

RECENTLY PATENTED INVENTIONS.

Pertaining to Apparel.

HAT-GUARD.—H. SAUNDREY, New York, N. Y. The purpose of the inventor is to provide a guard applicable to any form or type of hat and comprising a strap and retaining sections, these sections being permanently attached to the hat in such manner that while securely held in position they are concealed, and the strap section being of such character that it can be expeditiously attached to or detached from the retaining sections.

Electrical Devices.

ELECTRIC ALARM-CLOCK.—J. F. RODGERS, New York, N. Y. The object of the invention is to provide a new and improved electric alarm clock more especially designed for use in factories and other places, and arranged to give an alarm at predetermined hours, such as indicating the time for starting and quitting work.

PORTABLE ELECTRIC-LIGHT CABINET.—H. H. ROBERTS, Lexington, Ky. It is especially designed by the inventor to provide a portable apparatus which the patient can apply himself to the various parts of the body in home treatment and which shall be so constructed as to be conveniently handled and applied and which will permit various colors of light to be separately or simultaneously used and which shall be free from all risk of fire.

ELECTRIC HEATER FOR METAL-WORKERS.—J. O. LUTHY, Austin, Texas. The invention is an electric heater of novel construction of parts and certain reagents forming a bath for utilizing the electric current through the bath to raise to a red heat any piece of metal plunged into this bath. It enables blacksmiths, machinists, and other metal workers to quickly and conveniently heat metal to a welding temperature without the use of a forge or a fire.

Of Interest to Farmers.

CATTLE-GUARD.—C. LONG, Paha, Wash. The invention pertains to improvements in cattle guards designed to be placed at railway crossings or at other points along a railway, an object being to provide a guard of simple construction, that will prevent the crossing of cattle and without danger of hurting the animals' feet.

DISK HARROW.—C. N. CASS, Spangle, Wash. One purpose of the inventor is to construct a disk harrow or similar implement in two sections, a forward and a rear section, and providing means whereby the sections can be adjusted independently or relatively to each other and held in adjusted position, the parts being released for adjustment by the driver but the actual adjustment being performed by the team.

HAY-STACKER.—D. D. OGILVIE, Lee, Nev. The aim in this case is to provide a form of stacker, adapted especially for stacking hay from buck-rakes, and to so construct the machine that the fork conveyer can be speedily and conveniently raised and lowered, and wherein when the conveyer reaches the highest point in its ascent it will automatically discharge its load in such manner as to deliver the hay in the middle of the stack, rather than at one side, as most stackers do.

CULTIVATOR.—J. J. STALDER, Meade, Kan. Mr. Stalder's invention refers to improvements in cultivators and more particularly to that class of cultivators designed to cultivate alfalfa closely, destroying weeds, grasses, etc., without destroying the alfalfa plants. The cultivator may be used for other purposes.

PLOW.—R. J. VICKERY and J. J. DINSMORE, Clark, S. D. The invention is an improvement particularly in plows arranged in gangs. The implement may be connected with any suitable form of traction engine to which the inventors secure to the front side of the draft bar a triangular wooden draft frame connected to the draft bar and having a central iron draw bar extending across the frame at the middle thereof and provided at its front projecting end with an eye which may be coupled with the traction engine or other draft apparatus.

Of General Interest.

STRINGER FOR STAIRCASES.—C. F. SREIBER, New York, N. Y. In the present patent the invention has reference to stringers for staircases and the like, and the object of the improvement is the production of a stringer having joints of an improved form, giving the stringer great durability and strength. At points along the facing stringer the material is pressed to give an ornamental finish.

DENTAL INSTRUMENT.—A. B. PRENTIS, Marshfield, Ore. This instrument or appliance is adapted for holding the tongue and cheek away from the teeth while being filled or crowned and preventing access of saliva to them. The instrument may be quickly applied in the position required for use, and causes no discomfort to the patient.

SAFETY OR RESTRAINING DEVICE.—MABEL E. MCCALMONT, Warren, Pa. The device is especially designed for use in hospitals and asylums, or by the general nursing and medical profession, for restraining the movements of the delirious, insane, or unruly, including infants and children, who have to be

held or restrained in bed, and the invention relates particularly to restraining of limbs, arms and legs, of the patient.

BRICK-SUPPORTING PALLET.—B. JACQUART, South River, N. J. The invention relates to brick-supporting pallets and to a truck for passing the same into and out of the kiln. In reference to this invention it may be stated that a lot of 10,000 of these pallets have been in daily use for over seven months without giving any trouble for repairs.

CEMENT.—T. JONES, Acme, Texas. The object of the present invention is to produce a material of the general nature of so-called Keene's cement, this inventor's product being a material of the highest grade and excellence and made by the most direct and economic method. Only one calcination is employed. Plasticity and ultimate hardness are brought about by chemical substances added together.

PROCESS OF MAKING SMOKELESS POWDER.—M. A. G. HIMALAYA, Washington, D. C. The invention relates to an explosive, composed of chlorate of potash, starch, and a siccative oil. It consists in a novel process in which chlorate of potash in an impalpable powder is incorporated in the grains of starch without gelatinizing or destroying the structural grains of the starch.

APPARATUS FOR REFINING, AGING, MELLOWING, AND PURIFYING ALCOHOLIC LIQUORS.—J. F. DUFFY, Chicago, Ill. One purpose of the improvement is to perfect a system in which automatically-operating agents are involved for aging, refining, mellowing, and purifying wines and liquors, the method employed being a continuous one, commencing at the still or rectifiers, and ending at the receiving tank or cistern from which the liquor is drawn off into barrels.

FOUNTAIN-PEN.—F. Y. BRENTON, Belleville, Ontario, Canada. The invention refers to fountain pens such as are used chiefly for the purpose of marking goods or packing cases. The object is to produce a pen of this class which will provide a reservoir for the ink, and which will provide means for feeding this ink in sufficient quantities to the pen-point.

FINGER-GUIDE.—J. A. EVANS and J. F. WOLFF, Deer Lodge, Mont. The invention refers to instruments of the cornet or horn type, and its object is to provide a guide arranged to prevent or check all superfluous or upward movement of the player's fingers when raised from the actuated valves, thus facilitating speedy and difficult fingering of quick passages in the piece to be played.

EQUALIZING APPARATUS.—C. C. GRIMES, Haskell, Ind. Ter. In this patent the invention is an improvement in equalizers comprising in connection with the platform and the frame in connection with which said platform is movable, means whereby the platform may be retained in the same plane or planes parallel to its normal position when depressed at any point throughout its surface. The invention can be embodied in a beast and employed in supporting car beds, wagon beds, in buffers, and the like.

Hardware.

MASONRY TOOL.—P. J. COURTNEY, Elizabeth, N. J. The objects among others in this case are the provision of a tool for handling the mortar in building construction, and forming the joints of the same between several layers of building material. The inventor has combined with an ordinary trowel, in a manner that its usefulness is not impaired, a jointer, comprising beads so arranged that they can be brought into action without inconvenience or loss of time as is attendant when these functions are performed by separate devices.

LOCK-BOLT.—U. G. SMITH, Lansford, Pa. The purpose of the improvement is to provide a very simple and effective lock bolt adapted as a locking bolt and nut for an end of a vehicle axle, for example, or for use wherever an ordinary bolt and nut is applicable and it is desired to lock the nut and bolt against turning.

Heating and Lighting.

SHIELD FOR HEATING-COILS.—P. S. KNOTH, New York, N. Y. The coils are such as are used in schools, offices, stores, and other buildings and places, and the object of the invention is to provide a shield arranged for convenient and quick attachment to the coil without requiring any addition or a change in the construction and arrangement of the heating coil.

CARBIDE-FEED FOR ACETYLENE-GAS GENERATORS.—N. D. SHAFFER and J. S. BENTON, Johnstown, Pa. The feeder comprises a main discharge pan, and an interrupter or cut-off pan, rigid with said pan and both of said parts being secured to a shaft by the rocking or oscillation of which the desired operating movement may be given to the feeder. When properly proportioned to the size generator it is to feed, the device will drop approximately a uniform amount of carbide at each operation.

MINER'S LAMP.—R. L. GRAVES, Sumpter, Ore. This lamp is adapted for burning paraffin-wax or other solid fuel. With a heat-conducting wick tube, the fuel is retained in fluid condition no matter into which direction

the flame is blown, since in any deflection of the flame, one or more of conducting extensions would receive heat, and the same be conducted into the lamp-body to the tubular portion of the wick-tube, keeping the latter suitably heated for retaining the fuel in melted fluid condition.

Household Utilities.

BATH-CABINET.—JEANNE E. FRANCOUER, San Francisco, Cal. This cabinet is organized with another piece of furniture such as a bureau, a desk, or a chiffonier, so as to be completely housed and concealed, and present the appearance of an ordinary piece of furniture, and giving at the same time the advantages of two or more pieces of furniture in one construction and thereby greatly economizes space so that it may be located in a bed room or office without either offending the eye or losing for other purposes the value of the space it occupies.

COOKING APPARATUS.—J. R. ADAMS, Kenosha, Wis. The invention relates to containers adapted to receive vessels of partially cooked food, which after having been brought to the boiling point or cooked for a short length of time in any suitable manner are tightly sealed and inclosed within the walls. The heat retained in the vessel of partially cooked food is thus prevented from being dissipated and the food continues to cook for a considerable length of time. Steam is prevented from escaping to moisten, warp, or soil the device.

SAD-IRON.—J. F. WILLEY and E. W. WATSON, Versailles, Ill. The object of the improvement among others is the provision of a comparatively cheap, simple, and effective self-heating iron, presenting a neat appearance without any overhanging or cumbersome parts likely to interfere with its proper use. This object is accomplished by the invention.

Machines and Mechanical Devices.

SEWING-MACHINE HEMMER.—THERESE S. ZACHARA, New York, N. Y. In this patent the invention relates to hemmers designed to be attached to sewing machines, and has for its object to provide means simple in construction, effective in operation, and adapted to readily form a hem of any desired width. The device is preferably attached to the presser foot of a sewing machine and disposed in front of and adjacent to the stitch forming mechanism.

ADJUSTING DEVICE FOR CAMERA LUCIDAS.—A. TAYLOR, New York, N. Y. The object in this instance is to dispense with disadvantages found in adjusting devices now in general use. This is accomplished by means of an adjustable clamp adapted to be attached to the body tube of a microscope, instead of to the draw tube, and mechanism mounted upon said clamp, adapted to support a camera lucida, and adjust the axis of said camera relatively to the axis of the microscope.

CLAMPING DEVICE.—C. L. SIMMONS, Davenport, Wash. The purpose in this case is to provide a device or cradle, for convenient attachment to monuments, pillars, and like heavy articles and for securely gripping the same, to permit of hoisting or lowering the article in the quarry, shop, cemetery or other place, and without danger of the article toppling over or the clamping device becoming loose or detached.

POWER TRANSMISSION.—G. S. BLUEBAUM, Billings, Mo. The invention pertains to devices for converting reciprocating motion into rotary motion, and its aim is the provision of power transmission more especially designed for transmitting the power of wind mills and like motors to other machinery, and arranged to steady the motion when the motor runs light or heavy.

HANGING STAGING-HOIST.—H. O. CLARKE, Pittsburg, and A. G. ROSS, Wilkesburg, Pa. This hoist is adapted to be suspended at the side of a building and used by brick masons, painters and others. The inventor aims to produce a device capable of easy, vertical adjustment, especially avoiding complicated and expensive mechanism or such as would interfere with the free movement of the workmen on the stage or platform.

WASHING-MACHINE.—I. N. CONNELL, Balleys Mills, Ohio. The intention in this improvement is to provide a machine which is simple in construction, effective in operation and durable in use, adapted to be handled by the most unskilled person without injuring the finest or coarsest fabrics contained therein, and capable of being operated with the least possible strength and exertion.

VIBRATING ROLLER FOR PRINTING-PRESSES.—E. NICHOLSON, 623 West Hillsdale Street, Lansing, Mich. One of the purposes of this invention is to provide a color vibrator for printing presses adapted for use in connection with distributing rollers where different colors are to be printed at one impression, and to provide a device capable of being quickly and conveniently set up for adaptation to any number of colors, and to act in conjunction with distributing rollers of the ordinary type.

VERTICAL-SPINDLE MOUNTING FOR WOODWORKING MACHINES.—A. MAYER, Winton, Minn. This improvement has reference to the mounting of the vertical spindles of woodworking machines, and especially ap-

plicable in connection with the mounting of the vertical spindles which carry the cutters used in finishing the edges of lumber, or in cutting matching tongue grooves.

PULLEY.—J. B. DUNLAP, Tulsa, Ind. Ter. More particularly this invention relates to drive pulleys for shafting, but comprehends the general subject of gear-wheels and similar driving or driven wheels. It is directed to the pulley or gear-wheel fastening means and also to a peculiar construction of a two-part hub.

POST-HOLE DIGGER.—D. A. GRAY, Chattanooga, Tenn. In the operation of this machine the connecting rods being preferably set to regulate the depth of the cut as desired, the drive shaft may be turned, thus operating to turn the cutter to form a hole of the desired depth. Lugs are provided with clamping screws so that when desired the casing may be held upon the main shaft with the springs under tension.

GRAIN SEPARATING AND VITRIOLIZING MACHINE.—A. R. FERGUSON, Colton, Wash. The invention refers to improvements in machines for separating wild oats from wheat, barley, or other grain, the main object being to provide means for treating the grain with a cleaning solution to kill the smut germs, thus promoting the growth of the grain.

Prime Movers and Their Accessories.

TURBINE.—E. L. SCHAUN, Baltimore, Md. Broadly stated, this apparatus involves a turbine of the radial flow type and which is coupled with an air compressor arranged to store air under pressure, which air is utilized for starting the turbine, and when that operation becomes normal the air is employed to mix with a fuel forming a combustible compound which is burned in the combustion chamber of the apparatus, the expanding gases resulting from such combustion being directed through the turbine to drive the same.

ROTARY ENGINE.—H. L. BAKER, Greenville, and L. E. IRISH, Belding, Mich. The invention consists in the construction and arrangement of abutment valves; in the construction and arrangement of the revolving piston; in means for connecting this piston to its driven shaft, and also further in the special combination with the piston, cylinder, shaft, and governor of a concentrically arranged cut-off valve for automatically adjusting the admitted steam to the load and using the steam expansively.

FIRE-BOX FOR STEAM-BOILER FURNACES.—J. LIVINGSTONE, Montreal, Canada. The inventor designs, first, to contribute to the strength and stability of the boiler around the fire-box by maintaining, while in service, the natural elasticity of the material, avoiding the burning of the inner ends of the stay-bolts and avoiding strains which exist between the stay-bolts and outer and inner walls of the box due to high temperature of unequal distribution. Secondly, to secure more perfect combustion of, usually, unconsumed carbon. Thirdly, to assure continuous production of free hydrogen in the box, and fourthly, to give relief from explosion.

Railways and Their Accessories.

CAR-COUPLING.—A. M. KNAPP, Portland, Ore. This coupling is an improvement in couplings of the Janney type. The curved locking arms, or "knuckles," of such couplings, are subject to wear, owing to lateral and vertical motion of cars, and must be ultimately discarded. To avoid this and attendant expense, it has been proposed to provide the inner sides or faces of the knuckles with a removable wear-piece which can be substituted when worn out, and a new one substituted without doing away with the entire knuckle.

Pertaining to Vehicles.

TONGUE-SUPPORT.—E. C. AYERS, Valentine, Neb. Mr. Ayers's invention is in the nature of a support for wagon tongues, designed to relieve the necks of horses of its weight, and it consists in the novel construction and arrangement of a tension spring, combined with a chain and pulley and means for regulating the tension.

WAGON-TONGUE.—H. B. NOLEN, Lamar, Wash. The purpose of the invention is to provide a construction of tongue especially adapted for use in connection with agricultural implements, which tongue can be expeditiously attached to the frame of an implement in such manner that it will insure the tongue being perfectly rigid and fast to the frame and not liable to displacement under the most severe use. It is a division of the application formerly filed by Mr. Nolen, and for which Letters Patent were issued.

AUTOMOBILE-WHEEL.—B. H. BRIDGERS, Wilmington, N. C. In carrying out the invention, Mr. Bridgers makes the ordinary metallic or wooden wheel rim, having an elastic tire secured thereto, detachable from the spokes of the wheel in place of the same being permanently secured thereto as in the usual construction. Thus, a rigid metallic or wooden wheel rim and an elastic tire secured to it, constitute together a single attachable and detachable member of the wheel.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.