

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 English, French, Belgian, Austrian, 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 it 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 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. 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 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.

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.

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, 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 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.



J. R., of Mich.—An article on the construction, arrangement and speed of bolts for milling, without referring to the questions of G. W. W., would be most instructive for our readers.

W. F. D., of Mass.—Graphite has been obtained in cast iron, but the iron itself cannot be converted into graphite, because the latter is simply carbon in a peculiar condition. The graphite which adheres to the interior of gas retorts, is of the same nature nearly as graphite plumbago.

G. M. H., of Me.—The case of variation of half an inch in the shrinkage of two similar castings of columns, from the same pattern and with the same kind of iron, must be due to the mode of casting, or the metal in the one case had been raised to a higher temperature than in the other case. Such variations of shrinkage are not uncommon.

I. N. G., of N. Y.—A solution of the chloride of soda will remove the odor from muskrat skins, but the operation will slightly injure the quality of the skin. To apply the chloride, steep the skins for about an hour in the liquid, of a strength equal to 1° Baume.

W. D. S., of Pa.—You will find the theory of the action of Giffard's Injector set forth on page 260, Vol. III. (new series) SCIENTIFIC AMERICAN. Your views accord with that theory.

T. O. B., of Ind.—There is no practical work published on dyeing that comes up to the practice of the present day. All logwood blues dyed on cotton are fugitive. They are prepared with a mordant of pyroligneous acid, and topped with strong logwood liquor.

W. M., Jr., of Pa.—French pistols are frequently made with the same acute grooves as those shown in your sketch, and they have been proposed to us for muskets several times within the past year. Grooved friction wheels are coming into common use as substitutes for toothed gearing. Your paper is sent regularly from this office.

J. S. B., of N. Y.—You can manufacture any of the machines for which you own the patent right of Monroe county, but you cannot sell them in the neighboring county, without the consent of the owner of the patent for that county.

J. C., of C. W.—The power of steam engine required for propelling your yacht, at a certain speed, depends upon the model and displacement. You should consult a steamboat builder, and submit your model or draft to him.

C. W. C. S., of Manassas Junction, Va.—We have seen several statements pretending to give the horse power of Niagara Falls, but we distrust them all. There is no space of any consequence, for a long distance below the falls, for building factories, or Niagara would be a splendid situation for a manufacturing city. The precipitous rocks extend nearly to the edge of the river below the falls.

A. T. S., of Ill.—You will obtain all the receipts you request some time during the publication of this volume of the SCIENTIFIC AMERICAN, as we shall publish one column of such every week.

C. M., of Pa.—You can ascertain all about vessels sailing from this port by referring to the columns of the *Journal of Commerce*.

I. M. S., of N. Y.—The article to which you refer an carbonic oxide, was obtained chiefly from the *London Journal of Gas Lighting*. The reference to water gas on the continent of Europe cannot mislead the public, as we view the question.

W. B. S., of Vt.—It is impossible to tell whether American watches keep as good time as English lever watches having the fusee, without a series of long and comparative experiments with the best watches of the two classes. So far as we know, such experiments have not been made.

C. S. H., of N. Y.—By raising a cut iron nail to a red heat, then allowing it to cool very slowly in warm sand, ashes or charcoal, it will become soft and tough and may be clinched.

R. R., of Ill.—Raw silk is not cultivated in this section, and we do not know what prices may be obtained for cocoons, or where you can obtain silk worms.

A. M. B., of N. Y.—We have never heard it stated that the stripes of the American flag were symbolic of any institution in our Republic.

P. A. J., of N. Y.—Strong and warm soap suds should remove gum from the journals of your Buck-eye mower. A lye of soda or potash will effect the same object.

J. J. A., of Wis.—Soap mixed with arsenic is the composition used for stuffing birds and preserving their skins. The following is a good receipt for your use: Camphor 2½ oz.; powdered arsenic, 1 lb.; white soap, 1 lb.; salts of tartar, 6 oz.; powdered chalk, 2 oz.; mix all together and use in the common way. Corrosive sublimate has been recommended as a substitute for arsenic in preserving insects and birds, but it is much inferior. There is no good work published on the art of forging.

W. F. S., of Ohio.—You ask for an impossible receipt, namely, "To kill the stick of glue without injuring the sticking qualities."

J. B., of N. Y.—The *London Journal of Gas Lighting* is published by W. B. King, No. 11 Bolt Court, Fleet street, London.

SPECIAL NOTICE—FOREIGN PATENT.—The population of Great Britain, is 30,000,000; of France, 35,000,000; Belgium, 5,000,000; Austria, 40,000,000; Prussia, 20,000,000; and Russia, 60,000,000. Patents may be secured by American citizens in all of these countries. Now is the time, while business is dull at home, to take advantage of these immense foreign fields. Mechanical improvements of all kinds are always in demand in Europe. There will never be a better time than the present to take patents abroad. We have reliable business connections with the principal capitals of Europe. Nearly all of the patents secured in foreign countries by Americans are obtained through our agency. Address Munn & Co., 37 Park row, New York. Circulars about foreign patents furnished free.

Money Received

At the Scientific American Office on account of Patent Office business, during one week preceding Wednesday, July 2, 1862:—

C. & L., of N. Y., \$15; L. E. P., of Wis., \$15; O. C. S., of Mass., \$75; E. E., of Cal., \$10; J. J. E., of N. Y., \$55; R. H., of Ill., \$10; H. N. G., of N. Y., \$15; C. M. B., of Mass., \$15; A. B., of Conn., \$225; J. H. & E. H. A., of Md., \$25; C. B., of Iowa, \$25; A. J. H., of Pa., \$10; W. H. G., of N. Y., \$40; J. H., of Pa., \$20; J. R. & J. A. S., of Ill., \$20; W. H. McN., of N. Y., \$20; S. J. A., of Cal., \$20; E. B. R., of N. J., of \$20; M. G., of Pa., \$20; L. W., of N. Y., \$20; S. B. R., of Wis., \$20; S. T. W. P., of N. Y., \$20; G. H. M., of Mass., \$20; F. W., of Mass., \$45; C. & G. M. W., of N. Y., \$20; G. J. H., of Ill., \$20; B. & R., of Wis., \$20; S. H., of Pa., \$20; W. S. M., of Md., \$20; G. N. C., of Conn., \$20; A. J. L. of Pa., \$20; J. E., of N. J., \$20; J. A., Jr., of Ill., \$20; G. P. B., of Pa., \$20; G. & H., of Ill., \$10; G. H. H., of N. Y., \$40; L. H. D., of Ohio, \$25; R. H. J., of Ill., \$20; A. R., of Cal., \$50; B. S., of N. J., \$25; W. T., of Wis., \$15; C. J., of Conn., \$15; M. & A., of Wis., \$63; D. & K., of Conn., \$15; W. M. C., of Pa., \$15; J. A., of Conn., \$15; D. II., of Ill., \$15; J. C., Jr., of N. Y., \$10; L. T., of Vt., \$15; F. J. R., of Pa., \$10; C. & G., of Ohio, \$15; M. H. S., of Ohio, \$15; W. B., of Pa., \$15; J. C., of Mass., \$25; R. K., of Mass., \$25; W. S., of N. Y., \$10; J. W. S., of N. Y., \$15; E. C. P., of N. Y., \$15; W. K., of N. Y., \$15; S. & B., of Ind., \$30; S. & C., of Mass., \$15; C. S., of Ill., \$15; H. W., of Pa., \$15; P. E. C. B., of N. Y., \$10; E. P. H., of Ind., \$15; T. S. S., of N. Y., \$15; H. H. C., of Mich., \$15; G. U., of Mass., \$10; C. H. D., of Vt., \$15; A. D., of Pa., \$25; L. & P. K. D., of N. Y., \$25; U. R., & B., of Mich., \$15; G. H., of N. Y., \$25; A. S., of N. Y., \$25.

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office from June 25 to Wednesday, July 2, 1862:—

R. K., of Mass.; J. C., of Mich.; J. H., of N. J.; H. P. B., of N. Y.; R. H., Jr., of Ill.; A. R., of Cal.; L. H. D., of Iowa; B. S., of N. J.; G. H. H., of N. Y.; W. H. F., of Mass.; J. C., Jr., of N. Y.; F. & A., of N. Y.; A. B. S., of Mass.; J. J. E., of N. Y.; C. B., of Iowa; A. S. L., of N. Y.; A. D., of Pa.; A. & S., of Pa.; J. H. & E. H. A., of Md.; G. H., of N. Y.

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 recention 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.

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.

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.

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.

Back Numbers and Volumes of the Scientific American.

VOLUMES I., II., III., IV., V., VI. (NEW SERIES) COMPLETE (bound or unbound) may be had at this office and from all periodical dealers. Price, bound, \$1 50 per volume, by mail, \$2—which include postage. Price, in sheets, \$1. Every mechanic, inventor or artisan in the United States should have a complete set of this publication for reference. Subscribers should not fail to preserve their numbers for binding. Numbers 3, 4, 6, 8, 9, 10, 11, 12 and 16, of Vol. IV, are out of print and cannot be supplied.

Binding.

We are prepared to bind volumes in handsome covers, with illuminated sides, and to furnish covers for other binders. Price for binding, 60 cents. Price for covers, by mail, 50 cents; by express, or delivered at the office, 40 cents.