

an adjustable stop to limit the movement of the diaphragm valve.

SASH HOLDER.—Lewis H. Bowman, Walla Walla, Wash. To hold a window sash, without rattling, at any height desired, and to prevent the ingress of air or dust when the sash is closed, are the main objects of this invention...

WAGON AXLE BEARING.—Henry M. Cromer, Anderson, S. C. This invention is designed to facilitate the utilization of old thimble skeins, making them fit closely upon the axle, as well as provide a new construction...

CLINICAL THERMOMETER SHIELD.—Jennie C. Harrington, Ossian, Ia. This shield is especially designed for use on fever thermometers, to prevent patients from breaking the instrument while it is being held in the mouth...

APPARATUS FOR COOLING LIQUIDS.—William L. Spoon, Jr., Burlington, N. C. For cooling hot water or other liquid used in ice machines, etc., this inventor has devised an apparatus which is designed to be very effective, while permitting the use of the liquid over and over again...

STERILIZING APPARATUS.—Arthur J. Vause, Sydney, New South Wales. For sterilizing milk and other liquids, and the receptacles in which the milk is placed, as well as for automatically bottling and corking the milk...

WATER COCK.—Maurice Andriveau, Paris, France. This invention relates to cocks in which automatic closing takes place, and provides a cock which will have a double closing action...

WASHING MACHINE.—Alexander E. Hoiges, Tecumseh, Oklahoma Ter. In a suitably constructed frame, according to this invention, a semi-circular receptacle is mounted to rock, there being within it a rubbing cylinder journaled in a frame...

BOSOM PAD.—Dora Harrison, Lansing, Mich. This pad is an improvement on a formerly patented invention of the same inventor, providing an improved dress form readily applied to or removed from the pockets of corsets and other garments...

ROLLING PIN.—Anson B. Fowler, Shelton, Wash. This device may be used as an ordinary rolling pin, in the preparation of dough for the oven, or with a flour delivery for sprinkling the dough to be rolled...

SEPARATOR.—Frank H. Congdon, East Greenwich, R. I. This invention relates to separators used in spinning machinery, such as the Doyle separator, and embodies an improved form thereof.

GLASS PITCHER.—Joseph Wilson, New York City. This pitcher has panels decorated with "punties," and prismatic panels at each side of such panels, box panels crossing both the others.

BICYCLE LUGGAGE CARRIER.—A. J. Gilliland, Smethport, Pa., and W. H. White, Nyack, N. Y. This is a bracket device to be fitted on the steering head and having arms projecting from each side adapted to conveniently carry a variety of packages.

SPOON HANDLE.—Herian J. Klumpp, Portland, Oregon. On the obverse side this handle represents interlaced ribbons, with panels containing floral figures, while on the reverse side are scroll and shell figures and a beaded ribbon following the margin of the bead.

NOTE.—Copies of any of the above patents will be furnished by Munn & Co. for 10 cents each. Please send name of the patentee, title of invention, and date of this paper.

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Notes & Queries

HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. References to former articles or answers should give date of paper and page or number of question. Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research...

(7369) J. W. B. writes: About what size wire, number of sections, etc., to wind on laminated core of following size. You will help me out of a quandary:

- Length of core... 5 1/2 inches. Diameter of core... 3 3/4 " Number of laminations... 30 Sections... 10 Diameter between fields... 8 3/4 "

I wish to obtain an E. M. F. of 52. A. If your field is of the proper strength, wind the armature with 24 sections of 12 turns each of No. 16 wire. You can change the number of sections if you keep the total number of turns the same.

(7370) J. L. B. writes: Will you kindly answer for me the following? 1. Why does not the magnetic pole coincide with the geographic pole? A. This is as yet one of the hidden secrets in the physical constitution of the earth.

ROLLING PIN.—Anson B. Fowler, Shelton, Wash. This device may be used as an ordinary rolling pin, in the preparation of dough for the oven, or with a flour delivery for sprinkling the dough to be rolled, to prevent it from sticking or adhering to the pin...

SEPARATOR.—Frank H. Congdon, East Greenwich, R. I. This invention relates to separators used in spinning machinery, such as the Doyle separator, and embodies an improved form thereof.

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TO INVENTORS. An experience of nearly fifty years, and the preparation of more than one hundred thousand applications for letters at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted FEBRUARY 22, 1898, AND EACH BEARING THAT DATE.

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

Table listing various inventions such as Air brake, Amusement device, Animal trap, Ash remover, Axles apparatus, Band cutter, Band slide, Battery, Bearing ball, Bedstead, Bicycle crank shaft, Bicycle guard, Bicycle handle, Bicycle holder, Bicycle lamp attachment, Bicycle stand, Bicycle support, Bicycles, Billiard cushion, Binding implement, Bit, Boiler, Boiler gage, Book rest, Boot or shoe nailing machine, Boring and turning machine, Bottle and stopper, Bottle attachment, Bottle packing case, Bottle stopper, Bowling alley, Box folding machine, Brake, Brake mechanism, Bread and pastry board, Bottle, Burner, Burning and heating appliance, Button or stud for shirt bosoms, Cabinet, Camera, Camera, photograph magazine, Can, See Oil can, Sealing wax can, Candle holder, Candy cutting machine, Car brake shoe slack adjuster, Car coupling, Car coupling, H. Laake, Car coupling, S. Reynolds, Car door, Car draw bar, Car fender, Car fender, J. W. Talmadge, Car stopper, Automatic, I. J. Neracher, Cars, etc., safety guard and truck for, A. M. Phelps, Card box, Carpetsweeper, Card, Card packing case, Cash register, Cash register and indicator, Cash pitching apparatus, Centrifugal machine, Chair, Chair, See Opera chair, Chair, Hanson & Wolf, Chuck, R. H. Hurlbut, Churn, Coppock & Miller, Churn, J. R. Hailey, Cleaner, Clothes wringer, C. Wheeler, Jr., Coffee, Collar fastener, Collar lowering machine, Color value curtain shutter, Cooker, steam, J. Mayer, Cooler, Corn sheller, Allen & Berden, Corn sheller conveyor, J. H. Gilman, Corner plate, H. Liebreich, Corner stay machine, H. A. Inman, Corner strip anchor plate, F. A. Mitchell, Cotton cleaning mechanism, seed, M. Swenson, Couch, spring leg for, E. M. Hulst, Countersinking machine, dovetail, G. A. Huben, Cuff links, detachable fastener for, J. M. Parkinson, Cultivator, C. F. Pogue, Cup, See Soap cup, Cutter, See Glass cutter, Cyclometer, E. G. Dorchester, Damper, grate, Keifel & Zipp, Demolier, automatic, G. C. Sharpe, Dish, crushed fruit, G. Bohner, Door checks and closers, lever connection for, C. O. Case, Door hanger, G. C. Gardner, Doors, double sliding, A. G. Bierbach, Draining machine, J. Edmonds, Drawing apparatus, R. Richter, Dress shield extender, H. L. Rutter, Dresser, See Fruit drier, Steam drier, Drier, A. S. Livengood, 599,509 Drill, See Rail drill, Dropper, See Medicine dropper, Drum, heating, G. M. Ridenour, Dye, black triazo, C. Ris, Dye, black alizarin, R. E. Schmidt, Dye derived from anthraquinone green, R. E. Schmidt, Dye derived from quinizarin, green, R. E. Schmidt, Egg beater, E. J. Scoopes, Electric fire alarm, H. A. McGee, Electric battery, Shrewsbury & Dobell, Electric light support, incandescent, J. Whitaker, Electric meter driving gear, G. A. Le Fevre, Electric resistance conductor, H. G. O'Neill, Electromotive resistance conductor, O'Neill & Gale, Fly screen, C. T. Siebert, H. A. McCoy, Electrical primary battery, J. B. Whittemore, Elevator, See Mail and parcel elevator, Elevator hoist, T. Mason, Elevator safety appliance, J. D. Conner, Engine, See Gas engine, Rotary engine, Vapor engine, F. J. E. Bruguiere, Engines, electric igniter for explosive, H. F. Probert, Engine, electric igniter for gas, F. E. Culver, Explosives, making, J. E. Blomen, Explosive cap, J. W. Talmadge, Fabric, See Knitted fabric, Feed trough, N. R. Medaugh, Fermenting squares and vats, construction of, W. Cutler, Finishing roll, J. Hall, Fire alarm box, Hayes & Fisher, Firearm, box magazine, J. M. Browning, Firearm, magazine, Bennett & Mason, Fire extinguisher, G. C. Hale, Fishing tackle holder, H. D. Streator, Flask, J. C. Korn, Fly screen, C. T. Siebert, H. A. McCoy, Fly trap, automatic, C. C. Grenzbach, Foot covering, J. H. Meeteer, Forging and sharpening rock drills, etc., apparatus for, H. C. McNeil, Forging hollow shafts, funnels, etc., mechanism for, Frame, See Photographic printing frame, Sewing machine quilting frame, Fruit cleaner, W. J. McKay, Fruit drier, G. A. & B. G. Stevens

Table listing various inventions such as Furnace blast pipe, Game apparatus, Gas compressor, Gas engine, Gas engine, W. E. White, Gas engine attachment, Gas generator, Gas generator, acetylene, Gas machine, hydraulic blower and pressure apparatus, Gate, S. E. Auker, Gate, R. Hayden, Gear, driving, V. E. Doremus, Generator, See Gas generator, Glass cutter, window, Meissner & Koelg, Grease trap for sinks, baths, etc., H. Sieben, Gun, pneumatic, W. L. Breath, Gun turrets, apparatus for operating, G. W. Dickie, Hanger, See Door hanger, Pipe hanger, Harness attachment, racing, J. H. Snapp, Hat pin, W. R. Gorrell, Heater, See Water heater, Hides, skins or leather, machine for treating, J. Hall, Hoisting and lowering gear, Bell & Maguire, Hoisting apparatus, W. Sauer, Horse race call, Olson, Hydrocarbon burner, J. H. White, Injector, steam, R. Pattison, Ink well, Killion & Perdue, Insect exterminator, E. F. Robertson, Insulator, strain, J. 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