

Advertisements.

ORDINARY RATES.

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OVERMAN WHEEL CO.
BOSTON, WASHINGTON, DENVER, SAN FRANCISCO.
A. G. SPALDING & BROS., Special Agents, CHICAGO, NEW YORK, PHILADELPHIA.

COLD FORGED PRODUCT.

'Rogers' Drive Screw.'

Patented May 10, July 19, 1887; July 10, 1888; July 19, 1892.
It will turn like a screw into wood when driven with a hammer, and will not break the fibers of the wood.

AMERICAN SCREW CO. PROVIDENCE, R. I.

Motor of 19th Century
Can be used any place, to do any work, and by any one. No Boiler! No Fire! No Steam! No Ashes! No Goggles! No Engineer! A perfectly safe Motor for all places and purposes.

THE COPYING PAD.-HOW TO MAKE and how to use; with an engraving. Practical directions how to prepare the gelatine pad, and also the outline ink by which the copies are made.

RIEDLER ENGINES AND PUMPING ENGINES ARE POSITIVELY BETTER THAN ANY OTHERS UPON THE MARKET.

Give her a watch;

a good watch, a handsome one—but don't "go broke" over it.
Fourteen-karat gold, filled, or coin-silver, elegantly engraved; enamel dial in modern Arabic numerals; jeweled works; stem-set and stem-winding. A gem to look at and a perfect time-keeper.

No cheap Swiss watch can compare with it. Your jeweler sells it, in many different styles.

PATENTS!

MESSRS. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN, continue to examine improvements, and to act as Solicitors of Patents for Inventors.
In this line of business they have had forty-five years' experience, and now have unequalled facilities for the preparation of Patent Drawings, Specifications, and the prosecution of Applications for Patents in the United States, Canada, and Foreign Countries.

ZINC ETCHING HALFTONE PROCESS
Printer Engravings OF MAGAZINES, BOOKS, SOUVENIRS.
CATALOGUE WORK A SPECIALTY
A.H. KELLOGG SCOTT & BOWNE BUILDING New York.

ACCOUNTANTS who use the Comptometer have no trouble with their trial balance. Has it ever occurred to you that by getting one you might save lots of time, avoid mistakes and not ruin your nerves?
Write for Pamphlet. FELT & TARRANT MFG CO. 52-56 ILLINOIS ST. CHICAGO.

KODAKS. Take one with You to the World's Fair.
They're the only practical camera for the purpose. No bulky glass plates—no troublesome holders—no need of hunting up a dark room. With our special Columbian spools of film, containing 200 exposures you can have your Kodak loaded before leaving home and can then "press the button" as often as you like, while at the Fair without the necessity of reloading.

PERFORATORS OF ALL METALS
For Cotton, Oil and Rice Mills, Sugar Houses, Distilleries, Phosphate and Fertilizer Works, Mining and Concentrating, Gas and Water Works, Elevators, Thrashers, Separators, Corn Shellers, and all kinds of Grain Cleaning Machinery. Heavy Steel and Iron Plates and Cylinders for Screening Ore, Coal, Stone. For Filters, Strainers, Ventilators, Oil Gas and Vapor Stoves and all special purposes. Special sizes for Coffee Cleaning and Roasting Machinery, Perforated Tin and Brass.

The Smith Premier Typewriter
Embodies the most Progressive Mechanical Principles. All the Essential Features Greatly Perfected. Perfect and Permanent Alignment. Easiest Running, and Nearly Silent. All type cleaned in Ten Seconds without Soiling the Hands.

MECHANICS' TOOLS.
If you are interested in Tools as a manufacturer or amateur, you should have a copy of our new catalogue. Our 1892 edition is a very elaborate and complete book of 70 pages, handsomely bound in cloth.

THE STANDARD H.W. JOHNS ASBESTOS BOILER COVERINGS
PATENTED
77 MAIDEN LANE, NEW YORK.

SCIENTIFIC EXPERIMENTS.—Description of some simple and easily performed scientific experiments. Foucault's pendulum, exchange of water and wine, the bird in the cage, the five-pointed star, the sum of the angles of a triangle, surface of the sphere, with 8 illustrations. Contained in SCIENTIFIC AMERICAN SUPPLEMENT, No. 875. Price 10 cents. To be had at this office and from all newdealers.

IN ONE MINUTE IT WILL CONVINCED YOU OF OUR ABILITY TO SUPPLY TOILET PAPER FOR LESS MONEY THAN IT CAN BE OBTAINED ELSEWHERE. A.P. W. PAPER CO. ALBANY, N.Y.

Electric Motors FOR ALL POWER PURPOSES.
MILLS, FACTORIES, SHOPS, LOCOMOTIVE WORKS, ETC., OPERATED BY OUR ELECTRIC MOTORS.
Are Cleaner, Healthier, Give Greater Returns for Outlay, than those Operated by Other Methods. PROFIT—ECONOMY.
GENERAL ELECTRIC COMPANY, DISTRICT OFFICES:

Greenfield's Stationary Engines
3 to 5 H. P. Price \$120. Adapted for all purposes. Also Automatic and Variable Cut-Off Engines. Sizes from 3 to 75 horse power. 10 years on the market.
MANUFACTURED BY W. G. & G. GREENFIELD, EAST NEWARK, N. J.

FASTEST FINE GRINDER KNOWN
VERTICAL ROCK EMERY MILL.
STURTEVANT MILL CO. BOSTON, MASS.

The American Bell Telephone Company
125 MILK ST., BOSTON, MASS.
This Company owns the Letters Patent No. 186,787, granted to Alexander Graham Bell, January 30, 1877, the scope of which has been defined by the Supreme Court of the United States in the following terms:

HARTFORD STEAM BOILER INSPECTION AND INSURANCE CO.
At 1/2 Price
Gold and Silver Watches, Bicycles, Tricycles, Gigs and Picnics, Carts, Buggies, Wagons, Carriages, Saws, Blights, Harness, Cart Tops, Blinds, Sewing Machines, Accordions, Organs, Pianos, Under Mills, Cast Irons, Food Mills, Stoves, Kettles, Bone Mills, Letter Presses, Jack Screws, Trucks, Drills, Hay Cutters, Press Stands, Copy Books, Vices, Rods, Road Plows, Lawn Mowers, Coffin Mills, Lathes, Benches, Dump Carts, Corn Shellers, Hand Carts, Forges, Scrapers, Wire Fences, Washing Mills, Engines, Saws, Steel Sinks, Grain Dumps, Crow Bars, Ballers, Tools, Bit Braces, Hay, Stock, Elevator, Railroad, Platform and Counter SCALES.

AGENTS WANTED FOR FINE TOOLS IN EVERY SHOP.
C.H. BESLY & CO. CHICAGO, ILL. U.S.A.

CASH PAID for all kinds of good Second-hand Iron and Wood-Working Machinery. Address W. P. DAVIS, ROCHESTER, N. Y.
"The case of cycling is in the tire."
Columbia Bicycles are fitted with the COLUMBIA PNEUMATIC TIRE.
The Columbia catalogue is the most readable book of its class—beautifully illustrated—free at Columbia agencies—by mail for two 2-cent stamps.
Guaranteed against puncture. Fastest and most resilient. Built to last.
POPE MFG. CO., Boston, New York, Chicago, Hartford.

KEMP'S MANURE SPREADER
Spreads any and all kinds of yard and stable manure. Its chief merit is in the thorough pulverizing and even distribution, though it will discharge its load in one-tenth the time required by hand.
KEMP & BURPEE MFG. CO. SYRACUSE, N. Y., U.S.A.

CALDWELL IMPROVED CHARTER GAS ENGINES.
TAKES LESS FUEL THAN ANY OTHER ENGINE.
H.W. CALDWELL & SON, CHICAGO, ILL.

PRINTING INKS.
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