

ENGINEERING INVENTIONS.

A car coupling has been patented by Mr. Alfred R. Heath, of Covington, Ind. This invention covers novel connections for car couplers, so constructed and arranged that the coupling will be effected automatically, and the uncoupling may be made from either side or top, or from the cab of the locomotive.

A car coupling has been patented by Mr. John H. Davis, of Wilmington, N. C. The drawbar is made with two jaws having a vertical opening, one of the jaws having a vertically pivoted and horizontally swinging knuckle, on one side of which is a hook and on the other side a locking arm that drops behind a spring-seated tongue to lock the hook in rigid coupled position.

MISCELLANEOUS INVENTIONS.

A gate has been patented by Mr. Isaac Dutton, of Harbor Springs, Mich. This invention covers a novel construction of gate, which may be hung to swing in both directions, which may be tilted, and which will be self-closing.

An insect powder duster has been patented by Robert E. Clark and Jessie L. Zeigler, of Fort Motte, S. C. This invention covers an apparatus which may be attached to any wheeled vehicle or used alone, as desired, for distributing poison over plants.

A clothes drier has been patented by Mr. Van Rensselaer Ten Broeck, of Jersey City, N. J. All the principal parts are made of wood, the arms being readily raised and lowered, and when not in use the arms may be all removed, and the device placed away in small space.

A trace bearer has been patented by Mr. James H. Brennan, of Shullsburg, Wis. This invention covers an improved construction, whereby the lower end of the round trace-bearing loop is strengthened and re-enforced, and its connection with the supporting strap or skirt rendered more secure.

A combined punching and shearing machine has been patented by Mr. Henry A. Ridley, of Newport, Ark. It has a head mounted to slide by the action of a lever operating the punch and shear, to facilitate the cutting and punching of metal plates, such as boiler iron, etc.

A shoe lace fastener has been patented by Mr. John G. Hart, of New York City. It consists of a head having a concave under surface and provided with a central shank having shoulders and prongs, making a simple and effective device for fastening the end of a shoe lace.

A finger ring has been patented by Mr. John B. Newman, of Milford, Pa. It consists of an inner ring with pictures or ornaments on its face, and a second ring held movably on the face of the first ring, with a transparent cover which permits of viewing one of the pictures at a time.

A cracker box cover has been patented by Messrs. Albert H. Pine, and Stephen A. Norton, of Pine Bluff, Ark. It is designed to exclude flies and prevent the drying out of the contents, while still permitting the crackers to be visible from the outside, and to be conveniently removed as they are sold.

A wash boiler has been patented by Mr. Monroe Davis, of Oak Valley, Kansas. It has a removable interior wire framework of a base and cones detachably and adjustably connected, to support the clothes in such manner that the steam may reach every part, and the material will be extended.

A sled brake has been patented by Mr. Hans C. Johnson, of Rhinelander, Wis. It consists of dogs pivoted to the runners and connected with diagonal rods connected to a lever pivoted to the pole, whereby the lower ends of the dogs may be forced into the snow, or readily held up out of the way.

A filter has been patented by Messrs. Emil Fretz and Jacob Waespi, of Dallas, Texas. This invention covers an improvement on a former patented invention of the same inventors, making a filter of simple and durable construction, which can be easily and conveniently cleaned without disturbing the gravel.

A hoisting machine has been patented by Messrs. Alexander and James Robertson, of Welland, Ontario, Canada. This invention covers a novel construction and combination of parts to improve the construction of hoisting machines, so that greater working capacity may be obtained therefrom.

A piano pedal has been patented by Mr. Otto Lestina, of Derby, Conn. It is made with an elastic metallic strip secured to and projecting from its rear end, the pedal not being pivoted, and designed to avoid squeaking and the wear of parts, the elastic plate serving as a spring.

A gate has been patented by Mr. Thomas Tyson, of Mound City, Mo. Its construction is such that it may be adjusted vertically to clear obstructions, as of snow or ice, in connection with a novel arrangement of the latch, and various other details of construction and combinations of parts.

An oil distributor for ships has been patented by Mr. John Ericson, of Sabine Pass, La. This invention covers a novel construction of vessel to be launched upon the sea when the water is rough, to distribute oil thereon in such quantities as may be predetermined, and which can be readily regulated.

A gate has been patented by Mr. John H. Bradford, of Lebanon, Ky. Combined with a horizontally swinging gate and its pivot post are side posts carrying levers, with swinging handles, by pulling on which, through a novel arrangement of lever connections, the gate may be opened from either side.

A sash holder has been patented by Mr. Joseph Clough, of Pawtucket, R. I. This invention covers an improvement in window fasteners, consisting of two pivoted cams simultaneously thrown out of action, or out of contact with the window sash, by means of a pivoted lever, which is connected with both cams.

A machine for winding sewing machine bobbins has been patented by Mr. George Hogg, of Newburg, N. Y. This invention covers a novel construction and arrangement of parts, in a machine in which the bobbins are placed on spindles, the thread being broken as one bobbin is filled, when another bobbin is brought into position.

A hame tug has been patented by Mr. Wallace Boardman, of Harrisonville, Mo. It is made partly of leather and partly of metal, and designed to save leather, being so made that the front or rear part, if broken, may be removed without throwing the other away, or one section can be replaced without opening the whole tug.

A method of making button hole strips has been patented by Messrs. Edward K. Warren and Joseph H. Ames, of Three Oaks, Mich. It consists in making a series of button holes from the same piece of goods, whereby a strip or sheet of ready made button holes suitable for garments of various kinds is produced, to form finished edge button holes.

A creamer has been patented by Mr. Ernst H. Wilke, of Lincoln, Neb. This invention covers a novel construction and combination of parts, including a number of receptacles in which the cream is caused to rise quickly and can be conveniently stored, and in which the butter made from the cream can also be stored, both retaining their qualities and flavor.

An apparatus for varnishing wheels has been patented by Mr. Ernest W. Gerbracht, of Brooklyn, N. Y. It consists of a tank in which the wheels, placed on a spindle, are allowed to remain in a varnish bath, and another similar tank in which the spindle may be revolved, with its wheels, to remove superfluous varnish.

A button fastening machine has been patented by Mr. August Schillmoller, of San Francisco, Cal. It has pivoted arms, on one of which an anvil and button receptacle are supported, a movable button holder being carried on the other arm, with various other novel features, making an improved machine for fastening buttons on shoes, gaiters, etc.

A paper file has been patented by Mr. Augustus C. A. Perkes, of Portland, Oregon. The invention consists of two wire frames hinged together and pressed one on top of the other by a spring, with pins or spikes held on the under frame and adapted to be passed through the paper to be filed between the two frames.

A cant hook has been patented by Mr. Milton N. Rankin, of Willettsville, Ohio. The hook proper is double pivoted, and there are various other novel features of construction, whereby a firm hold, free from slip, is secured upon a log or body to be rolled or turned, obtaining a powerful action for the cant hook.

A flour or meal bin has been patented by Mr. Charles W. Fisher, of Fair Play, Col. Its construction is such that the flour may be sifted as drawn from the bin, and its opened door will constitute a bread board, the bin to be made of convenient size for ordinary household use, and its form permitting of its being readily cleaned.

A baling press has been patented by Mr. Potivert I. Crews, of Meridian, Miss. This invention covers novel features of construction and combinations of parts designed to form a simple and easy working press for baling cotton, hay, straw, etc., and which may be operated to form good bales with economy of time and labor.

A vehicle wheel has been patented by Messrs. Henry M. Rice and John O'Day, of Allegheny, Pa. Its construction is such that any of the spokes may be readily removed for renewal or repairs without disturbing the felly or tire, while automatic lubrication of the axle bearings is provided for, and the wheel is made very strong and light.

An exhibitor for shirts, etc., has been patented by Messrs. George H. Hardy and Rollin A. Baldwin, of Manchester, N. H. This invention covers a novel construction of frame or exhibiting stand, having a simple and neat appearance, adapted to support shirts, collars, cuffs, etc., and exhibit them to the best advantage.

A bitters or medicinal compound has been patented by Messrs. Camillus E. and Ernest Bizozero, of West Quincy, Mass. It is made with alcohol, centaury, yarrow, angelica, calamus, cinnamon, myrrh, aloes, vanilla, cloves, nutmeg, and camphor, in certain proportions, for use for bowel troubles, neuralgia, headaches, fever, etc.

A running gear for vehicles has been patented by Mr. George E. Crutchfield, of English, Ark. It is made of metal, with tubular axles, a tubular reach, and tubular forward and rear hounds, the forward hounds turning with the pole and acting as a fifth wheel, and the construction being simple, durable, and economical.

A pneumatic door opener has been patented by Mr. William R. Ostrander, of New York City. This invention is designed to provide simple and effective means for releasing the bolt of a door lock from the plate in the door jamb, and to impart force for producing the result from a part of the building more or less remote.

A spring bed bottom has been patented by Mr. Edwin F. Tilley, of Brooklyn, N. Y. A fabric is stretched over a main frame, with central reinforcing springs for the fabric, a re-enforcing frame supported by the springs and underlying the central opposite edge portions of the fabric, the structure being designed to be inexpensive, durable, and comfortable.

A shaft tug has been patented by Mr. William Snow, of Waverly, Ill. This invention provides a strap which will be always open to receive the shaft, and ready to tighten down upon it, while it is designed to hold securely under any tension exerted to force it from the proper position, without the aid of extra straps attached to the belly band.

A fence has been patented by Messrs. James Higgins and John Sullivan, of Grand Rapids, Mich. The post is made with a longitudinal rib having open slots for receiving the fence wires and the top guard rail, the design being to afford a structure which can be easily and quickly set up by unskilled labor, and will be firmly braced and stayed.

A bed has been patented by Mr. Samuel R. Millen, of Clarinda, Iowa. This invention covers an improved construction of beds for invalids, in which, by turning a shaft, the back section will be raised and the foot section lowered, to bring the occupant to a sitting position, while, by reversing the shaft, the bed is returned to normal position.

A device for hitching horses has been patented by Mr. Edmund H. Turner, of Fergus Falls, Minn. It consists of a ring piece with a slot and toothed flange, with a fastening device of cross piece and spikes, being especially adapted to be secured to a crack in planking, such as a board fence or sidewalk, in which the device will be firmly and securely held.

A thill holder has also been patented by the same inventor. A loop is attached to the inner surface of the dash board, from which a strap is swung over the dash board having hooks to engage a cross piece of the thills, the latter being partially supported by a spring, which throws up the thills when released, so that they may be held up by the strap.

A drag saw has been patented by Messrs. John Winger and John W. Barger, of Harrison, Ark. This invention covers a novel construction and combination of parts in a machine that will have a force feed, and wherein various styles of toothed saws may be used, and wherein also the power may be readily and conveniently regulated according to the work to be done.

A shutter worker has been patented by Mr. James K. McGukin, of Newark, N. J. Combined with an outer tube or casing is an inner concentric tube having a spiral bore, a radial arm being attached to the inner tube, with other novel features, whereby a shutter may be held partially or entirely open, and conveniently operated from the room with the windows closed.

A grain measuring, registering, and bagging machine has been patented by Mr. George R. Kendrick, of Bucyrus, Ohio. This invention covers an improvement on a former patented invention of the same inventor, of a machine in which the grain delivered from the separator of the thrashing machine is measured, registered, and delivered in any desired quantity to the bags.

A truss frame for ladders has been patented by Mr. Caleb C. Pierson, of Elizabeth, N. J. This invention covers a novel construction and combination of parts whereby ladders may be conveniently and safely used for scaffolds, making a safe and stiff scaffold of any length from 6½ feet up to 42 feet, by adding 6½ foot sections, the material being just as useful for any length of ladder as for scaffolds.

A fence for intercepting insects has been patented by Mr. Emil C. Krause, of Stockbridge, Wis. It is made with boards jointed together at their ends, with a tarred rope at their upper edge, and an outwardly extending board made to form a channel, whereby bugs will be prevented from passing from one field to another, and will be received in a receptacle where they can be destroyed.

The manufacture of starch forms the subject of a patent issued to Mr. Hermann Wiegand, of Danville, Ill. This invention covers a process of mixing or incorporating with the liquid starch a volatile hydrocarbon, such as refined coal oil, then moulding and finally drying the starch, the hydrocarbon being eliminated by the drying process, thus making starch which will not ferment while wet or discolor in drying.

A saw filing machine has been patented by Mr. William J. Lindsay, of Ottumwa, Iowa. It has a mechanism for reciprocating a file and moving it away from the tooth in one direction of its movement, with a mechanism for simultaneously unclamping and conveying the saw forward, and then clamping it, by which no injury can be done to the saw or file, and every tooth will be cut to the same depth.

An oat extractor for grain separators has been patented by Mr. William P. Clifford, of Ottumwa, Iowa. A hopper projects into a casing having an inclined apron and screen, an oat-extracting cylinder attached to a shaft being placed opposite the discharge opening of the hopper, while a brush is fitted to work as closely as desired to the surface of the extracting cylinder.

A harness has been patented by Mr. Cyrus C. Cole, of Albion, Mich. This invention covers improved means for coupling traces to breast collars or to tug attachments of hame collars, the coupling device consisting of a sleeve or frame adapted to receive and slide upon a trace, and having a lever or tongue for engaging the latter, with a lateral hook for engagement with the harness collar.

A machine for coating fabrics has been patented by Mr. Henry G. Bunch, of Rahway, N. J. The fabric is carried by a roller having brakes to prevent its turning too freely, thence under and over cross pieces, one acting as a tentering bar, thence under an adjustable spreader, and through a drawing roller and beater, to distribute various kinds of coating material evenly over a fabric.

Driving reins form the subject of a patent issued to Mr. Matthew S. Dickinson, of Ridgely, Md. This invention covers a novel use of overdraw bits, overdraw straps, and short side rein sections, to dispense with the ordinary check rein, causing the horse to carry a high head, but allowing freedom to stretch out his neck and lower his head when tension on the rein is slackened.

A machine for grooming horses has been patented by Messrs. William Dellinger and John G. McNaughton, of Marion, N. C. It has alternating rotary combined brushes and combs and stationary

combs, each of the latter consisting of a continuous plate bent or folded upon itself, and having divergent side plates provided with toothed lower longitudinal edges.

A flywheel has been patented by Messrs. J. A. Romano and E. A. Barton, of Celajo, Guanajuato, Mexico. This invention covers a fast and loose attachment for sewing machines by which the flywheel may be revolved with the shaft in one direction and independently of it in a contrary direction, or the flywheel may be disconnected from the driving shaft to turn independently in either direction.

A composition for developing ozonized oxygen has been patented by Mr. John E. P. Meyer, of Golden, Col. The constituent parts of the compound are barium permanganate and the acid salts of sulphuric acid in powdered form, to be used in proportions specified in connection with water, forming a ready, safe, and simple means of producing ozonized oxygen in sick rooms.

A curtain or lambrequin support for windows has been patented by Messrs. Charles C. Bauer and Frank H. Frankenberg, of Pueblo, Col. It is made with bars having bearings at their upper ends for the curtain or lambrequin rods combined with links pivoted thereto and adapted to be connected with the upper sash, the curtain or lambrequin being moved away from the opening when the upper sash is lowered.

An apparatus for reproducing copies of writings, drawings, etc., has been patented by Mr. Gustav H. Block, of Penge, Surrey County, England. It is of that class in which a lithographic stone or zinc plate is written or drawn on, and a negative impression taken on a sheet of gelatinous composition, making the printing surface from which impressions are transferred on to paper, the invention providing a portable apparatus which can be employed by an unskilled person.

A spring bed bottom has been patented by Mr. Frank C. Rheubottom, of Union City, Mich. It consists of slats adjustably secured together, coiled springs secured to the slats having their upper ends passed under and around the upper coil of the spring on the adjacent slat and then loosely connected to the spring on the same slat, the springs thus accommodating themselves to the lateral adjustment of the slats, while being connected securely lengthwise, and always forming a continuous bearing surface.

Mosaic wood work and a method of making it form the subject of two patents issued to Mr. William J. Kelley, of Pittsfield, Mass. It is a form of mosaic flooring or wainscoting made in composite strips which are arranged side by side upon the floor base or wall to delineate the desired pattern. Thin, slightly flexible sheets of soft wood are made the base, upon which are glued a series of vari-colored hardwood facing strips, the grain of successive strips being alternately crosswise of and in the direction of their length, and the whole is then sawed through on lines transverse to the length of the facing strips, making strips having a single succession of vari-colored square facing blocks. These strips are then grooved on their side edges, whereby they may be connected by longitudinal splines and conveniently fixed in position on the floor, the facing blocks being free to expand and contract in either direction.

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