

Their capacity to resist evaporation by the heat generated at the cutting edge, with their capillary power, gives the varying qualities to various lubricants.

(4505) G. A. W. asks: 1. I have a Grenet battery about 1 1/2 or 2 volts and I would like to make an induction coil to use for giving shocks to people.

(4514) F. S. T. says: In a complete vacuum A says that the attraction the earth has is the same to a feather as it is to a cannon ball weighing 10,000 pounds, and if dropped from the same distance that they would both reach the ground together.

(4506) G. H. L. asks: 1. How can I determine the voltage and amperage of an incandescent electric lamp? A. By measuring the resistance of the lamp and taking number of ohms and dividing electromotive force by the resistance, you will find the amperage.

(4507) E. B. asks: 1. Suppose two cylinders were filled, one with steam at 1 pound pressure, the other with an ordinary gas mixture at 1 pound pressure. The gas is exploded and free to expand at the same time the steam is free to expand.

(4508) A. H. asks what tri-sodium phosphate is made of. A. Acid calcium phosphate, made by decomposing bone ash with sulphuric acid, is precipitated with a slight excess of sodium carbonate.

(4509) O. D. asks: What causes brass to break when bisulphate of mercury is applied to it? A. The mercury being reduced from the bisulphate forms an amalgam with the brass, which is weaker than the unamalgamated brass.

(4510) G. K. C. asks: Can a sheet of mica be softened by any process? If so, how? A. No. It is sometimes ground up and mixed with shellac and the mixture moulded by heat and pressure.

(4511) H. P. S.—The plant is Cassia nitidiana, "wild sensitive plant."

(4512) K. M. I. says: Suppose a reservoir stands 100 feet or more above the point of discharge of a line of pipe and all points in the pipe line to be below the level of reservoir, is it known to engineering practice that not a drop of water might be discharged at the outlet, owing to the presence of air in the pipes? An individual supposed by many to be eminent authority has told me that he himself was an eyewitness to such a phenomenon.

(4513) L. P. G. asks: 1. Is it true that drowned bodies which have sunk may be brought to the surface of the water by firing heavy guns? A. It is said that sunken bodies have been brought to the surface by firing cannon near the spot.

tion or shock of the discharge is supposed to liberate or expand confined gases in the body, making the body lighter by its enlargement. 3. Is it dangerous to leave windows open during a thunder storm? A. It is safer to close windows during a thunder storm. 4. If so, why? A. There is some danger that a current of warm moist air from the interior of the room may act as conductors for the discharge.

(4515) A. W. N. says: I understand that pneumatic street cars are a success, but that stations are required to charge the cylinders. Would not a small 1 or 2 horse power steam motor and air pump, continuously running on board the car or adjoining car, charge an 8 or 10 horse power air engine? The frequent stopping and down grades furnishing ample time to keep up the required amount of pressure.

(4516) A. W. N. says: I understand that pneumatic street cars are a success, but that stations are required to charge the cylinders. Would not a small 1 or 2 horse power steam motor and air pump, continuously running on board the car or adjoining car, charge an 8 or 10 horse power air engine? The frequent stopping and down grades furnishing ample time to keep up the required amount of pressure.

TO INVENTORS.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted August 23, 1892.

AND EACH BEARING THAT DATE.

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

Table listing inventions and their patent numbers, including: Aeration of liquids, E. Williams. 481,249; Air compressor pistons, speed regulator, E. C. Fasold. 481,527; Alkalies and chlorine, production of caustic, F. M. Lyte. 481,407; Auger, earth, F. W. Brooksieper. 481,345; Automatic brake, J. H. Priestley. 481,190; Axle threading tool, J. C. Stichel. 481,514; Bales, device for drawing the bands around, Martin & Crawford. 481,184; Bar. See Cutter bar.

Table listing inventions and their patent numbers, including: Clevis and gauge wheel, combined, G. Moore. 481,186; Closet. See Water closet; Clothes drier, J. L. Mather. 481,365; Clothes drier, E. Powell. 481,265; Clutch, friction, F. H. Richards. 481,194; Coal or ore jigger and washer, S. Stutz. 481,438; Coin receptacle pocket, F. H. Brown. 481,523; Collar holder, shirt, F. L. Robinson. 481,425; Commodore, J. W. Clarke. 481,255; Condensed steam, H. Woodbridge. 481,518; Corset, W. P. Bigelow. 481,294; Cotton, pneumatic conveyor for unloading, G. A. Stafford. 481,436; Countershaft supporting jack, H. J. Garbutt. 481,486; Coupling. See Bar coupling; Gas main safety coupling, Pipe coupling, Thill coupling.

Table listing inventions and their patent numbers, including: Painting with distemper and other colors, A. Pereira. 481,282; Pan. See Bed pan; Paper board tubes, manufacture of, W. W. McEwan. 481,239; Paper feeding and cutting mechanism, F. T. Johnston. 481,497; Paper hanging machine, L. D. Barton. 481,251; Paper holder, L. Elias. 481,167; Parallel bars, T. Peterson. 481,509; Parer and cover, P. J. Gates. 481,528; Pasting machine, Underly, J. L. Dennis. 481,236; Pastry rack, portable, C. F. Jesser. 481,404; Pegging jack support, W. M. Sawyer. 481,374; Penholder, Blalock & Muir. 481,158; Pen or pencil holder and making the same, H. T. Smith. 481,534; Petroleum distillation, separation of waste products of, J. P. Engle. 481,392; Petroleum, recovering waste products of, J. P. Engle. 481,391; Picture frame, P. Wiener. 481,217; Pillow sham holder, A. J. Robberson. 481,424; Pipe coupling, L. A. Barnes. 481,250; Pipe wrench, W. H. Dechant. 481,267; Pipes, tapering tool for lead, M. Fritsche. 481,169; Planing machine, L. T. Pyott. 481,379; Planograph, self-recording, J. Soler. 481,432; Planter, corn and seed, A. Griesemer. 481,170; Planter, potato, J. A. Damon. 481,164; Plow attachment, G. Watson. 481,215; Plow planter attachment, J. P. Nugent. 481,242; Plug spring jack, C. A. Shea. 481,204; Polishing wheel, J. McEllan. 481,415; Pressure regulating device, C. F. A. Convert. 481,272; Printing machine, enclosure, J. L. Dennis. 481,404; Printing press folding attachment, R. C. Seymour. 481,203; Protector. See Tree protector; Trolley protector.

Wrench, E. A. Cochran 481,889
 Wrench, B. McGilvray 481,506
 Yardstick holder, E. R. Northam 481,188

DESIGNS.

Badge, G. B. Rand 21,792
 Box, E. L. Button 21,793
 Buckle, suspender, C. R. Harris 21,791
 Bucktonook, C. Webster 21,792
 Cane handle, F. S. Evans 21,784
 Fabrics, ornamentation of, H. Sturm 21,795
 Flag, J. W. MacNamara 21,788
 Hat rack, J. Honecker 21,781
 Horn, campaign, H. L. Mills 21,789
 Knife handle, H. A. Weibman 21,785
 Lathe bed, C. M. Conradson 21,798
 Sign, barber's, Svoboda & Hofmann 21,782
 Spoon, J. A. Hughes 21,783
 Statute, C. Holloway 21,787
 Stove, heating, W. N. Moore 21,801
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 Trimming, dress, H. W. Schloss 21,794
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 Ventilator grate, G. N. Joss 21,800
 Watch case, J. C. Dubeber 21,797

TRADE MARKS.

Beer, lager, Long Island Brewery 21,680, 21,681
 Cigars, C. Alvarez 21,691
 Cigars, Diaz y Hermano 21,685
 Cigars, R. Lopez 21,681
 Coats, pantaloons, overalls, shirts, and gentlemen's
 furnishing goods, Beau La Due & Clawson 21,677
 Flour, corn, Ontario Oriental Flour Company 21,683
 Lard and its substitutes, W. J. Wilcox Lard and
 Refining Company 21,675
 Lead, white, M. L. Wieder 21,688
 Leather, harness, sole, and belting, J. Grotzinger
 & Co. 21,686
 Lubricating compounds, oils, and grease, L. E. At-
 kinson 21,655
 Meats, smoked and unsmoked, and all kinds used
 for human food, Volunteer Chicago Beef Co. 21,630
 Metal polish, S. Kidder 21,673
 Milk, condensed, W. Johnston 21,680
 Oil and grease, lubricating and machine, C. H.
 Bealy 21,669
 Pantaloon and overalls, men's, Cowan, Magill &
 Co. 21,685
 Phosphate beverages, Rose Bros 21,687
 Pills, W. T. Hanson Company 21,682
 Pills used in kidney complaints, J. H. McKee 21,679
 Plastic material composed in part of pyroxylene,
 Celluloid Company 21,682, 21,683
 Powder for causing the smoking out of rats, rab-
 bits, etc., L. Bossie 21,670
 Remedy for constipation, diseases of the liver,
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 Harris 21,678
 Saws, Shurly & Dietrich 21,688
 Scalp wash, L. A. Smith 21,684
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 Soap, laundry, Benjamin Brooke & Company 21,671, 21,676
 Supporter for ladies' underwear, L. P. Sigbee 21,674
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 terials for machine and hand sewing, Kerr
 Thread Company 21,664
 Time-keeping and time-keeping instruments, S.
 E. Thomas 21,684
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 Toilet preparations for beautifying the com-
 plexion, Flowers & Witwer 21,659
 Toilet preparations, not inuding face powder, M.
 Botts 21,672
 Washing machines, hand power, Boss Washing
 Machine Company 21,651
 Whisky, Renauld & Niederstadt 21,662, 21,663

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for 25 cents. In ordering please state the name and number of the patent desired, and remit to Munn & Co., 361 Broadway, New York.

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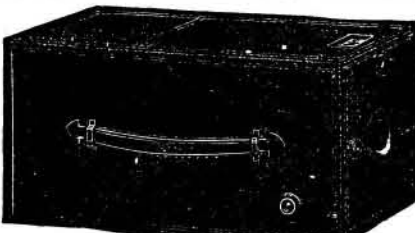
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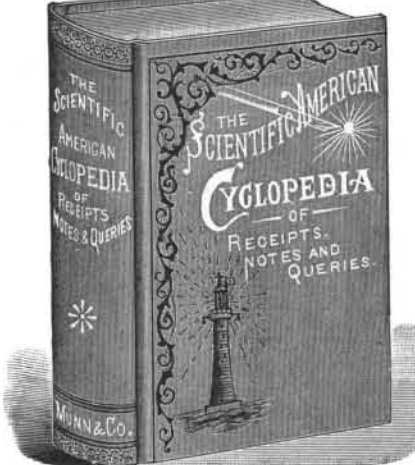
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