

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 4,523; 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.

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.

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 transactions 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 subjoined 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.

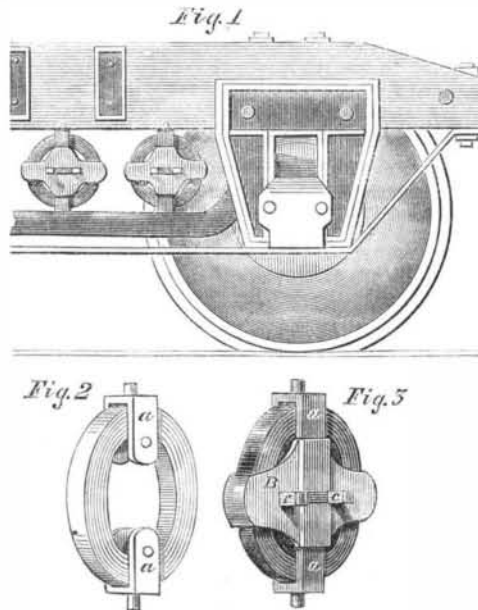
Messrs. MUNN & Co.:—Gentlemen: It gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of inventors before the Patent Office was transacted through your agency, and that I have ever found you faithful and devoted 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.

JERROLD & BEGGS' STEEL SPRINGS.

In addition to the spiral, the elliptic and the volute steel springs, we have in the invention here illustrated an entirely novel form, which may be called the flat coil, and which is said to be superior in all respects to any other form of steel spring; sustaining, with the same weight of metal, a larger load. It was invented by J. E. Jerrold and Eugene Beggs, of Paterson, N. J., who have secured patents in the United States and Great Britain through the Scientific American Patent Agency.

The mode of placing this spring is shown in Fig. 1 of the annexed cuts, and its construction is represented in Figs. 2 and 3. A flat ribbon or plate of tempered cast steel is wound in a circular ring, as shown in Fig. 2, and two stiff clasps, *a a*, of metal, are secured to opposite sides of the coil. In use, one of these clasps



is secured to the sustaining bar or table, while the body of the carriage rests upon the other, as shown in Fig. 1. To stiffen the spring and prevent its yielding too far to the load, a strong metal clasp, *B*, Fig. 3, is made to embrace it at right angles to the clasps, *a a*, thus causing it, under pressure, to yield outward at four parts of the circle. The clasp, *B*, may be secured in place by keys, *c c*, Fig. 3.

The patentees say that this spring will support 400 lbs. of load to 1 lb. of steel in the spring, while the elliptic springs sustain only about 80 lbs. It is especially adapted to strengthening elliptic springs, by being placed between the two halves at the middle of the opening. As rubber costs about 70 cents per pound and these springs can be made for about 25 cents, they will probably supersede that costly material in many situations. In short, these light, simple and durable springs seem destined to go into very extensive use.

The United States patent was issued on July 17, 1860, and further information in relation to the invention may be obtained by addressing Jerrold & Beggs, at Paterson, N. J.

A UNIVERSAL LANGUAGE.

We find in the October number of *Presse Scientifique des Deux Mondes*, the following extract from a pamphlet by Mr. Figuier:—

They occupy themselves much in Spain with a project of a universal language, project renewed of the celebrated Raymond Lulle, and of some philosophers of the eighteenth century. The most important men of Spain in letters, in science and in politics have taken a deep interest in this humanitarian enterprise, the initiative of which belongs to Mr. Sotos Ochando. The Society of the Universal Language is constituted at Madrid, and has already held several sessions. A commission has been established to direct the labors. By means of an assessment on all the members, national and foreign, the grammar and dictionary of the future universal language will be printed and published. Many persons of distinguished ability have much faith in the success of the project. Do not discourage them. The utopias of one century are often the common place familiarities of the following century.



SEVENTEENTH YEAR!!!

On the 5th of January next, the FOURTH VOLUME of the "NEW SERIES" of the SCIENTIFIC AMERICAN will be commenced.

In announcing the above fact, the publishers embrace the opportunity to thank their old patrons and subscribers for the very liberal support they have hitherto extended to this journal; placing it, as they have, far beyond that of any other publication of the kind in the world, in point of circulation.

The extent of the circulation evinces the popularity of the paper; and while our readers seem satisfied with the quantity and quality of matter they get in one year's numbers (comprising 832 pages and costing only \$3), the publishers are determined to still improve the paper during the coming year.

The SCIENTIFIC AMERICAN has the reputation, at home and abroad, of being the best weekly publication devoted to mechanical and industrial pursuits now published, and the publishers are determined (if labor and enterprise will do it) to keep up the reputation they have earned during the SEVENTEEN YEARS they have been connected with its publication.

TO THE INVENTOR!

The SCIENTIFIC AMERICAN is indispensable to every inventor, as it not only contains illustrated descriptions of nearly all the best inventions as they come out, but each number contains an official list of the claims of all the patents issued from the United States Patent Office during the week previous; thus giving a correct history of the progress of inventions in this country. We are also receiving, every week, the best scientific journals of Great Britain, France and Germany; thus placing in our possession all that is transpiring in mechanical science and art in those old countries. We shall continue to transfer to our columns copious extracts from these journals of whatever we may deem of interest to our readers.

TO THE MECHANIC AND MACHINIST!

No person engaged in any of the mechanical pursuits should think of "doing without" the SCIENTIFIC AMERICAN. It costs but four cents per week; every number contains from six to ten engravings of new machines and inventions, which cannot be found in any other publication. It is an established rule of the publishers to insert none but original engravings, and those of the first class in the art, drawn and engraved by experienced persons under their own supervision.

TO THE CHEMIST AND ARCHITECT!

Chemists and architects will find the SCIENTIFIC AMERICAN a useful journal to them. All the new discoveries in the science of chemistry are given in its columns, and the interests of the architect and carpenter are not overlooked; but all the new inventions and discoveries appertaining to these pursuits are published from week to week.

TO THE MILLWRIGHT AND MILL-OWNER!

Useful and practical information appertaining to the interests of millwrights and mill-owners will be found published in the SCIENTIFIC AMERICAN, which information they cannot possibly obtain from any other source. To this class the paper is specially recommended.

TO THE PLANTER AND FARMER!

Subjects in which planters and farmers are interested will be found discussed in the SCIENTIFIC AMERICAN; most of the improvements in agricultural implements being illustrated in its columns.

TO THE MAN OF LEISURE AND THE MAN OF SCIENCE!

Individuals of both these classes cannot fail to be interested in the SCIENTIFIC AMERICAN, which contains the latest intelligence on all subjects appertaining to the arts and sciences, both practical and theoretical; all the latest discoveries and phenomena which come to our knowledge being early recorded therein.

TO ALL WHO CAN READ!

Everyone who can read the English language, we believe, will be benefited by subscribing for the SCIENTIFIC AMERICAN, and receiving its weekly visits; and while we depend upon all our old patrons renewing their own subscriptions, we would ask of each to send us one or more new names with his own. A single person has sent us as many as 160 mail subscribers, from one place, in a single year! The publishers do not expect every one will do as much; but if the 3,500 subscribers, whose subscriptions expire with the present volume, will each send a single name with their own, they will confer a lasting obligation upon us, and they will be rewarded for it in the improvement we shall be enabled to make in the paper by thus increasing our receipts. The following are the—

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