

ENGINEERING INVENTIONS.

A smoke consuming apparatus for steam boilers has been patented by Mr. Alfred Don, of 21 Cooper Street, Redfern, Sydney, New South Wales, Australia. This invention covers a novel apparatus for projecting a jet of combined air and steam into the fire box, making an increased combustion, and to consume and disperse the smoke in the fire box.

A car coupler has been patented by Mr. Louis A. Rudisill, of Charlotte, N. C. It has an armed link-securing wheel, with a bolt movable transversely across the path of the wheel, in combination with a drawhead, spring, and other novel features, making a simple and strong construction, in which it is not necessary to slack up the cars to uncouple.

A central rail fastening has been patented by Mr. Thomas A. Davies, of New York City. Combined with rails united by fish plates are opposing angle plates located centrally of the rails in engagement with the web and base, a fastening device passing through the web and plates, with other novel features, to prevent creeping of the rails, and requiring only a reduced and simple fish plate.

MISCELLANEOUS INVENTIONS.

A lubricant has been patented by Mr. Edward C. Leahy, of Halifax, Nova Scotia, Canada. It consists of coconut oil, lard, tallow, plumbago, yarn waste, tin crystals, carbonate of soda, and chloride of sodium, combined in certain specified proportions.

A wagon has been patented by Mr. Edward M. Allen, of Stafford, Md. Combined with front and rear axles and a perch connecting them are body supports pivoted on the axles, novel draught devices, with a particular form of brake construction and connections.

A flying machine has been patented by Mr. William Beeson, of Dillon, Montana Ter. It has a mainsail and a tail or backsail, both supported from a board which ranges fore and aft under the mainsail, with a pendulum bar to which is affixed a support for the aeronaut.

A burglar alarm has been patented by Mr. William H. Reiff, of Philadelphia, Pa. It is a bell rung by a power, a detent for stopping the power mechanism, and pivoted trip which is set in position for engagement by an opening door, the latter causing the trip to fall and permitting the alarm to sound.

A flour bolt has been patented by Mr. John M. Cook, of Baltimore, Md. It is adapted to be run with equal facility in either direction, causing the stock to be delivered upon the cloth on both sides of the axis over an extended area, and is provided with a set of knockers for jarring the cloth and dislodging adhering stock simply and effectively.

A lamp supporting attachment has been patented by Mr. Nelson Guyer, of Lima, Ohio. A post or standard adapted for connection to a table has a tube fitted upon it, with an arm supporting a lamp bracket, and a second arm bracing the first arm and carrying pins and hooks, making a lamp support especially adapted for sewing machines or tables.

The manufacture of gas forms the subject of a patent issued to Mr. William W. Dashiell, of Bergen Point, N. J. Combined with a gas apparatus are heating devices for an air, steam, and oil supply, the oil and steam being each supplied through a single conductor, and equally distributed in a generator over the fire.

A window frame and sash have been patented by Mr. John E. Jones, of New York City. The sash has at its outer edges straight surfaces with inclined rabbets facing the window frame, combined with tapering strips secured to the window frame, making a packed window frame and sash designed more particularly for railway cars.

A spring vehicle has been patented by Messrs. Jonathan G. Huff and Lemuel H. Huff, of East Bend, N. C. This invention refers to light vehicles of the "side bar" description, being intended to relieve them of injurious strains, render them lighter, more durable, and easier riding, and to simplify and cheapen their construction.

A printing machine has been patented by Mr. Charles F. Howe, of Greenleaf, Kansas. It is a platen machine, for doing general newspaper printing, the ink rollers traveling forward and back on a main frame, the paper being carried by endless belts, and the invention covering various novel features of construction and the arrangement of parts.

A button attaching machine has been patented by Mr. Harrison Tone, of Denison, Texas. It is for securing the ordinary four-holed metal button to pants, and has different sizes of dies in combination with a plunger, the dies having a flange and central projection, with parallel oblique curved recesses, a washer being ordinarily used in connection with the button.

A washer cutter has been patented by Mr. Charles Wunderlich, of Washington, Mo. This invention covers a novel construction and arrangement of parts in a device in which the knives are removable for sharpening, and each is vertically adjustable to regulate the depth of cut according to the thickness of leather, rubber, or other material from which the disk or washer is to be cut.

A safety inkstand has been patented by Mr. Louis B. Prahaz, of Brooklyn, N. Y. It is an improvement on a former patented invention of the same inventor, there being combined with the outer and inner casings and their covers a circularly bent spring plate between the casings, with arms extending from its upper edge, so that there will be no liability to breakage.

A draft, check, or other money order or instrument forms the subject of a patent issued to Mr. William T. Doremus, of Flatbush, N. Y. It is made with spaces, and provided with numerals and words, whereby the instrument can be filled out in such

manner as to prevent it from being raised, the invention being an improvement on a former patented invention of the same inventor.

A vehicle wheel has been patented by Mr. G. L. Herrmann Schneidewind, of Altona, Prussia, Germany. It is of the class known as "cycloid wheels," wherein the weight is distributed at various points on the periphery, so that, when the wheel is traveling backward or forward, its momentum will be increased in the direction of its revolution by the distribution of its weight.

A can cover and clamp has been patented by Messrs. Edmund R. Bristol and Edward C. Gran, of Jordan, Minn. Combined with a can cover having a recess, and a top cross bar held over the cover, is an adjustable screw or pin fitted to the cross bar and entering the recess in the cover when the cross bar is locked, making a simple and inexpensive shipping can or package.

SCIENTIFIC AMERICAN BUILDING EDITION.

FEBRUARY NUMBER.

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Curtis Pressure Regulator and Steam Trap. See p. 77. Chucks—over 100 different kinds and sizes in stock. Specials made to order. Cushman Chuck Co., Hartford, Ct.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

January 24, 1888,

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 items like Absorption tower, Acid obtaining sulphurous, Addressing machine, Advertising circular, Air brake, Alarm apparatus, Ammonia gas generator, Annealing metals, Axles, Bed, Belt and wheel, Belt, therapeutic electric, Boiler, Boiler tube cleaner, Boilers, Bolt, Books, Boot or shoe heel, Boring tool, Bottle, Bottle stopper, Bottles, Box fastener, Brace, Brake, Brick machine, Bridges, Brush, Bunting, Button, Buttons, Cable grip, Can cover and clamp, Can crimping, Can or measure, Car brake, Car connection, Car coupler, Car coupling, Car coupling, Car starter, Car, stock, Car wheel, Cars, Cartridge reloading implement, Casting and finishing machine.