

ENGINEERING INVENTIONS.

A rotary engine has been patented by Mr. John Marvin, of Northport, N. Y. The plates which form the steam chest are made to rotate upon a fixed shaft, through which steam is admitted to and exhausted from the chest, the pressure being equal at all points of the revolution and there being no dead centers.

A car heater has been patented by Messrs. George W. Carter and William T. Pickett, of Canyonville, Oregon. It has a water base, with pipes which conduct the water to the interior of the stove, and a guard or casing outside to prevent the contact of the heated surfaces of the stove with combustible material, making a self-extinguishing stove.

A station indicator has been patented by Mr. George C. Logan, of New Orleans, La. This invention covers a novel construction and combination of parts, providing means whereby an approaching station may be indicated within a car, and the apparatus containing the names of the several stations may be operated from the engine or car, the apparatus being simple and durable and easily manipulated.

A car coupling has been patented by Mr. John P. Turney, of Arlington, Oregon. This invention covers a novel arrangement of pneumatic couplings and tubes, extending to the cab of the engineer, in combination with a compressed air reservoir and a switch conduit for directing the air blast through any of the tubes to any of the couplings, the coupling and uncoupling being effected by the engineer.

A railroad rail has been patented by Mr. Gilbert A. Ewing, of Jackson, Ohio. It is of the class of rails formed of two longitudinal interlocking sections, and the invention provides practically an endless rail, with which chairs and fish plates will not be needed, and wherein but few locking devices will be required, the rails also having an oval space between the webs of sections adapted to carry insulated telegraph wires.

MISCELLANEOUS INVENTIONS.

An inhaler has been patented by Mr. Almon K. Ives, of Missoula, Montana Ter. It has a powder receptacle with small perforations in its top and a suitable handle, with compressible air bulb and flexible tube, for forcing air into contact with the powder and expelling portions of the powder with the air.

A printer's galley has been patented by Mr. Frederick Schley, of Brooklyn, N. Y. The side and end pieces have a rib on the outer edge at the bottom, over which the bottom piece is bent and held in engagement therewith, thus reducing the cost of manufacture and making a galley that will stand hard usage.

A pole attachment for vehicles has been patented by Mr. William P. Fest, of Brooklyn, N. Y. The running gear of the vehicle has longitudinally extending spurs, and the pole has eyes, one in advance of the other, adapted to receive the spurs, whereby the fitting of the pole will be facilitated, and all rattling at the connections will be avoided.

A gun sight has been patented by Mr. George W. Wood, of Granville, N. Y., and James W. Carver, of Pawlet, Vt. This invention provides in one attachment a sight applicable for use at either a short or long range, and which may be used to gauge the wind, and also affords the advantages of a peep or closed sight and an open sight.

An animal trap has been patented by Mr. William H. Harden, of Quitman, Ga. It is designed mainly for rats, the invention covering a novel construction of the cage, in combination with suspending, tripping and locking mechanism, and automatically opening doors which permit the animal to enter, but do not allow of escape.

A seal lock has been patented by Mr. George W. Lewis, of Portsmouth, Va. It has a slotted metallic casing, a locking block eccentrically pivoted therein, having a lip with a perforation, in combination with a fragile seal, being especially adapted for securing a freight car door, so that the fastener cannot be released without breaking the seal.

A puzzle has been patented by Lizzie E. Simpson, of New York City. It consists of a board provided with a series of pin apertures arranged in intersecting lines and baffle apertures promiscuously arranged upon the board, contiguous to the lines of pin apertures, being intended to afford an interesting study and pastime to children and adults.

A washing machine has been patented by Mr. John W. Lasswell, of Augusta, Kansas. It is a machine of that class in which two oppositely reciprocating rubbers are employed in a tub or vat, the invention covering novel details of construction, designed to provide a machine which will be thoroughly effective, simple, and durable.

A galvanic battery has been patented by Mr. Howard Cassard, of Baltimore, Md. It has a cover formed as a cup with a liquid seal, and a bent tube communicating with the fuming cell of the battery and trapped in the liquid seal, with other novel features, the battery being designed with reference to greater efficiency and to prevent the escape of gases.

A well has been patented by Mr. Henry Piering, of New York City. This invention covers a metallic cylindrical curb support, with teeth on its bottom, perforations around its body, and a flange on its top, to be placed in the bottom of a partly excavated well hole and sunk to the desired depth as the masonry wall is built up from the flange.

A corn husker has been patented by Mr. Theodor H. Mehring, of Niobrara, Neb. It is an implement which may be worn upon the bare hand, or upon the hand when incased in a glove or mitten, being made in two sections, sliding one upon the other, the device being simple and cheap, and capable of quick adjustment to suit the breadth of any hand.

An elevator and conveyor for unloading and loading vessels, etc., has been patented by Mr. James F. Simmons, of Manistique, Mich. This invention covers a novel combination and arrangement of parts in a machine having a universal adjustment, permitting its use in many positions, as for transferring goods from a vessel to a car and *vice versa*, and for various other purposes.

A lock has been patented by Mr. Henry Van Hovenbergh, of New York City. This invention relates to what are known as "pin tumbler locks," especially adapted to places in which the control of the lock is limited to a given time or particular persons, and is intended to obviate the necessity of changing the lock when a change of ownership or control is made.

A middlings purifier has been patented by Mr. Victor Monnier, of Dundas, Minn. The interior of the machine is in separate compartments, the air currents of which are regulated independently, whereby each grade of material may be treated separately, without affecting the other grades, and there are various other novel features of construction and combinations of parts.

A sad iron has been patented by Mr. Horace S. Pease, of Cincinnati, Ohio. This invention relates to a former patented invention of the same inventor, the fluting plate being made attachable and detachable, and to serve also as a shield to protect the operator's hand from contact with the hot chimney and from the heat arising from the heated smoothing iron.

An apparatus for the manufacture of charcoal has been patented by Mr. Jacob Scherffus, of Winona, Minn. The charring of the wood is effected in a chamber about which the products of combustion pass without entering, the heated air being continuously used, while provision is made for gathering and condensing all products given off by the wood during the processes of charring.

A spring bed bottom has been patented by Mr. Anthony Huber, of New York City. The body of the spring bottom is formed of thin metal cross strips, riveted together at their intersections, at which points are attached spiral springs, the construction being such that the springs can be readily applied where desired and conveniently removed when the cot is to be folded.

A feed bucket has been patented by Mr. Albert M. Smith, of Westery, R. I. It has a frame with inwardly extending arms holding a spring upon which rests a feed receptacle, a detachable partition being held within the receptacle, whereby the horse will be unable to obtain more feed at a time than he can conveniently eat, and wherein also there will be no waste.

An ice velocipede has been patented by Messrs. George B. M. Ribble and Charles C. Spencer, of Cortland, N. Y. It is made in triangular form, and so that the front runner and main frame have free up and down movement independent of the two rear runners, and is provided with a propelling mechanism of novel character to be operated by the feet of the rider.

A smoke consumer has been patented by Mr. Robert H. F. Sevall, of Birmingham, Ala. Combined with a furnace is a superheating chamber, the smoke passage communicating therewith, an oil supply pipe leading into the chamber, and a perforated burner pipe, with other novel features adapted to securing a more perfect combustion under various forms of construction.

A drier has been patented by Mr. Arthur Buel, of New York City. It has sections of porous refractory material secured to frames and connected to form an endless apron, with drums over which the apron passes, in combination with furnace openings and a drying oven, and other novel features, the invention being especially applicable in the drying of white lead, whiting, and other pigments.

A combined cradle and rocking chair has been patented by Messrs. William Furl and Rudolph Fraenzel, of Lock Haven, Pa. The construction is such that a rocking chair may be conveniently drawn out of the crib frame and adjusted for use, and get readily adjusted for telescoping therein, the several rockers assuring a strong support for both the chair and cradle.

A tobacco pipe has been patented by Messrs. Thomas B. Whitlege, George W. Kenner, and Michael Rueckert, of St. Mary's, Mo. Combined with an apertured cap are various parts operating in relation to each other, the cap, and the interior of the bowl, to prevent the tobacco from falling from the bowl, for pressing it more closely or loosening it, or for scraping and cleaning the bottom of the bowl.

An ice creeper for horses has been patented by Mr. Charles S. Acheson, of Philadelphia, Pa. The body of the creeper is formed of a flat plate adapted to set up against the forward part of the bottom of the shoe, and having a recess fitted to receive the toe, with threaded sockets in which spurs are inserted, the creeper being attached to the horse's foot by a strap and buckle.

An apparatus for transporting and setting stone has been patented by Mr. Donald McDonald, of Louisville, Ky. Combined with a suitably supported and adjustable mast is a cable having its end portions disposed around guides on the mast, with other novel features, forming an apparatus designed to facilitate the lifting of stone, carrying it and lowering it in position, as required in building bridge piers, constructing buildings, etc.

A fireplace forms the subject of a patent issued to Mr. Robert B. Berrie, of Lexington, Mo. The grate has a rearwardly inclined back, above which is held a corrugated top plate, a fixed hood being held in front of and above the top plate, and a flat plate held to slide thereon, to increase or diminish the opening between the top plate and hood, whereby the draught can be easily regulated and the heat directed into the room.

A last block fastener has been patented by Mr. William Cook, of New York City. The last block has in its under side a slot open at its upper end, the block having a countersunk recess, and the fastener having a shank connected with the last body and constructed with a flattened head, in such manner that the head may be grasped by the ordinary pinchers or pliers, the fastener being quickly and easily manipulated to lock the block in place or allow of its removal.

A fifth wheel has been patented by Messrs. Jonathan G. and Lemuel H. Huff, of East Bend, N. C. The lower fifth wheel section, secured on the axle iron, has a king bolt opening formed through it leading to the axle iron, and is provided with a key-way or slot, the upper section having a king bolt with a key fitted to the keyway of the lower section, such king bolt being extended through the opening in the lower section and bearing at its lower end on the axle iron.

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