Scientific American.



[Reported Officially for the Scientific American.] LIST OF PATENT CLAIMS Issued from the United States Patent Office FOR THE WEEK ENDING DEC. 4, 1855.

Suspending Ships' Yards—Thos. Batty, of Brooklyn, N. Y.: I claim the arrangement of the yard, the beam, i, and the crane, e.e., substantially as and for the purposes set forth.

[I'he foregoing is part of an improvement for which on patent has already been secured by Mr. Batty. Two rants were required in order to cover the entire inven-The improvement consists in a peculiar method of attaching standing topsail yards to the mast, whereby the mast is relieved from strain by the weight, while the yard. at the same time, can be conveniently moved and swung about. This invention is more particularly useful on ves sels where Forbes', Howe's, and other new rigs are employed.]

CUTTING PILE FARRICS-E. B. Bigglow, of Boston. Mass.: I claim the employment of a rotting cutter, in combination with take-up rollers, substantially in the manner and for the purpose specified.

HANGING WINDOW SASHES—E. W. Bullard, of Hardwick. Mass.: I claim the improved mode described, of hanging and fastening sashes, which consists in beveling one-side of the sachs, and combining therewish a corresponding wedge or beveled strip, moved up and down, as described, or in any other way, by which arrangoment the modes set forth of fastening, loosening, and removing the sashes from the frame are secured.

sashes from the frame are secured.

Military Saddles—Daniel Campbell, of Washington, D. C.; I claim, first, placing the arch of the connecting strap of the holsters below the pommel of the saddle, and supporting the holsters upon projections from the freward ends of the side bars of the saddle-tree, or their equivalent, substantially as set forth.

Second, I also claim covering the holsters by means of the roof piece, Battached to the connecting strap of the holsters, and the covers, C.C., which are historial to the sides of the holsters, substantially as set forth.

I also claim constructing the valise of two connected receptacles, D.D., which are supported immediately in the rear of the legs of the cautel, substantially in the manner and for the purpose set forth.

Making Prow Molio Boards—Thos, A. Chandler of

MAKING PLOW MOLD BOARDS—Thos. A. Chandler, of Rickford. Ill.: I ctaim the forming eccentric ruller, B, clamp plate, D, with the cam lever, G, and the pressplate, T when constructed, arranged, and operated substantially in the manner and for the purpose set forth.

Sawing out and Tapering Blocks of Marile— J. A. Cole, of Washington, D. C., I claim attaching the saws to swinging frames, ff, by pivots at each end, which will admit the shoes, b. b, turning to any angle to follow guides, e., the whole being arranged in the manner and for the purpose set forth.

CHAMPERING THE EDGES OF SHOE SOLES, &c.—O. R. Dinsmoor & L. J. Bartlett, of Salisbury, N. H.: We claim the combination and arrangement of the lever gauge and spring presser with the knife blade or chisel, substantially asspecified, the same being used in manner and for the purpose essentially as explained.

FUPS essentially as explained.

FLUES AND DAMPERS IN COOKING APPARATUS—J. A. Elder, or Westprook, Me., and Wm. J. Thorn, of Hollister, Mass. We claim the arrangement of the dampers, 4, 5, 10, 18, and R S., in combination with the oven thes, 14, 15, and 13, in the manner substantially as described, for regulating and controlling the heat, for the purposes specified.

RAILEDAD CAR COUPLING—J. T. England, of Balti-more, Md.: I claim the described coupling, consisting of a ball, so arranged in the buffer head as to support, at its lowest position, the pin, and to be pushed away and allow the pin to fall on the introduction of the link, as set forth.

Wool Combing Machines—Peter Fairbairn, of Leeds and John Hargrave, of Kirkstall, Eng. Patented in England, Nov. 6, 1852: We do not confine ourselves to the precise arrangement of machinery, as described.

But we claim, in machinery for opening, combining, and other fibrous materials, combining one and the same machine, two or more retary gill cylinders, fitted with advancing and receding gills, and rotating at different speeds, for the purposes set forth.

CUTTING OUT BOOT AND SHOE SOLES—J. W. Hatch, of Rochester, N. Y.: I claim, first the, projections, d d', at different distances on the face of the wheel, and the fork, e. on the sector lever, E', having its prongs at different elevations, combined and operating, substantially as set forth.

Second, the application of the spring friction bar, h, to the yoke, I, for preventing the return of the sector lever, before the proper time, in the manner specified.

[The above invention is an improvement on a machine for the same purpose, patented a few months since, by Messrs. Hatch & Churchill. The cutting is done by means of hollow punches, which have the shape of the sole or other article to be produced.

The object of the present improvement is to do away with certain inconveniences contained in the other ma-chine, and thus enable one person to operate and attend the same, where several were before required. Without engravings it would be difficult correctly to describe the connection of the parts. It will be sufficient to say that the invention is a good one and effects an important sav ing of labor.l

BURGLAR'S ALARM—H. L. Hervey, of Quincy, Ill.: I do not claim decoys, of themselves, as decoys are notnew, But I claim the combination and arrangement of levers, F, springs, a stop levers, D and E. slotted levers, C, key levers, B, flat sided levers, G G2, connecting levers, II 12, and links, J, varying the alarm at pleasure, by mean of the stop levers, D and E, and for drawing the bolt, as described.

HAND COTTON PICKERS—Geo. A. Howe, of Worcester, lass.: I claim the endless bely or chain of gatherers, F. ranged, and operated the purpose set forth. ed substantially in the manner and for

The purpose set forth.

BURGLARS' ALARM—Sam. Hamilton, of Tolland, Mass. Disclaiming the clock devices and bells, I claim constructing an alarm with an actuating pull knob, by, having a catch spring, c, watch disk, bt, formed with a tube, c', together with the rail, d d, figs. 3 and 4, the blocks, k t, L, llibks, n n, hook spring, c x o, s, liding blocks, s t, with catch davices. t', t', the secret spring strip. ''†, through all of which, in comi ination with clock-work devices are actuated, bells or alarms, J & & &, substantially in the manner described and for the purpose set forth.

BAGASSE FURNACES—S. H. Gilman, of New Orleans, La.: Iclaim the pit, D, located between the furnace and the boilers, in a passage way, B, as described and for the purpose specified.

I also claim the perforated blast pipe, G and L, of the feed opening, as arranged and described, and for the purpose specified.

FEET WARMERS—Henry Forncrook, of Elbridge, N. Y., I claim the arrangement of the angular supports, C, upon the inner box, thereby providing the foot warmer with a hot air chamber; also with substantial supports for the outer box, in the manner described, for the purposes specified.

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MILITARY WAGONS.—Jos. Francis, of New York City: I wish to be understood as not ciaiming the transportation of boats, or segments thereof, in cradles on roads or railroads, as that has teipre been done.

I ciaim, first, constructing the todies ofroad wagons and like vehicles of corrugated plate metal, supported by a bottom frame permanently attached thereto, so us to serve to support the iron tody at all times, and be used as a sled upon which to drag the superstructure, when taken offits wheels, as set forth, and made water-tight for transportation, as specified.

I also claim the mode of attaching and detuching the running gear, so as not to passany bolts which are liable to wear and cause a leak through any part of the water-tight body, but simply to connect the same with the frame as shown at fig. 3, by the outside connections and traces, so as to securely brace the iron body in proper form, and be permanently united therewith.

CUTTING THE FRONTS AND BACKS OF VIOLENS—Mat-

be permanently united therewith.

Cutting the Fronts and Backs of Violins-Matthia-Keller, of Philadelphia, Pa.: 1 claim, first, the slides B and C, with the pattern, M and J, lever G, and spindle, F, with its cutter, i, the whole being arranged and constructed substantially in the mainer set forth, for the purpose of forming any numler of exactly similar backs and fronts of violins from one pattern.

Second, the supplementary lever, Q, with its connectings, R S and J, in combination with the levers, K and G, and slot, k, for the purposo of forming the cancave sides of blacks and fronts of violins, without changing the pattern used der forming the convex sides and for the purposure of the purpos

tern used ter forming the convex sides, and for the pur-pose of giving the said backs and fronts a gradual and cor-rect tapering thickness.

rect tapering thickness.

AMALGAMATORS—Edward N. Kent, of New York City: I do not wish to be understood as making claim broadly to an apparatus for the separation of gold or silver from foreign substances, which consists of a vessel containing a column of water with mercury at the bettom, and with agitators above the mercury, and in which the substances to be separated are supplied below the surface of the water, and lelow the discharge.

I do claim the employment of double action paddle wheels which rotate on their own axis, and revolve about a vertical axis, substantially as described, within and in combination with a column of water in a vessel having the discharge at or near the top, substantially as specified, and for the purpose set forth.

And I also claim sustaining the paddle wheels in the column of water from above, and causing them to rotate on their axis, by the weight of the heavy pair resting on the pripheries above, that mercury may be applied in combination therewith, at the bottom and below the wheels, substantially as and for the purpose specified.

[This valuable improvement was fully illustrated by engravings, and described in our paper week before last.]

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Locks—Edward Kershaw, of Beston, Mass.: Now. I am aware that locks have Leen heretofore made with the bolt in the form of a disk, and rotating about a center; and also that tumplers have been used in connection with such lock bolt, which had a movement with the bolt, and parallel to its axis, and were placed in position by pushing in the key; therefore, I do not claim either of those. But, in connection with a rotating lock bolt, or its equivalent, I claim the combination of the shank, b, and segmental tumblers, C C, with the tubular recess of the lock case enclosing the same, with their several suiordinate appendages, co-operating with each other substantially as described.

Pumps—flosea Lindsey, of Ashville, N. C.: I claim the horizontal cylinder, E. and pipe, C. connected as shown, the cylind der being provided with valves, bb, and piston rods, F. F., the piston rods being operated as the pipe, C. and cylind r. E. rotate by the curved flanch, I, as shown and described, for the purpose specified.

[Mr. Lindsey places his pump at the bottom of the well and operates it in the following manner: A hollow tube extends down the well having a pump barrel attached and placed longitudinally across its lower end. The pump barrel is furnished with a piston rod that extends entirely through : two pistons are attached to the rod, so that when one movesin, the other withdraws; reciprocating motion is communicated to the pistons by means of a hollow cam ring placed in the well on the same level as the piston rod; the tube is revolved at the top of the well by means of a winch; the pump barrel being carried around with the tube, the ends of the piston rod come in contact with the cam ring, and the pistons move in and out, forcing the water up through the tube. There is no limit in the hight to which water may be thus carried.]

Locks—J. H. Pomerey, of Bloomington, Ill.: I claim on spring locks or latches the use of the spring belt of catch, M. N. or its equivalent, so constructed as to be operated by the door frame or keeper to release the bolt and fasten the door in the manner substantially as set forth.

PHOTOGRAPHIC BATH-Isaac Rehn, of Philadelphia, Pa.: I claim the overflowing bath, with the conducting trough and receiving chamber, or their equivalents, as set forth.

Boot TREES—Jas. H. Sampson, of Grafton, Mass.: I claim the combination and arrangement of the three levers a.d the screw, M, applied to the section A and B, of the tree, and made to operate together, substantially as specified.

fied. I also claim the combination of the spring lever catch with the foot, C, and front section, B, in the manner de-scribed and for the purpose specified.

SELF-REGULATING HOTBLAST FOR FURNACES—Chas. Schinz, of Camden, N. J.: 1 claim the use of the pipe, h, h, and the bar, i.i. when arranged as set forth, and operating conjointly, by means of suitable gearing upon the eccentrics, v. v., for opening and closing the valves, z. z., substantially as described, so as to divide a given volume of air of varying temperature and pressure into proportionate parts, and for the purpose set forth.

CLOTH STRETCHING ROLLERS—Nathan Simmons of Providence, R. I.: I claim the cloth stretching roller or cylinder, imparting to its sectional stretchers while the roller is in revolution, consecutive movements, in one direction or away from the middle of the roller, in the order as described, and by mechanism substantially as specified, or any mechanical equivalent

SPOKE MACHINES—Thos. R. Markillie, of Winchester, Ill.: I claim the arrangement of the cam, U, on the patterns V, in combination with the tracer, S, and a spring, a, in the manner and for the purposes described.

I also ciaim the particular arrangement of the rotary cutter and tracer in combination with the plate that supports them, suspended in the manner and for the purposes described.

MACHINES FOR SCOURING KNIVES—G.M. Morris & J. Newton, of Watertown, Conn.: We claim the machine described and shown for scouring knives, the same consisting of two scouring rollers, D.D., and a trough containing the cleansing material, said rollers leing arranged over each other above the trough, and each of them formed of a series of woolen, or other absorbent elastic disks, arranged on a screw shaft, E, and forced and confined compactly together by two movable metallic disks, F. substantially as, andfor the purpose set forth.

[The scouring is done by means of two rollers covered.]

ed of a series of woolen, or other absorbent elastic disks, and for the purpose set forth.

Taranged on a screw shaft, B, and forced and confined compactly together by two movable metallic disks, F', substantially as, and for the purpose set forth.

The scouring is done by means of two rollers covered with woolen cloth. The knife is placed between the rollers, which are then revolved by means of a crank.

Most of the old knife-scouring contrivances are large, clumsy, and hard to operate; but the present improvement is small, neat, portable, and very easily operated.

The lower roller turns in a tray which contains the scouring powder or mixture, which is taken up by the roller, and thus constantly brought in contact with the knife. The peculiar manner of securing the woolen to the roller, shafts, as set forth in the claim, makes the cloth last for a very long time, and prevents it from ever becoming ragged. For family use this invention is truly admirable.

HAND SOWRES—Moses D. Wells, of Morgantown, Va. I claim effecting the seed discharge and rezulating the adjustment and operation being substantially as described. Machines for Preparing—Corron Seed forth.

Machines for Previdence, R. I. Patented Sept. 30, 1841. Extended Sept. 30, 1835; I claim separating the pins laterating the pins after substantially as described, so that when the grove or moth claims the lower roller turns in a tray which contains the scouring powder or mixture, which is taken up by the roller, and thus constantly brought in contact with the knife.

The peculiar manner of securing the woolen to the roller, shafts, as set forth, in the claim, makes the cloth last for a very long time, and prevents it from ever becoming ragged. For family use this invention is truly admirable.

HAND SOWRES—Moses D. Wells, of Morgantown, Va. I claim effecting the seed discharge and rezulating the amount of the same by means of the double inclined planes. I. of bear of the claim powder in line, substantially as described, whereby the pins, after being substant

Connection Between Regulation Value and Governous's Stibs—John Tremper, of Philadelphia, Pa. 1 ciaim effecting the connection between the throttle value cut-off, or other regulator value and the governor stem, by means of a pin, d, working within a slot, a, or against a bearing lace, the said slot or bearin, g face having an escape of ening, b, opposite to which the pin, d, is trought, by the cessation of the operation of the governor, wherely the pin is allowed to escape from the said slot or bearing face, and there y effect the disconnection of the operator from the value or cut-off instantaleously, to allow the value to be closed by a spring or weight provided for the purpose, to stop the engine immediately after the governor rod, and the said slot or bearing face, a, and escape openings he length or upon the lever of the throtte value or cut-off, or what is equivalent, the pin teing astached to the said lever, and the slot or bearing face and escape openings being in the connecting rod of the governor, or in a plate connected therewith, or what is equivalent, by a toothed rack and segment, substantially as described.

[In the ordinary steam engines, no provision is made for

[In the ordinary steam engines, no provision is made for the control of the engine in case the governor becomes suddenly inoperative. If, by reason of its driving belt or geargiving way, or by other accidental cause, the gover nor is stopped, it leaves the throttle valve wide open and the steam full in the engine. An increase in the speed at once takes place, which often results in doing much injury to the machinery.

The principal object of the present invention is to tach the governor entirely from the valve the instant it becomes inoperative, and at the same time to close the valve by means of a spring or weight applied for that purpose, and thus stop the engine. Another object is, to regulate the movement of the valve while the governor is in operation.

We regard the above as an important improvement, and presume it will find a very extensive introduction. It is quite simple in its nature, and readily applied to all kinds of steam engines.]

WATER WHEELS—John II. Gatiss, of Franklindale, Pa., assignor to Abraham Edwards, of Towanda. Pa.: 1 am aware center vent water wheels have been used, and that the shaftsof such wheels, as well as the wheels them-elves have teen enclosed in a flume, these, therefore, I do not claim.

claim.
But I claim the arrangement of the gates, passages, and buckets of a center vent wheel, such as described, so that the water may act upon each bucket simulaneously, and with equal force, first striking them at their very lowest points, and heid thereto ty the tips or flanges, and then escaping to the center discharge, as set forth and shown

MACHINE FOR CHANNELING STONE—John Taggart, of Roxlury, Mass, assignor to himself and Vernen Brown, of Boston, Mass. 1 claim supporting the operative machinery of the drill saws by means of standards, U.U. extending down therefrom, and resting noon the bottom of the grooves in the stone, by said drills, the same enabling soid operative partsor machinery to move downward with the drills in proportion as they may cut into the stone.

BLIND FASTENER—Daniel E. True, of Lake Village, N. H.: I disclaim the mere contination of bent levers for opening and closing the blind from the inside, as such device is well known, though requiring distinct adjustment for fastening and unfastening the blind.

I claim the arrangement of the spring bolt at the extremity of the outer lever, and connecting said lever with the blind, as described, so as to be self-fustening, and withdrawn by the same lever movement, operating the blind as, and for the purpose described.

[I'his is a very ingenious and excellent arrangement of levers for opening and closing window blind shutters from the inside of the apartment, without raising the window. There is a lever connected with each blind, which passes through the bottom window-sill into the apartment, where it terminates in an ornamental knob. The blind is operated by simply pulling and pushing the knob. This is one of the best improvements of the kind that we have It is cheap, and easily applied to every window.]

MACHINES FOR PARING AND SLICING APPLES—Levi Van Hoesen, of New Haven, Conn.: I claim the combination of a spring with a sliding machine, when constructed and combined substantially as described, that is, with an arrangement whereby the fork carrying the apple may be turned, so as alternately to be brought into play with the paring knife, and with the slicing wheel being at the same time thrown into gear in the former case, and out of gear with the latter.

gear with the latter.

QUARTZ ORUSHING MACHINES—Richard Vose, of New York City: I claim supporting the center of the inclined vessel, A, upon a semi-spherical hub, a, which works in a raised perforated socket in the plate, C, whilst the depressed portion of the periphery of said vessel is supported upon a horizontal plane or track, Ly which I am crabled to impart the requisite movements to the said vessel, through the medium of a shalt descending from its hub, a, and in connection with the said method of supporting and operating the inclined vessel, A.

I also ciaim discharging the contents of the said vessel through an aperture in the descending operating shaft, substantially as set forth.

In connection with the described peculiar manner of supporting and operating the vessel, A, I also also ciaim the combining of the periphery of said vessel with the supporting frame by means of the springs, s, s, or their equivalents, for the purpose of steadying the movements of said vessel, and preventing it from turning upon its axis, substantially as set forth.

Gimlet—Chester C. Tolman, of Shelburne Falls, Mass.

GIMLET—Chester C. Tolman, of Shelburne Falls, Mass, assignor to James Sargent & Daniel P. Foster, of same place: I claim constructing the lower or outer of the two screw threads or flanches, B B, of the gimlet in rounded or curved paratolic form, and having the sides of said portions of the threads or flanches brought to a sharp or cutting edge, the screw or worm, c, being used or not as desired.

[The spindle of this gimlet is provided with two screw threads, which, at the lower end of the spindle, are sharpened into cutting edges, as set forth in the claim. Theresultis, that the gimlet cuts its way through the stuff with remarkable ease and rapidity, making a smooth hole, and never clogging up. Cheap, simple, and effective, this im plement, we feel confident, will become a public faverite.]

MACHINERY FOR OPERATING AND FREDING COTTON TO THE GIN-Major B. Clarke, of Newman, Ga.: Having described my machine for opening and cleaning cotton, preparatory to ginning. I claim the arrangement of the toothed leeding roller, a. the adjustable gats, b, and the adjustable comb, e.g., with each other, substantially in the manner and for the purpose set forth.

Recent Foreign Inventions.

Jean Panet, a French inventor, has taken out patent for propelling cars on railroads by a column of water taken from a fall of water. The method is described by him as follows: "The railway is constructed in the ordinary manner of existing railways, but between the two lines (the same tube serving for both) and along the entire length a tube is sunk into the ground at a depth of from 1 foot 6 inches to 3 feet. This tube receives casings to receive smaller ones for the pistons by which the motion is given; these smaller tubes, again, are furnished with valves and levers. The principal tube is closed at its upper extremity, and at the upper part water is introduced from a brook or river where there is a fall of water. It will be found that the water introduced into the tube exerts an equal pressure on every part of it, and gives the necessary power. The carriage is moved by the force of the water contained in the reservoir tube, and may be constructed with four or six wheels; it is furnished with two levers, four balances, and one slide for moving them. The levers are placed one on each side of the carriage, serving to regulate the opening of the valves; the levers and balances are arranged in pairs, and in such a manner that they move in an opposite direction, so that the speed can be regulated at will, and they are fixed or movable by means of the slide; the balances receiving the pressure from the pistons give the motion."

The advantages of this invention M. Panet sets forth as follows: "Water being the principal agent, there is no fear of scarcity of propelling power, as it can be renewed in the course of the distance by introducing a fresh supply of water as often as may be deemed advisable. The water, after having been employed for propulsion, can be used for various purposes in those parts where it is scarce. But the chief advantages of the system are, that no fuel would be required, and no explosions would take place."

M. Panet would have a fine field for putting his invention into practice on the Lockport and Niagara Falls Railroad, by employing the waters of the Niagara river for a propelling agent. But would this plan answer the purpose of railroad propulsion? Could it be used as economically as steam, and at the same time give as good results? It could not. The water from the highest falls in the world would be too sluggish in its action in comparison with steam, and would not answer the purpose of quick railroad propulsion. It is not the mere cheapness of the propelling agent that we now regard in modern engineering and commercial enterprize. If it were otherwise, no steamships would now be navigating the ocean, as the wind for driving sailing vessels costs nothing.

PREVENTION OF THE ALTERATION OF NOTES, BILLS, &c.-Wm. Ross, of Falcon Square, London, has recently patented an invention for preventing the alteration of bank bills from one denomination to another. During the manufacture of the paper, when in a pulpy state, the characters or letters which indicate the denomination of the bill, whether "five," "ten," and so on, are imprinted upon it. This is accomplished by water-lining in the ordinary manner. To render the character impressed more apparent, it is proposed to print the words in colors, in such a manner that will secure the color penetrating the paper itself, which, by this means, will become part and parcel of the material, so that erasure will be impossible, without accomplishing the utter destruction of the substance upon which the impression is made.

It is estimated by Septimus Piesse that the total revenue derived from various sources, from the substances with which "Britannia perfumes her pocket-handkerchief," cannot be less than \$200,000 per annum.

The Chicago Press announces the discovery in La Salle County, Illinois, of deposits of cannel coal, in sufficient quantity to meet any demand that may be made upon it for fuel or manufacturing purposes.

During the past year, 82,199,190 pounds of tea were exported from Canton to England 5,895,490 pounds to Australia, and 31,007,115 pounds to the United States. 51,678 bales of silk were exported to England, and 1494 bales to the United States.