

## PATENTS FOR SEVENTEEN YEARS.



The new 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 duration of patents granted under the new act is prolonged to SEVENTEEN years, and the government fee required on filing an application for a patent is reduced from \$30 down to \$15. Other changes in the fees are also made as follows:—

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 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 law abolishes discrimination in fees required of foreigners, excepting reference to 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.

During the last sixteen years, the business of procuring Patents for new inventions in the United States and all foreign countries has been conducted by Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN; and as an evidence of the confidence reposed in our Agency by the Inventors throughout the country, we would state that we have acted as agents for more than FIFTEEN 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 we have taken out Patents have addressed to us most flattering testimonials for the services we have rendered them, and the wealth which has inured to the Inventors whose Patents were secured through this Office, and afterward illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! We would state that we never had a more efficient corps of Draughtsmen and Specification Writers than are employed at present in our extensive Offices, and we are prepared to attend to Patent business of all kinds in the quickest time and on the most liberal terms.

## 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 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 vice 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 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. More than 5,000 such examinations have been made through this office during the past three years. Address MUNN & CO., No. 37 Park-row, N. Y.

## How to Make an Application for a Patent.

Every applicant for a Patent must furnish a model of his invention is 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 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 the order of 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.

## 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 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.

## 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, docu-

ments, &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 story of the case, inclosing the official letters, &c.

## Assignments 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.

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.

## 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, under the new law, is \$10. A pamphlet of advice regarding applications for Patents and Caveats, in English and German, furnished gratis on application by mail. Address MUNN & CO., No. 37 Park-row, New York.



R. W., of N. Y.—Your sketch of a sword-fish steamer which you propose for the capture of the pirate vessel *Atabana*, and to run down other rebel craft, is entirely different in principle from the design and construction of a vessel that is required for such service. It is not a long sharp ram for piercing that is required but one that will smash in the sides of an opponent. Great speed cannot be obtained at sea in a small vessel because it cannot carry engines of sufficient size.

G. M. H., of Maine.—The Malaga raisins are prepared by allowing the grapes to remain on the vines until they become sufficiently dry to be picked off and packed in boxes with a sheet of paper between each layer. The stem of each bunch is partially severed with a sharp knife when on the vine, and all the leaves are removed to allow full exposure to the sun. The grapes thus exposed soon shrivel and become sweet. Other raisins are prepared by drying ripe grapes after they are picked, either in the sunshine or in heated rooms.

H. S. L., of Mass.—Alcohol may be manufactured from every vegetable containing starch, and any substance containing sugar. The Tartars manufacture a spirituous liquor from asses' milk. Ail milk contains sugar, which by fermentation generates alcohol.

F. A. S. P., of N. Y.—We are unacquainted with a single case wherein a submarine vessel has been employed with success in attacking an enemy's ship under water. Your plan of employing a submarine ram to use electrical barbed shells for blowing up iron-clad vessels is ingenious, and for special purposes may be practical, but not for general operations.

J. H. S., of Wis.—The *Engineer and Mechanics' Magazine* are the leading weekly mechanical journals published in England. You can obtain either of them through the agency of Messrs. Willmors & Rogers of this city.

J. P. E., of Pa.—We shall be very glad to illustrate your furnace for steam boilers. Its publication will bring it before thousands of engineers and manufacturers who will take an interest in it. The engraving will belong to you after its publication in our paper.

R. S., of Conn.—To obtain the silver from clippings of photographic paper containing nitrate of silver first burn them, then take their ashes and place them in a crucible with some borax, and subject the crucible for an hour to a bright red heat. The silver will be found in the form of a button at the bottom of the crucible. Saltpeter and carbonate of potash will answer as a substitute for borax.

J. S., of C. W.—It was at one time supposed that every line of telegraph required a separate battery to operate it, but this was a mistaken notion. Ten lines are frequently worked from the same battery, and these lines run in all directions—east, west, north and south. Only one ground wire is used for all the lines and only one wire is brought from the battery to the operating room where all the lines are attached. This single battery also operates different instruments—the Morse, Combination and House telegraphs. The use of one battery for so many lines effects a great saving in the expense.

H. G., of Ohio.—You should make experiments with your castings in order to determine the strength of the column, after they have been completed and ready to be erected. It is not safe to take the general strength of the iron as your guide, for the castings may be imperfect. The falling of the Pemberton mills at Lawrence, Mass., as described on page 162, Vol. II. (new series) SCIENTIFIC AMERICAN, was caused by the imperfect cast-iron columns used to support its floors.

G. H. B. of Governor's Island.—Your communication is written in an excellent Christian spirit, but it is not exactly suited to our columns.

J. K., of Md.—Black lead crucibles are composed of plumbago and clay. Good crucibles are also made with a mixture of pure fire-clay, old crucibles ground to coarse powder and black lead. Equal parts of these substances are kneaded together with water, molded, dried slowly, then fired in a kiln. Two parts of the hardest coke ground together into coarse powder, kneaded with water to the proper consistency, molded and dried slowly, makes good crucibles, being baked in a kiln. Hessian crucibles are composed of fire-clay and siliceous sand, after being dried they are fired in a kiln. It requires much practice and skill to mold and manufacture crucibles.

J. L. St. F., of N. J.—The term "*ignis fatuus* vitality" must have been manufactured for some particular purpose. It is not in use in our language. It may be appropriate if understood to mean "living deceptive light," but *ignis fatuus* means vain or foolish fire, and when applied to "Will-o'-the-Wisp" and "Jack-o'-the-Lantern," it has reference to the night-light seen in marshes, fens and swamps and its cause is not yet well understood. It is supposed to be due to the evolution and flame of marsh gas. In all likelihood the light is a phosphorescence, due to the ignition of decayed organic substances containing phosphorus, which ignites and burns at the atmospheric temperature with a flame of low heat.

J. A., of N. Y.—Overman on the "Manufacture of Iron" is a work which will afford you the information you desire.

A. E. K. Jr., of N. Y.—You will find a very full description of the mode of cleaning and preserving the prints of engravings, by Dr. Hayes, State Assayer of Massachusetts, on page 389, Vol. VI (new series) SCIENTIFIC AMERICAN.

G. L. D., of Pa.—The substance that is used for the paste of stamps and envelopes is dextrin, or an artificial gum, made by roasting starch at a certain temperature. You will find a full description of the process in "Munspratt's Chemistry" and other works on the same art. It is put on either with a sponge or a brush. You will find the method described under the article envelopes in the "American Cyclopaedia."

## Money Received

At the Scientific American Office on account of Patent Office business, from Wednesday, October 29, to Wednesday, November 5, 1862:—

J. R., of N. J., \$52; J. A. McC., of N. Y., \$20; A. C., of Va., \$85; G. McK., of England, \$20; B. S. & J. M., of Pa., \$20; H. B., of Iowa, \$20; T. W. W., of Iowa, \$20; E. J. C., of Ill., \$20; J. L. E., of Ill., \$20; J. R. P., of N. Y., \$35; B. C. F., of Iowa, \$20; A. B., of N. Y., \$20; J. W. F., of Pa., \$20; G. C., of N. Y., \$10; H. A. A., of Ill., \$25; N. P., of N. Y., \$25; T. P., of N. Y., \$15; H. M., of Mass., \$30; A. L., of N. Y., \$15; F. S. B., of Iowa, \$25; W. H. S., of Conn., \$25; J. C., of U. S. A., \$30; M. N. K., of Iowa, \$15; S. B. E., of Conn., \$10; R. W., of N. Y., \$15; N. J., of Ind., \$15; F. A. DeM., of N. Y., \$15; T. V. C., of U. S. A., \$15; G. G. G., of N. Y., \$22; W. S., of Mich., \$25; H. G. P., of N. Y., \$10; M. H. F., of N. Y., \$15; C. A. & Co., of Conn., \$325; H. B., of Mich., \$25; J. A. DeB., of N. Y., \$40; A. M. W., of Cal., \$15; G. G., of N. Y., \$15; W. T. E., of N. J., \$15; R. D. M., of Md., \$43; F. M. C., of N. Y., \$50; W. H. W., of N. J., \$25; A. J. E. of N. Y., \$25; J. V. S., of N. Y., \$25; N. P., of N. Y., \$15; W. A. P., of Cal., \$20; A. B., of N. Y., \$20.

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, and inform us 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 October 29, to Wednesday, November 5, 1862:—

A. C., of Va. (2 cases); D. H., of N. Y.; H. A. A., of Ill.; N. P., of N. Y.; J. W. S., of N. Y.; K. P. K., of Va.; A. J. E., of N. Y.; F. S. B., of Iowa; W. H. S., of Conn.; F. M. C., of N. Y. (2 cases); H. M., of Mass.; W. H. W., of N. J.; H. B., of Mich.; W. G. V., of England; J. G. M., of England.

## TO OUR READERS.

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a *bona fide* acknowledgment of our reception of their funds.

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid has expired.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty 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 inclosing \$1 as fee for copying. We can also furnish a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of \$2. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

Models are required to accompany applications for Patents under the new law, the same as formerly, except on design patents when two good drawings are all that is required to accompany the petition, specification and oath, except the government fee.

NEW PAMPHLETS IN GERMAN.—We have just issued a revised edition of our pamphlet of *Instructions to Inventors*, containing a digest of the fees required under the new Patent Law, &c., printed in the German language, which persons can have gratis upon application at this office. Address MUNN & CO., No. 37 Park-row, New York.

## THE CHEAPEST MODE OF INTRODUCING INVENTIONS.

INVENTORS AND CONSTRUCTORS OF NEW AND USEFUL CONTRIVANCES OR MACHINES, of whatever kind, can have their inventions illustrated and described in the columns of the SCIENTIFIC AMERICAN on payment of a reasonable charge for the engraving.

No charge is made for the publication, and the cuts are furnished to the party for whom they are executed as soon as they have been used. We wish it understood, however, that no secondhand or poor engravings, such as patentees often get executed by inexperienced artists for printing circulars and handbills from, can be admitted into these pages. We also reserve the right to accept or reject such subjects as are presented for publication. And it is not our desire to receive orders for engraving and publishing any but good inventions or machines, and such as do not meet our approbation in this respect, we shall decline to publish.

For further particulars, address—

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