

Founded by Mathew Carey, 1785.

HENRY CAREY BAIRD & CO. INDUSTRIAL PUBLISHERS, BOOKSELLERS & IMPORTERS...

The Part Played by Accident in Invention and Discovery.

By Prof. Ernst Mach in January Monist. 50 cents. Chicago: The Open Court Pub. Co.

ASK YOUR DEALER FOR W. L. DOUGLAS \$3. SHOE BEST IN THE WORLD.

If you pay \$4 to \$6 for shoes, examine the W. L. Douglas Shoe, and see what a good shoe you can buy for \$3.

OVER 100 STYLES AND WIDTHS, CONGRESS, BUTTON, and LACE, made in all kinds of the best selected leather by skilled workmen.

Ask your dealer for our \$5, \$4, \$3.50, \$2.50, \$2.25 Shoes; \$2.50, \$2 and \$1.75 for boys.

TAKE NO SUBSTITUTE. If your dealer cannot supply you, send to factory, enclosing price and 3c to pay carriage.

W. L. DOUGLAS, Brockton, Mass.

Advertisement for THE NEW DEPARTURE BELLS, featuring an image of a bell and text describing its features and availability.

TO MANUFACTURERS AND OTHERS

Desiring a representative in Brazil. The undersigned represented Brazil at the World's Fair, Chicago, 1893.

EMPIRE BOILER CLEANER COMPOUND

We Don't Offer Gratuities, but our Circular will give you the information that will enable you to save Time, Trouble and Money.

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.

A. W. FABER

Manufactory Established 1761. LEAD PENCILS, COLORED PENCILS, SLATE PENCILS, WRITING SLATES, STEEL PENS, GOLD PENS, INKS, PENCIL CASES IN SILVER AND IN GOLD, STATIONERS' RUBBER GOODS, RULERS, COLORS AND ARTISTS' MATERIALS.

WARRANTED OAK DESKS.

38 inch, \$12.00; 48 inch, \$15.00; 54 inch, \$18.00; 60 inch, \$20.00.

ELASTIC ROTARY-BLOW RIVETING MACHINE

For riveting together various articles of hardware, bicycle chains, agricultural implements, mechanics' tools, sewing machine attachments, and almost every class of work where riveting is required.

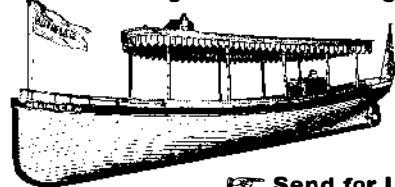
MANUFACTURE OF BICYCLES.—A very comprehensive article giving the details of construction of every part of these vehicles.

THE IMPROVED PERFECTION CAKE TINS

Loose bottoms. "Don't leak." The groove prevents that. Require no greasing. More than a million American housekeepers now use these celebrated tins exclusively.

DAIMLER MOTOR COMPANY, BUILDERS OF

Highest Grade Single and Twin Screw Launches.



Safest, cleanest and speediest power boat built. No smoke or smokestack, no boiler, no electricity. No steam or naphtha under pressure.

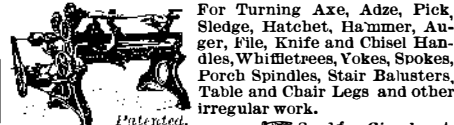
Send for Illustrated Catalogue and Price List. OFFICE AND WORKS, "STEINWAY," LONG ISLAND CITY, N. Y.

The Bartley Direct Running Saw Mill



Most complete, compact, and substantial. Portable Saw Mill now on the market. Can be set up anywhere.

THE OBER LATNES



For Turning Axe, Adze, Pick, Sledge, Hatchet, Hammer, Auger, File, Knife and Chisel Handles, Whiffletrees, Yokes, Spokes, Poreh Spindles, Stair Balusters, Table and Chair Legs and other irregular work.

MAGNETO BELLS

ALL KINDS OF TELEPHONES. ELECTRICAL SUPPLIES. SEND STAMP TO MIANUS ELECTRIC CO., MIANUS, CONN.

BUY TELEPHONES

That are good—not "cheap things." The difference in cost is little. We guarantee our apparatus and guarantee our customers against loss by patent suits.

HELLO, CENTRAL!

Long Distance Granular Carbon Telephones! The "best" is the cheapest in the long run, and ours are the best.

RED CEDAR TANKS.

CYLINDERS and CAISSONS—of Pine or Cypress—any size. WILLIAMS MFG. CO., KALAMAZOO, MICH.

PATENTS

Messrs. MUNN & Co., Solicitors of Patents, have had nearly fifty years' continuous experience. Any one may quickly ascertain, free, whether an invention probably is patentable by writing to Munn & Co.

65 Light Dynamo

In payments of \$10 per month. Hobart Electric Mfg. Co., Troy, Ohio.

INVESTORS

A Chicago company, manufacturing an article for which demand is large, will enter into negotiations to dispose of its English patents, also duplicate of all machinery used in factory.

CHEAPEST DYNAMO ON THE MARKET

DO NOT SEND US MONEY. WE DO NOT MAKE IT. IF YOU WANT A FIRST CLASS DYNAMO AT A FAIR PRICE, WE CAN SUPPLY YOU.

MONITOR VAPOR ENGINE AND POWER COMPANY

8 ERIE STREET, GRAND RAPIDS, MICHIGAN. GASOLINE LAUNCH ENGINES AND LAUNCHES

Advertisement for THE STURTEVANT PRESSURE BLOWERS, featuring an image of a blower and text describing its uses and availability.

THE NEW BRISTOL COUNTER



Registers an accurate account of work done on printing presses, grain tallies, weighing, measuring and other automatic machines.

INCUBATORS

Our 100 pure, finely illustrated Combined Poultry Guide and Catalogue will tell you what you wish to know about PROFITS IN POULTRY.

INCUBATORS

Brooders, Vegetable and Clover Cutters, BONE and GRAIN MILLS. A complete line of poultry supplies at lowest prices.

STEREOPTICONS

Lantern Slides. WE ARE MAKERS. Write for Catalogue M. McIntosh Battery & Optical Co., CHICAGO.

FISHER PATENT Steam Pump Governors

For Steam Pumps Working under Pressure and the FISHER PATENT GRAVITY GOVERNORS for Steam Pumps lifting elevated open tanks.

Something New in Photography

A Revolution. Send us a cabinet picture with 25c. or postal note, also 2-cent stamp for return mailing, and we guarantee to return, within one week from date of receipt, 1 Doz. Miniature Photos, warranted to give perfect satisfaction.

SCIENTIFIC AMERICAN DYNAMO.

Description of a plain shunt-wound dynamo of simple construction, capable of supplying a current of from 60 to 75 110-volt incandescent lamps, or of being used as a 5 h. p. motor.

ALCO VAPOR LAUNCH

Engine and Helm Controlled from Bow. Latest improved and only 12 to 1 Motor now ready for the market. 18 to 40 ft. Launches. 2, 3, 5 and 7 horse power.

HE IS DEAD

To his own interest, who deals in Aras and Ammunition or who shoots a Rifle Pistol, of Shot Gun and has not a copy of IDEAL HAND BOOK, No. 7, A. 100 pages of solid information. Just out. (Mention Scientific American.) BE ALIVE and send for one FREE to all countries. Send stamps for postage.

Advertisement for METAL and WOOD TOOLS, featuring an image of a tool and text describing various types of tools and machinery available.

WANTED. General Agency. Location established, and 20 yrs. bus. ref. Jos. Driver & Co., Philadelphia.

AGENTS. "Trio Foot Brush." Sure seller. Send address, we do the rest. GREEN MFG. CO., Bonton, N. J.

ICE MACHINES. Corlies Engines. Brewers' and Butters' Machinery.

MANY BOATS OF MANY KINDS FOR Catalogue. J. H. RUSHTON, Canton, N. Y.

Experimental & Model Work

E. V. BAILLIARD, 105 Liberty Street, N. Y. DEAFNESS CURED! THE DEAF VAPORATOR.

EXPERT MODEL MAKING

SEND SAMPLE FOR ESTIMATE. ARTICLES IN WIRE, SHEET-METAL, IRON, STEEL, OR BRASS.

OIL TEMPERED SPRINGS

FOR ORGANS—PIANOS—GOVERNORS—BICYCLES AND AGRICULTURAL IMPLEMENTS AND SPECIAL SPRINGS—MADE FROM CRUCIBLE SHEET STEEL.

Incubators & Brooders

Best in the world, hot water, pipe system. Will hatch chicks when others fail. Catalogue Free.

SHOEMAKER'S POULTRY BOOK

96 pages, printed in 6 colors. Birdseye view of largest Poultry Farm. Tells all about Chickens, Prices of same, their Diseases, remedies, poultry buildings, etc.; finely illustrated.

Inventors Promoters Manufacturers

Wanting good bronze pattern castings should write us. Our work is so good that patterns need but little attention to make them ready for use.

CARBORUNDUM

HARDEST ABRASIVE KNOWN. EMERY AND DIAMOND POWDER SUBSTITUTE. IN FLOUR POWDER, CRYSTAL WHEEL, SLAB & HOME FORM.

Hawkins' "Aids" to Engineers

EXAMINATIONS, with Questions and Answers, 5 1/2 x 7 1/2, leather, gilt edge, \$2, postpaid. Send for FREE Descriptive Catalogue of this and other Engineers' Books.

ELECTRICITY PAPERS

No. 1. How to Make a Dynamo. Price 10c. each. No. 2. How to Make a Telephone. No. 3. How to Make an Electro Motor. No. 4. How to Make a Storage Battery. No. 5. How to Make a Wimbush Electric Machine.

WOODEN TANKS.

For Railroads, Mills and Manufactories. Builders of Steel Towers and Tanks. L. A. Red Cypress Wood Tanks a specialty.

FIRE BRICK FOR ALL PURPOSES.

Send for Prices and Catalogue. BROOKLYN FIRE BRICK WORKS, 88 Van Dyke Street, BROOKLYN, N. Y.

STEEL STAMPS & DIES FOR EVERY PURPOSE

STAMPS FOR MARKING. C. H. HANSON, 42 & 44 CLARK ST., CHICAGO.

MEN AND WOMEN

Taught to make Crayon Portraits in spare hours at their homes by a new copyrighted method. Those learning my method will be furnished work by me, by which they EARN \$8 TO \$16 A WEEK.

HOUGH'S SECURITY CASH RECORDER.

ENTIRELY DIFFERENT FROM A CASH REGISTER—IT ENABLES YOU TO TRADE AND PROVE EVERY TRANSACTION—A COMPLETE RECORD KEPT BY VALUABLE CASH RINGS.

BRASS BAND

Instruments, Drums, Uniforms, Equipments for Bands and Drums. Lowest prices ever quoted. Fine Catalogue and Illustrations, mailed free; it gives 10 and Music & Instructions for Amateur Bands.

Rope

If you want any Rope for Transmission of Power. H. CHANNON COMPANY, 2470 Market St. CHICAGO.