

CADILLAC

Model G

Appreciation and Enthusiasm

grows greater every day as the season advances, for this new Cadillac, the first and only car at its price, proving a formidable rival of cars selling at from 50 to 100 per cent. higher. The price of the Model G is made possible only by the unsurpassed facilities and equipment of the largest factory in the world devoted exclusively to the production of high-grade motor cars.

Its Guarantee is the Name Cadillac



MODEL G—FOUR CYLINDER—20 H. P.

Without a Peer at the Price \$2,000

Great hill climbing power—plenty of speed. Sprightly enough in design to satisfy the whims of the young folks; with the good form that commends it to fashionable family use. Ring type engine governor; smooth, quiet running; sliding gear transmission; shaft drive direct on high speed; lightness in weight secures utmost tire economy.

Let your nearest dealer give you a demonstration.

Described in Catalog G—N.

Model H—30 h. p., 4 Cylinder Touring Car, \$2,500
Catalogue H—N

Model M—10 h. p., 4 Passenger Car, \$950
Catalogue M—N

Model K—10 h. p., Runabout, \$850
Catalogue M—N

Send for catalogue of car that interests you
CADILLAC MOTOR CAR CO.
Detroit, Mich.
Member A. L. A. M.

| | |
|--|------------------|
| Electrical ignition devices and spark plugs, G. J. Schultz Co. | 63,607 |
| Enamels and motors, explosive, Keystone Varnish Co. | 63,625 |
| Engines and motors, explosive, Detroit Gas Engine and Machinery Co. | 63,606 |
| Engines, gas and gasoline, Page Engineering Company of Baltimore City. | 63,612 |
| Ethyl, chlorid of, H. H. Fries. | 63,705 |
| Fabrics, printed and dyed textile, Eddystone Manufacturing Co. | 63,671, 63,672 |
| Files, document, Globe-Wernicke Co. | 63,706 |
| Flour, wheat, Tranchant & Fennell. | 63,704 |
| Flour, wheat, B. B. Earnshaw. | 63,731 |
| Gelatin, prepared, Whitman Grocery Co. | 63,740 |
| Gin, Freiberg & Workum. | 63,674 |
| Hair restorer, J. T. Gaudet. | 63,641 |
| Headwear, certain, H. W. Atkins. | 63,669 |
| Headwear, certain, Moore Smith Co. | 63,682 |
| Hones, Pierres Ouvrees de la Sahn Societe Anonyme. | 63,649 |
| Lamp parts and incandescent mantles, Lindsay Light Co. | 63,608 |
| Lenses, F. A. Hardy & Co., 63,701 to 63,703. 63,720 to 63,722 | 63,722 |
| Locks and keys, Yale & Towne Mfg. Co. | 63,654 |
| Macaroni, S. Rocca. | 63,714 |
| Machinery and parts thereof, Link-Belt Co. | 63,609 |
| Magazine, monthly, Sportsman Publishing Co. | 63,716 |
| Maps, charts, etc., Atlas School Supply Co. | 63,693 |
| Medicinal wines, H. Stein. | 63,653 |
| Medicine, certain, J. J. Hubel & Co. | 63,644 |
| Medicine, liver, A. P. Sawyer. | 63,664 |
| Medicine, proprietary, J. A. Stephenson, Jr. | 63,667 |
| Medicines for the cure of consumption, G. H. Center. | 63,655 |
| Musical instruments and parts, C. Meisel. | 63,711 |
| Mustard, prepared, C. Gulden. | 63,727 |
| Oil and scythe stones and hones, Simmons Hardware Co. | 63,651 |
| Oils, lubricating, G. W. Gallaway. | 63,623 |
| Paper and envelopes, writing, G. B. Hurd & Co. | 63,709 |
| Paper and paper boards, Union Bag and Paper Co. | 63,687 |
| Paper bags, Union Bag and Paper Co. | 63,688 |
| Paper, tissue, James R. Crompton & Bros., 63,679, 63,710 | 63,710 |
| Paper, writing, J. W. Butler Paper Co. | 63,677 |
| Peanuts, E. W. Brewer. | 63,718 |
| Periodical, Merck & Co. | 63,712 |
| Pickles, Alart & McGuire. | 63,731 |
| Piece goods, certain, J. Lonke. | 63,680 |
| Pins, safety, American Pin Co. | 63,668 |
| Poison, insect, H. L. Squires. | 63,652 |
| Preparation for the treatment of blood and skin diseases, Dr. Peter Fahney & Sons Co. | 63,657 to 63,661 |
| Railway cross ties, Consolidated Cross Tie Co. | 63,741 |
| Remedies, certain proprietary, F. E. Chamberlain. | 63,656 |
| Remedy for certain diseases, Murray Drug Co. | 63,645 |
| Remedy for diseases of the blood, liver, and kidneys, V. T. Murphy. | 63,662 |
| Serum for the prevention of hay fever, Serum Laboratorium Ruete Enoch. | 63,650 |
| Sheetings, shirtings, drills, etc., China and Japan Trading Co. | 63,695, 63,733 |
| Shoes, leather, A. Newman. | 63,713 |
| Shoes, leather, Fleishman, Morris & Co. | 63,735 |
| Silk and silk mixed piece goods, Susquehanna Silk Mills. | 63,684 to 63,686 |
| Silver cleaning solution, S. Hudgens. | 63,624 |
| Soap, N. K. Fairbank Co. | 63,626 |
| Soap, cotton seed oil, Union Oil Co. | 63,625 |
| Soap, toilet, Remmers Soap Co. | 63,627 |
| Spoons, souvenir silver, J. R. Watts & Co. | 63,689 |
| Squares, Simmons Hardware Co. | 63,715 |
| Starch, laundry, New York Glucose Co., 63,646, 63,647 | 63,647 |
| Stationery, certain articles of, Globe-Wernicke Co. | 63,724 to 63,726 |
| Stoves and ranges, St. Louis Union Trust Co. | 63,619 |
| Tanning extract, Stamford Manufacturing Co. | 63,666 |
| Tea, Corbin, Sons & Co. | 63,700 |
| Textiles, certain, China and Japan Trading Co. | 63,697 |
| Thread, cotton, Clark Thread Co. | 63,639 |
| Thread, spool cotton, and sewing silk, American Thread Co. | 63,630 to 63,637 |
| Waists for women, dress and shirt, Romm & Co. | 63,738 |
| Water wheels and motors and parts thereof, Abner Doble Co. | 63,604 |
| Waters, carbonated or mineral, Huntoon Spring Water Co. | 63,676 |
| Waters, natural spring, Huntoon Spring Water Co. | 63,708 |
| Whisky, E. P. Dodge. | 63,670 |
| Whisky, Jaeger Bros. Co. | 63,678 |
| Woolen dress goods and cloakings, F. D. Glazier. | 63,675 |
| Woolen piece goods and haircloth, William Hollins & Co. | 63,690 |
| Wrenches, monkey and pipe, Trimont Manufacturing Co. | 63,620 |

WINCHESTER



.22 CALIBER AUTOMATIC RIFLE

This wonderful little rifle is in a class by itself for pleasure and sport. After loading it all that it is necessary to do to shoot ten times is to pull the trigger for each shot, as the recoil of the exploded cartridge operates the repeating mechanism. The use of this rifle develops accuracy of aim when shooting rapidly, an accomplishment all hunters strive for. For city, country or camp the .22 Automatic is very handy. To fully appreciate it you should shoot it.

Winchester Guns and Winchester Ammunition are Sold Everywhere

WINCHESTER REPEATING ARMS CO. - NEW HAVEN, CONN

Do You Want To Start Small Manufacturing Under Favorable Conditions?

Then there is one town that offers such exceptionally favorable conditions that you cannot afford to miss knowing about them.

That town is **Wilkes-Barre, Pennsylvania.**

Wilkes-Barre is public spirited. There is nothing extraordinary in our paying for this advertisement. It is only a sample of Wilkes-Barre's way.

Our city is now projecting the model industrial building of the country to attract ambitious manufacturers of small capital. In this building the city will help such as are ambitious to grow by giving them nominal rents for small space, and with **very low** rates for electric light and electric power—also for to of course help themselves.

The city is centrally located in the heart of America's wealthiest center with the **very best** skilled and unskilled labor available that can be had in this country.

Fair taxes pure water liberal banking facilities—and low freight rates.

The best chance you will have to start is **NOW** and **HERE.**

Write us and get acquainted.

WILKES-BARRE GAS AND ELECTRIC CO. - Wilkes-Barre, Pennsylvania

LET US BE YOUR FACTORY

We estimate on anything you want made to order.

STAMPINGS, MODELS, EXPERT WORK

We publish "The Silent Partner," a brainy little magazine, full of good thoughts. Sample free. Write us

THE GLOBE MACHINE AND STAMPING CO
970 Hamilton St., Cleveland, O.

A MONEY MAKER

Hollow Concrete Building Blocks Best, Fastest, Simplest, Cheapest Machine. Fully guaranteed.

THE PETTYJOHN CO.
615 N. 6th Street, Terre Haute, Ind.

ICE MACHINES

Corliss Engines, Brewery and Bottlers' Machinery. THE VILBER MFG. CO., 839 Clinton St., Milwaukee, Wis.

INVENTORS MANUFACTURERS

LET US FIGURE—METAL NOVELTY WORKS 69 SO. CANAL ST. CHICAGO, ILL.

MODELS & EXPERIMENTAL WORK.

Inventions developed. Special Machinery. E. V. BAILLARD, 24 Frankfort Street, New York.

DRYING MACHINES

For all kinds of granular materials. S. E. Worrell, Hazlet, Mo.

RUBBER

Expert Manufacturer Fine Jobbing Work

PARKER, STEARNS & CO., 228-229 South Street, New York

DIE WORK SPECIAL TOOLS MODELS NOVELTIES

Experimental Work for Inventors

H. TURNER TOOL CO., 215 S. Clinton St., Chicago

MODELS CHICAGO MODEL WORKS

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

INVENTORS

We manufacture METAL SPECIALTIES of all kinds, to order; largest equipment; lowest prices. Send perfect sample for low estimate and best expert advice **FREE**

THE EAGLE TOOL CO., Dept. A, Cincinnati, O.

MR. INVENTOR

Send us your models or drawings for our lowest prices We can develop, perfect or manufacture your invention

MONARCH TOOL CO., 128 Opera Place, Cincinnati, O.

THE SCHWERDTLE STAMP CO.

STEEL STAMPS, LETTERS & FIGURES. BRIDGEPORT, CONN.

Experimental & Model Work

Cir. & advice free. Wm. Gardam & Son, 45-51 Rose St., N.Y.

CEMENT BOOKS.

How to Use Portland Cement 50c; Cement Sidewalk Construction, 50c; Reinforced Concrete Construction, \$2.50; Hollow Concrete Block Building Construction, 50c. Sent postpaid.

CEMENT AND ENGINEERING NEWS, Chicago, Ill.

MASON'S NEW PAT. WHIP HOISTS

save expense and liability incident to Elevators. Adopted by principal storehouses in New York & Boston

Maufd. by **VOLNEY W. MASON & CO., Inc.** Providence, R. I., U. S. A.

NOVELTIES & PATENTED ARTICLES

MANUFACTURED BY CONTRACT, PUNCHING DIES, SPECIAL MACHINERY, S. KINGSLOW STAMPING & TOOL WORKS, CLEVELAND, O.

Magical Apparatus.

Grand Book Catalogue. Over 700 engravings 25c. Parlor Tricks Catalogue, free.

MARTINKA & CO., Mfrs., 403 Sixth Ave., New York

We Have No Rent

to add when making you Prices on Dies or Stamping.

LARIMER MFG. CO., Eola, Ill. (near Chicago)

BABBITT METALS.—SIX IMPORTANT FORMULAS. SCIENTIFIC AMERICAN SUPPLEMENT 1123. Price 10 cents. For sale by Munn & Co. and all news-dealers. Send for catalogue.

Technical Literature

A Monthly Review of Current Technical Publications

a large 64-page illustrated journal giving its readers, in more or less condensed form, the BEST literary material of general interest appearing in the current technical publications of America and Europe, as well as much valuable information found in daily papers, trade pamphlets, society proceeding speeches and lectures, etc. The

"Index to Articles in Current Technical Periodicals" gives a classified descriptive listing of all the articles of importance appearing in the current technical press, brought down to the first of the month of issue.

"An indispensable publication for engineers and other technical men, and one of the most instructive ever published for general readers who wish to keep in touch with modern industrial progress."

SUBSCRIPTION RATES
\$2.00 a Year. Single Copies, 20 Cents

Special Offers to Readers of the Scientific American.—As a trial subscription we will send you **TECHNICAL LITERATURE** for two months for 25 CENTS with a low rate in combination with a special Premium Book Offer for the continuance of the subscription.

Send your quarter to-day and get the current numbers.

TECHNICAL LITERATURE, 19 S. 220 Broadway, New York

LABELS.

| | |
|--|--------|
| "A Booklover's Notes," for note books, C. S. Britton. | 13,647 |
| "Autocrat," for canned fruits, Burkenroad-Goldsmith Co. | 13,642 |
| "Autocrat," for canned vegetables, Burkenroad-Goldsmith Co. | 13,645 |
| "Autocrat," for canned fish, Burkenroad-Goldsmith Co. | 13,646 |
| "Dr. Hall's Severe Coughs, Colds, and Catarrh," for medicated confection, Dr. A. C. Hall. | 13,641 |
| "Funke's Chocolates—Juvenile," for candy, J. B. Funke Co. | 13,640 |
| "Guaranteed Coffee," for coffee, James Heekin Co. | 13,638 |
| "La Cremeta," for cigars, A. C. Henschel & Co. | 13,635 |
| "La Mavita," for cigars, A. C. Henschel & Co. | 13,636 |
| "Monibak," for coffee, American Pure Coffee and Spice Co. | 13,639 |
| "Native Purity," for pure bread extract, National Maltine Co. | 13,637 |
| "Pride of Ohio," for canned tomatoes, Fayette Canning Co. | 13,643 |
| "Pride of Ohio," for canned corn, Fayette Canning Co. | 13,644 |
| "San Zeno," for cigars, C. B. Henschel Manufacturing Co. | 13,633 |
| "Tom and Jerry," for cigars, W. J. Philppar. | 13,634 |

PRINTS.

| | |
|--|-------|
| "Apparel for Man and Boy," for clothing, E. L. Boone. | 2,045 |
| "Duke's Mixture," for tobacco, American Tobacco Co. | 2,040 |
| "Dupont," for powder, E. I. du Pont de Nemours Powder Co. | 2,047 |
| "Pan-Dandy Bread," for bread, S. E. Lovelless. | 2,042 |
| "The New Kite Whistling Rufus," for a kite, King Aerial Adv. Co. | 2,046 |
| "This Introduces You to Eve, the Texas Microline Girl," for proprietary medicines, Mi-Cro-Line Medicine Co. | 2,044 |
| "Turkish Cigarettes," for Turkish cigarettes, S. Anagyros. | 2,041 |
| "Zimmermann's Sausages," for sausages, M. Zimmermann Co. | 2,043 |

PATENTS

60 YEARS' EXPERIENCE

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, 626 F St., Washington, D. C.

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for 10 cents, provided the name and number of the patent desired and the date be given. Address Munn & Co., 361 Broadway, New York.

Canadian patents may now be obtained by the inventors for any of the inventions named in the foregoing list. For terms and further particulars address Munn & Co., 361 Broadway, New York.

The New Agriculture

By T. BYARD COLLINS

12mo, 374 pages, 106 illustrations, cloth, price \$2.00

THIS new and authoritative work deals with the subject in a scientific way and from a new viewpoint. Dr. Collins has devoted his lifetime to the study of changing economic agricultural conditions. "Back to the soil" was never a more attractive proposition and never so worthy of being heeded as during these opening years of the twentieth century. Farm life to-day offers more inducements than at any previous period in the world's history, and it is calling millions from the desk. The reason for this is not at first obvious, and for this reason Dr. Collins has prepared the present work, which demonstrates conclusively the debt which agriculture owes to modern science and the painstaking government and State officials. Much of the drudgery of the old farm life has been done away with by the use of improved methods, improved stock and varieties. All this tends to create wealth by increased value of the product and decreased cost of production. Irrigation, the new fertilization, the new transportation, the new creations, the new machinery, all come in for a share of attention. The illustrations are of special value, and are unique. All who are in any way interested in agriculture should obtain a copy of this most timely addition to the literature of agriculture. A full table of contents, as well as sample illustrations, will be sent on application.

Publishers of "Scientific American," **MUNN & CO.,** 361 Broadway, New York