

RECENTLY PATENTED INVENTIONS. Engineering.

Mr. David J. Lupton, of Jerusalem, O., has patented an improved car platform, which is pivoted to the top of the car coupler, so that the ends of the platform may move backward and forward in recesses in the ends of the car, and adapted to have its outer edge coupled to the platform of the adjoining car.

The same inventor has patented a combined car and air brake coupling that couples upon contact and that can be uncoupled from the platform of a passenger car or from the top of a freight car, so that the operator will not need to stand between the cars. This inventor combines with the car coupler an automatic coupler for the steam or air brake connections, so that the air pipe will be coupled and uncoupled by the same operation that couples and uncouples the car couplers, thus enabling air brakes to be used upon freight cars with as great facility as they are now used upon passenger cars.

Mechanical.

Mr. Marcus W. Chamberlain, of Hackensack, N. J., has patented a machine for expanding can covers and other similar articles. Upon this machine the flanges of can covers crimped or battered by constant use to such an extent that they are rendered unfit for service may be expeditiously and conveniently expanded to their original shape.

Improved mechanism for the excavation of gravel or soil, and for its disintegration by movable jets of water controlled from the surface and operating upon the bottom beneath a body of water, has been patented by Mr. Adoniram Fairchild, New York City. A revoluble spheroidal shell having a number of overhanging inclined faces on its lower wall, with jet nozzles fitted in the faces, is mounted on a support whereon the shell may revolve by the force of the water.

Mr. Austin J. Hanks, of Wilmington, O., has patented a machine for forming steel felloes for vehicle wheels. The inventor employs preferably ten shafts, journaled transversely in a frame and arranged in two horizontal lines of five each, the upper shaft being located in vertical alignment with the lower shaft. The shafts are made in two lengths, five being about twenty inches long and the remainder twenty-two inches in length, and in the arrangement of the several shafts they are made to alternate with the shorter ones in each row. Each set of rolls is made of two disk sections and are adjustable to any sized blank that the operator may desire to pass between them, by introducing between the members one or more spacing disks of proper thickness. The blank enters the machine at one end and is delivered as a felly at the other end.

The same inventor has patented a vehicle wheel of the class of wheels known as "suspension wheel." The invention consists in a peculiar construction which cannot be adequately described without illustrations.

Mr. Thomas C. Conrad, of Philadelphia, Pa., has patented a toy engine, which is provided with parts resembling those of a reciprocating engine. It is attached to a stick in such a manner as to permit of rolling the fly wheel along the floor. By the motion thus imparted the engine is made to illustrate the principle of the steam engine.

An improvement in breech-loading fire arms, which relates especially to that class of arms known as "hammerless," has been patented by Mr. James T. Walsh, of Red Fork, Ark. The object of the invention is to provide a simple, positive, and durable mechanism for operating the breech block or extractor, and also to employ in connection with the breech block a safety lock capable of automatic action, and which may be applied at will to prevent the trigger from being drawn.

An improvement in machines for shelling peas has been patented by Mr. Giuseppe Pacl, of New York City. In this machine green peas in the pod may be introduced in quantities and the peas cleaned and expeditiously separated from the pods irrespective of size. The machine is provided with a means for discharging the pods and the shelled peas separately into convenient receptacles.

An improved nutmeg grater designed to operate upon a number of nutmegs at the same time has been patented by Mr. Joseph E. Giroux, of Alpena, Mich. It consists in a revolving grating cylinder provided with a crank handle, a spring-seated follower for holding the nutmeg to grating contact, and a case of peculiar construction inclosing the parts.

An improved game counter adapted for keeping the tally of points and games in the playing of billiards and like games has been patented by Mr. William B. Atkinson, of Franklin, Ky. The apparatus is provided with a dial, concentric independently operating hands movable in opposite directions around the dial, pulleys and ratchet wheels connected with the shafts, and operating hand cords secured to and depending from the opposite sides of the pulleys.

Electrical.

Mr. Willis Eugene Robinson, of Fairbault, Minn., has patented an improved telephone call register, which consists in the combination with a train of spring-actuated gearing provided with a stop-motion of an electro-magnetic releaser for starting the train, a dial for recording the number of separate movements of the train, and mechanism for permitting of the winding of the driving spring without disarranging the other parts of the apparatus, and devices which permit of setting the index.

An automatic regulator for dynamo-electric machines, in which the current delivered by the machine is made to shift the commutator cylinder on the armature shaft, and thus vary the output of the machine, has been patented by Mr. Perley P. Belt, of Fredonia, Kan. This invention consists in the combination with a dynamo-electric machine of a commutator cylinder mounted upon a sleeve placed on the armature shaft and adapted to move through a quarter of a revolution, a pulley mounted upon the sleeve and connected

by a belt with an electric motor in the main circuit of the dynamo, a spring connected with the armature shaft and commutator-supporting sleeve, and arranged to hold the commutator cylinder forward to the point of maximum output, a pair of brushes making contact with the commutator cylinder, a rotary dash pot carried by the armature shaft and having a piston connected with the commutator cylinder, and the electric connections between the commutator bars and sections of the armature.

Agricultural.

Mr. George W. Haupt, of Germantown, O., has patented an improvement in hand planters especially adapted for setting out tobacco, cabbage, and similar plants. It is a light, durable, and simple device whereby, without stooping, the farmer may expeditiously set the plants in the ground and press the surrounding earth in close contact with their roots.

An improved baling press has been patented by Mr. George Ertel, of Quincy, Ill. This is an improvement on the press for which letters patent No. 336,305 were granted to the same inventor February 16, 1886, and in such manner as to obviate all jamming of the power mechanism by the chain or link connections between the sweep head and the plunger pitman.

Miscellaneous.

Mr. James J. Ryan, of Brooklyn, N. Y., has patented a salve, which is intended as a remedy for piles. The composition consists of bloodroot, Armenian bole, resin, lard, and Stockholm tar, in certain definite proportions.

An improvement in mattresses patented by Harriette J. Webb, of Lockport, N. Y., has for its object to so construct a mattress that a section thereof may be entirely removed and an opening thereby created for the reception of a bed pan or similar article, also to provide a hinged section adjoining the detachable section, whereby the pan may be removed without inconveniencing the patient.

Mr. Has Brouck Alliger, of Rondout, N. Y., has patented an improved can opener, which is so constructed that when the cutting blade is passed through a portion of the can to be opened, it may be made to assume an inclined position, whereby as the knife is drawn through the metal of the can a clean shearing cut is produced with a minimum of exertion.

SCIENTIFIC AMERICAN BUILDING EDITION. AUGUST NUMBER.—(No. 58.) TABLE OF CONTENTS.

- 1. Elegant plate in colors showing perspective and floor plans of an attractive little cottage recently erected at a cost of only \$900 at Sunapee, N. H., from plans by Munn & Co., architects, New York. Sheet of details, etc.
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11. Dwelling and store at Mount Vernon, N. Y. W. S. Stickle, architect, Mount Vernon. Cost \$5,600 complete. Plans and perspective elevation.
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13. Attractive stable at Montclair, N. J. Cost complete \$3,200. J. C. Cady, New York, architect.
14. Miscellaneous: Steam as a fire extinguisher.—Trees and streets.—Portrait and biographical sketch of John Ruskin.—A porch covered with clematis montana, illustrated.—Prevention of decay in stone.—The porcelain tower at Nankin.—The Howard heater, illustrated.—Effective lightning rods.—An improved square chisel mortiser and borer, illustrated.—Zinc and brick work.—The Hartman sliding blinds.—An improved mitering machine, illustrated.—An improved twist machine, illustrated.—An improved heater, illustrated.—A perfect sanitary wash tub, illustrated.—An improved bench plane, illustrated.—A large contract for steel roofing.—New York Central Iron Works Company.

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