

Practical Hints to Inventors.

MUNN & CO., Publishers of the SCIENTIFIC AMERICAN have devoted the past twenty-five years to the procuring of Letters Patent in this and foreign countries.

How Can I Obtain a Patent?

is the closing inquiry in nearly every letter, describing some invention which comes to this office. A positive answer can only be had by presenting a complete application for a patent to the Commissioner of Patents.

How Can I Best Secure My Invention?

This is an inquiry which one inventor naturally asks another, who has had some experience in obtaining patents. His answer generally is as follows, and correct:

Construct a neat model, not over a foot in any dimension—smaller if possible—and send by express, prepaid, addressed to MUNN & Co., 37 Park Row, New York, together with a description of its operation and merits.

Preliminary Examination.

In order to have such search, make out a written description of the invention, in your own words, and a pencil, or pen and ink, sketch. Send these, with the fee of \$5, by mail, addressed to MUNN & Co., 37 Park Row, and in due time you will receive an acknowledgment thereof, followed by a written report in regard to the patentability of your improvement.

To Make an Application for a Patent.

The applicant for a patent should furnish a model of his invention if susceptible of one, although sometimes it may be dispensed with; or, if the invention be a chemical production, he must furnish samples of the ingredients of which his composition consists.

Caveats.

Persons desiring to file a caveat can have the papers prepared in the shortest time, by sending a sketch and description of the invention. The Government fee for a caveat is \$10. A pamphlet of advice regarding applications for patents and caveats is furnished gratis, on application by mail. Address MUNN & Co., 37 Park Row, New York.

Reissues.

A reissue is granted to the original patentee, his heirs, or the assignees of the entire interest, when, by reason of an insufficient or defective specification, the original patent is invalid, provided the error has arisen from inadvertence, accident, or mistake without any fraudulent or deceptive intention.

requirements of the law, as in original applications. Address MUNN & Co., 37 Park Row, for full particulars.

Rejected Cases.

Rejected cases, or defective papers, remodeled for parties who have made applications for themselves, or through other agents. Terms moderate. Address MUNN & Co., stating particulars.

Trademarks.

Any person or firm domiciled in the United States, or any firm or corporation residing in any foreign country where similar privileges are extended to citizens of the United States, may register their designs and obtain protection.

Design Patents.

Foreign designers and manufacturers, who send goods to this country, may secure patents here upon their new patterns, and thus prevent others from fabricating or selling the same goods in this market.

A patent for a design may be granted to any person, whether citizen or alien, for any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief; any new and original design for the printing of woolen, silk, cotton, or other fabrics; any new and original impression, ornament, pattern, print, or picture, to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture.

Design patents are equally as important to citizens as to foreigners. For full particulars send for pamphlet to MUNN & Co., 37 Park Row, New York.

European Patents.

MUNN & Co. have solicited a larger number of European Patents than any other agency. They have agents located at London, Paris, Brussels, Berlin, and other chief cities. A pamphlet, pertaining to foreign patents and the cost of procuring patents in all countries, sent free.

MUNN & Co. will be happy to see inventors in person, at their office, or to advise them by letter. In all cases, they may expect an honest opinion. For such consultations opinions and advice, no charge is made. Write plain, do not use pencil, nor pale ink; be brief.

All business committed to our care, and all consultations, are kept secret and strictly confidential.

In all matters pertaining to our care, such as conducting interferences, procuring extensions, drawing assignments, examinations into the validity of patents, etc., special care and attention is given. For information, and for pamphlets of instruction and advice,

Address

MUNN & CO.,

PUBLISHERS SCIENTIFIC AMERICAN,

37 Park Row, New York.

OFFICE IN WASHINGTON—Corner F and 7th streets, opposite Patent Office.

NEW PATENT LAW IN CANADA.

By the terms of the new patent law of Canada (taking effect September 1st, 1872) patents are to be granted in Canada to American citizens on the most favorable terms.

The patent may be taken out either for five years (government fee \$30), or for ten years (government fee \$40) or for fifteen years (government fee \$60). The five and ten year patents may be extended to the term of fifteen years. The formalities for extension are simple and not expensive.

In order to apply for a patent in Canada, the applicant must furnish a model, specification and duplicate drawings, substantially the same as in applying for an American patent.

American inventions, even if already patented in this country, can be patented in Canada provided the American patent is not more than one year old.

All persons who desire to take out patents in Canada are requested to communicate with Munn & Co., 37 Park Row, N. Y., who will give prompt attention to the business and furnish pamphlets of instruction free.

Messrs. Munn & Co., have had twenty-five years experience in the business of obtaining American and Foreign Patents for inventors; they have special agencies in nearly all countries where patents are granted. Moderate charges and prompt attention may always be expected.

MUNN & CO. 37 Park Row, N. Y.

FOREIGN PATENTS—A HINT TO PATENTEES.

It is generally much better to apply for foreign patents simultaneously with the application in the United States. If this cannot be conveniently done, as little time as possible should be lost after the patent is issued, as the laws in some foreign countries allow patents to any who first make the application, and in this way many inventors are deprived of valid patents for their own inventions.

Address

MUNN & CO.

37 Park Row, N. Y.

Circulars, with full information on foreign patents, furnished free. The new patent law in Canada permits Americans to take patents there on favorable terms.

Value of Extended Patents.

Did patentees realize the fact that their inventions are likely to be more productive of profit during the seven years of extension than the first full term for which their patents were granted, we think more would avail themselves of the extension privilege. Patents granted prior to 1861 may be extended for seven years, for the benefit of the inventor, or of his heirs in case of the decease of the former, by one application to the Patent Office, ninety days before the termination of the patent.

MUNN & CO. 37 Park Row, N. Y.

Inventions Patented in England by Americans.

[Compiled from the Commissioners of Patents' Journal.]

From August 24 to August 29, 1872, inclusive.

- BLAST REGULATOR.—C. B. Knowles, J. E. Saunders, Nashville, Tenn. FIRE ARM.—J. J. Byers, Delta, N. Y. MACHINE FOR CUTTING TEXTILE MATERIALS.—A. Warth, Stapleton, N. Y. W. F. Tobbin, New York city. MACHINE FOR MAKING SCREW TAPS.—A. and A. E. Goddard, Essex, Conn. OXYDIZING METALS.—T. S. Harrison (of Philadelphia, Pa.), London, Eng. PAINT FOR SHIPS' BOTTOMS.—J. H. Bloodgood, New York city. PERAMBULATOR.—J. B. Wightman, Brooklyn, N. Y. PLUGS FOR BOILER TUBES.—R. A. Copeland, New York city. PRINTING MACHINERY.—R. M. Hoe, New York city. SEWING MACHINE.—I. W. Hoyer, Philadelphia, Pa. SEWING MACHINE.—T. S. Harrison (of Philadelphia, Pa.), London, England. STREAM AND WATER GAGE.—C. H. Hall, New York city. TYPE SETTING MACHINE.—S. D. Sperry, Hartford, Conn. VESSELS FOR ACIDS.—C. Morfit (of Baltimore, Md.), London, England. WASHING MACHINES, ETC.—W. Rickard, Monitor, Cal.

NEW BOOKS AND PUBLICATIONS.

THE FLOWER GARDEN.

A new magazine, handsomely printed, devoted to floral matters, has just been commenced by C. L. Allen & Co., 76 Fulton Street, Brooklyn, N. Y. Price \$1 a year. The first number is before us, and contains a great amount of information on flowers, floral gardening, and the habits and treatment of plants, which we have not before seen.

Advertisements.

RATES OF ADVERTISING.

Back Page - - - - - \$1.00 a line, Inside Page - - - - - 75 cents a line or each insertion.

Engravings may head advertisements at the same rate per line, by measurement, as the letter-press.

To Investors.

To those who have funds to invest in large or small amounts, or who wish to increase their income from means already invested in other less profitable securities, we recommend, after full investigation, the Seventy-Three Gold Bonds of the Northern Pacific Railroad Company.

Nearly one-third of the Main Line of the Road will be completed and in operation with a large business the present season. All the property and rights of the Company, including a most valuable Land Grant, averaging about 23,000 acres per mile of road, are pledged as security for the first mortgage bonds now offered.

All marketable stocks and bonds are received in exchange at current prices. Descriptive pamphlets and maps, showing Route of road, Connections, Tributary Country, &c., will be furnished on application.

JAY COOKE & CO.,

NEW YORK, PHILADELPHIA AND WASHINGTON,

Financial Agents N. P. R. R.

TOOL CHESTS WITH BEST TOOLS ONLY FOR CIRCULAR ADDRESS J. PRATT & CO. 53 FULTON ST. N.Y.

BLIND SLAT PLANERS, best in use. Circulars free. C. P. S. WARDWELL, Lake Village, N. H.

FOR SALE—Reynold's New Steam Sash, Blind, and Door Factory in Port Deposit. Machinery new and in complete running order. Apply to or address I. E. REYNOLDS, Port Deposit, Maryland.

To Dyers and Textile Manufacturers.

NOW OUT, THE MANUFACTURER'S REVIEW AND INDUSTRIAL RECORD. VOL. 5, NO. 1.

With Supplement, containing Designs, Color Samples, and Dyeing Receipts. Price per copy, 50 cts. INDUSTRIAL REVIEW CO., PUBLISHERS, 18 Exchange Place, New York.

SELF PRIMING

"CINCINNATI STAR PUMP" For Driven Wells. JOHN H. MCGOWAN & CO., Cin., O.

NEW BOILER FOR SALE, Tubular, 48 in. diameter, built by Pitkin Brothers, Hartford, Conn. Has never been set up. Apply to OSBORNE & CHEESMAN CO., Ansonia, Conn.

WOODWORTH SURFACE PLANERS, \$125. Planers and Matchers, \$350. S. C. HILLS, 22 Courtlandt Street, New York.

FOR CASE-HARDENING. Hydro-Carbonated Bone Black, containing three times the Carburizing Power of the substances ordinarily used, producing uniformly a hard tough case to the depth of a half inch, if desired. Samples and circulars sent by mail. E. F. HOUGHTON & CO., 140 S. Front St., Philadelphia, Pa.

PATENTS. only mode of disposing of. See Patent Right Gazette. Address Capt. HENRY GERNER, Pres. U. S. Patent Right Association, 94 Chambers St., P. O. Box 4514, New York.

AGENTS.—Headquarters for Agents' Supplies. The largest Manuf'ry of Agents' Goods in the U. S. We make 100 different fast-selling articles—largest commission ever offered: just the goods for State and country fairs. Send stamp for Circular. WESTERN NOVELTY MANUFACTG CO., Cleveland, Ohio.

AN ACCEPTABLE PARTY IS WANTED to invest \$300,000 to \$300,000 to manufacture a novel and unequalled breech-loading army and sporting gun. Its claims will be urged before the Army Board. SPENCER HATT, Belmont Works, New York City.

WOOD AND IRON Working Machinery. Gage Lathes, Cabinet Makers' Machinery, Shaping Machines, Band Saws, Shingle and Stave Machinery, Band Saws, Cable and Sheaves for transmitting power, Engine Lathes, Upright Drills, Key Seat Machines, etc. Illus. Catl. free. T. R. BAILEY & VAIL, Lockport, N. Y.

FOR SALE—A 24 in. Woodworth Planer and Matcher, 4 Side; one 3 Side; also Moulding, Mortising, Sticking, Tenoning, Resawing, Variety, Elliptic, Swing Saw, Band and Scroll Saws, French Band Saw Blade, Helting, &c. (nearly new). G. HARVEY & CO., 23 Ferry St., New York City.

HAVING FACILITIES, would like the manufacture of some staple articles. Address W. M. W., South Athol, Mass.

Highest Premium awarded by American Inst. Fair, 1871.

72 lbs Metal in the 100 lbs. 12 lbs. Metal in the 100 lbs. 300 lbs. Metal in the 100 lbs. TRADE MARK.

An Indestructible Coating for Iron, Tin and Wood.

PRINCE'S METALLIC PAINT

is acknowledged, wherever known, to be the BEST & CHEAPEST PAINT in the market.

N. Y. CENTRAL & HUDSON RIVER R.R. CO. SUPPLY DEPARTMENT, Albany, N. Y., Oct. 25, 1871. "Messrs. Prince & Bass, 96 Cedar St., N. Y.—Gents: Our Company have used your Metallic Paint for several years. For freight cars, car roofs and buildings, it has given us entire satisfaction. Yours, &c. H. M. ST. JOHN, Supply Agent."

Office of J. B. & J. M. CORNELL, PLAIN & ORNAMENTAL IRON WORKS, New York, Nov. 10, 1871. "Messrs. Prince & Bass—Gentlemen: We have used the Prince's Metallic Paint for several years, and believe it to be the best metallic paint for iron work now in use. Yours, &c. J. B. & J. M. CORNELL, Iron Works and Foundry, 135 & 143 Centre St., N. Y."

For Sale, Dry and in Oil, by the Trade and by PRINCE & BASS, MANUFACTURERS, 96 CEDAR STREET, New York.

All packages are marked with name and trademark.

MODELS FOR THE PATENT OFFICE and experimental machinery of all kinds. HOLSKER MACHINE CO., 219 Cherry St., New York, near Jefferson St. A special shop for Patent Models. Many years experience. Refer to Scientific American Office.

CINCINNATI BRASS WORKS.—Engineers and Steam Fitters' Brass Works, Best Quality at lowest Prices. F. LUNKENHEIMER, Prop'r.

U.S. PATENT IMPROVED VARIETY MOLDING MACHINERY And Adjustable CIRCULAR SAW BENCHES. For Machines and Information, address J. P. GROSVENOR, Lowell, Mass.

F. K. PHOENIX, Bloomington Nursery, Ill.; 600 acres; 21st year; 12 Green-Houses, Trees, Bulbs, Hedge Plants, Nursery Stock; 4 Catalogues, 20 cts.

ORIGINAL PATENT AGENCY—Estab. 1859. Patents Sold. Send for our Circular and List. E. H. GIBBS & CO., 11 Wall Street, New York.

\$425 Upright Engines and Tubular Boilers, 4 H.P., with all trimmings. Send for circulars. VARIETY IRON WORKS CO., Cleveland, Ohio

CIVIL ENGINEERING SCHOOL OF UNION COLLEGE, Schenectady, N. Y. Thorough course of instruction and field practice. Unrivalled collection of apparatus. Graduates usually obtain situation. Tuition, \$30 per term. Assistant rendered deserving students. For special information, address Prof. C. STALEY. For information concerning the college course, Classical, Scientific and Eclectic, address E. N. POTTER, President.

PUNCHING PRESSES. For the Best and Cheapest, Address THE STILES & PARKER PRESS CO., MIDDLETOWN, CONN.

PLATINUM H. M. RAYNOR, For all Laboratory and Manufacturing purposes.

HAND SAW MILL.—Do work of 3 men. Rip 3 inch lumber with ease. Thousands in use. Agents wanted everywhere. WM. H. HOAG, 32 Courtlandt Street New York.

PORTABLE STEAM ENGINES, COMBINING the maximum of efficiency, durability and economy, with the minimum of weight and price. They are widely and favorably known, more than 900 being in use. All warranted satisfactory or no sale. Descriptive circulars sent on application. Address J. C. HADLEY & CO., Lawrence, Mass. 93 Liberty St. New York.