

REJECTED APPLICATIONS.

Messrs. MUNN & CO. are prepared to undertake the investigation and prosecution of rejected cases, on reasonable terms.

All persons having rejected cases which they desire to have prosecuted, are invited to correspond with MUNN & CO., on the subject, giving a brief history of the case, inclosing the official letters, &c.

FOREIGN PATENTS.

Messrs. MUNN & CO. are very extensively engaged in the preparation and securing of patents in the various European countries.

Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors.

Circulars of information concerning the proper course to be pursued in obtaining patents in foreign countries through MUNN & CO'S Agency, the requirements of different Government Patent Offices, &c., may be had, gratis, upon application at the principal office, No. 37 Park Row, New York, or any of the branch offices.

SEARCHES OF THE RECORDS.

Having access to all the official records at Washington, pertaining to the sale and transfer of patents, MESSRS. MUNN & CO., are at all times ready to make examinations as to titles, ownership, or assignments of patents. Fees moderate.

INVITATION TO INVENTORS.

Inventors who come to New York should not fail to pay a visit to the extensive offices of MUNN & CO. They will find a large collection of models (several hundred) of various inventions, which will afford them much interest.

MUNN & CO. wish it to be distinctly understood that they do not speculate or traffic in patents, under any circumstances; but that they devote their whole time and energies to the interests of their clients.

COPIES OF PATENT CLAIMS.

MESSRS. MUNN & CO., having access to all the patents granted since the rebuilding of the Patent Office, after the fire of 1836, can furnish the claims of any patent granted since that date, for \$1.

THE VALIDITY OF PATENTS.

Persons who are about purchasing patent property, or patentees who are about erecting extensive works for manufacturing under their patents, should have their claims examined carefully by competent attorneys, to see if they are not likely to infringe some existing patent, before making large investments.

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.

TO OUR READERS.

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 enclosing \$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.

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 are required to accompany the petition, specification and oath, except the Government fee.

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 acknowledgement of our reception of their funds.

Back Numbers and Volumes of the "Scientific American."

VOLUMES I., II., IV., V., VII. VIII. AND IX., (NEW SERIES) complete (bound) may be had at this office and from periodical dealers. Price, bound, \$2 25 per volume, by mail, \$3— which includes postage.



J. G., of Md.—Your communication is of interest, but you have not stated where the furnace is located, nor where the ore is obtained, although we infer the steamboat you mention runs on Lake Superior.

T. H., of Pa.—The south pole attracts the north pole of a magnet, and vice versa. When a small compass, therefore, is brought within the influence of a large and powerful one, the small magnet is rotated.

M. D., of Maine.—The sound of one bugle is heard at as great a distance as fifty pitched on the same key—that is, considering the sounds to proceed from the same center of vibration.

C. D., of Mo.—Fluor spar subjected to the heat of a blow-pipe will emit a phosphorescent light; but we are unacquainted with any cold mixture that will produce such a light in a glass vessel.

E. H. H., of Ohio.—We have no data to ascertain how far a 200-lb. shot would go through water direct. Our iron-clads are armor-plated to a depth of from two to four feet below the light load-line: some are of wood and some are of iron below the armor.

L. F. R., of N. Y.—It is impossible for us to judge from your letter what sort of occupation is best suited to your taste and capacity. We usually think it best for persons seeking employment to do that which suits their own inclination; but for us to undertake to advise what you ought to do would be simply absurd.

G. W. L., of N. Y.—There is no special work published relating to the combustion of our anthracite coal in furnaces.

J. S., of Pa.—Litharge is about the best "drier" for paints that you can use, but the oxide of manganese is scarcely inferior. Fused copal is dissolved in hot oil with turpentine, but we have been informed that varnish makers now employ benzine as a substitute for the turpentine. How it is used we have not been informed, but as it is very volatile it will require to be mixed in a close vessel.

M. M. C., of Maine.—The quantity of waste water at the snifting valve of a hydraulic ram will depend upon the height of the fall, and the height to which the water is to be raised. If the water is to be raised to a less height than the fall, the waste water will be less than that which is forced up by the ram, and vice versa.

E. L., of Pa.—We cannot understand the nature of your question. You ask the reason why 30 pounds of soda, dissolved in 40 gallons of water, will not crystallize when half a pint of vitriol is added. We cannot see what crystallize you intend to subserve by the use of the vitriol. Caustic soda lye is made by dissolving equal quantities of fresh slacked lime and soda, then allowing the sediment to settle.

W. D., of Ill.—The furnaces under steam boilers, for burning bituminous coal, range from three feet to eighteen inches in depth according to the size of boiler. Your fire-box of 12 inches depth may answer for the small boiler. Anthracite coal is more destructive than bituminous upon boilers.

J. W. P., of Wis.—Your desire to obtain a quick running water wheel to avoid the use of gearing in running your lathe and you have only a fall of four feet. You will be unable to get a quick-running wheel on such a low fall, but any of the turbine wheels advertised in the SCIENTIFIC AMERICAN will suit your purpose best. There is no book published containing illustrations of the most recent improvements in waterwheels, but most of the best wheels have been described and illustrated in our columns.

D. McJ., of Canada.—We believe you will find no difficulty in smelting metals in your cupola, five feet in height and fifteen inches in diameter, by using any good blower to produce a draft. A six horse-power engine should be sufficient to drive the blower. We advise you not to waste time, labor or money upon a flying machine. Some new power superior to steam must be discovered before flying can be rendered practicable.

G. C., of Conn.—Address the Delamater Iron Works for such information as you require about calorific engines. We cannot state which is the best steam engine of ten horse-power.

Money Received.

At the Scientific American Office, on account of Patent Office business, from Wednesday, Jan. 20, 1864, to Wednesday, Jan. 27, 1864:—

J. M. M., of N. Y., \$12; J. McK., of Iowa, \$40; A. F. C., of N. Y., \$45; W. K., of N. Y., \$20; E. D. W., of N. Y., \$51; S. G. W., of Ill., \$20; W. B. R., of Mass., \$20; A. M. G., of N. H., \$41; C. F. T., of N. Y., \$61; F. S. D., of Ill., \$20; O. A., of N. Y., \$20; C. N., of N. Y., \$56; P. H., of Pa., \$20; R. H. L., of Pa., \$44; A. T., of N. Y., \$16; T. H. B., of N. Y., \$45; C. J. F., of N. J., \$16; I. L., of N. Y., \$25; T. J. B., of Wis., \$25; B. L. M., of Conn., \$16; W. C. H., of Ohio, \$30; C. W., of Iowa, \$12; B. H. & Co., of Ill., \$15; A. S. G., of Ill., \$20; G. M., of Ill., \$25; J. B., of N. Y., \$21; C. P., of Mo., \$20; G. W. R., of R. I., \$10; S. H. M., of Ill., \$16; J. J. McC., of Conn., \$25; J. S., of Mass., \$16; P. C., of Mass., \$28; R. W. P., of Mass., \$25; E. D., of Maine, \$16; J. R., of N. Y., \$25; J. N. B., of N. Y., \$20; H. H. E., of Conn., \$45; H. J., of Conn., \$20; E. F. C., of Nebraska, \$20; R. R. B., of N. Y., \$45; J. R., of Iowa, \$20; W. T. E., of N. J., \$45; H. W., of N. Y., \$16; G. S., of N. Y., \$10; F. L. P., of N. Y., \$16; A. H., of Ill., \$45; G. O. W., of Mass., \$20; A. M. & J. M. H., of N. Y., \$41; G. & S., of N. Y., \$45; M. & B., of N. Y., \$16; F. A. M., of Pa., \$25; G. W. A., of Va., \$25; L. D. W., of Mich., \$25; S. D. D., of Iowa, \$25; B. & H., of N. J., \$16; P. & W., of Iowa, \$25; F. G., of Mich., \$16; E. P., of Ill., \$20; B. & P. J. of

N. Y., \$10; G. R. V., of N. Y., \$10; N. B., of Ill., \$20; J. S., of Mo., \$27; E. H. M., of Iowa, \$16; S. S. H., of Conn., \$16; C. & W., of Mass., \$10; S. A. H., of Conn., \$16; V. D. S., of Iowa, \$25; M. T., of Iowa, \$50; C. V. W., of N. Y., \$20; R. H. R., of N. Y., \$16; W. H. M., of Conn., \$22; J. B., of Iowa, \$45; F. McC., of Conn., \$20; H. & B., of N. J., \$120; H. M. H., of Pa., \$41; F. B., of N. Y., \$22; J. M. G., of Ill., \$45; A. P., of N. Y., \$16; C. W., of Mich., \$20; N. P. S., of N. Y., \$51; E. P. N., of N. Y., \$46; H. A. T., of Ill., \$10; A. B. L., of Conn., \$15; J. G. F., of Mass., \$16; T. C., of Conn., \$16; L. S. F., of N. J., \$16; D. G., of Pa., \$16; H. R., of Wis., \$25; T. H., of Iowa, \$21; C. K., of Ill., \$50; H. & B., of Ill., \$50; A. T., of Iowa, \$30; J. B. A., of Ill., \$16; R. C. G., of Va., \$20; V. & L., of Minn., \$16; J. L. H. F., of N. J., \$16; W. & T., of Conn., \$16; D. & S., of Pa., \$21; T. & L., of N. J., \$25.

Persons having remitted money to this office will please to examine the above list to see that their initials appear in it and if they have not received an acknowledgment by mail, and their initials are not to be found in this list, they will please notify us immediately, stating the amount and how it was sent, whether by mail or express.

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office, from Wednesday, Jan. 20, 1864, to Wednesday Jan. 27, 1864:— J. M. M., of N. Y.; J. R., of Ill.; J. R., of N. Y.; M. T., of Iowa (2 cases); A. A. H., of N. Y.; J. McK., of Iowa; J. N. B., of N. Y.; C. V. W., of N. Y.; A. M. G., of N. H.; C. F. T., of N. Y.; F. B., of N. Y.; N. P. S., of N. Y.; R. H. L., of N. Y.; A. M. & J. M. H., of N. Y.; E. P. N., of N. Y.; E. W., of Iowa; J. J. McC., of Conn.; S. D. D., of Iowa; J. C. C., of Ohio; H. C. C., of Ohio; G. R. V., of N. Y.; P. & W., of Iowa; L. D. W., of Mich.; T. J. B., of Wis.; G. W. A., of Va.; J. J. R., of Ill.; I. L., of N. Y.; F. A. M., of Pa.; B. & P., of Pa.; J. S., of Mo.; N. B., of Ill.; J. G. F., of Mass.; H. R., of Wis.; C. K., of Ill. (2 cases); G. M., of Ill.; J. J. G., of Ohio; R. W. P., of Mass.; V. D. S., of Iowa; T. & L., of N. J.; D. & S., of Pa.; E. H., of Cal.

Binding the "Scientific American."

It is important that all works of reference should be well bound. The SCIENTIFIC AMERICAN being the only publication in the country which records the doings of the United States Patent Office, it is preserved by a large class of its patrons, lawyers and others, for reference. Some complaints have been made that our past mode of binding in cloth is not serviceable, and a wish has been expressed that we would adopt the style of binding used on the old series, i. e., heavy board sides covered with marble paper, and morocco backs and corners.

Believing that the latter style of binding will better please a large portion of our readers, we commenced on the expiration of Volume VII. to bind the sheets sent to us for the purpose in heavy board sides, covered with marble paper and leather backs and corners.

The price of binding in the above style is 75 cents. We shall be unable hereafter to furnish covers to the trade, but will be happy to receive orders for binding at the publication office, No. 37 Park Row, New York.

RATES OF ADVERTISING.

TWENTY-FIVE CENTS per line for each and every insertion, payable in advance. To enable all to understand how to calculate the amount they must send when they wish advertisements published, we will explain that ten words average one line. Engravings will not be admitted into our advertising columns, and, as heretofore, the publishers reserve to themselves the right to reject any advertisement they may deem objectionable.

LABORATORY OF CHEMISTRY.—ADVICES AND consultations on chemistry applied to arts and manufactures metallurgy; plans of factories, drawings of apparatus. Informations on chemical fabrications. Commercial essays, &c. Address Prof. H. DUSSANCE, Chemist, New Lebanon, N. Y.

TRURAN ON IRON.—D. APPLETON & CO., 443 AND 445 Broadway, New York, have just published the Iron Manufacture of Great Britain theoretically and practically considered. Including descriptive details of the Ores, Fuels, and Fluxes employed; the preliminary operation of Calcination; the Blast, Reheating, and Puddling Furnaces; Engines and Machinery; and the various processes in Union &c. &c., by Wm. Truran, C. E., formerly Engineer at the Dowlais Iron Works, under the late Sir John Guest, Bart. Second edition, revised from the manuscript of the late Mr. Truran, by J. Arthur Phillips, author of "A Manual of Metallurgy," "Records of Mining," &c., and Wm. H. Dorman. One Vol. Imperial 8vo., containing 84 plates. Price \$10.

WOODRUFF'S PATENT PORTABLE BAROMETERS. The best, cheapest, and only perfectly portable barometer. Prices \$5, \$8, \$12, \$15 and \$20. Sent to any address, and safe carriage warranted on receipt of price. Local and traveling agents wanted. Send for circulars CHARLES WILDER, Peterboro', N. H. 6 8 10 12 4\*

ATTEBURY'S PATENT REFLECTOR LANTERNS Patented May 12 and Nov. 17, 1863. The Reflectors are silver plated, give a brilliant light and cannot tarnish the Reflectors, the reflectors being protected by the glass in the inside which surrounds the Reflectors which also adds to the brilliancy of the Reflectors. And on the outside being hermetically sealed which renders it impossible to tarnish the Reflectors by heat or the atmosphere. The back of the Reflectors answers as a shield to the eyes of the person carrying the Lantern, as the eye being shaded from the light enables the person to see a greater distance ahead. For railroads, steamboats, wagons, farmers, &c., all wanting a lantern that will give a brilliant light, will do well by trying one of the above lanterns, have them adapted for burning carbon or lard oil. For sale by all the principal lamp, crockery, or hardware dealers in the United States and Canada. ATTEBURY, REDDICK & CO., Glass Manufacturers, Pittsburgh, Pa. 1\*

NITROUS OXIDE APPARATUS.—THE CHEAPEST and best now used. Gas bags, tubing, pure nitrate ammonia and chemical reagents, chemical glass, &c., for Dentists, teachers and Experimenters. Send for Catalogue. A. W. SPRAQUE, 89 Washington street, Boston. 6 2\*

LATHE WANTED.—NEW OR SECOND-HAND. Back geared, screw cutting, with counter shaft and pulleys. Two feet between centers, to swing ten inches. Address CHARLES H. GREENLEAF, 707 Arch street, Philadelphia, Pa. 1\*

SCRAP IRON FOR SALE.—APPLICATIONS FOR THE purchase of scraps of the best Bloom Sheet Iron (from which spoons have been cut), and band iron, received by the subscribers. Several tons weekly can be supplied. LALANCE & GROESJEAN, 273 Pearl street, New York. 6 2\*

A PROFITABLE CHANCE OFFERED TO BUY OR make, in connection with the owner, a patent padlock and night latch, already introduced into market. Full machinery tools and stock on hand, with orders unsupplied. Order unable to attend to the manufacturing on account of other business. For full particulars apply to W. R. SCOFIELD, 62 John street, New York. 1\*