

(56) J. F. S. writes: Can you inform us as to preparation or manufacture of "oil of apple" or "essence of apple," advertised by manufacturers and dealers in oils, extracts, essences, etc.?

(57) A. H. says a manufacturer of ladders here contends that ladder rounds (for a common straight ladder) tapered off from the center gradually to the ends down to the size of the tenons are stronger and stiffer than to leave the rounds straight and taper them off at the ends just enough for the tenons; rounds the same size in the center. Is he right? A. No. He is wrong.

(58) S. Van D. asks: Why does a sulphurous smell always accompany a thunderbolt? A. The odor is supposed to be due to the formation of ozone.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted November 25, 1884, AND EACH BEARING THAT DATE.

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

Table listing inventions with names and patent numbers, including Acid, making hydrochloric, L. Mond; Adding machine, Noyes & Stark; Advertising device, J. C. Blevney; Amalgamator, M. T. Van Derveer; Anchor support and tripper, R. P. Trefry; Auger, post hole, G. W. Gilmour; Axle box, car, G. W. Sweeney; Axle, vehicle, J. O. Therien; Bag and pouch fastening device, J. Fickinger; Belt guide, J. E. Laying; Belt shifter or stop motion, H. A. Green; Bench and stand, combined, J. W. Waiters; Berth, automatic ships, W. T. Milligan; Bicycle, Stillwell & McNab; Blotter, N. O. Pyles; Blotting thimble or pad, A. B. Bromwell; Boneblack drier, E. P. Eastwick; Boneblack kiln, E. P. Eastwick; Book support, adjustable, W. O. Johnson; Bottle filling device, G. A. Kintz; Bottle wrappers, material for, S. Friend; Brake, See Lathe friction brake; Brakeshoe, D. Prew; Brick for regenerative furnaces, S. A. Richards; Brick kiln, J. Weaver; Bridge, M. Kersten; Broom, P. A. Yoergensen; Broom shield, Dew & Robertson; Brush, B. Normandin; Brush, blacking, Eaton & Fenn; Brush, stove, C. Barrett; Buckle, trace, J. O'Brien; Burglar trap, G. Grebe; Butcher worker, M. D. Woodbury; Button, T. W. F. Smitten; Camera, See Photographic camera; Can, See Oil can; Cannon, manufacture of, B. T. Babbitt; Cant dog and pry, combined, A. K. Doe; Cant dog, pry, and pike, combined, A. K. Doe; Car coupling, P. Brown; Car coupling, J. D. Kieley; Car coupling, J. P. Lancaster; Car coupling, J. A. Reid; Car uncoupler, electro-magnetic, J. D. Reed; Carriage, child's, G. R. Clark; Carrier, See Cash carrier; Cash carrier, C. Fisher; Caster, J. I. Duncan; Casting ingots of metal, apparatus for, Durfee & Eggleston; Chair, See Folding chair; Chuck, J. H. Westcott; Churning device, A. Cairns; Cigarette machine, W. H. Emery; Clock, electro-mechanical, C. H. Pond; Cock, stop, C. Pfaudler; Cocoa roaster, H. Stollwerck; Cooking and collecting the resulting gases and their products, apparatus for, T. Nicholson; Collar, horse, S. L. McClanahan; Confectionery, machine for making, P. A. Johns; Cork strip for protecting steam and gas pipes, etc., J. Bourdon; Corks, metallic cap for, A. L. Bernardin; Corset fastening, T. J. Wood; Cultivator, T. E. Gregg; Cultivator, W. B. Patterson; Cultivator attachment, F. Albrecht; Cutter, See Moulding cutter; Dental tool, J. G. Morey; Derrick, T. Gaffney; Digger, See Potato digger; Drier, See Boneblack drier; Drill, See Rock drill, Stone drill; Ease, T. C. Vall; Eccentric, variable, E. Py; Egg, fruit, and honey carrier, L. H. Taylor; Electric motor, Blodgett & Tierrell; Electric motor, G. Prouvé; Electricity gauge, J. & H. M. Goodman; Embalmer's and undertaker's cabinet, T. C. Quayle; Embroidery frame, J. Elder; Engine, See Gas engine; Evaporator, See Sugar evaporator; Eye bars, manufacture of, E. W. Eckert;

Table listing inventions with names and patent numbers, including Fastener, metallic, G. W. McGill; Faucet, compound, C. H. Waters; Faucet protector, ale, G. Hirschman; Feed lubricator, visible, T. Brabson; Feed water, heating, C. N. Petesch; Feed water regulator, E. D. Shepardon; Fence post, M. J. Schott; Fence wire, L. W. Lindley; Fence wire, barbed, Woodruff & Hutchins; Fertilizer, J. R. Young, Jr.; Filter, A. D. Puffer; Filter, cooler, and refrigerator, combined, W. E. Templeton; Firearm, W. Newcomb; Firearm, breech-loading, W. & S. E. Folk; Fire escape, A. H. Terwilliger; Fireplace, E. Chickering; Folding chair and bathtub, combined, S. J. & S. A. Beach; Frame, See Embroidery frame, Spectacle frame; Frames, etc., manufacture of covered, D. & D. C. Wheeler; Furnace, See Gas furnace, Hot air furnace, Regenerator furnace; Furnace crown bar, White & Hodgson; Furnace door, T. R. Butman; Gauge, See Electricity gauge, Shingling gauge; Garment fastener, A. V. Smith; Gas engine, B. Parker; Gas furnace for metallurgic purposes, T. G. Kirkpatrick; Gas furnace, natural, J. N. Pew; Generator, See Steam generator; Glass cutting machine, P. C. Clafin; Governor, steam engine, A. L. Ide; Governor, steam engine, H. Whiting; Grain elevators, revolving chute for, J. Hughes; Grinding mill, roller, W. R. Fox; Gunning machine, Furnival & Daniels; Hand protector, M. Bidwell; Handle, See Pail handle; Harmonium and piano, combined, L. Küstner; Harness, H. T. Fountain; Harrow, Hetrick & Stimmel; Harrow, W. W. Robinson; Hat holder, T. B. Boyd; Hay rake, horse, A. W. Stevenson; Heel counter machine, M. Hynes; Hinge, spring, J. H. Alexander; Hinge, spring, P. H. Walsh; Hoisting gear, W. W. Wythe; Hoisting machine, J. Boyd; Holder, See Hat holder, Stencil holder, Tidy holder; Horseshoe, W. V. Wallace; Hose reel, Harding & Hill; Hot air furnace, J. B. Oldershaw; Hydraulic motor, N. Yaum; Injector, steam boiler, F. B. Maxwell; Jars or cans, cap or cover for, T. G. & J. H. Otterson; Jewelry, ornamenting, C. J. Leyers; Joint, See Rail joint, Railway joint, Universal joint; Kiln, See Boneblack kiln, Brick kiln; Lace fastening, F. M. Munroe; Lantern, W. S. Tryon; Lasting machine, H. A. Smith; Lathe friction brake, U. & H. E. Eberhardt; Letter sheet and envelope, combination, D. W. Clegg; Letter sheet and envelope, combined reversible, D. W. Clegg; Leveling instrument, W. H. Munford; Lifting jack, J. S. Hood; Link blanks, roll for forming, J. T. Wright; Lock and latch, combined, H. L. Heaton; Loom for weaving hair cloth, Greenhalgh & Wadsworth; Loom stop mechanism, E. Herzog; Lubricator, See Feed lubricator; Lubricator, L. B. Bailey; Malt husks, treating, P. Ammann; Measure for grain, shot, etc., H. W. White; Metals, process of and apparatus for the treatment of ores for the extraction and separation of their, J. J. Shedlock; Milk, apparatus for preserving, J. Meyenberg; Milk, preserving, J. Meyenberg; Mill, See Grinding mill, Roller mill; Millstone driver, J. F. Callahan; Moulding cutter, J. Phillips; Motor, See Electric motor, Hydraulic motor, Spring motor; Mouse trap, D. B. Wirt; Nailing machine, J. Nagle; Nut washer, W. A. Jordan; Oil and glue from bones, etc., extracting, F. Seltam; Oil can, W. Snow; Ore concentrating apparatus, O. Hanson; Ores, apparatus for disintegrating, H. B. Meech; Packing, metallic, S. Armstrong; Pail handle, etc., S. C. Cary; Painting wire fences, apparatus for, Marsau & Hill; Paper-hanging device, G. W. Schock; Paper satchel, C. L. Lockwood; Paper sizing and drying machine, combined, L. A. Fernon; Pea and bean sheller, E. R. Young; Photographic camera, W. Clark; Pianoforte attachment, E. Höfinghoff; Piano pedal key attachment, J. Shaw; Pills, machine for making, J. A. McFerran; Planter, J. B. Altman; Planter and cultivator, combined seed, T. B. Shanbon; Plow, A. Schindler; Plow, M. M. Warmoth; Plows, tongue latch for wheel, R. Newton; Post, See Fence post; Potato digger, C. A. Denison; Power by belts and pulleys, device for transmitting, N. Yagn; Preserving fruit, etc., apparatus for, W. A. Wicks; Protector, See Hand protector; Pump, W. S. McLeod; Rail joint, D. E. Bishop; Railway appliances by electricity, apparatus for controlling, J. T. Hambay; Railway joint and chair, combined, L. Haas; Railway signals by electricity, apparatus for controlling, J. T. Hambay; Railway switch, G. W. Parsons; Railway switch circuit closer, J. T. Hambay; Railway switch locking device, T. Rowlands; Railway switch stand, A. Baker; Rake, See Hay rake; Reel, See Hose reel;

Table listing inventions with names and patent numbers, including Regenerator furnace for use of natural gas, T. G. Kirkpatrick; Regulator, See Feed water regulator, Watch regulator; Roaster, See Cocoa roaster; Rock drill, H. C. Serreant; Roller mill, Mumford & Moodie; Sash fastener, J. A. Paine; Saw, A. & C. W. Boynton; Scale, letter, J. E. Smith; Scraper, earth, C. E. Outhwaite; Seal and railway ticket for milk cans, G. W. Evans; Sewing machine, J. Tripp; Sewing machine shuttle, D. L. & W. H. Keeler; Sheet metal bending machine, O. A. Fairchild; Sheller, See Pea and bean sheller; Shingling gauge, S. T. Poe; Ship's log, hydrostatic, A. Kurreick; Shoe, S. C. Crowe; Signaling apparatus, electro-mechanical, M. Toulmin; Silk woods, preparing trams for, R. Simon; Skate, roller, O. Arnold; Sled, hand, R. W. Williams; Soda water apparatus, W. H. Greene; Sodium bicarbonate, manufacture of, Mond & Jarmay; Sower, fertilizer, J. W. Watts; Spark arrester, C. Foster; Spark arrester, J. A. Jones; Spectacle frame, E. Collins; Spring, See Watch case spring; Spring motor, A. Marques; Spur, J. Kaino; Staple, P. W. Doherty; Steam engine reversing gear, E. A. Marsh; Steam generator, O. D. Orvis; Steam generator, M. H. Smith; Steam pipe covering, J. M. Ordway; Stencil holder, J. W. Rennett; Stone dressing machines, rotary cutter head for, J. W. Maloy; Stone drill, T. M. Yerkes; Store service system, C. Fisher; Stove, vapor, W. E. Kauke; Strap attachment, B. F. Rice; Sugar evaporator, Ferguson & Post; Tag, J. F. Miller; Telephone and automatic fire alarm system, combined, T. D. Lockwood; Telephone, mechanical, I. F. Tucker; Tidy holder, F. F. Unckrich; Tile laying machine, Walls & Engle; Time detector, electric, A. Lasmoles; Time indicating apparatus, C. H. & C. W. Thompson; Tool for grasping and holding articles, J. Goodrich; Track fastener, J. Forshey; Tramway, overhead, R. Cartwright; Trap, See Burglar trap, Mouse trap; Truck, hand, W. W. Hughes; Universal joint, R. H. Gleason; Upholstering purposes, machinery for curling fibers for, O. C. Flick; Valve, S. Bradbury, Jr.; Valve, safety, Falk & Frazier; Valve with relief attachment for fountains or other vessels under pressure, draught, L. W. Puffer; Vapor burner, petroleum, W. H. Peck; Vessels, balancing device for, R. Schaum; Wagon, dumping, R. D. Shackelford; Washer, See Nut washer; Watch case spring, C. W. Thiers; Watch regulator, G. I. Tuttle; Watch stem winding and setting mechanism, H. M. Haines; Water closet, F. B. Hanson; Whiffletree, spring, C. B. Morse; Wells and oil bearing rock and tube therefor, extracting oil from oil, W. Richards; Windmill, G. H. Pattison; Window bead fastener, E. W. Talbot; Wire, annealing, E. Tucker, Jr.; Wire drawing apparatus, H. L. Rawson; Wrench, J. Houlehan;

DESIGNS.

Table listing designs with names and numbers, including Basque, lady's, L. Tully; Carpet, N. Komori; Cloak, miss', M. Kavanagh; Clock case, A. O. Jennings; Costume, girl's, J. Q. Reed; Costume, lady's, M. Turner; Costume, miss', S. J. Shiels; Rug, A. Petzold; Type, printing, H. H. Thorp;

TRADE MARKS.

Table listing trade marks with names and numbers, including Baking powders, Oriole Baking Powder Company; Bitters, Picon & Co.; Bitters, J. G. B. Siegert & Hijos; Blacking and preparations for polishing boots, E. Brown & Son; Busties, E. E. Hodson; Cigars, E. H. Gato; Coffee and spice mills, H. H. Coles; Flour, wheat, J. Boyd, Jr., & Co.; Food for infants, Fairchild Bros. & Foster; Food for infants, milk, H. Nestle; Medicines, certain named proprietary, Flower Medicine Company; Milk, condensed, H. Nestle; Oil made from petroleum, lubricating, W. H. Compton; Patterns and linings for ladies' dresses, Moschowitz Bros.; Pens, metallic, Esterbrook Steel Pen Manufacturing Company; Yarns, worsted and woolen, Nonantum Worsted Company;

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