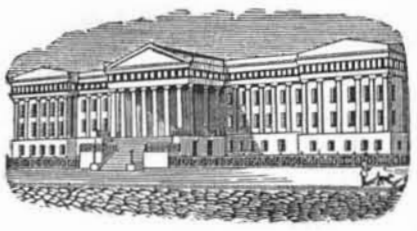

[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS

Issued from the United States Patent Office

FOR THE WEEK ENDING NOVEMBER 15, 1853.

LOOMS FOR WEAVING PILED FABRICS—By E. B. Bigelow, of Boston, Mass.: I claim, first, the method of constructing and operating the pincers or other equivalents for successively operating the pile wires, so that they shall carry said pile wires forward to the face of the cloth and hold them in position with their proper edges upwards, until they are otherwise secured, as specified.

I also claim constructing the pincers for successively operating the pile wires with grooved jaws opening and closing in a line with the pile wire, and with a motion in advance of the lathe, as specified, whereby collision with the lathe is easily avoided.

I also claim the application of long horizontal guides, as specified.

I also claim the application of a vibrating box or holder, in combination with the pincers or other equivalents, for successively operating the pile wires, as specified.

I also claim, in combination with the pile wires a bar or guide which shall successively press against said pile wires to keep them in a proper position during the operation of cutting, as specified.

And, finally, I claim the method of applying the tension weight and brake to the whip roller by means of the arms, as specified.

POWER LOOMS—By John Gledhill, of New York City: I cla.m. first, the combination of the main connecting rods. links, and radius rods, as described. for giving the lay a motion, the forward part of which is accelerated. and the backward part is retarded, for the purpose set forth.

Second, the "automatic server," consisting of a block or head, furnished with any number of hooks, or analogous devices, arranged in any number of series according to the number of bunches of filling hair or threads, and in order of succession, the said block or head being hung, as described, on a pivot, in such a position that when a proper amount of circular motion is given to it by snitable mechanism, the hooks will withdraw the hairs from one or other of the bunches, and bring them to a suitable position to be taken by the nippers or other device which draws them through the warp.

Third, a pair of nippers which are operated hy suitable mechanism, as described. to make their jaws pass through the warp from one side thereof, every time the shed is opened seize one or more hairs or threads from the opposite side, and return through the open shed with the same, and release the same when it is beaten up and the shed is closed.

Fourth, the combination of the fixed stud, finger. lever, spring, and arm, as described. the stud finger and spring being for the purpose of producing a proper tension on the hairs or threads, as they are being drawn through the shed, and the lever and arm being for the purpose of moving the finger to allow the nippers to pass in coming to fetch the hairs or threads.

[An engraving of this invention was published on page 316, Vol. 8, Sci. Am.]

SUPPLEMENTAL VALVE TO THE EQUILIBRIUM PIPE OF THE CORNISH ENGINE—By H. P. M. Birkinbine, of Philadelphia, Pa.: I do not confine myself to the particular form of supplementary valve described, or to the particular method of actuating the same, a slide valve might answer the same purpose as the former, and various mechanical devices might be substituted.

I claim the use of the adjustable valve apparatus described, or any equivalent to the same for intercepting more or less the steam in the equilibrium passage so as to regulate the rapidity of descent of the plunger, according as the head of water may require.

DAGUERREOTYPE APPARATUS—By James Brown, of New York City: I claim the employment of a diaphragm, with a suitable opening through which the person or subject is presented to the camera, when the said opening is surrounded by ornament or embellishment, as described, for the purpose of producing a portrait or picture with an ornamental or embellished border.

[A notice of this invention is published on page 268, Vol. 8.]

ELECTRO MAGNETIC ANNUNCIATOR—By C. S. Bulkley, of New York City: I claim the circuit closer, constructed in such a manner in combination with the permanent arrangement of the several numerical characters and words or sentences necessary to designate the number of each room, and the ordinary desires of the lodgers upon concealed register plates, which are connected with and operated by electro-magnets through suitable escapement, or other equivalent devices, that by a single sweep of the key to the point denoting the particular communication the lodger wishes to make the circuits of the said magnets will be closed and broken the required number of times to strike the bell and exhibit through apertures in the face of the register, that number and word or sentence of the said register plates, which respectively designates the number of the lodger's room and the communication made by him, as set forth.

DRESSING STAVES—By J. D. Elliot, of Leicester, Mass.: I claim the combination of the transversely inclined bed with the swivelled roller, for the purpose of adapting the machine to the dressing of riven staves with the grain of the wood, whether thick or thin. tapering or inclined from edge to edge, without any separate adjustment for the various sizes, as described.

CHUCK FOR CUTTING BARREL HEADS—By Franklin Fruit, of Jefferson City. Mo.: I claim the chuck constructed as described. viz., two circular discs connected by studs, and centers, placed between the studs, any proper number of studs and centers being used, said centers passing through both the front and back discs, and having collars upon them, each center being provided with a spiral spring, which is placed between the collar and the inner side of the back disc, and by which springs each center will yield or give, independently of the others, so that the different pieces forming the barrel head may vary in thickness. and still be properly adjusted and secured between the faceplace and chuck, as set forth.

[See notice of this invention on page 148. Vol. 8, Sci. Am.]

PROPELLERS—By Banford Gilbert. of Pittsburg, Pa.: I do not desire to claim the use of submerged propellers, actuated by a reciprocating motion, nor the use of propellers with two levers or floats, hinged at or near their point of connection, and operating by opening and closing as they pass to and fro through the water, as in the case of the duck's foot propeller.

I claim the combination of the anchors with the double floats or paddles, suspended so as to hang vertically in the water when in use, and operating with a horizontal reciprocating motion, one of the floats in each set propelling the boat in one direction, and the other float in each set propelling it in the opposite direction, one anchor being combined with each set of double floats for the purpose of retaining one float in a horizontal position, so as to pass through the water with the least possible resistance, when not in use, and sustaining the pressure of the water against the paddle in use, when in the vertical position, which the anchor compels it to retain while propelling the boat, and leaving it free to assume the angle of least resistance while returning through the water. The simultaneous reversing of the double paddles being accomplished by means of a handle which shifts the connecting rod, to which all the anchors in one frame are attached, as described.

DRESSING CIRCULAR SASH, &C.—By Leonard Gilson, of Brighton, Mass.: I claim, first, the swing bed frame and adjustable bed plate in combination with the lever, clamps, and set screws, as set forth.

Second, I claim an angle frame with a joint at or near the vertex, to increase or diminish the angle, and a movable segment plate thereon, in combination with the bed plate and cutter for circular work, as described.

CREASING STRAPS OF LEATHER—By D. H. Hovey, of Kilborn, Ohio: Having described my improved machine for creasing straps, &c., for harness and other purposes, I claim the combination of the self-adjusting creasers, springs, vibrating cam, and pressure roller, arranged and operating as described.

VENTILATORS—By Joseph Leeds, of Philadelphia, Pa.: I claim the combination in one case or shell of the series of downwardly inclined curved openings in the outer shell. for taking in and directing downward a column of pure air, with the center pipe or opening crowned with the two frustums of cones with their apices towards each other for producing a counter current, and carrying from the apartments to be ventilated the impure air, and increasing said ejecting current, as described, the whole requiring but a single opening in the roof.

COATING BOX FOR DAGUERREOTYPE PLATES—By William Lewis & Wm. H. Lewis, of New York City: We claim, first, the metallic base, formed as a box, to which either cold water or heat are to be applied to regulate the temperature of the chemicals in the coating box, as described.

Second, suspending the glass pot within the coating box, by means of a flange or bead on the upper edge thereof, taking the upper surface of the box, as specified.

Third, the rollers in combination with the ways, formed with the inclines to relieve the friction, as specified.

Fourth, the rollers on the cover, combined with the ways and inclines on the slide, to lift the cover and relieve friction, as specified.

Fifth, the rebates to support the glass on the lower surface thereof, in combination with the screws, to retain the same against the rebates, as specified.

Sixth, we claim securing the metal yoke in place by ribs, on the inner of the vertical parts thereof, and the slides, as described.

Seventh, the hub on the yoke, taking the socket in the cover, and containing the spring, whereby the cover is retained in place but allowed to take its proper bearing, as described.

SELF-ACTING DAMPERS FOR AIR-TIGHT STOVES—By S. P. Lyon, of Farmington, Mich.: I claim the arrangement of the lever having the valve on its lower end, and a curved portion and flat spring on its upper end, in combination with the lever pivotted between the curve portion and spring (said lever attached to the upper valve), the thumb screw, and expansible plate, the whole operating automatically in the regulation of the draught of air to the fire, and also to the induction of air to the flue, as set forth.

PADDLE WHEEL—By Wm. H. Muntz, of Norton, Mass.: I claim, first, making the supports of the buckets, a cut-water wheel, and two wheels of smaller diameter: second, forming each bucket of a float and guard made to stand at any angle to each other; third, making the guard to extend from the rim of the cut-water wheel to the other or smaller wheel, and so that the guard shall not only pass edgewise through the water but endwise into the water, the float being made to project inwards from the guard, as stated.

And in combination therewith I claim making the float narrowest at its outer end, or at the cut-water wheel, and gradually in width towards the inner end, as described.

SEED PLANTING CULTIVATORS—By George Phillips, of Philadelphia, Pa.: I claim the arrangement and combination of the side pieces, slotted beam and slotted bars, and the hollow sectional axle or shaft, for the purpose of allowing the expansion and contraction of the side pieces, as ses forth.

I also claim attaching the driving and graduating wheel to the back part of the machine, by means of the notched bars, secured to the upright post of the center or draught beam by a bolt, upon which they move, and suspending above the same pawls, with either of the notches, thus enabling said wheel to perform its functions of regulating the height of the back part of the machine, and driving the distributing shafts, and to be drawn or thrown under the center or draught beam to form a pivot wheel, upon which the machine can be raised from the ground and turned in the manner specified.

MOP HEADS—By Timothy Randlett, of Enfield, N. H.: I claim the binder and revolving tightener, combined with and embracing the united cross-head, the socket, and ridge, as set forth.

FEED ROLLERS OF STRAW CUTTERS—By Robert Sinclair, Jr. & R. F. Maynard, of Baltimore, Md.: We claim for straw cutters the employment thereon of alternate right and left fins. so arranged as to form a double spiral or screw, said fins being formed as set forth, and operating together so as to prevent the straw from crowding to the right or left, and to compress the straw laterally as it is passed to the knives, and constituting altogether what we denominate the double screw propellers for straw cutters.

MACHINE FOR TRIMMING SOLES OF BOOTS AND SHOES—By John H., James M. & H. O. Thompson, of Holderness, N. H.: We claim a machine in which the sole is trimmed by revolving knives and guided. as fed along, by the operator, by an adjustable gauge bar against which the edge of the pattern plate abuts, as described.

HOT-AIR REGISTERS—By Wm. H. Towers, of Philadelphia, Pa.: I claim placing within the jambs of each register the means of moistening the heated air, as described.

LOOMS—By Wm. Townshend, of Hinsdale, Mass.: I do not claim the levers in themselves, as these have before been used; neither do I limit myself to the number of heddles and treddles, and I do not claim the pattern chain in itself, as this is well known.

But I claim the levers and a slotted fulcrum with their latch pieces, or their equivalents, combined with the levers, by which arrangement the levers are connected to either lever by means of the end motion, and carried up and down by competent power applied to the levers.

FINISHING THE ENDS OF STAVES—By J. E. Warner, of Boston, Mass.: I do not claim a feed bed revolving in fixed bearings; but I claim a feed bed revolving in bearings which are capable of being moved by weights, springs, or other means towards the beds or stops on which the back or outer side of the stave is supported, the extent of such movement depending upon the thickness of the staves operated on.

I also claim the combination of said feed-beds with the saws, cutters, fixed stops, and movable frame, and what are substantially their equivalents, operating as described, for the purpose of finishing the ends of staves.

SAFETY VALVES FOR LOCOMOTIVE ENGINES—By Henry Waterman, of Hudson, N. Y.: I claim the piston attached to the weighted end of the valve lever within the cylinder, and immersed in the liquid in the cylinder, combined and operating as described.

UNITING SHOVEL BLADES TO HANDLE STRAPS—By Jonathan White, of Antrim, N. H.: I claim uniting by welding the iron handle straps to the sheet cast-steel blade, as set forth.

ROTARY CHURNS—By H. H. Grover, of North Cohocton, N. Y. I do not claim a tub in the form of an inverted cone or conic frustum with revolving dasher, either with or without breakers, as such churns, with breakers and dashers extending from the bottom to the top of the tub, or with dashers without breakers, have been used before: but what I do claim is a churn consisting of such conical tub, furnished with a vertical revolving dasher at its bottom combined with breakers at the top, as set forth.

DRESSING CROOKED TIMBER—By E. M. Branson (assignor to Franklin Slaughter), of Fredericksburgh, Va.: I claim supporting the arbor of one of two pulleys carrying an endless belt of knives for dressing crooked timber upon elastic bearings, for the purpose of yielding to any undue strain upon the knives, as described.

RE-ISSUE.

PLANING MACHINES—By A. A. Wilder, of Detroit, Mich. Patented Dec. 21, 1852: ante-dated July 17, 1852: I disclaim the invention of planing by a reciprocating plane which planes on its forward stroke. and feeds the board on its backward stroke, the whole distance of the stroke of the plane, as in other machines of this class.

I claim, first, the reciprocating beds, arranged with respect to the stationary beds, as described, in combination with the clamps, or their equivalents attached to them, whereby the board is clamped between said movable bed and the clamps, and is free to move over the stationary planing bed. and is fed during the backward stroke of the planes the whole length of said stroke.

Second, I claim the method as described, of clamping and feeding timber to knives or chisels.

Reform of the Patent Laws.

Your valuable journal is doing good service in pointing out defects in the Patent Laws, and suggesting needed reforms. Allow me to direct attention to two points, which demand notice.

First, the law provides for the adding of a new improvement to a patent, by the original patentee paying $15. The framer of that law looked upon the filing of a specification and the issuing of a patent as cotemporaneous events—nearly—not the intervention of several months, as is now the case, between the former and the latter—the very time when improvements are most likely to be made. The law is *strictly* construed at the Patent Office, and for all such improvements, a new patent must issue, and a fee of $30 be paid.

Second, the law requires that one invention shall be the subject of one patent, evidently meaning that the inventor of a churn and a cotton press shall not have both examined under one fee; but this is so interpreted by the Patent Office, that if the inventor of a cotton press improves the mode of pressing, filling, and discharging, each improvement must be the subject of a separate patent. Could such have been the original intent of the law?

FRANCIS H. SMITH.

[We are not acquainted with a single case like that mentioned by our correspondent under his first head. It has hitherto been the custom to grant a patent for a new improvement to an original patentee for a fee of $15; the improvement dating from the commencement of the original patent. This is according to the strict language of the law; it says, (Sec. 13, Act. 1836) on the payment of fifteen dollars, the original patentee, whenever he shall be desirous, may have the specification of any new improvement of the original invention or discovery, annexed to the original description and specification." This is so plain as to require no comment, excepting to say that our correspondent has rendered the matter somewhat opaque. He means that the spirit and intent of the law is to allow a patentee to add an improvement to the original patent, at any time, for a fee of $15, but that the Patent Office construes the law to make the patentee pay $30, and take a separate patent for every new improvement.

The *New Rule* of the Patent Office mentioned under the second head above should be abrogated at once. It is doing great injury to many inventors. It never was intended by the framers of the patent law, that an inventor who had made several improvements at once on *any one* machine, should be required to file a specification and pay a separate fee for each. A machine is a harmonious whole, made up of several parts, and is not a complete machine, if one part is wanting. It is indeed true that of two machines devoted to the same objects, such as the steam engine, one may have its valves worked by hand like Newcomen's before H. Potter made them self-acting, and the other may be as perfect as the best now made, still the latter only is the complete machine. A machine is never complete while an improvement can be added; it is surely wrong then to demand several fees for improvements made by one man at one time, to make a machine complete. An inventor is always allowed a patent for any improvement he may have made on any part of a machine, therefore, when we know that all the separate parts of a machine are so dependent on one another, that the improvement of one very often leads to the improvement of another as a necessary consequence, it is surely both just and right that an inventor should be allowed to include any number of original improvements on one machine in one patent. We mean to be understood as limiting the claims to a distinct machine to accomplish a certain object or objects, and not those kind of claims which embrace indefinite *definitions*, including all time, space, power, action, and proportion. We hope the Commissioner of Patents, who is a thorough lawyer, and whose mind, when particularly directed to a subject, can soon trace effects to their proper causes, will see fit to abrogate the New Rule, not many days hence.

Buying Congress.

We are destined to have stationed in Washington during the approaching session of Congress from thirty to sixty ex-members, who come to sell their personal influences in hard cash on the nail and contingencies; their influence aforesaid for such consideration to be used to get through Congress any legislation whatever desired to put money in the pockets of the payees. Some of these gentlemen have followed this business for years past, until they are well known around the halls of Congress as "lobby members." Their former position in the public service gives them at all times an entree into both chambers, which affords advantages for electioneering for schemes on the treasury, for which speculators pay liberally.—Their knowledge of the rules governing the transaction of business also makes them somewhat desirable agents. These advantages, backed by the fact that they are notoriously less scrupulous in their means of carrying their points than most others, have up to this time rendered them so successful as professional legislative drummers that they have among them shared much of the public money which never should have left the treasury of the United States. Little good it does them, however, as, in spite of our laws and the efforts of our police, faro banks still flourish in Washington. We shall have to keep our attention upon them affectionately. As they show their hands we shall inform the public, and more especially honest members of Congress, what schemes on the treasury each may have in hand, so that they may beware of the plots of these gentlemen. The rules of the House and Senate should promptly be so amended as that ex-members, claim agents, or drummers, shall be excluded from the halls, as other claim agents are excluded.

[The above is from the "Washington Star.' It describes a system of corruption as disgraceful as it is dishonorable. It may be said, "Congress cannot hinder such characters as choose to act the part of political jackalls from coming to Washington, and endeavoring to get particular measures passed for their own interests." This is true, but the inference is that such characters would never be found hanging round the Halls of Congress if they did not receive encouragement in the practice of their lobbying arts. It is thus that Congress is implicated in such conduct. We are well aware that many *honest* men have often gone, and may have to go again, to Washington, in order get just claims enforced; we do not refer to this class of men, but to those whose claims are selfishness, whose ideas of justice consist in getting as much out of Uncle Sam as they can, and whose patriotism is bounded by the amount of dollars and cents they can make out of special privileges. Some means should be adopted by Congress to prevent this outside pressure upon legislation, and remove a foul blot upon our federative legislation.

We clip from "L'Invention," an excellent French journal devoted to the Arts, the following paragraph:

"M. Niepce de Saint Victor has sent to us for transmission to Messrs. Munn & Co., of New York, four magnificent heliographic engravings upon steel, after the process common to him and to our skillful engraver, M. Lemaitre. Messrs Munn & Co., who have always been so just towards the nephew of the father of photography, will receive these four engravings with the greatest pleasure."

We shall indeed, for we are always ready to appreciate merit, whether in our own or foreign lands.

A Great Gun.

A gun for duck shooting has been imported from England by a gentleman of Baltimore.—This handy little plaything is only 8 feet in the barrel, 5 feet in the stock—one foot and a half around the breech, and an inch and a half across the muzzle! So says the "Baltimore Times.

The rail-car making business of the United States is said to involve $5,000,000 capital, giving employment to several thousand men, and producing a value in property, estimated at $17,000,000 per annum.