

head of the nail as described. The whole being constructed, combined, and arranged, substantially in the manner and for the purposes herein set forth.

1,542.—Sugar Mold Carriage.—Theo. A. Havemeyer (assignee of T. A. Havemeyer & Henry Snitzpan), New York City. Patented March 13, 1862.

I claim, first, The adjustable plates, G, H, provided with arms, f, f', and arranged or applied to the carriage, substantially as and for the purpose set forth.

Second, In combination with the adjustable plates, G, H, the frame, A, provided with recesses, k, to receive the tips, l, of the molds as specified.

Third, Providing the frame, A, with a recess, e, and its front part or end, substantially as shown, to receive the castor wheel, C, when said frame, recess and castor wheel are used in combination with or applied to a sugar mold carriage, for the purpose herein specified.

Fourth, The hollow post, E, arranged to receive the arbor, c, of the castor wheel, C, and attached to the frame, A, to support the front end of the plates, G, H, substantially as set forth.

Fifth, The combination, construction, and arrangement of the parts herein shown and described, to operate as and for the purpose specified.

[This invention relates to an improved carriage for conveying sugar molds from the coolers in the refinery, to the apartment in which they are placed to admit of the draining operation being gone through with. The object of the invention is to obtain a carriage for the purpose specified which will admit of being adjusted to suit molds of different sizes and also be capable of being moved about with greater facility than those previously constructed.]

1,543.—Sewing Machine.—John Batchelder, Lisbon, Conn. Patented May 8, 1849. Extended May 8, 1863.

I claim, first, In combination the holding surface which supports the material immediately about the needle horizontally under the thrust of the needle, and the continuous discharging feed which moves the material horizontally under and past the needle upon and over such holding surface, each having the functions and mode of operation herein before specified.

Second, I claim in combination the holding surface which supports the material immediately about the needle horizontally under the thrust of the needle, the continuous discharging feed which moves the material horizontally under and past the needle upon and over such holding surface, and the receiving and supporting or discharging plate which receives the material from the feed and insures its free passage from the feed and machine during the operation of the machine in sewing a seam, each having the functions and mode of operation herein before specified.

Third, I claim in combination the horizontally holding surface immediately about the needle, the continuous discharging feed, the receiving and supporting or discharging plate and the yielding pressure holder, each having the functions and mode of operation herein before specified.

Fourth, I claim in combination the horizontally holding surface immediately about the needle, the continuous discharging feed, and the yielding pressure holder, each having the functions and mode of operation herein before specified.

Fifth, I claim in combination the horizontally holding surface immediately about the needle, the continuous discharging feed, the yielding pressure holder, and a sewing mechanism, each having the functions and mode of operation herein before specified.

Sixth, I claim in combination the horizontally holding surface immediately about the needle, the continuous discharging feed, the yielding pressure holder, and the reciprocating eye-pointed needle, each having the functions and mode of operation herein before specified.

Seventh, I claim in combination the receiving and supporting or discharging plate, and the continuous discharging feed, each having the functions and mode of operation herein before specified.

Eighth, I claim in combination the horizontally holding surface immediately about the needle, the continuous discharging feed and the reciprocating eye-pointed needle, each having the functions and mode of operation as herein before specified.

Ninth, I claim in combination the continuous discharging feed, the receiving and supporting or discharging plate, and the yielding pressure holder, each having the functions and mode of operation herein before specified.

DESIGN.

1,819.—Stove.—Garretson Smith & Henry Brown, Philadelphia, Pa., assignors to H. C. March & E. Sisler, Lawrenceville, Pa.:

NOTE.—The total number of patents recorded above is eighty-six, THIRTY-FOUR of these were solicited through the Scientific American Patent Agency.

IMPORTANT TO INVENTORS, PATENTS FOR SEVENTEEN YEARS.

MESSRS. MUNN & CO., PROPRIETORS OF THE SCIENTIFIC AMERICAN, continue to solicit patents in the United States and all foreign countries, on the most reasonable terms.



They also attend to various other departments of business pertaining to patents, such as Extensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements, &c. The long experience Messrs. Munn & Co. have had in preparing Specifications and Drawings has rendered them perfectly conversant with the mode of doing business at the United States Patent Office, and with the greater part of the inventions which have been patented.

Information concerning the patentability of inventions is freely given, without charge, on sending a model or drawing and description to this office.

THE 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 it to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corresponding with the facts, is promptly sent free of charge. Address MUNN & CO., No. 37 Park Row, New York.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

The service 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 the records in our Home Office. But for a fee of \$5, 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. Many thousands of such examinations have been made through this office. 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 consists, for the Patent Office. These should be securely packed, the inventor's name marked on them and sent, with the Government fees, by express. The express charge should be pre-paid. 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 the order of 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.

The revised Patent Laws, enacted by Congress on the 2d of March, 1861, are now in full force, and prove to be of great benefit to all parties who are concerned in new inventions.

The duration of patents granted under the new act is prolonged to SEVENTEEN years, and the Government fee required on filing an application for a patent is reduced from \$30 to \$15. Other changes in the fees are also made as follows:—

Table with 2 columns: Fee description and Amount. Includes 'On filing each caveat', 'On filing each application for a Patent, except for a design', 'On issuing each original Patent', etc.

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 (but in cases of designs on the above terms. Foreigners cannot secure their inventions by filing a caveat; to citizens only is this privilege accorded.

During the last seventeen years, the business of procuring Patents or new inventions in the United States and all foreign countries has been conducted by Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN; and as an evidence of the confidence reposed in our Agency by the inventors throughout the country we would state that we have acted as agents for at least TWENTY THOUSAND inventors! In fact, the publishers of this paper have become identified with the whole brotherhood of inventors and patentees at home and abroad. Thousands of inventors for whom we have taken out patents have addressed to us most flattering testimonials for the services we have rendered them, and the wealth which has inured to the inventors whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! We would state that we never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in our extensive offices, and we are prepared to attend to patent business of all kinds in the quickest time and on the most liberal terms.

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 the case, inclosing the official letters, &c.

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, under the new law, is \$10. A pamphlet of advice regarding applications for patents and caveats, printed in English and German, is furnished gratis on application by mail. Address MUNN & CO., No. 37 Park Row, New York.

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 Eperonniers, Brussels. We think we can safely say that THREE-FOURTHS of all the European Patents secured to American citizens are procured through the Scientific American Patent Agency, No. 37 Park Row, New York. Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors. Anyone 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 different Government Patent Offices, &c., may be had gratis upon application at our principal office, No. 37 Park Row, New York, or any of our branch offices.

ASSIGNMENTS OF PATENTS.

Assignments of patents, and agreements between patentees and manufacturers are 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 inventors or patentees 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.

Back Numbers and Volumes of the Scientific American. VOLUMES I, II, III, IV, V, VII, AND VIII (NEW SERIES) complete (bound) may be had at this office and from periodical dealers. Price, bound, \$25 per volume, by mail, \$3—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. VOL. VI. is out of print and cannot be supplied.



T. H. S., of Conn.—If you read the advertising pages of the SCIENTIFIC AMERICAN you will find the article you desire. A long list of such substances was printed in this journal some five weeks ago. Read your paper more carefully.

E. A. H., of Ill.—You are probably aware that your article was printed from your own copy. If there are obscurities in it you are responsible—not we.

J. R. H., of Pa.—An assignment for a patent must have a five cent revenue stamp attached, and to a power of attorney there must be attached a \$1 stamp.

F. A. M., of N. Y.—We regret that we are unable to publish your article on "Storms." The subject is of limited interest. Your M. S. is subject to your order.

E. J., of N. H.—The plates of iron steamers are made water-tight in the same way that steam boilers are: they are riveted and the edges of the plates are afterwards calked with a calking tool. The plates are sometimes lapped and sometimes riveted to an inner sheet, on which two plates are laid; thus giving a flush surface outside. Armor plates are not calked to prevent leakage; they are not generally tongued and grooved although this plan has been used.

E. W., of N. Y.—It is not true that heat as an action of matter is a new theory, but it has only been fully demonstrated within a few years. Some ancient writers on philosophy considered heat to be an action or motion of matter.

C. N. B., of Pa.—There is no single work published on the carding, dyeing and finishing of woollen fabrics.

H. T., of Pa.—Measures have been taken, we believe, to lay another Atlantic telegraph cable in the summer of 1864. The cable is now being manufactured by Glass, Elliott & Co., of London, who have also undertaken to lay it.

J. C. S., of N. H.—Cinnabar is the sulphuret of mercury (vermillion, the gaudy pigment, is the bi-sulphuret), a dark blood-colored ore that yields quicksilver—a liquid metal. It is found in many parts of the world—Spain, Hungary, Peru—but most abundantly at the New Almaden mines in California. The chief use of it is in the extraction of the precious metals, gold and silver from their ores; without its aid more than half would be wasted. The Spanish give it the ugly name of azogue; the French call it vis argent. Besides its use in medicine, mercury is used in gilding, silvering mirrors, making thermometers and barometers, and for many other purposes. It is put up in iron flasks, weighing about 25 pounds. It is said the Rothschild's once bought up all the quicksilver in Spain, for several years, and realized thereby several millions of dollars. The works in San Jose county are one of the curiosities of California. We think it fortunate for diseased humanity that its preparations—calomel and corrosive sublimate—are going out of use as medicines. Mercury boils at 660°, and freezes at 40° below zero. It is sometimes, though rarely, found in a native fluid state.

Money Received

At the Scientific American Office, on account of Patent Office business, from Wednesday, Sept. 23, to Wednesday, Sept. 30, 1863:—

- List of names and amounts received: H. T. M., of N. Y., \$12; E. L. M., of N. Y., \$25; A. G., of N. Y., \$25; J. L. G., of N. Y., \$16; J. F. B., of Wis., \$45; G. T., of N. Y., \$20; R. A. T., of N. Y., \$20; J. H. B., of N. Y., \$20; E. C., of N. Y., \$61; J. L. K., of N. Y., \$20; C. N. of N. Y., \$20; O. F., of N. Y., \$20; W. D. Jr., of Pa., \$20; E. M., of N. Y., \$20; D. D., of N. Y., \$25; F. C., of Mass., \$26; L. & K., of Conn., \$20; E. K., of Pa., \$15; J. C., of Mich., \$25; E. S. H., of N. Y., \$25; J. M., of N. Y., \$25; W. S., of N. Y., \$25; S. C., of N. Y., \$16; H. P., of Maine, \$45; S. C. S., of Ill., \$20; G. B. D., of Ill., \$20; C. R., of Pa., \$20; W. S. D., of Pa., \$90; L. S., of N. Y., \$20; W. W., of N. J., \$16; R. H. S., of Mich., \$45; C. D., of Ohio, \$20; H. A., of N. Y., \$20; D. S. S., of Ind., \$16; H. G. D., of Ky., \$16; E. P., of Ohio, \$10; A. B. J. F., of Ind., \$26; A. H., of Ill., \$25; G. T., of N. Y., \$25; J. H. R., of N. Y., \$25; T. N. & J. N. C., of N. Y., \$41; J. W. N., of N. Y., \$20; T. J. W., of N. H., \$20; W. T. E., of N. J., \$16; C. T. D., of N. J., \$45; J. K., of Iowa, \$20; A. W., of N. Y., \$45; W. M., of Mass., \$30; E. K. S., of N. Y., \$10; A. G., of N. Y., \$16; J. E. Van Z., of Ky., \$20; W. W., of Pa., \$22; G. W. P., of N. Y., \$16; E. H., of N. Y., \$25; G. R. W., of Conn., \$44; T. B., of N. Y., \$16; E. J. E., of Ill., \$28; R. B. L., of Ohio, \$26; W. S., of Ill., \$16; S. M. P., of Ohio, \$15; W. B. W., of N. Y., \$25; R. L. S., of Mich., \$20; D. W., of Ill., \$21; J. H., of Ill., \$16; K. V. B., of N. Y., \$10; G. W., of Iowa, \$25; A. E. McG., of Minn., \$16; P. S. F., of N. Y., \$25; H. W., of C. W., \$20; G. & G., of N. Y., \$25; H. S. W., of Mich., \$20; P. C., of Pa., \$25; R. E. & A. G., of N. Y., \$16; J. R., of Ind., \$16; J. B., of Ohio, \$16; J. B. R., N. Y., \$300; S. G. W., of Ill., \$25; H. H., of Pa., \$25; F. S. D., of Ill., \$16; W. A. S., of N. Y., \$25; G. K. G., of Cal., \$15; W. L. R. V., of N. Y., \$16.

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, and inform us 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, Sept. 23, to Wednesday, Sept. 30, 1863:—

- List of initials: H. T. M., of N. Y.; E. S. H., of N. Y.; G. T., of N. Y.; E. L. M., of N. Y.; J. M., of N. Y.; J. H. R., of N. Y.; A. G., of N. Y.; J. B. S., of N. Y.; T. N. & J. N. C., of N. Y.; F. C., of Mass.; E. J. E., of Ill.; D. D., of N. Y.; G. R. W., of Conn.; A. H., of Ill.; S. G. W., of Ill.; H. H., of Pa.; G. & G., of N. Y.; E. H., of N. Y.; J. C., of Mich.; P. S. F., of N. Y.; A. B. J. F., of Ind.; W. B. W., of N. Y.; E. & W., of N. Y.; P. C., of Pa.; W. A. S., of N. Y.; L. & K., of Conn.; H. L., of Mich.; G. W., of Iowa; L. & P., of N. Y.; W. S. D., of Pa.

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...

TO OUR READERS.

Models are required to accompany applications for Patents under the new law, the same as formerly, except on design patents...

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.

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 their wish advertisements published...

KING'S NOTES ON STEAM. LESSONS AND PRACTICAL NOTES ON STEAM. The Steam-Engine, Propellers, &c., &c. for young Marine Engineers, Students, and others.

This is the second edition of a valuable work of the late W. R. King, U. S. N. It contains lessons and practical notes on Steam and the Steam-Engine, Propellers, &c. It is calculated to be of great use to young marine engineers, students, and others.

This is one of the best, because eminently plain and practical, treatises on the Steam-Engine ever published. Philadelphia Press. Its republication at this time, when so many young men are entering the service as naval engineers, is most opportune.

J. E. STEVENSON & CO., MACHINERY BROKERS, Consulting Engineers, and Agents for the introduction of all kinds of improved machinery, 200 Broadway, New York.

E. C. STRANGE, MANUFACTURER AND DEALER IN Box Board, Stave and Shingle Machines, Stave Jointers, Cutting Off, Planing and Crozing Machines, Nail-peg and Barrel Heading Machines, Nail-peg, Barrel and Hoghead Hoop Sawing Machines, No. 20 Broadway, Taunton, Mass.

I WOULD ADVISE ALL TO USE CONWAY'S SEWING Machine Oil. Will warrant it not to clog. Give it a trial. Prepared at 43 East Broadway, N. Y.

\$500 WILL BUY A VALUABLE UNPATENTED invention. Capitalists desiring a good investment, should address J. H. MARTIN, Hartford, N. Y.

FOR SALE. THE AMERICAN HOE CO'S WORKS, situated in West Winsted, Conn. There is two Water Privileges together of 125 horse power, and 1 Trip-Hammers Rolling Mill, 2 Presses, 7 Grindstones, 20 Polishing Wheels, &c.

FAN BLOWERS—DIMPPEL'S, ALDEN'S, McKENZIE'S and others, for Steamboats, Iron Works, Foundries, Smith Shops, Jewelers, &c., on hand for sale by LEACH BROTHERS, 85 Liberty street, New York.

\$2,000.—TO UNEMPLOYED BOOKKEEPERS and Accountants. A chance is offered to men of the above profession, who desire to be well compensated for their time, to act as agents for Fowler's New Adding Machine.

REQUA'S POWER WINDLASS, OR HOISTING DRUM, illustrated and described on pp. 97 and 195 of present volume of SCIENTIFIC AMERICAN. This machine is well adapted to all kinds of work; such as driving piles, loading ships, and can be used in connection with all kinds of steam-engines, or other motors.

FOR WOODWORTH PLANERS AND SASH MACHINERY address J. A. FAY & CO., or E. C. TANTER, Worcester, Mass.

BOLTS, NUTS AND WASHERS OF ALL SIZES constantly on hand for sale by LEACH BROTHERS, 85 Liberty street New York.

NERVOUS DISEASES AND PHYSICAL DEBILITY, arising from specific causes, in both sexes—new and reliable treatment, in Reports of the Howard Association—sent in sealed letter envelopes, free of charge. Address Dr. J. SKILLIN HUGHTON, Howard Association, No. 2 South Ninth street, Philadelphia, Pa.

PAYE'S PATENT FORGE HAMMER—ADAPTED TO both heavy and light forgings, with an adjustable stroke of from one inch to three feet, on hand for sale by LEACH BROTHERS, 85 Liberty street, New York.

A MESSEIERS LES INVENTEURS.—AVIS IMPORTANT. Les inventeurs non familiers avec la langue Anglaise, et qui préféreraient nous communiquer leurs inventions en Français, peuvent nous adresser dans leur langue natale.

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 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 also to give a great variety of questions which have been put to them from time to time during their practice of upwards of seventeen years, which replies are not accessible in any other form. The publishers will promptly forward the pamphlet by mail, on receipt of six cents in postage stamps.

MAIN & BROWN ON MARINE STEAM ENGINE.

Just published. Questions on subjects connected with the Marine Steam Engine and Examination Papers, with hints for their solution. By Thomas J. Main, M. A., F. R. S., Asst. Secy. Math. Prof. R. N. College, Portsmouth, and Thomas Brown, Chief Engineer R. N. attached to the R. N. College, 12mo. \$1.50. These questions have been arranged in a progressive order, and whenever any new difficulty presents itself, the question has been either worked out fully, or the various steps of the solution have been inserted.

Every reader of the SCIENTIFIC AMERICAN is particularly invited to send for a catalogue of my Practical and Scientific Books, which will be mailed free of postage. HENRY CAREY BAIRD, Industrial Publisher, 406 Walnut street, Philadelphia.

WATER WHEELS.—WARREN'S TURBINE WHEEL and improved oil stop, is acknowledged by cotton and woolen manufacturers, and those who are making the greatest saving in the use of water, to be superior to all other wheels in the country.

ANDREW'S PATENT OSCILLATING ENGINES ARE light, strong, cheap and economical, leave the shop ready for use, and require no special foundation. 11 sizes are made, from 1 to 60 horse-power, and larger sizes to order. WM. D. ANDREWS & BRO., Manufacturers, 414 Water street, New York.

ANDREWS' PATENT CENTRIFUGAL PUMPS FOR all liquids, hot or cold. The most simple, durable and economical power pumps made. Will pass 25 per cent of sand and gravel without injury. For price lists address the manufacturers, WM. D. ANDREWS & BRO., 414 Water street, New York.

SECOND HAND IRON PLANERS FOR SALE.—ONE fourteen feet bed, three feet between uprights, weighs about 6 1/2 tons. Cash \$1,250 and is nearly new. Also, one five feet bed, has been used about six months. Also a good suspension drill. Also a new hand lathe, iron bed, swing 25 inches. Address GEORGE GAGE & SON, Waterford, N. Y.

THE "KING MICROSCOPE"—DOUBLE LENS.—Prof. Horsford, of Harvard University, says: "It works very well, and you have got it up very neatly." Magnifies 25 diameters—55 cents in Postal Currency. The "BOWEN" microscope, 28 cents. The "S. WOODWARD" microscope, 38 cents. Or one each of the three kinds for \$1. All free of postage. Address T. EDWIN KING, Box 350, Boston, Mass.

SEWING MACHINES.—GROVER & BAKER'S NEW Lock-stitch Machine, No. 9, 495 Broadway. This is the best and cheapest machine for Tailors' use ever produced. Price \$45. 13 13

R. J. IVES, BRISTOL, CONN., MANUFACTURES all kinds of machine and fancy screws. Address as above.

ROTARY BOILERS.—WE HAVE ON HAND AND for sale, two Rotary Boilers, made of 1/2-inch iron, 22 feet long, 6 feet in diameter, 6-inch heads, with safety valves and all gearing necessary for operation of them. They were manufactured by A. Brown & Co., Frankfort, Pa., and are in perfect order. Address PRASLER & CARPENTER, Ancram Paper Mills, Ancram, N. Y.

IRON PLANERS, ENGINE LATHES, DRILLS AND other machinists' tools, of superior quality, on hand and finishing, for sale low. For description and price address NEW HAVEN MANUFACTURING COMPANY, New Haven, Conn.

REYNOLDS' TURBINE.—THE BEST WATER WHEEL in use. Simple, durable, economical and efficient. 500 of them driving the best mills in the country. Superior, in every respect, to overshot or breast wheels. More than forty sizes manufactured, adapted to all heads. TALLCOT & UNDERHILL, Office 482 Broadway, New York.

TO INVENTORS.—ANY PARTIES HAVING ANY improved method of manufacturing fine-cut tobacco, either in the machinery, or in the preparation, or of increasing the weight of the same, causing it to keep in a damp state, can sell their discovery at a low price by addressing F. C., "Tobaccoist," New York city.

MACHINERY.—S. C. HILLS, No. 12 PLATT-STREET New York, dealer in Steam Engines, Boilers, Planers, Lathes, Chucks, Drills, Pumps; Mortising Tenoning and Sash Machines; J. S. WORTHINGTON, Daniels' Planers, Dick's Punches, Presses and Shears, Cob and Corn Mills; Harrison's Grist Mills; Johnson's Shingle Mills; Belting, Oil, &c.

LANE'S PATENT LIFTING JACK—VERY EASILY operated, compact, simple and cheap. For cut and description see page 405, Vol. VIII, (new series), SCIENTIFIC AMERICAN. State rights for sale. Communications in relation to rights or orders for Jacks may be addressed to J. G. LANE, Washington, N. Y.

WANTED.—SCRAP IRON, OLD BOILERS, AND ALL Iron Machinery.—The subscribers will pay cash for any quantity of Wrought or Cast Scrap Iron, Old Boilers, and Old Iron Machinery, delivered at their warehouse, 23, 30, and 32 Terrace street, Buffalo, or at their Rolling Mill and Nail Factory, Black Rock, N. Y. Buffalo, July, 1868. PRATT & CO

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.

For further particulars address—

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

OIL! OIL! OIL For Railroads, Steamers, and for Machinery and Burning. PEASE'S Improved Engine and Signal Oil, indorsed and recommended by the highest authority in the United States. This Oil possesses qualities vitally essential for lubricating and burning, and is the most reliable oil in the world.

\$200, \$150, \$100, \$50 PREMIUMS.—TO EDITORS, Ladies and Others. I will pay the above-named amounts for the best four articles on either my Soap, Saleratus, or Concentrated Potash.

DISCHARGED SOLDIERS AND OTHERS ARE MAKING enormous wages in the Stencil business. Don't fail to send for a free Catalogue containing full particulars. Address MILLIKEN & DAVIS, Brandon, Vt.

MASON'S PATENT FRICTION CLUTCHES, FOR connecting and disconnecting shafting, also for hoisting machinery, and for starting all heavy machines without sudden shock, are manufactured by WILLIAM MASON, Providence, R. I.

REAPERS AND MOWERS INDEPENDENT AND "Combined." Parties desirous of engaging in the manufacture of those successful and popular machines, the "Cayuga Chief," "Cayuga Chief No. 2," or "Cayuga Chief, Jr.," can address the patentee, C. WHEELER, Jr., Poplar Ridge, Cayuga County, N. Y.

GUILD & GARRISON'S CELEBRATED STEAM Pumps—Adapted to every variety of pumping. The principal styles are the Direct Action Excelsior Steam Pump, the improved Balance Wheel Pump, Duplex Vacuum and Steam Pumps, and the Water Propeller, an entirely new invention for pumping large quantities at a light lift.

SAVING OF FUEL TO PARTIES USING STEAM.—DAMPER REGULATORS. Guaranteed to effect a great saving in fuel, and give the most perfect regularity of power. For sale by the subscribers, who have established their exclusive right to manufacture damper regulators, using diaphragms or flexible vessels of any kind. CLAR'S PATENT STEAM AND FIRE REGULATOR COMPANY No 5 Park Place, New York.

STOVE POLISH.—A FIRE-PROOF ARTICLE. Q. & SON, 114 John street, N. Y.

BLACK DIAMOND STEEL WORKS, PITTSBURGH Pa. PARK, BROTHER & CO., manufacturers of best quality Refined Cast Steel, square, flat and octagon, of all sizes. Warranted equal to any imported or manufactured in this country. Office and Warehouse, Nos. 149 and 161 First street, and 120 and 122 Second street, Pittsburgh, Pa.

POWER LOOM WIRE CLOTHS AND NETTINGS, superior in quality and at low prices, by the CLINTON WIRE CLOTH COMPANY, Clinton, Mass. N. B.—Our trade-mark "Power Loom Wire Cloth."

VULCANIZED RUBBER—Adapted to mechanical purposes—MACHINE BELTING, STEAM PACKING, VALVES, HOSE, EMERY VULCANITE WHEELS, &c. &c. Directions, prices, &c., can be obtained on application to the NEW YORK BELTING AND PACKING COMPANY, Nos. 37 and 38 Park Row, New York.

Zur Beachtung für deutsche Erfinder. Die Unterzeichneten haben eine Uebersetzung, die Erfindern das Verhalten angibt, um sich ihre Patente zu sichern, herausgegeben, und verabfolgen solche gratis an dieselben.

Die Unterzeichneten haben eine Uebersetzung, die Erfindern das Verhalten angibt, um sich ihre Patente zu sichern, herausgegeben, und verabfolgen solche gratis an dieselben. Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Etzgen von Erfindungen mit kurzen, deutlich gezeichneten Beschreibungen beliebe man zu adressiren an

Munn & Co., 37 Park Row, New-York.

Auf der Office wird deutsch geantwortet.

Dieselbst ist zu haben:

Die Patent-Gesetze der Vereinigten Staaten.

nebst den Regeln und der Geschäftsordnung der Patent-Office und Uebersetzungen für den Erfinder, um sich Patente zu sichern, in den drei Sprachen, nämlich in Englisch, Französisch und Deutsch, herausgegeben von den Patent-Gelehrten Frember, Erfinder und darauf bezügliche Nachrichten; ebenfalls nützliche Hinweise für Erfinder und solche, welche Patente zu sichern.

nebst den Regeln und der Geschäftsordnung der Patent-Office und Uebersetzungen für den Erfinder, um sich Patente zu sichern, in den drei Sprachen, nämlich in Englisch, Französisch und Deutsch, herausgegeben von den Patent-Gelehrten Frember, Erfinder und darauf bezügliche Nachrichten; ebenfalls nützliche Hinweise für Erfinder und solche, welche Patente zu sichern.