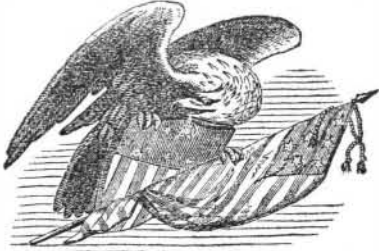


THE RISE AND PROGRESS OF INVENTIONS



During the period of Fourteen Years which has elapsed since the business of procuring patents for inventors was commenced by MUNN & Co., in connection with the publication of this paper, the number of applications for patents in this country and abroad has yearly increased until the number of patents issued at the United States Patent Office last year (1859) amounted to 4,538; while the number granted in the year 1845—fourteen years ago—numbered 502—only about one-third as many as were granted to our own clients last year; there being patented, through the Scientific American Patent Agency, 1,440 during the year 1859. The increasing activity among inventors has largely augmented the number of agencies for transacting such business.

In this profession, the publishers of this paper have become identified with the universal brotherhood of Inventors and Patentees at home and abroad, at the North and the South; and with the increased activity of these men of genius we have kept pace up to this time, when we find ourselves transacting a larger business in this profession than any other firm in the world.

We may safely assert that no concern has the combined talent and facilities that we possess for preparing carefully and correctly applications for patents, and attending to all business pertaining thereto.

FREE EXAMINATION OF INVENTIONS.

Persons having conceived an idea which they think may be patentable are advised to make a sketch or model of their invention, and submit to us, with a full description, for advice. The points of novelty are carefully examined, and a reply written corresponding with the facts, free of charge. Address MUNN & CO., No. 37 Park-row, New York.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

The advice we render gratuitously upon examining an invention does not extend to a search at the Patent Office, to see if a like invention has been presented there, but is an opinion based upon what knowledge we may acquire of a similar invention from our long experience, and the records in our Home Office. But for a fee of \$5, accompanied with a model or drawing and description, we have a special search made at the United States Patent Office, and a report setting forth the prospects of obtaining a patent, &c., made up and mailed to the inventor, with a pamphlet, giving instructions for further proceedings. These preliminary examinations are made through our Branch Office, corner of F and Seventh streets, Washington, by experienced and competent persons. Over 1,500 of these examinations were made last year through this office, and as a measure of prudence and economy, we usually advise inventors to have a preliminary examination made. Address MUNN & CO., No. 37 Park-row, New York.

CAVEATS.

Persons desiring to file a caveat can have the papers prepared on reasonable terms, by sending a sketch and description of the invention. The government fee for a caveat is \$20. A pamphlet of advice regarding applications for patents and caveats furnished gratis on application by mail. Address MUNN & CO., No. 37 Park-row, New York.

HOW TO MAKE AN APPLICATION FOR A PATENT.

Every applicant for a patent must furnish a model of his invention, if susceptible of one; or if the invention is a chemical production, he must furnish samples of the ingredients of which his composition is composed for the Patent Office. These should be securely packed, the inventor's name marked on them, and sent, with the government fee, by express. The express charges should be prepaid. Small models, from a distance, can often be sent cheaper by mail. The safest way to remit money is by draft on New York, payable to Munn & Co. Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents; but if not convenient to do so, there is but little risk in sending bank bills by mail, having the letter registered by the postmaster. Address MUNN & CO., No. 37 Park-row, New York.

REJECTED APPLICATIONS.

We are prepared to undertake the investigation and prosecution of rejected cases, on reasonable terms. The close proximity of our Washington Agency to the Patent Office affords us rare opportunities for the examination and comparison of references, models, drawings, documents, &c. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left dependent upon the final result.

All persons having rejected cases which they desire to have prosecuted are invited to correspond with us on the subject, giving a brief history of their case, enclosing the official letters, &c.

FOREIGN PATENTS.

We are very extensively engaged in the preparation and securing of patents in the various European countries. For the transaction of this business we have offices at Nos. 66 Chancery Lane, London; 29 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. We think we can safely say that three-fourths of all the European patents secured to American citizens are procured through our Agency.

Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors. Any one can take out a patent there.

Circulars of information concerning the proper course to be pursued in obtaining patents in foreign countries through our Agency the requirements of the different Patent Offices, &c., may be had gratis upon application at our principal office, No. 37 Park-row, New York, or either of our branch offices.

CAUTION TO INVENTORS.

Messrs. MUNN & CO. wish it to be distinctly understood that they neither buy nor sell patents. They regard it as inconsistent with a

proper management of the interests and claims of inventors, to participate in the least apparent speculation in the rights of patentees. They would also advise patentees to be extremely cautious into whose hands they entrust the power to dispose of their inventions. Nearly fifteen years' observation has convinced us that the selling of patents cannot be conducted by the same parties who solicit them for others, without causing distrust.

BUSINESS CONDUCTED CONFIDENTIALLY.

We would inform inventors that their communications are treated with the utmost confidence, and that the secrets of inventors confided to us are never divulged, without an order from the inventor or his acknowledged representative.

TESTIMONIALS.

The annexed letters, from the last three Commissioners of Patents, we commend to the perusal of all persons interested in obtaining Patents:—

Messrs. MUNN & Co.:—It takes pleasure in stating that while I held the office of Commissioner of Patents, MORRISIAN ONE-FOURTH OF ALL THE BUSINESS OF THE OFFICE CAME THROUGH YOUR HANDS. I have no doubt that the public confidence thus indicated has been fully deserved as I have always observed, in all your intercourse with the Office, a marked degree of promptness, skill and fidelity to the interests of your employers. Yours, very truly,

CHAS. MASON.

Immediately after the appointment of Mr. Holt to the office of Postmaster-General of the United States, he addressed to us the following very gratifying testimonial:—

Messrs. MUNN & Co.:—It affords me much pleasure to bear testimony to the able and efficient manner in which you have discharged your duties of Solicitors of Patents while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and, I doubt not, justly deserved) the reputation of energy, marked ability and uncompromising fidelity in performing your professional engagements. Very respectfully,

Your obedient servant, J. HOLT.

Messrs. MUNN & Co.:—Gentlemen: It gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of inventors before the Patent Office was transacted through your agency, and that I have ever found you faithful and devoted to the interests of your clients, as well as eminently qualified to perform the duties of Patent Attorneys with skill and accuracy. Very respectfully,

Your obedient servant, WM. D. BISHOP.



CORRESPONDENTS sending communications for publication in our columns are requested to avoid writing on both sides of a sheet of paper. This fault, though common to persons unaccustomed to writing for the press, gives great trouble to the printer (especially in long articles), and, when combined with illegibility of handwriting, often causes interesting contributions to be regretfully consigned to our waste-paper basket.

G. B., of Ga.—We think Tusch's soaping brush is a good household article. It can be used anywhere. It was patented May 23, 1860.

H. G., of N. Y.—Letters Patent are granted for 14 years. Minors can take patents, but the benefits of it must revert to the parents. In making assignment of a patent granted to a minor, it is necessary that the father should also sign the document.

D. R., of Ill.—The product made on a patented machine is not protected by the Letters Patent. If you buy a patented machine for making brick, you are confined to the manufacture in your own territory, but you can sell the brick where you please.

L. C. S. & Co. and A. R. B., of Conn.—We have inquired for tungsten steel but cannot find that any has yet been imported to this city.

J. G. W. L., of La.—We cannot tell how long the oil wells of Pennsylvania will continue to yield, but recent reports from the principal oil districts represent the supply as gradually diminishing in all the wells, thus involving the necessity of sinking new ones to keep up the supply. We are informed that there is a tract of country in Pennsylvania, about 200 miles long by 30 wide, in which oil can be obtained anywhere by sinking wells.

E. W. E., of Ala.—You can stain black walnut or pine in imitation of rosewood, by mixing some carmine with lac varnish, for the red streaks, and using a little copperas and logwood in solution, to make the black streaks. You can make a cheap red stain for wood with a strong solution of red Brazil wood mixed with lac varnish.

A. W. & S., of Tenn.—We know of no way to prevent your millstones from heating but to reduce the speed. In some of the back numbers of our paper you will find many valuable suggestions on the subject by practical millers.

S. C., of N. Y.—A head of water 60 feet high would drive an engine similar to a steam engine. It is by this plan that the water is raised at the Washington Water Works.

R. O. D., of D. C.—Ericsson's air engine is altogether too heavy in proportion to its power to drive a flying machine; a yoke of oxen would be about as suitable.

K. N., of Wis.—No soap possesses the astonishing properties of removing oil, pitch and tar directly from cloth. Any good soap, however, will remove oil, but when tar and pitch get upon cloth these substances must first be softened with a little warm butter, after which the soap should be applied for their removal. Benzole and refined turpentine, mixed with alcohol, are the best substances which can be employed for removing paint from cloth. Considerable railroad iron is still imported from England, but it is not equal to the best American. In a few years hence, we think American iron will be manufactured as cheaply as the English.

C. L. R., of N. Y.—There is a difference of opinion among engineers about the expediency of putting tallow into the boiler of a steam engine before blowing it off for the last time when laying it by for the winter. We think it is better to dry it thoroughly and then close it perfectly air-tight.

C. H., of La.—You have doubtless seen before this time the same idea as yours, in regard to the crank motion, in our paper.

W. N., of Mass.—The colored rings which you saw in the mirror, when standing between it and the light, were produced by refraction. The light from the lamp passed twice through the glass, once on its way from the lamp to the metal back of the mirror, and again on its return towards the eye; in this passage it was decomposed by the rays of different colors being bent or refracted, some more than the others. Light is never increased, but always diminished, by passing through glass or anything else.

MONEY RECEIVED

At the Scientific American Office on account of Patent

Office business, for the week ending Saturday, Oct. 20, 1860:—

J. P. M., of R. I., \$250; L. P., of Mass., \$25; W. & F., of N. Y., \$100; J. H. P., of Mo., \$25; J. A. M., of La., \$130; A. S., of Ala., \$20; B. E. S., of Mass., \$30; C. M. D., of Conn., \$25; S. R. S., of Ind., \$25; H. G., of Ill., \$25; B. T., of Ill., \$25; L. J., of N. Y., \$25; C. W., of Ga., \$35; G. S. K., of Wis., \$12; T. Van H., of N. Y., \$55; A. S. E., of Texas, \$35; C. H. B., of Conn., \$25; J. A. H., of N. Y., \$55; J. M., of N. Y., \$250; R. F. H. H., of N. J., \$455; S. N. D., of Mich., \$25; J. T., of Cal., \$50; W. H. B., of Mass., \$10; C. L., of Cal., \$10; W. H. B., of Ill., \$116; C. F. A., of N. H., \$25; R. & E., of N. Y., \$100; A. A., of Conn., \$25; J. B. Mc M., of N. Y., \$20; G. S. R., of Miss., \$25; J. P. W., of Ky., \$30; P. M., of Conn., \$110; G. H. F., of N. Y., \$15; W. H. W., of N. Y., \$25; J. W., of Conn., \$25; S. & S., of Ga., \$30; J. A. H., of Cal., \$25; S. F. H., of Mich., \$60; D. S., of Cal., \$150; G. A. C., of N. Y., \$25; S. & B., of Cal., \$30; R. G., Jr., of Fla., \$25; S. & J. H. B., of Mo., \$40; Z. F., of Mo., \$25; C. G. S., of Mass., \$30; H. & G., of Iowa, \$15; S. L., of N. Y., \$30; W. C. W., of N. Y., \$30; E. H. B., of N. Y., \$15; E. R. P., of N. Y., \$15; G. M., of N. Y., \$5.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Oct. 20, 1860:—

P. D. Van D., of N. Y.; C. R. O., of N. Y.; J. S. & Mc C., of Ohio; C. M. D., of Conn.; J. H. P., of Mo.; S. N. D., of Mich.; H. & G., of Iowa; C. E. A., of N. H.; G. S. R., of Miss.; W. H. H. M., of N. H.; Z. F., of Mo.; P. M., of Conn. (2 cases); E. R. P., of N. Y.; L. P., of Mass. R. G., Jr., of Fla.; S. P. P., of N. Y.; J. A. H., of Cal.; I. K., of Ill.; S. I., of N. Y.; H. N. I., of Vt.; C. H. C., of N. Y.; W. & F., of N. Y. (2 cases); C. H. B., of Conn.; J. W., of Conn.; S. B. S., of Ind.; H. P., of N. Y.; J. S. B., of N. Y.; J. B. Mc M., of N. Y.; G. M., of N. Y.; C. W., of N. Y.; A. A., of Conn.; B. T., of Ill.; J. A. H., of N. Y.

USEFUL HINT TO OUR READERS.

BOUND VOLUMES.—Persons desiring the first volume of the New Series of the SCIENTIFIC AMERICAN can be supplied at the office of publication, and by all the periodical dealers; price, \$1.50; by mail, \$2, which includes postage. The volume, in sheets, complete, can be furnished by mail; price \$1. Vol. II. is now bound and ready for delivery. The price for this volume is the same as that charged for Vol. I.

SUBSCRIBERS TO THE SCIENTIFIC AMERICAN who fail to get their papers regularly will oblige the publishers by stating their complaints in writing. Those who may have missed certain numbers can have them supplied by addressing a note to the office of publication.

GIVE INTELLIGIBLE DIRECTIONS.—We often receive letters with money inclosed, requesting the paper sent for the amount of the enclosure, but no name of State given, and often with the name of the Post-office also omitted. Persons should be careful to write their names plainly when they address publishers, and to name the Post-office at which they wish to receive their paper, and the State in which the Post-office is located.

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THIRTY CENTS per line for each and every insertion, payable in advance. To enable all to understand how to calculate the amount they must send when they wish advertisements published, we will explain that ten words average one line. Engravings will not be admitted into our advertising columns; and, as heretofore, the publishers reserve to themselves the right to reject any advertisement sent for publication.

FOR SALE.—AN 8-HORSE (MONTGOMERY patent) Boiler; all in perfect order except the tubes; will be sold or traded for machinery or hardware, at \$75—cost new, \$750. Address Post Office box No. 187, Harrisburg, Pa. 18 3*

ILLUSTRATED CATALOGUE OF RULING Pens and Bookbinders' Machinery; new and improved edition. Those in the trade wishing it, will apply to W. O. HICKOK, Harrisburg, Pa. 18 2*

THE WEAVER'S GUIDE.—TWO HUNDRED samples of different kinds of weaving, from 2 harness upwards to 16, with drafts and explanations. Price \$5 per copy. Address for particulars or copies, E. KELLERMANN, Moosup, Conn. 17 4*

SWISS MATHEMATICAL DRAWING INSTRUMENTS of the finest finish, in large quantities, constantly on hand, for sale by JAMES W. QUEEN & CO., No. 924 Chestnut-street, Philadelphia. N. B.—An illustrated sheet of the instruments in full size, with priced list, sent by mail free on application. 17 5*

5,000 AGENTS WANTED.—TO SELL FIVE new inventions—one very recent, and of great value to families. All pay great profits to agents. Send four stamps and get 80 pages particulars. EPHRAIM BROWN, Lowell, Mass. 17 13*

THE BLANDY PORTABLE STEAM SAW MILL, after a fierce contest with numerous competitors, having more powerful machinery, was awarded the first premium at the United States Fair, at Cincinnati, Ohio, 1860, as the smoothest working, easiest handled and fastest cutting mill. We cut, in the presence of the awarding committee and thousands of spectators, 67½ feet first-class lumber, out of two logs, in 8 minutes 15 seconds. All the machinery worked by two hands. Also the first premium at Ohio State Fair for 1857, 1858 and 1859, and is the national premium and champion mill. The Blandy Portable Steam Engine was described and illustrated on page 27, Vol. II. (new series), of the SCIENTIFIC AMERICAN. Send for circulars. H. & F. BLANDY, Zanesville Ohio, 17 4c

CANVASSERS WANTED IN ALL PARTS OF THE UNITED STATES—Profitable employment. Please to read this—Agents wanted—Extra inducements for 1861! All persons in want of EMPLOYMENT will at once receive our catalogue of Books (pre-paid) by forwarding us their address. Particular attention is requested to the liberal offers we make to all persons engaging in the sale of our large type quarto PICTORIAL FAMILY BIBLE, with about One Thousand Engravings. On receipt of the established price (\$6), the Pictorial Family Bible, with a well-bound Subscription Book, will be carefully boxed and forwarded by express, at our risk and expense, to any central town or village in the United States, excepting those of California, Oregon and Texas. Our books are sold by canvassers, and are well-known to be the most saleable. Address, post-paid, ROBERT SEARS, Publisher, No. 181 William-street, New York.

A CHANCE FOR A GOOD BUSINESS MAN.—The advertiser has just purchased the business, good-will, &c., of a large Commission and Machinery Business, well located in the State of New York, enjoying the patronage of several large railroad companies. He wishes a partner, with not less than \$5,000 cash capital, who must be acquainted with the business, of thoroughly correct habits, and able to influence orders and consignments. Non-owners will be treated with. Address, with name and reference, which will be confidential, T. I. F., Post Office Box No. 1511, Baltimore, Md. 18 2*

HOWARD ASSOCIATION, PHILADELPHIA, Pa.—A benevolent Institution, established by special endowment for the relief of the Sick and Distressed, afflicted with Virulent and Epidemic Diseases; open to patients in all parts of the United States. Valuable reports on diseases of a virulent character, and on the new remedies employed in the Dispensary, sent to the afflicted, by mail, free of charge. Address Dr. J. SKILLIN HOUGHTON, Acting Surgeon Howard Association, No. 2 South Ninth-street, Philadelphia, Pa. 18 2*

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HOUSEHOLD ARTICLE FOR EVERYDAY use.—Patent for sale. A self-sweeping Scrubbing Bath or Nail Brush. Can be got up cheap; an excellent opportunity to make money. Patent granted May 23, 1860. Address W. M. TUSCH, Box No. 773 New York Post Office. 18

NEW AND PERFECT BARREL MACHINERY, consisting of a Head-turner, Stave-dresser, Jointer and Crozer, and especially adapted to rice, sugar and molasses hogsheads, and to tight or slack work of every description. They are at once the simplest, cheapest and most efficient Machines made. Liberal terms offered to agents and others to sell Machines and Rights. For full descriptive circulars, address C. B. HUTCHINSON, Auburn, N. Y. 18 4c

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THE GRAEFENBERG THEORY AND PRACTICE OF MEDICINE.—On the 1st day of May, 1860, the Graefenberg Company's Sales-rooms, Consulting Offices and Medical Institute were removed from No. 34 Park-row to—No. 2 Bond-street, New York, (first door from Broadway) in order to afford greater facilities and a more central location, demanded by the rapid increase of confidence in the Graefenberg Theory and Practice. The Graefenberg Theory and Practice, and the use of their medicines, together with complete symptoms of all diseases incident to this country and climate, the best method for their prevention and cure, will be found in the "Graefenberg Manual of Health." This valuable family medical work, containing 300 pages, has been revised and improved, and elegantly illustrated with beautifully colored engravings of the human system. Sent by mail to any part of the country, on receipt of 25 cents. It is a complete guide to all diseases and their cure. Address JOSHUA F. BRIDGE, M. D., Resident and Consulting Physician Graefenberg Co., No. 2 Bond-street, New York. 18 2*

One of the leading journals says of the Graefenberg Manual of Health:—"This is the only medical book for family and general use ever published. It is written in plain language, free from scientific terms, and condenses more practical medical information than can be obtained anywhere else, unless a regular medical course of education is undergone. The popularity of this admirable and compendious work is well shown by this being the twenty-fourth edition. It contains a number of colored anatomical plates, and is a complete family physician. It is at once simple, popular, plain and explicit; and the mother, with such an adviser, is prepared at once to apply the proper remedies in case of sudden sickness in the family. In the country, a copy of the 'Manual of Health' is indispensable, and every family should possess one. It will save a hundred times its cost in doctors' bills, and, what is far better, will be the means of preserving many valuable lives to their families and relatives." 18 2*tf

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STEVENSON'S JONVAL TURBINE WATER WHEELS, which gave a useful effect of .9077 per cent of the power employed at the late trial of water wheels at the Fairmount Works, Philadelphia, March 9, 1860, are manufactured solely by J. E. STEVENSON, Novelty Iron-works, New York. 16 4*

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MACHINISTS' TOOLS FOR SALE.—TWO double-gear saw-cutting slide lathes, swinging from 20 to 24 inches and shears 13 to 16 feet long; one double-gear slide lathe, 4 feet diameter and 20 feet in length; four planing machines, various sizes; three card wheel boring machines, three card axle lathes, three shop cranes, &c., &c. All second hand; in good order. Apply to CHAS. W. COPELAND, No. 123 Broadway, New York. 14 8

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