

Advertisements.

Inside Page, each insertion - - - 25 cents a line. Back Page each insertion - - - \$1.00 a line.

Advertisement for J. Means & Co. featuring a shoe and the text 'Will you please send us your address by postal card...'.

CONNECTION BETWEEN THE CRYSTAL FORM and the Atom Composition of Chemical Compounds.

ARTESIAN Wells, Oil and Gas Wells, drilled by contract to any depth, from 50 to 900 feet.

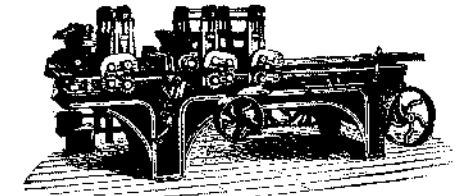
RAILWAY AND STEAM FITTERS' SUPPLIES Rue's Little Giant Injector.

LYON & HEALY State & Monitor Gun, Chicago. Catalogue of Ball Instruments, Uniforms and Equipments.

CARY & MOEN STEEL WIRE OF EVERY DESCRIPTION & STEEL SPRINGS.

THE BACKUS WATER MOTOR. SUPPLIES FROM HYDRANT PRESSURE the cheapest power known.

VOLNEY W. MASON & CO., FRICTION PULLEYS CLUTCHES and ELEVATORS PROVIDENCE, R. I.



WITH ERBY, RUGG & RICHARDSON, Manufacturers of Patent Wood Working Machinery of every description.

COPPER TUBES SHEET BRASS BRASS WIRE

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.

THE BRIDGEPORT WOOD FINISHING CO. G. M. BREINIG, AGENT, PRINCIPAL OFFICE MANUFACTURER NEW MILFORD, CONN.

PATENT JACKET KETTLES, Plain or Porcelain Lined. Tested to 100 lb. pressure.

ICE-HOUSE AND REFRIGERATOR. Directions and Dimensions for construction, with one illustration of cold house for preserving fruit from season to season.

TIGHT & SLACK BARREL MACHINERY A SPECIALTY JOHN GREENWOOD & CO. ROCHESTER N. Y.

AQUA PURA BY NATURE'S PROCESSES Turbid Water Made Clean. Matter in Suspension and ORGANIC and Semi-Soluble Elements removed.

A FAIR OFFER. If you will put a JENKINS BROS. VALVE on the worst place you can find, where you cannot keep other Valves tight...

ROCK BREAKERS AND ORE CRUSHERS. We manufacture and supply at short notice and lowest rates, Stone and Ore Crushers.

LEPAGE'S LIQUID GLUE THE ONLY GENUINE. UNEQUALLED for CEMENTING wood, glass, china, paper, leather, etc.

DROP FORGINGS FINISHED TOOLS BILLINGS & SPENCER CO. HARTFORD, CONN.

SPECIAL MACHINERY For Grinding and Polishing Manufactured by The Somersworth Machine Co., E. R. WARE, Ast., 154 Lake Street, CHICAGO.

H. W. JOHNS' PATENT ASBESTOS ROOFING FIRE-PROOF. THIS is the perfected form of portable Roofing, manufactured by us for the past twenty-seven years...

To Business Men. The value of the SCIENTIFIC AMERICAN as an advertising medium cannot be overestimated.

MUNN'S PORTABLE MILLS, AND MILL FURNISHINGS, MANUFACTURED BY MUNSON BROTHERS, UTEICA, N. Y., U. S. A.

THE AMERICAN BELL TELEPHONE CO. 95 MILK ST., BOSTON, MASS.

This Company owns the Letters Patent granted to Alexander Graham Bell, March 7th, 1876, No. 174,465, and January 30th, 1877, No. 186,787.

PULLEYS. Order from our "Special List." THE JOHN T. NOYE MFG. CO., BUFFALO, N. Y.

Columbia Bicycles and Tricycles. CATALOGUE SENT FREE. The POPE MFG. CO., 597 Washington St., Boston.

PROSPECTUS OF THE Scientific American FOR 1887. The Most Popular Scientific Paper in the World. Only \$3.00 a Year, including Postage.

This widely circulated and splendidly illustrated paper is published weekly. Every number contains sixteen pages of useful information and a large number of original engravings of new inventions and discoveries.

Terms of Subscription. One copy of the SCIENTIFIC AMERICAN will be sent for one year—52 numbers—postage prepaid, to any subscriber in the United States or Canada, on receipt of three dollars by the publishers.

THE Scientific American Supplement.

This is a separate and distinct publication from THE SCIENTIFIC AMERICAN, but is uniform therewith in size, every number containing sixteen large pages.

PRINTING INKS. THE "Scientific American" is printed with CHAS. T. ENBU JOHNSON & CO.'S INK.