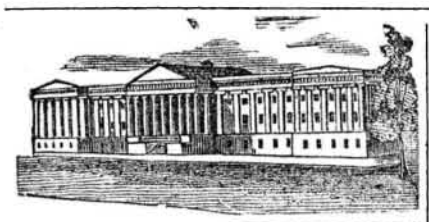

LIST OF PATENTS CLAIMS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending December 18, 1849.

To Thomas Blanchard, of Boston, Mass., for improvement in bending wood.

I do not claim as my invention the mechanical powers by which the operation of bending timber is effected—nor any particular form of machinery to carry my new method into operation, but the machine herein described is a form which I have adopted to carry out and combine my new method of bending timber, which is bending fibrous materials by means of the upsetting movements or the upsetting and relaxing movements combined, as exemplified in the screw, whether such movement or movements be produced by means of the screw, wedge, comb, lever, rack and pinions, or any other equivalent means.

To Robert M. Dempsey, of Indianapolis, Ind., for improvement in Bran Dusters.

What I claim is constructing the rotary scourer and operator with concentric roughened and reticulated prismatic rings; and hanging roughened or toothed prismatic rings—the latter being placed in the spaces between the former so as to leave concentric spaces between their inclined surfaces for the passage of the bran and flour over and around the ridges and sides of the aforesaid several prismatic rings in the manner and for the purpose herein fully set forth, by which the flour adhering to the bran, after leaving the ordinary bolts, is completely separated therefrom and saved, to be mixed with the superfine flour, or for any other purpose which the miller may desire—the flour passing through the wire bolting screws and out of the curb or case through the spout, whilst the bran is forced to the upper part of the curb and out of the spout, by the centrifugal action of the separator, aided by the blast of wind created by the rapid rotary motion of the said scourer and separator, as herein fully set forth.

To Peter Kirkham, of Waterbury, Conn., (Assignor to W. R. Hitchcock & Co., of Waterbury, Ct.) for improvement in the manufacture of Buttons.

I claim the new and useful improvement in the manufacture of buttons, of substituting a wooden mould for the common metalic shell that is stuffed with paper, and using the said wooden mould either for the top or bottom of the button, and covering the button entirely or only part of it, with some textile fabric or substance, and securing the shank and the covering inside, between the wooden mould and ring, or collet of the button, in the manner herein represented and described.

To Samuel Krauser, of Reading, Pa., for improvement in Clover Harvesters.

What I claim is maintaining the series of teeth at nearly the same angle with the ground at all heights to which they may be adjusted therefrom, in the manner herein set forth, and represented.

I also claim forming the fingers with a depression on their upper side above the knife, substantially in the manner and for the purpose herein set forth.

To Azel S. Lyman, of Upper Alton, Ill., for improved Alarm for indicating want of water in boilers.

I claim the introduction of the tube or box on the flue or other surface exposed to extra heat when water is too low, filled with water or other suitable liquid, for the purpose set forth.

To James M'Carty, of Reading, Pa., for combined lap and butt welded tube.

I do not claim either a butt-welded or lap-welded joint therein, as they are both old devices; but what I claim is a pipe composed of a combination of the butt-weld, with lap-welded end, as above particularly set forth.

To Isaac Merritt, of North West Bridgewater Mass., for improvements in Folding Gates.

What I claim is a single or double gate, constructed substantially as herein above described, so as to fold up horizontally in opening the same by degrees according to the width of opening required, without the necessity of moving the whole structure as when it swings on hinges horizontally in the arc of a circle, or vertically on a horizontal bolt, or pin, when folding, in the manner of a parallel ruler, my said improved gate moving horizontally over rails on wheels with great ease, whilst being contracted or expanded in opening or closing the gate, as herein fully set forth.

To Robert Patterson, of New Hartford, N. Y., for improvement in the manufacture of flax and hemp.

What I claim is the following process for preparing hemp and flax for spinning, viz., the treating of the lap after it comes from the "Spreading Frame," with an alkaline solution to soften the gluten of the flax, and washing it afterwards, as has been described, as a preparatory process for drawing it in the common drawing frames; and also drawing the flax lap in the common drawing frame, while the said flax lap is in a wet state, to draw out, separate the finer from the coarser fibres, and reducing the flax to its greatest possible fineness, making less tow, and running the machinery at a greater speed than by the dry process, and dispensing with the hatchel gill frame, substantially as herein set forth.

To Hugh Sangster, of Buffalo, N. Y., for improvement in Signal Lanterns.

What I claim is sub-dividing the front of the lantern into three divisions or sectors, and arranging and operating the colored glasses enclosed therein, in the manner herein described.

To Christian Sharps, of Washington, D. C., for improved method of revolving the hammer of repeating Fire-arms.

What we claim is the combination of the cocking and spring levers, with the double ratchet wheel on the revolving hammer substantially in the manner herein set forth.

To Henry Stanton, of Richfield, N. Y., for improvement in Churn Dashers.

What I claim is the combination of the perforated spiral float with the prismatic horizontal radial arm and vertical shaft arranged and operating substantially in the manner and for the purpose herein set forth.

To Henry Graham Thompson, of New York, N. Y., for improved valve-motion, cut-off and steam stops for rotary engines.

What I claim is first, the method of operating the steam stops or abutments, by a crank motion derived from the rotation of the piston-wheel, subtantially as described, when this is combined with the rotation piston wheel, the form of the peripery of which is such as would be generated by its rotation and the motions of the steam-stops, substantially as described, that the steam stops may always, in their motions, be in contact with the periphery of the piston wheel, and not operated by such periphery, as described.

Secondly, I claim making the ends of the steam stops with projections or toes that embrace the sides of the piston wheel, and extend within the periphery thereof, substantially as described, when this is combined with the grooves or recesses in the packing ring, or any equivalent substitute therefor, substantially as described, whereby the steam is prevented from passing from one side to the other of the pistons, through the grooves or recesses in which the ends of the stops slide, as described.

And Thirdly, I also claim in combination with the herein described method of operating the steam stops, the employment of cut-off valves, operated by eccentrics (or their equivalents) on the crank arbors that operate the steam stops, substantially as described.

To Isaac Winslow, of Philadelphia, Pa., for improvement in Bottle fasteners.

What I claim is the combination of the metallic caps with the tube constructed and used in the manner and for the purpose set forth.

To Andrew Wurfflein, of Philadelphia, Pa., for improved concealed hammer and turning nipple lock.

I do not lay an especial claim to the peculiarity of construction of the individual parts of this lock, as they may be varied in many ways, nor do I claim a concealed lock for exploding the cap inside of the stock; but what I claim is the combination of the lever with the nipple attached thereto, and sliding hammer, arranged and operated substantially as set forth, by which the nipple is turned and exposed to receive the percussion cap, and the hammer cocked simultaneously by the movement of the lever—the cap being exploded within a chamber inside the stock, in a peculiar manner as set forth in the foregoing specification, by which the inconvenience arising from flying fragments of the exploded cap and from smoke, at the moment of discharge, are avoided.

To Asa Broad, of Louisville Ky., for improvement in Machinery for Dressing Staves.

What I claim is the tilting plate placed in the front of the forward cutter in the head, in combination with the pin projecting from the beam of the supporting frame, for the purpose of throwing the shavings clear of the cutters, substantially in the manner herein set forth.

DESIGNS.

To Albert T. Dunham, John B. Coller and B. H. Sage, of Troy, N. Y., (Assignees of Wm. L. Sanderson,) for Design for Stoves.

To Wm. F. Shaw, of Suffolk Co., Mass., for Design for Girandoles.

RE-ISSUES.

To Edward Hall and Joseph L. Hall, of Cincinnati, Ohio, for improvement in Fire-proof Safes.

What we claim is joining the interior and exterior cases by the door frame; and connecting both cases with the insulating cement, by means of the anchors embedded therein, substantially as herein set forth.

We likewise claim the employment (in chests so joined) of hydraulic cement as the insulating substance for fire proof safes or chests, it being stronger when concreted than other cements heretofore used for the purpose, thus making a safe of superior strength and durability, especially when the same is constructed in the manner herein described.

To Francis S. Pease, of Buffalo, N. Y., for improvement in Harvesting Machines.

I do not claim to be the inventor of the turning alternating rake, and slotted double platform, but what I claim is alternating the rake and elevating and depressing its teeth by devices made, arranged and operated substantially as herein described.

I do not claim to be the inventor of a tight case for the back of the blade, to run in, nor of the slotted teeth to protect its edge, but what I claim is making a toothed blade case in uniform sections, each section having a tooth cast in one piece with it, the whole being attached to the rack bar by screws, or otherwise, in such manner that if the tooth, or if any section should get broken, it may be readily replaced by an extra one, cast in the same pattern, and kept on hand for that purpose, the rack thus made being equally efficient as a solid case, to protect the stock from dirt and obstructions, and can be more easily and cheaply repaired.

I also claim the manner in which the piston of the point of draught is changed by means of the slides and clamp screws, as herein set forth.

Carbonic Acid Gas.

A recent lecture delivered by Proff. Silliman, Jr., is thus described by the Louisville Journal:—

The subject of the lecture was "the form of bodies as effected by caloric." Having adverted to the well known fact, that water assumes the solid, the liquid, or the æriform condition according to the amount of caloric in it, the lecturer stated that the same law, probably, prevails among all bodies. Many gases which were formerly regarded as fixed in their æriform character have been reduced by chemical and mechanical forces to the state of liquids and solids. Carbonic acid is among the number. This gas, the professor demonstrated, is continually exhaled by the lungs in respiration. He collected a portion of it by breathing into a receiver, and on immersing a candle in it showed that the flame was extinguished. He then drew from a powerful cast-iron condenser a quantity of the same substance which, by cold and pressure, had been condensed into a liquid. This was held up before the audience in a thick glass tube and was seen as a limpid, colorless fluid, which might readily have been mistaken for water. By turning a key, the pressure was removed, and a portion of this liquified carbonic acid was allowed to return to the gaseous condition. The change was instantaneous; a part of the liquid flashed into vapor, and that which remained at the bottom of the tube was congealed into a mass resembling snow, having been frozen by its own evaporation. This experiment was exceedingly striking, and elicited from the audience strong expressions of admiration.

The learned lecturer next took up the apparatus in which carbonic acid is generated under great pressure, but, inasmuch as the experiment was not unattended with danger, he remarked that he presumed the audience would not insist on his generating the gas in their presence. He had put several charges of the acid into the condenser, which was surrounded by a freezing mixture. From the condenser he proceeded to draw off into a brass box the vapors of the acid, which, on being released from the immense pressure by which they were kept down—a pressure of thirty-eight atmospheres— were instantly condensed in carbonic snow. This snow was passed about among the audience on cotton in little boxes. When touched by the finger it excites the sensation of burning, and if kept for a few seconds on the skin produces blisters. The Professor placed a portion of it, mixed with sulphuric ether in a quantity of quicksilver, which, in a very short time, was frozen into a solid mass harder and heavier than lead. This part of the lecture created intense interest.

Prof. Silliman's style of lecturing is earnest, elevated, and impressive. His voice is fine, his enunciation is clear and distinct, and he has the air of being wholly absorbed in the questions of science before him.

American Pine Forest.

The grandeur of the pine grove is a sight worth seeing, 250 trees upon an acre of land, the lowest stem of which, before you came to a single branch, is 200 feet high. There is not a blade of grass growing at its foot, nor any brush or under wood whatever. You may walk among them without any obstruction for miles, and in the heat of the day and a cooling shade and shelter from the piercing rays of the sun, it appears as if you were in a half twilight, and not a rustle, beyond what your own foot makes upon the decayed leaves, strikes your ear; no birds of any kind can be seen, nor any squirrels, chitmunks, or rabits; all is still as death, and solitary as a desert island. But let a fire be kindled, and carried by the wind into the upper branches of these pines, and a sight will appear which would appal the stoutest heart; the fire leaps from tree to tree with the rapidity of lightning, and progresses as fast as the wind, nearly as fast as a horse can gallop. You will then see a canopy of fire on the tops of the forest and not a blaze below; indeed a man might run underneath, when, the fire is raging over his head and, if he took care to dash away the red ashes as they fall from the tops, he would take no harm, as long as the forest is unbroken, the flames advance, if it approaches a clearing, the utmost exertion of the people is taxed to keep it from their fences and buildings; for let it catch hold at one end and it will run along like a train of gunpowder, and everything upon the farm of a combustible nature will share the same fate; and well is it for the farmer if his wife and children are safe from its devouring influence.

To Preserve Smoked Hams.

The Southern Cultivator notices some hams exhibited in the Georgia State Fair which were one, two, three, and four years old. The writer says:

The owner refused to divulge his secret but as we have unfortunalely become possessed of it, we here give it. Procure some good, clean hickory ashes, have them perfectly dry; draw your meat from the pickle on a dry day; sprinkle the ashes over the meat pretty thick being careful not to knock off more salt than what must fall off; then hang up your meat as high as possible; smoke it with cool smoke, made by hickory wood; be sure to take it down before kipp er fly makes his appearanc, being generally in this climate the first of March; pack it away on a dry day in casks; first, a layer of hams in perfectly dry hickory ashes; second, a course of cobs, &c.; cover your cask snug and tight, and you may rest easy about your hams.