

30,607.—S. P. Patten, of New York City, assignor to himself and S. A. Nickerson, of Brooklyn, N. Y., for an Improvement in Capstan Windlasses:

I claim combining the capstan with the barrel of the windlass by means of a worm wheel, F, on the said barrel and an endless screw, L, on shaft, G, which has the capstan barrel, J, and pawl rim, H, fitted to it, substantially as described, the so-fitted pawl rim being furnished with one or more movable stops, K, to permit the operation in either of the modes specified.

RE-ISSUES.

Solomon E. Bolles, of Mattapoisett, Mass., for an Improved Machine for Raising and Transporting Stones. Patented April 10, 1855:

I claim my improved stone carriage or arrangement of derrick, C, open bed frame, A, and two separate or disconnected wheel axles or journals, substantially as specified.

I also claim the combination and arrangement of the auxiliary windlasses, K, its line, l, pawl, h, and ratchet, i (or mechanical equivalents thereof), with the main windlass, I, the crank shaft, L, and their working gears, a—the whole being to enable the machine to be operated substantially as specified.

EXTENSIONS.

Alfred Judson, of Rochester, N. Y., and T. D. Jackson, late of New York City, deceased (Elizabeth N. Jackson, administratrix), for a Bell Telegraph. Patent dated October 17, 1846. Re-issued December 26, 1848:

We claim, first, The combination of the bell, pulling wires, and machinery of the enunciator or telegraph as described, or equivalents thereto, with a face or register for indicating signals, whereby we are enabled to represent, when needed, a plurality of such signals at the same moment and have them all remain permanent and visible until the object for which they are made is answered.

Second, We claim the combination and arrangement of the drops with the tumbler, drop levers and slide, substantially in the manner and for the purpose set forth.

B. F. Palmer, of Philadelphia, Pa., for an Improvement in Artificial Legs. Patent dated November 4, 1846:

I claim the long tender, E, the spring, k, and cord, l, respectively combining and acting upon the parts, a b c and d, substantially in the manner and for the purpose set forth.

I also claim the improved manner of forming the knee joint, uniting the parts, a and b to each other by means of the hemispherical at the lower end of a, the partial concave, beveled to a thin edge on the front side of the upper end of b, and the pivot, g, combined and operating substantially in the manner set forth, for the purpose of obviating noise or friction in working.

I also claim the improved manner of forming the ankle joint, uniting the parts, b and c to each other, the rear side of the lower end of b being beveled to a thin edge passing over and inclosing the heel portion of that part of c in the rear of the front pivot, h, and the front upper part of c, at a, b, being brought to a thin edge and overlapping the lower end of the front side of b, substantially as set forth—thus forming a pliable joint that will work without noise and preserve its contour in all portions.

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 4,538; 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 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 \$3, 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 1,600 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-

tion. 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.

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 their case, enclosing the official letters, &c.

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 Eperonières, 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 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 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 office of Postmaster-General of the United States, he addressed to us the following very gratifying testimonial:—

Messrs. MUNN & Co.:—It affords me much pleasure to hear 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.



J. A. C., of C. W.—Electricity from a galvanic battery can be accumulated by means of a Leyden jar if the battery is one of high intensity, that is, consisting of a considerable number of plates. Connect one pole with the inside of the jar and the other with the outside.

S. F., of Pa.—The reporter, doubtless, meant to say that, by raising the temperature of iron from 1,000° to 1,500°, the light emitted from it is increased forty fold.

R. S., of Mass.—You can reduce quartz to a liquid by grinding it to powder, then boiling it in a close vessel with a strong caustic alkali.

L. A. L., of N. Y.—A small portion of calcined alum in powder added to black lead, and mixed with some beer and a little asphalt varnish (made with turpentine and asphalt) should make a good stove polish to prevent the metal rusting in your laboratory.

M. S., Jr., of La.—The walls of the basements of houses in this city situated near the rivers, and exposed to tidal overflows, are usually laid in hot asphalt. The arches of cellars laid under the sidewalks in our streets are also usually covered with hot asphalt; no other cement seems to be as good for keeping out water from the surface. Cisterns made in the "bottoms of the Mississippi," subject to overflows, if coated inside with good hydraulic cement and outside with hot asphalt, should be perfectly tight. The hydraulic cement which you have used seems to have been of an inferior quality.

R. R. T., of N. Y.—The bill to amend the Canadian Patent Law did not pass at the last session of Parliament. American inventors are excluded from taking patents in Canada at present. It is a shame and disgrace,

W. H. H., of Tenn.—A large building in Paris which had one of its stone walls bulging outward was straightened by running an iron rod through the walls, on the outer end of which was a broad plate of metal placed inside of a nut working on the screw of the rod. By heating the rod inside of the building, the metal expanded; then the nut, with its broad plate, was screwed up close to the face of the wall against the bulged part. When the rod cooled, the force of contraction in the metal was so great that it straightened the wall in a very satisfactory manner. This plan you could employ for your brick house; but it may be too troublesome and expensive. We do not remember any other method that we could recommend. Probably your house may be able to stand for quite a number of years, with its uneven walls.

F. D., of N. Y.—Mildew may be removed from white linen and cotton clothes by washing and bleaching, and especially by using a little chlorine water for the bleaching action. By placing a little salt on the mildew stains, then squeezing some lemon juice and hot water upon them, they will also be removed. Good brushing and a little alcohol rubbed on with a sponge afterward is the only treatment we recommend for mildew on woolen goods.

W. M. McA., of Pa.—You will find most of the facts known in regard to aluminum in back numbers of the SCIENTIFIC AMERICAN. It is a bluish-white metal, very light, its specific gravity being 2.56. It is easily worked, and can be hammered, rolled or cast; its melting point being about the same as that of silver, which is 1,878° Fah. It is nearly as strong and stiff as iron, and forms alloys with gold and other metals.

E. M. C., of R. I.—There are many plants which contain india-rubber in small quantities. The common milkweed is a specimen.

K. S. W., of Ga.—The stains made on fine linen with the oil from sewing machines are very difficult to remove; but this can be done with a little oxalic acid in solution after the oil is washed out. The color is due to the oxyd of iron in the oil, which cannot well be removed from light colored woolen without injury to the texture of the fabric.

S. D. T., of N. Y.—You may preserve your cider good and perfectly sweet for a long time by keeping it in close casks and placing a very small quantity of the bisulphide of lime in each.

D. C., of Va.—We are glad to know that you are doing well with your invention. We cannot advise you, however, to apply for a patent on the washing machine. A roller swinging over a corrugated concave bottom is an old device. We hope you will succeed in procuring us a good club of subscribers to our paper for the new volume, which will commence on the first of January.

M. P. F., of N. Y.—The mauve dye is made of aniline and the bichromate of potash. The description for making the purple dye from coal tar you will find on page 68, Vol. II, of the SCIENTIFIC AMERICAN.

J. S., of N. Y.—Amber varnish for violins is thinned with refined turpentine to reduce it to a proper condition for application. In varnishing a violin, all the old varnish should be carefully scraped off before the new is applied, unless a very thin coat is required.

J. Y. H., of Pa.—We do not think your plan of a long canvas screw for a flying machine as good as a short spiral. There will be no difficulty, however, in arranging the apparatus, if an engine is produced of sufficient power in proportion to its weight to raise itself by turning fans.

C. L. P., of N. Y.—We hope you may be successful with your lath machine. It is a good plan to try experiments as you are doing, and thus settle the practical value of your invention at the outset.

C. C. P., of Texas.—You are evidently possessed of much inventive talent, and it only needs to be directed toward practical results to be crowned with success. It is not a part of our business to negotiate the sale of inventions, but we advise you to find a capitalist at home to aid you in developing your improvements. Do not get too many irons in the fire.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, Nov. 10, 1860:—

- B. T. B., of N. Y., \$30; T. N. R., of N. Y., \$110; G. A. D., of Cal., \$12; M. A. W., of Cal., \$50; G. S. K., of Wis., \$20; E. W. K., of Ill., \$30; S. A. Co., of N. Y., \$25; P. L., of N. Y., \$25; C. & E., of Ohio, \$10; J. G., of Ohio, \$25; J. G. W., of N. Y., \$300; E. G. D., of N. Y., \$30; A. L. B., of Mass., \$30; D. H. F., Jr., of Mo., \$30; H. & M., of Ohio, \$30; E. C. T., of N. Y., \$30; H. N., of N. Y., \$25; W. C., of N. Y., \$25; T. N. H., of Mo., \$35; J. C. T., of Ill., \$30; J. R. I., of N. Y., \$250; H. M. B., of Ohio, \$25; S. K. W., of Pa., \$20; E. D., of N. Y., \$25; S. N. C., of Md., \$250; S. W., of Ga., \$30; J. K., of N. Y., \$35; J. E. G., of Ill., \$250; H. & W., of Mass., \$55; G. P. R., of Mass., \$30; G. & S., of Mich., \$15; E. S., of N. Y., \$30; B. M., of N. Y., \$30; E. H. B., of N. Y., \$25; A. L. F., of Pa., \$30; P. H., of Mass., \$30; A. L. S., of S. C., \$30; T. K., of N. Y., \$30; N. J., of N. Y., \$25; J. S., of N. J., \$35; L. A. G., of N. Y., \$25; P. S., of N. Y., \$30; W. H. R., of N. Y., \$350; J. H. R., of Tenn., \$25; H. & S., of Pa., \$30; C. B. T., of Cal., \$20; D. M., of Ohio, \$30; B. D. T., of N. Y., \$25; J. B. of Germany, \$25; J. L., of N. Y., \$25; O. R. B., of N. Y., \$12; S. & S., of Pa., \$30; R. C. M., of S. C., \$25; H. F., of La., \$30; W. S., of Pa., \$25; J. S. R., of Iowa, \$10.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Nov. 10, 1860:—

- T. N. R., of N. Y. (2 cases); P. C., of N. Y.; F. W. R., of Ind.; H. C. A., of Ill.; G. W. C., of Texas; J. L., of N. Y.; M. & S., of Ky.; B. D. T., of N. Y.; A. L. F., of Pa.; E. P., of Mass.; J. G., of Ga.; R. C. B., of N. C.; C. W., of Ill.; P. M., of Mich.; T. E. B., of Fla.; O. R. B., of N. Y.; H. N., of N. Y.; R. C., of Texas (2 cases); E. H. B., of N. Y.; J. R. J., of Ky.; G. & S., of Pa.; W. C., of N. Y.; J. T. P., of Conn.