

On almost every GOOD Car

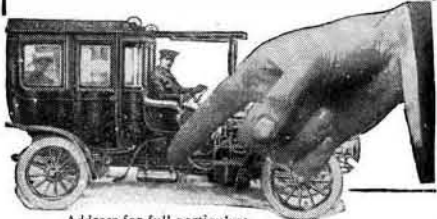
You'll see



Contains ready-generated Acetylene Gas ready for use at any time at the turn of the key.

Forty hours light at the turn of a key. Tanks last FOREVER. No bother. No trouble. No Carbide. No Water. No Dust. Just pure white light at the turn of a key.

This little tank holds enough Compressed Acetylene Gas (already generated and purified) to supply two big lamps for forty hours. Old empty tanks exchanged for new full ones at dealers and garages in over 400 cities.



Address for full particulars THE PREST-O-LITE CO., Dept. 25, Indianapolis, Ind.

Tours

Personally Conducted—Exclusively First-Class—to California—January 10th, February 7th and March 2nd under the auspices of the tourist department, Chicago, Union Pacific and North-Western Line;

Include all expenses

—hotels, railway fare, sleeping car and dining car accommodations of the finest character, and numerous side trips. So arranged as to spend the disagreeable portions of the winter months in comfort and ease.

Write for itineraries and full particulars to S. A. Hutchinson, Manager, 212 Clark Street, Chicago, Ill.

THE MIETZ & WEISS

OIL ENGINES

Stationary 1 1/2 to 80 H. P. Marine 3/2 to 100 H. P. Use KEROSENE and FUEL OILS. Direct connected Generators, Pumps, Air Compressors, Hoists, etc. Thousands in use in all parts of the world. AUGUST MIETZ 128-138 Mott St., New York, U.S.A.

Clearing Sale Slightly Used Typewriters

We own and offer as wonderful bargains, 1,500 typewriters which have been used just enough to put them in perfect adjustment. Better than new. Shipped on approval, free examination. 1,000 new Visible Steno machines, built to sell for \$95—our price while they last, \$45. Catalogue containing unparalleled list of splendid typewriter bargains. Send for it to-day. FREE. Rockwell-Barnes Co., 1659 Baldwin Bldg., Chicago, Ill.

I SELL PATENTS

CHAS. A. SCOTT 819 MUTUAL LIFE BLDG. BUFFALO, N. Y.

60 YEARS' EXPERIENCE PATENTS

TRADE MARKS DESIGNS & COPYRIGHTS & C. Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. HANDBOOK on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice, without charge, in the Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, \$3 a year; four months, \$1. Sold by all newsdealers. MUNN & Co, 361 Broadway, New York Branch Office, 625 F St., Washington, D. C.

Table listing various products and their prices, including items like 'Remedy for the ailments of birds', 'Rubber boots and shoes', 'Sauce, table', 'Sewing machines', 'Sheetings', 'Soap', 'Soda', 'Stove polish', 'Tobacco pipes', 'Toilet preparations', 'Tonic', 'Washing compounds', 'Watches', 'Whiskies', 'Whisky', 'Woolens', 'Labels', 'Prints', and 'Stamps'.

LEARN TO DRAW MORE SALARY Mechanical Drawing. With the growing importance of machinery and engineering there is an increasing demand for men who understand Mechanical Drawing. We can prepare you for this work in your spare hours. Instruments and Other Drawing Materials Furnished Free.

A CONTROLLING INTEREST FOR SALE. At great bargain in New York Corporation owning patented article of universal use, now sold by leading stores throughout United States. For particulars write or apply to CHARLES M. CHAPMAN, Attorney 60 WALL STREET, NEW YORK

BRAIN WORKERS—THINKERS! Have you that clearness of mind so essential to success in your undertakings? You can have, but not until your physical system is right. I want to tell every interested reader of SCIENTIFIC AMERICAN how he may attain perfect physical health by adopting the simplest, most rational and logical method yet known—RAW FOOD DIET—not a fast of "cranks," not a theory, but an infallible method of proper eating. Send \$1.00 for sack of my MASCERA TED WHEAT (30 days supply), and convincing letters, or merely write for literature and information blank. BYRON TYLER, 334 Life Bldg., Kansas City, Mo.

LET US BE YOUR FACTORY WRITE FOR ESTIMATE ON ANY ARTICLE YOU WANT MANUFACTURED STAMPINGS, MODELS, EXPER. WORK WRITE FOR FREE BOOKLET THE GLOBE MACHINE & STAMPING CO. 970 Hamilton St., Cleveland, O.

DON'T DRINK Bad Water. Our Filters Purify, Deodorize, Decolorize. Booklet Free. Baking Water Purifying Co. 65 Murray St., New York

"KNIPE" BALL BEARINGS For thrust or weight or both. No fitting, just push them on. All sizes 1/4 in. shaft and up. 10 cts. in stamps for samples. PRESSED STEEL MFG. CO., 545 The Bourse, Phila., Pa.

AUTOMOBILE INSURANCE Every owner of an Auto should insure his car against loss or damage, whether in actual riding or in transit. We fully insure you against such loss or damage, however sustained. Premiums low. Fullest reliability. H. W. BEALS, 76 William Street, New York

FREE ILLUSTRATED BOOK We will on request send to you postpaid, this book, also our special plans by which you can secure any article in our catalog absolutely free. Write to-day—don't miss this chance. J. Andrae & Sons Co., 114 W. Water Street, Milwaukee, Wis.

ICE MACHINES, Carls Engine, Brewers and Bottlers' Machinery, THE VILTER MFG. CO. 289 Clinton St., Milwaukee, Wis.

MODELS & EXPERIMENTAL WORK. Inventions developed. Special Machinery. E. V. BAILLARD, 24 Frankfort Street, New York.

RUBBER Expert Manufacturers Fine Jobbing Work PARKER, STEARNS & CO., 228-229 South Street, New York

Model and Experimental Work. Years of experience. M. P. Schell, 1759 Union St., San Francisco

MODELS & INVENTIONS PERFECTED UNION MODEL WORKS 193 SO. CLARK ST. CHICAGO. LINENOID—A MOLDED MATERIAL MADE OF PURE LINEN CRANE BROS. MANUFACTURERS, WESTFIELD, MASS.

BE A WATCHMAKER Send for our free book, How to be a Watchmaker. Stone School of Watchmaking, 904 Globe Bldg., St. Paul, Minn.

MODELS CHICAGO MODEL WORKS ESTABLISHED 1867 179 E. MADISON ST. CHICAGO, ILL. WRITE FOR CATALOGUE OF MODEL SUPPLIES

Telegraphy Circular free. Wonderful automatic teacher. \$2 up. OMNIGRAPH CO., Dept. 52, 39 Cortlandt St., New York.

CEMENT BOOKS. How to Use Portland Cement. 50c. General Siewalk Construction, 50c. Reinforced Concrete Construction, \$2.50; Hollow Concrete Block Building Construction, 50c. Sent postpaid, CEMENT AND ENGINEERING NEWS, Chicago, Ill.

VENTRILOQUISM Learned by any Man or Boy at home. Small cost. Send to-day 2-cent stamp for particulars and proof. O. A. Smith, Room 133, 2040 Knoxville Ave., Peoria, Ill.

I Print My Own Cards Circulars, books, newspaper, Card press \$5. Larger \$15. Money saver, maker. All easy, printed titles. Write factory for catalog, presses, type, paper, cards. The Press Co., Meriden, Conn.

STAMPS 100 all different. Venezuela, Uruguay, Mexico, Cuba, Philippines, etc., and Album, 100c FINELY MIXED 20c; 1000 hinges 5c. Agents wanted, 50 per cent. New List Free. C. A. Siegman, 2946 Cote Brillante Ave., St. Louis, Mo.

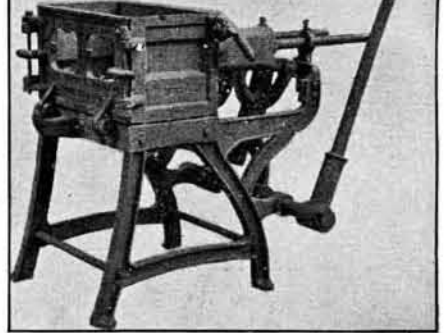
THE WIZARD'S KNOT A new and ingenious puzzle guaranteeing carloads of fun and entertainment. Price 50c. Sent Free for a list of 50 names and addresses, to whom 10 or more sales are made. A superlative Christmas gift. Beautifully finished in stained wood. The Wizard's Knot Co., York, Pa.



Sure Profits! You can start a business of your own—simple, certain and profitable in any locality, and with a trifling outlay for machinery! Concrete Building Blocks are replacing brick, stone and lumber everywhere, because more durable, ornamental and cheaper. May be manufactured anywhere, at half the cost of brick, and yet pay the manufacturer a profit of one hundred per cent!

IDEAL Concrete Machines

assure a business of wonderful profits to any man, without the necessity of previous experience. One man can do all the work, starting the business on little capital, and on as small a scale as desired. The Ideal Concrete Machine is simple, rapid and adaptable. Has no cogs, chains, wheels or gears to wear out, and will positively last a lifetime. Makes blocks with plain, tooled or ornamental face, or natural stone effect. Write for catalogue and complete details of the most profitable and certainly successful business for the man with small capital. It's freely yours for the asking. IDEAL CONCRETE MACHINERY CO., Dept. E, South Bend, Ind.



GAS ENGINE DETAILS.—A VALUABLE and fully illustrated article on this subject is contained in SUPPLEMENT No. 1292. Price 10 cents. For sale by Munn & Co. and all newsdealers.

THE LEAVITT SIREN HORN is an ideal signal for use on Automobiles and Motorboats. The tone can be varied instantly from a soft hum to a voluminous blast that can be heard for miles. The mechanical part of the horn is made from Aluminum and is furnished with a brass horn 8 inches in diameter. A large horn is necessary to concentrate the sound and throw it forward, as without it, the sound would not carry more than a few yards. We furnish all attachments complete. Price, \$35. THE UNCAS SPECIALTY CO. Norwich, Conn.

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.

BEST IN THE FIELD. UNDERWOOD TYPEWRITER CO. NEW YORK AND ANYWHERE