

entering upon his new duties in March, 1859, he addressed to us the following very gratifying letter:
Messrs. MUNN & Co.—It affords me much pleasure to bear testimony to the able and efficient manner in which you discharged your duties as 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.
Hon. Wm. D. Bishop, late Member of Congress from Connecticut, succeeded Mr. Holt as Commissioner of Patents. Upon resigning the office he wrote to us as follows:

Messrs. MUNN & Co.—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.

THE 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 it to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corresponding with the facts, is promptly sent, free of charge. Address MUNN & CO., No. 37 Park Row, New York.

As an evidence of the confidence reposed in their Agency by inventors throughout the country, Messrs. MUNN & CO. would state that they have acted as agents for more than TWENTY THOUSAND inventors! In fact, the publishers of this paper have become identified with the whole brotherhood of inventors and patentees, at home and abroad. Thousands of inventors for whom they have taken out patents have addressed to them most flattering testimonials for the services rendered them; and the wealth which has inured to the individuals whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! Messrs. MUNN & CO. would state that they never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in their extensive offices, and that they are prepared to attend to patent business of all kinds in the quickest time and on the most liberal terms.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

The service which Messrs. MUNN & CO. 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 they may acquire of a similar invention from the records in their Home Office. But for a fee of \$5, accompanied with a model, or drawing and description, they 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 the Branch Office of Messrs. MUNN & CO., corner of F. and Seventh streets, Washington, by experienced and competent persons. Many thousands of such examinations have been made through this office, and it is a very wise course for every inventor to pursue. 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 consists, for the Patent Office. These should be securely packed, the inventor's name marked on them, and sent, with the Government fees, by express. The express charge should be pre-paid. Small models from a distance can often be sent cheaper by mail. The safest way to remit money is by a draft on New York, payable to the order of Messrs. MUNN & CO. Person 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.

Patents are now granted for SEVENTEEN years, and the Government fee required on filing an application for a patent is \$15. Other changes in the fees are also made as follows:—

Table listing fees for patent applications: 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, \$20; On application for Re-issue, \$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.

The Patent Laws, enacted by Congress on the 2d of March, 1861, are now in full force, and prove to be of great benefit to all parties who are concerned in new inventions.

The law abolishes discrimination in fees required of foreigners, excepting natives of such countries as discriminate against citizens of the United States—thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners, except the Canadians, to enjoy all the privileges of our patent system (except in cases of designs) on the above terms. Foreigners cannot secure their inventions by filing a caveat; to citizens only is this privilege accorded.

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., No. 37 Park Row New York.

EXTENSION OF PATENTS.

Many valuable patents are annually expiring which might readily be extended, and if extended, might prove the source of wealth to their fortunate possessors. Messrs. MUNN & CO. are persuaded that very many patents are suffered to expire without any effort at extension, owing to want of proper information on the part of the patentees, their relatives or assigns, as to the law and the mode of procedure in order to obtain a renewed grant. Some of the most valuable grants now existing are extended patents. Patentees, or, if deceased, their heirs, may apply for the extension of patents, but should give ninety days' notice of their intention.

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

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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.

It would require many columns to detail all the ways in which the Inventor or Patentee may be served at our offices. 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.



C. G., of Ohio.—The diagrams you sent us of the steam engines in your vicinity have been received. If the drawings had been made to scale, and accompanied by the bore of cylinder, length of stroke, pressure of steam, and revolutions per minute, we should have been able to give a satisfactory answer. As you have drawn the diagrams there is too much "lead" on the exhaust side of the valve. The diagram marked No. 2 is also incorrect from the reason that you have gone to the other extreme and put too much "lap" on the exhaust. For common work, where fuel is plenty, let the exhaust side have about the same "lead" the steam side has, then the steam will "punch" the piston through to the end of the stroke, and the exhaust will be as free to go out as the live steam is to enter. Advising about a steam engine, without seeing it, is about as satisfactory to an engineer as prescribing for an absent patient would be to a physician. There may be a complication of disorders which affect the whole system.

C. C., of Conn.—Your improvement in sewing machines does not appear to embrace anything new, and we advise you not to apply for a patent. We send you by mail one of our pamphlets of advice how to make application for a patent.

W. T. S., of Mo.—Your suggestions in regard to the Atlantic telegraph appear to us reasonable, but we presume the points have been fully considered by the manufacturers.

E. W., of Mass.—If you succeed in making a gas engine work economically for any purpose, under any conditions, we should be much pleased to receive a description of it.

W. P. B., of Wis.—The excitement about gravel-wall buildings seems to have died away. It always seemed to us that this material must be more expensive and less durable than brick. In Texas, however, whole villages were built of it, and seemed to stand very well. There they have no severe frosts.

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S. L. H., of Ill.—We are obliged for your diagram of the drill, but do not think it sufficiently novel to publish, as the principle of it is similar to one already illustrated. Write again.

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Money Received.

At the Scientific American Office, on account of Patent Office business, from Wednesday, April 20, 1864, to Wednesday April 27, 1864:—

- C. H. R., of N. Y., \$25; H. P. T., of U. S. N., \$41; J. S. C., of N. Y., \$25; A. W., of N. J., \$25; J. P. N., of Maine, \$30; W. H. McM., of N. Y., \$56; J. R. G., of Ill., \$20; A. H. W., of Mich., \$20; A. M. C., of Conn., \$45; H. M., of N. H., \$45; D. F. H., of Mass., \$15; E. T. S., of N. Y., \$60; H. G. D., of Ky., \$20; A. J., of Ind., \$16; L. & L., of Ohio, \$32; R. P., of Maine, \$26; J. M. A., of Mass., \$15; S. W., of Pa., \$25; D. B. W., of Mass., \$16; W. B., of Mass., \$25; W. W., of Cal., \$18; J. E. H., of Mich., \$16; W. P. B., of Mich., \$15; L. M., of Ill., \$25; J. F. A., of Wis., \$16; D. B. T., of Wis., \$30; L. H., of Va., \$10; S. Z. H., of N. J., \$28; P. D. of N. Y., \$25; E. F. R., of N. Y., \$31; C. R., of N. Y., \$41; E. S., of N. Y., \$25; T. W. C., of N. Y., \$25; G. B. B., of Ind., \$20; B. T. M., of Conn., \$20; B. R. A., of N. Y., \$10; A. E. W., of Ill., \$20; H. T. L., of N. J., \$45; G. E. W., of R. I., \$20; Mrs. S. A. M., of N. Y., \$45; S. W., of Wis., \$25; J. C. C., of Nebraska Territory, \$10; E. H., of Mass., \$31; J. R. A., of R. I., \$25; S. E. B., of Mass., \$32; W. G. R., of Mo., \$25; B. L., of Mich., \$35; P. D. S., of N. F., \$19; J. J. G., of Ohio, \$250; T. S., of N. Y., \$23; A. H. S., of N. Y., \$26; G. J. B., of Ind., \$16; J. H. Jr., of Mich., \$25; L. J., of Vt., \$16; S. L. G., of Conn., \$16; P. S. G., of N. Y., \$41; J. M. J., of N. Y., \$42; G. W. W., of N. Y., \$25; S. DeM., of Md., \$41; A. B. G., of N. Y., \$20; T. D. H., of Conn., \$20; C. J., of Conn., \$45; P. & Bros., of Conn., \$50; S. P. B., of N. Y., \$20; C. R., of N. J., \$20; D. B. M., of Ohio, \$16; B. M. B., of N. Y., \$16; J. A. M., of N. Y., \$44; G. S., of Ky., \$25; R. S., of N. Y., \$25; W. D. A., of Iowa, \$20; A. W., of Vt., \$40; H. F. T. H., of Wis., \$16; R. D., of Mass., \$30; H. V. B., of N. Y., \$25; J. W. S., of Mass., \$25; Z. S. S., of N. Y., \$16; E. T. J., of Vt., \$25; T. L. M., of Ohio, \$35; T. B. F., of Mass., \$16; T. C., of Mass., \$25; N. & B., of Iowa, \$60; J. H., of Conn., \$28; E. B. R., of N. Y., \$25; H. L., of N. Y., \$25; H. & S., of Pa., \$20; S. & C., of N. Y., \$40; T. K. M., of Conn., \$25; A. B. B., of N. Y., \$10; J. T. M., of Ill., \$25; F. G. A., of

—\$16; W. H. McM., of N. Y., \$25; H. S., of N. J., \$16; G. A. E., of Mass., \$20; A. R., of N. Y., \$54; D. H. S., of Iowa, \$25; H. H., of Mass., \$25; S. H., of Ill., \$32; A. M. W., of Mass., \$25.

Persons having remitted money to this office will please to examine the above list to see that their initials appear in it and if they have not received an acknowledgment by mail, and their initials are not to be found in this list, they will please notify us immediately, stating the amount and how it was sent, whether by mail or express.

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office, from Wednesday, April 20, 1864, to Wednesday, April 27, 1864:—

- C. H. R., of N. Y.; E. F. R., of N. Y.; F. S. G., of N. Y.; H. P. T., of U. S. N.; C. R., of N. Y.; J. M. J., of N. Y.; J. S. C., of N. Y.; E. S., of N. Y.; G. W. W., of N. Y.; A. W., of N. J.; T. W. C., of N. Y.; J. H., of Conn.; T. C., of Mass.; E. T. J., of Vt.; D. B. T., of Wis.; J. H. Jr., of Mich.; T. S., of N. Y.; R. P., of Maine; B. L., of Mich.; A. W., of Vt.; S. W., of Pa.; J. W. S., of Mass.; J. R. A., of R. I.; E. H., of Mass.; W. W., of Cal.; H. V. B., of N. Y.; W. B., of Mass.; R. S., of N. Y.; H. W., of Wis.; S. W., of Wis.; T. L. M., of Ohio; A. H. S., of N. Y.; L. M., of Ill.; R. D., of Mass.; L. C., of Conn.; P. D., of N. Y.; E. B. R., of N. J.; W. H. McM., of N. Y.; H. L., of N. Y.; J. G., of Maine; J. T. M., of Ill.; H. H., of Mass.; A. B. B., of N. Y.; D. H. S., of Iowa; T. K. M., of Iowa; A. M. W., of Mass.; J. F. C., of N. Y. (2 cases); P. L. S., of N. Y. (2 cases).

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