# THE RISE AND PROGRESS OF INVENTIONS.

# ADVICE TO INVENTORS.

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 atents in this country and paper, the number of applications for atents 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 4,538; 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 theyear 1859. The increasing activity among inventors has largely augmented the number of agencies for transacting such business; and at this time there is scarcely a town of 4,000 inhabitants, but has its patent agent, patent lawyer, patent solicitor, or patent attorney, all of which terms are used to convey the same idea—viz., that their services are

agent, patent lawyer, patent solicitor, or patent attorney, all of which terms are used to convey the same idea—viz., that their services are offered to the inventor or patentee for a pecuniary consideration.

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 apace up to this time, when we find ourselves transacting a larger business in this profession than any other firm in the world. Year after year, we have increased our facilities for transacting patent business by gathering around us a large corps of the most eminent engineers, draughtsens and specification writers that can be procured. Among these gentlemen are those who have been connected with the United States and Poreign Patent Offices. The latest engagement we have made is the association with us of Hon. Charles Mason formerly Commissioner of Patents, and favorably known to the inventor as their friend and advocate. The memory of his acts while holding this high position will be cherished by many an honest inventor with gratitude as long as he lives.

The arrangement made with Judge Mason renders our facilities for proceening all kinds of patent business complete, however ample they were before; and without being accused of egotism, we may agely assert that no concern hasthe combined talent and facilities that we possess for carefully and correctly preparing applications for patents, and attending to all business pertaining to patents, such as Excensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements. &c.

Persons having conceived an idea which they thick may be patent, and as the patents of novel-typer patents, and attending to all business pertaining to patents, and as Excensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements. &c.

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### PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

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The advice we render gratuitously upon examining an invention does not extend to a search at the Patent Office, to ree 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 specials a rch made atthe 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 advice inventors to have a preliminary examination made. Address MUNS & CO., No. 37 Park-row, New York.

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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 file followed is \$30. A pampilet of advise or garding application for patents and caveats furnished gratis on application by mail. Address MUNN & CO., No. 37 Parkrow, New York.

HOW TO MAKE AN APPLICATION FOR A PATENT.

Every applicant for a patent must furnish a model of his invention, if succeptible of one; or if the invention is a chemical production, he must furnish samples of the ingredients of which his 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 prepried. Small models, from a distance, can often be sent cheaper by mail. The safest way to remit money is by fund on New York, payable to the order of Munn & Co. Persons who live in remo e 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 Parkrow, New York.

# REJECTED APPLICATIONS.

REJECTED APPLICATIONS.

We are prepared to undertake the investigation and prosecution or rejected cases, on reasonable terms. The close proximity of or Washington Agency to the Patent Office affords us rare opportunitie for the excludination and comparison of references, models, drawing documents, &c. Our success in the prosecution of rejected case has been very great. The principal portion of our charge is generall left dependent upon the final result.

All persons having rejected cases which they desire to have presented are invited to correspond with us on the sublect, giving brief history of their case, enclosing the official letters, &c.

FOREIGN PATENTS.

FOREIGN PATENTS.

We are very extensively engaged in the preparation and securing of patents in the various European countries. For the transaction of his business we have offices at Nos. 66 Chanery Lang. London; 29 Boulevard St. Martin, Paris; and 28 Rue dea Eperonniers, Brussels. We think we can safely say that three-fourths of all the European at his secured to American citizens are procured through our transactions.

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. 3? Park-row, New York, or either of our branch offices.

INTERFERENCES.

Tora, or either of our branch offices.

We offer our services to examine withouses in cases of interference, o prepare arguments, and appear before the Commissioner of agreed, or in the United States Court, as counsel in conducting interferences or appeals.

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 er cting extensive works for manufacturing under their pat nits, should have their claims examined carefully by competent attorneys, to see if they are not likely to infrince some existing patent, before making large investments. Many persons have been ruined from adopting the "penty-wise and pound-foolish" maxim, when an investment of a few dollars, to have been informed of their rights, would have saved them much a xiety and money. Written opinions on the validity of patents, a fire rareful examination into the facts, can be had for a reasonable remuneration. The price for such services is alwars settled upon in advance, after knowing the muture 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 bis family. During the past fourteen rears, we have had much ax-

of unique exhibited in the papers.

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

For further information, as to terms and mode of proceedure 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.

PATENT CLAIMS.

Persons desiring the claims of any invention which has been patented within 14 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.

No. 37 Park-row, New York.

CAUTION TO INVENTORS.

Mesers. MUNN & CO. wish, it to be distinctly understood that they neither buy nor sell patents. They regard it as inconsistent withey 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 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.

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.

e annexed letters, from the last three Commissioners of Patents, mmend to the perusal of all persons interested in obtaining

we commend to the perusal of an persons and commend. Patents:—

Mesers, Munn & Co.:—I take pleasure in stating that while I held the office of Commissioner of Patents, and R than ONE FOURTH OF ALL THE IUSTAGES OF THE OFFICE CAME THROUGH YOUR HANDS. I have a modoubt 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.

CHAS, MASON.

csts 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 satisfying testimonial:

Mrssrs. Munn & Co.:—It affords no 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 kinge, 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,

Messrs. Munn & Co.:—Gentleman : It sixtually the interval in the interval of the servant,

Messrs. Munn & Co.:—Gentleman : It sixtually the servant is servant.

Mosses. 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.



ISSUED FROM THE UNITED STATES PATENT OFFICE

[Reported Officially for the SCIENTIFIC AMERICAN.]

Pamphlets giving full particulars of the mode of applying for patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the Scientific American New York.

28,544 P. W. Adaire of Hays' Creek, Miss., for an

28,544 P. W. Adaire of Hays Creek, Miss., for an Improvement in Ditching Machines:
I claim the combination of the frame, A, and adjustable standards. E. E, with wheel, B, circular cutting plates, a a, cross-pieces, b h false bottoms, c, guide pieces, e', cams, C'C', guide or shield, B', plow, I, and openers, H, arranged and operating in relation to each other as and for the purposes set forth.

28.545.--M. C. Andrew of Lawrence, Mass., for an Impro ement in Swinging Bol te s for Railroad Car Trucks:

I claim the combination of the friction blocks with the truck frame, he swinging bolster and its pendulous links—the same being for the urpose described.

purpose described.

I also claim the application of the elastic step to the bolster, in connection with so constructing the bolster that it may be capable of spinging together, substantially in manner and for the purpose as described.

28 546.-W. J. Andrews, of Columbia, Tenn., for an

Improved Sad Iron Heater:
I claim the described rack for sad-iron heaters constructed and perating in the manner substantially as described.

[This invention consists in constructing a rack of hollo tubes, of a suitablestrength, and arranged in such a mannerthat the tubes will serve to hang the rackto the top bar of an ordinary grate, and to conduct hot air through them from the fire, and give out heat tothe iron or irons that are placed on the rack, independently of the direct heat the bottoms of the irons receive from the fire; and in combining with such a rack a guard plate for protecting the iron from burning or being smoked.]

28.547.-John Armour, of Helena, Ark., for an Im-

perience 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 ntmostskill to ensure success. All documents connected with extensions require to be carefully drawn up, as any discreptuacy or untruth exhibited in the papers is very liable to defeat the application.

28,548.—T. G. A old, of New York Ci, for an Improvement in Drop Light Joints:

1 claim, first, The construction of the socket of a drop light joint of a single piece, substantially as described.

Second, The employment, in combination with the socket, A, of a drop light joint for gas-burners, made in one piece, and the clastic custom. 28,548.—T. G. A old, of New YORK CI, for an improvement in Drop Light Joints:

I claim, first, The construction of the socket of a drop light joint of a single piece, substantially as described.

Second, The employment, in combination with the socket, A, of a drop light joint for gas-burners, made in one piece, and the clastic lining, d, of a screw ring, e, fitted to a screw thread inside of the said socket substantially as and for the purpose specified.

This invention consists in a certain construction of the socket of the joint and in a certain mode of applying the lining of cork or other elastic material, whereby provision is made for the contraction or renewal of the said lining when its opening becomes worn by friction or enlarged by the heat of the burner to which it is applied, or for adapting it to variations in the sizes of burners.]

28,549.—E. H. A herof, of Boston, Mass., for an Improvement in Appa at se for Naphthalizing

Improvement in Appa no se Gases:

I claim the combination of the gas-receiving and expanding chamber, F, with the naphthalizing cietern, scroll and foat, as specified.

Also, the above-described arrangement and application of the float, seroll and disk, whereby they are rendered capable of easy and proper adjustment, as explained.

Also, the combination of one or more propelling wings or the equivalent thereof with the scroll and float, when applied and used within a cistern substantially in manner and for the purpose as described—such propelling devices being to facilitate or effect the rotation of the said float and scroll while being broyed within the liquid, as described.

ed.

o, the application and a rangement of the foraminous diam with respect to the cistern and eduction pipe of the apparadescribed.

28,550.—Cyrus A er of Tunkhannock, Pa., for an

28,550.—Cyrus A er of Tunkhannock, Pa., for an Improvement in Gearing for Horse-powers:

I claim, first, Constructing the main wheel, C, in the form of a code, and each section with a narrow periphery, the teeth on the lower intermediate wheels, A A, running under a part of they and wheel, C, which is smaller than the part which they take into, following the same arrangement up to any number desired, the upper series held down by the top or cover, D—the whole constructed and working as specified.

Second, The peculiar construction, combination and operation of the intermediate wheels, b b b, and the main wheel, C, and the center pinion, Fig. 7, both when at rest and in motion, substantially as specified above.

Third, The manner in which the main shaft is held in position, namely, by the intermediate wheels taking into the main wheel and into the center pinion, thus enabling me to dispense with all b arings except the stepping.

Fourth, The manner of seating the driver, namely, putting a post through the coverl and main shaft into the step and a seat on top of this post, that will revolve or stand stationary, at the driver's pleasure.

Fith, Giving the band wheel, K, an increased velocity of one re-

pleasure. Fifth, Giving the band wheel, K. an increased velocity of one revolution over and above the velocity impacted by the tumbling shaft, M. by means of the cogged or milled stationary concave wheel or ring, N. Fig. 8, one or more intermediate wheels, Fig. 8, revolving on their own axis and the center pinion wheel, L. Fig. 8. Sixth, Having one end of the band wheel, shaft in the end of the tumbling rod, and revolving the same way.

Seventh, Having the whole machine shut up tight by the way it is constructed without boxing.

28,551.-W. B. Avery, of Cambridge, Mass., for a

Fire-escape:

I claim the combination and arrangement with a grapple constructed with pivoted holding dogs, o.o. of the reels, E and i, when these latter are lung by a slaft, a, in links, g. adjus able in position as described, and provided with a crank chain, c, and brakes—all operating to regulate and control the position and descent of the car, d, substantially as described.

substantially as occurrined.

28,552.—Leopold Benne t of Pittsburgh, Pa., for an Improved Steam Valve:

I claim the construction of a valve oscillating or working in the same manner as a cock, with the steam passage true sversely through it in the direction of its length, as in the manner described by reference and drawings; my object being to relieve the steam valve as far as possible from unnecessary friction. The valve can be worked by any ordinary eccentric or cam, or any of the usual appliances for working slide or poppet valves.

28,553.—Joel Bo man, of Somerse, Ohio, for an Improvement in Machines for Dressing Mill ones:
I claim the application to the lever, G, of the graduating device consisting of rocking bar, n, with arms, q, connected with sliding frame, t, x in combination with springs, p and v; the arrangement and operation being substantially as set forth.

28,554.—Joseph Brakely, of New York City, for an Improvement in Machines for Separating the Quali-

Improvement in Machine to the of Bark:

I claim the combination of a saw or cutter, D, rotary or reciprocating, a pressure roller, L, and adjustable bearing plate, O, with or without rollers, Q—all being arranged and applied to a bark mill substantially as and for the purpose set forth.

28,555.—Henry Brandt, of Col mbia, Pa., for an Improvement in Bending Teeth for Horse Rakes:

I claim the bender, A, with its flange, B, raised end, G, guides, E D, pivot, F, and braces, C e e, in combination with the flanged and grooved curved lever, K L M N, made substantially as set forth, for the purpose specified.

28,556.—G. C. Brower, of New Orleans, La., for an Improvement in Gas Torches:
I claim a gas torch constructed substantially as described and represented.

28,557.—Robert Br on of Schenectady, N. Y., for an Improvement in Harve ters:

I claim the combination of the finger bar having a bracket, K, and axial cross head, c, with the socket plate, L, of the frame, A; the whole constructed and arranged and operating in the manner and for the purpose described.

the purpose described.

[This invention consists, 1st. In a peculiar arrangement of gearing for communicating motion from the sickle, whereby a machine of light draft is obtained, and the power applied to the sickle in a very direct manner. 2d. In a novel arrangement of e pitman, by which the same may be extended or shortened as occasion may require. 3d. In a peculiar manner of attaching the finger-bar to the main frame of the machine, whereby the sickle is allowed to conform quire. Su. In a pecunar induction according to larger than 8 man frame of the machine, whereby the sickle is allowed to conform perfectly to the inequalities of the surface of the ground. 4th. In an adjustable driver's seat to admit of the adjustment of the weight of the driver on the machine, as circumstances may require.]

28 558.-T. V. B sh, of Galla in, Tenn., for an Im-

provement in Houses for Preserving Roots:
I claim, in combination with the outer walls and covering, a series of inner compartments, which inner compartments are surrounded by and covered over with dry earth as a filtering medium between the roots and the external air, for the purpose of storing and preserving said roots, substantially in the manner described.

28,559.—D. H. Chamberlain, of West Roxbury, Mass. for an Improved Feed for Leather-splitting Ma-

p o ement in Sharpening Saws:

I claim forming a narrow slit from the bottom of the notch in the spreader and sharpener, R, into the body of the same, and then brinking the sides of said slit into close contact with each other before tempering the said spreader and sharpener, substatially in the manner and for the purpose set forth.

I also claim combining the spreader and sharpener, R, with the ladication of the substantially in the manner and for the purpose set forth.

I also claim combining the spreader and sharpener, R, with the said block, A, when the adjustable segment, C, is combined with said block substantially in the manner and for the purpose set forth.