

ENGINEERING INVENTIONS.

A car coupling has been patented by Mr. Samuel Cooley, of Flemington, N. J. The drawheads are provided with a coupling wheel and a spring-actuated link of novel construction, making a coupling wherein a link attached to each drawhead will independently couple with a revoluble pin in the opposing drawhead, the coupling working automatically.

A gas blast furnace has been patented by Mr. John H. Hillman, of Pittsburg, Pa. The invention covers a combination of a preparatory storage gas furnace, a carburization gas furnace, and a smelting gas blast furnace, each separated from the others, making a furnace adapted for the utilization of gases or solid fuel, or both combined, for smelting iron or other ores.

A railway signal has been patented by Mr. Frederick Pearce, of New York City. The invention covers a novel arrangement of circuits, track instruments, and relays, in connection with electro-magnetsignaling lanterns arranged to be operated either in open or closed circuit system by the action of a passing train, to display a danger signal during the passage of a train over the section of track protected.

Utilizing exhaust steam is the subject of a patent issued to Messrs. Robert H. F. and Nicholas H. Sewall, of Smithland, La. Combined with the engine and main boiler are a supplemental cylinder and pipes connecting it with the engine and boiler, a pivoted lever being connected with the piston in this cylinder and with the engine, a pipe extending from the pump into the pipe between the boiler and supplemental cylinder, with other novel features.

A railway tie has been patented by Mr. John F. Stull, of Okobojo, Dakota Ter. Combined with a metallic plate tie, having ears, are chairs or plates connected to the ears, and having upwardly extending lugs, with keys adapted to pass through the chairs and the ears, with other novel features, whereby the several parts shall be connected without bolts or rivets, and to which the rails may be connected by means of keys.

AGRICULTURAL INVENTIONS.

An elevator for harvesters has been patented by Mr. Milton E. Benedict, of Perry, N. Y. This invention covers a novel construction, combination, and arrangement of parts and details in a new and improved elevator for harvesters which is designed to be simple and durable in construction and very effective in operation.

A cane or corn harvester has been patented by Mr. Azro J. Shaw, of Conway, Kansas. The invention covers a novel construction and combination of parts for cutting sugar cane, corn, and similar crops, grown in rows, topping the severed stalks and discharging them to the ground at the side of the machine, which may be arranged to cut down two or more rows of the standing crop at once.

MISCELLANEOUS INVENTIONS.

A rubber back pad for harness has been patented by Mr. Ellis W. Wall, of Pishelville, Neb. It is made with a novel form of hollow air cushions, having side flanges and depressions, needing no leather covering or stuffing, while there is no danger of galling.

A pen or pencil holder has been patented by Mr. Edward E. Foster, of New York City. It consists of a spring clamp adapted to receive the end of the finger, and provided with a device for holding the pen or pencil in the position of use, thus dispensing with the usual long pen or pencil holder.

A singletree has been patented by Mr. Oscar F. Lowe, of Hampton, Iowa. This invention covers an improvement relating particularly to the construction of the clips, whereby they will be efficient in use, and the portion subjected to wear may be readily replaced when worn or otherwise useless.

A combination tool has been patented by Mr. William W. Allen, of East Pepperell, Mass. It is designed for use as a cant bar, pry bar, pinch bar, spike claw, or rail lifter, the invention covering a novel construction and arrangement of the various parts and details.

A cavity drill or reamer has been patented by Mr. John Greek, of Evansville, Ind. This invention provides a strong and durable tool, which can be easily worked to form an elliptical cavity in a bored well, which may be easily cleaned out and charged with explosives, and for other work of similar character.

A windmill has been patented by Mr. Aaron F. Chubbuck, of Tyrone, Mich. It consists essentially of a wheel carried by a vertical shaft, a shield arranged in connection with the wheel, a shield controlling mechanism, and a mechanism for imparting a uniform speed to the main shaft of the mill.

A quilting frame for sewing machines has been patented by Mr. Terelius A. Hill, of High Point, N. C. Combined with a frame or track adapted to rest on a sewing machine table, and having projecting pins, are cross legs to support each end of the track, the legs being adjustable to tables of different heights, with other novel features.

A pad for copying presses has been patented by Mr. Afton Church, of New York City. It consists of a plate provided with absorbent material on one face and with means of attachment to the follower of a copying press, whereby impressions may be taken for an indefinite period without the aid of single blotters or cloths.

A bottle and label protector has been patented by Mr. August Grisi, of Hoboken, N. J. It consists of a sheet metal body and breast pieces, formed with fastening devices or clips, by which the protector may be fastened around and made to embrace the bottle, an opening being left to reveal the print or name of the label.

A jewel case has been patented by Messrs. Solomon Valter and Lazarus Weil, of New York City. The entire body and base are preferably covered with plush, and it has an upper hinged portion forming wings which may be opened out to display articles of jewelry, there being also a lower recessed portion to receive them, with other novel features.

A sectional thatch has been patented by Mr. Robert Griswold, of Woody, Kansas. The thatching is applied to a timber frame with nails, in connection with lengths of barbed wire applied to the face of the thatching, with binding wires and longitudinal wires, making a form of thatch especially designed as a cover of ricks and stacks.

A burial vault has been patented by Mr. Herman Froehlich, of Waterloo, Ind. Combined with lower and upper parts made of plastic material to form artificial stone, and formed with inclined sides and ends and round corners, is an adjustable clamping band with handles, and other novel features, providing a cheap and durable vault to replace the common wooden box now in general use.

A horse detacher has been patented by Mr. Simon Bail, of New York City. This invention covers a novel combination of devices, more especially adapted to one-horse vehicles, capable of operation by the driver or occupant, there being combined therewith a special mechanism between the detacher and a brake, whereby the latter is thrown into action upon the wheels by the same motion of the hand lever which works the detacher.

A grip for button lathes has been patented by Mr. Will F. Young, of New York City. It is for facilitating the manufacture of vegetable ivory buttons, and made to be self-adjusting to the convex surface of the segment of ivory, whether regular or irregular, consisting of two separate grasping members, a stock to which they are pivoted, and a yoke pivoted upon the stock and connected at its ends to the lower ends of the members.

A paper cutter has been patented by Mr. John F. Meador, of Prescott, Arizona Ter. This invention provides a number of plates sliding on top of each other, and each projecting at one side a short distance beyond the corresponding side of the next following plate, being especially adapted for cutting or tearing express money orders, or other papers, where steps are left in the torn edge of the paper to indicate the amount of the value of the order.

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3. Page Engraving of Holbrook Hall, New York City, an Eight Story Apartment House, lately condemned for dry rot.
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For which Letters Patent of the United States were Granted

November 8, 1887,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Table listing various inventions and their patent numbers, including Amalgamator, B. Tyson; Anchors, safety attachment for, N. Smith; Axle box, car, C. Gomer; Axle nut, C. C. Bradley; Bagasse furnace, F. Cook; Bags or satchels, combined corner protector and lock for, A. Peterson; Baling press, W. F. Dennis; Baling press, W. C. Ellis; Bands, device for tightening, G. D. Frost; Battery, See Carbon battery. Galvanic battery; Bed, folding, K. Brooks; Bed slat fastener, L. B. Hopkins; Bedclothes fastener, A. C. Graves; Bell, electrical repeating, H. B. Cox; Belt fastener, L. Werner; Belt holder, C. Wright; Belt, link driving, J. K. Tullis; Bicycle, F. D. Randolph; Billiard table pocket, T. Dougherty; Blast furnace, gas, J. H. Hillman; Board, See Card board; Boiler, See Steam boiler; Boilers, preventing the formation of scale in steam, E. Mather; Bolt cutter, Lonnon & Mallet; Boot or shoe heel, P. Linden; Boot or shoe shank stiffener, J. M. Watson; Bottle for blacking, mucilage, etc., H. A. Bartlett; Bottle packing, C. B. Heston; Bottle stopper cover, T. C. Bunting; Box, See Axle box; Box joint, L. F. Mergott; Bracket, See Kitchen bracket; Brake, See Car brake. Wagon brake; Brake saddle and shoe, I. P. Lawrence; Brick moulds, machine for sanding, A. C. Newton et al.; Broom holder, whisk, J. Wright; Buckle, F. B. Spooner; Burner, See Gas burner. Lamp burner; Bustle, Hubbard & Williamson; Button setting machine, O. Stoddard; Buttons, machine for making collar, G. Krementz; Cabinet, grocer's, J. P. Flick; Cables, splicing traction, P. J. Fransze; Camera, See Photographic camera; Camera plate holder, M. P. Warner; Can filling machine, H. R. Stickney; Candy furnace and oven combined, E. C. Frost; Car brake, G. A. Boyden; Car brakes, operating, G. A. Boyden; Car conduit, underground cable, D. Hagerty; Car coupling, S. Byrne; Car coupling, S. Cooley; Car coupling, J. Haish; Car coupling, A. W. Huzhey; Car coupling, R. W. Hunter; Car coupling, A. H. Reynolds; Car coupling, J. H. Wiseman; Car heater, H. G. Wilson; Car heater and ventilator, T. Saunders; Car wheel, J. A. Parker; Cars, bull's eye or signal for street, J. A. Brill; Cars, cupola for freight, C. A. Smith; Cars, heating pipe connection between, W. L. Sr. & W. L. Van Hartenken, Jr.; Cars, method of and apparatus for heating railway, F. M. Wilder; Bars, etc., track cleaning attachment for street, Peper & Sobinski; Carbon battery, C. H. Wilder; Card board, H. B. Dexter; Carding machine, Senior & Pitton; Carriage door, J. F. Fallon; Carriage top, W. M. Ward; Carriage top irons, machine for rolling, F. Schreidt; Carriage top operating device, W. M. Ward; Cart, road, O. W. Numbree; Cartridge, H. P. Hursh; Case, See Medicine case. Watch case; Centering device, H. P. Wellman; Chain hook, watch, H. M. Herring; Chuck, planer, E. Shaw; Churn, H. Heitkamp; Churn lid clamp, L. K. Koontz; Cider press, lever, J. E. Horstick; Cigar or cigarette, medicated, J. M. Allan; Clamp, See Churn lid clamp. Cotton press clamp. Jar clamp; Clock, J. Zelly; Clocks, chiming apparatus for, J. Harrington; Cloth cutting machine, F. W. Nevens; Clothes drier, H. F. Bolton; Clothes line prop, J. S. Jameson; Clothes rack attachment, F. W. Weis; Concentrating machine, F. E. Monteverde; Concentrator, W. L. Card; Connecting rod, H. Dugar; Converter box, G. Westinghouse, Jr., et al.; Conveyer, screw, J. S. Wilson; Coop, chicken, B. P. Cobb; Corn cutting machine, G. B. Dean; Corrugating machines, attachment for, G. C. Keene; Cotton press clamp, W. F. Moss; Cotton stalk cutter, J. P. Lockwood; Coupling, See Car coupling. Pipe coupling. Whiffletree coupling; Crate, C. R. Swan; Crushing or pulverizing mill, W. L. Card; Cuff fastener, T. E. Barrow; Current generators, method of and apparatus for connecting alternate, O. B. Shallenberger; Curtain pole ring, T. Morris; Cutter, See Bolt cutter. Cotton stalk cutter; Delivery mouth, controllable, R. K. Dorwart; Demijohn, etc., F. A. & D. Bahr; Die stock, H. E. Galloway; Digger, See Potato digger; Door check, C. M. Cashin; Door fastening, G. Van Wakenen; Draught equalizer, M. P. Lomen; Drawer pull, F. H. Chilton; Dress forms, making, M. W. Henlus; Drier, See Cloth drier.