hove in by means of said capstan and rollers or be directly run out of the lockers without any previous overhauling, substantially as set forth.

I also claim the flaring and radially flanched annular recess in the capstan when it is given such a shapelthat in handling a chain cable the series of cavities in the faces of said recess will so perfectly adapt themselves to the varying lengths and widths of the links of the cable that it can be safely and securely handled when the cable has only a partial turn around the capstan, as set forth.

I also claim the arrangement of the described under lifting bow stoppers and after stoppers, by which more cable can gradually and controlably be given to a vessel while riding heavily at anchor, substantially as set forth.

SAWING MACHINE—Wm. P. Wood, (assignor to himself and John S. Gallaher, Jr.,) of Washington, D. C., and John S. Gallaher assignor to Wm. P. Wood. Patent dated Feb. 26, 1866: I claim attaching saws to parallel rocking beams by meansofswivel bearings.

I also claim the reversible graduating scale gauge, in combination with the saw table, substantially as set forth.

combination with the saw table, substantially as set forth.

SEWING MACHINES—Sidney S. Turner, of Westboro, Mass., assignor to Elmer Townsend, of Boston, Mass. Patent dated Aug. 22d, 1854: I claim the arrangement of a hook or hook needle underneath and so as to work up through the feeding bar, L. in combination with the arrangement of the preser. M. above the feeding bar, and so as to press downwards towards it, substantially in the manner described, such enabling me to obtain an important advantage in operating by the single chain stitch sewing machine.

I also claim in a chain stitch sewing machine arranging and operating the awl and the hook needle as described, that is, so that they may not only pierce in opposite directions the material to be sewed, but be withdrawn in opposite directions therefrom.

I also claim in combination with the me chanism for giving the vertical movements to the needle the slots, a bc.

a me cuaim in combination with the mechanism for giv-ing the vertical movements to the needle the slots, a by, and the screw or pin. F, or mechanical equivalent therefor, for producing reciprocating semi-rotative move-ments of the needle during the vertical movement of it substantially in the manner and for the purpose described herein.

Original Picture of Hampden.

John Macgregor, M. P., for Glasgow, has presented to the U.S. Government, through the Hon. James Buchanan, late Minister to England, an original portrait of that champion of freedom, John Hampden. It is one of the only two portraits of him in existence. It has arrived at Philadelphia, and has been publicly exhibited for a few days at the Custom House in that city.