

43,617.—Hanging Circular Saws.—Josiah Young, Bangor, Maine.

I claim the permanent collar, C, on the mandrel, B, in combination with the circular concentric recess, in the collar D, attached to the saw, A, substantially as and for the purpose specified.

I further claim the two collars, D D, attached concentrically to the saw A, the concentric recess C, in D, the nut E, and permanent collar G, on the mandrel, all arranged substantially as and for the purpose specified.

43,618.—Machine for punching paper for Telegraphic Purposes.—Alexander Bain (assignor to William H. Allen,) New York City.

I claim, first, The arrangement of the shaft, d, lever, e, and latch, e', to cause the band, l, from the motive power to be operative or inoperative, as set forth.

Second, I claim a reciprocating rod actuated by an eccentric or its equivalent, in combination with a punch, substantially as set forth.

Third, I claim the combination of a finger key, a punch, and reciprocating mechanism, substantially as specified, whereby the punch is made to operate by depressing the key, substantially as set forth.

Fourth, I claim the spring clamp, r, applied to the paper reel, for the purposes and as specified.

Fifth, I claim the disk, w, and wheel, y, applied as specified for drawing along the strip of paper or similar material, as set forth.

Sixth, I claim the tooth, d, and stop, q', applied to the shaft d, for the purposes and as specified.

Seventh, I claim withdrawing the punch by a positive movement derived from the reciprocating mechanism through the agency of the arm, h, and pin 23, or their equivalents, for the purposes and substantially as specified.

43,619.—Tuyere.—M. W. Barret, (assignor to himself and Geo. Milburn,) Mishawaka, Ind. :

I claim the combination of the air-box, B, hearth, b, aperture, d, valve, C, screw shaft, f, removable bottom c, and latches, k, k', all constructed, arranged and operating as specified.

43,620.—Vulcanized Rubber Cravats.—William W. Beech, (assignor to himself and Frederic Chamberlain,) New York City :

I claim the application of hard vulcanized india-rubber for neckties and cravats.

I also claim embossing and ornamenting neckties and cravats when made of hard vulcanized india-rubber, and of ventilating the cravats by perforation or corrugation.

43,621.—Metal Lock for Wooden Hoops for Casks.—H. W. Catlin, (assignor to W. H. Clarke,) Brownsville, Pa. :

I claim a lock or fastening for the wooden hoops of casks, constructed in the manner substantially as herein shown and described.

43,622.—Shirt.—Solomon Fribourg, (assignor to S. Fribourg, Cahm & Co. New York City.)

I claim the shirt with the cravat attached thereto, and forming a part thereof, substantially as herein set forth.

43,623.—Ox-shoe.—Ira Merrill and Arthur Maxwell, (assignors to Arthur Maxwell,) Shelburne, Mass.

We claim the insertion of the third cork, c, for the uses and purposes herein set forth.

43,624.—Steam Boiler.—Charles M. Miles, (assignor to himself and Charles F. Jones,) Vineland, N. J. :

I claim the combination in a horizontal boiler of the fire-box, C, gas and smoke tubes, G, G, smoke-box, H, return tubes, I, and water tubes D and F, the whole arranged substantially as herein specified.

43,625.—Metallic Oil Barrel.—Edward Parker, of Philadelphia, Pa., assignor to himself and W. L. Jordan, of Reading, Pa. :

I claim as a new manufacture, a sheet iron cask or barrel, having body and ends brazed together and being otherwise constructed as set forth for the purpose specified.

43,626.—Boot-jack.—M. A. Richardson (assignor to himself and W. H. Keeler,) Sherman, N. Y. :

I claim hinging the boot-jack, C, to the wall by means of a suitable joint, a, and retaining it in a raised position against the wall by a reacting spring, E, the whole combined and operating substantially as and for the purpose herein set forth.

In combination with the hinged boot-jack, C, and reacting spring, E, I also claim the strap or cord, G, and lever, H, so arranged that said lever and boot-jack will open and close automatically and correspondingly, substantially as herein specified.

In combination with the opening, K, of the boot-jack, C, I also claim the button, d, arranged and operating substantially as described.

43,627.—Machine for dressing or sizing Yarns.—Benjamin Saunders, Nashua, N. H., assignor to A. H. Saunders, Nashua, N. H., and Richard Kitson, Lowell, Mass. :

I claim, first, A return pipe, C, in combination with the pump, D, or its equivalent, and size tank, A, or a reservoir connected therewith, substantially as herein specified, for the purpose of keeping the size in continuous motion, and to distribute it in a simple and easy manner.

Second, The siphon, F, or its equivalent, in combination with the return pipe, C, pump, D, and tank, A, substantially as herein specified, for the purpose of giving the requisite pressure at the moment of opening the branch valves to let the size into the various boxes or troughs.

[This invention consists in the use of a rotary or other pump and a series of pipes of galvanized iron or other suitable material in combination with the mixing tank or with a reservoir connected therewith, and with the several dresser boxes, in such a manner that the sizing contained in the mixing tank can be easily and readily forced through the pipes to the several dresser boxes without the use of pals, dippers or other similar implements, and by the constant current passing from the reservoir over all the dressers and back, a thorough equalization and a continuous mixing of the sizing is effected.]

43,628.—Candle-holder.—Emile Daire, Amiens, France. Patented in France Apr 12, 1863 ; and in England December 23, 1863 :

I claim the combination of the bent body, O O', of a candle-holder, with elastic, sharp-edged flanges, A A', inclined flaps, E E', and horizontal bottom guard, R, when said holder forms a segment of a polygon, for the purpose of insertion between the candle and the inside of the cup of the candlestick, as above described.

43,629.—Strengthening Ordnance.—Perclval M. Parsons, Blackheath, England :

I claim constructing cast-iron guns with, and applying to them internal tubes of wrought-iron, steel, homogeneous metal or other suitable material inserted at the breech end, into a suitable recess, and secured therein by a screw or screws, and so arranging the dimensions of the cast-iron surrounding the lining tube at the reinforce, that it may be subjected to an equal or nearly equal longitudinal strain or extension throughout a sufficient length of the same, and the general combinations by which the longitudinal strength of the cast-iron body of the gun or mortar is imparted to and supports the lining tube while it absorbs or relieves the cast-iron of a portion of the transverse or circumferential strain, as hereinbefore described.

43,630.—Preserving Iron from Corrosion.—Charles de Bussy (assignor to Moritz Pinner,) Paris, France :

I claim the protecting of iron plates, beams and other pieces of iron used for ships, vessels, wharfs, buildings and other purposes, by subjecting the same to a chemical process and covering them with a coating so as to prevent corrosion and the other actions of water and air, substantially as herein described.

RE-ISSUES.

1,729.—Eyelet Machine.—T. K. Reed and C. E. Howard (assignees of T. K. Reed and H. F. Packard,) West Bridgewater, Mass. Patented July 22, 1862 :

We claim, first, the combination of the hopper, D, the rotating cylinder, F, the cam, A, and the chute, I, substantially as and for the purposes described.

Second, The oscillating brush, E, applied and operating in combination with the hopper, D, and cylinder, F, substantially as and for the purposes set forth.

Third, The stationary brush, G, applied and operating in combination with the hopper, D, and cylinder, F, substantially as and for the purposes described.

Fourth, The curb, J, and inclined plane, K, applied and operating in combination with the cylinder, F, and chute, I, substantially as and for the purpose set forth.

1,730.—Eyelet Machine.—T. K. Reed and C. E. Howard (assignees of T. K. Reed and H. F. Packard,) West Bridgewater, Mass. Patented July 22, 1862 :

First, We claim an eyeletting machine which has an inclined chute, substantially as herein described, interposed between the supply hopper and the eyelet-applying tools herein described, and above the under and below the upper of said tools, and directly between the two, such machine feeding and applying the eyelets substantially as set forth.

Second, Depositing the eyelets successively upon a yielding pin, h, by means of an inclined chute, I, and immediately after applying the eyelet to the article by means of two tools, L and I, substantially as and for the purpose set forth.

1,731.—Direct-action Steam Pump.—William Sewell and Adam S. Cameron, New York City. Patented May 10, 1864 :

We claim, first, The combination in direct-action steam pumps of the separate steam and water piston rods, C D, having a detachable connection, substantially as herein shown and described, so that the said rods may be disconnected, and the machine used as a steam engine or hand pump, independent of each other, as set forth.

Second, The employment of the rock shaft, H, and the extensible arm, N, or its equivalent, for connecting the said rock shaft with the water piston rod, substantially as and for the purpose herein specified.

Third, The socket, E, connecting the steam and water piston rods for working the pumps by steam and serving as a guide to the water piston rod in working the pump by hand, substantially as herein described.

DESIGNS.

1,971.—Lantern.—Isaac S. Clough, Brooklyn, N. Y., and Vincent Fountain, Jr., of Castleton, N. Y.

1,972 to 1978.—Carpet Pattern.—Elemir J. Ney, Jr. (assignor to the Lowell Manufacturing Company,) Lowell, Mass. Seven patents.



PATENTS

GRANTED

FOR SEVENTEEN YEARS!

MUNN & COMPANY,

In connection with the publication of the SCIENTIFIC AMERICAN, have acted as Solicitors and Attorneys for procuring "Letters Patent" for new inventions in the United States and in all foreign countries during the past seventeen years. Statistics show that nearly ONE-THIRD of all the applications made for patents in the United States are solicited through this office; while nearly THREE-FOURTHS of all the patents taken in foreign countries are procured through the same source. It is almost needless to add that, after seventeen years' experience in preparing specifications and drawings for the United States Patent Office, the proprietors of the SCIENTIFIC AMERICAN are perfectly conversant with the preparation of applications in the best manner, and the transaction of all business before the Patent Office; but they take pleasure in presenting the annexed testimonials from the three last ex-Commissioners of Patents:—

Messrs. MUNN & Co. :—I take pleasure in stating that, while I held the office of Commissioner of Patents, MORE THAN ONE-FOURTH OF ALL THE BUSINESS OF THE OFFICE CAME THROUGH YOUR HANDS. I have no doubt that the public confidence thus indicated has been fully deserved, as I have always observed, in all your intercourse with the office, a marked degree of promptness, skill, and fidelity to the interests of your employers. Yours very truly,

CHAS. MASON. Judge Mason was succeeded by that eminent patriot and statesman, Hon. Joseph Holt, whose administration of the Patent Office was so distinguished that, upon the death of Gov. Brown, he was appointed to the office of Postmaster-General of the United States. Soon after entering upon his new duties, in March, 1859, he addressed to us the following very gratifying letter:

Messrs. MUNN & Co. :—It affords me much pleasure to bear testimony to the able and efficient manner in which you discharged your duties as Solicitors of Patents, while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and I doubt not justly deserved) the reputation of energy, marked ability, and uncompromising fidelity in performing your professional engagements. Very respectfully, your obedient servant,

J. HOLT. Hon. Wm. D. Bishop, late Member of Congress from Connecticut, succeeded Mr. Holt as Commissioner of Patents. Upon resigning the office he wrote to us as follows:

Messrs. MUNN & Co. :—It gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of inventors before the Patent Office was transacted through your agency; and that I have ever found you faithful and devoted to the interests of your clients, as well as eminently qualified to perform the duties of Patent Attorneys with skill and accuracy. Very respectfully, your obedient servant,

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.

As an evidence of the confidence reposed in their Agency by inventors throughout the country, Messrs. MUNN & CO. would state that they have acted as agents for more than 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 they have taken out patents have addressed to them most flattering testimonials for the services rendered them; and the wealth which has inured to the individuals whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! Messrs. MUNN & CO. would state that they never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in their extensive offices, and that they are prepared to attend to patent business of all kinds in the quickest time and on the most liberal terms.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE. The service which Messrs. MUNN & CO. 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 they may acquire of a similar invention from the records in their Home Office. But for a fee of \$5, accompanied with a model, or drawing and description, they 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 the Branch Office of Messrs. MUNN & CO., corner of F. and Seventh streets, Washington, by experienced and competent persons. Many thousands of such examinations have been made through this office, and it is a very wise course for every inventor to pursue. 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 a draft on New York, payable to the order of Messrs. 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.

Patents are now granted for SEVENTEEN years, and the Government fee required on filing an application for a patent is \$15. Other changes in the fees are also made as follows:—

On filing each Caveat.....	\$10
On filing each application for a Patent, except for a design.....	\$15
On issuing each original Patent.....	\$20
On appeal to Commissioner of Patents.....	\$20
On application for Re-issue.....	\$30
On application for extension of Patent.....	\$50
On granting the Extension.....	\$50
On filing a Disclaimer.....	\$10
On filing application for Design (three and a half years).....	\$10
On filing application for Design (seven years).....	\$15
On filing application for Design (fourteen years).....	\$30

The 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 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. He also 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, inclosing the official letters, &c.

FOREIGN PATENTS.

Messrs. MUNN & CO., are very extensively engaged in the preparation and securing of patents in the various European countries. 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 think 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 re-organization 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 suffering 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.

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.

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid has expired.

MODELS are required to accompany applications for Patents under the new law, the same as formerly, except on design patents, when two good drawings are all that are required to accompany the petition, specification and oath, except the Government fee.

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a *bona-fide* acknowledgement of our reception of their funds.

Binding the "Scientific American."

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

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

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

Back Numbers and Volumes of the "Scientific American."

VOLUMES III., IV., VII., IX AND X., (NEW SERIES) complete (bound) may be had at this office and from periodical dealers. Price, bound, \$2 25 per volume, by mail, \$3—which includes postage. 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. and VIII.** are out of print and cannot be supplied.



N. D., of N. Y.—Thirty years ago we heard a story somewhat similar to the one you have heard about Whittemore's stealing the invention of the card-setting machine; but on examining the evidence we are satisfied that all of these stories are false. See the report of the Congressional Committee. See also in the last volume of the SCIENTIFIC AMERICAN accounts of recent investigations of the subject of the absorption of gases by water and their expulsion by heat.

J. H. T., of N. Y.—If a cannon were moving breech foremost through the air at the rate of 1,000 feet per second, and should be discharged with a force that would move the ball in relation to the cannon 1,000 feet a second, the ball would fall vertically to the earth.

C. D., of Maine—Asks the following question—"If I patent a machine and dispose of the right, and then make an improvement which I also patent, does that improvement belong to me or to the purchaser of the original patent, and can the purchaser use the improvement without my consent?" We answer—Unless there is a previous agreement by which the patentee stipulates to convey all subsequent improvements made by him, he would have entire control of the patent for the improvement, and no one could use it without his consent.

O. C. M., of N. J.—We have been interested in your statement of your troubles with your small propeller. You say that the boiler is perfectly clean, but although it was once large enough, it will not now make sufficient steam for your engine. The trouble must be in the latter then, for if all the conditions are the same with the boiler, as they were originally it will continue to act well. It is very likely that the engine is in fault. Try the piston and see if it leaks. Examine the valve and see if it sets fair on its seat; see that the eccentric has not shifted. Your exhaust pipe is too small at any rate. It should be one and a half times the area of the steam pipe. Do not narrow it at the mouth; let it be straight. It ought to work quite as well, if not better on a small engine than when contracted. Write and let us know the result.

C. P. W., of Mass.—Very little power is obtained from a Barker-mill steam engine except with high pressure. We should suppose, however, that you could produce sufficient blast for a chemist's fire with an engine similar to the one described but constructed of thicker metal. The arms should be sword-shaped; this might be effected by enclosing the iron tubular arms in sword-shaped sleeves. The openings should be very small, perhaps the 100th of an inch in diameter.

H. C. A., of Ohio.—You will find full instructions for making all the solutions used in electro-plating in "Smees' Electro Metallurgy," published by John Wiley, of this city.

R. F., of Ind.—In the Hecker & Waterman experiments a slide valve is used, worked by an eccentric.

W. L. C., of Md.—The dimensions of the engine in the Hecker & Waterman experiments were stated in our last volume, page 377. The cylinder is ten inches in diameter with two feet stroke. As the object of the experiments is to test the quantity of fuel required to do a given amount of work in a given time with different measures of expansion, the cut-off is fixed at a certain point for each thirty hours run.

P. P., of N. Y.—The specimen you send us is a very good article of plumbago. Most of the mining companies in this city are perfect swindlers. We would suggest to you to advertise a part of the mine extensively and sell it at auction.

E. L., of Pa.—If you ask your druggist for a box of the "Pittsburgh Salt Company's Concentrated Lye," which is sold for twenty-five cents, you will find a number of receipts for making soap attached to the box. They are the best and simplest that we can give you. We make all our own soap for family use with this lye, and it is white, hard, and very emollient.

R. K. L., of Pa.—Chains have been made cast in one entire length. There is no value in them being only specimens of the molder's skill. On page 177 of the "Metal Worker's Assistant," you will find an engraving and full description of such a chain.

C. S. T., of Mass.—Address H. C. Baird, 406 Walnut street, Philadelphia, for a work on malleable iron.

Money Received.

At the Scientific American Office, on account of Patent Office business, from Wednesday, July 13, 1864, to Wednesday, July 20, 1864—

- J. D., of N. Y., \$30; E. M. C., of R. I., \$41; G. M. L., of N. Y., \$41; J. B., of Mich., \$25; E. H., of N. Y., \$15; S. W. P., of Ill., \$15; S. V., of Pa., \$20; R. B. M., of Ohio, \$28; G. McK., of N. Y., \$15; I. W. B., of Mich., \$28; H. P. G., of Pa., \$20; W. G. S., of Pa., \$16; N. S., of Mich., \$15; S. & B., of Conn., \$16; A. P., of N. J., \$25; H. C. II., of Ill., \$100; A. D., of N. Y., \$16; J. C., of N. Y., \$16; W. H. R., of Ky., \$45; J. F. C. P., of N. Y., \$10; G. M. L., of N. Y., \$44; J. F. R., of Ill., \$20; C. V. W., of N. J., \$20; P. H., of N. Y., \$20; W. D. S., of N. J., \$20; A. R., of N. Y., \$250; J. V. C. C., of Conn., \$46; A. W. H., of N. Y., \$92; G. M., of N. Y., \$12; J. D., of N. Y., \$25; H. F., of N. Y., \$25; N. V., of N. J., \$25; W. T. H., of Maine, \$10; J. L. B., of Pa., \$10; H. C. D., of Mich., \$25; W. H., of Conn., \$25; J. R., of Ind., \$16; M. H. B., of Ill., \$15; C. C., of Mass., \$10; G. A., of Oregon, \$41; E. C., of Mass., \$36; C. C. B., of Iowa, \$35; J. B., of N. Y., \$16; J. S., of Cal., \$20; W. & S., of N. Y., \$16; J. S. F., of N. T., \$52; J. B., of N. Y., \$186; J. & B., of N. Y., \$66; E. F. W., of N. Y., \$16; D. W. C. W., of Mich., \$20; J. T. W., of N. Y., \$22; E. B., of N. Y., \$20; J. F. C., of N. Y., \$16; J. G., of Ill., \$45; W. W., of Conn., \$46; J. H. C., of N. Y., \$23; G. H., of N. Y., \$25; D. E. B., of Ind., \$23; E. S., of Pa., \$25; J. A. McC., of Ky., \$10; G. G. P., of Pa., \$25; W. II., of N. Y., \$25; G. W. P., of N. Y., \$25; C. V. S., of Ill., \$30; H. F., of Ill., \$26; S. & B., of Mich., \$31; J. F. B., of Ind., \$18; S. M. B., of Mich., \$35; M. C. B., of Ind., \$15; J. E. T., of Pa., \$25; J. W. P., of Maine, \$15; Mrs. L. A. H., of N. H., \$25; C. S., of N. Y., \$16; T. B. F., of Mass., \$20; W. S., of Mich., \$20; T. II. S., of Va., \$20; G. L., of N. Y., \$45; O. M. P., of Pa., \$45; C. P. B., of N. Y., \$45; G. P. I. C., of N. J., \$20; A. J. P., of N. Y., \$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, July 13, 1864, to Wednesday, July 20, 1864—

- J. D., of N. Y.; E. M. C., of R. I.; G. M. L., of N. Y.; I. W. B., of Mich.; G. G. P., of N. Y.; M. C., of Ohio; G. W. P., of N. Y.; M. II. B., of Ill.; W. II., of Conn.; A. P., of N. J.; L. A. H., of N. H.; G. M., of N. Y.; J. D., of N. Y.; J. B., of N. Y., (4 cases); E. M. C., of R. I.; N. S., of Mich.; C. W. & J. B., of Pa.; H. P. G., of Pa.; L. O. C., of Pa.; J. E. T., of Pa.; II. C. II., of Ill.; J. H. C., of N. Y.; II. F., of N. Y.; G. H., of N. Y.; J. T. W., of N. Y.; A. W. H., of N. Y. (2 cases); E. C., of Mass.; W. H., of N. Y.; J. L. B., of Pa.; H. F., of Ill.; H. C. D., of Mich.; S. M. B., of Mich.; S. V., of Pa.

RATES OF ADVERTISING.

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

ARMY SUPPLIES.

OFFICE OF ARMY CLOTHING AND EQUIPAGE, 502 BROADWAY, NEW YORK, July 19th, 1864.

SEALED PROPOSALS WILL BE RECEIVED AT this office until 12 M., on Thursday, the 23d instant, for furnishing by contract, at the Depot of Army Clothing and Equipage in this city,—

- Blankets.
Knit Drawers.
Flannel Drawers.
Hospital Tents and Flies.
Hospital Tent Flies.
Shelter Tents, 8 oz. Duck.
Manilla Paper, 36x40.

Samples of which can be seen at this office. Bidders will submit with their proposals, samples of the articles which they propose to deliver or of the materials of which the articles are to be made, in the case of Flannel Drawers and Tents at least one yard of the material to be submitted. Bidders will state the quantity they wish to furnish, the shortest time in which they can make deliveries, and how soon they can complete the delivery of all they bid for.

All proposals must be accompanied by a proper *surety*, signed by two responsible parties, setting forth that if a contract is awarded to the party named therein he will at once execute the same, and give bonds for its faithful performance. The United States reserves the right to reject all bids deemed objectionable.

Proposals should be endorsed "Proposals for furnishing (here insert the article bid for)" and addressed to LT-COL. D. H. VINTON, Dy. Qr. Mr. Genl.

OFFICE OF ARMY CLOTHING AND EQUIPAGE, PHILADELPHIA, July 20th, 1864.

SEALED PROPOSALS WILL BE RECEIVED AT this Office until 12 o'clock, M., on Tuesday the 26th instant, for supplying the Schuylkill Arsenal with the following articles, viz:—

- Sky-blue Kersey, army standard, 3/4 or 6-1/2 wide, to be made from pure wool, and free from shoddy.
Blue Flannel Sack Coats, lined.
Haversacks, linen, painted.
Blankets, vulcanized India-rubber or Gutta-percha for infantry.
Boots } To be sewed by hand or machinery, but if and } by machinery, to be double-soled, without } welts.
Bootees, }
Drums, artillery, 3/4 and full size.
General Hospital Flags.
Company Order Books.
Company Descriptive Books.
Regimental General Order Books.
Regimental Order Books.
Brigade, Division, and Headquarter Books, viz:—
Brigade Letters received.
Brigade Letter.
Brigade Order.
All the above articles to be of army standard.
Also,
Linen Linings: samples required.
Army Standard samples of each of the above articles can be seen at this Office, to which deliveries must strictly conform.

Bidders must state in their Proposals the price which must be given in writing, as well as in figures, and also the quantity and times of delivery.

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 one 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 and he considered which does not strictly conform to the requirements therein stated.

Bids must be endorsed "Proposals for Army Supplies," stating the article bid for. G. H. CROSMAN, Asst. Quar. Mast. Gen. U.S.A.

PLATINA PLATE AND WIRE.—IMPORTED AND for sale by SAMUEL S. WHITE, Dental Depot, 653 Broadway, New York. 5 4*

HEYER'S POCKET SEWING MACHINE.—ILLUSTRATED in No. 5, current volume SCIENTIFIC AMERICAN. State and County Rights for sale. Address W. D. HEYER, Box 762, New Orleans, La. 5 4*

A GENTLEMAN, WITH 18 YEARS' ENGINEERING experience, desires a re-engagement as Superintendent or Draughtsman. Unexceptionable testimonials and references given. Address W. H., Box 212, Post-office, Baltimore, Md. 1*

STEAM ENGINE WANTED.—FROM 20 TO 35 HORSE- Power, in good condition. And the correspondent will please state whose make, how long it has been in use, also state price. Address JAMES AKEN, Sandlake, Rensselaer county, N. Y. 5 5*

FOR SALE.—A SUPERIOR POWER BOILER Punch and Boiler Former. Price for both, \$210. Inquire of H. MCCOLLUM, Owego, N. Y. 1*

A SPLENDID STORY BY SYLVANUS COBB, JR., in the PRINTER'S DEVIL, this week, at all Newsdealers. It is one of the best this popular author ever wrote. The PRINTER'S DEVIL, a handsome, illustrated, literary, and miscellaneous family paper, will be sent six months to any new subscriber for 25 cents. Address "PRINTER'S DEVIL," 113 Fulton street, New York. 1

TWIST DRILLS.—ALL SIZES OF STUB'S WIRE Drills; also Twist Drills for machinists' use, varying in diameter from 3/32nds to 1 1/2 inch, together with sockets to fit them. For sale by the "Manhattan Fire Arms Company," corner of High and Orange streets, Newark, N. J. 5 4*

NEW APPARATUS FOR MAKING NITROUS OX- IDE chemically pure. Needs no watching, and breaks no glass. Pure Nitrous Ammonia, yielding eight gallons per lb. more than the ordinary. Rare Chemicals and Apparatus for experimenters. A. W. SPRAGUE, 59 Washington street, Boston. 5 2*

SOMETHING OF IMPORTANCE.

Having obtained Letters Patent for tanning Leather without Bark, and said patent having been submitted to the severest test, and giving entire satisfaction, as affidavits in my possession will affirm, different persons bought rights who were not tanners, but having strictly adhered to the instructions accompanying such right have been enabled to make the best of leather, in quick time, and at less expense than can be done with bark. The Patentee is a practical tanner, and will send all necessary instructions to any person buying a right. State, County, Town, and Shop Rights for sale. Agents wanted, and good inducement. For further information address ALEXANDER HILL, Patentee, Dubuque, Iowa. 5 3*

ALCOTT'S CONCENTRIC LATHES.—FOR BROOM, Hoe, and Rake Handles, Chair Rounds, &c.—Price \$25; and all other kinds of Wood-working Machinery, for sale by S. C. HILLS, No. 12 Plattstreet, New York. 1