HORSE HAY FORK .- James Dampman, Lebanon, Pa.- This invention relates to improvements in locking devices for horse hav forks, and consists in a sliding block on the elevating rope, having a fixed and a pivoted jaw for engaging and holding the upper end of the tine not connected to the hoisting rope: the said upper end being provided with an eve which, when brought up to the locking position, will receive the hooked end of the pivoted jaw, which is then closed up against the fixed jaw by pressing the shank into the space between the sides of the movable block, where it is secured by a spring catch having a trip cord connected to its free end, and passing out laterally through a hole in one of the sides of the block, so that when pulled it will disengage the spring catch, and trip the holding jaw, to permit the opening of the tines of the fork for discharging.

AUXILIARY PROPULSION OF VESSELS .- John Bourne, London, England. -The object of this invention is to provide a propelling mechanism for sailing ships in calms or light winds, which mechanism, while of average efficiency, shall be capable of being readily put into or out of operation, so that it will, when not used, leave the ship in all other respects the same as if it had not been applied.

Hollow Grate Bar.—George E. Turner, Chicago, Ill.—This invention has for its object to so construct the hollow grate bars which conduct air from below the fire to the products of combustion, that the unequal temperature to which it is subjected at different hights may not injuriously affect the same.

Lamp Extinguisher.—S. W. Perkins, Geneso, Ill.—This invention consists of a case capable of being slipped on over any ordinary lamp tube, and bearing two jaws, each provided with a weight and having a tendency to fold together upon the wick, so as to completely cover it when turned

to fold together upon the wick, so as to completely cover it when turned down, and thus extinguishes the flame; said jaws being readily separable by the wick as it is turned up by the ratchet wheel to be lighted.

STEAM ENGINE.-C. C. Waggoner, St. Johns, Ohio.-This invention con-

PNEUMATIC CENTRIFUGAL POWER REGULATOR.-Charles A. Sullivan, Starkville, Miss.—This invention relates to means for regulating the 98,219.—BOOTJACK.—S. P. Babcock, Adrian, Mich. evolution of a spring driver, and to preventing a useless and too rapid 98,220.—HARVESTER.—L. M. Batty, Canton, Ohio. expenditure of its power. The invention consists in certain combinations and arrangements of auxiliary mechanism to restrain the actuating power, which, together, constitute the pneumatic centrifugal power regulator.

98,221.—BOOTFACK.—S. I. Battock, Auxilia, Mich.
98,221.—HARVESTER.—L. M. Batty, Canton, Ohio.
98,221.—CHURN DASHER.—F. Bosom (assignor to himself and J. W. Tackabury), St. Louis, Mich.
98,222.—PROPELLING APPARATUS.—John Bourne, No. 1 Northwest Property Ratty Booth Residence.

98,223.—WATER WHEEL.—McK. A. Brooks, La Porte, Ind. 98,224.—FINISHING CASE FOR RAILWAY BARS.—John Burt, Detroit, Mich. 98,225.—MACHINE FOR LAYING OUT SASH AND BLIND.—G.W. 108,225.—MACHINE FOR CARRIAGE SPRING.—Daniel Shockey, Waynesborough, Pa.—This invention relates to a spring apparatus in which the cross bars on which the

the axies, and springs are interposed to check the downward movements of such cross bars. The invention consists in interposing springs to check the upward movements of such guide bars.

KNITTING MACHINE—John Kent, New York city.—This invention relates to a new and usefulimprovement in machines for knitting cotton, linen, and woolen goods or garments; and consists in 'attaching to the ordinary knitting machine certain mechanisms whereby the goods or garment of being seamed or sewed together, while, in fact, the goods are formed enlands of the ordinary to the ordinary to the ordinary seamed or sewed together, while, in fact, the goods are formed enlands of the ordinary to the ordinary to the ordinary seamed or sewed together, while, in fact, the goods are formed enlands of the ordinary to tire, and with unbroken thread.

COMBINED SEEDER AND CULTIVATOR .- Clark Alvord, Westford, Wis. This invention relates to a seeder, and consists of a seeder wheel placed in front or rear, and, for the most part, outside the seed box, but entering partially within the same, and receiving in its circumferential V-shaped groove a portion of the seed, which portion it carries under and out, and discharges; the circumferential groove being provided with transverse partitions, so constructed as to carry the seed before them until the proper moment, and then discharge it over the stop.

Mode of Curing Cheese and Preserving the same when Cutiing.—Artemas Holbredge, West Burlington, N. Y.—This invention relates to an improved mode of putting up, curing, packing, and preserving cheese where by it is designed to improve the quality of the cheese, render it capa ble of preservation a greater length of time, economize in space in pack ing, storing, and shipping, and to economize and preserve it in cutting for The invention also comprises an improved mode of ascertaining and cutting off the exact amount required.

SASH AND BLIND MARKER.-George W. Burton, Bordentown, N. J.-This SASH AND BLIND MARKER—George W. Date and invention relates to a new machine for marking the bars of sashes and invention relates to a new machine for mortising the same. The invention consists in the general combination of an adjustable fixed marker with a movable marker, and with a spring lever for moving the same; and also in the method of holding the markers in place so that it can reading the marker in place in pl

WHEEL FOR VEHICLES .- Horatio Keys, Terre Haute, Ind .- This invention relates to a new manner of securing the spokes in the hub of a wheel, with an object of obtaining a firm hold and of facilitating repair in case one or more of the spokes should be broken.

RAILROAD CHAIR.-Loyst J. Smith, Whitehall, N. Y.-This invention re lates to a new suspension railroad chair, which is so constructed that it will constitute a durable and reliable connection of railroads and a noiseless support of the same.

NEW BOOKS AND PUBLICATIONS.

CIVIL ARCHITECTURE. Being a Complete Theoretical and and Practical System of Building, containing the Fundamental Principles of the Art. By Edward Shaw, Architect, to which is added a Treatise on Gothic Architecture, etc., by Thomas W. Silloway and George M. Harding, Architects. The whole Illustrated by One Hundred and Two Plates, finely engraved on copper. Eleventh edition. Philadelphia: Henry Carey Baird, Industrial Publisher, 406 Walnut street. Price, by mail, free of postage to any part of the United States, \$10.00.

work of this character which can reach eleven editions scarcely needs other evidence of its worth. As its title imports, it is not a mere collection of designs of little value to any but the finished designer, but a complete elementary treatise, beginning at the foundation of the science; and after taking its reader by pleasant and easy gradations, through the first principles, teaching him how to apply them in actual work.

The present edition is enriched by the substitution of twenty new plates for those less in keeping with modern improvements, four of which are by Pugin, one of the best English authors on architecture. The whole work has been thoroughly and carefully revised, and, as it now stands, forms the best American work on the science of architecture extant.

ILLUSTRATED REGISTER OF RURAL AFFAIRS.

This annual, published by Luther Tucker & Son, Albany, N. Y., contains 150 illustrations and a valuable assortment of useful hints and information for farmers and housewives. The price is only 30 cents.

FLORAL GUIDE.

James Vick, of Rochester, N. Y., has issued a very beautiful illustrated catalogue of flowers. The engravings are exquisitely done.

THE Phrenological Journal, for January, is received, with the usual num ber of graphic sketches of character, portraits of distinguished men, and other entertaining features, which render it one of the most readable of American publications. The present number is peculiarly rich, and by the courtesy of its publishers, it furnished us last week with a fine portrait of M. Lesseps, and a sketch of his life, which is, at this time, of especial interest in connection with the recent construction of the great Suez

THE INSURANCE MONITOR, C. C. Hine editor and proprietor, 176 Broad way. New York, is one of the ablest monthlies devoted to a specialty published. To all interested in insurance matters, directly or indirectly, it is a sine qua non, and its miscellany cannot but prove acceptable to the intelligent general reader.

Official List of Latents.

Issued by the United States Patent Office.

FOR THE WEEK ENDING DEC. 28, 1869.

Reported Officially for the Scientific American

SCHEDULE OF PATENT OFFICE FEES:	
On each caveat	Q 10
On filing each application for a Patent (seventeen years)	91
On issuing each original Patent.	\$21
On appeal to Commissioner of Patents	\$20
On appeal to Commissioner of Patents. On application for Reissue.	. \$31
On application for Extension of Patent On granting the Extension.	. \$50
On granting the Extension.	. \$50
On filing a Disc dinter On an application for Design (three and a half years)	. #10
On an application for Design (three and a half years)	.⊈J(
On an application for Design (seven years)	. 81:
On an application for Design (fourteen years)	.\$3
In addition to which there are some small revenue-stamp taxes. Reside	antı
of Canada and Nova Scotia pay \$500 on application.	
	
For carn of Claim of any Patent issued within 30 years.	-81

97,970.—BASE-BURNING FIREPLACE HEATER.— Samuel B Sexton, Baltimore, Md. Dated December 14, 1889; antedated November 23, 1869. - Samuel B. 98.216.—Steam Engine Governor.—C. D. Allen, New York

sists in a novel and peculiar mechanism for shifting the valves, whereby the operation may be performed in one sixteenth of the time of the stroke.

Salta — Properting Apparatus. — E. Averill, Sacramento, Cal.

98,218.—WATER ELEVATOR.—Jabez K. Babcock, Shortsville,

thumberland Terrace, Regent's Park Road, England. 98,223.—WATER WHEEL.—McK. A. Brooks, La Porte, Ind.

98,231.—PLANING MACHINE.—G. W. Cole, Canton, Ill. 98,232.—PISTON AND PISTON PACKING.—O. Collier, Sacramen-

to, Cal.

98,233.—SIGNAL FOR RAILWAYS.—James P. Coulter, Bloomington, Ill.

98,234.—BALL-AND-SOCKET JOINT.—R. R. Craig and J. Craig,
Nevada, Cal.

98,235.—SPUR.—Seth Craig, Philadelphia, Pa.

98,236.—HAY FORK.—Jas. Dampman (assignor to W.A. Moyer),
Lebanon, Pa.

98.237.—SKATE.—C. T. Day, Newark, N. J.

98,237.—SKATE.—C. T. Day, Newark, N. J.
98,238.—STEAM-BOILER FURNACE.—R. S. Dillon (assignor to himselfand G. H. Russell), Detroit, Mich.
98,239.—CHARCOAL FURNACE.—W. T. Downs, St. Louis, Mo. Antedated Dec. 11, 1869.
98,240.—HOOP-CUTTING AND DRESSING MACHINE.—F. Ellis assignor to himself and J. S. Ellis). Sylvania, Ohio.
98,241.—STEERING APPARATUS.—Edward Fox (assignor to himself and J. J. Walton), New York city.
98,242.—TRUSS FOR VESSELS.—Charles Furbish, Bucksport, Me.

Antedated Dec. 17, 1869. 98,247.—HITCHING POST.—John Gibson, Jr., Albany, N. Y.

Antedated Dec. 18, 1869.
98,248.—RAILROAD-CAR HEATER.—John Gibson, Jr., Albany, -Securing Legs to Stoves.-John Gibson, Jr., Alba-

98,249.—SECURING LEGS TO STOVES.—John Gibson, Jr., Aluany, N. Y.
98,250.—HEAD REST.—D. R. V. Goetchins, Little Falls, N. Y. 98,251.—Shovel Plow.—Frank Goss, Wexford, Pa. 98,252.—Combined Seed Sower and Harrow.—A. D. Gray, Chariton, Iowa. 98,253.—Paper Feeder.—J. H. Gray and W. B. Turner, St.

Anthony, Minn.

98,254.—REGISTER FOR SPINNING JACK.—Henry Greenwood, Gilbertsville. Mass.

98,255.—APPARATUS FOR RAISING AND LOWERING CHANDELIERS AND LAMPS.—H. S. Hall, Boston. Mass.

98,256.—HAIR CUTTER.—G. A. Harley, New York city.

98,257.—HYDRAULIC NOZZLE.—Aaron Harris, Laporte, Cal. 98,258.—Horse Hay Fork.—Elam Harter, Dowagiac, Mich. 98,259.—Grappling Hook.—Elam Harter, Dowagiac, Mich.

98,260.—Anti-friction Journal Bearing for Hoisting Machines, etc.—R.G. Hatfield, New York city.
98,261.—Curtain Fixture.—Rufus E. Hitchcock, Waterbury, Conn. 98,262.—Curing Cheese.—Artemas Holbredge, West Burlington, N.Y. 98,263.—DRIED-BEEF CUTTER.—C.J.Holmes and D.C. Holmes,

Stafford Springs, Conn. 98,264.—LAMP.—John Horton (assignor to B. B. Schneider), New York city. 98,265.—Boring and Mortising Machine.—John Humphrey,

98,206.—Grain Smutter, Scourer, and Separator.—J. C. Hunt, Terre Haute, Ind., and W. W. Ingraham, Chicago. Ill. 98,267.—Reversible Chair. — William H. Joeckel, New

York city. 98,268.—PROPELLER WHEEL.—J. A. Joyner, New York city. 98,269.—Rotary Table Waiter.—A. N. Kellogg, Chicago,

98,270.—MACHINE FOR GRINDING GLASS JARS.—A. W. Kelly and J. B. Samuel, Philadelphia, Pa.

98,271.—Button.—John Kenmuir, Leavenworth, Kansas.

98,272.—Knitting Machine.—John Kent, New York city.

98,273.—Carriage Wheel.—Horatio Keys, Terre Haute,

98,274.—Bob Slep.—John Killefer, West Richfield, Ohio.

98,275.—PULLEY BLOCK.—C. H. Knapp, Lawrenceville, Pa. 98,276.—TABLE.—H. F. Learnard, Mazo Manie, Wis. 93,277.—BRAKE FOR CARRIAGES.—Benjamin F. Leet, Dayton,

Nevada. 98,278.—METALLIC CARTRIDGE.—Chas. D. Leet. Vienna, Austria, and B. B. Hotchkiss, New York city. Antedated December 15, 1869. 98,279.—Steam Pump.—J. A. Lidback (assignor to himself

98,279.—STEAM PUMP.—J. A. LIGIDACK (assignor to minisen and Henry Baker), Portland, Me. 98,280.—AXLE GAGE.—Gottlieb Luedke, Princeton, Wis. 98,281.—HARROW.—C. R. Macy, Bedminster, N. J. 98,282.—CHARCOAL COOKING FURNACE.—Angelina Madison,

Cincinnati, Ohio. Antestated Dec. 15, 1-69.
98,283.—TRACE FASTENING.—W. W. Mallery and C. H. Sage, 99,366.—Pump.—Isaac N. Forrester, Bridgeport, Conn. Copenhagen, N. Y.

98,284.—HARVESTER RAKE.—F. H. Manny, Rockford, Ill. 98,285.—APPARATUS FOR BLEACHING AND DEFECATING CANE JUICE.—J. C. Marsh (assignor to G. R. Marsh), Alexandria, La. 98,286.—Welt Knife.—Elezer May, Natick, Mass. 98,287.—Street Box for Gas Pipes.—Emerson McMillin, Innter Object.

Ironton, Ohio.

98,288.—CHURN.—A. H. McWaine, Shickshinny, Pa.

98,289.—WATCHMAN'S TIME DETECTOR.—A. Meyer, Stuttgart, Germany, assignor to Theodor Hahn.

98,290.—BAR OF HORSESHOE BLANKS.—James Montgomery,

98,299.—Bar of Hollessen, Sing Sing No. Y.
98,291.—Srider.—Elias Nashold, Rockford, Ill.
98,292.—HAY SPREADER.—Eben W. Nichols, Worcester,

98,292.—HAY STREADER. 1888.
98,293.—DRAFT AND SPARK EXTINGUISHING DEVICE FOR STEAM GENERATORS.—J. S. Patric and Lewis Patric, Rochester, N. Y. Antedated Dec. 24, 1889.
98,294.—Tube Cutter.—John Peace, Camden, N. J.
98,295.—Shipwrights' Clamp.—Wm. H. Phillips, Bridge-

town, N. J. 98,296.—Electrical Annunciator for Hotels.—Henry B.

98,296.—ELECTRICAL ANNUNCIATOR FOR HOTELS.—Henry B. Porter, Chicago, III. 98,297.—PULVERIZING CHASER.—Theophilus Pugh, Chicago, III. Antedated Aug., 1859.
98,298.—SOFA AND TABLE.—Wm. Reichenbach and Frietrich Roschdiantzky, Chicago, III.
98,299.—LOCK FOR SATCHELS AND CARPET BAGS.—William Roemer, Newark, N. J.
98,300.—BUTTON AND PIN FOR CARPET BAGS, ETC.—Wm. Roemer, Newark, N. J.

98,301.—Base-Burning Stove.—J. J. Roeper, Philadelphia,

98,302.—Propelling Boats.—D. J. Ross, Havre de Grace, 98,303.—HARVESTER CUTTER.—Jacob Schneider, Canton,

98,304.—Chewing Gum.—Wm. F. Semple, Mount Vernon,

99,004.—CHEWING GUAL.—U.M. T. SCHLIPS, Onio.
98,305.—PIANE FOR SHAVING WHALEBONE.—J. A. Sevey, Boston, Mass.
98,306.—PERPETUAL BRICK BURNER.—Zachariah Shaw, Ypsilanti, Mich.
99,307.—CURTAIN FIXTURE.—John Shorey and F. H. Butler (assignors to said shorey and John Griffith), Lowell, Mass. Anteclated Dec. 18, 1869.
98,308.—MACHINE FOR FOLDING CLOTH.—Augustus Simpson (assignor to Woonsocket Iron Foundery), Woonsocket, B.1.
98,309.—SPINDLE FOR SPINNING SILK.—George Singleton, (assignor to himself, J. F. Preston and J. N. Leonard), Rockville, Conn., Daniel Street and E. Pace, Paterson, N. J., and Leonard &

(assignor to himself, J. F. Preston and J. N. Leonard), Rockville, Conn., Robert Singleton and E. K. Rose, Paterson, N. J., and Leonard & Lockhart, Chicago, Ill.

98,310.—APPARATUS FOR PACKING STUFFING BOX.—D. L.

98,310.—APPARATUS FOR PACKING STUFFING BOX.—D. L. Smith, Montana, Iowa.
98,311.—HAMES AND COLLARS.—J. G. Smith, Oregon, Wis., assignor to himself and F. A. Vichery, Mason City, III.
98,312.—RAILWAY RAIL CHAIR.—L. J. Smith (assignor to himself and E. H. Gardi er), Whitehall, N. Y.
98,313.—SEED PLANTER.—J. L. Strait, Cooksville, Miss.
98,314.—PNEUMATIC CENTRIFUGAL POWER REGULATOR.—C. A. Sullivan, Starkville, Miss.
98,315.—HAMES FASTENER.—W. H. Tillou, Le Roy, N. Y.
98,316.—BREECH-LOADING ORDNANCE.—E. H. Tobey, Chicago, III.

98,310.—BREECH-LOADING ORDNANCE.—E. H. 100ey, Chicago, Ill.
98,317.—MACHINE FOR QUARRYING AND DRESSING STONE.
—Frederick Townsend, Albany, N. Y.
98,318.—MEAT CUTTER.—G. P. Treulieb, Baltimore, Md.
98,319.—WATER WHEEL.—R. W. Trude, Clearfield Bridge,

98,320.—Sun Dial.—Ludwig Ignatius Trueg, St. Vincents, 98,321.—Hollow Grate Bar Frame.—G. E. Turner, Chicago, III.
98,322.—Governor Valve.—Thomas Warren, Flint, Mich.
98,323.—Horseshoe.—Thos. Waterhouse, West Gorham, and C. F. McKenney, Saco, Me.
98,324.—Wheelbarrow.—J. G. Weir, Pittsburgh, Pa.
98,325.—Bed Lounge.—B. C. Wilkins, Elgin, Ill.
98,326.—Cultivator.—J. A. Wilson, Hamburg, Iowa.
98,327.—Card Holder.—S. E. Adamson, Philadelphia, Pa.

98,327.—CARD HOLDER.—S. E. Adamson, Philadelphia, Pa. 93,328.—EAVES TROUGH.—Wm. Adel, Rockton, Ill. 98,329.—STONE SEPARATOR.—Henry Aiken, Philadelphia,

98,330.—Turbine Water Wheel.—O. N. Angell and A. J. 98,330.—TURBINE WATER WHEEL.—O. N. Angell and A. J. Angell, Providence, R. I.
98,331.—MACHINE FOR THE MANUFACTURE OF SPOKED, WHEELS.—E. A. Archibalt. Methuen, Mass.
98,332.—OIL CAN.—A. N. N. Aubin, Montreal, Canada.
98,332.—PEAT MACHINE.—Amie N. N. Aubin, Montreal, Canada.

98,334.—SHINGLE MACHINE.—Joseph Baker, Sheridan, assigner to himself and R. C. Hathaway, Ionia, Mich. Antedated Dec. 9, 1899. 98,335.—Combined Harrow and Seed Sower.—E. A. Barton, Boonville, Ind.

98,336.—ENAMELING IRON AND STEEL.—Benj. Baugh, Chad-

wick. near Bronsgrove, England. 98,337.—HAND CULTIVATOR.—Luman L. Beach, Mount Upton,

98,338.—Buttons.—C. Becker and Morris Wise, New York 98,339.—Spring Bed Bottom.—C. H. Berry, East Somerville, 98,340.—Tobacco Cutter.—Seymour A. Bostwick, Laconia,

98,341.—Combined Cotton Scraper and Cultivator.— B. F. Bowling, Holly Springs. Miss. 98,342.—Crossing Signals for Railways.—C. M. Bow-

98,342.—CROSSING SIGNALS FOR RAILWAYS.—C. M. Bow-man, Washington, D. C.

98.343.—APPARATUS FOR FILTERING VOLATILE LIQUIDS.— Washington Boyce, Tuscola, Ill. Antedated Dec. 17, 1869.

98,344.—KING BOLT FOR RAILWAY CAR TRUCKS.—James M. Bucklin, St. Louis, Mo.

98,345.—REED ORGAN.—Riley Burdett, Chicago, Ill.

98,346.—GRAIN SEPARATOR.—Henry K. Burkholder, Clear Spring, Pa.

98,347.—Automatic Fan.—C. F. Burleigh, Tuftonborough,

N. H. 98,348.—Lawn Mower.—Luke Chapman (assignor to himself 98,348.—LAWN MOWER.—Luke Chapman (assignor to nimsell and the Collins Company), Collinsville. Conn.
98,349.—BUTTONHOLE CUTTER.—D. G. Chase, Boston, Mass.
98,350.—CORN MARKER.—J. T. Corbitt, Des Moines, Iowa.
98,351.—CHILDREN'S CARRIAGE.—B. P. Crandall, New York

city.

98,352.—Signal Box Mechanism for Fire Alarm Telegraph.—M. G. Crane, Newton, Mass., assignor to J. M. Gardiner, St
Louis, Mo.

98,353.—Piston Liquid Meter.—Robert Creuzbaur, Brook-

98,353.—PISTON LIQUID METER.—MODEL CICARDAM, 2019, N.Y.
98,354.—PLATING IRON FOR THE MANUFACTURE OF HINGES, ETC.—J. J. Crooke, Southfield, N.Y., and Lewis Crooke, New York city.
98,355.—STUMP EXTRACTOR.—C. W. Dawson, Paynesville,

98,35%,--Apparatus for Floating Ships over Sand Bars.

E. M. Deey, New York city. 57.—Tobacco Press.—S. P. Dick and D. R. Musselman

98,357.—Tobacco Press.—S. P. Dick and D. R. Musselman Louisville, Ky.
98,358.—CHOKE-BLOCK FOR RAILWAYS.—John Donaldson, George Reavely, and James Francis, Galashiels, Scotland.
98,359.—BEDSTEAD AND LOUNGE.—Jacob Dourson, Columbus

98,360.—EXTENSION TABLE ROLLER SLIDE.—Jacob Dourson,

Columbus, Ohio.
98.361.—QUILTING FRAME.—A. E. Ellis, Friendsville, Ill.
98.362.—WAITER.—Obed Fahnestock, Lebanon, Ind.

98,363.—MACHINE FOR MILLING KNIFE-EDGES OF SCALE-BRAMS.—Henry Fairbanks, St. Johnsbury, Vt. 98,364.—MANUFACTURE OF SHEET-IRON.—William Fields, Wilmington, Del. 98,365.—Sash Cord Guide Block.—J. M. Ford, Brooklyn, N. Y.

98,368.—Pump.—Isaac N. Forrester, Bridgeport, Conn 98,369.—HANDLE FOR CUTLERY.—J. D. Frary, New Britain, 98,370.—GANG PLOW.—E. E. Gore, Phœnix, Ind. 96,370.—GANG PLOW.—E. E. Gore, Frients, Ind.
98,371.—STEAM STEERING APPARATUS.—John McFarlane
Gray, Liverpool, England.
98,372.—VENTILATOR.—B. R. Hawley, Normal, Ill.
94,373.—CONCRETE BLOCKS FOR BUILDING AND OTHER PURPOSES—Thomas Heap, St. Joseph, Mo.
98,374.—GRAIN DRYER.—H. B. Hebert, New York city.
98,375.—PHOTOGRAPHIC PAPER.—H. M. Hedden, Worcester,
Mass. Mass.

98,376.—METHOD OF FORMING THE HEADS OF CARRIAGE SPRINGS.—B. T. Henry, New Haven, Conn.

98,377.—CAR COUPLING.—T. R. Herd, Allegheny, Pa.

98,378.—RAILWAY CAR TRUCK.—George Herrick, Waverly, 98,379.—CARRIAGE JACK.—Francis Hovey, New York city. 98,380.—Sash Holder.—R. B. Hugunin, Cleveland, Ohio. 98,381.—RENDERING SAFES, VAULTS, AND CHESTS FIRE-PROOF.—Theodore Hyatt, New York city. 98,382.—NITRO GLYCERIN COMPOUND FOR BLASTING.—John Horsley, Cheltenham, England. 98,383.—LANTERN.—John Hughes, Buchanan, Pa. 98,384.—CURTAIN FIXTURE.—M. G. Imback, Bethlehem, Pa. Antedated Dec. 18, 1869, 98,3 5.—MECHANICAL MOVEMENT FOR ACTUATING PRESSES.

—P.C. Ingersoil (assignor to himself and H. F. Dougherty), Green Point, 98,386.—Quilting Frame and Clothes Dryer.—John G. 98,386.—QUILTING FRAME AND CLOTHES DRYER.—John G. Ishler, Martinsville, Ill.
98,387.—BLEACHING COTTON AND WOOLEN FABRICS.—John Jeaning, Plainville, Conn., assignor to himself and R. B. Prindle, Washington, D. C.
98,383.—HOISTING MACHINE.—George Johnson, Cincinnati, Ohio. Antedated Dec. 17, 1869.
98,389.—RUFFILING ATTACHMENT FOR SEWING MACHINES.—A. C. Kasson, Milwaukea, Wis.
98,390.—SEWING MACHINE.—Thomas Lamb, Philadelphia, Pa. 98,391.—LADIES' BOOT.—William Love, McConnellsville, 98,392.—WATER-WHEEL.—Thomas Lowden (assignor to himself, deerge stout, and R.J. Lowden), Boston, Mass.
98,393.—ADJUSTABLE WRENCH.—James Magee, (assignor to himself and S. A. Alpin), Usquepaugh, R. I.
98,394.—HARVESTER.—L. J. McCormick, Lambert Erpelding, and W. R. Baker (assignors to C. H. McCormick & Brother), Chicago, 111.
98,395.—WASHING MACHINE.—W. T. McKean, East Palestine, Ohio 98,396.—CUTTER HEAD.—R. N. Meriam, Worcester, Mass. 98,397.—HORSE HAY FORK.—J. A. Miller, Shippensburg, Pa. Antedated Dec. 18, 1869.
98,398.—CLOTHES DRYER.—R. M. Miller, Port Andrew, Wis. 98,398.—ULOTHES DRYER.—R. M. Miller, Fort Andrew, Wis. 98,399.—VENTILATOR.—C. J. Neger, Philadelphia, Pa. 98,400.—SALVE.—W. W. Oglesbey, Benton county, Oregon. 98,401.—BED BOTTOM.—O. S. Osgood, Burlington, Iowa. 98,402.—DEVICE FOR LUBRICATING JOURNALS.—Addison Overbagh. Scranton, Pa. 98,403.—WINDOW BLIND.—Lindon Park, Brady, Pa. 98,404.—SOLAR CAMERA.—Isaiah Paxson and Charles Paxson. New York city. son, New York city. 98,405.—Extinguisher.—S. W. Perkins, Geneseo, Ill. 98,406.—LOCK.—N. Petre, New York city. 98,407.—SEED AND GRAIN SEPARATOR.—J. F. Pool, Monroe 98,408.—NOZZLE FOR OIL CANS.—Chas. Pratt, New York city 98,409.—Thread Controller for Sewing Machine.—G M. Pratt and L.E. Maynard (assignors to the Finkle and Lyon Manu facturing Company), Middletown, Conn. 98,410.—KNITTING MACHINE.— A. B. Prouty, Worcester Mass, assignor to Samuel V. Essick, Mansfield, Conn. 98,411.—HYDRANT.—D. J. Pruner, Bellefonte, Pa. 98,412.—HOPPER BOY RAKE.—Aaron C. Pry, Keedysville, 98,413.—SEED SOWER.—Amos Raffensparger and D. G. S Gochnauer, Mulberry, Pa. 98,414.—FEED CUTTER.—J. P. Randolph, Marietta, Ohio. 98,415.—FOLDING CHAIR.—E. C. Ranks, Boston, Mass. 98,416.—BASE-BURNING STOVE.—S. H. Ransom, Albany,

98,418.—Sfring Coupling.—L. Rodenhausen, Philadelphia, Pa. 98,419.—Ship Pump.—Benj. K. Rogers, Jonesport, Me. 98,420.—HEAD-REST FOR CAR SEATS.—H. W. Safford, New Tork city.

98,421.—Curing and Preserving Butter.—Jacob F. Saiger Shelby, Ohio. 98,422.—Pump.—Jacob Scott, Earlville, Iowa. 98,423.—LATHE.—William Sellers, Philadelphia, Pa. 98,424.—BASKET MACHINE.—Merville Shaffer (assignor to Ford Tanner), Lafayette, Ind.
98,425.—MANUFACTURE OF NITRO GLYCERIN.—Taliaferro P. Shaffner, Louisville, Ky.
98,426.—PROCESS OF PRESERVING NITROLEUM AND OTHER EXPLOSIVE LIQUIDS.—Taliaferro P. Shaffner, Lonisville, Ky.
98,427.—EXPLOSIVE COMPOUND.—Taliaferro P. Shaffner, Lonisville, Ky. Louisville, Ky. 98,428.—BLASTING FUSE.—Taliaferro P. Shaffner, Louisville, Ry.

98,429.—Well Tube.—James T. Shattuck, Natick, Mass.
Antedated November 27, 1869.

98,430.—Machine for Pressing Clay Pipes.—Thomas
Shaw, Philadelphia, Pa.

98,431.—Knife Rest.—Daniel Sherwood, Lowell, Mass., assigner to Woods, Sherwood & Co.

98,432.—Table Caster.—Daniel Sherwood, Lowell, Mass.,
assigner to Woods, Sherwood & Co.

98,433.—Cabridge Springs.—Daniel Shockey, Waynesborough, Pa. borough, Pa.

98,434.—Tobacco, Hay, and Cotton Press.—Valentine J.
Shrvock. Folsomville, Ind. Shryock, Folsomville, Ind. 98,435.—WATER WHEEL.—William Slade, Sen., Gum Creek, 98,436.—CARRIAGE AXLE.—Alfred E. Smith, Bronxville, N. Y 98,437.—SKATES.—Augustus B. Smith, Philadelphia, Pa. 98,438.—PICTURE NAIL.—Friend W. Smith, Jr., Bridgeport, 98,439.—METALLIC CARTRIDGE.—Wm. H. Smith, Charlestown, 98,440.—CHAIR FRAME.—Wm. M. Smith, Columbus, Ohio.

98,441.—TAG FOR MAIL BAGS.—C. A. Snyder, Richmond, Va. 98,442.—APPARATUS FOR PRODUCING AND CARBURETING HYDROGEN GAS.—John H. Steiner (assignor to himself and Christian Sharps), Philadelphia, Pa. 98,443.—CARRIAGE.—Lewis Theobald, Bremen, Ind. 98,444.—MACHINE FOR MAKING RAUROAD SPIKES.—Leopold Thomas, Pittsburgh, Pa. 98,445.—SODA WATER APPARATUS.—James W. Tufts, Medford, Mass. 98,446.—WALL FOR BUILDINGS.—M. P. Turner, Des Moines, 10wa. 98,447.—GAGE FOR FILING SAWS.—Oliver Tyson, Otho, Iowa. 98,448.—TICKET HOLDER.—George M. Van Buren, New York 98,449.—STEAM ENGINE.—Charles C. Waggoner, St. Johns, 98,450.—MANUFACTURE OF PARTLY GILT FRAMES.—Washington Wallick (assignor, by mesne assignments, to Wallick & Asay), Philadelphia, Pa. Antedated December 22, 1869.

98,451.—APPARATUS FOR FILLING VIALS.—John P. Whipple, Woonsocket, R.1.
98,452.—FEEDING MECHANISM FOR SEWING MACHINES.—

Winn. Jefferson Kindleberger, and William Augustus Arnold (assignors to "The Inventor's Association."), San Francisco, Cal.

98,456.—HARVESTER CUTTER.—Frederick Wittram, San Francisco, Cal.

98,457.—APPLE CORING AND SLICING MACHINE.—Moses B. Wright, West Meriden, Conn.

98,458.—MOUNTING WRITING SLATE.—George F. Bowman, Cleveland. Ohio.

James H. Whitney, Brooklyn, N. Y. 98,453.—STATIONERY FURNITURE.—Charles H. Wight, Balti-

98,459.—CLAMPS FOR ELEVATING WELL TUBES AND RODS.—
Adam Good, Jr., Titusville, Pa.

REISSUES.

96,866.—SEWING MACHINE.—Dated November 16, 1869; reissue 3,776.—P. J. Clever, Goliard, Texas.
77,304.—PREPARING COMPOUNDS CONTAINING COLLODION.—Dated April 28, 1868; reissue 3,777.—Division A.—John A. McClelland, Loubville, Ky.

77,304.—MATERIAL FOR FORMING DENTAL PLATES.—Dated April 28, 1868; reissue 3,778.—Division B.—John A. McClelland, Louisville, Ky.
73,900.—CARBURETING AIR FOR THE PRODUCTION OF LIGHT AND HEAT.—Dated January 28, 1868; reissue 3,779.—Blakey Pilkington, Oakland, Cal., assignee, by mesne assignments, of James D. Jenkins.

Jenkins.

94,248.—FRUIT JAR.—Dated August 31, 1869; reissue 3,780.
—Henry E. Shaffer, Rochester, N. Y.

55,581.—FRUIT JAR.—Dated June 12, 1866; reissue 3,781.—
Thomas H. Whitney and S. A. Whitney, Glassborough, N. J., assignees of John Focer.

12,627.—PLOW.—Dated April 3, 1855; extended seven years; reissue 3,782.—Thomas J. Hall, Bryan, Texas, for himself and Henry P. Stockton and Robert P. Lane, Rockford, Ill., assignees of Thomas J. Hall.

Hall. 80,865.—PRINTING PRESS.—Dated August 11, 1868; reissue 3,783.—J. M. Jones, Henry Johnson, and George M. Bowman, Palmyra, N. Y., assignees of J. M. Jones.

DESIGNS. 3,807.—BADGE.—Abraham Demarest, New York city. 3,808.—KEY.—Emery Parker, New Britain, Conn.
3,809.—STRIKER-PLATE FOR A LOCK.—Emery Parker (assignor to Russell and Erwin Manufacturing Company), New Britain, Conn.

EXTENSIONS.

TREATING OILS.—Philo Marsh, South Adams, Mass.—Letters Patent No. 14,042, dated January 1, 1856. METHODOF OPERATING AND LUBRICATING SLIDE VALVES.— James Cochrane, New York city.—Letters Patent No. 14,010, dated January 1, 1856.

APPLICATIONS FOR EXTENSION OF PATENTS.

ORE WASHER .- Wi liam L. Carter, Marietta, Pa., has petitioned for the ex ension of the above patent. Day of hearing, Feb. 23, 1870.

MACHINE FOR CUTTING LOAF SUGAB .- Adolph Brown and Felix Brown, New York city, has applied for an extension of the above patent. Day of hearing March 9, 1870.

FIREPLACE.-Alice Dodge, of Pittsburgh, Pa., administratrix of Calvin Dodge, deceased, has applied for an extension of the above patent. Day of hearing March 2, 1870.

SURFACE CONDENSERS FOR STEAM ENGINES .- D. D. Foley, Washington D. C., assignee, by mesne assignments, of James M. Miller, has petitioned for an extensionof the above patent. Day of hearing May 4, 1870.

METHOD OF COOLING AND VENTILATING ROOMS, ETC.-Azel S. Lyman New York city, has applied for an extension of the above patent. Day of hearing March 9, 1870.

GRAIN SEPARATOR.-Cyrus Roberts, Three Rivers, Mich., and John Cox. Newhope, Pa., have petitioned for an extension of the above patent. Day of hearing March 9, 1870.

HERMETICALLY SEALING PRESERVE CANS .- Charles Branwhite, New York city, has petitioned for the above patent. Day of hearing March 9, 1870.

Machine for Making Carpet Lining.—John R. Harrington, Brooklyn N. Y., has applied for an extension of the above patent. Day of hearing March 16, 1870.

Inventions Patented in England by Americans.

[Compiledfrom the "Journal of the Commissioners of Patents."]

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-Machinery for Operating Churns.—C. S. Wilon, Covert, N. Y.

-Machinery for Operating Churns.—C. S. Wilon, Covert, N. Y. mson, Covert, N. Y.

5.—MACHINE FOR BORING BLIND STILES.—Albert M. 1869.

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3,462.-ELLIPTIC SPRINGS ANR APPARATUS THEREFOR.-B. T. Henry, New Haven, Conn. November 30, 1869.

3.477.-CURING SPONGE.-W. H. Spencer, New York city. December 1, 1869.

3,515.-FLUID LENSES.-D. A. Woodward, Baltimore, Md. December 4, 1869.

3,527.-GRAIN HULLER.-J. T. Prince, Boston, Mass. December 6, 1869.

3,886.—APPARATUS FOR GRINDING SAWS.—H. Disston, Philadelphia, Pa. November 23, 1969.

3,396,—APPARATIS FOR LIGHTING AND EXTINGUISHING GAS BY ELEC-RICITY.—New England Electric Gas Lighting Company, Boston, Mass. November, 24, 1869. 3,441.—SEWING MACHINE.—L. Melone, Mount Gilead, Ohio. November 27, 1869.

3,456.—JOURNAL BEARING.—I. P. Wendell and S. P. M. Tasker, Philadel, phia, Pa. November 29, 1869.

Advertisements.

98,417.—ROAD SCRAPER.—George N. Rex, Butler, Ind.

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