William Fulton, of Cranherry, N. J., for Improvement in Lamps. Patented August 3, 1858. Re-issued

William Fulton, of Cranherry, N. J., for Improvement in Lamps. Patented August 3, 1858. Re-issued Sept. 13, 1859:

I claim, first, The perforated plate, C, or the gauze wire, C, for the purpose of regulating the elastic force of the air so that it may be Presented everly to the fiame or their equivalent.

Shown in Fig. 1, in combination with the perforated or air distributing plate, C, or the gauze wire, C, or their equivalent.

Third, I claim the register formed of the perforations, e, in the bottom, A, as shown in Fig. 5, in combination with the perforated plate or gauze wire, C, and the holes, h, in the lower part of cap, D, as shown in Fig. 1, the whole being arranged substantially as and for the purpose herein described.

William Joslin, of Cleveland, Ohio, formerly of Waterrord, N. Y., for an Improvement in Machinery for Manufacturing Cord.uge. Patented Jan, 19, 1847: I claim the employment of a condensing tube and laying block, or other equivalents thereof, in combination with the means of giving the fore twist to the strands, and the twist to the laid rope, substantially as described, or the equivalent thereof, for the purpose specified. ford, N. Y., for an Improvement in Machinery for

stantially as described, or the equivalent thereof, so specified.

I also claim the series of fivers turning in stationary bearings to give the fore turn or twist to the strunds, as described, in combination with the fiver for giving the twist to the rope, and provided with cross capstan, and means of giving tension to the rope, substantially as described.

Posters Mass for a Plate Holder

as described.

A. S. Southworth, of Boston, Mass., for a Plate Holder for Cameras. Patented April 10, 1855:

I chaim, bringing the different portions of a single plate or several smaller plates successively into the field of the lens of the camera, substantially in the manner and for the purpose specified.

B. Sexton, of East Windsor, Conn., for an Improve-ment in Machinery for Drying Cloth. Patented

ment in Machinery for Drying Cloth. Patented May, 8, 1860:

I claim combining with the wheels armed with tenter hooks substantially as described, the arrangement of rollers, or equivalents thereof, for presenting and drawing off the cloth, so that is shall form part of the periphery of a hollow vessel, substantially as described, and an apparatus, substantially as described, along the said hollow vessel, between the end wheels and between the place where the wet cloth begins to form the periphery of the said hollow vessel, and where the dry cleth is drawn off, substantially as and for the purpose specified.

N. C. Travis, Nathan Johnson and Richard Emerson, of Alton, Ill., assignees of Nathan C. Travis, aforesaid, for an Improved Regulator Valve for Steam

Engines. Patented Oct. 11, 1859:
We claim, first, The arrangement and combination of the valve ox, A, and casing, C, as and for the purposes herein shown and

Second, The arrangement and combination of the screw socket, k, Second, The arrangement and combination of the screw socket, k, stem, i, rod, i, arm, p, groove, q, and hand wheel, J, so that by turning the hand wheel, J, the stem. I, may be elevated and depressed irrespectively of the rise and fall of the rod, I, and without rotating the latter, all as herein shown and described.

[This invention was illustrated on page 321, Vol. 1, new Series of Scientific American.]

DESIGNS.

Thomas Loring, of Blackwoodtown, N. J., for a design for Sad Irons.

James Horton and John Martine (assignors to David Stuart and Richard Peterson), of Philadelphia, Pa., for Design for the Plates of a Stove.

James Horton and John Martine (assignors to David Stuart and Richard Peterson), of Philadelphia, Pa., for Design for the Plates of a Cylinder Stove.

W. Stanard (assignor to S. S. Jewett and F. H. Root), of Butfalo, N. Y., for Design for a Cook's

W. Stanard (assignor to S. S. Jewett and F. H. Root), of Buffalo, N. Y., for Design for a Cook's

Nors. -The number of patents reported in the above list is eighty-NOTE.—The number of patents reported in the above list is eightyeix. Out of this large—considering the season—number, ThirtyFOUR of the cases were solicited through the Scientific American
York.

HOW TO MAKE AN APPLICATION FOR A PATENT.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, Sept. 29, 1860 :-

C. G., of Pa., \$30; W. L., of Conn., \$25; J. H. L., of Ky., \$25; J' M. N., of Pa., \$30; L. S., of Ky., \$30; C. D., of Mass., \$30; E. L. G., of Conn., \$30; D. L., of III., \$50; W. H. H., of Ala., \$25; P. II., of Mo., \$25; II. & H., of Ind., \$25; W. C. E., of Tenn., \$30; J. S. Jr., of Pa., \$30; N. J., of N. Y., \$30; H. S. H., of N. Y., \$30; F 8. of N Y., \$25; J. B. & S. of N. J., \$100; Z. F., of Mo., \$10; G. & S., of Mass., \$30; V. Van V., of N. Y., \$25; L. G., of La., \$30; A. R., of N. J., \$100; H. & K., of Ill., \$30; C. W.W. S., of Fla., \$30, O. B. L., of N. Y., \$25; G. K. W., of R. I., \$30; C. V. M., of Mass, \$31; S. & L. of Pa, \$100; D. B. B., of Pa, \$25; W. A. D. of III., \$35; G. S. R., of Miss., \$35; G. W. H., of Pa, \$39; C. F. McN. K. Co., of N. Y., \$30; C. H. B., of Conn., \$30; J. P. F., of N. Y., \$33; J. H. B., of N. Y., \$30; J. R. J., of Ky., \$25; R. T. K., of Pu., \$33; J. H. B., of N. Y., \$53; H. Van S., of Conn., \$55. McN. K. Co., of N. Y., \$30; C. H. B., of Conn., \$30; J. P. F., of N. Y., \$33; J. H. B., of N. Y., \$10; I. M., of Olto, \$25; C. R. O., of N. Y., \$30; F. & H., of N., \$20; E. P. W., of N. Y., \$25; W. S. of N. Y., \$40; J. J. S., of N. Y., \$30; J. B. VanD., of N. Y., \$39; of N. 1., \$40; d. d. S., of N. 1., \$30; J. B. VanD., of N. 1., \$30; J. B. VanD., of N. 1. \$30; J. B. C., of Ohio, \$70; H. S. M., of R. I., \$20; C. G. C., of N. Y., \$25; J. O., of P.a., \$30; B. C., of P.a., \$30; S. & G., of Ill., \$10; A. F., of N. Y., \$12; R. L. U., of N. Y., \$20; W. A. L., of N. Y., \$25; H. McD., of N. Y., \$30; S. L., of Ohio, \$25; W. D. A., of N. Y., \$32; F. W. H., of Conn., \$10; T. S., of N. J., \$25; H. W., of N. J., \$25; D. M., of N. Y., \$25; G. H., of N. Y., \$25; A. T. B., of N.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent

ties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Sept. 20, 1860:—

F. W. H., of Conn. (3 cases); W. H. H., of Ga.; W. L., of Conn; C. L., of Cal.; J. M., of M. ine; F. & S., of N. Y.; A. T. B., of N. Y.; T. B. J., of Ill.; N. F. B., of Ill.; J. J. P., of Austria: E. G. C., of N. Y.; W. H. L., of N. Y.; W. D. A., of N. Y.; J. H. L., of Kr.; J. W., of Engkud; H. W., of N. J.; D. M., of N. Y.; S. L., of Ohio; H. H., of Iowa; A. A., of N. Y.; F. & H., of Va.; L. L., of N. Y.; J. B. C., of Ohio; J. J. McC., of N. J.; A. C., of Mass.; T. S., of N. J.; Z. G. A. N. P. O., of France: O. B. L., of N. Y.; G. H., of N. Y.; C. W. F., of N. Y.; J. W., of Obio; C. A. R., of Ala, H. S. W., of R. I., In May of Ohlo; H. McD., of N. Y.

THE RISE AND PROGRESS OF INVENTIONS.



During the period of Fourteen Years which has elapsed since the business of procuring patents for inventors was nenced 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 4,538; 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 tific American Patent Agency, 1,440 during the year 1859. 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 iden-

tified 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.

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

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 Parkrow, New York,

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

The advice we reuder 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 85, 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 np 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 S eventh 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 inven-The government fee for a caveat is \$20. A pamphlet of advice regarding applications for patents and caveats furnished gratis on

Ever- 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.

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 presented are invited to correspond with us on the subject, giving a brief history of their case, enclosing the official letters, &c.

FOREIGN PATENTS. of patents in the various European countries. For the transaction of this business we have offices at Nos. 66 Chancery Lane, London; 29 oulevard 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

patents sectived to American citizens are produced 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 the different Patent Offices, Sc., may be had gradis appendication at our repeated office, No. 27 Park-row, New York, or either of our branch offices.

CAUTION TO INVENTORS.

Messrs, MUNN & CO. wish it to be distinctly understood that they neither buy nor sell potents. They regard it as inconsistent with a proper management of the interests and claims of inventors, to participate in the least apparent specialtion in the rights of pagentees. 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 the ciling 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 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.

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-fourm of All the office of Commissioner of Patents, more than one-fourm of All the office of Commissioner of Patents, work than one-fourm of All the bubble 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.

Immediately after the appointment of Mr. Holt to the intersects of your employers. Yours, very truly,

Immediately after the appointment of Mr. Holt to the office of Postmister-General of the United States, he addressed to us the subjoined very gratifying testimonial:

Messis, Munn & Co.:—It affords me much pleasure to lear testimenty 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.



S. B. L., of N. Y .- We know of no instrument which is specially manufactured for testing the strength and purity of cider. A hydrometer would be of some use, but not so reliable as the judgment of an expert, founded on inspection and tasting. Pure milk and pure cider are seldom found in commerce. The purest cider is sometimes called champagne.

O. C. W., of Pa.—The yellow substance in the stones which you send us is mica, one of the three constituents of granite

O. G., of Minn.-We have worn out several pairs of india-rubber soles on leather boots, and liked them very much. Manufacturers have them put on at 75 cents per pair. Any one may put them on with the cement sold by them, but the operation must be very thoroughly and carefully performed, or they will peal off.

J. C. R., of Ind .- Your question has been thoroughly answered on page 313, Vol. II. (new series), of the Scientific Amtransfer of an interest in a patent, by levy and sale, has never, as we believe, been settled by judicial decisions. It certainly cannot be done as the laws now stand.

A. L., of Ohio .-- Your mode of driving the needle in sewing machines is not patentable, unless some nevel effect is obtained by it, as it would be regarded as a mere substitution of one mechanical equivalent for another. We think a very limited claim might be obtained on the feed. The thread controlling opparatus does not differ sufficiently from others that are in use, to be ~tontable.

E. E. W., of N. H.—You will find pretty good treatises on pyrotechny in any of the large encyclopedias. Professor Cut-bush, of West Point, published a large book on the subject about 30 years ago. The only other book we remember is a small treatise by Mr. Mortimer.

G. H. A., of Wis .- The recipe you name is correct, and in skilled hands will produce a good article. We know of no cheap varnish which is durable. The cheapest varnishes are made of white turpentine or resin dissolved in oil of turpentine; dryers should be added

T. D. S., of Pa.-We put little faith in fly traps and fly poisons. The molasses or sugar which it is necessary to mix with the poison attracts to a house about as many as are killed. We know of no substance which will kill flics and at the same time be safe for a child to eat.

C. H Y., of N. Y.—The most approved process for case-hardening is to inclose the article to be hardened in a case filled with horn or similar substances, and heat it for about 6 or 8 hours, according to the size of the article.

T. M., of Mo.—The only reliable way to determine the variation of the magnetic needle is by actual experiment. On certain lines upon the earth's surface, called "lines of no variation," the needle points towards the northpole. Such a line at the present time passes a little south of Cape Lookout, and through the center of Luke Erie, in a N. N. W. direction. The magnetic poles are about 150 from the poles of the globe, and they change their longitude about 10 in 12 years, vibrating between certain limits. In Londan, in 1576, the variation was 110 easterly; from 1657 to 1662, it was reduced to nothing, and then slowly advanced to its maximum in a westerly direction, which, in 1812, was 240 17 18". Since that time it has been slowly decreasing. On the N. E. boundaries of the United States, the variation is full 170 West; in Wisconsin, about 90 East; and in Oregon, about 220, the needle there point ing nearly N. N. E.

L. H. R., of Ill.-The idea of carrying the smoke and cinders of a locomotive, by a pipe, over to the rear of a train of cars, is an old device. It was illustrated in Vol. 11. (old series) of the SCHENTIFIC AMERICAN.

J. M. M., of Mo .- To learn with certainty which are the five highest structures in the world would require more labor than the knowledge is worth.