

NEW BOOKS AND PUBLICATIONS.

THE YACHTS AND YACHTSMEN OF AMERICA. A standard work of reference. Edited by Henry A. Mott. Vol. I. New York: International Yacht Publishing Company. Pp. 692. Price \$20.

This work, the first volume of which has been received, will undoubtedly be the most important contribution to the history of yachting that has ever been written, and the enterprising publishers are to be congratulated upon the success attained in the making of the book, in the cuts and type; while the editor, the well known Professor Henry A. Mott, here appears in the new and well filled role of a yachting editor. The work begins with a history of early yachting and descriptions of many types of sailing vessels of different kinds, from the five masted ship to the house boat. Accounts of yacht clubs and yachting regattas, and descriptions of a vast number of yachts, with a quantity of illustrations of vessels of all types, constitute the text. Numerous portraits are given. Many of the cuts are most elegant photogravures, and some views of the interiors and exteriors of club houses are very attractive. Under each club the general by-laws are given. The many illustrations of yachts, each one famous in its day or at the present time, illustrate most interestingly the gradual evolution of the modern type of American sailing yacht, which now approaches so nearly to the English that there is little difference between the yachts of the two countries. The frontispiece shows the Vigilant in a very handsome photogravure, and other yachts of the latest type are likewise given, so that anybody who appeals to it will find the most recent information on the subject. The great size of the book, its thoroughness, and the exhaustive treatment of the subject make it utterly out of the question for us to adequately review it, so that this short notice must be taken in place of an adequate review. The work itself speaks for its own merits.

SCIENTIFIC AMERICAN BUILDING EDITION.

AUGUST, 1894.—(No. 106.)

TABLE OF CONTENTS.

- 1. An elegant plate in colors showing a residence at Plainfield, N. J., recently erected for George H. Babcock, Esq. Perspective views and floor plans. A picturesque design. Mr. E. L. Hyde, architect, New York City.
2. A residence at Edgewater, Ill., recently erected for Mrs. Eva L. Prescott. Perspective elevations and plate in colors, together with floor plans. An excellent design. M. J. L. Silsbee, architect, Chicago, Ill.
3. A residence recently completed for J. P. Clarendon, Esq., at Hackensack, N. J. Two perspective elevations and floor plans. Mr. J. E. Turbune, architect, Hackensack, N. J. An attractive design.
4. A dwelling at Erie, Pa., erected for William J. Sell, Esq., at a cost of \$4,500 complete. Two perspective elevations and floor plans. Mr. C. F. Dean, architect, Erie, Pa.
5. A beautiful residence recently erected at Belle Haven, Conn. Three perspective elevations, one interior view, together with floor and ground plans. Mr. C. P. H. Gilbert, architect, New York City. A model design.
6. The beautiful residence of E. Einstein, Esq., at Pompton, N. J. Perspective elevation and floor plans. Cost complete about \$30,000. Architect, Mr. Manly N. Cutter, New York City.
7. A conveniently and economically arranged suburban cottage recently erected for George W. Payne, Esq., at Carthage, Ill. An attractive and picturesque design. Perspective elevation and floor plans. Cost \$3,000 complete. Architects, Messrs. G. W. Payne & Son, Carthage, Ill.
8. Perspective elevation and floor plans of a well arranged dwelling, recently erected for A. N. O'Hara, Esq., at Carthage, Ill. A pleasing design. Cost complete, \$5,500. Architects, Messrs. G. W. Payne & Son, Carthage, Ill.
9. A stable at Belle Haven, Conn. Perspective view and ground plan. A unique design. Mr. C. P. H. Gilbert, architect, New York City.
10. The Club House of the Knickerbocker Field Club, recently erected at Flatbush, L. I., N. Y. Engravings and floor plans. Messrs. Parsett Bros., architects, Brooklyn, N. Y. A neat design in the Colonial style.
11. An elegant residence of A. B. Bigelow, Esq., at Cranford, N. J. Perspective elevation and floor plans. Estimated cost, \$6,000. Mr. Manly N. Cutter, architect, New York City.
12. Miscellaneous Contents: The Hayes metallic lathing, illustrated.—Nonsuch Palace.—The Joseph Dixon Crucible Co.—The slate business.—New and old styles of eaves troughs, illustrated.—The Weathered hot water heaters.—Design for mantel and fireplace, illustrated.—The "P. & B." sheathing and insulating papers.—An improved vise, illustrated.—What becomes of all the lumber.—Globe ventilator, illustrated.—An improved sadiron, illustrated.
The Scientific American Architects and Builders Edition is issued monthly. \$2.50 a year. Single copies, 25 cents. Forty large quarto pages, equal to about two hundred ordinary book pages; forming, practically, a large and splendid MAGAZINE OF ARCHITECTURE, richly adorned with elegant plates in colors and with fine engravings, illustrating the most interesting examples of Modern Architectural Construction and allied subjects.
The Fullness, Richness, Cheapness, and Convenience of this work have won for it the LARGEST CIRCULATION of any Architectural Publication in the world. Sold by all newsdealers. MUNN & CO., PUBLISHERS, 361 Broadway, New York.

Business and Personal.

The charge for insertion under this head is One Dollar a line for each insertion; about eight words to a line. Advertisements must be received at publication office as early as Thursday morning to appear in the following week's issue.

"C. S." metal polish. Indianapolis. Samples free.
For coal hoisting engines. J. S. Mundy, Newark, N. J.
Best Handle Mach'y. Trevor Mfg. Co., Lockport, N. Y.
Distance Reading Thermometers.—See illus. advertisement, page 94. Ward & Doron, Rochester, N. Y.
Screw machines, milling machines, and drill presses. The Garvin Mach. Co., Lighthouse and Canal Sta., New York.
Centrifugal Pumps. Capacity, 100 to 40,000 gals. per minute. All sizes in stock. Irvin Van Wie, Syracuse, N. Y.
Guild & Garrison, Brooklyn, N. Y., manufacture steam pumps, vacuum pumps, vacuum apparatus, air pumps, acid blowers, filter press pumps, etc.
The "Olin" Gas and Gasoline Engines, from 1 to 10 horse power, for all power purposes. The Olin Gas Engine Co., 222 Chicago Street, Buffalo, N. Y.
Emerson, Smith & Co., Ltd., saw manufacturers, Beaver Falls, Pa., will send Sawyers' Hand Book on Circulars and Band Saws free to any address in the world.
The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4; Munn & Co., publishers, 361 Broadway, N. Y.
For the original Bogardus Universal Eccentric Mill, Foot and Power Presses, Drills, Shears, etc., address J. S. & G. F. Simpson, 26 to 36 Rodney St., Brooklyn, N. Y.
Competent persons who desire agencies for a new popular book, of ready sale, with handsome profit, may apply to Munn & Co., Scientific American office, 361 Broadway, New York.
Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application.

Notes & Queries

HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters, or no attention will be paid thereto. This is for our information and not for publication.
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, and though we endeavor to reply to all either by letter or in this department, each must take his turn.
Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same.
Special Written Information on matters of personal rather than general interest cannot be expected without remuneration.
Scientific American Supplements referred to may be had at the office. Price 10 cents each.
Books referred to promptly supplied on receipt of price.
Minerals sent for examination should be distinctly marked or labeled.

- (6196) G. H. will find a small plating dynamo described in SUPPLEMENT, No. 720.
(6197) J. H. C.—Magneto calls for telephones may be purchased from any of the dealers in electrical supplies who advertise in our columns.
(6198) D. E. writes: We wish to erect a pole 75 or 80 feet high on our school campus, and would be greatly obliged for information as to the best kind and size of timber to use and the best method of lapping or splicing upper stick to enable us to lower the top. A. You probably can do no better than to use pine for your staff. Square off five or six feet of the top and fasten on it two mast irons as far apart as the length of the square part. These are a sort of double hoop of iron or figure of eight shape, one section fitting the squared mast, the other section projecting therefrom, giving a round aperture for the top mast to slide through. A sheave or grooved pulley wheel is mortised in the foot of the top mast, with horizontal pin or journal. A couple of screw eyes are fastened to the top of the lower mast. A rope passing around and under the sheave is used to hoist the top mast; one end is secured to one screw eye, the other goes through a pulley fastened to the other screw eye. When in place the top mast is secured by a cross pin or "fid," going through a hole in it, bored just above the lower iron. The fid when in place projects about an inch on each side.
(6199) C. E. B. asks: 1. What power will the simple electric motor have with a cast iron field magnet armature made of 4 cast iron rings with a projection of iron between each coil, each ring insulated from each other, built, except casting, the same as in SUPPLEMENT, No. 641? Is this a good armature for small motors and dynamos? How close should the armature run to field magnets? A. Properly constructed, the motor will give 1/2 horse power. Cast iron is very objectionable for the armature. The armature wound should fit the field as closely as possible. 2. Are there any reliable rules for finding the tonnage of small boats? If so, give them. A. Measure a number of cross sections and compute it by regular rules for displacement. For general rules as to tonnage measurements we refer you to Haswell's "Mechanic's and Engineer's Pocket Book," \$4 by mail.
3. Where can I get the sailing rules the New York Yacht Club use in racing? A. Address the Secretary of the New York Yacht Club, 67 Madison Avenue, New York, N. Y.
4. What is the fastest time any steam vessel has ever been known to make, and what do you think is the limit? A. About 31 miles an hour is claimed. The limit for practical work on long distances is about 20 miles an hour, less for most vessels, and more for large ocean ships. You have not given sufficient data for answering your other query.
(6200) A. B. D. says: Will you please tell how to restore the color of russet shoes? A. Mix 1 part palm oil and 3 parts common soap, and heat to 100° Fah., then add 4 parts oleic acid and 1 1/2 of tanning solution, containing at least one-sixteenth of

tannic acid (all parts by weight) and stir until cold. This is recommended as a valuable grease for russet leather and as a preventive of gummying.
(6201) C. E. B. asks: 1. How many lenses in a first class stereopticon and their names, from the light out? A. Generally six. Two plano-convex lenses placed near each other and near the source of light (when the latter is artificial), with their convex surfaces adjacent, but not in contact. The condenser is located between the source of light and the slide. Beyond the slide is the objective, containing (in first class instruments) the rear combination consisting of a meniscus of flint glass, with its convex side toward the slide, and a +meniscus of crown glass with its convex side toward the -meniscus, and the front combination consisting of a biconcave lens of flint glass and a biconvex lens of crown glass. 2. What are the respective sizes of lenses to make a fifteen foot picture at a distance of sixty feet? A. A half size portrait lens is commonly used. The lenses are about 2 1/2 inches in diameter. 3. Can a fifteen foot picture at sixty feet distance be made with an oil lamp? A. Under these conditions the picture will be dim and unsatisfactory. 4. Can the lantern as mentioned in query 3 be used in showing pictures in houses where an eight foot picture at a distance of fifteen feet is desired? If so, with what change? A. A good picture will be produced, but it will be something less than 8 feet. 5. Please give name and address of parties who sell lenses apart from the instrument. Also give names and addresses of parties who deal in strong oil lamps suited for lanterns. A. Address opticians whose advertisements appear in our columns.
(6202) O. H. says: If a certain pendulum vibrates say once in three seconds and a second pendulum once in two seconds, what rule would be required to find the ratio of the lengths of these two pendulums? What were the so-called Alabama claims spoken of in American history? A. The length of pendulums for time beats are as the squares of the time multiplied by the standard length for a given latitude. Thus for New York the standard seconds length is 39.1017 inches. For a 2 second beat the square of 2 is 4x39.1017=156.4068 inches and for 3 seconds is 9x39.1017=351.9153 inches and for half seconds 1/4^2=1/4x39.1017=9.7754 inches. The Alabama claims were made by the United States government against England for the destruction of American vessels by the warship Alabama, which was built and equipped in England for the confederate States.
(6203) J. T. G. asks directions for making sulphate of mercury batteries, suitable for running small electric motor. A. Use a zinc and a carbon plate. No porous cups needed. Charge with a mixture of sulphate of mercury and ammonium chloride in equal parts, mixed to a thin paste with water.

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 unobstructed 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 procuring 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 August 21, 1894, AND EACH BEARING THAT DATE.
[See note at end of list about copies of these patents.]
Advertising device, E. Walker..... 524,745
Aerating and carbonating water, apparatus for, T. Craney..... 524,888
Air brake, C. R. James..... 524,990
Antispattering guard, C. Swayze..... 524,795
Apothecary's graduate, T. E. Ogram..... 524,766
Atomizer, A. M. Shurtleff..... 524,958
Bar, See Grate bar.
Axle box for wheels, F. C. W. Rorer..... 524,791
Axle, vehicle, W. L. Massengale..... 524,903
Bag, See Striking bag.
Bag lock, W. Roemer..... 524,811
Banjo attachment, W. H. Needham..... 524,728
Barber's chair, W. G. Hullhorst..... 524,858
Barrel heads, etc., machine for packing, Peters & Mathey..... 524,729
Battery plate separator, W. L. Silvey..... 524,843
Bearing, roller and ball, G. J. Chine..... 524,705
Beating, dressal and conductive, E. J. Muller..... 524,725
Beating engine, J. P. Cornett..... 524,834
Bed, folding, J. D. Morarity..... 524,858
Bedstead, metallic, J. B. Ryan..... 524,955
Beer, ale, porter, etc., process of and apparatus for the manufacture of, L. Wagner et al..... 524,744
Bevel, W. H. Combs..... 524,985
Bicycle adjusting device, A. Perkins..... 524,851
Bicycle bell clamp, E. D. Rockwell..... 524,840
Bicycle wheel brake, E. D. Rockwell..... 524,838
Bicycles, back support for, R. A. Boyd..... 524,753
Billiard cue, Sprague & Bajus..... 524,871
Bill, See Boring bit.
Boiler, See Locomotive boiler. Steam boiler.
Boiler setting, A. Worthington..... 524,878
Boilers of locomotive type, firebox for steam, W. Malan..... 524,902
Book holder for reading stands, Anderson & Frick..... 524,928
Boot or shoe, A. A. Collins..... 524,886
Boring bit, E. C. Phillips..... 524,952
Bottle sealing device, J. S. Detrick..... 524,890
Bot tile stopper, C. O. Neudorf..... 524,971
Box, See Axle box. Folding box.
Brazing, D. J. J. Welhomer..... 524,876
Brake, See Air brake. Bicycle wheel brake.
Brick mould, D. J. C. Arnold..... 524,927
Burial casket, M. M. Hoffmann..... 524,762
Camera, See Magazine camera.
Can labeling machine, Yardif & Wethered..... 524,918
Cans, liquid emptying device for, A. P. Chable..... 524,754
Car controller, electric, M. B. Monroe..... 524,785
Car coupling, S. Pennington..... 524,863
Car coupling, Tolar & Langston..... 524,919
Car coupling book blanks, making, Wyman & Gordon..... 524,879
Car coupling books, die for forging, Wyman & Gordon..... 524,880
Car, electric railway, J. C. Henry..... 524,823
Car fender, J. Rummell..... 524,841
Car fender, R. Thomson..... 524,918
Car fender, street, T. C. Rice..... 524,734
Car fender, trolley or other, Rockman & Hagan..... 524,885
Car sanding device, H. F. Roomey..... 524,735
Cars, draught rigging for platform, C. C. Borton..... 524,817
Carriage jack, O. W. Bowen..... 524,701
Carriage spring, C. A. Behlen..... 524,920
Carrier, See Harvester sheaf carrier. Trace
Cart operating device, tip, C. P. McClanathan..... 524,787
Case, See Egg case.

- Case, H. Peake..... 524,950
Cash register and indicator, A. Pfaff..... 524,836
Cash register and indicator, C. W. Shibley..... 524,812
Cash register, indicator, and check printer, C. W. Weiss..... 524,814
Cellulose, etc., sheet metal paneling for, F. G. Cadwell..... 524,982
Chain clamp, watch, T. Mason..... 524,782
Chain links, machine for coupling drive, N. B. Fasset..... 524,964
Chain, machine for making predetermined lengths of, C. F. Smith..... 524,794
Chair, See Barber's chair. Reclining chair.
Surgical chair.
Chamfering machine, T. Craney..... 524,889
Checkrein attachment, G. W. Taylor..... 524,922
Cigar tip cutter and advertising device, combined, C. H. Gould..... 524,713
Circuit controller, E. J. McEvoy..... 524,908
Circuits, safety switch for high-potential, S. Harris..... 524,707
Clamp, See Bicycle bell clamp.
Clothes drier, H. R. Sheets..... 524,889
Clutch, C. A. Weller..... 524,787
Coal scuttle, J. W. Krueger..... 524,784
Coffin handle, C. F. Mosman..... 524,786
Coin controlled machine, H. A. Manley..... 524,833
Combination lock, J. H. Whittington..... 524,750
Commutator cylinder, A. J. Sbow..... 524,796
Commutator for dynamo-electric machines, G. F. Car..... 524,884
Conduit for electrical conductors, underground, J. F. Cummings..... 524,947
Conveyer, C. S. Schenck..... 524,842
Cork board, method of and apparatus for manufacturing, T. A. Weber..... 524,746
Corset buck stay, H. G. Stiebel, Jr..... 524,874
Cotton openers, evening mechanism for, J. C. Potter..... 524,730
Coupling, See Car coupling. Electric wire coupling. Radiator coupling. Thill coupling.
Crane, F. B. Griffith..... 524,780
Cultivator, W. E. Cox..... 524,955
Curtain stretch rod and guide attachment, hook, car, A. Schulte..... 524,972
Cuspidor, stationary, O. W. Smith..... 524,913
Cutter, See Cigar tip cutter.
Decorating china glass, etc., machine for, J. A. Lacle..... 524,879
Dentist vulcanizing, H. Beebe..... 524,734
Derrick, bay elevating, D. Ogdvie..... 524,922
Distillation, apparatus for continuous, R. A. Chesebrough..... 524,704
Door opener and closer, G. Rischmuller..... 524,810
Door operating device, G. Rischmuller..... 524,768
Drier, See Clothes drier.
Drill, See Rock drill.
Dynamo regulator, automatic, H. D. Symmes..... 524,845
Edger, bevel, S. H. Randall..... 524,767
Egg case, folding, O. W. McNeill..... 524,727
Elastic wash, J. W. Heiser..... 524,951
Electric currents into alternating currents, apparatus for transforming continuous, F. S. F. Schneider..... 524,911
Electric heater, T. W. Young..... 524,884
Electric light support, W. H. Connell..... 524,936
Electric meter, D. Rasmussen..... 524,853
Electric wire coupling, Hall & Lillard..... 524,880
Electrical distribution, system of, G. Westinghouse, Jr..... 524,749
Electrical testing switch, H. Smith..... 524,844
Electricity for light and power purposes, apparatus for securing, F. M. Kohn..... 524,983
Electrodes, producing, D. G. Fitz-Gerald..... 524,710
Electrolytic purposes, tank or cell for, F. E. & A. S. Elmore..... 524,940
Electrotyping, machine for making wax forms for, C. M. Letz..... 524,765
Elevator safety appliance, M. C. Fullenlow..... 524,970
Elevators, swive support for, D. A. Robinson..... 524,964
End gate, wagon, F. F. Varing..... 524,741
Engine, See Beating engine. Rotary engine. Rotary steam engine.
Exercising machine, R. H. Bath..... 524,846
Explosive compound, G. J. Buechert..... 524,774
Eyeglasses, G. W. Bennum..... 524,698
Farm gate, A. Gano..... 524,849
Fence, farm, G. Russell..... 524,737
Fence ratchet, wire, J. E. Betz..... 524,775
Fertilizers, making, C. Weigelt..... 524,816
Fiber from agaves, etc., machine for extracting, E. Sampaio..... 524,953
Filter, H. Eisner..... 524,821
Filter, Jones & Test..... 524,827
Filter, G. W. Rafter..... 524,886
Filtering apparatus, W. Oliphant..... 524,835
Fire alarm system, J. W. White..... 524,901
Fishing line, E. Bacon..... 524,928
Folding box, G. H. Savacool..... 524,910
Frame, See Purse frame.
Fumigator, E. G. Horne..... 524,943
Furnace, See Regenerative furnace.
Furniture covering device, P. J. Mayent..... 524,834
Gauge, See Lumber gauge.
Game apparatus, C. F. Burtis..... 524,981
Game or puzzle, combination, W. T. Carter..... 524,703
Garment pattern, adjustable, H. M. Lambright..... 524,936
Garment supporter, W. A. Stephen..... 524,872
Gas burner attachment, H. E. Schweiler..... 524,801
Gas meter, dry, E. McGrady..... 524,859
Gate, See End gate. Farm gate.
Generator, See Motor generator.
Glass for skylights etc., Croskey & Locke..... 524,836
Glass structure, E. W. Cunningham..... 524,937
Glove fastener, F. Raymond, 2d..... 524,837
Granulating mill, T. Wehler..... 524,748
Grate bar, F. W. Schnautz..... 524,866
Grinder, knife or sickle, H. C. Duane..... 524,963
Gun, folding magazine, A. Burgess..... 524,800
Gun, magazine, J. M. Browning..... 524,702
Handle, See Coffin handle. Non-conducting handle.
Harvester, corn, W. K. Liggett..... 524,968
Harvester sheaf carrier and dumper, S. D. Locke, Jr..... 524,991
Hay press, J. A. Stokely..... 524,771
Heater, See Electric heater. Water heater.
Hod, Brandt & Spence..... 524,799
Hoisting and conveying apparatus, bucket, T. F. Moore..... 524,806
Horse checking device, J. Davie..... 524,888
Horses from vehicles in motion, safety device for detaching, L. Briggs..... 524,987
Hydrocarbon motor, H. E. Knight..... 524,945
Hydrometer, H. S. Keating..... 524,944
Insulator, C. N. Hammond..... 524,850
Iron, See Laundry iron.
Iron, carburizing, J. Meyer..... 524,904
Jack, See Coffin handle.
Journal bearing, anti-friction, T. Voegtli..... 524,920
Knob attachment, C. E. Doebler..... 524,848
Knob attachment, H. M. Newington..... 524,861
Lace clipping machine, Wilcox & Range..... 524,924
Ladder, extension, M. B. Monroe..... 524,784
Lamp, electric arc, R. H. Johnson..... 524,825
Lamp holder, electric, F. O. Farwell..... 524,708
Lamp shade, H. Hohenstein..... 524,825
Latch and lock combined, N. H. Colwell..... 524,756
Laundry iron, box, Potter & Hewitt..... 524,732
Leather splitting machine, S. H. Randall..... 524,768
Lock, See Bag lock. Combination lock. Umbrella lock.
Locomotive boiler, E. C. Jordan..... 524,901
Looms, jacquard apparatus for, T. Halton..... 524,898
Lumber gauge, H. H. Britt..... 524,930
Lung power tester and developer, J. R. Hanlon..... 524,899
Magazine camera, A. J. Bires..... 524,802
Magazine camera, J. F. Parsons..... 524,946
Mailing tube, G. P. McIntyre..... 524,860
Mantel, sheet metal, J. Graves..... 524,717
Marble, manufacture of artificial, L. Nathan..... 524,903
Measuring device, cloth, W. E. Clarke..... 524,755
Measuring tank, G. James..... 524,905
Metal sheets, apparatus for, G. Russell..... 524,738
Meter, See Electric meter. Gas meter.
Milking machines, teat cup for, A. Shiels..... 524,786
Mill, See Granulating mill.
Model, folding or collapsible, F. C. Krantz..... 524,855
Mould, See Brick mould.
Motor, See Hydrocarbon motor. Railway motor. Spring motor.
Motor generator, J. C. Henry..... 524,852
Needle threader, C. S. Goldman..... 524,896
Net, landing, A. Holmes..... 524,942
Nipple holder, J. Canney..... 524,757
Non-conducting handle, F. O. Farwell..... 524,708
Nut lock, Duane & Peck..... 524,778
Nut lock, D. M. Fulton..... 524,895
Nut lock, B. Porter..... 524,864
Nut lock, rail brace, and tie plate, combined, C. W. & O. F. Faye..... 524,809
Organ sheath, mouth, H. C. Boettcher..... 524,700
Packing, piston rod, J. Lister..... 524,831
Paper cases for inclosing cigarettes, apparatus for making, Dalton & Wills..... 524,938
Pattern, See Garment pattern.
Paving roller, heated, W. E. Dennison..... 524,939
Pen, See Fountain pen.
Photograph return carriage, H. Hoesechen..... 524,751
Photographs, coin-released actuating mechanism for, G. T. Waldron..... 524,921
Photograph mounts, device for cutting cards with beveled edges for, B. McHugh..... 524,726
Pick, for use in keyboard attachment for, F. Soblik..... 524,820
Pick, Z. Coihlen..... 524,818
Pitchforks, manufacture of, F. S. Kretzinger..... 524,719