tinum and other receipts in our "Cyclopedia of Receipts," but do not stand squeezing or pressing without marking the surface. Such surface color should be done after finishing.

(4824) F. W. C. says: I am desirous of knowing how to make aluminum present a matted appearance, such as would look well in jewelry. Also, if there is a better material to polish aluminum than rouge. A. The matting of aluminum is done with polished matting tools or stippled with a broad lining or stipple, the same as silver plate. The tools can be obtained from dealers in jewelers' tools. For the bright finish on aluminum, use Vienna lime after the rouge.

(4825) J. T. asks how far a 124 ton gun will throw a projectile, the kind Krupp will exhibit at the World's Fair, also the quantity of explosives to fire each round. A. The 124 ton gun is intended to carry solid shot of half a ton with a charge of 700 pounds of powder, with a range of 12 or 13 miles.

(4826) C. E. E. asks: What can I use for the porous cup in a battery? What will do that I can find here without buying one? A. Porous flower pots may be used for the porous cells of batteries by stopping the hole in the bottom of the pot. Such porous cells, however, are not as efficient as those made for the purpose.

(4827) S. B. write: We have two large iron columns, one on each side of boilers, in basement, both essential supports to a six story building. They get very hot. Will you please advise us if expansion and contraction of same is any indication of danger? A. There is no danger from the influence of the heat, if the columns are outside of the brickwork of the boiler setting.

TO INVENTORS.

An experience of forty-four years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequaled facilities for procuring patents everywhere. A synopsis of the patent laws of the United States and all foreign countries may be had on application, and persons contemplating the securing of patents, either at home or abroad, are invited to write to this office for prices which are low, in accordance with the times and our extensive facilities for conducting the business. Address MUNN & CO., office SCIENTIFIC AMERICAN, 361 Broadway, New York.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

March 21, 1893,

AND EACH BEARING THAT DATE.

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

Adding machine, A. J. Brooks 493,971
Aerating and purifying the water of wells, etc., means for, J. H. Armstrong 493,853
Age gauge, A. & J. Bolinger 493,963
Alarm. See Burglar alarm. Pneumatic alarm. Shoal alarm.
Album, G. Schwab 494,032
Almond or walnut huller, A. Gamble 493,887
A lar, portable, J. D. Schaub 493,790
Amina, treating hydrated phosphates of, S. L. Goodale 493,889
Anchor, E. T. Starr 493,901
Animal shears, Moffat & Virtue 494,070, 494,071
Animal shears, W. Silver 494,034
Armatures for dynamo-electric machines, system of winding, W. M. Thomas 494,042
Auger, earth, A. J. Greiner 493,769
Automatic gate, A. M. Whiteley 493,669
Awning, E. B. Warren 493,954
Banjo, F. B. Converse 494,059
Banjo, W. Mayer 493,625
Banjo, J. E. Quinlan 493,875
Barrel washer, U. Eberhardt 493,762
Battery. See Secondary battery.
Beam hangers, machine for making, J. Grant 494,102
Bearing for conveyers, shaft, J. B. Ivey 493,726
Bearing for propeller shafts, thrust, H. C. Pedersen 494,024
Bearing, roller, Botsford & Holtz 494,055
Bed, folding, P. J. Harrah 493,711
Bedpan or commode, R. Phillips 494,079
Beehive, Hawkins & Ray 493,804
Beer, etc., distributing apparatus for, J. Harlin (r) 11,314
Beer saucer with registering attachment, Paproth & Aster 493,646
Belting, link, O. Maxon 494,110
Bench. See Laundry bench.
Bin. See Flour bin.
Blacking box, J. M. Wheat 493,955
Block signal system, J. La Burt 494,007
Board. See Drawing or plotting board. Plaster board.
Boiler. See Wash boiler.
Boiler furnace, W. J. Richards 494,025
Boiler furnace, steam, Sutton & Buckley 494,041
Book covering machine, H. L. Arnold 493,959
Book, manifold sales, J. S. McDonald 493,894
Book, memorandum sales, R. Garr 493,922
Book rest and holder, O. C. Mitchell 493,936
Boring machine, double, C. H. Purdy 494,082
Boring machine, horizontal, A. J. Frith 494,100
Bottle moulding apparatus, C. D. & H. F. Crickler 493,984
Bo tle perfumery or other, G. W. Bean 493,962
Bottle stopper, G. H. Gillette 493,701
Box. See Blacking box. Feed box. Fruit box. Match box. Sample box.
Brace. See Corner brace.
Brake. See Car emergency brake. Pressure brake. Sled brake. Vehicle brake.
Bread or cake pan, T. S. Peacock 493,835
Bread raiser, J. C. Nicholls 494,018
Brick kiln, A. B. Horne 493,930
Brick kiln, continuous, J. P. Veirs 493,951
Bridges, side rail for suspension, E. E. Runyon 493,788
Broiling appa atus, meat, J. G. Weldon 493,801
Bronzing machine, G. Newsum 494,017
Brooder, poultry, D. E. Bricker 494,056
Buckle, J. Cantner 493,818
Buckle, P. A. Raymond 494,086
Buckle, back band, W. F. Anthony 493,744
Building or paving blocks, sectional mould for, G. M. Graham 493,767
Burglar alarm, C. H. Pratt 493,647
Burner. See Gas burner.
Button making machine, Sheridan & Draher 493,794
Button setting machine, J. Mathison 493,634
Caddy, W. H. Wood 494,093
Calipers, beam, G. A. Colnon 493,683
Camera. See Photographic camera.
Camp chair, folding, J. Harpfer 493,709
Can. See Milk can. Oil can.
Canal digger, J. McMullen *et al* 494,112
Candy mould, M. M. June 493,729
Car coupling, H. R. Dore 493,913
Car coupling, Harvey & Kane 493,998
Car coupling, J. C. Look 493,933, 494,067
Car coupling, T. L. McKeen 493,833
Car coupling, C. Morfit 493,638
Car coupling, G. Runge 494,030
Car coupling, Scurr & Cotton 493,792
Car coupling, Scurr & Whipple 493,793
Car coupling, V. Wallace 493,802
Car, electric, C. Brown 493,969
Car, elevated railway, H. S. Pruyn 494,081
Car emergency brake, J. Goodfellow 493,705
Car frame, W. Robinson 493,873
Car, oil tank, J. D. McIlwain 493,940
Car sanding device, E. H. Pinkham 494,080
Car starter, Pihl & Hult 494,026
Car starter, J. Ripberger 493,736
Car step, W. Kunz 493,932
Car, transfer, C. Chambers, Jr 493,976
Car wheel guide, railway, Turnbull & Councill 493,866
Carbureting apparatus, air, P. H. Fontaine 493,992
Card table, folding, A. A. Griffin 4 93 925
Carding engine, Clarenbach, Jr., & Zoll 493,752
Carding machine stopping mechanism, I. F. Lawry 493,870
Carpet fastener, Gallinger & De Lisle 493,699
Carpet lining, packing, etc., T. D. Holcomb 493,929
Cash register, barber's, M. J. Sarsfield 494,087
Caster, ball, A. M. Leinwather 494,009
Centrifugal machine, J. Schmerber 493,900
Chair. See Camp chair. Rail chair.
Chairs, electrical attachment for rocking, C. E. Hartelius 493,997
Check register, C. T. Daniels 493,985
Chopper. See Potato chopper.
Chuck, drill, C. E. Billings 493,857
Churn, W. N. Cason 493,681
Churn, W. Gibson 493,825
Churn dasher, F. M. Lucas 493,828
Churn motor, J. H. Dameron 493,822
Chute, coal, F. G. Susemihl 493,949
Cigar lighter, electric, W. M. Thomas 494,091
Cigarette machine, A. E. Decoufle 493,688
Clock striking mechanism, electric, W. Kaisling 493,777
Cloth napping machine, G. & H. Bauche 494,052
Cloth scouring machine, M. H. Kohlrausch 493,627
Clothes drier, G. Tyler 493,880
Coffee grinding mill, E. Schmidlin 493,655
Coin-freed machine, J. G. Cumming 493,821
Compound engine, J. S. Parmenter 494,075
Conveyer, R. L. Hassell 493,772
Corner brace, H. White 493,882
Corrugated tube for boilers, etc., L. Silverman 494,033
Corset stiffener, C. K. Pevey 494,078
Cotton conveyer, seed, F. C. Gammons 494,101
Cotton gin brush, Elam & Thomas 493,691
Coupling. See Car coupling. Insulating coupling.
Cradle, swinging, P. T. Resser 493,786
Cuff, A. D. Marble 493,830
Cultivator, W. Hammer 493,707
Cultivator, H. M. Little 494,010
Cultivator, lister, J. H. Spencer 493,878
Cultivator tooth, R. Wilson 493,741
Cut-out, automatic electric, F. B. Badt 493,672
Cut-out, electric, Crockett & Allen 493,755
Cut-out, rosette, C. E. Barry 493,884
Cycle pedal attachment, W. L. Ferguson 493,696
Decorticating rhea, etc., machine for, Longmore & Watson 493,778
Dental appliance for obtunding nerves, W. P. Horton, Jr 493,723
Dental boring apparatus, Weber & Hampel 493,846
Dental disk holder, N. Morgan 493,893
Dental plate, J. A. A. Schoondermark 493,843
Dental plate, J. R. Watson 493,800
Derrick, L. Burnhald 493,690
Digger. See Canal digger. Post hole digger.
Door, E. B. Hayes 494,114
Door or window screen, E. Goff 493,703
Drawing or plotting board, G. M. Graham 493,766
Drawings to stones, etc., transferring, L. Benoit 493,812
Dredging machine, centrifugal, Allison & Nash 494,094
Drier. See Clothes drier.
Drill. See Electric drill.
Drilling purposes, etc., self-feeding ratchet brace for hand, W. H. Heeson 493,717
Duplicating apparatus, F. F. Daus 493,757
Eaves trough attachment, G. L. Fisk 493,697
Electric connector and cut-out, Crockett & Allen 493,754
Electric currents, system for transmitting, E. Baines 493,673
Electric drill, reciprocating, W. A. G. Birkin 494,053
Electric light fixtures, switch for, J. Hutchinson 493,868
Electric lighting system, S. W. Rushmore 493,842
Electric machine and motor, dynamo, H. P. Brown 493,679
Electric machine, dynamo, F. Bain 493,745
Electric machine, dynamo, S. Hellebrandt 493,718
Electrical appliance, C. H. Folger 494,098
Electrode, secondary battery, Donaldson & Macrae 494,062
Elevator de vice, safety, H. H. Day 493,760
Elevator safety device, H. H. Day 493,759
Elevator safety device, W. H. Hultgren 493,724
Engine. See Carding engine. compound engine. Locomotive engine. Pumping engine. Rotary engine. Steam or pneumatic engine.
Engines, method of and apparatus for operating aqua-ammonia, C. L. Horack 493,722
Envelope, J. T. Webber 493,847
Exhaust head, G. W. Christoph 493,908
Eyeglass hook, W. W. Hayden 493,865
Fan, H. Scheuer 494,032
Fan, revolving hand, H. C. Durgin 493,915
Farm gate, D. W. Jewett 493,728
Faucet, A. P. Howes 493,774
Feed box, I. L. Martin 493,832
Feedwater heater, G. H. Conklin 493,981
Fiber separating machine, S. B. Allison 493,852
File, letter, V. Astier 493,960
Filter, oil, F. A. Nusbaum 493,644
Filter, water, B. Martin 493,633
Filters, collecting tube for, G. H. Moore 493,937, 493,938
Floor or roof, fireproof, N. Poulson 493,839
Flour bin and sifter, J. A. McClellan 493,640
Flue or chimney lining, Y. W. Smith 494,036
Fruit box, A. H. Meech 493,779
Funnel, E. N. Gaudron 493,993, 493,994
Furnace. See Boiler furnace.
Furnace, G. F. Gallagher 493,923
Furnace for burning coal screenings, F. L. Bartlett 493,854
Furnace or stove, J. H. Scholding 493,947
Fuse, projectile, J. Rapp 493,735
Gauge. See Age gauge.
Game counter, S. B. Miller 494,011
Garment supporter, W. H. Ralph 493,648
Gas apparatus, C. F. Cattell 493,975
Gas, apparatus for manufacturing, J. W. Keneval 493,891
Gas, apparatus for the manufacture of, A. T. Bennett 493,855
Gas burner, A. T. Bennett 493,856
Gas generator, J. H. Miller, Jr 494,012
Gas, incandescent burner for hydrocarbon, J. S. P. Stutley 494,040
Gate. See Automatic gate. Farm gate.
Gate, J. P. Irwin 493,725
Generator. See Gas generator.
Glass. See Prescription glass.
Glass blowing apparatus, H. Hilde 493,867
Glass, machine for manufacturing articles of, W. Bechtold 493,809
Glass, marbled, C. F. E. Grosse 494,063
Glove fastening, E. J. Kraetzer 494,104
Glove turning device, E. Schwalbach, Jr 493,656
Grate front and hearth, folding, W. H. Vance 494,046
Grinding and sharpening shearing combs and cutters, etc., machine for, Moffat & Virtue 494,072
Grinding machine, D. H. Church 494,058
Grinding machine, roll, G. Vine 493,952
Guitar, W. Becker 493,810
Gun rack for tents, S. S. Pague 493,645
Hame fastener, M. Potter 493,838
Hammer, carpenter's, E. G. Duryea 493,989
Hammer, power, J. O'Brien 493,874
Handle. See Saw handle.
Harp, Æolian, C. J. Holbrook 493,773
Harvester, corn, E. A. Harrington 493,710
Harvester, corn, Myers & Anderson 493,639
Harvester, corn, R. Pederson 494,023
Harvester, cotton, G. Lispenard 494,105
Harvester, grain binding, L. Miller 493,731
Hay press, L. F. Gressett 493,996
Heater. See Feedwater heater.
Heating apparatus, portable, J. E. McElfatrick 493,780
Hoof trimmer, H. C. McCleave 494,013
Hook. See Eyeglass hook.
Horse checking device, J. H. Gibson 493,898
Horse power, W. M. Lewis 493,837
Hub attaching device, vehicle, L. Harris 493,771
Hub, cycle, A. Perkins 494,076
Huller. See Almond or walnut huller.
Ice cream freezer, T. H. Besse 493,906
Ice cream freezer, J. W. Bowley 493,966
Index and balance indicator for account books, combined, J. H. Rand 493,841
Indicator. See Station indicator.
Insulating coupling, E. Ballet 493,883
Insulator, trolley wire, Hathaway & Kelleher 493,713
Iron. See Sad iron.
Jack and truck, combined, W. Beckert 493,811
Jar stopper fastener, fruit, J. H. Forrest 493,698
Joint. See Rail joint.
Journal bearing, self-lubricating, J. J. Wood 493,742
Journal box, H. J. Thompson 493,665
Keg or tool rack, W. E. Pierce 493,836
Kettle, T. Cascaden 493,974
Kettle, W. J. Plecker 493,782
Key. See Watch key.
Kiln. See Brick kiln. Wood drying kiln.
Knife. See Mould forming knife.
Knitting machine cam guard, G. H. Coburn 493,909
Knitting machine, circular, Griffith & Caswell 493,924
Lacing stud, P. A. Raymond 494,084
Ladder, C. V. Childs 493,977
Ladder, safety, A. Necker 494,078
Ladder, store service, H. Fresh 493,861
Lamp, cooking, L. Wojidkow 493,808
Lamp, electric arc, E. Thomson 493,739
Lamps, thermal cut-out for electric, Lemp & Wightman 493,629
Last support, J. Grant 493,765
Latch, J. Chandler 493,819
Lathe attachment, O. J. Beale 493,807
Lathe, pulley, A. Streit 493,738
Lathing, metallic, E. Hawes 493,714
Laundry bench, E. A. Whiting 494,092
Lid holder, D. O'Leary 493,834
Life-saving apparatus, H. A. Stevens 494,090
Lightning arrester, H. O. Henneberg 493,926
Liquids, method of and apparatus for dispensing, J. P. Day 494,061
Liquors by el ctrolysis, apparatus for purifying, J. Becker 493,809
Loading device, L. A. De Mayo 493,986
Lock. See Time lock.
Locomotive, electric, A. Philipsborn 493,943, 493,943
Locomotive engine, F. W. Johnstone 493,776
Loom, swivel, O. W. Schaum ..... 493,651 to 493,654
Loop, billet, W. P. Gelabert 493,925
Lubricator, G. B. Essex 493,824
Lubricator, C. C. Jerome 493,727
Lubricator, Lohmann & Andersen 494,106
Match box, H. Cramer 493,983
Match box and cigar cutter, combined, W. W. Hayden 493,866
Meat scorer, Rader & Heist 494,027
Metal, apparatus for forming elongated articles from billets of heated, J. Robertson 493,945
Metal articles, method of and apparatus for compressing and shaping, J. Robertson 493,897
Metal bars, machine for tapering and shaping, T. & J. Coulter 493,982
Metal tubes, method of and apparatus for shaping and drawing, J. Robertson 493,946
Meter. See Water meter.
Milk can, G. H. Wright 493,804
Mill. See Coffee grinding mill.
Mining machine, F. N. Slade 493,659
Mould. See Candy mould.
Mould forming knife, L. His 494,000
Motion, mechanism for transmitting, G. F. Evans 493,859
Motor. See Churn motor. Rotary motor.
Musical instrument, A. Pettersson 494,025
Musical instrument strings, pin for, G. A. Ernst 493,917
Nozzle, exhaust, H. C. Reagan, Jr 493,783
Nut lock, Miles & Commander 493,732
Oil can or other liquid receptacle, T. A. Schlueter 493,877
Ordnance, mechanism for firing breech-loading, W. H. Driggs 493,987
Ores, extraction of metal from, J. Turton 494,044
Packing for piston rods, stuffing box, W. H. Appie 493,671
Packing, metallic rod, C. F. Churchill 493,978
Pad. See Wax pad.
Paint, manufacture of, J. K. Hawkins 493,999
Pan. See Bed pan. Bread or cake pan.
Paper box machine, W. H. Coffin 493,979
Pawl, ratchet, D. J. Reardon 493,944
Pegging machine, Cummings & Conpal 493,910
Perambulator, collapsible, J. Martin 493,831
Perforating machine, J. F. Craemer 493,753
Phonograph speaking tubes or other purposes, support for, W. G. Henderson 493,719
Photographic camera, H. A. Benedict 493,747
Photographic camera, J. A. Davison 494,097
Photographic printing device, W. Ohse 494,022
Pianoforte, D. A. Barber *et al* 494,051
Piano stringing device, A. Bollermann 493,748
Pipe wrench, J. A. Smith 493,737
Plane, bench, G. W. Wright 493,903
Planter and fertilizer distributer, seed, J. R. McCord 493,872
Planter, corn, A. S. Parker 493,781
Plaster board, J. D. Baker 493,961
Platform. See Unloading platform.
Pneumatic alarm, S. P. Hasey 493,712
Post hole digger, L. Gibbs 493,700
Potato chopper, C. F. Compton 493,684
Power. See Horse power
Power, transmission of, T. A. Edison 493,858
Precious metals from their ores, process of and solvent for separating, W. A. G. Birkin 494,054
Prescription glass, J. O. Adsit 493,851
Preserving perishable articles, vessel for, W. B. Frantz 494,099
Press. See Hay press.
ressure brake, fluid, R. W. Bayley 493,904
Printers' chases, lock-up for, F. Wesel 493,848
Printing, C. B. Woodward 493,850
Printing press inking apparatus, J. L. Cox 494,096
Printing press inking apparatus, G. E. Martin 493,892
Propeller, screw, R. McGlasson 494,014
Pulley, friction clutch, C. Johnson 493,775
Pulp screening machine, G. D. Rowell 493,787
Pulverizer and leveler, S. L. Allen 493,958
Pump, oil, E. English 493,694
Pumps for locomotives, apparatus for cleaning air, A. Whyte 493,670
Pumping engine, steam, C. C. Webber 493,668
Punching machine, A. Hoolahan 493,890
Punching machine, H. Schurig 493,791
Purifier and separator, G. A. Culver *et al* 493,756
Puzzle, J. Green 493,768
Puzzle, A. Nembach, Jr 493,941
Quoit peg, F. A. O. Bedingfeld 493,746
Rack. See Gun rack. Keg or tool rack.
Rail chair, sleeper, and tie, W. G. Olpherts 494,074
Rail joint, J. D. Blanten 493,816
Rail joint, F. Mulville 493,989
Railway block signal, R. D. Peters 494,077
Railway cattle guard, J. J. Burke 493,972
Railway, conduit electric, H. P. Feltrow 493,695
Railway converter system, A. Du Bois-Reymond 493,914
Railway foot guard, M. Riley 493,649
Railway, marine, E. Kaye 494,066
Railway rail splice, W. J. Williams 493,802
Railway signal, electric, Bradford & Williams 493,678
Railway signal, electric, H. V. & A. C. Miller 493,935
Railway signal, electrical, S. W. Miller *et al* 494,111
Railway splice, Quinn & Berry 494,083
Railway switch, C. M. Fitch 493,991
Railway switch, electrically operated, P. Evans 493,918
Railway tie, metallic, A. E. Roberts 494,029
Railway trolley, electric, J. F. Saitz 493,789
Railways, closed conduit for electric, G. W. Von Siemens 493,948
Railways, couduit system for electric, E. Hazelton 493,716
Refrigerating apparatus, D. L. Holden 493,721
Refrigerator, F. H. Zahrn 494,049
Refrigerator water seal, W. C. Sheldon 493,658
Register. See Cash register. Check register.
Registering device, package, R. F. Andersson 494,050
Riveting machine, R. Heyde 493,928
Rotary engine, J. Matthews 494,069
Rotary motor or pump for steam, water, or compressed air, F. Schroder 493,844
Rotating screen for screening kaolin or analogous substances, J. W. Burgess 493,751
Sad iron, H. L. Noble 494,020
Sample box, R. Gair 493,921
Satchel or bag frame, R. Flocke (r) 11,315
Saw, A. Krieger 493,628
Saw, J. Lykke 493,934
Saw, crosscut, L. E. Dean 493,687
Saw, crosscut, J. V. Hotchkiss 494,103
Saw handle, crosscut, T. J. Ely 493,823
Saw, miter, R. Uhl 493,667
Saw sharpener, W. H. Nogar 494,021
Scale, letter, E. S. May 493,636
Screen. See Door or window screen. Rotating screen. Self-cleaning screen. Window screen.
Scrubber, O. Smith 494,037
Seat. See Wagon seat.
Secondary battery, L. Bristol 493,817
Self-cleaning screen, A. Fereva 493,986
Sewer water trap, A. Budde 493,750
Sewing machine, Speight & Chapman 494,039
Sewing machine, G. Speight *et al* 494,038
Sewing machine bobbin, J. Scott 493,845
Sewing machine tension device, J. M. Merrow 493,871
Sewing machine thread waxing and tension device, J. B. Morgan 493,637
Sewing machines, combined presser foot and thread holder for, Johnson & Porter 493,869
Shade holding mechanism, J. B. Thurston 493,979
Shades, attachment to frictional holding mechanisms for spring-actuated, E. T. Burrowes 493,885
Shampooing the hair and scalp, device for, W. C. Vose 493,953
Shears. See Animal shears.
Shears, A. Remscheid 493,785
Sheet metal, machinery for pressing boats from, W. Heslop 493,720
Shingle sawing machine, F. Challoner 493,682
Shirt, W. S. C. Wiley 493,956
Shoal alarm, S. H. James 493,826
Shoe, A. F. Bertram 493,813
Shoe fastener, P. A. Raymond 494,085
Shoe shank stiffeners, machinery for making metal, E. E. Fay 493,860
Shutter worker, L. Kutscher 494,006
Signal. See Railway signal. Railway block signal.
Sled brake, H. Bunker 493,680
Slotting machine, C. B. Baldwin 493,674
Smoke arrester and separator, Born & Parkin 493,749
Snow plow, M. D. Schaller 493,899
Spectatorium, S. Mackaye 494,068
Spinning machines, saddle for top rolls of, E. Dixon 493,912
Sprinkling tanks, strainer cover for, F. E. Bowman 493,965
Stage appliance, theatrical, D. L. Towers 494,043
Stagings, hand implement for taking down building, J. J. Maher 493,632
Staple driving tool, S. C. Davidson 493,758
Starch, manufacture of, J. Dubiel 493,689
Starching apparatus, fabric, J. M. Beiermeister 493,905
Station indicator, M. Fiset 493,763
Stay, garment, H. Johnston 494,064
Steam, apparatus for condensing exhaust, F. L. McGahan 493,733
Steam calorimeter, R. C. Carpenter 494,057
Steam or pneumatic engine, J. W. Powers 493,840
Steamer, G. Wiley 493,849
Steering apparatus, T. Ellis 493,692
Stilt, shoe, W. R. Steuart 493,663
Stirrup, saddle, J. A. Krewson 494,005
Stopper. See Bottle stopper. Jar stopper.
Stove burner, oil, E. M. Wright 493,743
Stove, oil, L. F. Wilder 493,740
Stovepipe thimble, E. F. Neumann 493,641
Stoves, chill core for moulding sockets for, O. Daman 493,911
Stoves or furnaces, air pump attachment for, Boyler & Rothwell 493,967
Strap, N. Nilsson 494,019
Straw stacker, J. W. Nethery 493,784
Sugar wagon, G. Van Wagenen 493,799, 493,950
Sulky, S. Elliott 494,115
Sulky attachment, trotting, F. Lohr 493,630
Suspenders, M. Feldman 493,990
Switch. See Railway switch.
Syringe, J. M. Wardell 494,048
Table. See Card table.
Tap, ale, J. Neumann 494,015, 494,016
Telephone, C. T. Bloomer 493,907
Telephone switchboards, listening and ringing key for, W. M. Goodridge 493,704
Tellurian, W. R. Dunham 493,988
Testing machine, O. Reeser 493,784
Thrashing machine feed regulator, G. W. Hallett 493,706
Ticket controlling apparatus, L. J. Hunter *et al* 493,931
Ticket, transfer, and receipt controller, L. J. Hunter *et al* 494,001
Tie. See Railway tie.
Time lock, G. J. H. Goehler 493,862
Tire, bicycle, E. F. Ryder 493,650
Tire, pneumatic, E. Barrett 493,675
Tire, pneumatic, F. H. Irons 494,008
Tire valve, pneumatic, A. M. Shurtleff 494,088, 494,089
Tobacco box clamping machine, J. H. Kester 494,004
Tooth plate, artificial, G. A. Juterbock 494,065
Toy, J. G. Hunt 494,002
Toy, P. E. McDonnell 493,895
Trap. See Sewer water trap.
Trephine, J. A. MacKenzie 493,730
Trimmer. See Hoof trimmer.
Truck safety attachment, car, R. J. Spearing 493,661
Truck, street car, S. Harris 493,770
Trucks, safety shoe and brake attachment for car, R. J. Spearing 493,662
Tube. See Corrugated tube.
Tube making apparatus, J. Robertson 493,898
Tug, thill, M. Potter 493,837
Typewriting machine, and duplicator, combined, J. T. Davis 494,060
Unloading platform, E. J. Coler 493,980
Valve for triple valve mechanisms, graduating, J. T. Hayden 493,715
Valve for stop valve mechanisms, stop, H. Baum 493,805
Valve, suction, W. H. Brenner, Sr 493,968
Valve, throttle, A. J. Pitkin 493,835
Vehicle, L. Landreth 494,009
Vehicle bolster, T. H. Glancy 493,702
Vehicle brake, M. J. Bobo 493,676
Vehicle running gear, J. S. Cleland 494,095
Vehicle spring gear, H. W. Bonnar 493,677
Vehicle spring gear, H. W. Hamell 493,708
Vehicle, two-wheeled, D. S. Gallatin 493,764
Vending device, J. C. Ayer 493,805
Vending machine, coin-operated, H. Byron 493,973
Ventilator, W. McFarlane 493,878
Wagon seat, C. Goeller 493,863
Wash boiler, S. A. Mackie 493,631
Washer. See Barrel washer.
Washing compound, C. R. Ely 493,633
Washing machine, J. H. Conner 493,685
Washing machine, W. M. Coventry 493,920
Washing machine, C. Flanders 493,919
Washing machine, S. A. Seat 493,657
Washing, A. E. Worden 493,957
Watch bow fastener, W. F. Bingham 493,814
Watch dials, embossed plate for enameled, F. Hess 493,927
Watch key, W. F. Bingham 493,815
Watch stem winding and setting mechanism, J. W. Nunamaker 493,642, 493,643
Water meter, rotary, Westinghouse, Jr., & Ruud 493,881
Water wheel, Bookwalter & Tyler 493,964
Wax pad, L. L. Lucas 494,109
Weaving machine, circular, N. Lombard 494,107, 494,108
Weigher, rotary grain, B. Simons 494,085
Weighing machine, automatic, H. E. Smyser ..... 493,795 to 493,797
Weighing machine feeding device, H. E. Smyser 493,798
Wheel. See Water wheel.
Whiffletree guard, L. Dimock 493,761
Whistle, steam, H. R. Frisbie 493,990
Winding machine, yarn or thread, R. Broadbent 493,970
Windmill tower, T. Snow 493,660
Window, P. Vandernotb 494,047
Window screen, D. Stone 493,664
Wire fastening, C. F. Erb 493,916
Wire stretcher, L. Cross 493,686
Wood drying kiln, I. Ungar 494,045
Wrench. See Pipe wrench.
Wrench, P. Mandigo 493,829

TRADE MARKS.

Antiseptic compound for purifying the blood, Eman & Powley 22,686
Beer, lager, Chattanooga Brewing Company 22,680
Bicycles, J. E. Geigan 22,697
Boots and shoes, Hayden, Guardenier & Co 22,669
Burlaps, J. T. Bailey & Co 22,671
Burlaps and buckram, J. T. Bailey & Co 22,672
Coffee classifiers, hullers, polishers, power screens, pulpers, and elevators, M. Mason & Co 22,676
Corsets, corset waists, and shoulder braces, Williamson Corset and Brace Company 22,668
Dermal toilet preparations, J. A. Maxim 22,689
Lamps and lamp burners, Bridgeport Brass Company 22,693
Liniments, Hofbauer Bros 22,687
Macaroni, vermicelli, egg noodles, and similar compounds, A. M. Caffe 22,678
Medicinal tonic, Allaire, Woodward & Company 22,683
Medicine for external use, liquid, Cyona Company 22,688
Oil, French peas, mushrooms, haricots verts, flageolets, macedoines, truffes, sardines, prunes d'ente, and similar articles, olive, A. M. Caffe 22,677
Paper, albumenized, Scovill & Adams Company 22,666
Paper, writing, Springdale Paper Company 22,665
Perfumed toilet preparations, including soap, V. Klotz 22,690
Remedy for certain named diseases, Macura Drug Co 22,685
Remedy for rheumatism, W. H. A. Nesbitt 22,684
Ribbons, silk, W. Openhym & Sons 22,670
Rubber goods, certain named, A. U. Betts 22,674
Sarsaparilla and cough sirup, Red Seal Remedy Co 22,682
Soap, toilet and laundry, Amalga Soap Company 22,691
Stoves and ranges, Famous Stove Co 22,695
Threads and silk fabrics, sewing, knitting, and embroidery silk, Brainerd & Armstrong Company 22,694
Twine, binder, J. T. Bailey & Co 22,673
Valves, machinery, Mason Regulator Company 22,696
Washing fluid, E. Wartenberg 22,692
Watchcases, J. Macher 22,667
Whisky, Kaufmann Bros. & Co 22,675
Whisky, Manhattan, and other cocktails, A. S. De Lissa 22,679
Wine, orange quinine, Meagher Bros. & Co 22,681

DESIGNS.

Bottle, H. J. Heinz 22,304
Ewer, H. Brunt 22,303
Medal, C. W. McCain 22,300
Plate, compartment, W. R. Gulick 22,305
Spoon, W. S. O'Brien 22,301
Spoon handle, J. W. Maillot 22,302

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