



PATENTS

The First Inquiry that presents itself to one who has made any improvement or discovery is: "Can I obtain a Patent?" A positive answer can only be had by presenting a complete application for a Patent to the Commissioner of Patents.

Messrs. MUNN & CO., in connection with the publication of the Scientific American, have been actively engaged in the business of obtaining patents for over twenty years—nearly a quarter of a century.

Those who have made inventions and desire to consult with us, are cordially invited to do so. We shall be happy to see them in person, at our office, or to advise them by letter.

Preliminary Examination.—In order to obtain a Preliminary Examination, make out a written description of the invention in your own words, and a rough pencil or pen-and-ink sketch.

In Order to Apply for a Patent, the law requires that a model shall be furnished, not over a foot in any dimension, smaller, if possible.

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.

Interferences.—When each of two or more persons claims to be the first inventor of the same thing, an "interference" is declared between them, and a trial is had before the Commissioner.

Foreign Patents.—American inventors should bear in mind that, as a general rule, any invention that is valuable to the patentee in this country is worth equally as much in England and some other foreign countries.

Patents are Granted for Seventeen Years, the following being a schedule of fees:— On filing each caveat.....\$10

On filing each application for a Patent, except for a design.....\$15

On issuing each original Patent.....\$20

On appeal to Commissioner of Patents.....\$30

On application for Reissue.....\$30

On application for Extension of Patent.....\$50

On granting the Extension.....\$50

On filing a Disclaimer.....\$10

On filing application for Design (three and a half years).....\$10

On filing application for Design (seven years).....\$15

On filing application for Design (fourteen years).....\$30

In addition to which there are some small revenue stamp taxes. Residents of Canada and Nova Scotia pay \$50 on application

Advertisements.

A limited number of advertisements will be admitted on this page at the rate of \$1 per line. Engravings may head advertisements at the same rate per line, by measurement, as the letter press.

PATTERN LETTERS to put on Patterns for Castings, etc. KNIGHT BROS., Seneca Falls, N. Y.

E. H. PHELPS,

85 Liberty st., New York,

MILLWRIGHT AND HYDRAULIC ENGINEER, furnishes information and advice to those desiring any kind of Water Wheels or Millwork. In close stamp for circular. Refers, by permission, to Woodruff & Beach, Hartford; W. C. Hicks, 55 Liberty st., N. Y.; Wm. Wright, 57 Liberty st., N. Y.; Martin Luther, Hartford, Conn.

WANTED—The sale of one or more articles of general consumption by a first-class house which has peculiar facilities for introducing and selling same. Manufacturers of staple goods will find this an excellent opportunity to establish a depot in this city. Address B. C., Box 5722, Post-office, New York.

Band Saws.

FRENCH BAND SAW MACHINES and SAWS— For Sawing Logs and Resin. Also, for Light and Heavy work. G. GEFUHAL, 39 West Fourth st., New York.

CHAMPLIN'S "HOLDFAST SPIKE," Patented Feb. 18, 1868. Proposals for manufacturing the above, on royalty, will be received by the Patentee, J. H. CHAMPLIN, Essex, Conn.

TRIANGULAR STEEL RULES FOR Machinists' use, divided on three edges, to 18, 24, 30, 36, 42, 48, 54, or 60 parts to the inch. Sent per mail on receipt of price. 3-inch, 60 cents; 4-inch, 80 cents; 6-inch, \$1.20. DARLING, BROWN & SHARPE, Providence, R. I.

METTAM'S Galvano Electro Metallic Insoles, Cure Rheumatism, Neuralgia, and Nervous Diseases. Send for circular. LORIN BROOKS & SONS, Agents, 434 Broadway, New York.

DRAWING INSTRUMENTS.—A Manual of 112 pages describing all Mathematical Instruments and Drawing Materials, their use, and how to keep in order. Sent free on application by JAS. W. QUEEN & CO., Mathem' Inst' makers, 924 Chestnut st., Philadelphia.

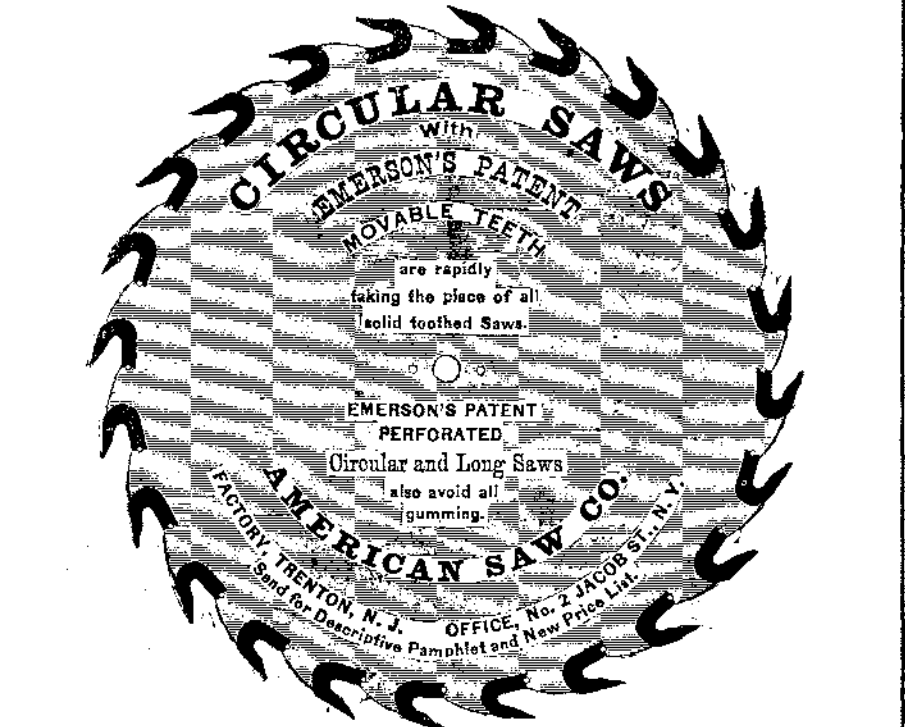
VALUABLE PATENT FOR SALE.—"Champlin's Safety Brake," warranted to stop a train with less expenditure of power, and in shorter time, than any other brake in use. Address J. H. CHAMPLIN, Essex, Conn.

Wanted. AGENTS TO SELL BY SAMPLE A Combined SQUARE, PLUMB, AND LEVEL.

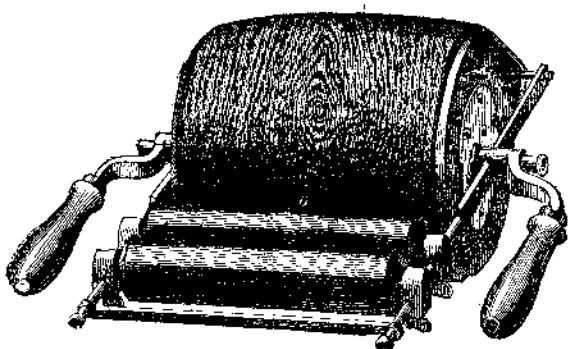
Something new and very saleable. Needed by everybody. Great inducements offered. For terms, address 11 108 21st W. S. BATCHELDER & CO., Pittsburgh, Pa.

DRAWING INSTRUMENTS OF EVERY DESCRIPTION— Swiss, German Silver, and Brass Surveying Instruments, Transits, Levels, and Surveyors' Compasses, Surveying Chains, Tripods, Leveling Rods, etc., etc. Winsor's and Newton's, and Osborne's Water Colors, Drawing Paper, Faber's Pencils, Standard Rules, etc., etc. A Price and Illustrated Catalogue sent free on application. WILLIAM Y. McALLISTER, Optician, 728 Chestnut street, Philadelphia Pa.

S. BENSON— Manufacturer of Cast Iron Pipes and Fittings for Gas and Water Mains, all sizes, from 2 to 30 inches, cast vertically in 12 1/2 feet lengths. Office and Factory 53 East Monument st., Baltimore, Md.



Special Merit for Novelty, Utility and Economy.



1st PREMIUM MEDAL AWARDED. WM. H. MURPHY, THEO. L. DE VINNE, JNO. W. CHAMBERS. Judges. Sec. Am. Institute. The attention of Painters, Manufacturers of Woodenware, Cottage Furniture, Coffins, Refrigerators, Sleighs, Agricultural Implements, Chairs, etc., etc., is invited to

AIR CYLINDER GRAINING MACHINE.

This machine Grains in Oil Colors, perfect imitations of Walnut, Rosewood, Chestnut, and Oak, in all their varieties. The impressions are as sharp and true as those of the photograph. The advantages of this machine are:—

1st. It performs many times as much labor as can be done by hand. 2d. No hand work, however painstakingly and slowly done, can equal it. 3d. It does not require a highly skilled workman. 4th. It is adapted to all kinds of work, and can be applied to any surface, flat or curved. 5th. The machine is substantially made of vulcanized rubber, with brass side-plates, so simple and durable that it will last for years without getting out of order. 6th. By an improvement made last year, the figure can be carried close to the ends of the panel. 7th. The pattern plates are now reinforced by a patent backing, which prevents their breaking.

This machine has taken the First Premium at the American Institute Fair, this year. See Report of Committee. Also, see Scientific American, August 3, 1867. Samples of the work done on exhibition at the office. For circulars and further particulars address, 9 608 eow HEATH, SMITH & CO., 44 Murray street, New York.

Industrial Works. MACHINISTS' TOOLS AND EQUIP- ments for Railroad, Iron Ship Building, and Gun Shops.

STEAM HAMMERS, TERN TABLES, Shafting, Bolt Cutters, Cotter and Key-Seating Machines, Cranes, Cupolas, etc. 9 130e J. BEMENT & DOUGHERTY, Philadelphia, Pa.

Agents Wanted. WE want first-class Agents to introduce our NEW STAR SHUTTLE SEWING MACHINES. Extraordinary inducements to good salesmen. Further particulars and sample work furnished on application to W. G. WILSON & CO., Cleveland, Ohio; Boston, Mass.; or St. Louis, Mo.

SPIRAL PEN RACKS and the PATENT for Sale. JAS. ADAIR, Pittsburgh, Pa. 11 081*

Patent Cutters FOR THE TEETH OF GEAR WHEELS, Which can be sharpened by grinding without changing their form. Send for a price list. J. R. BROWN & SHARPE, 9 30s eow Providence, R. I.

IRON & WOOD WORKING MACHINERY TURBINE WATER-WHEELS. LUCIUS W. POND, 85 LIBERTY ST. N. Y. and Worcester, Mass. 08 11

POWER LOOMS. Improved Drop Box Spooling, Winding, Beaming Dyeing, and Sizing Machines, Self-Acting Wool Scouring Machines, Hydra Extractors. Also, Shafting, Pulleys, and Self-Opening Adjustable Hangers, manufactured by THOS WOOD, 2106 Wood st., Phil'a, Pa.

Reynolds' TURBINE WATER WHEELS, And all kinds of MILL MACHINERY. Send for Illustrated Pamphlet. GEORGE TALCOT, 9 081f 96 Liberty st., New York.

BODINE'S JONVAL TURBINE WATER Wheel, combining great economy in the use of water, simplicity, durability, and general adaptation to all positions in which water can be used as a motive power.

We are prepared to furnish & warrant the same to give more power than any over-shot or other turbine wheel made using the same amount of water. These wheels have been tested with all the wheels of note in the country, and have never failed to prove their superiority. We therefore propose to put them in for any responsible party, warranting them to work up to our representations falling in which we will take them out at our own expense. The attention of millwrights is invited to this wheel. Agents wanted in every county in the United States and Canada. Send for descriptive circular. J. H. BODINE & CO. Manufacturers, Mount Morris, New York, and Westfield, Mass. 9 081f eow

TWIST DRILLS 1-32 to 1-4 inch. AMERICAN TWIST DRILL CO., Woonsocket, R. I. 7 eow 081f

THE HARRISON BOILER HAS ABSOLUTE SAFETY! HAS GREAT ECONOMY IN FUEL! HAS DURABILITY AND FACILITY OF REPAIR.

Hundreds of these boilers have now been in use for years, giving perfect satisfaction. For descriptive circular and price apply to J. B. HYDE, Agent, Office No. 9, at 119 Broadway, New York, or to THE HARRISON BOILER WORKS, 9 131* Gray's Ferry Road, Philadelphia, Pa.

STEAM ENGINES

FROM 4 TO 200 HORSE-POWER—Including LOOMIS' PATENT CUT-OFF ENGINES, SLIDE VALVE STATIONARY ENGINES, and PORTABLE ENGINES. Also, IMPROVED CIRCULAR SAW MILLS, GRAIN MILLS, etc. Send for Descriptive Circular and Price List. WOOD & MANN STEAM ENGINE CO., Utica, N. Y. Warerooms, 96 Maiden Lane, New York. 10 081t and 201 and 203 South Water st., Chicago, Ill.

CLOCKS.—In buying a Clock, get one which has for its motive power Barnes' Patent Level Tempered Clock Springs, particularly if you desire one to keep time for a long term of years. Many of our best makers are already using them. They cost no more than those formerly made. They expand with a direct centrifugal force, and are free from that lateral motion which is peculiar to the ordinary springs (in consequence of being tempered while war ad and sprung by hardening), thereby causing great friction on both sides by contact with the clock movement, and in many instances wasting much of the power of the spring, besides interfering with the motion of the wheels, and thus wearing out the clock. It will be seen by any mechanic that one source of annoyance to those repairing Clocks is removed, and for which there is no longer any excuse. Also, that a correct Time Keeper may be had without the use of weights.

WANTED—A 2d-hand small iron hand planer. L. F. STANDISH, Springfield, Mass.

BRASS, Tin, and Iron Small Wares of all descriptions made to order. Dies and die work for all kinds metal goods. J. H. WHITE, Newark, N. J. 1*08

I AM WILLING TO SELL ENTIRE OR State Rights for the sale and manufacture of my improved Window Shade Fixture, patented through the Agency of Munn & Co., and illustrated in the Scientific American of June 29, 1867. Agents wanted every where to dispose of Rights and canvas for orders. For particulars apply to the patentee, 11 4 0e WM. BROWN, Arlington, Mass.

\$40,000,000 in FORTY YEARS. A Capital Sketch of the Richest Merchant in the World. (A. T. STEWART) will appear in the March number of HANEY'S JOURNAL, January and February numbers now ready. Only 25 Cents per Year. Address HANEY & CO., No. 119 Nassau street, New York. 10 3*08

MARBLEIZED SLATE MANTLES AND Slab Slate for all building purposes. HUDSON RIVER SLATE CO., 25 Park Row, N. Y. 10 4*08

FREE. Our New Catalogue of Improved STENCIL DIES. More than \$200 A MONTH is being made with them S. M. SPENCER & CO., Brattleboro, Vt. 6081f

IRON PLANERS, ENGINE WATERS, Drills, and other Machinists' Tools of superior Quality, on hand and finishing. For Sale on Commission and Price, address NEW HAVEN MANUFACTURING CO., New Haven, Ct. 2 081t

1868. THE BEST PAPER IN THE WORLD. Published for Nearly A QUARTER OF A CENTURY.

This Splendid Newspaper, greatly enlarged and improved, is one of the most reliable, useful, and interesting Journals ever published. Every number is beautifully printed and elegantly illustrated with several Original Engravings, representing New Inventions, Novelties in Mechanics, Agriculture, Chemistry, Photography, Manufactures, Engineering, Science and Art.

Farmers, Mechanics, Inventors, Engineers, Chemists, Manufacturers, people in every profession of life, will find the SCIENTIFIC AMERICAN to be of great value in their respective callings. Its counsels and suggestions will save them Hundreds of Dollars annually, besides affording them a continual source of knowledge, the value of which is beyond pecuniary estimate. All patents granted, with the claims, published weekly. Every Public or Private Library should have the work bound and preserved for reference.

The yearly numbers of the SCIENTIFIC AMERICAN make a splendid volume of nearly one thousand quarto pages, equivalent to nearly four thousand ordinary book pages. A New Volume commences January 1, 1868. Published Weekly. Terms: One Year, \$3; Half-Year, \$1 50; Clubs of Ten Copies for One Year, \$25; Specimen Copies sent gratis. Address MUNN & CO., 37 Park Row, New York.

The Publishers of the Scientific American, in connection with the publication of the paper, have acted as Solicitors of Patents for twenty-two years. Thirty Thousand Applications for Patents have been made through their Agency. More than One Hundred Thousand Inventors have sought the counsel of the Proprietors of the SCIENTIFIC AMERICAN concerning their inventions. Consultations and advice to inventors, by mail, free. Pamphlets concerning Patent Laws of all Countries, free.

A Handsome Bound Volume, containing 150 Mechanical Engravings, and the United States Census by Counties, with Hints and Receipts for Mechanics, mailed on receipt of 25c.