

The Patent Laws, enacted by Congress on the 2d of March, 1881 are now in full force, and prove to be of great benefit to all parties who are concerned in new inventions.

The law abolishes discrimination in fees required of foreigners, excepting natives of such countries as discriminate against citizens of the United States—thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners, except the Canadians, to enjoy all the privileges of our patent system (except in cases of designs) on the above terms. Foreigners cannot secure their inventions by filing a caveat; to citizens only is this privilege accorded.

CAVEATS.

Persons desiring to file a caveat can have the papers prepared in the shortest time by sending a sketch and description of the invention. The Government fee for a caveat is \$10. A pamphlet of advice regarding applications for patents and caveats is furnished gratis, on application by mail. Address MUNN & CO., No. 37 Park Row, New York.

REJECTED APPLICATIONS.

Messrs. MUNN & CO. are prepared to undertake the investigation and prosecution of rejected cases, on reasonable terms. The close proximity of their Washington Agency to the Patent Office affords them rare opportunities for the examination and comparison of references, models, drawings, documents, &c. Their success in the prosecution of rejected cases has been very great. The principal portion of their 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 MUNN & CO., on the subject, giving a brief history of the case, including 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. For the transaction of this business they have offices at Nos. 66 Chancery Lane, London; 29 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. They thing they can safely say that THREE-FOURTHS of all the European Patents secured to American citizens are procured through their 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 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. The whole establishment is one of great interest to inventors, and is undoubtedly the most spacious and best arranged in the world.

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. Written opinions on the validity of patents, after careful examination into the facts, can be had for a reasonable remuneration. The price for such services is always settled upon in advance, after knowing the nature of the invention and being informed of the points on which an opinion is solicited. For further particulars address MUNN & CO., No. 37 Park Row, New York.

EXTENSION OF PATENTS.

Many valuable patents are annually expiring which might readily be extended, and if extended, might prove the source of wealth to their fortunate possessors. Messrs. MUNN & CO. are persuaded that very many patents are suffered to expire without any effort at extension, owing to want of proper information on the part of the patentees, their relatives or assigns, as to the law and the mode of procedure in order to obtain a renewed grant. Some of the most valuable grants now existing are *extended patents*. Patentees, or, if deceased, their heirs, may apply for the extension of patents, but should give ninety days' notice of their intention.

Patents may be extended and preliminary advice obtained, by consulting, or writing to, MUNN & CO., No. 37 Park Row, New York.

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.

UNCLAIMED MODELS.

Parties sending models to this office on which they decide not to apply for Letters Patent and which they wish preserved, will please to order them returned as early as possible. We cannot engage to retain models more than one year after their receipt, owing to their vast accumulation, and our lack of storage room. Parties, therefore, who wish to preserve their models should order them returned within one year after sending them to us, to insure their obtaining them. In case an application has been made for a patent the model is in deposit at the Patent office, and cannot be withdrawn.

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.



Horse-power.—It is a fixed rule of this, and all other well-regulated newspaper establishments, to disregard all anonymous letters.

J. W., of Conn.—You can sell an article before applying for Letters Patent without afterward invalidating your claim, but we do not think it a safe practice to adopt.

G. W. G., of Me.—On page 287 of our last volume you will find a description of an ice-making machine in practical use in England. The cooling is effected by the expansion of air previously compressed by a steam engine. It was considered a triumphant success to make one ton of ice by the expenditure of one ton of coal. The first stroke of an air pump, in exhausting a receiver, covers the interior surface of the receiver with a film of moisture. We do not find the data for filling your table.

R. H., of N. Y.—Baryto-celestine, a mineral which contains 35 per cent of sulphate of baryta, is found on Drummond Island, Lake Erie, and at Kingston, U. C. We are not aware that it is worked in this country. At Pittsburgh, Pa., large quantities of caustic soda are prepared, and sold under the name of concentrated lye.

D. T., of Mass.—You can not drill holes in glass with a common drill. They are usually made by a steel tool, like a punch in form, or flat on the end. The cutting is done by fine sand or emery. Wheeler & Wilson drill the glass in their cloth-presses, with a tool like the one mentioned above, in connection with diamond dust. If you have many holes to drill it would pay to buy some diamond dust. Large holes in glass can be made by a copper tube and fine sand or ground glass. The ground glass can be procured at druggists.

T. G. R., of N. Y.—The best book for your purpose is the "Practical Draughtsman." Address H. C. Baird, No. 406 Walnut street, Philadelphia, and he will send it by return mail.

D. C. D., of U. S. N.—Stubbs's tools can be procured of any first-class hardware store in this city. We are not engaged in the commission business. You had better write to some friend in this city to procure what you desire. Subscriptions received.

A. W. S., of Mass.—The harmlessness of pure nitrous oxide has been pretty fully discussed in our columns.

E. L., of N. J.—Plaster casts are taken from the faces of living persons in the manner you suppose. Tubes to breathe through are inserted into the nostrils, and the moistened plaster is then spread over the face and head. The velvet on wall paper and toys is prepared by cutting waste velvet into dust; it is velvet shoddy.

A. S. R., of N. H.—The best way to stop the leak in your boiler is to put a plate over the crack. All other expedients are shiftless and only temporary.

J. R. M., of Tenn.—There is no work on the locomotive link or link motion. Discussions of it can be found in Bourne's Catechism and Camdin's Practical Engineering, Main and Brown's Marine Engine, etc. The link used on Rogers's patent is, we believe, one patented by Uhry and Lutgens, and if the radius is struck from three different points, as you say, it is for some reason best known to the patentees. We see no object in it.

Gas Blow-pipe, Buffalo, N. Y.—Your letter contained no signature, and we cannot, therefore, reply to your inquiry by mail. The invention seems to embrace novelty, and we think a patent can be secured for it.

D. H. S., of N. Y.—If you are distilling pine wood to obtain turpentine the acid which troubles you is doubtless acetic acid. Your proper remedy is to make your retort or still of cast-iron instead of wrought-iron.

M. V. B. P., of Canada East.—You can procure plumbago suitable for electroplating of Smith & Butler, No. 448 Broome street, New York. A good work on electro-metallurgy is Smees', published by John Wiley, No. 535 Broadway, New York. The pressure of water at a great depth may force a cork into a bottle, and yet the water may not be sensibly compressed by the pressure.

T. E. F., of N. H.—The pressure at the bottom of a boiler is the same as at the top.

A Constant Reader, of N. Y.—It is a common practice with good cooks to bake the undercrust of mince, as well as of other pies, before the pie is filled.

J. A., of N. J.—The ports for your 6-inch cylinders should be four inches long by one-half inch wide.

C. E., of Pa.—When a horse is employed in moving a machine in a circular path the diameter of this path should not be less than thirty feet, but forty feet would be better.

O. B. M., of Mass.—The comparative economy of turbines and breast-wheels has been already fully discussed in our columns, but we should still welcome any new facts or ideas bearing upon the subject. There are some of the turbines you speak of at Woonsocket directly under Mr. Harris's eye, and he has doubtless considered their advantages. We would be pleased to illustrate Mr. Boyden's wheel.

Y. N., of N. Y.—The effects of adding large amounts to our specie circulation has been plainly shown since the discovery of the California mines. All except our share of the increased currency of the world goes abroad and is distributed among all nations. Our paper circulation does not go abroad, because foreigners will not take it. Some values adjust themselves more slowly to inflations of currency than others; among the slowest are wages, farms and Government bonds. It is the opinion of this writer that Government could have obtained the means to carry on the war with far greater ease if specie payments had been maintained.

J. H. M., of N. Y.—The preparation of India-rubber for vulcanizing is a complicated process of cutting, washing, grinding and kneading. It was fully described and illustrated in the first volume (New Series) of the SCIENTIFIC AMERICAN, pages 169 to 176.

H. S., of S. C.—You had better advertise your invention for removing scale from boiler tubes through our columns. We do not undertake to negotiate the sale of inventions.

S. L. B., of Geo.—You can obtain drawing instruments at Messrs. B. Pike & Sons', No. 518 Broadway, New York.

R. E., of —.—India-rubber can be dissolved in spirits of turpentine or naphtha, and it can be hardened to various degrees by sulphur and heat, with the addition of lime and other substances.

L. M. M., of Mass.—The action of drying substances on paint is mysterious. We cannot tell you how to prepare oil with black oxide of manganese in such way as not to have it become thick.

H. B., of Wis.—We do not think the artificial ears to which you refer amount to much.

Money Received

At the Scientific American Office, on account of Patent Office business, from Wednesday, January 4, to Wednesday, January 11, 1865:—

A. M. W., of N. Y., \$12; J. W. P., of Mo., \$30; W. H., of Del., \$50; H. A. R., of N. Y., \$25; S. & S. of Ohio, \$20; G. S., of N. Y., \$20; W. L., of N. Y., \$45; J. H. P., of N. Y., \$22; R. A., of Ohio, \$40; R. S. L., of Ill., \$20; S. Van S., of N. J., \$15; L. C. F., of Ill., \$51; J. T., of N. Y., \$45; P. C. P., of Ill., \$70; W. A. H., of Ind., \$45; H. W., of Wis., \$20; J. H. D., of N. J., \$15; B. McG., of N. Y., \$20; F. & B., of N. Y., \$15; G. F. J. C., of N. J., \$30; H. H., of N. Y., \$15; J. H., of N. Y., \$30; J. A. L., of N. Y., \$30; C. M. J., of N. Y., \$34; J. E. S., of N. Y., \$30; H. K. J., of Conn., \$45; J. P. G., of N. Y., \$40; P. & B., of Pa., \$45; K. & L., of Mass., \$20; J. S. L., of N. Y., \$15; M. B. D., of N. Y., \$40; A. R. J., of N. Y., \$15; P. C., of Ill., \$20; E. S., of N. Y., \$20; F. J. E., of Ill., \$20; H. B., of Iowa, \$15; B. K., of Penn., \$45; J. L. H., of Conn., \$15; T. R., of N. Y., \$41; P. W., of N. Y., \$15; W. W. S., of U. S. N., \$22; T. S. & W., of N. Y., \$37; J. H. H., of N. J., \$25; J. A., of N. Y., \$30; L. B. H., of Mass., \$48; W. G. A. B., of Del., \$40; H. E. G., of N. Y., \$20; J. T., of N. Y., \$41; F. W. C., of N. Y., \$15; W. T., of Ill., \$20; C. D., of N. Y., \$20; E. F., of N. Y., \$15; T. D. E., of N. J., \$20; R. K., of Ill., \$20; N. De LaP., of Ohio, \$16; J. W., of N. Y., \$45; H. B., of N. J., \$15; I. M. M., of Conn., \$45; I. W. B., of N. Y., \$20; J. F. R., of Pa., \$20; C. E. B., of Mass., \$16; J. W. F., of Cal., \$20; O. W. K., of Wis., \$25; J. M. R. of N. J., \$15; H. L. B., of Pa., \$15; M. B. W., of Ky., \$16; C. S. S., of N. J., \$15; P. G., of Pa., \$25; A. J., of Pa., \$16; A. L. B., of Minn., \$25; L. R., of Ill., \$16; J. P. C., of Conn., \$50; G. L. M., of N. J., \$25; B. & H. of Mass., \$22; S. B. H., of Pa., \$10; P. & K. of Pa., \$275; J. H. O. N., of Pa., \$25; E. E. S., of U. S. N., \$20; C. F. C. of Conn., \$15; E. B. T., of Mass., \$20; R. H., of J., of Conn., \$10; J. H., of Pa., \$16; C. J. F., of Iowa, \$15; H. R., of Ill., \$15; D. T., of Ohio, \$10; H. H. of Iowa, \$16; D. G. F., of Wis., \$25; J. H. C., of Mass., \$25; J. H. G., of Ohio, \$16; M. H., of Mich., \$25; J. C. of R. L., \$20; L. H. L. of N. Y., \$16; F. & L., of Me., \$25; W. W. T., of N. Y., \$16; G. L. D., of N. Y., \$15; J. F. W., of N. H., \$25; T. J. L., of R. I., \$140; W. & H., of Ill., \$16; G. W. B., of Conn., \$15; J. A. R., of Pa., \$25; G. W. S., of Pa., \$20; H. K., of Iowa, \$10; W. L. C., of Wis., \$25; J. S., of N. Y., \$25; F. B., of Iowa, \$20; J. B., of Ill., \$15; G. W. J., of Mass., \$30; H. R. A., of Ill., \$20.

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. 4, to Wednesday, Jan. 11, 1865:—

T. S. & W., of N. Y.; (3 cases) J. H., of N. Y.; J. H. H., of N. J.; H. A. R., of N. Y.; W. H., of Del.; R. A., of Ill.; J. J. Jr., of Ms.; (4 cases); J. M. C., of Mass.; J. I., of N. Y.; P. G., of Pa.; E. B. T., of Mass.; E. E. S., of U. S. N.; O. A., of Cal.; G. W. J., of Ms.; P. E. P., of France; W. H. H. of Ohio; J. W., of Wis.; J. W. P., of Mo.; C. D., of Canada; J. A. A., of Ohio; J. T., of N. Y.; J. T., of N. J.; D. G. F., of Wis.; J. L. of Conn.; J. A. R., of Pa.; D. T., of Ohio; O. W. K., of Wis.; A. L. B., of Minn.; J. B., of Ill.; D. A. B. S., of France; F. & L., of Me.; R. & H. V. F., of Ind.; A. M. W., of N. Y.; J. A. L., of N. Y.; J. E. S., of N. Y.; C. M. J., of N. Y.; J. H. P., of N. Y.; T. R., of N. Y.; M. & H., of N. J.; L. R., of Ill.; G. W. S., of Pa.; H. R., of Ill.; J. F. W., of N. H.; J. H. O'N., of Pa.; W. L. C., of Wis.; M. H., of Mich.; F. M. L. D., of France; J. K., of Wis.; T. J. L., of R. I. (2 cases).

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. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

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 III., IV., VII., X., AND XI., (NEW SERIES) complete (bound) may be had at this office and from periodical dealers. Price, bound, \$3 00 per volume, by mail, \$3 75 which includes postage. Every mechanic, inventor or artisan in the United States should have a complete set of this publication for reference. Subscribers should not fail to preserve their numbers for binding. VOLS. I., II., V., VI., VIII., and IX., are out of print and cannot be supplied.

THE CHEAPEST MODE OF INTRODUCING INVENTIONS.

INVENTORS AND CONSTRUCTORS OF NEW AND useful Contrivances or Machines, of whatever kind, can have their inventions illustrated and described in the columns of the SCIENTIFIC AMERICAN on payment of a reasonable charge for the engraving.

No charge is made for the publication, and the cuts are furnished to the party for whom they are executed as soon as they have been used. We wish it understood, however, that no second-hand or poor engravings, such as patentees often get executed by inexperienced artists for printing circulars and handbills from, can be admitted into these pages.

MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, No. 37 Park Row, New York City.

PROPOSALS FOR ICE.

MEDICAL PURVEYOR'S OFFICE, WASHINGTON, D. C. Sealed Proposals to be received at this Office until January 25, 1865, for furnishing ICE to the Medical Department of the Army, at the points herein designated.

The proposals will be made for the quantities indicated below as required at the respective places, with the proviso that should more be needed at any time for the year's supply, it shall be furnished at the same rates and under the same conditions.

- Annapolis, Md., ice-house owned by the United States. 150 tons. Point Lookout, Md., ice-house owned by the United States. 200 tons. Fort Sumner, Va., ice-house owned by the United States. 280 tons. Portsmouth, Va., ice-house not owned by the United States. 100 tons. Newbern, N. C., ice-house not owned by the United States. 400 tons. Hilton Head, S. C., ice-house owned by the United States. 450 tons. Beaufort, S. C., ice-house owned by the United States. 300 tons. Savannah, Ga., ice-house not owned by the United States. 400 tons. Pensacola, Fla., ice-house not owned by the United States. 100 tons. Mobile Bay, Ala., ice-house not owned by the United States. 100 tons. New Orleans, La., ice-house owned by the United States. 500 tons.

- Boston, Mass. 10 tons. Portsmouth Grove, R. I. 130 tons. New Haven, Conn. 60 tons. New York. 800 tons. Newark, N. J. 100 tons. Philadelphia, Pa. 1,300 tons. Baltimore, Md. 400 tons. Frederick, Md. 15 tons. Washington, D. C. 2,500 tons.

The undersigned proposes to furnish \_\_\_\_\_ tons of first quality Ice, carefully packed in substantial ice-houses, at the within-named points, namely: \_\_\_\_\_ at the following price per ton of two thousand pounds, namely: \_\_\_\_\_ per ton.

The ice to be subject to the inspection, measurement and approval of a Medical Officer, or other properly-appointed inspector, before being received for.

FORM OF PROPOSAL.

The undersigned proposes to furnish daily, or otherwise, all the Ice required for the hospitals, upon approved requisitions of Surgeons in charge, at or near the within-named points, at the following price per hundred pounds, namely: \_\_\_\_\_ cents per hundred pounds.

The above form of proposals will be adhered to as closely as practicable. Other forms will be received by the Department and duly considered.

COMSTOCK'S ROTARY SPADER.—HAVING disposed of the right to manufacture and vend Comstock's Rotary Spader throughout the United States, except the New England and other Atlantic and Pacific States, we are now prepared to issue licenses to manufacture and vend this implement upon the basis of a license fee of ten per cent of gross sales of machines made and sold to parties who will advance in cash the following sums, to be reimbursed from said gross sales:—For the New England States, \$3,000; for the State of New York, \$6,000; for the State of New Jersey, \$3,000; for the State of Maryland, \$2,000; for the State of Delaware, \$1,000; for the State of California, \$10,000; for the State of Oregon, \$1,000; or, for the whole to one party, \$25,000.

FOR SALE.—1 by 10-FOOT RUBBING BED, 5 cents per pound; 6 gangs of saws and 6 rip saws, 7 cents per pound; 2 cranes, 4 cents per pound; hangers and pulleys, 10 cents per pound; truck and track iron for sale cheap, all in good order. Foot 31st-st. N. R. Engines from 10 to 300-horse power, at DAVIS'S MACHINERY YARD, Nos. 17 and 19 Morris street, Jersey City. 3 4\*

J. A. FAY & CO., CINCINNATI, OHIO. Patentees and Manufacturers of all kinds of PATENT WOOD-WORKING MACHINERY of the latest and most approved description, particularly designed for Navy Yards, Ship Yards, Sash, Blind and Door, Wheel, Felly and Spoke, Stave and Barrel, Mill, and Lath, Car and Agricultural Shops, Mill, &c. Planning and Resawing, Warranted superior to any in use. Send for Circulars. For further particulars address J. A. FAY & CO., Corner John and Front streets, Cincinnati, Ohio.

OIL! OIL! OIL! For Railroads, Steamers, and for machinery and Burning. EASE'S Improved Engine Signal, and Car Oils, indorsed and recommended by the highest authority in the United States and Europe. This Oil possesses qualities vitally essential for lubricating and burning, and found in no other oil. It is offered to the public upon the most reliable, thorough, and practical test. Our most skillful engineers and machinists pronounce it superior to and cheaper than any other, and the only oil that is in all cases reliable and will not gum. The "Scientific American," after several tests, pronounces it "superior to any other they have used for machinery." For sale only by the Inventor and Manufacturer, F. S. PLASE, No. 61 and 63 Main street, Buffalo, N. Y. N. B.—Reliable orders filled for any part of the world. 1tf

MACHINERY.—ONE 16-FOOT LATHE, 60-INCH swing; Slide Lathes, 4, 6, 8, 12 and 18 feet bed; Iron Planers, 3, 5, 7 and 9 feet; Bolt Cutters; Upright Drills; Compound Planers; Universal Chucks, etc., etc., on hand at Machinery Depot, 135 North 3d street, Philadelphia. CHARLES H. SMITH. 21 6\*

RUFUS CHANDLER & CO. (SPRINGFIELD, MASS.) Manufacturers of all kinds of MACHINE SCREWS, also STEEL SLICE GAGES, other machinists' tools, and small machinery generally. 25 7\*

PATENT EXCHANGE.—ESTABLISHED FOR THE convenience of INVENTORS and BUSINESS MEN. Genius and Enterprise. We make the introduction and sale of Patents our study and profession. Terms given upon application. F. G. ORWIG & CO., 221 Broadway, New York. 25 tf

ANDREWS' PATENT OSCILLATING ENGINES ARE compact, strong, light, durable, simple and economical. We make them double and single of twenty sizes, from one-half to 250 horse-power. They leave the shop set up ready for use and require no foundation. For particulars and prices (which are low) address WM. D. ANDREWS & BRO., 414 Water street, New York. 25 8\*

BLAST MACHINERY FOR SALE.—TWO VERTICAL Blowing Cylinders, 40 inches diameter, 33 inches stroke, in fair order. Apply to MEERICK & SONS, Philadelphia. 21 tf

MACHINISTS' TOOLS, ENGINE LATHES, HAND Lathes, Planers, Upright Drills, etc., of best material and superior workmanship, manufactured and for sale by WM. M. HAWES & CO., Fall River, Mass. 25 12\*

\$2,000 A YEAR MADE BY ANY ONE WITH \$15. Stencil Tools. No experience necessary. The Presidents, Cashiers and Treasurers of three Banks indorse the circular. Sent free with samples. Address The American Stencil Tool Works, Springfield, Vt. 25 1f

GRINDSTONES OF THE BEST QUALITY MANUFACTURED FOR Mechanics, Railroad Shops, Manufacturers and the Trade. Address orders to F. M. STEARNS & CO., Boston, Ohio. 11\*

HARTMANN & LAIST, 64 SYCAMORE STREET, Cincinnati, Ohio, Manufacturers of Glycerine for Gas Motors, Hydraulic Presses, etc. Warranted not to freeze at the lowest temperature. Glycerine for Perfumers, Tobacco Manufacturers, Printers, Druggists, etc. Acetic Acid, Acetate of Lime, Acetate of Soda at the lowest prices. PAUL BALLUFF, Agent, 95 Maiden Lane. 2 16\*

FOR SALE.—THE ENTIRE RIGHT TO SCOFIELD'S Sewing Work-holder, illustrated in No. 26, Vol. XI, SCIENTIFIC AMERICAN. Sample with full particulars sent by mail on receipt of two stamps, for return postage. Address H. G. SCOFIELD, North Stamford, Conn. 2 3\*

TOR SALE.—AN OSCILLATING ENGINE, 22 BY 36 bore, will be sold cheap. Apply to GEO. H. PARKER, Detroit, Mich. 1 6\*

STEAM AND WATER GAGES, SCOTCH GLASS Tubes, Low Water Detectors, Ratchet Drills, Stocks and Dies, Boiler Felting JOHN ASHCROFT, 50 John street, New York. 1 11\*

Wrought-iron pipe, ash valves & cocks, pipe fittings, steam and gas-fitters' tools. John Ashcroft, 50 John st, New York. 1 11\*

STEAMBOAT BOILERS FOR SALE.—TWO FINE Boilers, 28 feet long, 9 feet shell, 10 feet front, with about 1,800 feet of fire surface each. Are in complete order, and good as new. WM. D. ANDREWS & BRO., 414 Water street, New York. 1 4\*

AIR PUMPS AND PORTABLE STEAM ENGINES, of best quality, for Oil Wells; and all other kinds of machinery, for sale by S. C. HILLS, 12 Platt street, New York. 1 d

FOR SALE.—ONE MULEY SAW MILL, WITH A 20 foot carriage and 7-foot saw, \$800; one Re-saw Machine, 4 rolls, 5-foot wide, \$240; one Axe Handle and Spoke Lath, \$225. Address J. A. FAY & CO., Worcester, Mass., or E. C. TAINIER, Succeeding Partner. 25 60w

FOR DANIELS'S PLANING MACHINES, CAR MOR- LISING, Boiling Machines, Car-Tenoning Machines, Car Planning and Beading Machines, &c., address J. A. FAY & CO., Cincinnati, Ohio. 3 1y

IMPORTANT TO WOOLEN MANUFACTURERS AND YARN SPINNERS.—Greenwood's Patent Reciprocating Rotary Motion. An improvement in spinning wool and other similar fibers. Warranted to make yarn of a more even size, and requiring 20 per cent less twist. Is in operation in Camden Woolen Mills, New Jersey. State rights for sale, and except Pennsylvania, or the whole patent will be disposed of. For further information address GREENWOOD BROTHERS, Camden Woolen Mills, N. J. 3 2\*

FOR SALE.—3 NEW 8-FOOT ENGINE LATHES, screw cutting, weight 1,600 lbs., \$450; two second-hand 12-foot ditto no screw, swing 21 and 24-inch diameter, \$450. Address J. A. FAY & CO., or E. C. TAINIER, Succeeding Partner, Worcester, Mass. 25 60w

E. H. BELLOWES, MANUFACTURER OF STEAM Engines and Boilers. A new 5 horse-power portable engine for sale. Worcester, Mass. 17\*

MESSIEURS LES INVENTEURS.—AVIS IMPORTANT Les inventeurs non familiers avec la langue Anglaise, et qui préfèrent nous communiquer leurs inventions en Français, peuvent nous adresser dans leur langue natale. Envoyez nous un dessin et une description concise pour notre examen. Toutes communications seront reçues en confiance. MUNN & CO., Scientific American office, No. 37 Park-Row, New York.

A VALUABLE WORK FOR INVENTORS, PATENTEES AND MANUFACTURERS.

The publishers of the SCIENTIFIC AMERICAN have just prepared with much care, a pamphlet of information about Patents and the Patent Laws, which ought to be in the hands of every inventor and patentee, and also of manufacturers who use patented inventions. The character of this useful work will be better understood after reading the following synopsis of its contents:—

The complete Patent Law Amendment Act of 1861—Practical Instructions to Inventors, how to obtain Letters Patent, also about Models—Designs—Caveats—Trade-marks—Assignments—Revenue Tax—Extensions—Interferences—Infringements—Appeals—Re-issues of Defective Patents—Validity of Patents—Abandonment of Inventions—Best Mode of Introducing them—Importance of the Specification—Who are entitled to Patents—What will prevent the granting of a Patent—Patents in Canada and European Patents—Schedule of Patent Fees; also a variety of miscellaneous items on patent law questions. It has been the design of the publishers to not only furnish, in convenient form for preservation, a synopsis of the PATENT LAW and PRACTICE, but to answer a great variety of questions which have been put to them from time to time during their practice of upwards of twenty years, with respect to matters not accessible in any other form. The publishers will promptly forward the pamphlet by mail, on receipt of six cents in postage stamps. Address MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, No. 37 Park Row New York.

WATER WHEELS.—THOSE WHO WISH TO GET a large amount of power from a small quantity of water should use Warren's Turbine Water Wheel. For circulars, &c., address A. WARREN, Agent, American Water Wheel Company, 31 Exchange street, Boston, Mass. 2 12\*

FOR SALE.—STATE OR COUNTY RIGHTS OF THE American Mower, the best Mower in use, combines all the improvements which make a perfect Mower. WM. VAN ALLEN, Youngliskepie, N. Y. 2 4\*

PAGE'S PATENT PERPETUAL DRAW BRICK AND Lime Kiln. Brick Kiln will burn 40,000 No. 1 Brick per day, with four cords of wood or two tons of soft coal. Lime Kiln will burn 300 bushels of wood or two tons of wood or two tons of coal. Dress C. D. PAGE, Cleveland, Ohio. 1 5\*

IMPORTANT TO HORSE RAKE MANUFACTURERS.—The subscribers, yielding to the solicitations of many manufacturers of Horse Rakes, have at length completed arrangements for furnishing Rake Teeth of any shape desired, bent and tempered to any pattern. We have no hesitation in assuring Rake Manufacturers that they can now rely upon procuring from us good reliable teeth of very superior temper, and in any quantity, on short notice. We furnish, in addition to the ordinary sizes of Round Teeth, prout's Patent Shape Teeth, for which we have the exclusive right of manufacture. We annex List of Sizes:—7-16 inch Round, No. 1; 13-32 inch Round, No. 2; 3-8 inch Round, No. 3; Sprout's Patent, No. 1; Sprout's Patent, No. 2; Sprout's Patent, No. 3. Extra price for all teeth over 5 feet in length, also when a coil or spring is made of the teeth. Nos. 1, 2 and 3, Sprout's Patent, corrected for strength with the same Nos. of Round, and are much lighter and more elastic. Our Teeth are all tested before leaving the shop, and warranted to be a perfect spring temper. Parties ordering Teeth should be careful to send pattern. We also furnish Rake Steel to order, cut to lengths at lowest market rates. Terms cash. H. S. WELLS & CO., Pittsburg, Pa., Manufacturers of best kind of all descriptions of Cast-steel. 1 13\*

WANTED.—\$125 A MONTH! AGENTS EVERY- where, to introduce the new Shaw & Clark \$16 Family Sewing Machine, the only low price machine in the country which is licensed by Grover & Baker, Wheeler & Wilson, Howe, Singer & Co., and Bachelder. Salary and expenses, or large commissions allowed. All other Machines now sold for less than forty dollars each are infringements, and the seller an user liable. Illustrated circulars sent free. Address SHAW & CLARK, Biddeford, Maine. 25 12\*

IRON PLANERS, ENGINE LATHES, DRILLS AND other machinists' tools, of superior quality, on hand and established for sale for and by the NEW HAVEN MANUFACTURING COMPANY, New Haven, Conn. 1 11\*

INVENTORS IN WANT OF CASH CAPITAL TO introduce their inventions can hear of a party who will furnish any reasonable amount, by addressing W. E. G., Box 5,722, New York. N. B.—None need apply unless having really useful articles. Give description. 21 12\*

FOR SALE.—ONE FLUE BOILER, 30 FEET LONG by 45 inches diameter, with two 14-inch return flues, including cooler front, bonnet, pipes, valves, etc., all complete; has been in use about five years, and is in good condition. Please address Plant's Manufacturing Company, New Haven, Conn. 21 tf

REYNOLDS' TURBINE WATER WHEELS.—COM- PATENT men are employed to measure streams, make plans, and put in flumes, wheels, and gearing. TALLCOT & UNDERHILL, No. 170 Broadway, New York. 1 X 11 1/2\*

SCALY BOILERS KEPT CLEAN, OLD CRUSTS removed by WINAN'S INCORUSTATION POWDER. Any quantity on trial. No charge if not satisfactory. H. N. WINANS, 11 Wall street, New York. 2 3\*

\$70 A MONTH! I WANT AGENTS EVERYWHERE, at \$70 a month, expenses paid, to sell Fifteen Articles, the best selling ever offered. Full particulars free. Address OTIS T. GAREY, Biddeford, Maine. 22 13\*

GROVER & BAKER'S HIGHEST PREMIUM ELAS- TIC Stitch Sewing Machines, 465 Broadway, New York. 1

GUN AND PISTOL SCREWS.—COMSTOCK, LYON & CO., Manufacturers (Office 74 Beekman street, New York), are always prepared to furnish Gun and Pistol screws to sample. Screws to fit the U. S. Musket, Sewing Machine Screws, and Metal Screws generally, of the best quality, at short notice. 16 20\*

PECK'S PATENT DROP PRESS MANUFACTURED in all its varieties, by M. & C. PECK & CO., Foundries and Machinists, New Haven, Conn. 16 26\*

HOLSKE & KNEELAND, MODEL MAKERS. PAT- ENT Office Models, Working Models, and Experimental Machinery, made to order at 528 Water street, near Jefferson street, New York. Refer to Munn & Co., SCIENTIFIC AMERICAN Office. 11f

FOR PATENT SCROLL SAWS, RAILWAY CUT- TING-OFF SAWS, Splitting Saw Tables and Arkers, Edging Saws, &c., address J. A. FAY & CO., Cincinnati, Ohio. 3 1y

FOR BEDSTEAD AND FURNITURE MACHINERY, Friezing, Shaping and Molding Machines, address J. A. FAY & CO., Cincinnati, Ohio. 3atf

BLANDY'S PORTABLE STEAM ENGINES.—FROM 4 to 33-horse power, complete and ready for immediate use, for masonry or brick work. Burn coal or wood. The best for Oil Oper- ators. BLANDY'S PORTABLE STEAM SAW MILLS.—truly portable. Can be set in full operation in two days. Warranted to cut from 5,000 to 10,000 feet lumber per day with ordinary sized man- ufacture. For full information, and circulars, send 1 cent in postage to Blandy's Engine Works, Zanesville, Ohio, or Blandy's Newark Engine Works, Newark, Ohio. 3 4\*

FOR WOODWORTH PATENT PLANING AND MATCHING MACHINES, Patent Shaping and Resawing Ma- chines address J. A. FAY & CO., Cincinnati, Ohio. 3 1y

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 eight 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.

ASSISTANT QUARTERMASTER'S OFFICE, No. 15 STATE-ST., NEW YORK, Jan. 1, 1866.

CAVALRY AND ARTILLERY HORSES WANTED.—I will purchase in open market all horses that may be presented and pass inspection at the Government stables on Thirty-ninth street, near Tenth avenue, until further notice, as follows: Cavalry horses, 5 to 10 years old, 15 to 16 hands high, and dark color. Artillery horses, 6 to 10 years old, 15 1/2 hands high, and over 1,100 pounds, and dark color. Price for cavalry horses, \$165. Price for artillery horses, \$180. Payable in such funds as may be furnished by the Government. G. D. T. BROWNING, Capt. and A. Q. M.

SOLID EMERY WHEELS, SILICATE OR VULCANIZED EMERY WHEEL CO., 91 Beekman street, New York.

MILL STONE DRESSING DIAMONDS SET IN Patent Protector and Guide.—For sale by JOHN DICKINSON, Patentee and Sole Manufacturer and Importer of Diamonds for all Mechanical purposes. Also, Manufacturer of Grinders' Diamonds, No. 64 Nassau street, New York City. Old Diamonds reset. N. B. Send postage stamp for Descriptive Circular of the Dresser. 4 1/2

CLOTHING BUREAU, QUARTERMASTER GENERAL'S OFFICE, WASHINGTON, January 9, 1866.

ARMY SUPPLIES.—SEALED PROPOSALS WILL be received at the Office of Army Clothing and Equipage, New York City, until 12 o'clock, M., on WEDNESDAY the 23rd inst., for furnishing by contract at the Depot of Army Clothing and Equipage, at New York City,

- Uniform Coats, Infantry, standard.
Artillery Jackets, do.
Trousers, Infantry, do.
Sack Coats, lined, do.
Sack Coats, unlined, do.
Shirts, Domestic Flannel, do.
Drawers, Canton Flannel, do.
Stockings, do.
Boots, sewed and pegged, do.
Boots, Cavalry, sewed and pegged, do.
Blankets, India rubber, do.
Ponchos, India rubber, do.
Knapsacks, do.
Haversacks, do.
Canteens, do.
Camp Kettles, do.
Mess Pans, do.
Axes, Felling, do.
Pick Axes, do.
Hatchets, do.
Spades, do.
Shovels, do.
Barrison Flags, do.
Tents, Hospital, do.
Tents, Shelter, 8-oz. cotton duck, do.
Great Coat Straps, do.

Further information may be had, and samples of the above articles may be seen, at the Office of Army Clothing and Equipage, New York City. Bidders may state the number they propose to furnish, how soon they can commence, and the number they can deliver weekly, and will submit samples of the articles, or of the material of which they are to be made, and, when a textile fabric, at least one yard should be furnished.

Proposals must be accompanied by a guaranty, signed by at least two responsible persons, setting forth that if a contract is awarded to the party making the bid, that he or they will at once execute the contract, and give bonds for the proper fulfillment of the same.

The right is reserved to the United States to reject any part or the whole of the bids, as may be deemed best for the interest of the service. Awards will be subject to the approval of the Quartermaster-General of the Army.

Supplies must be delivered in regulation packing boxes. Proposals should be indorsed, "Proposals for furnishing (here insert the name of the article bid for) and addressed to: Bt. Brig.-Gen. D. H. VINTON, D. Q. M. General, New York City 4 2

CLOTHING BUREAU, Q. M. GENERAL'S OFFICE, WASHINGTON, January 6, 1866.

ARMY SUPPLIES.—SEALED PROPOSALS WILL be received at the office of Army Clothing and Equipage, New York City, until 12 o'clock, M., on TUESDAY, the 17th inst., for furnishing by contract at the Depot of Army Clothing and Equipage, New York City, Great Coats, foot, like standard sample; Great Coats, mounted, like standard sample.

Bidders will state the number they wish to furnish, how soon they can commence, and the number they can deliver monthly, and will submit a sample of the hoesery of which they propose to make the coats.

Proposals must be accompanied by a proper guaranty, signed by at least two responsible persons, setting forth that if a contract is awarded to the party making the bid, that he or they will at once execute the contract and give bonds for the proper fulfillment of the same.

The right is reserved by the United States to reject any part or the whole of the bids, as may be deemed best for the interest of the service. Awards will be subject to the approval of the Quartermaster-General.

The supplies must be delivered in regulation packing boxes. Proposals should be indorsed "Proposals for furnishing Great Coats," and addressed to: Bt. Brig.-Gen. D. H. VINTON, D. Q. M. Gen. U. S. A. 1

OFFICE OF INVENTOR'S ASSOCIATION, No. 61 Bleecker Street (East of Broadway), N. Y. City.

STACKPOLE, WENDELL & COBB, INVENTORS, Manufacturers and Wholesale Dealers in Patents. Patents Introduced and Sold on Commission. 4 2

STUMPS IMPROVED PATENT BEE-HIVE.—THE subscriber having obtained a patent for an improved Bee-hive, which surpasses any bee-hive ever offered for sale, will dispose of the right on the following terms:— Two counties for \$50; ten counties, \$100; twenty-five counties, \$250. A model and specifications will be furnished to each purchaser at the above rates. For further particulars address HENRY STUMP, Adel, Dallas County, Iowa. 1

FOR SALE.—ONE 10-HORSE AND ONE 5-HORSE Power Steam Engine. Address P. HOFFHEINS, Dover, Pa. 4 2

STEAM ENGINES, MACHINERY, ETC. STEAM ENGINES from 10 to 50-horse power, with link motion, variable cut-off, of the most approved construction; also lathes, mill-gearing, shafting, hangers, etc., and machinery in general. Address: S. & T. BAILEY, New Haven, Conn. 4 1/2

THE BEST READING of the day is found in the Monthly Magazines. Among these the ATLANTIC MONTHLY is placed at the head of all American Magazines. It contains the best American writers, is thoroughly national in tone, and treats topics of living interest. Its price is low, being only \$4 a year, 35 cents a number. Clubs furnished at lower rates. The Magazine will be better than ever for the year 1866. Subscriptions should begin with the January number, which contains articles by Longfellow, Bryant, Whittier, Lowell, Holmes, Hawthorne, Mrs. Stowe, Bayard Taylor, and others. The January number sent as specimen for 25 cents. Address: TICKNOR & FIELDS, Boston. 3 2

SCOTCH GLASS TUBES, STEAM AND WATER GAGES FOR SALE. E. BROWN, No. 311 Walnut street, Phila. 3 2

CHIEF QUARTERMASTER'S OFFICE.

Philadelphia, January 12th, 1866. Sealed Proposals will be received at this office until 12 o'clock M., on Thursday, the 19th instant, for supplying the Schuylkill Arsenal with the following articles, viz:—

- 64 Dark Blue Cloth, Army Standard.
64 Dark Blue Kersey, Army Standard.
Vest Buttons, Army Standard.
6-inch Yellow Worsted Lace, Army Standard.
Brass Crossed Sabers, for Hats, Army Standard.
Brass Eagles, for Hats, Army Standard.
Regimental Colors, (Infantry), Army Standard.
Regimental Descriptive Books, Army Standard.
Regimental Index Books, Army Standard.
Hospital Tent Poles, (sets), Army Standard.
Heavy 54 inch Burlaps, Sample Required.
Canvas Padding, Sample Required.
Canteen Webbing, 1 inch, (Linen or Cotton), Sample Required.
Machine Thread, (Stewarts-Linen, No. 70, spools), Sample required.
White Basting Cotton, Sample Required.
Flax Sewing Twine, Sample Required.
Each bid must be guaranteed by two responsible persons whose signatures must be appended to the guarantee, and certified to, as being good and sufficient security for the amount involved, by some public functionary of the United States.

Bids from defaulting contractors, and those that do not fully comply with the requirements of this advertisement will not be considered. Blank forms for proposals embracing the terms of the guarantee required on each bid, can be had on application at this office, and none others which do not embrace this guarantee will be considered, nor will any proposal be considered which does not strictly conform to the requirements therein stated.

Bidders will state the quantity they propose to furnish, how soon they can commence, and the quantity they can deliver weekly. The right is reserved by the United States to reject any part or the whole of the bids, as may be deemed best for the interest of the service.

Samples of such articles as are required to be of army standard, can be seen at this office. Proposals must be indorsed "Proposals for Army Supplies," stating on the envelope the particular article bid for. HERMAN BIGGS, Colonel Quartermaster's Department.

CLOTHING BUREAU, QUARTERMASTER GENERAL'S OFFICE, WASHINGTON, January 12, 1866.

ARMY SUPPLIES.—SEALED PROPOSALS WILL be received at the Office of Army Clothing and Equipage, Philadelphia, until 12 o'clock, M., on WEDNESDAY the 17th inst., for furnishing, by contract, at the Depot of Army Clothing and Equipage, Philadelphia, viz:—

- Sack Coats, lined, army standard.
Sack Coats, unlined, do.
Blankets, India-rubber, for infantry, do.
Knapsacks, complete, do.
Hatchets, do.
Uniform Hats, do.
Hat Cords and Tassels, do.
Camp Kettles, do.
Mess Pans, do.
Shelter Tents, do.

Each bid must be guaranteed by two responsible persons whose signatures must be appended to the guarantees, and certified to as being good and sufficient security for the amount involved, by some public functionary of the United States.

Bids from defaulting contractors, and those that do not fully comply with the requirements of this advertisement, will not be considered. Blank forms for proposals, embracing the terms of the guaranty required on each bid, can be had on application at this office, and none others which do not embrace this guaranty will be considered, nor will any proposal be considered which does not strictly conform to the requirements therein stated.

Bidders will state the quantity they propose to furnish, how soon they can commence, and the quantity they can deliver weekly. The right is reserved to the United States to reject any part or the whole of the bids, as may be deemed best for the interest of the service.

Awards will be subject to the approval of the Quartermaster-General of the Army. Samples can be seen at this office, and proposals must be indorsed "Proposals for Army Supplies," stating on the envelope the particular article bid for. HERMAN BIGGS, Colonel Quartermaster's Department. 4 2

FITT'S CELEBRATED STEAM GONG CAN BE heard thirty miles. The best kind of an alarm. Its cost \$100 including valve. HERMAN BOILER FEEDER CO., Worcester, Mass., are the only manufacturers. 4 5

VALUABLE RIGHTS FOR SALE FOR MOST OF the States, or for any City or County, of HUNT'S PATENT FOOT-WARMER, the only small, practical and reliable article out for warm feet while traveling or sitting in cold rooms or churches. For full particulars apply to our delivery. Sole agents and description in SCIENTIFIC AMERICAN of Jan. 14. SOL HUNT & CO., Post-office Box 90, or No. 30 West Fifth street, Cincinnati. 1

TO STEAM PLOW BUILDERS.—I HAVE A NEW idea for a Motive Power for Steam Plows. Experiments so far very satisfactory. I wish to find a party willing to become interested in it. Address LIGHT DRAUGHT, Philadelphia, P. O., Pa. 4 2

BRIG.-GEN. H. HAUPT WRITES TO W. H. PAINE in relation to his Surveyor's Measure: "Have no hesitation in expressing the opinion that it is superior as an instrument for measuring, for the use of Engineers and Surveyors, to any yet invented. Its accuracy is surprising; its durability great; its adjustments perfect; its weight trifling." For sale by E. & G. W. BLUNT, No. 179 Water street, N. Y.; JOHN R. EVANS, No. 3 9 Penn. av., Washington, D. C.; P. LAWRENCE, Shelbygan, Wis. 1

\$5 TO \$15 PER DAY, CLEAR PROFIT, BY USING TOTTEN'S PATENT FRENCH FLUTING APPARATUS. State Rights for sale. Address R. SMITH, No. 168 Maiden Lane, N. Y. 1

SPOKE LATHES (BLANCHARD'S) OF AN IMPROVED pattern, made by J. GLEASON, No. 1,030 Germantown avenue, Philadelphia, Pa. 4 3

GENL. SHERIDAN.—PORTRAIT, CHARACTER and Biography, in Jan. Double No. Ethnological. Ask your Newsmen for it, or send to Messrs. FOWLER & WELLS. 3 2

PLATINA PLATE AND WIRE IMPORTED BY SAMUEL S. WHITE, 688 Broadway New York. 2 4

PLATINA SCRAPS BOUGHT BY SAMUEL S. WHITE, 688 Broadway, New York. 2 2

FOR PATENT STAVE AND BARREL MACHINERY, Shingle Machines, Etc., address J. A. FAY & CO., Cincinnati, Ohio. 4bt

AMES'S IRON WORKS, OSWEGO, N. Y.—WE ARE now manufacturing a superior article of eight and twelve horse-power Portable Engines. Also a new Patent Forge Hammer, the best forge hammer now in use for all forgings under six tons weight. Address H. M. AMES & CO., 3 2

MELODEON OR CABINET ORGAN TUNERS WANTED.—MASON & HAMMON will give immediate employment to a number of experienced and skillful Tuners, at their Cabinet Organ Manufactory, corner of Cambridge and Cherry streets, Boston. None but those who are masters of their art need apply, but to such great inducements will be offered. Apply personally or by letter. 3 3

ROOMS, WITH STEAM POWER, TO LET, AT NO. 115 East Twenty-ninth street. 3 2

PLATINA FOR CHEMISTS.—TELEGRAPH AND Galvanic Batteries, Etc. JOHNSON & LUND, Importers, No. 27 North Seventh street, Philadelphia.

BLINN'S TIN, SHEET-IRON AND COPPER-PLATE WORKERS.—A New and Revised Edition, gotten up in a Superior Style. A PRACTICAL WORKSHOP COMPANION FOR TIN, SHEET-IRON AND COPPER-PLATE WORKERS: Containing RULES FOR DESCRIBING VARIOUS KINDS OF PATTERNS USED BY TIN, SHEET-IRON AND COPPER-PLATE WORKERS; PRACTICAL GEOMETRY; MENSCURATION OF SURFACES AND SOLIDS; TABLES OF THE WEIGHTS OF METALS, LEAD PIPE, ETC.; TABLES OF AREAS AND CIRCUMFERENCES OF CIRCLES, JAPAN, VARNISHES, LACKERS, CEMENTS, COMPOSITIONS, ETC. A New and Revised Edition. By LEROY J. BLINN, Master Mechanic. With over One Hundred Illustrations. 12mo. \$2 50. By mail, free of postage.

CONTENTS: An Oval Boiler Cover. A Flange for a Pipe that goes on the Roof of a Building. An Octagon or Square top or Cover. A Steam Cover. An Ellipse or Oval, having two Diameters given. An Ellipse with the Rule and Compasses, the Transverse and Conjugate Diameters being given, that is the Length and Width. To find the Center and two Arcs of an Ellipse. To find the Radius and Versed sine for a given Frustum of a Cone. Practical Geometry. Decimal Equivalents to Fractional Parts of Lineal Measurement. Definitions of Arithmetical Signs. Mensuration of Surfaces. Mensuration of Solids and Capacities of Bodies. Tables of Weights of Iron, Copper and Lead. Tables of the Circumferences and Areas of Circles. Sizes and Capacity of Tinware in Form of Frustum of a Cone, such as ans, Dish Kettles, Pails, Coffee Pots, Wash Bowls, Dippers, Measures, Druggists' and Liquor Dealers' Measures. American Lap Welded Iron Boiler Pipes. Table of Effects upon Bodies by Heat. Weight of Water. Effects produced by Water in an Aeriform State. Practical Properties of Water. Effects produced by Water in its Natural State. A Tapering Article, the Top and Base to be a Rectangle, in two Sections. Effects of Heat at certain Temperatures. Tempering. Effects produced by Air in its Natural and in a Rarefied State. Table of the Expansion of Atmospheric Air by Heat. Size, Length, Breadth and Weight of Tin Plates. Crystallized Tin Plate. List of Caliber and Weights of Lead Pipe. Caliber and Weights of Fountain or Aqueduct Pipes. To ascertain the Weights of Pipes of various Metals and any Diameter required. Weight of a Square Foot of Sheet Iron, Copper and Brass, as per Birmingham Wire Gage. Recapitulation of Weights of Various Substances. PRACTICAL RECEIPTS. Japanning and Varnishing. Varnishes—Miscellaneous. Lackers. Cements. Miscellaneous Receipts. Britannia. Solders, Etc. Strength of Materials.

My New Catalogue, complete to Dec. 15, 1864, sent free of postage to any one who will favor me with his address. HENRY CAREY BAIRD, Industrial Publisher, No. 406 Walnut street, Philadelphia.

WANTED TO PURCHASE, EITHER SECOND HAND or new, if cheap, 1 Small Iron Planer, 1 Upright Drill, 1 Small Daniels' Wood Planer, 1 Engine Lath, 3 to 10 feet shear. Address, with full description and lowest cash price, Box 2422, Buffalo, N. Y. 3 2

HYDRAULIC PRESSES.—TWO LARGE, HYDRAULIC PRESSES, in good order, used heretofore in the manufacture of Adamantine Candles, for sale by E. SECCOMB, No. 101 Commercial street, Boston, Mass. 3 4

PLATINA WHOLESALE AND RETAIL—FOR ALL purposes. H. M. RAYNOR, Importer, No. 78 Broadway, New York. Platinum Scrap of any sort purchased. 3 2

TO SKILLED MECHANISMS AND INVENTORS.—A first-class inventor, having perfected important inventions, desires to form an association with a limited number of worthy inventors and skillful machinists, with a capital of \$5,000, for the purpose of introducing their inventions to the favorable notice of the public and the acceptance of capitalists and manufacturers. The plan includes a well-furnished mechanic's shop, an office and a thorough organization. It is believed that a lucrative miscellaneous business can be carried on, as supplemental to the above object. Address [3 3] SPENCER HIATT, Cuba, Ind.

ADDRESS S. HIATT, CUBA, IND., FOR SAFE, Lucrative Investments in First-class Inventions. 3 4

FOR SALE. AN INTEREST IN AN EXTENSIVE, well-established Hardware Manufacturing Business, located on a Water Power and Railroad, 28 miles from Chicago. Also two Road engines and 20 Acres of Land, in a beautiful, healthy location, suitable for the works. For particulars address ROBERT HOBSON, No. 57 Fulton street, New York. 3 2

DEL. LIT. INST. ENGINEERING SCHOOL, AT Franklin, Delaware Co., N. Y.—Advantages—Full set best Engineering Instruments, worth \$1500; Laboratory, fitted up with furnace, still, balance, &c.; full set Reagents for analysis; full set Mineral Specimens; \$200 pays Board, Books and Tuition one year. GEO. W. JONES A. M. (Yale Col.), Prof. Math., Instr. in Field Work. W. A. ANTHONY, B. Ph. (Yale Col.), Prof. Nat. Sci., Instr. in Drawing. 3 1/2

PORTABLE STEAM ENGINES.—COMBINING the maximum of efficiency, durability, and economy with the minimum of weight and price. They are widely and favorably known, more than 300 being in use. All warranted satisfactory or no sale. Descriptive circulars sent on application. Address J. C. HOAGLAND & CO., Lawrence, Mass. 3 1/2

**Improved Hay-stacking Derrick.**

This derrick is intended to facilitate stacking hay, and is so arranged as to raise the hay vertically, with ease deliver and discharge it without scattering the hay over the field. The height of the derrick is about thirty feet, and the head can be swung around very easily and readily, so as to construct a stack of any desired height. There is a small stop, A, at the bottom which fits in two holes diametrically opposite each

by painting or polishing our floors? Floors painted or polished look far prettier in July sunshine than any carpets, which are then mere fusty traps to catch dust, harbor insects and retain bad smells. Everything has its use and its season. The use and season of carpets are not in the summer time. Where it is impossible to paint or polish the floors of a house, the employment of oil-cloth will be found good economy in summer, and far cleaner. Oil-cloth, too,

Basket, which is represented by the above engraving, has been invented.

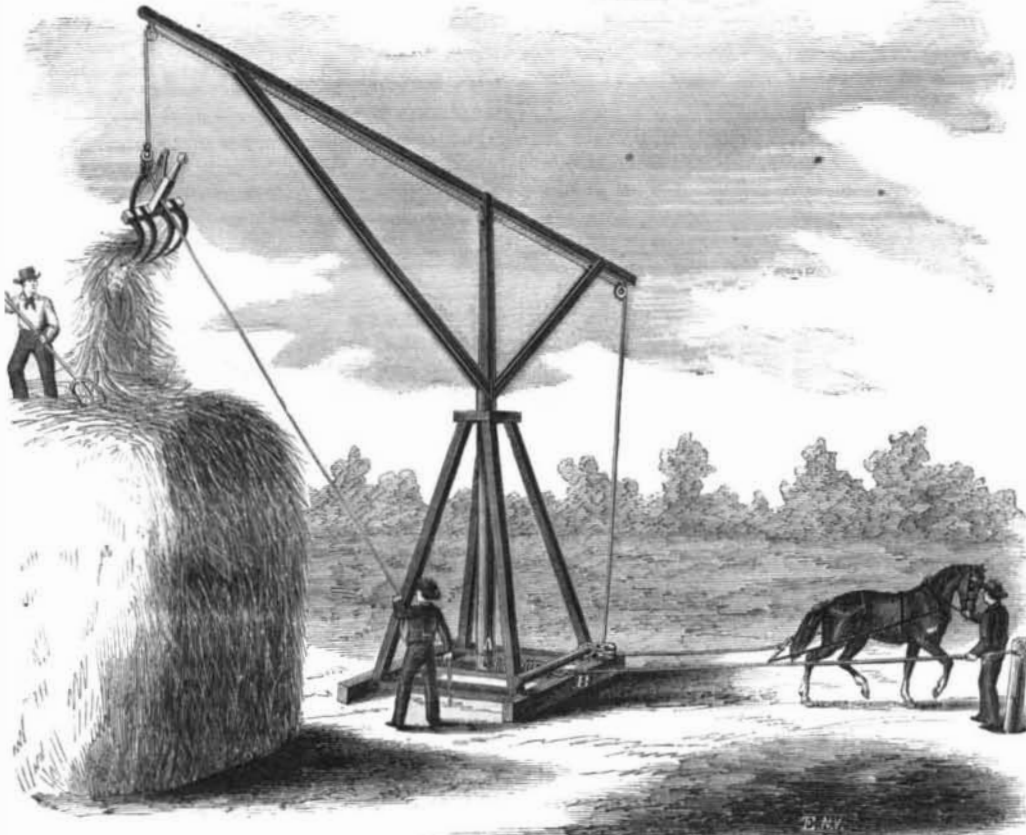
These baskets when empty nest closely together, and can therefore be shipped to any distance at a very light cost for freight. Again; the bottom being so large, allows the sides to be correspondingly low, thus furnishing what is an absolute necessity for the preservation and transportation of all ripe fruits—a shallow and well ventilated Basket.

They are furnished at the following prices: Quart size, \$35.00 per thousand Baskets. Pint size, \$30.00 per thousand Baskets.

This article was patented through Scientific American Patent Agency, May, 31, 1864.

For further information address A. Beecher & Sons, Westville, Conn.

AT PROVIDENCE, last year, the transactions in printing cloths amounted to 2,697,150 pieces, a falling off from the previous year of 1,225,650 pieces. To show the extraordinary rise in prices, it is stated that printing cloths that sold for 4½ cents per yard January 1, 1861, sold for 9 cents at the beginning of 1862, 14½ cents 1863, 16½ cents 1864, and 27 cents January 1, 1865.

**TURNER'S HAY-STACKING DERRICK.**

other; by withdrawing the stop by the rope, B, of the derrick can be swung round and retained in place by throwing the stop in again. This gives complete control over the position of the derrick, and allows the hay to be delivered at any point with great facility. As the stack is built up the derrick can be shifted to various points in a short time. The ease with which this derrick can be worked is very great, and the inventor states that after many experiments he is satisfied that this one leaves nothing to be desired.

This invention was patented by Seth Turner, of Onarga, Iroquois Co., Ill., through the Scientific American Patent Agency, on Dec, 13, 1864. For further information address the inventor, as above.

**A Hint on Carpets.**

Of all the expensive things in a modern house of the ordinary class perhaps carpets are the dearest. In case of removal, they become almost useless, and have to be sacrificed at any price that can be got for them, because, having been cut and measured for one room, perhaps of a peculiar shape, they are useless in any other; for if the pattern could be matched, which it often cannot, a bit of bran new carpet sewn on a bit not so new, would be out of harmony, and tell a story which pride of poverty would rather were concealed. The Persian and Turkish system of carpeting rooms is infinitely better and prettier than ours. The Persian carpets, especially those from Resht, are exquisitely beautiful. Their colors are brighter, the designs are prettier, and they are far more durable than the European carpets. They are made in strips usually between two and three yards long, and about one yard in breadth, to go round the sides of a room, with a square carpet of any size preferred, for the center.

They do not require to be nailed or fitted, and a sufficient number of them, will, of course, carpet any room, however large or small. They have a very rich and grand appearance too. In summer they are easily taken up, beaten, rolled and put aside by a single man-servant; and in the hot weather why should we not more generally imitate Continental custom,

of charming patterns, may now be bought very cheap, and it keeps a room delightfully cool and fresh.—*All the Year Round.*

**BEECHER'S VENEER FRUIT BASKET.**

The necessity for having some reliable contrivance to protect small fruits, while being transported to market, can readily be seen by referring to the many and varied baskets, pots and boxes, which from time to time are used for that purpose.

The old-fashioned splint basket first used, (and still used in some sections,) is so constructed that it can not stand up without help, and is therefore continually spilling the fruit.

Then come the square boxes, a multiplicity of kinds, but all afflicted with at least one difficulty. They will not pack close enough together, when empty, to transport, except at ruinous cost to the shippers.



A great improvement on the above named kinds, in so far as they pack closely together, are the several pot-shaped styles of basket that have been used so extensively for the past few years. But these styles, escaping one evil, encounter another nearly as formidable. They are so small at the bottom as necessarily to be very deep to hold the requisite measure; the effect of which is that, when filled, the lower tier of berries are more or less damaged by the weight of those above them.

To obviate the difficulties here mentioned, and at the same time to combine all the excellencies of the different styles heretofore used, the Veneer Fruit

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