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Smoke consumer, J. Player..... 449,827
 Snap hook, Buckingham & Yeates..... 449,870
 Soldering tool, H. Beutelspacher..... 450,094
 Spark arrester, E. J. Hadlock..... 450,012
 Speculum, J. E. Lee..... 449,941
 Speed governor, J. W. Roberts..... 449,729
 Speed regulator, A. B. Morse..... 449,858
 Spike, C. E. Seymour..... 449,705
 Spindle bands, take-up device for, T. Walker..... 449,810
 Spool for textile machinery, J. E. Phillips..... 449,914
 Spring. See Vehicle spring.
 Stairs, metallic corner for, L. A. Howell..... 450,102
 Stamp actuated by electro-magnets, time, W. B. Martindale..... 449,759
 Stamp, hand printing, R. H. Smith..... 449,831
 Stanchion for ships, J. H. Bell..... 449,994
 Staple fastening machine, R. H. Little..... 449,779
 Steam boiler, Vogt & Burbs..... 449,923
 Steel, crucible for the manufacture of, G. Nimmo
 Steel, process of and apparatus for hardening hollow articles of, H. A. Brustlein..... 449,938
 Stocking, R. M. Appleton..... 449,920
 Stools or chairs, vertically-adjustable seat to, A. Nantz..... 449,689
 Stopper. See Bottle stopper.
 Stove, E. B. Cobly..... 449,929
 Stove, air heating, J. B. Oldershaw..... 449,691
 Stove, gas, P. J. Grinberg..... 449,776
 Stove leg attachment, J. B. Morse..... 449,919
 Stove or range, C. V. Roberts..... 449,918
 Stump puller, W. B. Morris..... 449,858
 Sugar, apparatus for lixiviating, C. Steffen..... 449,976
 Sugar from saccharine materials, apparatus for extracting, G. K. Patrick..... 449,747
 Supporter. See Garment supporter.
 Switch. See Railway switch.
 Switch board, electrical, J. B. Lyon..... 449,685
 Syringes, piston for, A. Molinari..... 449,883
 Tack driving machine, M. G. Mains..... 450,027
 Tanning, process of and composition for, C. B. Warrand..... 450,121
 Teakettle, J. C. Clark..... 449,839
 Telegraphy, F. Anderson..... 449,865
 Telegraphy, R. G. Brown..... 449,897
 Telephone, multiple, W. W. Jacques..... 449,679
 Thermal gauge, tracklayer's, P. H. Fontaine..... 450,065
 Threshing machine cutter and feeder, J. Eakles- ton..... 450,098
 Threshing machine feeding device, J. P. Monnett..... 450,084
 Tidy holder, W. G. Browne..... 449,898
 Tire for vehicle wheels, A. W. Thomas (r)..... 11,155
 Tool holder, L. B. Nielsen..... 450,031
 Tower and mast, F. L. Butler..... 449,790
 Toy, E. P. Roberts..... 449,748
 Toy bank, registering, Headley & Horton..... 450,071
 Toy detonator, A. L. Seymour..... 449,706
 Toy pistol, T. C. Murray..... 449,781
 Toy swing, D. L. Keeler..... 449,938
 Track cleaner and lubricator, T. J. King..... 449,856
 Track clearing and lubricating device, T. J. King..... 449,850
 Train signal, Finn & Garner..... 449,672
 Transom lifter, O. Lund..... 449,800
 Trap. See Animal trap.
 Tricycle, J. Carter..... 450,001
 Truss, J. A. Becton..... 449,826
 Tub, mould for, J. W. Wash, J. Moore..... 449,844
 Tug clip, name, G. D. Stulken..... 449,714
 Tug, thill, J. S. Hurley..... 449,906
 Twines, etc., machine for the manufacture of, W. H. Avis..... 449,931
 Type mould, Mitchell & Milne..... 450,083
 Typewriting machine, F. M. Jones..... 450,107
 Typewriting machines, electrical, E. F. Youngs..... 449,923
 Typewriting machines, type cleaning brush for, V. Van Fleet..... 450,126
 Umbrella, T. J. Thorp..... 449,716
 Valve and washing pipe, wash basins and the like, waste and water pipe, J. R. Whiting..... 449,989
 Valve controller, electric, G. E. Turner..... 449,889
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 Valve, steam actuated, J. H. Baker..... 449,868
 Vehicle brake, automatic, A. F. Geerze..... 449,840
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 Vise, C. Weiss..... 449,867
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 Wagon trains, connection for, W. H. Thurman..... 449,890
 Waistband, F. Spitz..... 449,710
 Wall paper, sales rack for, W. H. Eastman..... 449,734
 Walls or ceilings, device for securing fixtures to, T. Wright..... 449,127
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 Washing machine, W. J. Bennington..... 449,965
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 Washing machine, Tackett & Raddas..... 449,855
 Washing preparation, R. F. Halleck..... 449,879
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 Watch, stop, L. E. Piguet..... 449,915
 Water closet tanks, operating valve in, W. H. Ward..... 449,770
 Water closet tanks, water supply apparatus for, T. McHugh..... 449,994
 Water closet valve, W. H. Ward..... 449,769
 Water closets, water supplying apparatus for, W. H. Ward..... 449,768
 Water elevator, automatic, R. Estes..... 450,040
 Water meter, rotary, L. H. Nash..... 449,821
 Welding, electric, E. Thomson..... 449,836
 Well, tubular, Cameron & Chapman..... 449,771
 Wheel. See Car wheel.
 Wick raiser, B. P. Luce..... 450,106
 Windmill, H. W. Wood..... 449,744
 Window frame, Mesker & Arbous..... 450,082
 Wire, machine for laying and spooling, Johnson & Hale..... 450,022
 Wire stretcher, Springer & Jackson..... 449,981
 Wood polishing machine, J. E. Carpenter..... 449,686
 Wood making materials, Live Oak Marine Store Co..... 19,305
 Wrench. See Monkey wrench.
 Wrench, C. H. Driver..... 449,793
 Wrench, A. C. Whittier..... 449,722
 Wringer. See Clothes wringer.

DESIGNS.

Advertising card, W. H. Spahr..... 20,663
 Carpet button or fastener, stair, D. Walker..... 20,661
 Cracker, etc., E. C. Pearson..... 20,662
 Handle for spoons, etc., G. & B. W. Gooding..... 20,664
 Spoon, E. C. Pearson..... 20,665
 Spoon, A. J. Dempsey..... 20,669
 Spoon, etc., J. H. Johnston..... 20,668
 Sugar bowl, etc., G. L. Crowell, Jr..... 20,667
 Water closet bowl, C. A. Jaynes..... 20,659
 Weighing machine case, H. E. Patterson..... 20,660

TRADE MARKS.

Alcohol, wood, J. A. & W. Bird & Co..... 19,278
 Beer, Bavarian Brewing Co..... 19,305
 Beer, O. S. Neale..... 19,310
 Beer, lager, G. Uebel & Sons..... 19,307
 Bicycles, Keefe & Beaudon..... 19,287
 Candy tablets, T. Candy..... 19,283
 Chains, vest, D. C. Percival & Co..... 19,273
 Cigars, S. Azcano y Meana..... 19,274
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 Cigars, V. Bustillo & Brother..... 19,275
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 Cigars, J. Ybaseta..... 19,287
 Cigars, cigarettes, and manufactured tobacco, J. Gener..... 19,280
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 Steel plates, Bessemer, E. Davies & Sons..... 19,286
 Thread, spool, J. Chadwick & Bro..... 19,291
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- Art of Electrolytic Separation of Metals.** By G. Gore. Theoretical and practical. Fully illustrated. 8vo. cloth. London, 1880..... \$3.50
- Dynamo.** How to make a Dynamo. A Practical Treatise for Amateurs. Containing numerous illustra- tions, and detailed instructions for constructing a small dynamo to produce the electric light. By Alfred Crofts. 12mo. cl. London. Second edition, 1889..... .50
- Electric Batteries.** Elementary Treatise on. From the French of Alfred Naudet, translated by L. M. Fish- back. Fifth edition. N. Y., 1888..... \$2.50
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