

RECENTLY PATENTED INVENTIONS.

Bicycle Appliances.

BICYCLE-HOLDER.—CHARLES B. DURFEE and FRANK M. WILLIAMS, Belleville, N. Y. The purpose of this invention is to provide a bicycle-holder which shall be simple, inexpensive, and compact.

BICYCLE-STAND.—JOHN F. BENGERT, Brooklyn, N. Y. To provide a stand which can be permanently carried on the bicycle frame without interfering with the action of the wheels, which can be used either on a road or on the floor of a building and which enables the bicycle to be raised from the ground if necessary, this inventor has devised a support consisting of a bracket attachment for the bicycle frame, a sleeve or socket held to rock upon the bracket attachment and a standard having end movement in the sleeve or socket and provided with a foot.

Electrical Inventions.

ELECTRIC-RAILWAY.—WILLIAM W. DOTT, New York city, JAMES A. MCKNIGHT, Mount Vernon, N. Y., and CHARLES GRANTEN, New York city. The object of this invention is to propel cars and trains while maintaining a steady current for running the cars properly without danger of deadly overhead or rail currents. In addition to a feed wire, there are also employed a sectional working conductor and a series of circuit-controllers, one for each section of the working conductor.

ELECTRIC CUT-OUT.—HARRY A. LEWIS, Norristown, Pa. This invention provides an electric cut-out designed for use in a line-wire to relieve a building from danger of a strong or excessively charged current produced by lightning or other causes.

FUSE-HOLDER, CIRCUIT-BREAKER, AND LIGHTNING-ARRESTER.—HARRY A. LEWIS, Norristown, Pa. To provide an improved fuse-holder, circuit breaker, and lightning-arrester arranged to protect instruments and buildings from the effects of high-voltage currents, produced by lightning, this inventor has devised means whereby the current is either passed into the earth or let out by a return wire.

INSULATOR.—CHARLES L. WINGARD, Walla Walla, Wash. This insulator is constructed with two duplicate sections matching to form a tubular body. Each section has its edges provided with interlocking shoulders, and has a head provided with a notch leading to the bore thereof.

Mechanical Devices.

STENCIL-MAKING MACHINE.—JULIUS STERNFELD, New York city. The purpose of this invention is to provide a machine for puncturing paper accurately, so as to form stencils such as those used for marking the outlines of monograms. The machine is arranged to permit the operator to form any desired number of stencils at the same time, and comprises a depending bearing mounted to turn a counterbalanced arm pivoted in the bearing, and a casing provided with a rod projecting from its upper face and with a tube projecting from its lower face.

ELEVATOR FOR GRANULAR MATERIAL.—APOSTOLOS MARANGOS, Marseilles, France. To provide an elevator of the type used on floats or pontoons for loading or unloading ships, this inventor has devised a construction which is not affected by the pitching of the float on which it is placed.

below this axis and extending crosswise thereof, a horizontal shaft is journaled. On the horizontal shaft an elevator is freely suspended, comprising a vertical screw-shaft and a casing surrounding the shaft engaging gear-wheels located on the horizontal shaft and vertical shaft. A pulley is mounted on the horizontal shaft and is connected to rotate with the gear-wheel thereon.

ROTARY ENGINE.—SAMUEL T. WILSON, Charleston, W. Va. This rotary engine comprises a cylinder-casing, two separable rings attached to the heads and forming an annular cylinder open at one end, an abutment projecting from the casing-head and a cylindrical piston rotating concentrically with the cylinder and having a flange at its end of greater diameter than the body and projecting longitudinally into the annular cylinder.

Railway Appliances.

PNEUMATIC RAILWAY-SIGNAL.—LEWIS S. BROWN, Columbus, O. This invention is an improvement in pneumatic railway-signaling apparatus, comprising an air-pumping apparatus operated by the passage of the car-wheels and a distant air-motor operated by the air thus pumped and sounding a bell.

AUTOMATIC APPARATUS FOR PREVENTING COLLISIONS.—JOHANNES VERMEEREN, Hellerup, Denmark. This apparatus is designed to prevent collisions between trains, and consists of mechanism between the rails which is set in action by the train when drawn up at a station or stopping place.

Miscellaneous Inventions.

ADJUSTABLE SPRING-BEARING.—NICOLAS DUBVAL-PHET, Paris, France. This invention provides a suspension device for the frames of light vehicles, such as bicycles, and has double springs or cushions between each member of the fork and the wheel-axle, one spring of each set being a compression spring and the other an expansion spring.

PAPER PLANT-BOX.—JOSEPH T. CRAW, Jersey City, N. J. The purpose of this invention is to provide a paper plant box in which seedlings may be grown and young plants reared. The paper-box is made from a blank comprising a series of panels of the shape of a parallelogram, one of the end panels being provided with a side flap.

CORNICE-LADDER.—JAMES W. ANDERSON, Philadelphia, Pa. To provide a ladder especially adapted to be hung from a cornice, which ladder shall be durable, light, and easily applied, this inventor has devised various new improvements.

BUILDING-TRUSS.—WILLIAM A. BORING, New York city. The purpose of this invention is to provide a truss for use in spaces which will not receive any other form of truss of equal bearing capacity in proportion to its weight, and which possesses great lateral strength to sustain a wind load bearing on a structure supported by the truss.

Designs.

JAR.—JOHN SCHIES, Anderson, Ind. The leading feature of this design is the sectional configuration of the mouth of the jar, with an external outward flare in an upward direction and with an inner flared portion uniting with the rounded inner surface.

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

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.

Marine Iron Works. Chicago. Catalogue free. For logging engines. J. S. Mundy, Newark, N. J. "U. S." Metal Polish. Indianapolis. Samples free. Gasoline Brazing Forge, Turner Brass Works, Chicago. Yankee Notions. Waterbury Button Co., Waterbury, Ct. Handle & Spoke Mch. Ober Lathe Co., Chagrin Falls, O.

FERRACUTE Machine Co., Bridgeton, N. J. Full line of Presses, Dies and other Sheet Metal Machinery. Improved Bicycle Machinery of every description. The Garvin Machine Co., Spring and Varick Sts., N. Y.



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.

(7468) S. R. M. asks: Which of two glass balls, No. 1 and 2, exactly the same size, weight and material and conditions, would be the most likely to break were they brought together at different speeds, No. 1 at one-half the speed of No. 2, all conditions except speed to be the same? A. The two glass balls will be subject to an equal breaking force at moment of collision.

(7469) J. W. E. says: How far can one of our large battleships be seen with aid of glass? In other words, how many miles can a battleship be seen by looking through glasses? A. The distance at sea at which a vessel may be seen with a glass depends upon the height of the vessel's upper works, as well as the height of the observer above the sea.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted JULY 19, 1898, AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.] Alarm. See Railway signal alarm. Alkali metals, from their chlorides, apparatus for producing, P. Danckwardt. 607,506 Animal trap, J. Knoop. 607,691 Arm rest, L. Barr. 607,675

Table listing various inventions and their corresponding patent numbers, including items like armor plates, bicycle parts, electrical devices, and machinery.

(Continued on page 78)

Advertisements.

ORDINARY RATES.

Inside Page, each insertion. - 75 cents a line
Back Page, each insertion, - \$1.00 a line

For some classes of Advertisements, Special and Higher rates are required.
The above are charges per agate line—about eight words per line.

WOOD or METAL WORKERS
without steam power can save time and money by using our Foot and Hand Power Machinery
SEND FOR CATALOGUES—
A—Wood-working Machinery. B—Lathes, etc.
SENECA FALLS MFG. COMPANY.
695 Water St., Seneca Falls, N. Y.

POWER & FOOT LATHES
SHAPERS, PLANERS DRILLS MACHINE SHOP OUTRITS TOOLS AND SUPPLIES. CATALOGUE FREE
SEBASTIAN LATHE CO. 120 CULVERT ST. CINCINNATI, O.

MACHINE DESIGN,
Mech. Drawing, Mech. and Electrical Engineering,
Taught at Your Home for \$2 Per Month.
This pays for Text Books, Drawing Plates, and Instruction until you complete the course.
Write for free S. A. Circular.
THE UNITED CORRESPONDENCE SCHOOLS,
F. W. Ewald, Gen. Mgr. 154-158 Fifth Ave., N. Y.

TOOLS
Every kind of Tool for Steam, Gas, and Water Fitters. Every Tool has our personal guarantee. We have been the Leading Tool Manufacturers for Fifty Years...
WALWORTH MFG. CO.,
20 OLIVER STREET, BOSTON, MASS.

FOR FINE WORK
No machine on the market can equal our No. 00 Hand Bench Milling Machine with two speed counter. Spindles and bearings of hardened and ground tool steel. Arranged to take same size chucks and other attachments as at mouth of bench lathe spindle. Traverse movement of table 7 inches. Fuller description in free illustrated booklet.
The Pratt & Whitney Co., Hartford, Conn.

BARNES' UPRIGHT DRILLS
Complete line, ranging from Light Friction Disk Drill to 42" Back Geared Self-Feed. Send for New Catalogue.
W. F. & JOHN BARNES CO.
1999 Ruby Street, ROCKFORD, ILL.

HIGH GRADE WOOD WORKING MACHINERY
Single Machines or Complete Equipments for Any Class of Work.
Your Correspondence is Solicited. Illustrated Matter and Prices on application.
J. A. FAY & CO.
10-30 John St., CINCINNATI, OHIO

DORMAN'S VULCANIZERS
are used all over the world.
Exclusive Manufacturers of Steam Machines for Rubber Stamps. We also make Dry Heat Vulcanizers. Complete outfits from \$10 to \$1,000. All Stamp and Stencil Tools and Supplies. Brass and Steel Dies for all purposes. Seals, Engraving and Die Sinking of all kinds. Established 1860. Printing Presses, with complete outfits, from \$1 to \$100. Send for Catalogue.
THE J. F. W. DORMAN CO.
121 E. Fayette St., Baltimore, Md., U. S. A.

ARMSTRONG'S No. 0 THREADING MACHINE
Can be attached to bench or post. Designed for threading the smaller sizes of pipe, iron or brass, also bolts. Has two speeds, one for pipe 1/4 to 1 inch; the other for pipe 1/4 to 2 inches, inclusive. Uses the regular Armstrong adjustable dies. Other attractive features. Send for particulars. The Armstrong Mfg. Co., 139 Centre Street, New York. Bridgeport, Conn.

AMERICAN PATENTS.—AN INTERESTING and valuable table showing the number of patents granted for the various subjects upon which petitions have been filed from the beginning down to December 31, 1894. Contained in SCIENTIFIC AMERICAN SUPPLEMENT, No. 1002. Price 10 cents. To be had at this office and from all newsdealers.

TRANSITS AND LEVELING INSTRUMENTS.
PLUMBERS' IRON LEVEL With Double Plumb.
Special device giving rise and fall of all piping. Price \$2.25. Size 12 inch. For book on the level.
C. F. RICHARDSON & SON,
P. O. Box 977, ATHOL, MASS., U. S. A.

Tools for Fine or Rough Work
Tools that are common and Tools that are rare, costly and cheap Tools, and every other kind of Tool used in any trade you will find described and illustrated in MONTGOMERY'S TOOL CATALOGUE FOR 1898. A handsome book containing 512 pages and copious index. Pocket size 6 1/4 x 4 1/4 inches, with rounded edges and stitched covers. Every workshop and factory in the country should have one. Sent by mail for 25 cents by
MONTGOMERY & CO.
105 Fulton Street, New York.

Table listing various mechanical items and their prices, including: Gold, etc., sizing machine for, W. Gray; Governor, engine, J. V. Reed; Grain separator, J. B. McCutcheon; Grain separator, centrifugal, F. F. Landis; Grapple, log lifting, A. Paulson; Grate, W. McClave; Gun, ammunition holder for machine, D. M. B. H. Cochrane; Hair fastener, E. M. M. Mackay; Hammer, metal beater, J. E. Hermann; Handle bar, adjustable, R. M. Keating; Harvester, pea, A. D. Pitcher; Hat fastener, H. Ingram; Hat finishing machine, W. E. Cummings; Heater, See Bath room and water heater; Steam heater; Heater, J. A. Miller; Heel and toe tip, D. A. Berry; Heel plate for machine shoes, M. Heiser; Hinge, J. H. Giesey; Hinge, roofer sprig, F. L. Barnick; Holdback, F. B. Lagrange; Holdback hook, I. Wise; Hook, See Hold back hook; Horse detacher and wheel lock, combined, P. W. Peters; Horseshoe, D. & A. Sombaty; Horseshoe, supplementary, R. H. Langdale; Hose supporter, R. Gorton; Hot air furnace, J. T. & T. R. Brien; Hydraulic press, L. P. Landry; Hydraulic separator for treating minerals, W. S. Lockhart; Hydrocarbon burning mechanism, W. L. Mersfelder; Ice creeper, K. P. Dege; Ice making apparatus, T. L. Rankin; Indicator, J. N. Yarnall; Indicator, See Water level indicator; Jack, See Wrench jack; Jewel receiving pins, die for producing, F. C. Blenkner; Joint, See Sucker rod joint; Journal bearing, Swan; Key fastener, W. V. St. John; Keyless lock, W. B. Holton; Knitting machine, circular, D. Hurley; Kumiss and making game, H. P. Connell; Lace holder, H. Whyman; Ladder, L. C. Trefel; Ladder, trussed, F. S. Seagrave; Ladders, automatic coupling or lock for extension, F. S. Seagrave; Lamp, electric arc, J. H. J. Haines; Lantern, bicycle, J. H. Lehman; Lath, tapping, J. D. Haslet; Lath, turret, J. P. Lavigne; Lifts, hoists, etc., automatic safety device for, A. Musnicki; Lightbox appliance, J. M. Williams; Linotype machine slug cutting mechanism, G. W. Masco; Liquids from granular materials, apparatus for separating, R. Wilson; Lock, See Keyless lock; Seal lock; Wagon brake lock; Locomotive engine attachment, C. Humphrey; Loom batten, shuttle block, and shuttle, O. W. Schaum; Looms, electric stop motion for, A. Stephens; Magnet for electric machines, field, S. H. Short; Match box, J. H. Benjamin; Match box and cigar or pipe lighter, combined, C. Wilson; Match making, E. Laguna; Meat holding device, B. P. Cobb; Meat packages, apparatus for making, W. G. Bell; Mechanical movement, K. Chickering; Metal processing apparatus for producing reels in, J. Rieder; Milk can, H. B. Haigh; Mill, See Windmill; Mould, See Brick machine mould; Motor, See Electromagnetic motor; Mowing and raking machine, combined, J. McCallum; Nut lock, Chapman & Gelatt; Nut lock, J. N. Gardner; Nut lock, W. B. Metcalf, Jr.; Nut lock, Worst & Hart; Oil burner, J. H. Campbell; Oil cap, O. Pound; Oil in manufacturing gas and lubricating oil, process of and apparatus for treating crude, J. M. Bailey; Ore roasting furnace, H. F. Brown; Overshoe holder, W. H. Tillson; Pan, See Baking pan; Paper, toilet, S. Wheeler; Peat, etc., treatment of, R. F. Strong; Pencil, lead, G. M. Seidel; Pencil pocket holder, J. L. Wiley; Phonograph, T. A. Edison; Photographic developing tray, W. H. Rose; Photographic finder, O. Bentz; Photographic paper, apparatus for treating and washing, A. Schwarz; Photographic plate washer, W. H. Brown; Photographic printing apparatus, continuous, A. Schwarz; Pipe, See Tobacco smoking pipe; Pipe coupling and patch, G. W. Meserve; Pipe elbow, W. A. Kemp; Pipe threading equipment, C. A. Bailey; Planter, corn, C. H. Dill; Planter, cotton seed, J. P. Caldwell; Plow collar attachment, T. Haynes; Pole or thill support, vehicle, W. A. Maycock; Portable furnace or stove, A. M. Botelbo; Post brace, E. F. Brown; Post driver, G. W. Tipton; Power from compressed gases, process of and apparatus for generating, E. N. Dickerson; Precious metals from their solutions, recovering, M. E. Waldstein; Press, See Drop press; Pressing cloth of fabric, machine for, W. Heddon; Printing of music and apparatus for exposing same to readers, C. Gerandal; Propeller pipes, self acting closing device for, J. Pinker; Pulley, self oiling, G. F. Kenny; Pump, cattle, J. C. Stinson; Puzzle, N. B. Crary; Pyrocatechin, making, G. Tobias; Pyroxylin composition of matter, J. H. Stevens; Rack, See Clock rack; Railway, electric, C. A. Myers; Railway signal alarm, P. E. Legrand; Railway signals, etc., compensating device for, J. R. Jones; Railway speed controlling apparatus, Rowell & Brinard; Railway spike, Van Vliet & Gardener; Railway system, electric, S. H. Short; Razor bone holder, W. J. Libby; Recorder, See Sunshine recorder; Register, See Fare register; Regulator, See Electric regulator; Rheostat, M. Shells; Roof valley, G. F. Drouve; Rotary engine, F. E. Brainerd; Rotary engine, S. H. Draper; Sacks, machine for transferring and sewing filled, A. T. Timewell; Salt, bath, F. F. Myles; Sash cord guide, W. R. Fox; Sash fastener, G. Feltham; Sash fastener, G. C. Nicholson; Saw, meat or hand, J. Oldham; Saw strainer rod, wood, Smith & Shaw; Sawing attachment for portable engines, wood, E. Jaquin; Scaffold, J. Sladek; Scraper, wheeled, T. R. McKnight; Seal lock, Kirkpatrick & Banks; Separator, See Grain separator; Hydraulic separator; Steam and water separator for pyrite, water, etc., by bacterial action, purifying, M. Ducat; Sewing machine, filled sack, A. T. Timewell; Ships, apparatus for cleaning paint from, W. P. Press; Shirt, S. C. Chamberlin; Shoe, H. Piessens; Shoe shank stiffeners, machine for cutting, G. E. M. Lewis; Shoes, etc., wholly or in part of patent leather, manufacture of, L. J. Neu; Signal, See Car sign; Skein holder, M. A. Arrowsmith; Skins, machine for depilating, G. De Keukelaere; Skirt facing, corded, L. Suro; Skirt protector, A. Allgoever; Sling trip, E. Caneigne; Smeiting process of and apparatus for pyrite, G. M. Westman; Solder, D. Crowther; Sole rough rounding machine, H. T. Crosby; Spectacle or eyeglass case, Leibe & Goerk.

A TIGHT GRIP.
The SKINNER PATENT DRILL CHUCK is simple, strong, and accurate. The jaws are of hardened tool steel. Stands severest tests. Is self-centering, self-tightening, most durable. Holds straight or taper shank drills.
Send for catalogue.
SKINNER CHUCK CO., Church St., New Britain, Conn.

WELL DRILLING MACHINERY,
MANUFACTURED BY WILLIAMS BROTHERS,
ITHACA, N. Y.
MOUNTED ON OR ON SILLS, FOR DEEP OR SHALLOW WELLS, WITH STEAM OR HORSE POWER.
SEND FOR CATALOGUE.
ADDRESS WILLIAMS BROS. ITHACA, N. Y.

KLONDIKE NECESSITIES
Take a SMITH & WESSON heavy caliber Revolver
when you go to the Klondike, or you may return empty handed.
Catalogues of desirable weapons for heavy use mailed on application.
SMITH & WESSON,
14 Stockbridge St., Springfield, Mass.

Oster Pat. Adjustable Stocks & Dies
They are light in weight, dies made of the best tool steel, guaranteed just as strong and reliable as solid dies, cut the thread at one operation and release from the work without running back over finished threads. Each set of dies cuts two distinct sizes.
THE OSTER MFG. CO.
85 Prospect Ave., Cleveland, Ohio, U.S.A.

For Fire Protection which means cheap insurance, put in a CALDWELL TANK AND TOWER.
Endorsed by the leading Insurance Companies.
W. E. CALDWELL CO.
217 E. Main Street, Louisville, Ky.

"QUEEN" ARCHITECT LEVEL \$50
Improved Transits & Levels
Graduated entirely on our large dividing engines. Special award at the World's Fair. All kinds of Engineering, Surveying and Drafting Instruments and Materials. 220 p. illustrated catalogue mailed free only if this ad. is mentioned.
QUEEN & CO., Inc.,
1011 Chestnut St., Philadelphia.

Acetylene Gas Lighting
Reduced to the most Efficient, Safest, and Economical use.
We claim for the NIAGARA the only Machine entirely Automatic in its action. Standard sizes from 10 to 150 lights. Larger sizes manufactured promptly to order. Licenses granted for use in unoccupied territory.
Correspond with the NIAGARA FALLS ACETYLENE GAS MACHINE CO.,
Niagara Falls, N. Y. and Canada.

CALCIUM CARBIDE
Export trade and Eastern States supplied.
E. Aug. Neresheimer, 35 Nassau St., New York

Safety Gate Co. RICHMOND, INDIANA.
Manufacturers of Automatic Elevator Gates AND TRAP DOORS FOR FREIGHT ELEVATORS.

How to Build a Home
Those intending to build will find the very best practical suggestions and examples of Modern Architecture in the handsomest Architectural Magazine ever published.
"The Scientific American Building Edition."
Each number is illustrated with a Colored plate and numerous handsome engravings made direct from photographs of buildings, together with interior views, floor plans, description, cost, location, owners' and architects' names and addresses. The illustrations include seashore, southern, colonial and city residences, churches, schools, public buildings, stables, carriage houses, etc.
All who contemplate building, or improving homes or structures of any kind, have in this handsome work an almost endless series of the latest and best examples from which to make selections, thus saving time and money.
PUBLISHED MONTHLY. SUBSCRIPTIONS \$2.50 A YEAR. SINGLE COPIES 25 CENTS.
Semi-Annual Bound Volumes, \$2.00 each. Yearly Bound Volumes, \$3.50 each.
For sale at all news stands, or address MUNN & CO., Publishers, 361 Broadway, New York

WILLIAMS' SHAVING STICK
WORTH ITS WEIGHT IN GOLD.
Williams' Soap sold everywhere, but sent by mail if your dealer does not supply you.
Williams' Shaving Stick, 25 cts.
Genuine Yankee Shaving Soap, 10 cts.
Luxury Shaving Tablet, 25 cts.
Swiss Violet Shaving Cream, 50 cts.
Jersey Cream (Toilet) Soap, 15 cts.
Williams' Shaving Soap (Barbers'), 6 Round Cakes, 1 lb., 40c. Exquisite also for toilet. Trial cake for 2c, stamp.

THE J. B. WILLIAMS CO.,
LONDON GLASTONBURY, CONN. SIDNEY
64 GREAT RUSSELL ST., W.C. 151 CLARENCE ST.

TWO POWERS INCOMPARABLE.
OLDS GASOLINE ENGINE WORKS.
LANSING, MICH. (Box 418)

VAPOR LAUNCH COMPLETE FOR \$150 AND UPWARDS
Row, Sail or Steam Boat.
Send five cents for catalogue. Racing Yacht and Boat Works, Racine Junction, Wis., Box A.

GAS AND GASOLINE ENGINES WATER MOTORS
BACKUS WATER MOTOR CO. NEWARK N. J. U.S.A.

SHERIFFS MANUFACTURING COMPANY,
Established 1854. Manufacturers of Marine Engines
MILWAUKEE, WIS., U. S. A.

ROTARY PUMPS AND ENGINES:
Their Origin and Development.—An important series of papers giving a historical resume of the rotary pump and engine from 1688 and illustrated with clear drawings showing the construction of various forms of pumps and engines. 88 illustrations. Contained in SUPPLEMENTS 1109, 1110, 1111. Price 10 cents each. For sale by Munn & Co. and all newsdealers.

MAGNETO BELLS
ALL KINDS OF PARTS OF TELEPHONES.
ELECTRICAL SUPPLIES.
SEND STAMP MIANUS ELECTRIC CO., MIANUS, CONN. FOR CATALOGUE.

THIS Adjustable DRAWING Table
Hardwood Top 20"x28"
delivered in United States for \$8.00 each. Is easily adjusted, firm and durable. Send for Catalogue to ADJUSTABLE DRAWING TABLE CO.
Office, Powers Opera House Block, Grand Rapids, Mich., U. S. A.

Peterson's Continual Water Still.
This still is in use and endorsed by the following leading chemists in the United States: E. R. Squibb & Sons, N. Y.; Hall & Ruckel, N. Y.; and many others. For further particulars write to or inquire of John Peterson, 231 South St., N. Y.