

that we possess for preparing carefully and correctly applications for patents, and attending to all business pertaining to patents, such as Extensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements, &c.

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 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 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, under the direction of a gentleman who has spent a lifetime about the Patent Office. 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 fill 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 \$30. 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 36 Rue des Eprouvettes, 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.

INTERFERENCES.

We offer our services to examine witnesses in case of interference, to prepare arguments, and appear before the Commissioner of Patents, or in the United States Court, as counsel in conducting interferences or appeals.

For further information, send for a copy of "Hints to Inventors." Furnished free, Address MUNN & CO., No. 37 Park-row, New York.

THE VALIDITY OF PATENTS.

Persons who are about purchasing patent property, or patentees who are about erecting extensive works for manufacturing under their patents, should have their claims examined carefully by competent attorneys, to see if they are not likely to infringe some existing patent, before making large investments. Many persons have been ruined from adopting the "penny-wise and pound-foolish" maxim, when an investment of a few dollars, to have been informed of their rights, would have saved them much anxiety and money. Written opinions on the validity of patents, after careful examination into the facts, can be had for a reasonable remuneration. The price for such services is always settled upon in advance, after knowing the nature of the invention and being informed of the points on which an opinion is solicited. Judge Mason assists in all examinations of this kind.

For further particulars, address MUNN & CO., No. 37 Park-row, New York.

EXTENSIONS OF PATENTS.

Valuable patents are annually expiring which might be extended and bring fortunes to the households of many a poor inventor or his family. During the past fourteen years, we have had much experience in procuring the extension of patents; and, as an evidence of our success in this department, we would state that, in all our immense practice, we never lost but two cases—and those were unsuccessful from causes entirely beyond our control.

It is important that extension cases should be managed by attorneys of the utmost skill to ensure success. All documents connected

with extensions require to be carefully drawn up, as any discrepancy or untruth exhibited in the papers is very liable to defeat the application.

Of all business connected with patents, it is most important that extensions should be entrusted only to those who have had long experience, and understand the kind of evidence to be furnished the Patent Office, and the manner of presenting it. The heirs of a deceased patentee may apply for an extension. Parties should arrange for application for an extension at least six months before the expiration of the patent.

For further information, as to terms and mode of procedure in obtaining an extension, address MUNN & CO., No. 37 Park-row, New York.

ASSIGNMENT OF PATENTS.

The assignment of patents and agreements, between patentees and manufacturers, carefully prepared and placed upon the records at the Patent Office. Address MUNN & CO., at the Scientific American Patent Agency, No. 37 Park-row, New York.

PATENT CLAIMS.

Persons desiring the claims of any invention which has been patented within fourteen years, can obtain a copy by addressing a note to this office, stating the name of the patentee, and date of patent when known, and enclosing \$1 as fee for copying. Address MUNN & CO., No. 37 Park-row, New York.

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.—I take pleasure in stating that while I held the office of Commissioner of Patents, MORE THAN 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.

MODELS BY EXPRESS.

Inventors sending models to our address should always enclose the express receipt, showing that the transit expenses have been prepaid. By observing this rule we are able to prevent the collection of double charges. Express companies, through oversight, sometimes neglect to mark their paid packages, and thus, without the receipt to confront them, we are obliged to pay transit charges in receipt of the model.

It would require many columns to detail all the ways in which the inventor or patentee may be served at our office. We cordially invite all who have anything to do with patent property or inventions to call at our extensive offices, No. 37 Park-row, New York, where any questions regarding the rights of patentees will be cheerfully answered. Communications and remittances by mail, and models by express (prepaid), should be addressed to MUNN & CO., No. 37 Park-row, New York.



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.

U. D. F., of Texas.—The ore which you send us is iron pyrites.

P. & B., of Texas.—The mineral you send us is evidently mostly iron; but to ascertain how much carbon there is in it would cost more than it is worth.

M. A. W., of Conn.—We know of no substance which would give a polish to linen if applied to a wheel buffed with india-rubber. A wheel of polished steel or iron would produce a smooth glaze on starched linen.

W. B. S., of La.—We have little doubt that the mineral enclosed in your letter is iron pyrites; but if you wish to test it, dissolve it in hot nitric acid and drop in a little aqua ammonia, when, if it contains copper, the solution will show a blue color.

OBSERVER, of Ga.—Your statement of the mode in which a buzzard flies is so opposed to the laws of nature, that we think you must have made a mistake in your observations. An inclined descent could not produce sufficient momentum to raise the bird to a point higher than the one from which he started.

G. W. B., of Miss.—As you say, there is no doubt that the "sulphur showers," as they have been called, are simply pollen from the flowers of trees.

R. M., of Va.—There is no proposition in philosophy plainer to us than that momentum is in proportion to the velocity multiplied by the weight. If you will examine the matter carefully, you will find that your statement is full of errors.

A. S., of N. J.—When a chimney is too wide for the furnace, it frequently happens that descending currents of cold air are started, and the draft is injured. A good remedy is to lessen the opening at the top.

A. S., of Mass.—Wine is made by adding water and sugar to the juice of grapes, and fermenting the whole in a cool place. You will do well to address the Farmers' Club for particulars as to wild grapes.

N. L. W., of N. C.—You need a force pump to raise water 60 feet high from a spring to your house. The ram is only used when there is plenty of water to drive it.

BLACKSMITH, of Pa.—Cast steel may be hardened by plunging it at a red heat into naphtha previously heated to 200°, and, as soon as the naphtha begins to boil, withdrawing the steel and plunging it into cold water. It is stated that this process will make the steel hard, and, at the same time, preserve it from flaws, cracks or twist. Blacksmiths are generally strong enough to take care of themselves.

E. F., Jr., of R. I.—The mineral you send us is a fine specimen of pure plumbago, or black lead. There is a great demand for plumbago, just now, and if you discover a mine of it, your fortune is made.

W. C. B., of N. B.—The pyrotechnists have a great variety of recipes for the charging of rockets. The following is a good one: Niter, 4 parts; sulphur, 1 part; charcoal, 1½ part.

E. R. S., of Pa.—Iron is prepared for plating by cleaning carefully, and then depositing on it a film of copper by the battery, from a cyanide solution. It is then ready for gilding, silvering, and bronzing, precisely like copper.

INDICATOR.—There are very few substances which have a boiling point as high as mercury, and the known liquids which have high boiling temperatures are liable to be decomposed while boiling. In any of the school books of chemistry you will find tables of specific heat. But you will not find all you are seeking for in books; the experiments which have been made are quite limited.

J. S., of O.—It is said that two pieces of vulcanized rubber may be joined by using a thick solution of rubber in bisulphide of carbon, to which a small quantity of chloride of sulphur has been added.

L. Y. T., of N. H.—In graining wood, the wood is first painted or stained of a uniform color, and when dry, the grain color is laid on and streaked by drawing over it a wisp of a broom, a comb, or a rag. You will find a list of manufacturers in the New England Directory.

G. M. R., of Mass.—There is no substance known, which interposed between a magnet and a piece of iron, neutralizes the attraction. Perpetual motions and flying would be practicable if we had a substance with such a property.

D. P. N., of Texas.—We think you will have better success if you omit the heating. Oysters should be put up perfectly fresh, and the cans completely filled before the soldering. Gold leaf is attached to varnished surfaces, by means of "gold size," which you can make yourself or purchase of those who deal in varnishes. Pumice stone, glass paper, &c., are used after a coat of varnish, not to polish it or give a gloss, but to make the surface even. The final gloss is given by a coat of thin varnish, or by rubbing with an oiled rag, or by the hand.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, Sept. 22, 1860:—

- R. C., of Texas, \$185; W. H. R., of N. Y., \$250; J. McA., of Ill., \$30; F. & H., of Va., \$15; J. W. T., of Ala., \$25; P. C. P., of N. Y., \$25; J. H. B., of Ohio, \$25; S. D. S., of Tenn., \$15; G. H., of N. Y., \$30; J. R., of Mass., \$25; J. B., of N. Y., \$30; G. & S. P. G., of Wis., \$35; H. McD., of N. Y., \$30; J. H. & E. H. A., of Md., \$25; E. J. S., of N. Y., \$25; W. C., of Pa., \$25; A. C., of N. B., \$30; M. A. H., of Va., \$30; E. C., of N. Y., \$25; J. B. S., of Conn., \$25; H. B., of N. Y., \$25; J. S. S., of N. Y., \$25; J. H. H. B., of N. Y., \$20; A. C. C., of R. I., \$20; G. W. C., of Texas, \$55; M. & S., of Ky., \$30; T. S., of N. J., \$55; C. W. F., of N. Y., \$25; S. S., of Kansas, \$25; R. & C., of La., \$35; H. P., of N. Y., \$35; S. J., of N. J., \$30; J. H. R., of Tenn., \$30; F. H. P., of Conn., \$25; D. L., of Pa., \$25; J. J. McC., of N. J., \$30; J. D., of Ind., \$25; I. M. A., of Pa., \$30; A. C., of Mass., \$25; T. S., of Ohio, \$30; P. B., of Mich., \$30; D. M., of N. Y., \$25; R. W. H., of N. Y., \$25; I. B. S., of Conn., \$25; J. V. H. S., of N. Y., \$25; P. & T., of Md., \$25; W. J. L., of N. Y., \$30; L. J., of N. H., \$30; J. B., of N. Y., \$30; H. W. H., of Ohio, \$25; G. W. H., of Pa., \$25; E. P. W., of N. Y., \$30; I. K., of Ill., \$40; F. S., of Ill., \$25; W. & G., of Fla., \$50; W. P. L., of N. J., \$30; J. D., of La., \$30; C. H. McC., of Ill., \$250; W. S. K., of Conn., \$50; E. G. C., of N. Y., \$30; W. H. H. M., of N. H., \$35; H. G., of Ill., \$30; R. T. K., of Pa., \$30; W. J. H., of Conn., \$30; C. A. W., of N. J., \$25; T. S., of N. J., \$25; T. S. & J. A. L., of Mo., \$55; and \$25 by express from Almond, N. Y. Name of sender unknown.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Sept. 22, 1860:—

- C. & E., of Ohio; D. F. D., of Ind.; C. A. W., of N. J.; M. W. T., of Ohio; E. I. S., of N. Y.; W. S. K., of Conn. (3 cases); D. L., of Pa.; A. C., of Mass.; J. S. S., of N. Y.; J. Y., of N. Y.; G. W. H., of Pa.; H. B., of N. Y.; S. D. S., of Tenn.; K. & T. C., of N. Y.; J. D., of Ind.; G. W. R., of N. Y.; J. H. B., of N. Y.; H. P., of N. Y.; W. C. W., of Ill.; S. S., of Kansas; J. H. B., of Ohio; J. R., of Mass.; J. P. K., of Texas; J. H. & E. H. A., of Md.; B. & N., of Pa.; M. & B., of Miss.; T. S., of N. J.; J. V. H. S., of N. Y.; P. C. P., of N. Y.; R. W. H., of N. Y.; I. B. S., of Conn.; F. S., of Ill.; J. W. T., of Ala.