

WINDOW SASH.—John Groves, of New York city.—The invention relates to that particular class of window sashes, hinged at the bottom to a movable stile, and locked thereto and to the frame work at some point above.

SUSPENDED LIFTING JACK.—Hector C. Havemeyer, of New York city.—This invention relates to a new manner of applying hydraulic lifting jacks, with the object of using them in warehouses, magazines, sugar houses, shops, &c., for holding, goods, hogsheds, or other devices, suspended, and conveying the same along elevated tracks from one to another part of the buildings.

PAVEMENT.—Hermann A. Gunther, of New York city.—This invention consists in making a concrete pavement or sidewalk, constructed so that it may be taken up in small sections. Between blocks of artificial stone or concrete, is placed gum, tar, rubber, (or other water repellant substance), poured into the joints between the blocks while said substance is in a molten state.

APPARATUS FOR RELEASING HORSES.—James Harrison, of New York city.—This invention furnishes an improved apparatus for application to the stalls of a stable, which will enable all the horses or other animals secured in said stalls to be disengaged and led or drawn from said stable, when, in case of fire or other accident, there may be no time to enter each stall and disengage and lead out the animals one at a time, or when the said animals may be so frightened that they will not leave their stalls.

ROCKING CHAIR.—John W. H. Doubler, of Darlington, Wis., assignor to himself and William Logue, of same place.—This invention has for its object to furnish an improved rocking chair, which will rock easily and noiselessly and will require no more room than an ordinary chair made without rockers.

EARTH PULVERIZER AND HARROW.—James Lefebvre and George W. Shults, of Cambridge City, Ind.—This invention relates to a new way of more effectually pulverizing cloddy ground, after the plow, by arranging the broad points of rotary crushers in two sets, which act on the clod in lines at an angle to each other, and in a novel mode of locking the front crushers.

SOLDERING APPARATUS.—Luke Albert Smith, Kansas City, Mo.—This relates to a new and improved device for holding tin cans for soldering them; and it consists in an expanding and contracting cylinder. A ring, with a vertical flange on the inner edge, is mounted on a suitable support, with an expanding and contracting cylinder of sheet metal, arranged within said flange and supported by an extension.

HORSE POWER.—Hemphill Smith, Shelby Station, Tenn.—This invention relates to an improved arrangement of draft rope, windlass, and weight in connection with the frame of a horse power, in such a way that the wheel can be used either inclined or horizontally, either as a tread wheel or draft wheel.

FLY TRAP.—Samuel F. McGowan, Rockville, Ind.—The invention consists in a revolving wheel flue and a water tank containing water or other liquid. The face of the wheel is covered with molasses and water, or some other substance that will attract flies.

STENCH TRAP.—Michael Garney, Newark, N. J.—This invention consists in the employment of a large vessel in connection with the pipe, made in two sections, the one leading into it extending nearly to the bottom, and the other leading from it connected near the top; the said vessel having a large opening at the bottom for cleaning it out, said opening being closed by a

plug. The object of the improvement is to have a large trap in which all the grease will condense and be retained, instead of passing out into the pipes below and choking them up in inaccessible places, as is now the case with the small traps used in sinks, which become sufficed by the quantity of warm water passing through them to maintain the grease in such a fluid state that considerable quantities are carried out into the pipes below. The usefulness, and practical character of this invention, will be apparent to any plumber who inspects it.

IMPROVED RAILWAY RAIL CHAIR.—Thomas Donahy, Empire City, Nevada.—This invention has for its object to furnish an improved railroad rail chair, designed for use one length of a rail from switch chairs, to avoid the necessity of frequently cutting rails to allow the switch to work.

TILT HAMMER.—Patrick Breen, Auburn, N. Y.—The object of this invention is to produce a mechanism connected with a tilt hammer, of suitable kind for retaining the drop on its rebound, and prevent it from falling again after the main stroke. The pattering of the drop on its return stroke is, in many cases—as, for instance, in minting—injurious, spoiling the fine execution of the main fall.

ROTARY STEAM ENGINE.—George V. Atwood, Mount Hope, Ala.—This invention relates to an improvement in that class of steam engines which receive steam continuously. A piston wheel, provided with disks and pivoted within a revolving cylindrical wheel, in combination with the spiral groove in the cylinder, for the admission of steam, and a steam wheel, cylinder and piston wheel, combined and arranged in a peculiar manner, constitute the invention.

LIGHTNING CONDUCTOR.—Othniel Prestor, South Danville, N. Y.—While the inventor is aware that it is contended that the conductivity of a lightning rod is according to the area of its cross section, his own experience, which has not been very limited in the business of manufacturing and putting up lightning conductors, leads him to doubt the entire correctness of that theory. In practice, he claims to have found that surface has much to do with the conductivity of lightning rods.

WOOD BENDING MACHINES.—Hiram McDonald, Shortsville, N. Y.—Thills of one horse vehicles, to be bent, being confined to a former (whereon they have been previously bent, in a machine, to form vertical curves at the ends), are placed on a bed former or die whereon the final bending is to be effected. This consists in a long thin plate of metal, having the upper edge provided with the configuration necessary for imparting the form to the under side of the thill, and has four (more or less) pairs of bars attached to its sides and extending above the edge considerably higher than the depth of the pieces to be bent.

NEW BOOKS AND PUBLICATIONS.

The London GRAPHIC is probably the largest and finest printed illustrated weekly newspaper published in the English language. From it are largely drawn the engravings that appear in our American illustrated weeklies. The general reading matter is, of course, more adapted to English than to American readers; but the illustrations, and the sketches which accompany them, are of interest to readers everywhere, as they form an epitome of the most important current events in all parts of the civilized world.

THE ANNUAL REPORT OF THE COMMISSIONERS OF PUBLIC PARKS, for the year ending May, 1871. New York: William C. Bryant & Co.

This is a voluminous and handsomely printed document, making a royal octavo volume of 427 pages. It is profusely illustrated with photographs, lithographs, and wood engravings—the latter, however, on account of their inferior quality, detracting from, rather than adding to, the attractions of the volume.

THE GREAT FIRES IN CHICAGO AND THE WEST. History and Incidents—Losses and Sufferings—Benevolence of the Nations, etc. etc. By a Chicago Clergyman. To which is appended a Record of the Great Conflagrations of the past. Illustrated with Maps and Scenes. Published by J. W. Goodspeed, Chicago, Cincinnati, St. Louis, and New Orleans. H. S. Goodspeed & Co., 37 Park Row, New York.

This is a book of remarkable interest, and which is certain to meet with a large sale. As a record of incident connected with the greatest fire that has yet visited an American city, it is worth preserving in every library.

A REVIEW OF THE THEORY OF NARROW GAUGES, as applied to Main Trunk Lines of Railway. By Silas Seymour, General Consulting Engineer. New York: D. Van Nostrand, Publisher, 23 and 27 Warren Street.

This pamphlet is undoubtedly one of the most able reviews of the narrow gauge question that has yet appeared. It expresses the views of one of the most clear headed and farsighted of our American railway engineers, which those who peruse the book will see coincide to the opinions we have, from time to time, expressed relative to the fallacy of most of the arguments in favor of narrow gauges.

SUPPLEMENT TO BICKNELL'S VILLAGE BUILDER. Containing Eighteen Modern Designs for Country and Suburban Houses of Moderate Cost. With Elevators, Plans, Sections, and a variety of Details, all drawn to Scale. Also, a full set of Specifications, with Approved Form of Contract and Estimates of Cost. New York: A. J. Bicknell & Co., Architectural Book Publishers, 27 Warren Street. Price \$5.

The eighteen designs, some of which are handsomely colored, embraced in this book, are contributed by six architects of recognized skill and experience in village building. The designs are remarkably neat and tasteful and are so drawn and engraved, in connection with explanatory plans, elevations, and notes, that the peculiar adaptation of each to individual wants can be understood by any non-professional man of ordinary intelligence.

Official List of Patents.

ISSUED BY THE U. S. PATENT OFFICE.

FOR THE WEEK ENDING NOVEMBER 14, 1871.

Reported Officially for the Scientific American.

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MUNN & CO., Patent Solicitors, 37 Park Row, New York.

- 120,809.—WASHER.—W. Arnold, Pawtucket, R. I. 120,810.—DRYING PAPER, ETC.—H. Dodge, Albany, N. Y. 120,811.—STOVE.—W. Doyle, Albany, N. Y. 120,812.—VARNISH.—T. J. Elliott, New York city. 120,813.—HORSESHOE.—D. Grim, Pittsburgh, Pa. 120,814.—BANDAGE.—J. G. Grocock, New York city. 120,815.—SEWING MACHINE.—T. J. Harper, Atlanta, Ga. 120,816.—INHALER.—R. B. Heintzelman, New York city. 120,817.—RUFFLER.—E. L. Howard, Malden, Mass. 120,818.—MOP HOLDER.—G. B. Isham, Burlington, Vt. 120,819.—PUMP.—S. W. Kelly, Nashville, Tenn. 120,820.—RIGGING.—J. C. Knowlton, Providence, R. I. 120,821.—BOTTLE STOPPER.—G. C. Lowe, New York city. 120,822.—PADLOCK.—S. Loyd, New York city. 120,823.—CANAL BOAT.—J. M. McMaster, Rochester, N. Y. 120,824.—GAS MACHINE.—W. T. McMillen, Richmond, Ind. 120,825.—STAND.—J. R. Palmenberg, New York city. 120,826.—THRASHER.—A. V. Pitts, Chicago, Ill. 120,827.—AUGER.—R. L. Priestler, Souder's Station, Md. 120,828.—GRAIN BINDER.—M. T. Ridout, Sun Prairie, Wis. 120,829.—ROOFING.—J. Siddons, Rochester, N. Y. 120,830.—CORK PULLER.—C. T. Simpers, Philadelphia, Pa. 120,831.—WASH BOARD.—A. D. Smith, Grafton, Ohio. 120,832.—POTATO DIGGER.—J. Smith, Ridgeville, Ohio. 120,833.—CHAIR.—P. M., O., A. S. Snell, Williamsburgh, O. 120,834.—KILN.—D. M. Sprogle, Annapolis, Md. 120,835.—SMOKE STACK.—D. B. Strope, Fort Wayne, Ind. 120,836.—DITCHER.—F. Taylor, Indianapolis, Ind. 120,837.—ENGINE.—N. W. Taylor, J. W. Brightman, Cleveland, O. 120,838.—ROLLING METAL.—L. Thomas, Pittsburgh, Pa. 120,839.—ROOT CUTTER, ETC.—G. Trump, Second Fork, Pa. 120,840.—STOVE.—J. W. O. Webb, Cedar Rapids, Iowa. 120,841.—PUMP.—N. W. Wheeler, Morrilton, N. J. 120,842.—ORDNANCE.—J. Whitworth, Manchester, England. 120,843.—LET OFF.—A. J. Woodman, Indian Orchard, Mass. 120,844.—HOIST.—W. E. Worthen, New York city. 120,845.—HUB.—E. A. Archibald, Methuen, Mass. 120,846.—PROPELLER.—N. B. Baldwin, Chicago, Ill. 120,847.—WHEEL.—I. E. Bower, Bainbridge, Ga. 120,848.—WASHER.—J. Bower, J. and H. Campbell, West Alexandria, Ohio. 120,849.—DASHER.—W. C. Broyhill, W. D. Sperry, Tremont, Ill. 120,850.—LAYING TILES.—M. A. Burnham, New York city. 120,851.—ROOFING.—O. W. Burritt, Weedsport, N. Y. 120,852.—SHOE, ETC.—F. P. Buzzell, Milton Junction, Wis. 120,853.—WATER METER.—C. Campeaux, New York city. 120,854.—LINK JOINT.—C. B. Carpenter, North Attleborough, Ms. 120,855.—SEWING MACHINE.—W. Chicken, E. S. Moulton Chelsea, Mass. 120,856.—GOVERNOR.—G. W. Clark, Council Bluffs, Iowa. 120,857.—APPLE CORER.—S. C. Collins, Oregon, Mo. 120,858.—BEE HIVE.—T. S. Collins, H. Senseman, Tremont, O. 120,859.—EVAPORATOR.—J. Cook, Wellsville, N. Y. 120,860.—BRIDLE BIT.—H. M. Cornell, Brighton, Ill. 120,861.—REIN.—J. P. Crutcher, T. Y. Vanleave, Cornersville Tenn. 120,862.—GUNPOWDER.—C. W. Curtis, London, England. 120,863.—CHUCK.—A. F. Cushman, Hartford, Conn. 120,864.—JACK.—A. A. Davis, Clark's Green, Pa. 120,865.—BED.—J. M. Farnham, Hartford, Conn. 120,866.—FIBER.—J. Felber, St. Louis, Mo. 120,867.—REFRIGERATOR.—J. W. Fisher, Islip, N. Y. 120,868.—HEMMER.—D. Forest, Eastport, Me. 120,869.—SAD IRON.—E. A. Franklin, Brenham, Tex.