

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.

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.

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January 24, 1888,

AND EACH BEARING THAT DATE.

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 Textile fabrics, machine for finishing and polishing,
 C. Tachon..... 376,993, 376,994
 Textile fabrics, machine for fixing cords to, E.
 Cornely..... 376,860
 Thermoscopes, circuit closer and regulator for
 electro-magnetic, H. J. Haight..... 376,880
 Thread holder for spools, E. G. Cone..... 376,858
 Tie. See Horse tie. Railway tie.
 Tongue support, D. Ward..... 376,939
 Tool handle, C. L. Young..... 377,008
 Transom lifter, S. L. Hill..... 376,955
 Trap. See Steam trap.
 Tray, sample, D. Goldstein..... 376,739
 Truss, L. B. Craig..... 376,861
 Tube skelps for handling, preparing, A. L.
 Murphy..... 376,780
 Tug hook, J. A. Brill..... 376,810
 Turret, armor, H. Gruson..... 376,945
 Umbrella and cane, combined, W. H. G. Ellis..... 376,870
 Valve, automatic air, A. H. Engstrom..... 376,799
 Valves, spindle connection for, H. R. Frisbie..... 376,981
 Vehicle bolster spring, E. Cliff..... 376,857
 Vehicle seat, S. B. Irwin..... 376,887
 Vehicle, spring, J. G. & L. H. Huff..... 376,957
 Vehicle spring, C. W. Saladee..... 376,758
 Vehicle, two-wheeled, H. K. Olmsted..... 376,862
 Vehicle, two-wheeled, H. H. Smith..... 376,932
 Vehicle wheel, G. L. H. Schneidewind..... 376,969
 Velocipede saddle, E. G. Latta..... 376,892
 Ventilator. See Room ventilator.
 Ventilator, Louis & Murray..... 376,827
 Vessels against rats, protector for, T. Wilson..... 376,839
 Voting machine, W. W. Ford..... 376,980
 Wagon, E. M. Allen..... 376,984
 Wagon, dumping, A. C. McEwen..... 376,902
 Washstand and water closet, combined, A. D. El-
 well..... 376,871
 Washer cutter, C. Wunderlick..... 376,974
 Washing machine, L. Whitney..... 376,862
 Watchman's electric controlling apparatus, Skri-
 van & Dvorak..... 376,920
 Water closet, E. T. Johnson..... 376,744
 Water closet, cisterns, seat connection for, J.
 Demarest..... 376,867
 Weather strip, T. P. Asbury..... 376,846
 Weed cutter, sectional, Denehy & Childs..... 376,735
 Weighing apparatus, grain, M. E. Reiser..... 376,965
 Weighing machine, coin released, G. Reimann..... 376,910
 Wheel. See Car wheel. Emery wheel. Fifth
 wheel. Vehicle wheel.
 Wheel, J. Bolick..... 376,838

Whiffletree hook, A. Curtis..... 376,733
 Window frame and sash, J. E. Jones..... 376,969
 Window sill, H. Breuer..... 376,940
 Wire nail, W. A. Sweet..... 376,791
 Wire, reducing and finishing, J. Withington..... 377,000
 Wire reel, C. B. Rumsey..... 376,913
 Wool washing machine, S. Davis..... 376,866
 Wrench, B. F. Lancaster..... 376,891
 Wrench, H. P. Roberts..... 376,991
 Yoke, neck, J. Edgar..... 376,868

TRADE MARKS.

Corn cure, D. H. Aldrich..... 15,115
 Drawers, men's, Stiefel & Cohen..... 15,129
 Envelope paper and envelopes, Holyoke Envelope
 Company..... 15,122 to 15,124
 Fireproofing, compound for, Griffith's Pyrodene
 Fireproofing Company..... 15,119
 Gum, chewing, C. T. Heisel..... 15,121
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 L. G. Thompson..... 15,131
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 pany..... 15,115
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 Pencil, lead, L. Zeckendorf..... 18,032
 Type, font of printing, C. E. Heyer..... 18,024

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38th ANNUAL STATEMENT
 OF THE
AETNA
LIFE INSURANCE Co.,
 OF HARTFORD, CONN.,
 January 1, 1888.

Premium Receipts in 1887, - - -	\$3,202,098.69
Interest Receipts in 1887, - - -	1,640,533.34
Total Receipts during the year, - - -	4,842,632.03
Disbursements to Policy-holders, and for expenses, taxes, &c., - - -	3,893,783.65
Assets January 1, 1888, - - -	32,620,676.76
Total Liabilities, - - -	27,193,053.36
Surplus by Ct. Mass., and N. Y. standard, - - -	5,427,623.40
Surplus by many States, - - -	7,319,000.00
Policies in force January 1, 1888, - - -	65,485, insuring, - - - 97,372,334.44
Policies issued in 1887, - - -	7,406, insuring, - - - 14,380,449.00

MORGAN G. BULKELEY, President.
 J. C. WEBSTER, Vice-President.
 J. L. ENGLISH, Secretary.
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