ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WEEK ENDING FEBRUARY 19, 1861.

Reported Officially for the Scientific American.

*** Pamphlets giving full particulars of the mode of applying for patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

428.—Rufus Anson, of New York City, for an Improvement in Baths for Toning Photographic Pictures:

I claim the use of nickloride of mercury in combination with the above or similar ingredients (equivalent thereto) in forming a bath for toning photographic pictures.

429.—J. M. Bacon, of Ripon, Wis., for an Improvement in Seeding Machines:

I claim the arrangement of the seed box, D, the shaft, J, the wheels, a a, provided with cups and constructed on their periphery as described, and the discharge spouts, on each side of the wheels, with the bars, G, the troughs, H, and the cultivator frame, E, regulated and used as described for the purpose set forth.

430.—Louis Ballman, of Boston, Mass., for an Improvement in Sewing Machines:

I claim a gate or hinged bobbin support provided with journals for the pivots of the bobbin, in combination with a shuttle or bobbin case, the two being so connected that the journals can be moved out of the hollow of the shuttle, so that a bobbin may be removed therefrom, without detaching the support or gate from the shuttle, and the combination being substantially such as described.

And I also claim, in combination with a bobbin and a bobbin case or shuttle, an equalizing curve, constructed and placed substantially as described, and so arranged with reference to the bobbin and an eye through which thread is passed, that thread passing off of the bobbin and through the eye shall in its transit slide over the equalizing curve, the combination being substantially such as before recited to produce the effect before set forth.

431.—Hiram Barber, of Milpitas, Cal., for an Improvement in Gates:

I claim, in connection with the adjustable rails, B B′, the springs, G G, and plates, f f, arranged to operate substantially as and for the purpose specified.

[This invention relates to an improvement in that class of gates which are constructed and arranged with a view to admit of being opened and closed by a person in a vehicle or by a rider on horseback. The invention consists in the employment or use of adjustable guide rails on which the gate works in connection with springs and guides, whereby he gate when either in an open or closed state may be inclined so as to move by its own gravity in connection with an impetus given it by springs, and the gate opened and closed by simply actuating a lever which may be done by the driver of a vehicle or a rider on horseback.]

432.—Franklin Bisbee, of Scituate, Mass., for an Improvement in Masons' Trowels:

I claim the ferrule shaped and operating substantially as set forth, when combined with the handle and offset shank of a mason's trowel or other tool.

433.—Josiah Bishop, of Austin, Texas, for an Improvement in Machines for Extracting Cotton and Corn Stalks:

I claim the fingers, h k, either or both sets or series, when connected to a mounted frame, A, and operated by the draught movement of the same, substantially as shown, so as to have a backward and forward movement, and also an upward and downward movement, for the purpose specified.

I also claim, in combination with the fingers, h k, either or both sets or series, the cleaning bar, K, arranged relatively with the fingers, to operate as and for the purpose specified.

[The object of this invention is to obtain a simple and efficient machine for expeditiously eradicating or pulling up by the roots cotton and corn stalks, so as to render the soil free from stumps which are left by the usual process of cutting, and capable of being properly prepared for a succeeding crop. An engraving of this invention will soon appear n our columns.]

434.—Douglas Bly, of Rochester, N. Y., for an Improvement in Artificial Legs:

I claim the rounded or hemispherical termination of the leg at the ankle, with the recess, G, in the foot for the reception thereof, when combined and arranged with a joint bearing having a universal motion on a single center, substantially as and for the purpose shown and described.

I also claim the stop or projection, m, when combined with a corresponding recess in the shell of H, substantially in the manner and for he purpose set forth.

435.—J. M. Brahn, of Red Bank, N. J., for an Improvement in Railroad Switches:

I claim the post, D, with its hook, m, arranged as set forth, so as to lock the switch rail tie, c′, to the sleeper, d, in combination with the levers, F F′, arms, t t′, transverse shafts, G G′, and vertical arms, s s s s, all arranged and operating in conjunction with the horizontal levers, k k, h h, and k′ k′ h′ h′, substantially as specified for the purposes set forth.

[This invention relates to a novel improvement for automatically operating the switch rails of a permanent railroad, so that as the train of cars approaches the switch in either direction certain appliances on the locomotive will operate the switch rail, and switch the cars on the desired track, where the switch rails will be securely locked and held in the desired position.]

436.—Salem Copeland, of Worcester, Mass., for an Improvement in Guards or Fingers for Reaping and Mowing Machines:

I claim, first, Sliding the steel plate or face of a cast or malleable iron guard under downward projections on the body of the guard, substantially as and for the purposes set forth.

Second, I claim the combination of the curved and beveled projections, e e, on the steel plate, with the curved projections, c c, on the body of the guard, substantially as and for the purposes stated.

Third, I claim the combination of the steel plate or face, C, with the cast or malleable part, A, the parts being constructed and combined as and for the purposes set forth.

437.—Joseph Cragg, of Baltimore, Md., and Samuel Archbold, of Washington, D. C., for an Improved Surface Condenser for Steam Engines, &c.:

I claim, first, The form and general arrangement of the outside casing marked E, with the steam and water passages.

Second, The mode of making a water and steam-tight joint between the casing and spine plates.

Third, The mode of arranging the spine plates for the purpose of obtaining, with little cost, a large quantity of surface in a small space and a thorough circulation of the steam, water, or other elastic or non-elastic fluids using for the purpose specified, and apparatus as described.

438.—W. W. Cumberland, of Newark, N. J., for an Improvement in Hat Blocks:

I claim, first, The fastenings, G H I and J, attached to the sides of the center piece, A, in combination with the fastenings, G′ H′ I′ and J′, let into grooves formed in the other pieces of the block of a corresponding cross section and corresponding taper with the fastenings, G H I and J, the fastenings in the grooves being so adjusted in position that their inner surfaces shall come in contact with the inner surfaces of the fastenings, G H I and J, and their points come in contact with the projections on the opposite fastenings, at the same time that the sides of the fastenings, G H I and J, come in contact with the sides of the grooves, so as to wedge the fastenings attached to the center piece on three sides, and wedge the pieces of the block together and insure the proper position of the several parts of the block with regard to each other, substantially as described and for the purpose set forth.

Second, In combination with fastenings attached to the center piece, I claim the arrangement of one or more spring catches, having their upper ends bent back into the finger space, and so placed that the springs will be relieved from their corresponding notches in the side pieces by grasping the upper ends of the springs when the center piece is grasped, so that one or more of the spring catches can be released by the same hand of the workman that is used to withdraw the center piece while his other hand can be used to hold down the outside pieces of the block when he is withdrawing the center piece.

Third, In combination with the metal fastenings attached to the sides of the pieces, I claim preventing the points of the downward projections, K, of the fastenings attached to the center piece from wearing away the sides of the grooves in the blocks (when formed of wood) with which they come in contact, by means of a slot in the end of said projections, and a screw passing through the corresponding part of the fastenings in the grooves and secured in the wood in the bottom of the grooves, the smooth neck of which shall enter the slot and fit it on the the two sides when the parts are in proper position, substantially as described and for the purpose set forth.

439.—C. H. Denison, of Brattleboro, Vt., for an Improved Felloe Machine:

I claim, first, The adjustable plates, n p, provided with the pins, o q, when used in connection with the plate, G, and cutter head, F, as and for the purpose set forth.

Second, The combination of the adjustable semi-circular bed or bearing piece, I, and yielding bar, J, with the cutter head, F, plate, G, and bars, n p, provided with the pins, o q, all being arranged for joint operation as and for the purpose set forth.

[The object of this invention is to obtain a machine by which the inner sides of felloes for wheels may be very expeditiously rounded and the work done in a proper manner, both the sawed and the steamed and bent felloes being operated upon with equal facility. See engraving on page 353, Vol. III., of the SCIENTIFIC AMERICAN.]

440.—P. F. Dodge and W. S. Dodge, of West Cambridge, Mass., for an Improvement in Taking Photographic Pictures by Artificial Light:

We claim the combining with an artificial light, and one or more series of reflectors, of an intercepting medium or plate, when so arranged with respect to the object and the light and reflectors as to intercept or soften the dazzling rays from the light, and allow the unobstructed rays to pass from the light upon the reflector and thence upon the sitter, substantially as described.

We also claim the peculiar arrangement of the upper and side reflectors together, so that the side reflectors cast their reflected rays upon the object, while the upper reflector casts not only the rays thrown upon it by the light upon the object, but also throws upon the object the reflected rays from the side mirrors, all as set forth.

441.—Richard Donaldson, of Mount Nebo, Pa., for an Improvement in Lime Kilns:

I claim the arrangement of the conic cooler, F, with its rim or flange, f, guide rods, m, bladed levers, L, and lid, G, in combination with the kiln, the whole constructed and operating in the manner and for the purpose substantially as described.

442.—H. C. Drew, of Stockbridge, Mich., for an Improvement in Capstans for Plows:

I claim the arrangement of the spring rack, G, with the blank-sided driving gear wheel, D, pinions, E E, and drivers, F F, all as shown and described for the purpose set forth.

[This invention consists in a novel arrangement and combination of two or more drums or capstans, around which the chains pass that connect with the grabber, with pinion spur wheel and a large spur wheel, with the teeth on the latter extending only part of the way around its circumference, the whole being arranged in such a relation to the draught pole, to which the animals are attached, that they will not be compelled to walk over a tight chain, but so that the large spur wheel will act upon the drums alternately.]

443.—Peter Dunwald, of Corning, N. Y., for an Improved Churn:

I claim the axis, c, provided with the washer, 6, kept to the end of the pipe, 3, by a spring, 7, said axis, c, screwing into the socket, 4, on the dasher, b, as and for the purposes set forth.

444.—B. H. Elmore, of Richmond, Ind., for an Improvement in Corn Planters:

I claim the combination of slides, U and W, and spring valve, V, with strap, S, slide, O, cam, N, shaft, J, and wheel, H I, the whole being constructed and operated substantially as set forth.

445.—S. T. Field, of Worcester, Mass., for an Improved Process for Manufacturing Wooden Eave Troughs and Piping:

I claim the mode or process described of manufacturing wooden eave troughs and material for tubular conductors at one and the same operation, and from the same stick of timber.

446.—A. L. Fleury, of Philadelphia, Pa., for an Improvement in Tools Used in the Manufacture of Iron:

I claim a hollow stirring tool, A, provided with a removable cap, B, and otherwise constructed substantially as shown and described.

[This invention consists in a tool for the introduction of salts or other solid substances, or liquid or gaseous matters, among the iron or ore in a puddling or other furnace or fire used in the manufacture of iron.]

447.—L. P. Garner, of Ashland, Pa., for an Improved Machine for Breaking Coal:

I claim the combination of the toothed rotating face plate, C, and toothed cylinder or roll, H, the whole constructed and operating as described, for the purpose set forth.

448.—J. K. Gingrich, of North Annville, Pa., for an Improvement in Plows:

I claim the arrangement of the driving wheel, L, elevating rod, P, swinging rod, N, connecting rod, L′, crank, h, clearer, k, beam, G, rod, h, crank, I, spring, J, and handles, F F′, with the plow body, A A′ B B′ C D D′, as and for the purpose shown and described.

[This invention and improvement in plows consists in a novel mode of forming and putting together the several parts composing the body of the plow, whereby the front cutting edge of the landside may be removed and reversed when an edge becomes worn out, and this cutter, with the landside wing, may be attached to the moldboard without using bolts, pins or screws. It also consists in a novel means of transferring the draught from the front end of the beam to the back part therof behind the plow standard, and of adjusting the draught bar at this point and giving to it a yielding motion. It further consists in the employment of a self-cleaning device for preventing the plow from clogging with weeds, &c., at the point where the standard connects with the beam.]

449.—R. Goldenblum and F. Steiner, of East Hampton, Mass., for an Improvement in Compositions for Waterproofing Leather:

We claim the composition made of fish oil, india-rubber dissolved in spirits of turpentine, petroleum, rosin, pitch, beeswax, tallow, common soap and lard, as described.

[The object of this invention is to produce a composition which, when applied to leather, will preserve the same, and at the same time make it perfectly impervious to water.]

450.—J. C. Gray, of Frankfort, Ind., for an Improvement in Beehives:

I claim the described arrangement of bee chamber, A, pedestal, B, mother trap, C, mineral floor, E, having the described upward and downward apertures, F G, and breeding boxes, H, whose floors, J, are elevated from the floor, E, by metallic rims closely fitting the said floor, in the manner and for the purposes set forth.

451.—John Griffin, of Louisville, Ky., for an Improvement for Changing the Speed of Steam Carriages:

I claim the arrangement, essentially as shown, of the steam cylinder, e, hung on trunnions, f, in connection with the reciprocating frame, F, air pump, G, pitmen, H′ I′, and gearing, l m, whereby the speed of the carriage may be changed from fast to slow, and vice versa, as occasion may require.

452.—E. A. Hearne, of Lowndes County, Ala., for an Improvement in Cotton Cleaners:

I claim a revolving drum armed with a series of paddle-shaped beaters, arranged in straight lines all around the drum, combined with a central feed hole and discharge spouts, situated near each corner on the back side of the box the drum revolves on, as substantially described.

453.—B. F. Hebard, of Neponset, Mass., for an Improvement in Burning Fluid Compositions:

I claim the composition of fusil oil, kerosene and spirits of turpentine, and its combination with a perfuming essential oil, as set forth.

454.—Goodrich Holland, of Willimantic, Conn., for an Improvement in Machines for Sorting Silk and Other Thread:

I claim the combination of the rocking frame, J, and weighted tumbler, n o p, with the roller, N, and bobbin, C, in the manner substantially as shown and described.

I also claim providing the periphery of the roller, N, with a screw thread, m, as and for the purposes set forth.

The combination of the screw-threaded roller, N, and a chaser, h, with the roller, M, in the manner substantially as shown and described, so that, when the size of the passing thread increases, the roller, N, and its screw, m, will be rotated and carry the chaser out of the screw, and thereby cause the stoppage of the thread-winding bobbin, all as set forth.

455.—Edward Holmes and Britain Holmes, of Buffalo, N. Y., for an Improved Stave Machine:

We claim, first, Connecting the cutter frame, G, to the stationary or gear frame of the machine, by means of flexible or yielding connections, H and I, so as to admit of the oscillation or movement of the cutter frame in any direction, according to the peculiar requirements of each stave to be dressed, substantially as set forth.

Second, We claim the arrangement of the flexible mouthpieces, P and P′, in the cutter frame, G, substantially as described, in combination with the flexible connection of said cutter frame to the stationary or gear frame of the said machines, as set forth.

456.—M. R. Hubbell, of Wolcott, Vt., for an Improved Vegetable-cutter:

I claim the knives, C D E F, and platform, b, carried in a reciprocating frame, and arranged to operate in connection with the hopper, G, and crossbar or partition, H, substantially as set forth.

457.—J. W. Hyatt, Jr., and I. S. Hyatt, of Chicago, Ill., for an Improved Knife-sharpener:

We claim the combination of the wheel, D, and springs, J J, or equivalent pressing device, with the wheels, G G′, in the manner shown and described.

[This invention is a rotary knife-sharpener, intended to operate upon both sides of the edge of a knife at one and the same time. The invention consists in the employment of twin wheels or cylinders mounted in bearings in a suitable frame, and operated upon by a spring or springs, so that their peripheries will be made to touch each other; and also operated by a large smooth-faced wheel, whereby they receive their rotary motion in opposite directions; said twin wheels or cylinders are to be made of stone, or to have their peripheries thickly covered with a composition containing emery, so that, when a knife is placed between them, they being rotated, it will be operated upon by each wheel, and its edge will be ground uniformly on each side at the same time.]

458.—D. A. Johnson, of Chelsea, Mass., for an Improvement in the Mode of Uniting the Spokes and Felloes of Wooden Wheels:

I claim as new in coupling spokes with the parts of felloes of wooden wheels, by means of a metallic band, in the manner described, at each or any of the spokes, and conical pin or wedge for expanding the end of the spoke, constructing said band with an hour-glass-shaped cavity for reception of the spoke, and making the band to cover or overlap the outer end of the spoke, substantially as shown and described.

459.—Daniel Kaufman, of Boiling Spring, Pa., for an Improved Broom:

I claim the employment of clamps, A, consisting of two plates, a b, screws, c, and rings, d, in combination with the slotted end of a broom handle, B, constructed and operating as and for the purpose specified.

[This invention consists in the arrangement of clamps consisting of two plates, the ends of which are made to slide one into the other, and which are united and fastened to the broom by means of screws screwing from opposite sides into rings, in combination with a handle the inner end of which is slotted to receive one of said rings in such a manner that, by means of said clamps, the broom can be fastened to the handle with ease and facility.]

460.—J. P. Kenyon, of Brooklyn, N. Y., for an Improvement in Hydrants:

I claim, first, The arrangement of the chamber, J, central tube, L, shoulder, o, or its equivalent, with the plunger, H, provided with the chamber, K, packing, M, and tube, G, the latter being in communication with the chamber, J, tube, F, and spout, D, substantially as and for the purpose set forth.

Second, The handle, E, crankshaft, C, and yoke, c, when used in connection with the plunger, H, chamber, J, tube, L, and their concomitant parts, all arranged for joint operation as set forth.

461. J. G. Leffingwell, of Newark, N. J., for an Improvement in Gas Cocks:

I claim the combination of set screw or screws and lever with a gas cock, constructed substantially in the manner and for the purpose specified.

462.—R. R. Lewis, of New York City, for an Improvement in Vapor Burners for Heating, &c.:

I claim the burner composed of the inner and outer perforated tubes, A B, the disks, a a, and the granulated mineral filling in the annular space between said tubes, the whole combined substantially as and for the purpose specified.

463.—G. G. Lobdell, of Wilmington, Del., for an Improvement in Railroad Car Wheels:

I claim, in single plate wheels, the construction of the flanch, D, with an inner rib, E, arranged and employed in relation to the said flanch and the remaining portions of the wheel, in the manner and for the purposes described.

464.—W. A. Ludden, of Brooklyn, N. Y., for an Improvement in Smoking Tubes:

I claim a telescopic smoking tube, composed of a sliding tube or shell, A, perforated piston or tube, B, and mouthpiece, C, the whole made as shown and described.

[The object of this invention is to provide the means for smoking fine cut tobacco, commonly known as Turkish tobacco, put up in charges of a peculiar shape and construction in a convenient and agreeable manner.]

465.—J. G. Manley and F. Wedge, of Zanesville, Ohio, for an Improved Earth-boring Machine:

We claim, first, The arrangement of a screw shaft, D, with a slip coupling, F G, in combination with an auger, M N O, substantially as and for the purposes set forth.

Second, The combination of a screw shaft, D, of an auger, M N O, with a swinging nut, A, and a frame, P C, substantially as and for the purposes set forth.

[This invention is for boring holes for the insertion of fence posts and analagous purposes. The particular objects of the improvements are to

adapt the instrument to bore vertical holes on hill sides or in sloping or uneven ground, and to insure the thorough removal of the loose earth from the hole in the act of withdrawing the auger.]

466.—J. B. McIntosh, of Girard, Pa., for an Improvement in Machines for Loading Hay:

I claim the employment of the cam, P, constructed and operating as described, in combination with the tooth bars, b, to discharge the hay on to the endless apron, O, in the manner and for the purpose specified.

Second, I also claim the arrangement of the frame, N′, with the adjustable hood, z, in combination with carrier, N, and endless apron, O, in the manner and for the purpose specified.

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

I claim the feeding apparatus as described, in combination with the series of bits, substantially as and for the purpose set forth.

468.—Charles Monson and Stillman Moore, of New Haven, Conn., for an Improvement in Gas Burners:

We claim the use of the double tubes, A and B, so as to be readily adjusted in their rotary without changing their longitudinal position, when constructed, arranged and fitted as and for the purpose substantially as described.

469.—Daniel Moore, of Brooklyn, N. Y., for an Improvement in Firearms:

I claim, first, The gudgeon, c, provided with a head, and taking the semi-circular notch in the projection from the barrel, in combination with the spring, d, and the ribs and grooves, 1 and 2, for the purposes and as specified.

Second, I claim the slide, i, formed as a fork, and provided with the perforated sole piece, 3, and semi-circular groove, to take the flanged base of the cartridge, as set forth.

470.—Peter Murray, of Detroit, Mich., for an Improvement in Steam Engines:

I claim constructing and furnishing the cylinder of the engine with a system of separate induction passages, ports and valves by which the superheated and ordinary steam are admitted separately to the cylinders, substantially as and for the purpose specified.

471.—L. M. Parker, of Shirley Village, Mass., for an Improved Fruit-gatherer:

I claim my improved fruit-picker as made of a series of wires, bent and arranged in manner and connected with a shank or pole socket, substantially as specified.

472.—Hiram Powers, of Florence, Italy, for an Improved Punching Machine:

I claim the shoulder, a, and cog, b, of the lever, acting in combination upon the notched shaft, No. 3, in which the punch, shaft or cutting instrument, c, is inserted, operating as specified and described, for punching, stamping and cutting metal and other hard substances.

473.—Daniel Ruggles, of Barras, Mass., for an Improvement in Brakes for Sewing Machines:

I claim of a frictional brake, with suitable levers, and the pin or key, d, in combination with the driving balance, or other rotating wheels, and the table of a sewing machine, substantially as and for the purposes specified.

474.—W. C. Salmon and G. F. Bliss, of Placerville, Cal., for an Improved Machine for Upsetting Tire:

We claim the combination of the stationary and movable bed plates, A′ and B, their clamping dogs, E and F, and jaws, D and D′, as set forth, with the spring, G, sector, H, and cam, J, with its lever, J′, all arranged and operating in the manner and for the purposes set forth.

[This invention consists in a combination of stationary and movable bed plates, having clamping jaws on them for grasping and holding the tire securely, with a sector and cam lever for shrinking the tire after it is properly clamped to the beds, and a spring which throws the movable jaw back after it has been acted upon by the cam and sector.]

475.—Gelston Sanford, of New York City, for an Improvement in Machines for Treating Vegetable Fiber:

I claim the arrangement of the feed rollers, B B, the brushes, the belts, D D, armed alternately with teeth and scrapers, as shown, and the carrying rollers, E, the whole being also arranged to operate in reverse directions at will, as set forth.

476.—S. T. Savage, of Albany, N. Y., for an Improvement in Stoves:

I claim the employment of the base burning chamber, B, external case, A, and partitions extending from x to x′ and from z to z′ arranged as represented, whereby an indirect draft is produced around the front, the sides and the back of the stove, in the manner and for the purpose specified.

477.—H. G. Scofield, of North Stamford, Conn., for an Improvement in Sewing-work Holders:

I claim the open-ended buckle, C C′ G, as a new article of manufacture, when adapted to receive the edge or a fold in the cloth, B, to allow it to be drawn forward at will and to be introduced and removed, substantially as and for the purpose set forth.

478.—Jacob Shavor and A. C. Corse, of Troy, N. Y., for an Improvement in Gridirons:

We claim the downward projecting side, D′, and the downward projecting side, D, in combination with the reservoir, c, as described and set forth.

479.—P. B. Sheldon, of Prattsburgh, N. Y., for an Improvement in Roll Blotters:

I claim the combination of the two rollers, a a, arranged in a suitable holder, b c f, either with or without the supplementary roller, h, substantially as and for the purpose specified.

480.—Josiah Shephard, of Columbia, Texas, for an Improvement in Cotton Scrapers:

I claim, first, The curved runners, C C, arranged and constructed as described, and in combination therewith the scraping plates, D D, when attached to the runners by pivoted arms, d d, brace rods, g g, and bolts at c c, substantially as and for the purposes set forth.

Second, I claim the jointed beams, E E, carrying plates, k k k′ k′, and otherwise constructed and arranged, as and for the purposes specified, when combined with the runners, C C.

This invention consists in attaching to two curved runners two scraping wings which scrape the sides of the rams and leave them free from weeds, said scraping wings being so attached to said runners that they may be readily adjusted so as to increase or diminish the space between their front ends. It further consists in the employment of a frame, carrying plates which are curved inward, pivoted to the front standards of the aforesaid runners, and working between said runners for the purpose of earthing or throwing earth about the roots of the plants during the operation of thinning or scraping.]

481.—J. H. Simonds, of New York City, for an Improved Hot Air Register:

I claim the attaching of the racks, D, to the slide, E, at points substantially as shown, so as to admit of the sectors, C, gearing into the racks, D, and at the same time admit of the inner edge of the slide serving as inner bearings for the journals, a, at one end of the valves, as set forth.

[Registers for hot air and venti-ducts, as hitherto constructed, have had their slats or valves so arranged as to work entirely within a box which projects within the flue or ducts, and serves as a great obstruction to the same. The object of this invention is to obviate this difficulty and also to obtain a better means than usual for operating the slats or valves, and keeping them in proper position within the box.]

482.—J. B. Smith, of Winfield, N. Y., for an Improvement In Harvesters:

I claim the arrangement of the removable inclined bar, T, with the shoe, S, and roller, V, as shown and described.

483.—W. H. Smoote (assignor to himself, Franklin Taylor, C. A Nelson and Montreville Cornell), of Prince William County, Va., for an Improved Method of Making Wooden Vessels of Staves:

I claim forming barrels, casks, and other vessels of wood without external hoops, by the mode described and set forth and for the purposes mentioned.

484.—W. W. Snow, of Jersey City, N. J., for an Improvement in Car Wheels:

I claim uniting the hub and rim of a car wheel by two plates, the front one being corrugated near its perimeter so as to cross the rim or tread m a waved line, and the back plate being convex and uniting with the flange, and the whole constructed substantially as set forth and for the purpose specified.

485.—James Spear, of Philadelphia, Pa., for an Improvement in Cooking Stoves and Ranges:

I claim the combination of the sifting and ash drawers, A and B, with the curved or guide plate, D, when used in connection with a stove or range in which the oven extends under the fire grate.

486.—P. H. Standish, of Pacheco, Cal., for an Improvement in Harvesters:

I claim the arrangement of spring, f, wedge, d, and guide, I, with the frame, A, shaft, F, pallet bar, H, and scolloped wheel, E, in the manner and for the purposes set forth.

[This invention relates to certain improvements in the sickle-driving mechanism, which is of that class having a serpentine cam and pallets. The object of the invention is to allow a certain degree of play or yielding movement to the axes of the pallets, and, at the same time, render the pallets easily adjustable, so that they may be readily thrown in and out of gear with the cam.]

487.—F. J. Steinhauser, of Lancaster, Pa., for an Improvement in Snow Plows:

I claim the circular breakers, A, and shovels, B, together with the ice breakers, F and G, as arranged in combination with the ordinary snow plow, D, for the purpose of removing snow and ice from railway tracks.

488.—William Stewart, of Philadelphia, Pa., for an Improvement in Mills:

I claim the construction of the grinder with a series of conical toothed rings or concaves, E, placed one above the other within an exterior conical case, D, and a series of conical, grinding, toothed rings, C, placed one above the other upon a cone, B, the whole arranged and operating in the manner and for the purpose shown and described.

489.—J. R. Supplee, of Bridgeport, Pa., for an Improvement in Radiators:

I claim having the openings at the under side of the drum, A, of the conical or straight pipes, B B, made larger in proportion to the distance from the cold air flue, F, also similar openings around the sides and ends of the drum, thereby equalizing the draft through all the heating surface, substantially as described.

490.—William Taylor, of Berlin, N. Y., for an Improvement in Guides for Laying Cord:

I claim the hinged cording device constructed and operating substantially as described, and for the purpose set forth.

491.—Enoch Thomas, of Beverly, Va., for an Improvement in Presses:

I claim, first, The movable boxes, C, and collars, T, combined with the cam shaft, D, and wheels, F, in the manner and for the purposes set forth.

Second, The use of the detached followers, R, between the cams, E, and follower, H, in the manner and for the purposes set forth.

Third, The combination of the ears, J, toothed boxes, K, and spring ratchet clamps, L, operating to retain the follower, H, as explained.

Fourth, The oil plates, S, interposed between the cams, E, and followers, H or L, for the reduction of friction, as set forth.

[The leading object of this invention is to produce a continuous movement of the follower to any extent desired, by successive revolutions of the cam shaft. It is thought to combine the most important advantages which are regarded as peculiar to the cam and screw press respectively. The invention also consists in appliances for overcoming friction, facilitating the insertion and removal of material, and adapting the press to work equally well with a small or a large quantity.]

492.—W. H. Topham, of New Bedford, Mass., for an Improvement in Lamps:

I claim the arrangement of the flanched screw socket, H, and disk, c, with the band, b, tubes, D E F, and cap, I, in the manner and for the purpose shown and described.

The employment or use of the double armed spring, K, in combination with the cap, I, and spring, L, in the particular manner shown and described, for the purposes set forth.

I claim the arrangement of the rings or plates, G, to extend from the plate, c, to the inner surface of the cone or deflector, J, so as to inclose the flame, all in the manner and for the purposes shown and described.

[The object of this invention is to supply the flame with a requisite amount of oxygen to support proper combustion and to present the air to the flame in a warm state, so that the flame will not be cooled thereby.]

493.—E. P. Torrey, of New York City, for an Improvement in Ice Cream Freezers:

I claim the arrangement of a rotary agitator, F, or its equivalent, in combination with a can, A, and tub, D, of an ice cream freezer constructed and operating substantially in the manner and for the purpose specified.

494.—J. H. Totman, of Plattsburgh, N. Y., for an Improved Method of Hanging and Securing Reciprocating Mill Saws:

I claim the employment of the front gauze, c, the rear gauze, c′, the hook, d, and key, e, when these devices are constructed and operated in the manner and for the purpose specified.

495.—J. S. Wethered and S. E. Woodworth, of San Francisco, Cal., for an Improved Process for Treating the Ores of Precious Metals:

I claim the above-described process of treating ores, consisting of the use of steam in combination with a mixture of pulverized ore, carbon, a solution of salt, soda ash and mercury, in the manner and for the purpose as set forth.

496.—S. H. Whitmore, of Cincinnati, Ohio, for an Improvement in Steam Engines:

I claim, first, The above-described apparatus consisting of the sliding bar, the catches, hooks, plungers or lifters, and rod, 13, combined and arranged substantially as described, for operating the cut-off and exhaust valves of a steam engine.

Second, The application to the above apparatus, arranged substantially as described, of an automatic governor operating through the rod, 13, to trip the cut-off valves at any desirable point in the stroke.

Third, The reciprocating bar, 11, carrying the stationary catches for opening the valves, and by its return movement opening the exhaust by impinging against the cranks, 6 6, substantially as described.

Fourth, The plungers with their cylinders or slotted arms jointed to the rod, 13, for disengaging the hooks, 8 8, from the catches, 9 9, constructed substantially as described.

Fifth, The hooks, 8 8, when combined with the cranks, 6 6, and operated in connection with the catches, 9 9, substantially as described.

Sixth, The independent adjustable valve seat, 19 19 19, in connection with the oscillating valves, 1 1, substantially as described.

Seventh, The hollow-throated valves, 1 1, when combined with the cut-off arrangement described in the first claim.

497.—John Whitten, of Boston, Mass., for an Improvement in Fracture Apparatuses:

I claim an improved splint as made not only with thigh and calf rests, B C, hinged together, but with a footpiece, H, and straining screws, and an adjustable thigh slide, L, and crotch cushion, M, applied to the two rests, substantially in manner and so as to be capable of operating as described.

498.—R. A. Wilder, of Cressona, Pa., for an Improved Machine for Breaking Coal:

I claim, first, So constructing and arranging a rotating toothed disk in a coal-breaking machine as that it shall serve the purpose of a coal breaker as well as form one of the sides of the hopper into which the coal to be broken is thrown, substantially as described.

I also claim, in combination with a rotating toothed disk, forming one side of the hopper, a perforated plate or plates, F, forming the bottom of said hopper, substantially as described.

I also claim hinging the bottom of the hopper, F, at its middle, and adjusting it at its ends, for the purpose of passing coal to or from the center, or to or from the larger and smaller openings in it, so as to break the coal of greater or less sizes, substantially as described.

I also claim, in combination with the rotating disk and the perforated bottom, the curved shroudings, E, as and for the purpose described.

I also claim constructing and operating a coal-breaking machine so that the teeth or knives of one rotated vertical disk shall pass the teeth or knives of the other rotated vertical disk in opposite directions, so that they may strike the coal that comes between them on opposite sides at the same moment, for the purpose of cracking the coal into pieces and preventing the waste by crushing or pulverizing, substantially as described.

499.—Frederick Wilford, of Eagle, Wis., for an Improved Apparatus for Walling Wells, Cisterns, &c., with Grout:

I claim, first, A hollow cylinder, to be constructed in two main parts and hinged together, in combination with the movable or swinging stave and the stretchers or extension braces, to be constructed and operated substantially as described and set forth; and—

Second, The movable or swinging stave in combination with the stretchers or extension braces and connecting rod; the whole to be constructed and operated substantially as described and set forth.

500.—W. T. Williams, of New York City, for an Improvement in Animal Traps;

I claim the flaps, d d, and levers, f f, in combination with the supports, e e, in the manner and for the purposes specified.

And I claim the valve, c, in combination with the flaps, d d, and supports, e e, acting in connection with the receptacle, a, as and for the purposes set forth.

501.—Charles Wilson, of Brooklyn, N. Y., for an Improvement in Tightening Ropes on Cotton Bales:

I claim the arrangement of the windlass, C, and attached hollow cone, D, with the sliding cone, F, weighted lever, I, fork, G, collar, C, and shaft, B, in the manner and for the purposes shown and described.

[The object of this invention is to obtain a machine which may be readily connected to the ropes of a cotton bale, and power applied effectively for drawing the ropes tightly around the bale after it is compressed and before its removal from the press—the parts being so arranged that they will be under the complete control of the operator, and the device rendered capable of being manipulated with the greatest facility.]

502.—A. H. Wood. of Boston, Mass., for an Improvement in Gas Burner Regulators:

I claim a regulator for gas fixtures, gas burners, &c., constructed and arranged substantially as described, so as to constitute not only a throttle valve but also a receptacle or basin susceptible of removal for cleansing, for receiving the condensed matters or tarry products evolved from the gas.

503.—D. B. Woodward, of Ercildoun, Pa., for an Improvement in Horse Rakes:

I claim the rocking frame, A1, having the teeth, i i i i, applied to it in the manner described, in combination with the rockshaft, O, cam wheels, D D, bar, B, and ratchet wheels, A2 A2—these several parts being constructed and arranged for joint operation in the manner and for the purposes specified.

504.—P. H. Woolsey, of Andes, N. Y., for an Improvement in Feeding Tapering Lumber to Rotary Planers:

I claim providing the swinging or moving frame, E, with a yielding joint at E′, the same operating therewith substantially in the manner described and for the purpose specified.

505.—Arcalous Wyckoff, of Elmira, N. Y., for an Improved Machine for Cutting Wooden Troughs:

I claim the combination and arrangement of two annular cutters or cutting cylinders, B C, one being of larger diameter than the other, and both cutting concentrically, for the purpose of forming a succession of gutters or eaves troughs, finished inside and outside from each piece of plank or scantling, the outer portion of one being taken from the core of the next, while a crescent-shaped piece is saved between the kerfs of the two cutters, to be utilized, substantially as specified.

I also claim, in combination with the described cylindrical cutters, B C, edge cutters and trimmers, e e and f f, arranged substantially in the manner and for the purposes shown and described.

I also claim the arrangement of the wings or flanges, d d, extending back upon the cutting cylinders from the heels of the cutting edges, i i, in combination with the said cutting edges, so as to keep the same and the throats between them immediately and continually unobstructed by the chips as fast as formed, substantially as specified.

506.—J. E. Atwood, of Mansfield Center, Conn., and Lewis Leigh, of Seymour Conn., assignors to themselves, J. C. Atwood, of said Mansfield Center, Conn., V. A. Messinger, of Boston, Mass., and V. A. Messinger, of Canton, Mass., for an Improvement in Machines for Sorting Silk Thread:

We claim, first, The stop motion consisting of the pins, I P, in the indicator, D2, the notched lever, L, and the lever, M, the whole applied and operating, substantially as described, in combination with each other and with the winding bobbin and its driving apparatus.

Second, The screw, d, and stop, e, applied in combination with the lever, D2, substantially as and for the purpose specified.

Third, The adjusting screw, E, applied and operating in combination with the lowest of the levers carrying the gaging rollers, substantially as and for the purpose set forth.

507.—C. W. Cahoon (assignor to J. B. Cahoon), of Portland, Maine, for an Improvement in Lamps:

I claim the combination of chimney fastenings with a thumb lever, substantially as described, so that the chimney may be withdrawn by pressure upon the lever.

I also claim the combination of a guard with the thumb lever, the said guard being located between the chimney and that end of the lever to which pressure is applied, substantially as described.

I also claim the combination of a spring with a thumb lever fitted with chimney fastenings, substantially as described.

I also claim the combination of a chimney guard with a thumb lever substantially as described.

I also claim the combination of an opaque lamp body with a transparent plate, substantially as described.

508.—J. H. Gould, of Philadelphia, Pa., assignor to H. E. Wallace, of ——, for an Improvement in Packing for Steam Engines:

I claim the application of india-rubber, steel springs, or other elastic substances, in combination with the alloy the composition of which is given above, in the manner and form set forth, to produce a steam-tight joint.

509.—D. F. Haasz (assignor to himself and Thomas Nash), of Philadelphia, Pa., for an Improvement in Apparatuses for Ascertaining the Fares taken on Public Conveyances:

I claim a box, A, its two compartments, C and D, the zig-zag passage, a, valve, e, shield, f, and the sliding door, B, or its equivalent, the whole being arranged as and for the purpose set forth.

510.—George Herdtfelder (assignor to himself and Charles Lammrich), of New York City, for an Improved Underground Receptacle for Waste Matter:

I claim the receptacle for ashes, garbage, &c., formed of the box, c, and covers, f, in combination with the chamber, g, and pipe, i, for the purpose and as specified.

511.—I. H. Hobbs (assignor to himself and W. H. Clark), of Philadelphia, Pa., for an Improvement in Ruling Guides for Fountain Pens:

I claim the application to a fountain pen of the lateral projection or ruling guide, g, the same being constructed and applied to an adjustable tongue, C, so as to operate substantially in the manner and for the purpose specified.

512.—L. P. Mara (assignor to J. B. Murray), of New York City, for an Improvement in Newspaper Wrappers:

I claim combining with a newspaper wrapper a dried marginal coating of gum acacia or other suitable adhesive material, substantially as described.

513.—G. W. McMinn, of Covington, Ky., assignor to himself and R. T. Riley, of Cincinnati, Ohio, for an Improvement in Metallic Springs:

I claim, first, Forming the leaves of a metallic spring with alternate bosses, B, and depressions, C, adapted to rest one within another, in the manner and for the purposes set forth.

Second, In the described combination with the above, I claim the clamp, D E, adapted to confine or release the parts of the spring, in the manner set forth.

514.—Herrman Müller and Charles Majer (assignors to themselves, Fritz Kasefang and Louis Beauche), of New York City, for an Improvement in Cigar Machines:

We claim, first, The fixed concave surface, G, in combination with the rollers, E and F, closing roller, D, and knives, r r—the whole being constructed and operated in the manner and for the purpose substantially as described.

Second, The fixed concave surface, P, in combination with the two side rollers, N and O, the fork, L, and the sliding plate, M—the whole being constructed and operated in the manner and for the purpose substantially as set forth.

Third, The sliding board, M, with its rack, R, and its soft cover, m, for the rolling of the outer leaf, substantially as described.

Fourth, The fork, L, spring, l, fitting over the cigar during the rolling up of the outer leaf, substantially as described.

515.—William Turner (assignor to J. Y. Norton and J. Philips), of Phœnixville, Pa., for an Improved Lubricating Compound:

I claim the use of this compound for lubricating purposes.

516.—T. H. Dodge, of Washington, D. C., for an Improvement in Mowing Machines:

I claim, first, The combination with the drag bar or shoe and heel of the finger beam, of E. Ball's "Ohio Mower," patented December 1, 1857, of a lifting lever and cord or chain, whereby the driver can cause the heel of the finger beam to rest very lightly on the stubble or ground or be raised entirely above both.

Second, I also claim extending the drag bar back, so as to permit the finger beam to fold over in rear of the driver's seat, in combination with a rear extension piece for its support, substantially as described.

RE-ISSUES.

33.—M. A. Howell, Jr. (assignee of J. H. Elward), of Ottawa, Ill., for an Improvement in Mole Plows. Patented Nov. 13, 1860:

I claim, first, In combination with a plow or machine for purposes of underground draining, a stationary coulter, and a coulter the front edge of which may be moved laterally, for the purpose and substantially as described.

Second, The sections, e d and c, in combination with the coulters, a and b, when arranged as and for the purposes set forth, substantially as described.

Third, The movable coulter, a, in combination with the side draft, as applied at the link or loop at f, on the side of the beam, A, through either of the slots in the transverse piece upon the forward end of the beam, A, for the purposes substantially as set forth and described.

[See engraving on another page.]

34.—S. H. Ransom & Co, of Albany, N. Y., assignees of Washburn Race, of Seneca Falls, N. Y., for an Improvement in Registers for Stoves. Patented April 4, 1846:

We claim connecting the expansion rod with the register in the manner substantially as described and for the purpose specified.

35.—C. B. Hoard, of Watertown, N. Y., for an Improved Method of Winding Timekeepers by Currents of Air. Patented April 3, 1860:

I claim winding a clock or other timekeeper by means of a current of air produced by a pipe, flue, or other artificial channel, employed for ventilation, or otherwise actuating an air motor.

36.—P. H. Jackson, of New York City, for an Improvement in Ships' Winches. Patented August 7, 1855:

I claim the pawl, 4, and counterweight, 6, constructed as specified, so that the pawl can be reversed by turning it under the center, 5, and the counterweight will cause the said pawl to act upward on either side of the center, as set forth.

I claim the ratchet wheel, 3, of a windlass or winch, and the reversible pawl, 4, below said wheel, in combination with a double-acting heaver, as specified, by which arrangement a windlass or winch can be rotated in either direction by the use of one ratchet wheel, as described and shown.

I also claim the pawl, a, formed with two arms or points, as set forth, in combination with the socket or plate receiving the handspike or heaver, said pawl being reversible in the manner specified, so that the arm not in action becomes a counterweight to the arm or point taking the ratchet teeth, as set forth.

37.—Suspended.

38.—William Wharton, Jr., of Philadelphia, Pa., for an Improvement in Transferring Cars from one Track to Another Patented Sept. 18, 1860:

I claim the employment, in connection with sidings or turnouts on railways, of a supplementary inclined or curved guide rail, in combination with car wheels so constructed as regards the said supplementary rail which is so arranged in respect to the rails of the main track and those of the siding that the wheels may be transferred from the control of the rails on one track to that of the rails of the other, by a lateral thrust caused by the wheels bearing against the side only of the said guide rail, as set forth.

DESIGN.

John Long, of Massillon, Ohio, for a Design for a Cooking Stove.

Notes and Queries

W. A. H., of R. I.—We have no other knowledge of the heel attachment than that contained in Mr. Aiken's claim.

W. McC., of Miss.—We know of no mode of making the color of polkberries permanent.

J. T., of C. W.—If you want to learn to take photographs, you had better apply to some one familiar with the art to teach you.

T. D. J., of Mich.—Smoke will fall whenever it becomes as cool as the air.

W. F. D., of Mass.—We have known cement cisterns to be used for warm water, and know no reason why they should not be suitable to hold boiling hot water, as cement consists of lime, silica and alumina, calcined.

J. T., of Ill.—We suspect that all others who may try it will find your plan for transferring fur from the natural skin to sheets of india-rubber impracticable as well as yourself.

B. R. E., of Iowa.—Artificial noses have been made by cutting a strip from the forehead and grafting it upon the nose. If you would like to go through this operation, you can apply to some surgeon in your neighborhood. We suppose an artificial bridge could be made of india-rubber, but we do not know of any person engaged in the manufacture.

J. K., of Mass.—Send us your address, and we will forward you our pamphlet of advice to inventors. The tables which you ask for, giving the expansion of different metals with heat, &c., we shall probably publish soon.

W. P. K., of Mass.—Your request to publish an article on church organs will be duly considered. It is a subject in which very few of our readers feel an interest.

W. R., of Me.—We know of no beam engines now in operation with the connecting rod arranged as you propose; but such engines have been described in the earlier works on the steam engine, and we saw one in operation about 20 years ago.

J. M., of Wis.—We do not know of any one who is engaged in manufacturing the patent alarm bedstead of J. C. House. In Vol. XI. No. 4 (old series), you will find an engraving of it, representing a sluggard in the act of being thrown upon the floor by the mechanical attachment of the bedstead.

A. E. T., of Ohio.—The bit of stone you send us is probably quartz, but the piece is not large enough to permit a thorough examination.

R. T., of Pa.—By boiling a piece of cloth composed of cotton and wool for several minutes in moderately diluted sulphuric acid, the cotton will be destroyed, while the wool will scarcely be affected. This is one method that is employed to detect cotton in suspicious woolen fabrics.

B. & S., of C. W.—We advise you to address the Collinsville Company, Collinsville, Conn. They are making cast-steel plows.

H. W. T., of Mass.—We do not believe that the tables you speak of would be of general interest to our readers.

J. F. DeN., of S. C.—By an advertisement in another column you will see that you can get sulphate of ammonia in a crude form for manure from Dodge, Colvill & Olcott, No. 188 Pearl-street, this city.

J. F. H., of Ky.—On page 345, Vol. II. (new series) of the Scientific American, two processes of extracting aluminum from its ores are described.

A. E. W., of N. Y.—By referring to No. 18, Vol. I. (new series), you will find an engraving and notice of such a plate as you want.

T. C. H., of N. Y.—If you will procure a copy of our recent edition of the Patent Laws you will find all the information you need on the question of the abandonment of an invention. The price of the pamphlet is 25 cents.

J. D. A., of Ohio.—You should put your deed on record before commencing a suit for infringement. By procuring a copy of the Patent Laws and Information published by us (price 25 cents) you will find an answer to your inquiry about the use of patented inventions.

H. G., of Penn.—As you suggest, a tank of water as a target in experiments with artillery might furnish a very accurate measure of the penetrating power of the shot, from the perfectly uniform and homogeneous character of the substance penetrated. But would not the inconvenience resulting from the escape of water through the shot holes be an insuperable objection to the use of such a target?

J. M., of Texas.—It would occupy too much of our space to describe the mode of making stearine candles from tallow, but you will find the process fully described in Morfitt's work on soaps and candles, published by Parry & McMillan, of Philadelphia.

W. J. B., of Ala.—The sheet metal which you call "crystallized tin" is sheet iron coated with zinc, and is called "galvanized iron." It is not produced by an acid, as you suppose, but by preparing the sheet iron in a peculiar manner and dipping it into molten zinc. You will find the process fully described on page 269, Vol. XII. (old series), of the Scientific American.

S. M. L., of Ky.—The fly-wheel of your sawmill to which the pitman is attached does not appear to be properly balanced, and this may account for the jumping of the other wheel and the wear of the journal on the side to which the pitman is attached. Secure a balance weight on the rim of the wheel opposite to the pitman connection, and see what effects will result.

J. McC., of Ala.—Carbon or hard coal is insoluble in acids and all other common solvents. Soapstone is decomposed with muriatic acid, but it is not useful for any purpose known to us except in its solid pure state.

Money Received

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, Feb. 23, 1861:—

W. F., of Conn., $30; W. & G., of Fla., $300; L. G., of La., $20; L. P., of Conn., $10; J. A. W., of Miss., $30; C. D., of N. Y., $25; E. B., of N. Y., $57; L. L. K., of Mass., $58; A. S., of N. Y., $25; T. C., of Cal., $35; A. N., of Pa., $25; C. P. W., of N. Y., $55; J. O. W., of N. Y., $58; C. M. L., of Ohio, $25; J. P. T., of Md., $55; H. J. H., of Ill., $25; J. W. & J. S. H., of Ill., $25; J. B. S., of N. Y., $25; McC. & B., of Mo., $25; E. G., of Mass., $25; W. H. G., of N. Y., $25; L. S., of Vt., $55; J. & R., of N. Y., $30; G. S. C., of Ill., $30; C. A. W., of Mass., $30; N. F. M. of R. I., $20; D. B., of Ill. $30; J. L., of Mass., $30; G. W. B., of N. Y., $30; W. T. A., of Iowa, $15; S. M. D., of Mass. $30; C. N. B., of Pa., $25; I. S., of N. Y., $20; P. H., of Pa., $25; W. H. D., of Cal., $40; C. C., of Ill., $12; E. B. S., of Conn., $55; S. M. G., of Vt., $25; G. G. L., of Del., $25; W. B. Q., of Ill., $25; D. F., of N. Y., $25; J. A. De B., of N. Y., $25; J. N., of N. Y., $25; H. P., of N. Y., $25; J. B. S., of Conn., $15; L. & W., of N. Y., $30; J. R. R., of Mass., $165; J. V., of Mich., $25; B. R., of Mass., $25; G. N. C., of Conn., $25; G. B.B., of Conn., $30; W. H., of Pa., $30; H. McK., of Ala., $30; W. J. P., of N. Y., $30; W. W. R., of Wis., $30; C. T. B., of Mass., $30; E. H. L., of N. Y., $10; C. H., of La., $62, M. A. S., of Ill., $35; G. & S., of Mass., $25; J. H. G., of Pa., $25; J. B. P., of Miss., $25; D. L. of N. Y., $25; A. Q., of N. Y., $30; C. W., of S. C., $25; G. W. B., of N. Y., $25; R. & W., of N. Y., $25.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Feb. 23, 1861:—

C. H., of La.; M. A. S., of Ill.; E. G., of Mass.; W. & J., of Mich.; B. R., of Mass.; G. N. C., of Conn.; W. T. A., of Iowa; P. H., of N. Y.; G. W. B., of N. Y.; T. S. W., of Pa.; J. P. T., of Md.; D. F., of N. Y.; A. M. G., of N. H.; A. Q., of N. Y.; A. A., of Ill.; A. L. B., of Mass.; C. N. B., of Pa.; A. N., of Pa.; C. C., of Ill.; E. B. S., of Conn.; D. L., of N. Y.; J. A. DeB., of N. Y.; W. H. G., of N. Y.; C. S., of N. Y.; J. N., of N. Y.; R. & W., of N. Y.; H. P., of N. Y.; C. M. L., of Ohio.

New Books and Periodicals Received.

The Medical and Surgical Reporter.—S. T. Butler, M.D., and R. J. Lewis, M. D, editors and proprietors, Philadelphia. This valuable publication contains a good deal of information, which is interesting to the non-professional reader as well as that which interests physicians alone.

A Comprehensive Grammar of the English Language. For the Use of Schools. By Simon Kerl, A.M. New York: Phinney, Blakeman and Mason; Buffalo: Breed, Butler & Co. 1861. This grammar is even worse than Lindley Murray's.

Bryant and Stratton's Commercial Arithmetic.—New York: Phinney, Blakeman & Mason, No. 61 Walker-street; Buffalo, Breed, Butler & Co., No. 188 Main-street.

There is a great mass of practical information in this book, but the definitions are about as puzzling and difficult of comprehension as it is possible for words to make them.

Important Hints to Our Readers.

Back Numbers and Volumes of the Scientific American.—Volumes I., II. and III. (bound or unbound) may be had at this office and from all periodical dealers. Price, bound, $1.50 per volume by mail, $2—which includes postage. Price in sheets, $1. Every mechanic, inventor or artisan in the United States should have a complete set of this publication for reference. Subscribers should not fail to preserve their numbers for binding.

Patent Claims.—Persons desiring the claim of any invention which has been patented within thirty 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 inclosing $1 as fee for copying. We can also furnish a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of $2. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

Binding.—We are prepared to bind volumes, in handsome covers, with illuminated sides, and to furnish covers for other binders. Price for binding, 50 cents. Price for covers, by mail, 50 cents; by express or delivered at the office, 40 cents.