Business and Personal.

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Recent American and Foreign Patents.

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

CLAMPING MACHINE.—James H. Humes, East Saginaw, Mich.—This invention relates to improvements in machines for clamping sash and other like frames of wood, for squaring them up and holding them for fastening, and it consists in an arrangement on a table having a strong frame around the edge and raised above it, of two sliding clamping bars at right angles to each other, on horizontal slides working in slots in the table top, by means of cranked shafts below operated by treadles or hand levers, to which slides the bars are adjustably connected by angle plates, to be changed for larger or smaller frames, and which have set screws for adjusting the clamping bars to the shape of the frames to be clamped.

PROJECTILE FOR RIFLED CANNON.—John G. Butler, Fort Leavenworth Kansas.—This invention relates to an improvement in lifting studs applied to projectiles for the purpose of centering the front ends of the same, and the invention consists in the combination with a projectile of a band and studs, both expansible and respectively fitted in undercut cavities at the front and rear ends of a projectile.

LEMON SQUEEZER.—James L. Jensen, Brooklyn, N. Y.—This invention relates to improvements in lemon squeezers, and consists in an improved means of attaching the porcelain cups or bowls to the handles.

BEDSTEAD.—James C. Merritt, West Point, N. Y.—This invention consists in so constructing the parts and rails of a bedstead that they may be securely and durably fastened together without screws or metal fastening of any description, and a strong and perfect bedstead formed thereby.

BRIDLE BIT.—M. J. Firey, Mansfield, Ohio.—This invention relates to a new and useful improvement in bridle bits, whereby they are made more effective in securing horses to posts or other fixtures, than bridle bits have heretofore been.

STEAM BOILER BLOW-OFF PIPE.—John C. McLaughlin, Pittsburgh, Pa.—The object of this invention is to provide efficient means for clearing the bottoms, or interior lower surfaces of steam boilers of scale and sediment, thereby preventing such boilers from being damaged by the fire.

PERCOLATOR.—Albert Merrell, Cincinnati, Ohio.—The object of this invention is to furnish an apparatus by means of which percolation can be forced, either by removing the pressure of the atmosphere by vacuum from the bottom of the percolator, or by forcing air into it at the top, or both, and thereby greatly accelerating and more perfectly performing the operation known in pharmacy as percolation.

COMBINED IRON AND STEEL BARS.—Ellridge Wheeler, Hudson, Mass.—This invention relates to improvements in the manufacture of metal bars, having for its object to provide merchantable bars of combined iron and steel, of any size, shape, and length, the two metals being permanently welded and adapted for working by the common methods into any required articles.

ELEVATING APPARATUS.—P. R. Berry, Youngstown, Ohio.—This invention relates to improvements in apparatus for elevating brick, mortar, and other building material in the erection of buildings, and consists in a platform, sectional vertical guides, and a safety holding apparatus for the platform, arranged for hoisting the material either by manual labor or by horse or steam power in a rapid and economical manner.

VEGETABLE CUTTER, SCRAPER, ETC.—A. W. Pagett, Springfield, Ohio.—This invention relates to improvements in machines for washing, cutting, pressing, and scraping vegetables for food, fruit for making cider, wine, etc., and for crushing beefsteak, stuffing sacks for sausages, and other like uses. The invention consists in a peculiar construction and arrangement in one machine, of a washing apparatus, a pressing apparatus for separating the juice from the pomace, also applicable for stuffing, a cutting, and a scraping apparatus, under an arrangement whereby all the operating parts may be worked by one hand lever, and whereby the same may be simply and cheaply constructed.

RAILROAD RAILS.—Ellridge Wheeler, Hudson, Mass.—This invention relates to improvements in railroad rails, and consists in the construction of rails, either of iron and steel, or all iron, so that the whole of the exterior shell, or the whole of the same except the base will be formed of homogeneous steel or iron, and welded to the central iron part with no seams or "lines of filing" extending to the surface, except at the edges of the base, and so that more perfect welds will be formed between the steel and iron.

RATTAN CUTTER FOR UMBRELLA RIBS.—John Murphy, Green Point, N. Y.—This invention has for its object to construct a tool by means of which rattan can be cut on three sides for umbrella ribs, and the outer separated parts split, to be useful for caning chairs. The invention consists in the construction of a cutter, having three cutting sides, and open on the fourth side, and provided with outward projecting splitting ribs.

WASHING MACHINE.—Israel Baker, Tomah, Wis.—This invention has for its object to furnish an improved washing machine, which shall be simple in construction, and effective in operation, and which may be manufactured and sold for a small amount.

WASHING MACHINE.—Gustavus Hamel, De Soto, Mo.—This invention has for its object to furnish an improved washing machine, simple in construction, easily operated, and effective in operation, washing small and large articles with equal facility and thoroughness.

POTATO DIGGER.—Daniel Bibbee, and William Rand, Letart Falls, Ohio.—This invention has for its object to furnish an improved potato digger, which shall be so constructed as to raise the potatoes and soil, and separate the potatoes from the soil and from the weeds and grass that may be raised with them, and deposit the potatoes in a box, and which shall at the same time be simple in construction and operation.

WATCHES.—Henry Stauffer, Ponts Martel, Switzerland.—This invention relates to improvements in watches, and consists in an arrangement of the large second hand, commonly called "dead second," to beat full seconds at one beat, instead of making several beats to a second as they now do. It also consists in arranging it to beat in unison with the quarter second, the same being connected together by gearing arranged in a novel manner.

HORSESHOE.—S. J. Baker, Madison Centre, Me.—This invention relates to improvements in horseshoes, for spreading the heels of horses, that have become too contracted, and it consists in jointing the two parts of the shoe at the front to a plate to which the toe calk is attached by a rivet through each part, and a central rivet at the space between the ends of the two parts, the latter to prevent the two parts from shifting forward or back. It also consists in beveling the rear parts of the shoe from the inside outward and downward, so that the walls of the heel fitted thereon will be gently forced outward; and it also consists in the application to the said rear parts, of a spreading seam, for gradually setting the parts outward from time to time when the shoe is attached to the foot, to spread the heel.

MACHINE FOR MAKING HARROW TEETH.—James Morgan, Pittsburgh, Pa. This invention relates to improvements in machines for making harrow teeth, and consists in an arrangement of a pair of pressing and pointing dies, a fine cutter, and a cutter for cutting off the bar.

SCREENS.—W. C. Chapman, Charleston, S. C.—This invention relates to improvements in the construction of rotary, reciprocating, or other screens or sieves for screening rice and other grains, and consists in making screens with meshes in the form of oblong parallelograms, of round or other oval formed wire, preferably wound (in the case of circular screens) spirally over the transverse ribs, widely separated, and confined to them by small wires wound around each, determining the width of the spaces between the wires; and in the case of flat screens, stretched across the transverse wires and similarly secured, or in some cases stretched from end to end of the rotary screen, the transverse ribs being arranged the other way, but not spirally.

COTTON SEED PLANTER.—Edward J. Hudson, Golconda, Ill.—This invention has for its object to sow two "stands" of cotton seed at one and the same time, one of which shall be covered deeply, and the other shallow, in order that, if the weather be wet the shallow-covered seed may germinate, and if the weather be dry the deeply covered seed may come up, and the farmer thus be reasonably sure of a crop in either alternative.

TOY HOOP.—Philipp Hessemer, Washington, D.C.—This invention consists in the combination of tags painted in different colors with the spokes of a hoop, one tag to each spoke, and in the arrangement of one tag near or next to the hub of the hoop, the second tag at a distance from the hub greater than the length of the first, and the third tag at a distance from the hub greater than twice the length of the first, and so on, in order that, when the hoop is rapidly revolved, it may show as many separate concentric colored rings as there are tags.

RAILWAY GATE.—John B. Rittenhouse and Jos. Collins, Locust Lane, Pa.—This invention has for its object to enable a locomotive engine to automatically open the gates placed across a railway track for the purpose of preventing cattle from straying thereon to places whither they should not wander.

NET WEIGHT SPRING BALANCE.—John Jochum, Brooklyn, N. Y.—This invention relates to improvements in spring balances, whether having circular dials or straight scales, over which the index fingers work, and consists in the application of an adjustable pointer or index finger arranged to be set back to zero after the "tare" has been placed on the scale, and indicate the net weight only of the article placed on the vessel for containing it; or in case the dial or scale be arranged to move past a fixed finger, the said dials or scales are to be similarly adjustable.

STRAW CUTTER.—Nelson O'Neil, Purchase Line, Pa.—The object of this invention is to furnish a machine for cutting straw and similar material for feed, which machine shall be cheap, durable, and convenient, and it consists in the arrangement for changing or varying the length of the feed cut.

METALLIC CONNECTIONS FOR MOSQUITO-NET FRAMES.—U. W. Armstrong and Ira Keeney, Evansville, Ind.—This invention has for its object to furnish improved metallic connections for securing the upright and horizontal bars of mosquito-net frames to each other, which said connections shall be simple in construction and effective in operation, enabling the net frames to be readily put up and taken down when required.

BRIDLE BIT.—Milton J. Firey, Mansfield, Ohio.—The object of this invention is to provide suitable and efficient means for securing and controlling horses, more especially designed for vicious and headstrong horses which cannot be controlled by the ordinary bit, or which have a habit of pulling and breaking away when hitched.

PROCESS OF CLEANING AND POLISHING COFFEE BEANS.—Charles C. Warren and James B. Baldy, Toledo, Ohio.—This invention has for its object to simplify the process of cleaning and polishing raw—that is, not roasted—coffee beans, and to prevent the application of foreign substances to the beans during such cleaning process.

CRANK MOTIONS FOR ENGINES.—John Smith and Godfrey Joithe, Newark, N. J.—This invention relates to certain improvements in that kind of crank motion in which, by the application of two gear wheels the motion of the crank shaft is doubled. The invention consists in mounting the crank upon a sleeve which turns loose on the crank, and which carries a cam for setting the valve. The sleeve, cam, and crank make but one revolution to two of the shaft, and the valve is therefore set to produce one rotation of the crank whose shaft meanwhile turns twice.

STEAM GENERATOR.—T. S. La France, Elmira, N. Y.—This invention relates to a new vertical steam generator, which is so constructed that the heat of the fire is almost entirely utilized, and that steam can be very rapidly produced. The invention consists in a new arrangement of double pipes which lead from the main water chamber into the fire-box, and in which a complete circulation of the water will be obtained to create steam rapidly. The invention also consists in the use of a novel super heater.

ADJUSTABLE SHEDS AND ROOFS.—Francis L. Hall, Oneida, N. Y.—This invention relates to a new manner of hanging the protecting leaves of field and garden sheds, and the roofs of equivalent structures, with a view of allowing their adjustment in every direction for letting the rays of light pass through from either side.

HEATER.—John F. Still, West Farms, N. Y.—This invention relates to improvements in heaters, for heating dwellings and the like, by means of cold air received into a space between the shell of the combustion chamber and an outer shell, to be heated and then conveyed to the room to be heated and it consists in an arrangement, in the said space, of heating plates, draft-regulating heaters, and a water reservoir, whereby the air is heated and mixed with the vapor rising from water contained in the said reservoir, in any efficient manner, the said arrangement being such that the heater may be very cheaply constructed.

PRESS FOR COTTON AND OTHER SUBSTANCES.—W. I. Blackman, Columbus, Miss.—This invention has for its object to furnish an improved press for compressing bales of cotton, and other substances, which shall be strong, durable, simple in construction, effective in operation, and may be built at a trifling expense.

SCREENS, GRATINGS, ETC.—Charles Lockwood, Haverstraw, N. Y.—This invention has for its object to improve the construction of the metallic part of the screen or grating, and the manner of its attachment to the frame to adapt it for use for sand and coal screens, ash sieves, door and window gratings, wool-washing machine gratings, and similar purposes.

CHURN DASHER.—Philip Edgerton, Rutland, Vt.—This invention has for its object to furnish an improved churn dasher which shall be so constructed and arranged as to throw the milk into various currents and counter currents, thereby violently agitating it, bringing the butter in a very short time, and developing all the butter that may be in the milk.

STOVE FOR HEATING PURPOSES.—Dewitt C. Clark and Henry W. Cady, Sioux City, Iowa.—This invention relates to a new and useful improvement in stoves, for heating purposes, whereby such stoves are rendered more efficient for the purpose intended than stoves of ordinary construction, and it consists in forming chambers between the outer wall or casing of the stove, and in a damper in the lining, and in a dividing partition.

ANIMAL TRAP.—William D. Lindsley, Eudora, Kansas.—This invention relates to a new and useful improvement in traps for catching rats and mice, and other animals, and consists in making the trap in two compartments, and so arranging the mechanism, that the animal springs the trap in one compartment, and is caught, and, in attempting to escape by passing into the other compartment, he resets the trap.

STYLUS FOR HAND WRITING.—A. S. Carleton, Providence, R. I.—The object of this invention is to provide a substitute for the ordinary writing pen whereby a constant supply of ink may be always ready for use, and by which a light or a heavy and uniform ink mark may be made on paper; and it consists in an ink fountain tube, tapered nearly to a point at one end, and discharging the ink therefrom, the flow of ink being regulated by an adjustable needle valve, and by an adjustable air valve, or screen.

PORTABLE WRITING DESKS.—William Bothe, Williamsburgh, N. Y.—This invention has for its object to improve the construction of portable writing desks, so as to make them stronger, more durable, and less liable to get out of order.

WASHING FLUID.—John Bolinder, Brooklyn, N.Y.—This invention has for its object to furnish an improved washing fluid, or soft soap, which will readily and thoroughly remove dirt and grease, will bleach the clothes, and will not injure the fabric.

MUSICAL STAFF.—Horton Wright, Akron, Ohio.—This invention has for its object, and consists in, drawing the lines of the staff to correspond essentially with the key-board of a musical instrument, such as a piano, melodeon, etc. Or, so as to be, in fact, identical with said key-board.

AUTOMATIC LIQUID MEASURE AND FUNNEL.—Theodore W. Ellis, Macon, Ga.—This invention has for its object to furnish an improved liquid measure which shall be so constructed that exactly the desired amount of the liquid will flow out, automatically, from the measure into the receiving vessel the measure acting, at the same time, as a funnel.

SHEET METAL PIPE FORMING AND THREADING MACHINE.—M. K. Pierce Calahan's Ranch, Cal.—This invention relates to new and useful improvements in machinery for forming sheet metal pipe, and forming screw threads on them. It consists in the combination with a bed plate, having oblique grooves and ribs along each margin, of a forming roller, having spiral grooves and projections at the ends, so corresponding to those the bed that when placed thereon its projections will fit in the grooves the bed, and the projections of the latter will fit in the grooves of the former, and operating gear for pressing the roller down upon a sheet placed between it and the bed and attached to one end of the roller, and rolling the latter along the bed, to impart by the said grooves and projections spiral threads to the sheet, which is rolled up at the same time into tubular form, and forced upon punches, which are so arranged in the bed as to punch the lapping edges of the plate to form the rivet holes for connecting them.

ATTACHING SPONGE AND CHALK HOLDER.—Cornelius S. See, New Brunswick, N.J.—This invention relates to improvements in attaching sponge and chalk holders to desks, billiard, and other tables, and consists in providing slotted metal holders for the handles or shanks of the cups, for permanent attachment to the tables, and for connection of the shanks in the slots of the holders, in a way to hold them more permanently, and to prevent the holding screws from getting loose as they now do when screwing the vibrating shanks up against the wood.

GRINDING ATTACHMENT FOR CARDING MACHINES.—Andrew J. Burke, Mansfield, Ct.—This invention relates to the application to carding machines of an attachment for imparting motion to the carding cylinders in the direction opposite to their working motion—as is required for grinding the cards—by means of the main driving belt while working on the loose pulley of the main card shaft, and without the labor and delay involved the present practice of lengthening and crossing the driving belt.