





"These two I use daily."



**ARNICA Tooth Soap**

Is antiseptic; preserves while it beautifies. No spilling or wasting; convenient and economical.

25 Cents  
At all Druggists

**STRONG'S Arnica Jelly (Carbolated)**

Keeps the skin free from roughness and pimples. Nothing better for sunburn or chapping; also for cuts, bruises, burns and all eruptions. Keeps the skin soft, smooth and delicate. The collapsible metal tube is convenient and unbreakable.

Take it with you wherever you go. If your druggist hasn't it—Send to us. Sent postpaid on receipt of 25 cents.

**C. H. STRONG & CO. CHICAGO**

Package, shipping, A. Potts ..... 795,110

Packing, A. B. Schier ..... 794,592

Packing, G. M. Kneuper ..... 794,987

Packing, J. H. Bricker ..... 795,098

Paint composition, R. H. Goddin ..... 795,116

Pan. See Vacuum pan.

Pants and garter attachment, A. F. & S. F. Stein ..... 794,894

Pants with garter attaching device, knee, A. F. & S. F. Stein ..... 794,895

Paper articles, machine for making, F. J. Metz ..... 795,153

Paper bag machine, W. A. Lorenz ..... 795,046

Paper forming and drying machine, G. W. Nistler ..... 795,055

Paper or other fabrics, reeling machine for, W. H. Waldron ..... 795,079

Parallel lines, protective system for, L. Wilson ..... 795,182

Pavements, wooden block for, F. J. Warren ..... 794,758

Pen, fountain, T. P. Ambrose ..... 794,836

Pen, W. W. Sanford ..... 794,814

Perambulator, mail cart, or the like, A. C. Barratt ..... 795,188

Phonograph repeating attachment, E. L. Crabb ..... 794,786

Pianos, safes, etc., hoist for, R. M. Hill ..... 794,712

Pillow, pneumatic, L. F. Doellinger ..... 795,108

Pitman connection, G. H. Ellis ..... 794,793

Plate and attaching device therefor, W. B. Williams ..... 795,181

Plug and receptacle, H. R. Sargent ..... 795,067

Portable rack, L. A. Friend ..... 795,111

Poultry picking implement, A. Weiler ..... 795,013

Power transmitting mechanism, T. L. & T. J. Sturtevant ..... 794,899

Power transmitting mechanism, A. L. Herkenhoff ..... 795,036

Preserve can, H. Bohm ..... 794,848

Printing plates, means for locking, Taylor & Hackett ..... 794,959

Printing surface cleaning composition, F. Förster ..... 795,215

Printing surfaces, cleaning, F. Förster ..... 795,216

Propeller, J. D. Fullerton ..... 794,932

Propeller, J. Huber ..... 794,984

Pulp molding machine, G. R. Ward ..... 794,903

Pump, mercury, S. E. Flechtner ..... 794,707

Pump piston, R. Addison ..... 794,834

Pump platform, P. M. Wolf ..... 794,792

Puzzle, C. H. Flakney ..... 794,819

Pyrotechnical grasshopper, E. H. Wagner ..... 794,824

Rack, H. F. Schauwecker ..... 795,068

Radiator, sheet metal, W. R. Kinnear ..... 794,805

Rail brake, M. Hattery ..... 794,802

Rail joint, R. H. Ireland ..... 794,715

Rail joint, Johnston & Hill ..... 795,042

Rails in situ, portable apparatus for dressing the surfaces of, Woods & Gilbert ..... 795,184

Railway brake apparatus, G. T. & L. Woods ..... 795,243

Railway gate, A. Berg ..... 795,022

Railway rail, E. F. Kreil ..... 794,719

Railway rail, A. A. Strom ..... 794,954 to 794,956

Railway rail brace, H. H. Sponenberg ..... 795,010

Railway rail joint, W. A. Zelch ..... 794,915

Railway switch mechanism, H. E. Nichols ..... 795,159 to 795,157 to 795,185

Railway tie, A. W. Yocum ..... 795,185

Railway ties, lifting jack for spiking, G. Coml ..... 795,195

Ratchet wheel mechanism, A. Benoit, et al. .... 795,095

Razor, C. L. Girard ..... 795,115

Razor blade holder, safety, L. Heckel ..... 794,798

Razor, safety, L. E. Gaylor ..... 794,934

Reaper and mower, T. R. Vizard ..... 795,078

Refrigerating apparatus, R. Whitaker ..... 795,014, 795,015

Rein holder, G. E. Sundek ..... 794,776

Retaining ring, M. C. Neuner ..... 794,735

Retort discharging apparatus, L. Berger ..... 795,202

Revolvers or other firearms, application of electric lights to, E. C. I. Cailliez ..... 794,924

Rheostat, J. W. Howell ..... 794,983

Rheostat, automatic, C. J. Sturgeon ..... 794,820

Ring. See Retaining ring.

Roasting furnace, J. A. Anker, et al. .... 794,837

Rock drill, G. S. Power ..... 795,169

Rock drilling machinery, apparatus for altering dust in connection with, W. C. Stephens ..... 794,752

Rocking chair attachment, E. E. Metter ..... 794,999

Rope clamp, J. McKenney ..... 794,732

Rose or escutcheon plate, compensating, Caley & Voight ..... 794,779

Rotary engine, H. M. Lofton ..... 794,723

Rotary engine, D. B. Hardy ..... 795,118

Rotary engine, J. R. Lewis ..... 795,142

Rug stiffening device, F. E. Kindgen ..... 794,717

Ruling machine delivery table, Peckham & Hyde ..... 795,164

Sash holder, J. W. Wynn ..... 794,913

Saw filing machine, C. H. Slack ..... 794,750

Saw sharpener, J. H. Ennis ..... 794,855

Scaffold, Conover & Blair ..... 795,196

Screw bolts, etc., ratchet spanner for, F. W. Schroeder ..... 794,952

Scrubbing machine, J. B. Slattery ..... 794,817

Seal, bottle, E. J. Brooks ..... 794,845

Sealing machine, bottle, A. A. Wood ..... 794,963

Seed cleaning machine hopper, J. Harris ..... 794,936

Seed tester, S. Van Bruggen ..... 794,756

Separator, Rowland & Longmore ..... 794,747

Serrating machine, R. F. Massa ..... 794,810

Sewing machine feeding mechanism, H. C. Miller ..... 795,150

Sewing machine, filler sack, R. H. Moore ..... 794,875

Shade holder, window, J. M. Glickman ..... 794,976

Shade holding device, C. L. Hopkins ..... 794,937

Shaft, crank, Cole & Steinhof ..... 794,783

Sharpener, knife or scissors, D. E. Donaldson ..... 794,854

Sharpening shears or other edged tools, combined holder and guide for, P. Hawkinson ..... 794,797

Sheet metal can or the like, F. C. E. Page ..... 794,880

Shoe form, pneumatic adjustable, C. D. Gaunt ..... 795,217

Shoes, gloves or the like, fastening for, E. P. Harlow ..... 795,119

Shooting gallery, W. J. Powerman ..... 794,775

Shutter fastener, W. A. Jordan ..... 795,135

Sign, changeable, F. M. Stamback ..... 795,074

Signal system, safety, F. V. King ..... 795,137

Signaling system, block, H. M. Coulter ..... 794,784

Signaling system, block, J. O. Bohannon ..... 795,190

Silvering table, G. Glaudel ..... 794,858

Slag furnace, S. Garrison ..... 794,932

Slag heater, boiler, R. Barzaley ..... 795,245

Slag settling apparatus, H. V. Pearce ..... 795,163

Sleigh bunker, non-bidding, D. Halstead ..... 794,861

Slot switch, J. H. Pfeiffer ..... 795,232

Smelting furnace, zinc, E. C. Hegeler ..... 794,799

Snap hook, J. A. Peek ..... 795,006

Soldering protective apparatus, self, F. B. Cook ..... 795,197

Sower, fertilizer, J. E. & C. B. Ebling ..... 795,931

Sponge, fountain, F. Fanning ..... 795,211

Squares, rafter attachment for steel, M. Nichols ..... 795,160

Stacker, hay, W. E. Waller ..... 794,825

Stacker, straw, W. E. Witt ..... 794,763

Stackers, hay retaining device for, J. O. McCreery ..... 795,154

Stairway, F. A. Winslow ..... 794,908

Stamp, hand, E. B. Hill ..... 794,800

Steam generator, W. B. Hoyle ..... 794,733

Steam or hot water boiler, J. E. Bernhard ..... 794,774

Steps, device for fixing wooden banisters to stone, C. von Lem ..... 795,143

Stirrup, safety, W. W. Markley ..... 795,050

Stone polishing wheel, R. C. George ..... 794,974

Stones, etc., and transporting same, machine for lifting, T. Trudeau ..... 794,961

Store front, F. W. von Oven ..... 795,084

Stove, heating, J. A. Jensen ..... 795,226

Stove safety device, gas, R. H. Watkins ..... 794,964

Stove, self-regulating, E. O. Slicher ..... 794,900

Stovepipes or other articles, device for cleaning, H. C. Krentler ..... 795,227

Stump or rock extractor, W. H. Wright ..... 794,912

Sun dial, A. C. Crehore ..... 794,787

Swing, T. H. Barger ..... 795,994

Swivel hook, E. J. Haverly ..... 794,979

Tank. See Glass tank.

Tanning substances, extracting, G. F. Engel ..... 794,847

Telephone cut out, M. L. Smith ..... 795,072

Telephone support, E. P. Baird ..... 794,967

Telephone system, intercommunicating, De Veau & Auth ..... 794,790

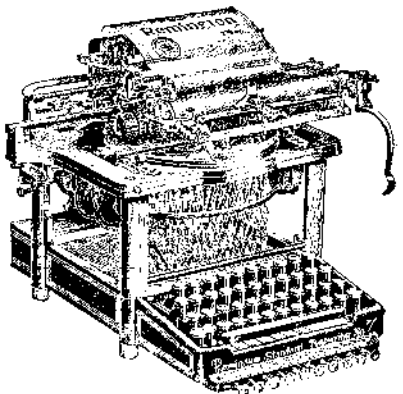
Tent structure, J. E. Walsh ..... 795,050

Threshing grate, F. E. Rielsberger ..... 794,858

# The REMINGTON Billing Typewriter

is the complete billing machine

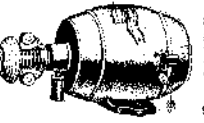
It supplies the needs of every business.  
 It embraces every billing system.  
 It improves and develops system according to the needs of business.  
 It eliminates waste labor in the billing department.  
 It eliminates waste labor which pen billing makes necessary in other departments.  
 It equals the other Remington models in its capacity for ordinary work.  
 It is now used by thousands of representative houses in every part of the country.  
 And everywhere its record as a time, labor and expense saver is beyond competition.



New illustrated booklet sent on request.

**Remington Typewriter Co.**  
 325-327 Broadway  
 New York  
 Branches Everywhere

**SENSITIVE LABORATORY BALANCE.**  
 By N. Monroe Hopkins. This "built-up" laboratory balance will weigh up to one pound and will turn with a quarter of a postage stamp. The balance can be made by any amateur skilled in the use of tools, and it will work as well as a \$125 balance. The article is accompanied by detailed working drawings showing various stages of the work. This article is contained in SCIENTIFIC AMERICAN SUPPLEMENT No. 1184. Price 10 cents. For sale by MUNN & Co., 361 Broadway, New York City, or any bookseller or newsdealer.



If you have an Apple Automatic Sparkler your batteries will always give a strong, hot, steady spark. Owners of launchs, automobiles or gas engines should write today and learn of this perfect storage battery charger.

The Dayton Electrical Mfg. Co.  
 98 Beaver Bldg. Dayton, Ohio.

**NOW READY**

**Bound Volume**

OF THE

**SCIENTIFIC AMERICAN BUILDING MONTHLY**

**VOLUME XXXIX**

January to June, 1905

277 Illustrations 6 Covers in Tint  
 132 Pages

PRICE OF SEMI-ANNUAL VOLUME  
 \$2.00, POSTAGE PAID

**SPECIAL FEATURES**

Notable American Houses.  
 By Barr Ferree.

Mrs. A. Cass Canfield's House, Roslyn, L. I., N. Y.  
 The House of Ogden Mills, Esq., Staatsburg, N. Y.  
 "Bellevue," the Estate of Giraud Foster, Esq., Lenox, Mass.  
 The House of Lloyd Bryce, Esq., Roslyn, L. I., N. Y.  
 "Martin Hall," the House of James E. Martin, Esq., Great Neck, L. I., N. Y.  
 "Talbot House," the Estate of Talbot J. Taylor, Esq., Cedarhurst, L. I., N. Y.

**Helps to Home Building.** What the House Builder should know. Difficulties to Overcome. The Plan. The Structure. Designing the House. The Rooms and Their Uses.

**Departments.** Roads. Landscape Architecture. Ventilation. New Building Patents. Publishers' Department. The Automobile. The Plumber. Exhibitions. Correspondence. Fire Protection. Civic Betterment. Unknown Buildings. The House. Monthly Comment. The Household. The Garden. Fifty Suggestions for the House. The House Interior. New Books. Sanitation.

**The Building Monthly** aims to help its readers to better building. The illustrations reproduce homes and other structures of the highest grade and of varying costs. It seeks to interest the architect, the house owner, the real estate promoter, the home maker, and the builder. It stands for the good and the true and the beautiful in the art. Its series on "Notable American Houses" describes and illustrates with great wealth of illustrations the more important of the best large houses recently built in the United States and brings its readers in immediate touch with the most important work of the leading architects of the day. Its descriptions of houses are brief but compact with information. Its departments constitute a "review of reviews," summary of current comment, suggestion and help in all matters relating to the construction of the home, its decoration, equipment, and use.

Volume XXXIX, January to June, 1905, price \$2.00. Six covers in tint and three hundred and eight illustrations. A rich conspectus of interesting notable houses. Many fine estates are treated with ample fullness. The discussions of current architectural themes are of permanent value and of unusual interest.

FOR SALE BY  
**MUNN & COMPANY**  
 No. 361 Broadway, New York City  
 AND ALL NEWSDEALERS

**LATEST EDITION**

OF

# Supplement Catalogue

**JUST OUT!**

Write for it. It costs nothing.  
 The new Catalogue contains 65 pages and gives a list of over 17,000 articles.

If there is any scientific, mechanical or engineering subject on which you wish special information, you will find in this Catalogue some papers in which it is thoroughly discussed by a competent authority.

SCIENTIFIC AMERICAN SUPPLEMENT papers for the most part have been written by the world's most eminent engineers and scientists. They contain information that is not always accessible in books.

**MUNN & COMPANY, Publishers**  
 361 BROADWAY, NEW YORK

