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26,742.—Henry H. Beach, of Philadelphia, Pa., for an Improvement in Grain-winnowers:

I claim the arrangement of such a shoe when the steps thereof are made movable in such relation to the fan that the grain passes from the first step at a point from which its gravity would cause it to fall in advance of the fan, and where it is exposed to the greatest strength of the blast, in the manner and for the purpose set forth.

26,743.—Levi A. Beardsley, of South Edmeston, N. Y., for an Improvement in Hop Frames:

I claim the employment of a frame holder composed of a sliding box, K, with a windlass or ruller to tighten the wire, and a vertical bead or strip, G, to guide or support the box, K, substantially as and for the purpose shown and described.

26,744.—J. B. Blakslee and S. S. Middlebrook, of Newtown, Conn., for an Improvement in Machinery for Felting Hat Bodies:

We claim the combination of the endless rotating platforms, b and b', when the same are arranged so as to move in opposite directions and at varying speeds, in the manner and for the purpose as herein fully set forth.

26,745.—Thomas Board and C. A. Austin, of Jackson, Va., for an Improved Mortising Tool:

We claim the combination of the auger, C, and hollow chisel, G, with the screw shaft, A, nut, D, bars, E E I H and I I J J, arranged substantially as and for the purpose set forth.

[This invention relates to an improvement in the combined auger and chisel tool for forming rectangular holes or mortises at a single operation. The object of the invention is to obtain a simple means for applying the tool to its work, so that it may be readily adjusted and manipulated, and thereby effect a considerable saving in labor, while performing the work in a perfect manner.]

26,746.—R. B. Brown, of Cambridge, Vt., for an Improved Sawing Machine:

I claim, first, Operating the carriage, G, by means of the pawls, G' I I, connected with the adjusting lever, I, and actuated from the saw shaft, B, through the medium of the link, h, arm, g, rock shaft, M, levers, J, J, and rod, K, substantially as shown and described.

Second, The wheels, j, when attached to the yielding bar, N, and arranged to operate as described, for the purpose of keeping the work from the saw as it is cut from the log.

[This invention relates to certain improvements in that class of sawing machines in which reciprocating saws are used. The object of the invention is to expedite the working of said class of sawing machines, and facilitate the necessary manipulation attending the operation of the same, by a very simple arrangement of means.]

26,747.—Joel Bryant, of Brooklyn, N. Y., for an Improvement in Journal Boxes:

I claim the construction and use of friction roller journal boxes, when made with a central base, B, substantially as described.

26,748.—James Bullock, of Baltimore, Md., for an Improvement in Horse Collars:

I claim a new article of manufacture, to wit, a horse collar having its shoulder and neck-relieving portion, A, made throughout of duck cloth, and without a side seam, and mounted with leather, B, C, and otherwise constructed after the method described for the purpose described.

[This invention consists in making the supporting part of horse collars of duck cloth and with leather bearings for the irons of the harness. The duck cloth is made into a sack and stuffed with fine straw and then sewed on to the rim or leather portion of the collar. The great advantage of this mode of constructing horse collars is this: a free circulation of air, vapor, &c., are allowed through the pores of the cloth, and consequently the liability of the horse's back being galled greatly lessened. Another advantage is that it avoids the necessity of a side seam. Viewing the collar as a whole it is more perfect in construction, has a neater appearance, and is less expensive than collars of the ordinary kind.]

26,749.—Lysander Button and Robert Blake, of Waterford, N. Y., for an Improved Hose Coupling:

We claim combining with the male and female parts, M and F, a closing pipe, having an endwise motion through one of said parts, substantially as set forth.

26,750.—Nathan Chapman, of Mystic River, Conn., for an Improvement in Cotton and Hay Presses:

I claim a movable cotton press, constructed substantially as described, when operated by toggle links in combination with the piston, J, and racks, I I, working or passing through the blocks, H H, arranged to work or traverse between ways, substantially as described.

In combination with the doors, T T, constructed as described, I claim the arms, Z Z, for closing and holding the doors closed, substantially as described.

26,751.—James M. Clark, of Philadelphia, Pa., for an Improvement in Flour Mills:

I claim, first, The arrangement of the center elevator, E, one trunk of which passes into the bolt chest, and when so arranged, the combination of said elevator with the bolts, B and C, and conveyor, K, as set forth.

Second, I also claim one continuous bolt chest, L, containing two separate reels placed in a line, or end to end, in combination with the center elevator, E, as set forth.

26,752.—R. M. Curtice, of North Adams, Mich, for an Improvement in Cider Mills:

I claim the combination of the spheroidal cutter, G, and fluted cylinders, E E, arranged to operate substantially as and for the purpose set forth.

[This invention consists in combining with the ordinary fluted cylinders previously used for crushing apples, a spheroidal toothed cutter, or grater, placed within a suitable hopper, and so arranged to

operate that the crushing of the apples in the process of manufacturing cider is greatly expedited. The invention also consists in using in connection with the fluted cylinders, clearers, so arranged as to free the interstices of the cylinders from the crushed apples, and thereby prevent the clogging of the cylinders, so that they may operate efficiently at all times. The invention further consists in an improved pressing device for expressing the juice from the crushed apples.]

26,753.—D. De Forest Douglass, of Springfield, Mass., for an Improvement in Artificial Legs:

I claim, first, The piece, e, applied in combination with the stop, c, to pass between the said stop and the front part of the thigh piece, substantially as and for the purpose set forth.

Second, The employment of a mortise and tenon ankle joint, g h h, constructed as described, in combination with a spring applied substantially as described, for controlling the action of the foot and toe.

26,754.—Augustus Eckert, of Dayton, Ohio, for an Improvement in Pulmonometers:

I claim the application of the buoy, E, to the bottom of the floating chamber, C, for the purposes and substantially as set forth.

[This invention is an improvement in lung gages consisting in furnishing the bottom of the inner or measuring cylinders with a close compartment, which surrounds the same, for the purpose of steadying said cylinder in its motion, and causing it to remain stationary at any point to which it has been blown up, so as to indicate with accuracy the vital capacity of the lungs.]

26,755.—Howell Evans, of Philadelphia, Pa., for an Improved Inkstand:

I claim the reservoir, B, with the cup-shaped mouth, a, constructed substantially as described, and so hung to any suitable standard, A, and arranged in respect to the screw or screws, b, or their equivalents, that by operating the said screw or screws, the reservoir will be so tilted on the stand as to cause the ink to flow either to or from the cup-shaped mouth, for the purpose specified.

26,756.—H. B. Fay, of New York City, for an Improvement in Stoves:

I claim the arrangement of the coal fire-chamber, B, within the body or case, A, the flue, d, and the pipes, e, f, communicating respectively with the smoke pipe, F, and the interior of the case, A, for the purpose specified.

[This invention consists in combining a wood and a coal-burning stove in such a manner that either kind of fuel (wood or coal) may be used as desired, and the stove made to diffuse equally as much heat with either fuel as those stoves that are constructed especially for each.]

26,757.—E. B. Furlong, of Charlestown, Mass., and Thomas Leavitt, of Malden, Mass., for an Improvement in Weighing Apparatuses:

We claim the arrangement of the weight, q, operating substantially as set forth, in combination with a weighing mechanism, for the purpose specified.

26,758.—Josiah W. Gill, of Exeter, N. H., for an Improved Rig for Reefing Fore and Aft Sails:

I claim the above described arrangement and application of the sail gaff and cross-trees, with respect to the mast and the main boom sail and gaff, and not only providing the extra sail with furling lines or devices, but the main gaff with appliances by which it may be made to operate with respect to the mast; all substantially as specified.

26,759.—Samuel H. Gilman, of New Orleans, La., for an Improvement in Furnaces for Burning Bagasse:

I claim the combination of an auxiliary fire-chamber for burning wood, coal, or other suitable dense fuel, with the bagasse fire-chamber, substantially as and for the purpose set forth.

And I also claim so combining the auxiliary furnace and its ash-pit, with the bagasse furnace that both the fire-chamber and ash-pit of the auxiliary furnace shall communicate freely with the bagasse fire-chamber, substantially as and for the purpose specified.

26,760.—George Goewey, of Philadelphia, Pa., for an Improvement in Grain Fans:

I claim the employment of a sieve constructed as shown and described for the purpose of clearing grain.

26,761.—George P. Gordon, of New York City, for an Improved Printing Press:

I claim the combination of the rotating, reciprocating, inking roller frame, moving as described, upon a center, with the type or form bed, when such center and such bed shall always retain their relative positions towards each other; also the above combination in combination with the rotating ink-distributing table.

Second, I claim the combination of the rotating, reciprocating, inking roller frame, or equivalent, with the impression cylinder arms or their equivalents.

Third, I claim the rotating, reciprocating cylinder arms or their equivalents for holding and carrying the impression cylinder or its equivalent, in combination with the ways or bearers or their equivalent, for causing the impression cylinder or scraper or its equivalent to move evenly over the tympan and type in giving the impression.

Fourth, I claim combining with an elastic tympan a flexible metallic back or its equivalent, substantially as described for the purpose set forth.

Fifth, I claim the combination of a vibrating tympan with a vertical bed or a bed placed out of a horizontal position, when the impression shall be given by a cylindrical surface.

Sixth, I claim the combination of a vibrating tympan, constructed substantially as described, with the impression cylinder or its equivalent for the purpose specified.

Seventh, I claim giving to a vibrating tympan its periods of motion and rest, for the purposes specified, during the continued motion of the other parts of the press, substantially as set forth.

Eighth, I claim in combination with an impression produced by a cylindrical surface, the use of a rotating ink-distributing table.

26,762.—Samuel D. Hailey, of Jackson, Tenn., for an Improved Surveyor's Level:

I claim, first, Connecting the vertical tubes to the horizontal tube by means of a yielding joint, in any manner substantially as described.

Second, Combining a plumb and sights with the jointed tubes to keep them vertical, for the purposes set forth.

26,763.—Halvor Halvorson, of Cambridge, Mass., for an Improvement in the Manufacture of Candles:

I claim the employment, in combination with the tubular wick, of the inner lining, b, of sized, starched or glazed paper, or other sufficiently impervious material, substantially as and for the purpose described.

26,764.—James T. Ham, of Sinatobia, Miss., for an Improvement in Cotton Presses:

I claim inclining the press as shown for the triple purpose of allowing the sweep that turns the windlass under the end of the press to cause the ropes or chains to wind uniformly on the windlass without over-riding or chafing, and to allow the former to run back by its own gravity and spread out the levers for the next operation, as set forth.

26,765.—Hatsell Higgins, of Orleans, Mass., for an Improved Anchor-tripper:

I claim the rotary anchor fluke tripper and its holder applied and used substantially as and for the purpose set forth.

26,766.—Edward Holmes and Britain Holmes, of Buffalo, N. Y., for an Improved Machine for Dressing Staves:

We claim the combination of the straight roller, I, with the convex roller, J, so as to allow the edge of the stave, as it passes into the cutters, to drop below the center or highest part of the convex roller (or bed over which the stave moves), substantially as set forth.

Second, We claim the combination and arrangement of the straight roller, I, and convex roller, J, with the tilting frame, C, (including the cutter) for the purposes and substantially as described.

26,767.—Thos. Houghton, of Philadelphia, Pa., for an Improvement in Lamps:

I claim the top of the ferrule, A, with its oval and inclined opening, in combination with the oval and inclined flange or projection of the cap, B; the said flange and opening being formed and adapted to each other substantially as and for the purposes set forth.

26,768.—John A. Howland, of Providence, R. I., for an Improvement in Coal-sifters:

I claim the combination, with the sieve, D, of the center plate, f, center, g, boss, C, and shank, E, as and for the purpose shown and described.

[This invention consists in arranging in the interior of a barrel a center, which is supported by two or more arms that are attached to the inside of the barrel, and which center serves to support the sieve in such a manner that the latter can be rotated, and that it is guided by the center below and by the shank passing through a hole in the cover above.]

26,769.—Geo. W. Hubbard, of Meriden, Conn., for an Improved Molasses Gate:

I claim making the covering part adjustable, by means of the spring at each end, in the manner and for the purpose described.

26,770.—John W. Hudson, of Lafayette, Ind., for an Improvement in Seeding Machines:

I claim the teeth or share, D, provided with seed receptacles, h, fitted on the peds, a, as shown, provided with seed slides, o, and arranged to operate substantially as and for the purpose set forth.

[The object of this invention is to obtain a machine that may be used both as a roller and seeding machine; both functions being performed at the same time, or, by a simple adjustment, either performed separately. The invention also has for its object the varying of the working capacity of the device, as circumstances may require.]

26,771.—Johm Lane, of Lockport, Ill., for an Improvement in the Mole of Drain Plows:

I claim the combination, with the peculiarly-constructed mole, A, A', of the shoulders, c, c, which extend from the base of the mole slope backward as they rise, and terminate at a point about midway between the back of the stem or coulter and the rear end of the mole, substantially in the manner and for the purpose set forth.

[This invention consists in constructing the mole which forms the drain so that the front half of its length first forms what may be termed a minor arch-shaped drain, with compacted side walls; and the rear half of its length following after abruptly, instead of gradually, converts the minor drain into a major drain, or a drain of the proposed size. The mole, by being thus constructed, has an inclined wing or cutter formed on each side; and these wings, as the mole progresses through the ground, cut away the compacted earth which forms the side walls of the minor drain, and conduct the same in its compacted state to the top of the drain, and thus ensure a perfect pack of the drain at the top, and a filling up of the slit formed by the coulter stem with dirt which has already been, to a very great extent, rendered compact. This is certainly a very ingenious and valuable invention, as every one who is acquainted with this subject will readily perceive.]

26,772.—Robert Larter, Jr., of Newark, N. J., for an Improvement in Apparatus to feed Paper to Printing Presses:

I claim, first, Simultaneously moving inward a series of friction pieces from near the edge of the pile of paper, while a corresponding series of legs are pressed upon the pile at points nearer the center thereof, so as to cause the surface of one or more of the sheets at or near the top of the pile to rise in the space between the rubber and the legs; the upper one being raised more than the rest, and being thereby separated therefrom by a considerable stratum of air.

Second, I claim, in connection with hollow and vacuum legs, G', used in the manner substantially as shown, bevelling the basis of the legs to correspond with the inclined position assumed by the upper sheet, C, under the action of the friction pieces, M.

Third, I claim controlling the apertures between the hollow legs, G', or their equivalents, and a vacuum space; and also operating all the friction pieces, M, or their equivalents, by a partial rotation of a trunk, H, arranged substantially as and so as to produce the effects set forth.

Fourth, I claim allowing for variation in the height of the pile of the paper by providing slots, or equivalent "lost motion," in the connections, F F', or their equivalents, and determining the time of the rubbing action; and also the time of producing the vacuum in the legs, G', or their equivalents, by the contact of L, or an equivalent portion of the separating apparatus, with the pile of paper.

Fifth, I claim elevating the front edge of the sheet, after its separation from the pile, and pressing the same against a series of tapes, V, by a blast of air, arranged substantially in the manner shown, for the purpose of ensuring the forward motion of the sheet so soon as the vacuum in the legs, G', is destroyed. I also claim in combination therewith, effecting the complete separation of the upper sheet from the remainder of the pile by the deflection backward of a portion of the same air after its action on the front edge of the sheet, substantially as and for the purposes set forth.

Sixth, I claim securing a correct position of the front edge of the sheet by carrying it forward in advance of the time it is required to be delivered to the press, and by sliding forward the tapes, or equivalent supports, beneath it; while stops, Q, Q, or their equivalents, are presented to its front edge, for the purpose of turning it into a correct position if askew.

Seventh, I claim giving a side motion to the sheet to secure a correct position of one of its edges, by a continuous movement of the rollers, X, or their equivalents, as set forth.

Eighth, I claim reversing the side movement of the sheet so as to register by either edge at pleasure, substantially in the manner shown.

26,773.—Walter G. Mackay, of New York City, for an Improvement in Ventilating Sinks, Water-closets, &c.:

I claim the application of the ventilating pipe, A, at the upper bend of a bent pipe trap, and at its junction with the soil pipe, B, in combination with said trap and soil pipe, in the manner and for the purposes specified.

26,774.—Eli Manross, of Bristol, Conn., for an Improved Latch for Gates:

I claim, as a new article of manufacture, the latch for doors and gates consisting of a movable catch retained in place by a spring, and acted upon by a slotted plate and projection, substantially in the manner and for the purpose described.

26,774.—E. J. McCarthy, of New York City, for an Improvement in Machinery for Burring Wool:

I claim the combination of the feed rollers with the stripping plate and the draw roller, arranged substantially as described for the purpose set forth.

26,776.—Geo. A. Meacham, of New York City, for an Improvement in Buttons:

I claim, first, A button composed of the swelled or headed shank, A, A', and outer rim, B, so combined and arranged as to allow the rim to rotate and assume various angular positions, without twisting or straining the cloth, or fastening around the shank while being buttoned or unbuttoned, substantially as set forth and described.

Second, The teeth, a, arranged at the base of the shank, A, substantially as and for the purpose set forth.

26,777.—John Miner and Silas Merrick, of New Brighton, Pa., for an Improvement in Iron Railroad Cars:

We claim the employment of panel plates composed of a single piece of sheet metal struck up (whether such raised parts be ornamented or plain), and secured to the framework substantially in the manner and for the purposes described.

26,778.—Thomas Mitchell, of Lansingburgh, N. Y., for an Improved Machine for Boring Brush Blocks:

I claim, first, Attaching brush blocks, r, to the faces of a polygonal drum, F, having an intermittingly rotating movement, an intermittingly longitudinal sliding movement, and a reciprocating feed movement, in connection with rotary drills, p p (one or more) for the purpose of boring the blocks to receive the bristles.

Second, The arrangement of the racks, f g, on the cylinder, F, plate, H, bar, G, connected with the grooved bar, h, the stop bar, I, and slide, C C', operated as shown, and having the shaft, D, of the drum and cylinder fitted in them with the weight, M, attached for giving the necessary movements to the polygonal drum, E, for the purpose set forth.

26,779.—James Montgomery, of Baltimore, Md., for an Improvement in the Construction of Steam Boilers.

I claim making vertical, or nearly vertical, water tubes for steam boilers or other purposes with their lower ends, to which the heat from the furnace is applied at its lowest temperature, thicker for any desired portion of their length than their upper ends to which the heat is applied at its greatest intensity, in the manner and for the purposes substantially as set forth.

26,780.—Campbell Morfit, of New York City, for an Improvement in Compositions for Coating Candles:

I claim the covering of tallow stearine or other candles with paraffin or paraffin mixtures, substantially as set forth, for the purpose of hardening their surface and improving their appearance and burning qualities.

26,781.—Joseph R. Palmenberg, of New York City, for an Improved Frame for Ladies' Dresses:

I claim the arrangement and construction of ladies' figures in parts, and the manner of fastening the separate parts together substantially as described and for the purpose specified.

26,782.—Washburn Race, of Seneca Falls, N. Y., for an Improvement in Stove Registers:

I claim the application of the two damper plates, F F', to the register plate, A, when geared together, so as to open upward simultaneously from the apertures, E E, situated at the bottom of the said register plate through the connection of the single clutch lever, G, with the expansive rod, C, in combination with said clutch lever and expansion rod, substantially in the manner and for the special purposes specified.

26,782.—Henry Rasquin, of New York City, for an Improvement in Skate-fastenings:

I claim, first, Providing the skating iron with two pins or wedges, substantially as described.

Second, Providing the boot or shoe with a groove, F, and with spring bones, H and K, substantially as described and for the purpose set forth.

26,784.—Robert L. Reaney, of Philadelphia, Pa., for an Improvement in Gold Separators.

I claim the arrangement of the case, J, weight pan, K, shaft, I, rollers, H H', cental overflow tube, B, and exit pipe, L, as and for the purpose shown and described.

[This invention combines, in one machine, three distinct operations, viz: grinding the gold quartz or other mineral with which gold is found associated, and reducing the same to a pulverulent state; washing and carrying off the light particles which are mechanically held in suspension, by a stream of water acting upon them in a peculiar manner, and lastly, effecting, by means of grinders or crushers (which also act as agitators) and the action of the water upon the quartz, a more perfect amalgamation of the particles of gold than has yet been attained, and with great economy of time, labor and space. This invention will be understood by the above claim.]

26,785.—George W. Robertson, of Philadelphia, Pa., for an Improvement in the Waste-cocks of Hydrants:

I claim causing the "waste water" of a hydrant, paver-washer, or other similar hydraulic apparatus, to wash the joint produced at the junction of the plug with the upper part of the barrel of the waste-cock thereof, substantially in the manner and for the purpose set forth and described.

26,786.—F. W. Robinson, of Richmond, Ind., for an Improvement in Horse-powers:

I claim the peculiar arrangement of the pinions, c, bevel gears, C, shafts, D D', master wheel, K, pinions, E E', shafts, e e', gears, F F', pinion, G, shaft, H, cross bars, J J' K L, as and for the purpose shown and described.

26,787.—C. B. Rogers, of Norwich, Conn., for an Improved Machine for Cutting Moldings:

I claim, first, The use of rotary cutter heads, K K, provided with necessary cutters, and placed obliquely with the stick, E, to be operated upon when said stick is fed between or underneath the cutters, K K, with a combined rotary and rectilinear movement for the purpose set forth.

Second, The combination of the feed rollers and cutter heads, arranged for joint operation as described.

[This invention consists in the use of feed rollers and cutter heads, arranged obliquely with the stick, in such a manner that the feed rollers will impart both a rotary and a longitudinal rectilinear movement to the stick; while the cutters will act on the stick in a plane obliquely with it, and cut the spiral bead or beads thereon.]

26,788.—Wm. Schaubel, of Philadelphia, Pa., for an Improvement in Steam Boilers:

I claim the arrangement of the casing, A, with its coiled flue, G, chimney, H, and the outer casing, B, and inner casing, C, and tubes, I I, of the fire-box.

26,789.—J. A. Sheffer, of Rochester, N. Y., for an Improvement in Coal-sifters:

I claim the combination and arrangement of the rockshaft, H R a a, and ways, W W, with the riddle, B, and containing-box, A, in the manner and for the purpose substantially as set forth.

26,790.—Abraham Shultz and Daniel Shultz, of Reading, Pa., for an Improved Washing Machine:

We claim the hexagonal rubber, E, with the spiral cleats, O O', on the periphery, as set forth, in combination with the cross brace, B, and connecting rods, M M', attached to one crank or eccentric for imparting a double concentric oscillating motion to the tub, A, and the hexagonal rubber, E, when constructed, arranged and combined as and for the purpose described and set forth.

26,791.—Franklin Skinner, of New Haven, Conn., for an Improved Machine for Cutting Shavings for Mattresses:

I claim the combination of the two wheels, B and D, or their equivalents, with their appendages, when the whole is constructed and made to produce the result substantially as described.

26,792.—R. L. Smith and C. Smith, of Stockport, N. Y., for an Improvement in Machines for Finishing Leather:

We claim, first, The combination of the polishing tool, L, with a horizontally moving stock, I, and bar, K, arranged and operating substantially as shown and described.

Second, The arrangement and combination of the vertical feed-regulating screw, G, lever, H, and bar, E, as and for the purpose set forth.

Third, The arrangement of the horizontal feeding nut, M, screw, N, and shaft, r, as and for the purpose shown and described.

Fourth, The combination with the crank, A, and rod, O, of the movable rack, P, pinion and shaft, p q, whereby the length of stroke of the polishing tool may be changed at pleasure.

[The object of this invention is to obtain a machine whereby the length of the stroke or vibration of the tool, as well as the pressure of the same on the leather, may be regulated with the greatest facility; the face of the tool is also kept parallel with the face of the bed over which the leather passes, and the latter fed by an automatic mechanism, evenly and with a regular movement to the tool.]

26,793.—Samuel M. Smith and Caleb Winegar, of Union Springs, N. Y., for an Improvement in Drain Tile Machines:

We claim the relative arrangement for united operation of the screening box, B, tile-making box, C, screwing plunger, F, tile plunger, G, eccentric, d e, for operating said plungers, F G, pulverizer, A, and feeding shaft, D, substantially as and for the purposes set forth.

[With this arrangement, the operations of pulverizing, screening and molding the clay into tiles are performed in one machine, by a continuing revolution of the driving shaft; the pulverization occurring first, the screening second, and the molding third. The pulverized clay empties into the screening box; from there it is forced through the screens into the molding box, and from these through the tile molds. The arrangement being such that, while the clay is being screened at one end of the machine, pulverized clay is coming into the screening box at the other end, and screened clay is being forced out through the tile molds. This is a simple and perfect arrangement.]

26,794.—John Souther, of Boston, Mass., for an Improvement in Apparatus for Evaporating Saccharine Juices:

I claim, first, a portable steam ladle for boiling hot sugar cane juice from one kettle to another, or the finished sugar to the coolers, as described.

Second, I claim the ladle constructed with a valve in the bottom, to receive the cane juice, or sugar, and a hollow handle or spout, through which the contents of the ladle is discharged, the outer end of said spout being suspended at a fixed height, substantially in the manner and for the purpose described.

Third, I claim the combination of mechanism described, substantially in the manner and for the purpose set forth.

26,795.—Samuel Squire, of Brooklyn, N. Y., for an Improvement in Adjustable Balances:

I claim the dispenser, B, hydrostatic index scale, F, fluid column, C, and levers shown in Figs. 4 and 5, the whole constructed and arranged substantially as described.

26,796.—J. K. Staman, of Milfin, Ohio, for an Improvement in Cultivators:

I claim, in combination with the bows, A and D, arranged relatively as specified, and having their lower ends chamfered as described, the cultivating teeth or shares, P, and the connecting brace strap, Q, when the whole is constructed and arranged as before set forth, for the purposes specified.

26,797.—G. A. Stanley, of Cleveland, Ohio, for an Improvement in Machinery for Molding Candles:

I claim the mold-box, or sliding frame, E E, in a stationary frame, A B, in combination with the tip-stands, H, at the base of the stationary frame, by means of which, in the descent of the molds, the candles are discharged therefrom, as specified.

Second, I claim drawing the wick into the mold by means of the jaws, O P, and retaining the wick in its proper position in the mold, as described.

Third, I claim the blades, X in combination with the plates upon the jaws, P, for the purpose of severing the wick after it has been secured between the jaws, O P.

Fourth, I claim the blade attached to the rack, M, for the purpose of cutting off the butt end of the candles, and separating the sprue tallow from the bottom of the sprue box.

Fifth, I claim the candle rack, Q Q', and R R', arranged and operating substantially as described, for the purpose of removing the candles, after they are discharged from the molds.

Sixth, I claim the described sprue box of adjustable parts—1st, to retain the tallow, 2d, to effect the removal of the sprue tallow, as set forth.

26,798.—Geo. A. Stanley, of Cleveland, Ohio, for an Improvement in Machinery for Molding Candles:

I claim the arrangement of the blades, E, upon the bar, D, for the purpose of cutting off the butts of the candles, and scraping the bottom of the sprue box.

Second, I claim forming the ends and sides of the sprue box of the rectangular frame, H F G G', and removing the sprue tallow, by means of the movement of this frame, as specified.

26,799.—David Thain and Wm. Jackson, of Philadelphia, Pa., for an Improvement in Obtaining Fatty Matters from Residues:

We claim obtaining the fatty acid, and other fatty matter remaining in the "acid bottoms" by distillation, in contact with superheated steam, substantially as described.

26,800.—R. B. Thompson, of Galesburg, Ill., for an Improvement in Tanning:

I claim the combination and use of the several ingredients compounded in proportion, as described, for the purpose of tanning leather from hides, as set forth.

26,801.—Lawriston Towne, of Providence, R. I., for an Improvement in making Chain from Sheet Metal:

I claim, first, Forming that portion of the carrier in which the blank link is transported in such a manner that if can be made to turn on an axis which shall be coincident with the axis of the blank link upon it, substantially as described.

Second, The combination of the supplemental plate, or its equivalent, with a stop, H, or its equivalent, for the purpose of determining the extent of rotation which shall be given to the plate, F, and thus insure the proper presentation of the blank to the chain, substantially as described for the purpose specified.

26,802.—G. J. Wardwell, of Barnston, Canada, for an Improvement in Stone-dressing Machines:

I claim the combination of a "stunner," and cutter together, or in the same instrument; the stunner preceding the cutter in its action

both to "stun" the material for the cutter and to gage the depth of its cut, substantially as described.

I also claim the arrangement of the shafts, i and j, of the band pulleys, u, s, upon frames, v p, distinct from and pivoted to the bed frames, x r, so that said shafts may be brought to a horizontal position (nearly or exactly), when the machine is working in an inclined position, in the manner and for the purposes specified.

I also claim the arrangement and combination of the lever, L, shipping frame, M, pulleys, G and P, shaft, B, pinion, I, feed finger, K, stay finger, b, and sword, h', whereby the shipping frame and feed and stay fingers, are operated by one and the same movement of the shipping lever, substantially in the manner and for the purpose specified.

26,803.—A. A. Wilder, of Detroit, Mich., for an Improved Clapboard:

I claim the rounding or bevelling the lower edge of clapboards, siding, or ceiling, for the purposes set forth.

26,804.—W. F. M. Williams, of Augusta, Ga., for an Improvement in Bridle Bits:

I claim a bridle bit, constructed in any manner substantially as set forth and shown.

Second, I claim combining sliding levers with two bars in the mouth, and adopting this construction to any bit now known, substantially as and for the purposes set forth.

Third, I claim the combination of an elastic and leather strap, connected as shown, with the circular sliding lever, and the bar in the mouth, in the manner set forth and shown.

26,805.—M. P. Wilmarth, of Pawtucket, R. I., for an Improvement in Ring Spinning Frames:

I claim the construction of the ring with the upwardly projecting rim, a, substantially as described for the purpose set forth.

26,806.—O. D. Woodruff, of Southington, Conn., for an Improved Meat-cutter:

I claim the employment and arrangement of the revolving plate, K, within the case, A', with reference to the fingers, c, and cutter, a, operating substantially in the manner and for the purpose described.

26,807.—Edward Bagot (assignor to G. B. Gordon), of New York City, for an Improved Beer Measure:

I claim the combination of the two pipes, B C, applied to the beer measure, as and for the purposes set forth.

[The object of this invention is to obviate the difficulty attending the frothing of the beer as the latter is drawn from the barrel. This frothing of the beer, especially if it be new, causes a great deal of trouble and inconvenience in drawing beer by measurement for retailing, as considerable time elapses before the froth subsides. This invention consists in admitting the beer into the lower part of the measure and also pouring the beer from the lower part, by which arrangement the froth is prevented from forming in large quantities, and the froth that does form allowed to rise above the inner end of the discharge spout so that it may subside without being discharged from the measure.]

26,808.—Francis D. Ballou (assignor to himself and J. L. Nash), of Abington, Mass., for an Improvement in the Manufacture of Boots and Shoes:

I claim attaching, by sewing, the welt or strip of leather to the uppers of boots and shoes preparatory to lasting the same, thus enabling the work to be performed by sewing mechanism, substantially in the manner and for the purposes set forth.

26,809.—Henry Belfield (assignor to himself and Justice Cox), of Philadelphia, Pa., for an Improved Latch for Sliding Doors:

I claim the handles, D D, joined to the plates, C C, with the spring latch, G, or its equivalent, and the whole applied to a sliding door substantially as set forth, so that the force applied to either of the handles, for sliding the door open, may be the means of detaching the latch from the jamb, as specified.

26,810.—Theodor Blume (assignor to himself and W. W. Hamer & Co.), of Cincinnati, Ohio, for an Improved Machine for Facing Pulleys:

I claim the described arrangement of the grindstone, A, hinged frame, F, nut, G, post, H, spindles, K K', and adjustable bearing, L, the whole being constructed and combined in manner substantially as and for the purpose set forth.

26,811.—Seth Boyden (assignor to himself and H. H. Jaques), of Newark, N. J., for an Improvement in Machinery for Forming Hat Bodies:

I claim the fur director or plate, F, curved or bent, substantially as shown and arranged in relation with the cone, B, and picker, D, to operate substantially as and for the purpose set forth.

[This invention relates to an improved mode of directing or guiding the fur to the cone, whereby trunks and all other comparatively complicated appliances hitherto used for the purpose are dispensed with, and exceedingly simple and efficient device substituted therefor.]

26,812.—Geo. Bradley (assignor to Jacob S. Rogers), of Paterson, N. J., for an Improvement in the Cop Spinning Frame:

I claim the combination of the grooved tube, C C, and collar, E E', with the dead spindle and cop, A, B, when the whole is operated substantially in the manner and for the purposes set forth.

26,813.—Wm. B. Card (assignor to himself and John Sheny), of Sag Harbor, N. Y., for an Improved Alarm for Drawers:

I claim the slide, I, arranged with the bar, H, and knob-arbor or spindle, J, levers, F G, and stop bar, D, and used in connection with the alarm, C, substantially as and for the purpose set forth.

I further claim the slide bar, L, when arranged with the bar, H, of the slide, I, in connection with the projection, s, on the underside of the counter or table, M, as and for the purpose set forth.

26,814.—Orril R. Chaplin, of St. Johnsbury, Vt., assignor to himself and O. G. Hale, of Waterford, Vt., for an Improvement in Mowing Machines:

I claim making the cutter bar or holder, L, in sections hinged together, in manner and for the purpose substantially as specified.

And in combination with said making the cutter bar, I claim making the connection, F, of the tails of the cutters in sections hinged together and to a connecting rod, essentially as described.

I also claim making each tooth, l, situated at the junction or joint of each two sections of the cutter bar in two parts hinged together, constructed and applied respectively to the two sections, as and for the purpose specified.

I also claim combining with the cutter bar made in sections, connected as described, a stiffener, L, constructed and made to operate therewith substantially as described.

I also claim combining the lever, N, and the shaft, M, together and to the frames, A and B, substantially as specified, in order that, by means of simultaneous movements of the lever in backward and lateral directions, the cutter bar frame may be elevated and the stiffener impelled forward at one and the same time.

26,815.—Lewis S. Chichester (assignor to Henry G. Evans), of New York City, for an Improvement in Cotton Gins:

I claim, first, The employment or use of the flanged shaft, P, arranged relatively with the roller, E, guard plate, G, screen, H, and feed board, I, to operate substantially as and for the purpose set forth.

Second, The combining, in one piece, of the guard plate, G, screen,

Notes & Queries

H. and feed board, I, substantially as shown, for the purpose specified.

Third, The corrugated roller, F, in combination with the auxiliary smooth roller, F, and roller, C, with or without the elastic surface, D, arranged or disposed so that the roller, F, may serve in the capacity of a stripper to the roller, E, or both as a stripper and draw roller, as described.

Fourth, The employment or use of the discharging rollers, Q, R, applied to a roller cotton gin, and arranged to operate substantially as and for the purpose set forth.

Fifth, The employment or use of the guard plate, G, either vibratory or stationary, in combination with the rollers, E F and B, substantially as set forth.

22,816.—John Dick (assignor to himself and S. C. Hills), of New York City, for an Improvement in Sewing Machines:

I claim, first, The combination of a feeding dog attached to a lever working on a fixed axle, on which the feed wheel rotates, and a retaining dog carried by an arm rigidly secured to the said axle, substantially as described.

Second, The combination, with the lever which carries the feeding dog, of a crank, H, applied to slide across the end of a hollow shaft, G, a lever, I, applied within the said shaft, and connecting the said crank with a screw arranged transversely to the said shaft, and an index attached to the said screw, outside of a dial attached to the exterior of the said shaft; the whole applied and operating substantially as described for the purpose set forth.

26,817.—Henry C. Foote, of Fredericktown, Ohio, assignor to himself and C. Kilgore, of Chattanooga, Tenn., for an Improved Combined Watch-key and Calendar:

I claim the combined calendar and shield as a new article of manufacture, the same consisting of a shield, circular plates and split ring, as described.

[This invention consists in combining with a shield an adjustable circular plate; on the latter is inscribed the days of the months and days of the week, and on the former the days of the month, the whole forming an almanac which may be adjusted so as to readily indicate the day of the week or month; it forms also an ornamental pendant which, if made of gold or other metal, may be hung on a watch chain or ribbon, by a split ring or other suitable fastening, which will serve to keep the dial plate in place.]

25,818.—Franklin B. Hunt (assignor to R. D. Van Duersen and Ira B. Gibbs), of Cincinnati, Ohio, for an Improvement in Mills:

I claim, first, the reversible block, Q, secondary frame, M, and cylinder carrier, F G H, constructed and arranged for the use of different cylinders, substantially as described.

Second, In combination with the above arrangement of parts, I claim the feed plates, U, constructed and arranged to operate substantially as described.

26,819.—Joseph J. Knight, of Philadelphia, Pa., assignor to himself, Thomas Patterson and James Lyndell, of Bristol, Pa., for an Improvement in Corn Planters:

I claim the axle, C, with the sleeve, E, its ratchet wheels, F, operating the lever, G, the clutch box, H, operated by the lever, K, the latter being connected to a stud, Y, for operating the ratchet wheel, P, and also connected to the lever, W, on the shaft, X, for operating the plow teeth, H, when the whole of the parts are combined for joint action, as and for the purpose set forth.

26,820.—Wm. P. Patton (assignor to himself and Wm. Moyer), of Harrisburg, Pa., for an Improved Stopper for Preserve Cans:

I claim the peculiar combination and arrangement of the several parts, A B C D, or their equivalents, substantially in the manner and for the purpose set forth and described.

26,821.—William Smith (assignor to Smith, Park & Co.), of Pittsburgh, Pa., for an Improvement in Railroad Car Wheels:

I claim making railroad car wheels having cast iron rims, and hubs with a rim plate, either sinuous or otherwise, extending around and underneath the rim, the hub and rim being connected by wrought iron spokes, placed alternately at the outer and inner face or edge of the rim and hub, in the manner described for the purpose of distributing the bearing or pressure of the spokes, so as to make it equal on both edges of the rim and hub.

Second, Making the cast iron rim of railroad car wheels with a sinuous rim plate cast in one piece with the rim, and extending around the inner face of the rim, the rim plate being so shaped that both of its edges (following its windings) are of equal length to each other and also to the circumference of the outer face or tread of the wheel, for the purpose of securing an equal degree of contraction of the rim and rim plate, and at the same time strengthening and bracing the rim and supporting the strain of the wrought iron spokes.

Third, Also, the combination in railroad car wheels of a cast iron rim, having a waving or sinuous rim plate around its under or inner circumference, with a cast iron hub connected with the rim plate and rim by means of wrought iron spokes arranged alternately near the inner and outer face of the wheel, substantially in the manner described.

26,822.—L. A. Dole (assignor to himself and Albert R. Silver), of Salem, Ohio, for an Improved Tool for Cutting Round Tenons:

I claim, first, The arrangement of the flanged cylinder, A, face plate, D, radial rests, e e e, and cutter, f, in the peculiarly constructed adjusting ring, C, G, substantially as and for the purpose set forth.

Second, The combination of the right hand screw thread, k, formed on the inner circumference of the flanged cylinder, A, the left hand screw thread, l, formed on the circumference of the gage shank and the set nut, F, substantially as and for the purposes set forth.

[This is a very neat and simple tool. The end of the piece of wood on which a round tenon is to be cut is inserted into a hollow tube which has at its front end several radial rests and a radial cutter. The tool is revolved, and the stick being fed forward on the rests, has a perfectly round tenon formed on it by the cutter, the length of the tenon being gaged by means of an adjustable stop at the rear end of the tube. Mr. Dole also obtained a patent, through the Scientific American Patent Agency, last week, on a simple and good washing machine. This washing machine produces, by one movement of the hands, a lateral squeezing action, and an up-and-down rubbing action on the clothes.]

DESIGNS.

S. W. Gibbs, of Albany, N. Y., assignor to North, Chase and North, of Philadelphia, for a Design for Stoves.

Theodore W. Lillagore (assignor to Savery & Co.), of Philadelphia, Pa., for a Design for Fire-dogs.

ADDITIONAL IMPROVEMENT.

Addison G. Brush, of Great Bend, Pa., for an Improvement in Operating Churns. Patented June 15, 1858:

I claim, in combination with the rotating tread wheel, A, the vertical pins, a, vibrating levers, b b, and connecting rods, d, d, arranged and operating with the rock shaft which drives the churn-dashers, as specified.

E. P. J., of Vt.—To make a cheap telescope, procure

from an optician a 35-inch object-glass (that is, a convex glass which produces a focus of the sun's rays at the distance of 35 inches), and a 1-inch eye-glass (that is, a convex glass producing a focus at 1 inch). Employ a tin plate-worker to make two tin tubes, one 30 inches long, and about $1\frac{1}{4}$ inch in diameter; the other, 10 or 12 inches long, and its diameter such that it will just slide comfortably inside the larger. The inside of these tubes should be first painted, or otherwise lined with a dull black. At the end of the larger tube an ingenious workman will have no difficulty in securing the object-glass, so that no more than an inch diameter of it shall be exposed, and at the end of the smaller tube the eye-glass must be fixed. When the open end of one tube is inserted in the open end of the other, so that the two glasses shall be about 37 inches apart, a telescope will be presented which will magnify the diameter of objects 37 times; or, in other words, will make heavenly objects appear 36 times nearer. We need scarcely add that, with this instrument, all objects will appear inverted; but, with regard to celestial objects, this is of no importance.

C. T. M., of S. C.—You say: "Seeing an answer to a correspondent that a gunpowder engine would not work, for the reason that it would explode too suddenly, induced me to try the experiment. I took a tin can, and fixed the mouth of a pistol in it, with a gas cock to shut off to reload; and found, by firing very small quantities of powder in at a time, I could get up considerable pressure without bursting the can. Could that be used as a boiler in place of steam? I do not want to go to the expense of a model if it will not work." An interesting experiment; but the great difficulty is to prevent the cylinder from becoming foul with powder smoke.

J. I., of Iowa.—A circular saw which has become "buckled" by overheating can be straightened by the usual mode of hammering, or by cutting into the softened part, or by pressing out the buckle by a method described on page 379, Vol. X. (old series), SCIENTIFIC AMERICAN. It requires great care and a proper anvil to straighten a buckled saw by hammering, but it is the best method. It would require too much of our space to give you recipes for making such a number of varnishes as you desire for furniture and carriages.

M. M., of Mo.—When air is raised in temperature in a close vessel to 350° Fah., it exerts a pressure of 10.69 lbs. on the square inch. When air is heated to 491° Fah., it is doubled in volume at the same pressure; or, if confined to its original volume, it exerts a pressure of 15 lbs. on the square inch. In compressing air, it gives out its latent heat according to the pressure to which it is subjected; but we have no table of experiments which give the accurate degrees of temperature according to the pressures.

I. K., of Pa.—A belt for polishing oak and hickory spokes is made by coating the belt with glue, then dusting it over the entire surface with very fine emery, and allowing it to dry. Give three separate coats in this manner. Some persons mix the emery with the glue, and put the whole on at once with a brush. Be sure and allow it to dry thoroughly before you use the belt.

T. C. H., of Cal.—We have read of Dr. Collyer's discoveries in paper-making from straw, &c., but we are not minutely acquainted with the process. So far as we have been able to learn, we have thought it was similar to some of the processes used for making paper from straw in the United States. No patent has been taken out by Collyer in this country, but he has secured it in England, where he resides.

D. L. W., of Ind.—You are right about perpetual motion being as easily obtained by a magnet placed in a close vessel containing aqua fortis and iron as by any other mode. The magnet, however, will soon become an oxyd by the action of any free acid that may be in the bottle.

H. K., of —The atmospheric hammer to which you refer could compress air in a cylinder by its falling action, but no benefit could be derived from such an application, because no work could be performed by the falling hammer but the compression of the air. A galvanic battery is made of alternate plates of zinc and copper, arranged in pairs in cells or tumblers containing dilute sulphuric acid. All the plates are connected together in a circle with a thick copper wire.

J. N. V. L., of Va.—We do not remember having received your new theory in regard to the aurora borealis; but if we had received it, we should probably not have published it. We value new theories much less than we do new facts. If you will make any observations on the aurora at its next appearance, and will send us an account of them, we shall be pleased to give them a place in our paper. A gentleman in our office offers to furnish us with one new theory of the aurora borealis per day throughout the year.

F. L. G., of Conn.—You ask whether the metals gold, silver, copper and iron grow out. All the metals are simple substances, and the quantity of them on the earth does not vary (with the exception of the small amount which is added by the fall of meteoric stones), but portions of them are constantly being moved from one part of the earth to another. Iron situated near the top of a hill may be washed down by the water and deposited in new beds at a lower level. There are also animals so small as to be invisible to the naked eye, the bodies of which are covered with scales of iron, and they congregate in marshes in such inconceivable multitudes as to form beds of iron ore which will supply large furnaces for years. Beds of metal may grow, but the quantity of metal on the earth does not sensibly vary.

J. W. & N. G., of C. W.—You can cast your plow points as hard as steel on the surface by using iron molds. You must cool the surface of the metal suddenly, if you wish to make it hard.

R. E., of Miss.—Sufficient heat may be concentrated by a burning lens from the solar beam to heat as much air as will drive a small air engine, but the lens will require to be very large, and to be continuously shifted, in order to focus the rays. The apparatus would be impracticable for useful purposes.

T. D. W., of Ala.—India-rubber tubing is not used in conveying steam except on extraordinary occasions, such as for carrying steam to extinguish a fire. It may thus be used, as it can stand a temperature somewhat above 230° Fah. We do not know the pressure such tubing will stand when highly heated, but you can get it made to stand a pressure of 200 lbs. of water on the square inch.

R. W. H., of Conn.—We think such a pipe as you men- tion would be very useful in many cases. We suppose you are aware that steam hose is made strengthened with coiled wire inside, but this is neither metal pipe nor elastic.

W. H. S., of Ind.—There is no tool used for dressing millstones, known to us, called the "diamond pick." Millers have frequently much trouble in obtaining picks that will keep the edge well for dressing stones, and they generally attribute the failure to a want of skill in tempering. The great object should be the selection of good cast steel, as no skill in tempering can make a good tool out of a poor piece of metal. Your method of backing millstones will be acceptable for publication.

S. T. V., of N. Y.—By boiling hickory wood in oil it does not become "seasoned" according to the common meaning of the term; but it is rendered harder and is prevented from absorbing moisture. Unless great care is observed, however, to boil it for a very short period only, the fiber of the wood will be greatly injured. You can season your hickory quickly by submitting it to boiling in water for about 10 minutes, then allowing it to dry afterwards in a shed. Steaming would effect similar results, the heat to which it is submitted having the effect of coagulating the vegetable albumen in the sap.

Money Received

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, Jan. 14, 1860:—

S. & J. H. B., of Mo., \$35; G. McK., of Ill., \$25; G. D., of Ohio, \$25; B. J. L., of Mass., \$30; J. M. K., of Vt., \$25; J. A. S., of Wis., \$25; J. W. C., of Maine, \$30; D. G. F., of Wis., \$30; R. P. B., of Miss., \$35; I. W. K., of Cal., \$15; T. H. B. & Co., of N. Y., \$35; G. W., of Conn., \$30; C. A., of Ill., \$55; P. M., of Ill., \$65; J. G. P., of Pa., \$30; T. J. G., of Mass., \$25; G. W. D., of N. Y., \$30; I. E. P., of Conn., \$25; G. P., of N. Y., \$25; O. H., of N. Y., \$15; H. H., of Cal., \$10; A. H. C., of Wis., \$12; A. E. D., of Ill., \$20; D. W. M. L., of Iowa, \$30; F. D., of Conn., \$25; A. H., of Ill., \$20; J. L., of N. Y., \$30; G. P., of N. Y., \$30; W. B. & R. B., of N. Y., \$20; J. P. H., of La., \$25; W. C., of N. Y., \$55; W. A. P., of Vt., \$25; J. A., of La., \$30; J. H. T., of N. Y., \$50; C. & E., of Conn., \$25; P. & H., of Cal., \$35; C. E., of N. J., \$20; H. H., of Conn., \$27; F. & H., of N. Y., \$25; C. H. D., of Mass., \$30; T. S., of Conn., \$30; J. E. P., of Conn., \$55; C. M. S., of Conn., \$25; G. V. D., Jr., of Va., \$25; J. H. N., of N. Y., \$30; C. & P., of Ind., \$30; J. McC., of N. J., \$20; B. & F., of Pa., \$36; H. B. F., of N. Y., \$30; J. H., of R. I., \$30; W. B. B., of N. Y., \$30; E. H., of Cal., \$45; J. R. E., of La., \$35; R. W. J., of R. I., \$25; W. G. M., of N. Y., \$30; G. L., of N. Y., \$30; J. P. C. R., of N. Y., \$30; P. A., of N. Y., \$25; T. D., of N. J., \$25; J. B. T., of Ill., \$25.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Jan. 14, 1860:—

T. D., of N. J.; P. A., of N. Y.; J. B. T., of Ill.; S. R., of N. J.; N. C. S., of Conn. (2 cases); J. M. K., of Vt.; I. E. P., of Conn.; H. H., of Cal.; G. L., of N. Y.; G. W., of N. Y.; H. M., of N. J.; O. H., of N. Y.; J. P. L., of N. Y.; F. D., of Conn.; T. J. G., of Mass.; J. N., of N. Y.; R. W. H., of Ga.; J. C., of N. Y.; W. A. P., of Vt.; T. R. D., of N. J.; R. W. J., of R. I.; C. & E., of Conn.; G. W. D., Jr., of Va.; C. M. S., of Conn.; J. H., of R. I. (2 cases); W. H. L., of N. Y.; A. H. C., of Wis.; G. P., of N. Y.

Literary Notices.

THE GRAND HAVEN WEEKLY CLARION, from its central position between Detroit, Milwaukee and Chicago, has become one of the best mediums of advertising in the West. Published by H. S. Clubb & Co., Grand Haven, Mich.

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PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within 14 years can obtain a copy by addressing a note to this office, stating the name of the patentee, and date of patent when known, and enclosing \$1 as fee for copying.