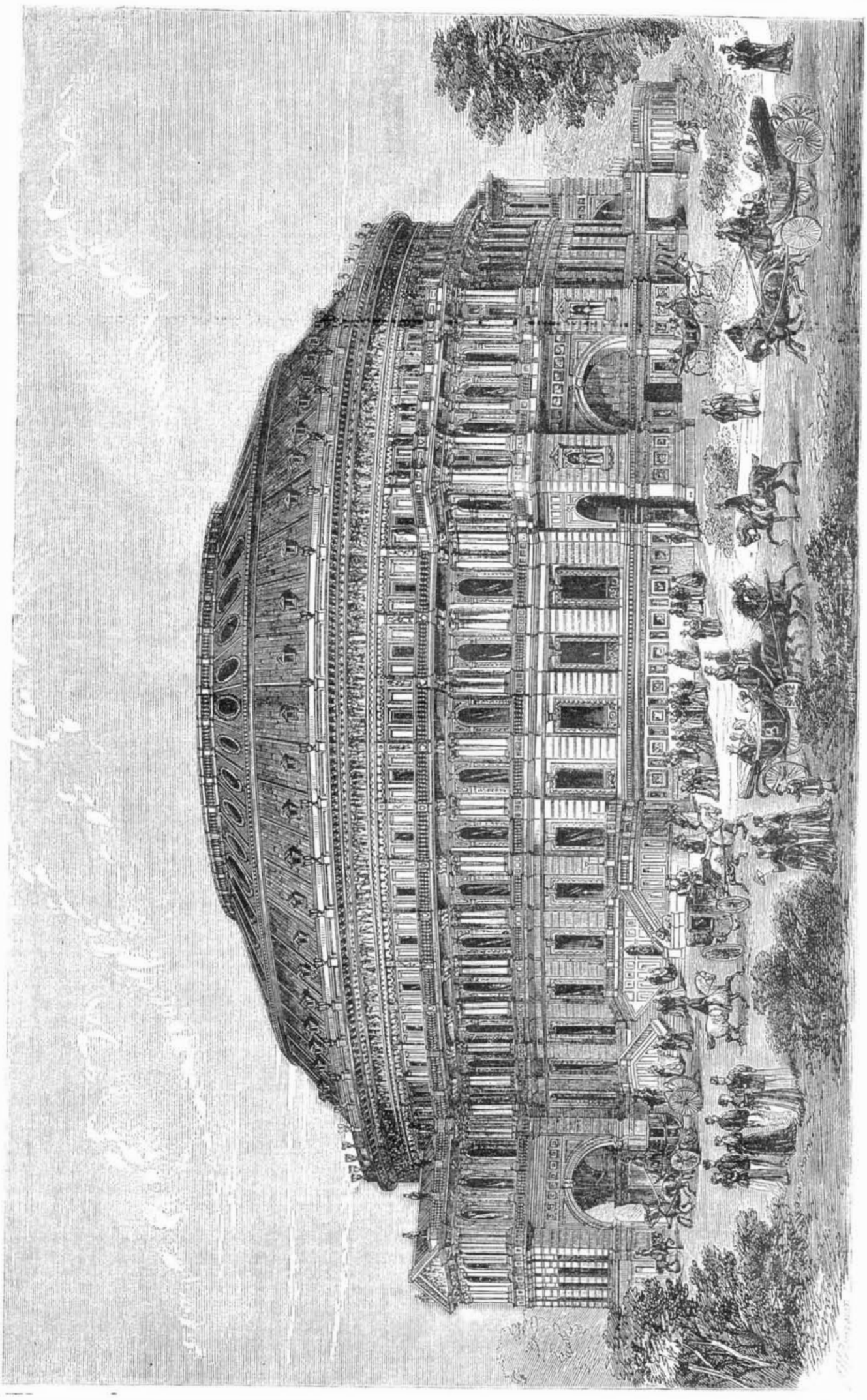
THE ROYAL ALBERT HALL OF ARTS AND SCIENCES.

On the 20th of May, 1867, the "first stone" of the Royal Albert Hall of Arts and Sciences, of which we present an illustration, was laid with all due solemnity and ceremonial by her Majesty the Queen; and now, at the end of little over two years, the vast building is nearly completed, and is only waiting to be covered in by its vast roof to allow of all its interior fittings and arrangements being set up. In form it bears some resemblance to a Roman amphitheater, although its material—namely, red brick faced with terra cotta—goes far to destroy the illusion. Still, it is only justice to the architect to admit that the general effect of his work is both pleasing and imposing. Its magnitude will be best indicated by giving the exact dimensions in figures. The long diameter of the outer wall is 272 feet, the shortest 238 feet, the length between the porches 338 feet, the breadth of the ellipse 332 feet, and the hight 135 feet. The interior is arranged to accommodate comfortably an audience of 8,000, to be divided as follows: In the arena, situate in the center of the building, 1,000 can be accommodated for the musical performances, and when the space is not occupied, by a flower show or an industrial exhibition. The amphitheater, which rises gradually all round the arena under the boxes, will hold 1,400, the boxes 1,100, the balcony 2,500, and the gallery 2,000. The boxes have already subscribed for it at $5,000 each, and a great number of the single seats at $500, but it is calculated that between 5,000 and 6,000 sittings will still be available as a source of revenue for carrying out the objects of the hall. The building is now complete both as to its outer and inner walls, between which, it should be mentioned, run vast and airy corridors for promenade as well as ingress and egress. The next great work will be the fixing in its place of the immense roof of iron and glass, for the purposes of which the whole interior of the building is at present filled with a perfect forest of scaffolding. This roof will be the greatest span of any work of the kind yet erected. Its long diameter will be 219 feet 4 inches; short, 185 feet 4 inches—an immense weight, it will be said, to be self-sustained. As, however, the calculations have all been made for lead, where glass is only to be used, there is every reason to calculate on its strength and durability.

The only remarkable feature remaining to be noticed is the great organ in course of erection by Mr. Willis, the builder of the organ in St. George's Hall, Liverpool. Its dimensions will be 75 feet wide at the base, 44 feet in depth, 60 feet in width, and hight 100 feet. There are to be 112 steps, and the bellows is to be kept going by two steam engines of from 6 to 8-horse power each. The largest organ at present known is the great organ at the Crystal Palace, but in the Kensington instrument the smallest pipe in the front will be longer than the longest pipe in the interior of its Sydenham predecessor. It is expected that the whole work—building, organ, and approaches—will be finished so as to open simultaneously with the projected International Industrial Exhibition in 1871, and that one of the earliest uses to which it will be put will be the ceremonial distribution of the prizes which will arise out of these exhibitions. The entire programme of its contemplated uses comprehends congresses, national and international, of science and art, performances of music on the grandest scale, distributions of prizes by public bodies, art and science conversazioni, agricultural, horticultural, and industrial exhibitions, and the occasional display of pictures and sculpture. For this latter purpose there will be an immense top-lighted gallery running all round the hall. It is satisfactory to be able to add that, in a building which is intended to accommodate assemblages of 8,000 persons, due care has been taken to provide ample facilities for entrance and exit.—*London Artizan.*



ROYAL ALBERT HALL, SOUTH KENSINGTON, LONDON.

Substitute for Fire-Brick.

Improvements in the method of using and applying certain materials in an unmanufactured state, in order to form a substitute for fire-bricks or fire-goods hitherto employed in the construction of furnaces in which fire-bricks, tiles, and other various forms of fire-goods are usually applied, have, according to the *Mechanics' Magazine*, been patented in England. Instead of using fire-bricks, lumps, stones, tiles, or other forms of materials or compounds, in construction, burnt or unburnt, powdered ganister stone, quartz, sand, mica, sandstone, or other silicious material, plumbago, lime, baryta, steatite, and magnesia, are used, alone or separately, or in varied proportions with fire-clays, or with each other, or with silicious or other solutions, mixed or not with hair, fiber, sawdust, shavings, or pulverized coke, or with other analogous materials. In applying the materials in a plastic state, wire may be used as a supporter, or a skeleton or light framework may be used to support the materials while in course of application to the furnace until the material is dry enough. Thus the furnace is built entirely of such materials in their raw or plastic state in connection with brick or other walls, the object being the substitution for fire-goods, and their consequent cost of manufacture, fuel, carriage, and skilled labor, of unmanufactured materials that can be used and applied by cheap labor more speedily and economically. Thus time and expense will be saved in construction, and it will not be necessary to keep large stocks of varied shapes of bricks, the loss of material and labor in making joints will be saved, while, in case of actual wear, additions can be supplied internally or externally to the structure so that it may be easily and speedily repaired.

Death from the Bursting of a Soda Bottle.

The *Medical and Surgical Reporter* contains an account of a death caused by the bursting of a soda bottle, published to show the terrible nature of accidents incidental to the process of filling glass bottles with carbonic acid water, and with the hope that some additional security may be suggested for the better protection of those engaged in the business. The large French-glass soda bottles, five sixteenths of an inch thick, are at present filled with a patent French apparatus with a pressure of 125 pounds. The bottle is surmounted by a metallic cap that closes with a spring when full. The workmen have heretofore been accustomed to protect the face only with a delicate wire screen, having the entire body exposed to those terrible missiles, that are liable at any moment to be hurled with deadly violence against their persons.

Facts for the Ladies.

Mrs. Bartlett, of Black River Falls, Wis., has made, with one "Wheeler & Wilson" needle, six hundred pairs of heavy canvas pants, worn by loggers, earning, within two years, upward of six hundred dollars, besides doing the work for her own and other families.

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

LOCK AND LATCH.—Charles Godfrey Gumpel, Leicester Square, London England.—This invention consists in the application of pins or sliders, of any suitable section, passing through the bolt or bolts, or sliding piece or pieces, acting on the bolt or bolts, and a fixed piece or bolt guide, or pieces or guides, in or on which the bolt or bolts, or sliding piece or pieces, moves or move.

COTTON-SPINNING MACHINE.—E. M. Greeson, Americus, Ga.—This invention comprises an arrangement of a number of hoes or scrapers, at suitable intervals, in a row suspended from a beam or frame, provided with guiding handles and connected at right angles to another frame mounted adjustably on one wheel, to the front of which latter frame the animal is to be hitched for drawing the same across the rows of plants.

DITCHING MACHINE.—J. W. McGehee, Fayetteville, Texas.—This invention consists essentially of a boring or ditching auger, suspended from the frame of a truck, and having an enlarged head projecting in advance of the truck, and rotated so as to bore out a groove as the truck is moved along, securing the earth taken back through a trough to an elevator, which carries it up to a spout chuting it to one side.

COMBINED STOVE PIPE, SHELF, AND CLOTHES HORSE.—W. C. Burnham, Blooming Grove, N. Y.—This invention relates to an improved stove pipe attachment, for use as a stove pipe, shelf, and clothes horse, or frame, for holding clothes around the pipe for drying while serving as a shelf; also, for holding vessels containing food to be kept warm.

AX.—Ernest Quast, Freedom, Mo.—This invention consists in making the polls in two parts, divided in the plane of the cutting edge, and shaped so that when put together and joined by rivets, a groove will be formed dovetailed at the base, for holding the bits which are fitted to it, so that a part of the rivets will pass through the tongues fitted to the said grooves.

FILTER RACK.—E. C. Andrews, Seneca Falls, N. Y.—This invention relates to improvements in racks for chemists' use, in supporting the funnel-shaped paper filters used by them for filtering liquids, and it consists of a skeleton frame, made of wire or other suitable substance, and so arranged as to expose the greatest possible amount of the surface of the paper to the air while filtering, or to prevent the contact of the paper with the side of the common funnel when used for straining into a bottle, by placing the rack in the said funnel.

WATER WHEEL—Denison Chase, Orange, Mass.—This invention consists in an improved form of the buckets and of the bottom of the wheel, calculated to facilitate the discharge of the water, and to obtain a greater per centage of power by the said discharge. The invention also comprises an improved arrangement of the gate, and the supports and adjusting devices of the bridge tree, which improvements are also applicable to other wheels.

COMBINED CANE, UMBRELLA, AND SEAT.—Gillespie Sweeney, New York city.—This invention relates to an Improved cane, seat, and umbrella combined together in one article, in an arrangement capable of adjustment for use in the capacity of either one of the said articles, and consists of a sheath answering for the cane, divided into three parts, and inclosing in one part the umbrella from the point below the lower ends of the ribs when folded, the stock is enlarged at this point and provided with ribs, braces, and a web of canvas stitched across the ends of the ribs, which spread out similarly in some respects to the umbrella, and form a seat when the top is placed on the ground; this latter part is inclosed within the part of the sheath forming the handle, which is divided longitudinally from the top down and hinged to the aforesaid enlargement of the stock. These two parts fasten together with a strong cord.

WINDING AND SETTING ATTACHMENT FOR WATCHES.—Charles Spiro New York city.—This invention comprises the attachment to the fusee of a ratchet clutch permanently fixed to it, and a drum carrying a movable clutch and a gear wheel, to which a folding handle of peculiar construction is connected, whereby the movable clutch may be pressed down into gear with the fixed clutch, and the latter turned to wind the watch, or the movable clutch is moved up out of connection with the other, so as turn independently of it, at the same time bringing the toothed wheel into gear with a train of gears connecting with the hands for setting.

COOKING STOVE.—James Grimes, Portsmouth, Ohio.—This invention relates to new and useful improvements in cooking stoves, and consists in the arrangement of the flues beneath and back of the oven, and in the divided cross center and in air tubes.

CAR COUPLING.—John D. Kerrison, New York city.—This invention relates to a new and useful improvement in couplings for railroad cars, whereby many of the objections to ordinary car couplings are obviated.

WASHING MACHINE.—Herrmann Cramer, Sonora, Cal.—This invention relates to a new and useful improvement in machines for washing clothes, and consists in a hollow revolving cylinder with open rim, serrated on its inner surface, placed in a suitable tub with a heating furnace connected therewith.

THILL COUPLING.—W. H. Cox and Theophilus Larouche, Williamstown, Y.—This invention relates to a new and useful improvement in devices coupling thills to buggies or other vehicles.

UMBRELLAS AND PARASOLS.—Miss Maggie Clyde, Brady Post Office, Pa.—This invention consists in making the staff of the umbrella or parasol in sections jointed together, and in a gutter around the rim of the umbrella, for conducting the water to one point, with a single opening for its discharge.

SELF SUPPORTING GATE.—J. R. Davis, Covington, Ga.—This invention relates to a new and useful improvement in the method of hanging and supporting farm and other gates.

TUBE WELLS.—Asa Waters, Mobile, Ala.—This invention relates to a new and useful improvement in "Tube," or "Drive wells," and consists in covering the perforated well tube with wire cloth, and in protecting the wire cloth covering with a perforated metallic shield.

WATER ELEVATOR.—G. W. Dickerson, Prairietown, Ind.—This invention relates to new and useful improvements in the method of raising water from wells and cisterns.

COMBINATION ENVELOPE OPENER.—C. B. Stevens, Riverton, Conn.—This invention relates to a new and useful improvement in an instrument for opening the envelopes of letters, public documents, etc., and consists in a peculiarly formed cutting blade and handle, and combining these with an ink and lead eraser.

TURBINE WATER WHEEL.—Philip O. Palmer, Swoope's Depot, Va.—The object of this invention is to save the water, and to improve the construction of the gates so that they can be more easily operated and adjusted than heretofore.

COMPOSITION FOR DESTROYING INSECTS ON FLOWERS, PLANTS, ETC.—John Ahearn, Baltimore, Md.—This invention consists of a composition for destroying insects on flowers, plants, vines, and bushes. It is made in liquid form and applied by sprinkling, either with a wisp of hay or a watering pot.

THILL COUPLING.—Cyrus Fisher, Canton, Mass.—This invention has for its object the fastening of the thills of a carriage to its forward axle, so that they can be readily and easily detached, when desired, and it consists in a strap bolt attached to the rear end of each of the thills and fitting a hole in a trunnioned block, which is confined between clips on the axle, the said strap bolt having a screw-threaded end, by means of which and a nut, casual detachment of the thills is prevented.

FILE.—Albert Thompson, Norway, Maine.—This invention consists in making a file with two sets of teeth on opposite sides, one set inclined in a direction the reverse of the other, in order that when a stroke in one direction has been made, the file may be turned over, and a return cutting stroke be made with it, thus very much expediting the labor of filing a saw or other article.

SCROLL-SAWING MACHINE.—William Oller, Scenery Hill, Pa.—This invention consists in making a saw in a frame consisting of two pairs of metallic levers, one pair at each side of the saw, said levers having their fulcra at the top and bottom of vertical metallic bars, placed one at each side the saw, and said levers being connected with the lower pair at their outer ends by means of extensible rods, by which the frame may be tightened or loosened at pleasure, and is made at once strong, flexible, and elastic, so as to admit of all the necessary movements of the saw.

ELEVATED OVEN RANGE.—Philip Rollhaus, Portchester, N. Y.—This invention relates to a new manner of arranging the pipes between the water-back and the boiler, with an object of allowing them to be made with a short turn to enable the use of brass pipes.

CORN SHELLER.—Henry P. Watts, Lynchburg, Va.—This invention has for its object to furnish an improved machine for removing corn from the cobboth when dry and when green, which machine shall be simple in construction, easily and conveniently operated, and effective in operation.

BEDSTEAD.—D. M. Estey, Brattleborough, Vt.—This invention has for its object to so improve the construction of bedsteads that the slats may be secured in place without the use of ledges or strips attached to the inner sides of the rails, and which shall, at the same time, allow the said slats to be conveniently taken out and put in when required.

COMBINED DOUBLE SHOVEL AND TWO-HORSE CULTIVATOR.—S. G. Rayl, Agency City, Iowa.—This invention has for its object to furnish a simple, convenient, and effective two-horse cultivator for cultivating plants planted in rows, and which shall be so constructed and arranged that the double shovel plows may be easily and quickly detached from the carriage and adjusted for use as single-horse cultivators.

BEAMS AND GIRDERS.—Richard J. Gatling, Indianapolis, Ind.—This invention has for its object to furnish improved girders and beams for fire-proof buildings and other uses, which shall be so constructed that the flooring and laths can be nailed directly to said beams and girders, and which may at the same time be constructed with less powerful machinery and at less expense than when made in the ordinary manner.

FORMING BITS AND AUGERS.—James Swan, Seymour, Conn.—This invention has for its object to furnish an improved method of upsetting and turning the lips and forming the screw points of double, curved-lipped bits and augurs from the pressed and crimped blanks by means of a pair of duplicate dies.

MACHINE FOR MAKING HORSE SHOES.—Frederick D. Althause, Morrisania, N. Y., and John F. Allen, Tremont, N. Y.—This invention has for its object to furnish an improved machine for forming horseshoes which shall be so constructed and arranged that the hot bars may be fed in at one end of the machine and come out at the other end in the form of perfect shoes.

CIRCLE, OR FIFTH WHEEL FOR VEHICLES.—C. St. James, Pittsfield, Mass.—This invention has for its object to furnish an improvement in the construction of the circle, or fifth wheel of vehicles, so as to avoid the use of a king-bolt, and which, at the same time, shall be so constructed as to allow the wear to be conveniently taken up to keep the parts always close and firm.

CAN OPENER.—H. C. Alexander, New York city.—This invention has for object to furnish a simple and convenient instrument for opening cans, sardine boxes, etc.

LETTER CARRIERS' ALARM.—Edward H. Ripley, Boston Highlands, Mass.—This invention has for its object to furnish an improved attachment for the doors of houses, offices, etc., which are kept constantly or occasionally locked or bolted, which shall be so constructed and arranged as to enable the letter carrier to pass letters and other small packages through said door, and at the same time will notify the inmates of their delivery.

WASHING MACHINE.—Isaac Erb, Bowmansville P. O., Lancaster, N. Y.—This invention has for its object to furnish an improved washing machine, which shall be so constructed and arranged that while washing the clothes quickly, thoroughly, and without injury to the fabrics, it will enable the cover and presser to be turned back out of the tub and out of the way while putting in and taking out the clothes, and which will, at the same time allow a steam-tight cover to be applied to the tub.

CORN CULTIVATORS.—A. J. Grush, Springfield, Ill.—The object of this invention is to provide a cultivator capable, by a slight adjustment, of adaptation for use and for guidance, either for the operator to ride upon it or walk behind it. It is also designed to provide certain adjusting devices for the plow beams for governing the depth of plowing and their distance apart; also an adjustable arrangement for the plow handles, and an arrangement of means for suspending the plows above the ground.

DRESS PROTECTOR.—Mrs. A. H. Graton, Lawrence, Kansas.—This invention consists of a short annular sack, preferably of water-proof substance, shaped and adapted for receiving the lower parts of the skirts, and to hold them up out of the water and mud, by being suspended at the outside by straps from a belt around the waist, and at the part inside the skirts, by straps hooking upon the hoop skirt or other under skirt.

FARM GATE.—George F. Bissell, Oneonta, N. Y.—The object in this invention is to improve and perfect the farm gate, various styles of which are in use, and the invention consists in the method of supporting and operating it.

APPARATUS FOR MEASURING WATER AND OTHER LIQUIDS.—John Winsborrow, Livermere Road, Dalston, England.—The object of this invention is to obtain uniformity in the pressure upon the several parts of a meter, and, consequently, greater accuracy, with a minimum of wear and tear in working, together with correct measurement of the liquid passed through.

FOLDING CHAIR.—Nicholas Collignon and Claudius O. Collignon, Closter, N. J.—This invention relates to chairs which fold up into a small space, whereby they are rendered much more convenient for transportation and storage than chairs of ordinary construction.

STUD AND BUTTON FASTENING.—C. L. Horack, Willimantic, Conn.—This invention relates to a new and useful improvement in a device for fastening studs and buttons to shirt bosoms and wristbands and for all similar uses.

CONVERTIBLE WRITING DESK.—Frederick Robbin, Hudson City, N. J.—This invention consists in so constructing and arranging the top and the case containing the drawers and pigeon holes, that a writing desk or a table may be formed at will.

FIELD PRESS.—E. J. Marsters, Shaw's Flat, Cal.—This invention relates to a new hay or cotton press, which is arranged so that it can be readily transported from one place to another, to press the material directly on the field or wherever it may be desired. The invention consists in the general construction of the apparatus, which is mounted upon a wagon, and which is so got up by the application of toggle levers and other devices, that a powerful press is obtained.

EARTH CLOSETS AND URINALS.—Augustus Fraser Baird, Pimlico, London, England.—This invention consists in constructing an earth closet which is provided with a receptacle beneath the seat for receiving the deposits with which the earth is to be mixed, and with a shoot or passage opening into the said receptacle for conveying the earth into the same, and at the other end to that opening abovementioned, another opening by which the earth is supplied from a hopper to the said shoot.

FOUNDERY MOLDING.—Thomas G. Lucas, Middletown, Conn.—This invention relates to a new and useful improvement in the manner of molding patterns for making castings of iron or other metal, and consists in the use of draft plates (one or more) in combination with the pattern.

COMPOSITION FOR DESTROYING INSECTS ON FRUIT TREES.—John Ahearn, Baltimore, Md.—This invention consists of a composition of six simple and inexpensive ingredients for application to the roots, trunks, and limbs of trees, to destroying grubs and worms, and to prevent the ravages of insects. It is also said to be an excellent fertilizer.

Official List of Patents.

Issued by the United States Patent Office.

FOR THE WEEK ENDING NOV. 16, 1869.

Reported Officially for the Scientific American.

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96,761.—CAN OPENER.—H. C. Alexander, New York city.
96,762.—HORSESHOE MACHINE.—Frederick D. Althause, Morrisania, and John F. Allen, Tremont, N. Y.
96,763.—REVERSIBLE DIE-BOX FOR NUT MACHINES.—Wesley Anderson, Pittsburgh, Pa.
96,764.—MACHINE FOR MAKING MATCH BLOCKS.—Emery Andrews, Portland, Me., and Wm. Tucker, Philadelphia, Pa.
96,765.—FILTER RACK.—E. C. Andrews, Seneca Falls, N. Y.
96,766.—TUBING CLUTCH.—Joel N. Angier, Titusville, Pa.
96,767.—EARTH CLOSET.—Augustus Fraser Baird, Pimlico, England.
96,768.—Antonio Barli.—Suspended.
96,769.—RAILWAY-RAIL SPLICE.—Jason T. Bartlett (assignor to himself and Edward E. Batman), Boston, Mass.
96,770.—POTATO DIGGER.—Joseph Belknap, Adrain, Mich.
96,771.—FARM GATE.—Geo. F. Bissell, Oneonta, N. Y.
96,772.—LANTERN.—Wm. H. Bonnell, Buffalo, N. Y.
96,773.—STOVE-PIPE SHELF AND CLOTHES DRYER.—W. C. Burnham, Blooming Grove, N. Y.
96,774.—COMBINED SEED PLANTER AND CULTIVATOR.—Geo. W. Carpender, Butler, Ind.
96,775.—WATER WHEEL.—Denison Chase, Orange, Mass.
96,776.—COMBINED SCREW AND PIPE WRENCH.—J. W. Close, Buffalo, N. Y.
96,777.—UMBRELLA.—Maggie Clyde, Brady Post Office, Pa.
96,778.—FOLDING CHAIR.—Nicholas Collignon and Claudius O. Collignon, Closter, N. J.
96,779.—APPARATUS FOR TYING FLEECES.—Solon Cooley (assignor to himself and Ceylon M. Kelly), Caro, Mich.
96,780.—WASHING MACHINE.—Herrmann Cramer, Sonora, Cal.
96,781.—APPARATUS FOR UNLOADING CARS.—John Dable, Chicago, Ill. Antedated November 5, 1869.
96,782.—MACHINE FOR ROLLING CAR COUPLING PINS.—Frederick W. Davidson, Cleveland, Ohio.
96,783.—GATE.—John R. Davis, Covington, Ga.
96,784.—TRACK-CLEARING CAR.—Augustus Day, Detroit, Mich.
96,785.—WATER ELEVATOR.—G. W. Dickerson, Prairietown, Ind.
96,786.—WASHING MACHINE.—Isaac Erb, Lancaster, N. Y.
96,787.—BEDSTEAD.—D. M. Estey, Brattleborough, Vt.
96,788.—CABINET FOR LADIES.—Alexander J. Forbes, San Francisco, Cal.
96,789.—RIGGING SHIPS.—Robert B. Forbes, Boston, Mass.
96,790.—PROCESS FOR REDUCING REBELLIOUS ORES OF THE PRECIOUS METALS.—Alfred I. Frick and Jean Baptiste Le Clerc, San Francisco, Cal.
96,791.—MACHINE FOR CUTTING PASTEBOARD.—H. A. Gage, Manchester, N. H.
96,792.—CALENDAR CLOCK.—Daniel J. Gale, Sheboygan Falls, Wis.
96,793.—BEAM.—Richard J. Gatling, Indianapolis, Ind.
96,794.—GAVEL FORK.—Thos. R. George, West Dryden, N. Y.
96,795.—SEWING MACHINE FAN.—D. W. Glassie, Nashville, Tenn.
96,796.—WIND WHEEL.—Luman M. Godfrey, Colon, Mich., assignor to himself and George S. Sheffield.
96,797.—DRESS AND SKIRT PROTECTOR.—A. H. Graton, Lawrenee, Kansas.
96,798.—GRATE BAR.—C. A. Greenleaf, Indianapolis, Ind.
96,799.—COOKING STOVE.—James Grimes, Portsmouth, Ohio.
96,800.—MACHINE FOR TENONING SPOKES.—Milburn Gunn, Jeffersontown, Ky.
96,801.—CORN CULTIVATOR.—A. J. Grush, Springfield, Ill.
96,802.—DOOR LOCK.—Charles Godfrey Gumpel, Leicester Square, England.
96,803.—MACHINE FOR BENDING THILLS.—James S. Hamlet, Portsmouth, Ohio.
96,804.—BREAD MACHINE.—John E. Hawkins, Lansingburg, N. Y.
96,805.—PORTABLE FENCE.—Lewis Hazlett and Samuel D. Hazlett, Winfield township, Pa.
96,806.—HEATING STOVE.—Chas. Hempel and Joseph Schaum, Detroit, Mich.
96,807.—CARPET SWEEPER.—R. C. Higgins and Abraham Fuller, Boston, Mass.
96,808.—BUTTON.—C. L. Horack, Willimantic, Conn.
96,809.—HEMMER FOR SEWING MACHINES.—E. Howell, Ashtabula, Ohio.
96,810.—HORSE HAY FORK.—Amos B. Hunt, Matteson, Mich.
96,811.—LATH MILL.—John S Hyde, Pentwater, Mich.
96,812.—APPARATUS FOR PREVENTING HORSES FROM KICKING IN THE STABLE.—Werner Itschner, Philadelphia, Pa.
96,813.—RAILWAY CAR COUPLING.—John D. Kerrison, New York city.
96,814.—FENCE.—Andrew Kull, Jr., Bloomfield, Wis.
96,815.—MANUFACTURE OF PLASTIC VENEER.—Chas. Kuttler, West Hoboken, N. J.
96,816.—RAILWAY CAR COUPLING.—Leo Laley, Goshen, Ind.
96,817.—HEEL-CUTTING MACHINE.—Richard C. Lambart, Raynham, assignor to David Whittemore, North Bridgewater, Mass.
96,818.—MACHINE FOR CUTTING FELLIES.—Wm. A. Lewis, and Geo. W. Butler, Joliet, Ill.
96,819.—FLASK FOR MOLDING.—Thos. G. Lucas, Middletown, Conn.
96,820.—FLUTING MACHINE.—Hannah Luchs, Washington, D. C.
96,821.—ANIMAL TRAP.—Wm. Luker, Kalamazoo, Mich.
96,822.—FIELD PRESS.—E. J. Marsters, Shaw's Flat, Cal.
96,823.—SODA WATER DRAFT APPARATUS.—John Matthews, Jr., New York city.
96,824.—DITCHING MACHINE.—James W. McGehee, Fayetteville, Texas.
96,825.—GRAIN DRILL.—Wm. H. Moore, Jr., Blooming Grove, Ind.
96,826.—COOKING STOVE.—W. N. Moore, Neenah, Wis.
96,827.—MANUFACTURE OF PIG IRON.—Charles Motier Nes York, Pa.
96,828.—BEVERAGE.—Constantine Nessi, San Francisco, Cal.
96,829.—DRAG.—John W. Newton, Geneva, Wis. Antedated November 1, 1869.
96,830.—SAMPLE CARD FOR LIQUIDS.—Henry Nustedt, New York city.