

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 25 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 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 so limited. For further particulars address 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.

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 1833, 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 emit 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 unable hereafter to furnish covers to the trade, but will be happy to receive orders for binding at the publication office, No. 37 Park Row, New York.



W. L. L., of N. Y.—In charging the general acceptance of Newton's philosophy to undue reverence for his authority you forget that his theory of light is generally rejected. It seems to us that the positions of the "Principia" are either self-evident truths or absolute demonstrations. After the most candid and respectful examination in your power, your statement that a body may have an orbital motion under the influence of a single force, appears to us absurd, we therefore do not publish your article.

A. S. H., of Maine.—When a clean plate of iron precipitates copper from a solution of sulphate of copper, an equivalent quantity of iron is dissolved in its stead. Why a person cannot have a contagious disease more than once is one of the many unsolved mysteries of physiology. Shot are sometimes confined in cartridges to make them scatter less. The eye-stone is the operculum or mouth-piece of a certain shell. It is the carbonate of lime, and when put in acid the evolution of carbonic acid gas causes it to move about.

N. C. S., of N. C.—Your engine is what is known as the "atmospheric" steam-engine, and has been discarded for a century. The use of steam on both sides of the piston was the principal feature of the invention of James Watt, and was the greatest step ever made in advance in the progress of the steam engine.

J. W. H., of Iowa.—If the party purchased the patent hive of the rightful owner of the county at the time of purchase, he would have a right to continue its use in the absence of a deed. Having once paid for the hive, his right to use it would be undisturbed by any subsequent purchaser of the territorial right.

G. W. S., of Conn.—A propeller wheel 7 feet in diameter ought to make as many revolutions as it can. Theoretically there is a limit at which the speed of a screw is too great, but no such velocity can possibly be attained in practice. Run your wheel 150 turns per minute if you can.

W. W. B., of N. Y.—The description of the new mode of engraving contained all of the details received by us. We have since seen a remark that crayons were used in making the drawings. Perhaps the lithographers might give you instructions in regard to the transfers.

C. H. R., of Va.—We agree with you that in a republic like this, all officials should treat citizens who suggest valuable improvements with courtesy.

C. W., of Minn.—Pitch is gathered by chopping a box-like receptacle in the trunk of the tree, and scooping out the gum as it collects.

E. D., of Mass.—Lenoir's gas engine was described in the SCIENTIFIC AMERICAN, Sept. 20, 1860—Vol. III. page 193. One precisely similar had been previously exhibited at the Crystal Palace, by Dr. Drake of this city. The practical objections to it were the jerks of its motion, and the accumulation of heat.

A., of N. Y.—It must be a satisfactory reflection to know that you have so convincingly settled the cause of boiler explosions. If you could only reduce your principle to practice and prevent the dangerous gases you mention from exploding the boiler, you would achieve an undying fame and a colossal fortune. Instead of being purely a chemical result one would think that the mightiest mechanical force known could scarcely cause the ruin that a regular steam boiler explosion does.

B. F. S., of Ill.—In reply to your question, "Does any insoluble matter remain at rest in still, deep water, and neither sink or swim, such as sunken ships or any other hard substance that has a specific gravity of water?" We should say that theoretically, of course, it would remain stationary. In practice it may be doubted whether any body ever did thus continue without motion for any considerable length of time, as a movement in the water, however slight, or any change in the specific gravity of the body would produce a motion.

J. C. H., of Ind.—You say that you have two flue boilers 25 feet long and 42 inches in diameter, and intend using another of the same diameter two feet shorter, but do not like the arrangement. If you will tell us what your objections are we can answer your question; we do not give information at hap-hazard, and it is impossible for us to know what the difficulty is without further information.

J. L. J., of Mo.—The subject of target practice in the Navy has already been fully discussed in our paper, and we do not wish now to re-open it. If you had written to us at an earlier date your communication would have been acceptable.

B. J. H., of N. Y.—You write to us complaining of the omission of an s before the word "tables," in our paper, and yet you spell "Scientific American"—Scientific. You should be more careful when criticizing others, and be sure that you are not hypercritical. Common sense is a great virtue.

J. L., of Ky.—We cannot suggest any relief in the case to which you refer, but Dr. Charles F. Taylor, of 159 Fifth avenue, this city, treats shortened limbs by mechanical means. We have some doubt about a cure in the case, but it will be no harm to correspond with Dr. Taylor on the subject.

J. McK., of Ind.—There are no architectural journals published in this country. You can get English journals devoted to this subject by addressing Willmer & Rogers, 47 Nassau street, this city.

E. L., of Ohio.—The only way to get into the navy is to make your application and present your credentials to the Secretary of the Navy, Hon. Gideon Welles. Any one who advertises to get you a place in the navy for a certain fee you may safely regard with suspicion.

J. B.—The first steamship which crossed the Atlantic was an American vessel "The Savannah," Captain Rogers. This ship was built in New York, but sailed from Savannah, Ga., direct to Liverpool, where she arrived in July, 1819, after a passage of 18 days. She had paddle-wheels with an inclined e

Money Received.

At the Scientific American Office, on account of Patent

Office business, from Wednesday, April 13, 1864, to Wednesday, April 20, 1864:—

- B. & S., of N. J., \$25; C. A. S., of N. Y., \$41; B. W., of N. Y., \$45; Mrs. S. A. M., of N. Y., \$20; D. & K., of Cal., \$20; A. T., of Pa., \$69; J. H., of Maine, \$22; S. G., of N. Y., \$18; J. G., of N. Y., \$16; W. A. O., of N. Y., \$16; H. L., of N. J., \$16; W. B., of N. Y., \$20; J. B., of N. Y., \$12; E. S. J., of Mich., \$25; T. & J. W. W., of Ill., \$16; B. B. & Co., of Conn., \$41; E. W., of N. Y., \$25; E. H. C., of Mich., \$16; L. C., of Minn., \$26; R. & C., of Ill., \$16; J. B. W., of N. J., \$10; S. H., of Mass., \$25; J. M. G., of Ill., \$16; W. H. S., of Conn., \$16; Z. W., of Cal., \$20; A. A. H., of Pa., \$16; J. C. O., of Wis., \$15; J. N., of Ill., \$25; H. B., of N. Y., \$30; J. T., of N. H., \$16; J. H. S., of N. Y., \$25; L. S. M., of N. Y., \$16; I. G., of R. I., \$20; A. W., of Scotland, \$25; J. K. U., of N. Y., \$25; D. H., of N. Y., \$16; S. & A., of N. Y., \$16; F. J. T., of Conn., \$20; J. L., of N. Y., \$16; J. B., of N. Y., \$20; J. E., of N. Y., \$10; C. R., of N. J., \$16; M. B. D., of N. Y., \$20; J. W., of Canada, \$500; W. M., of N. Y., \$25; S. & A., of N. Y., \$25; F. & T., of Del., \$30; W. B. S., of Ill., \$16; D. C. H., of Pa., \$25; A. W., of N. Y., \$25; W. S. N., of Conn., \$16; D. K., of Pa., \$20; B. F., of Maine, \$25; J. S. B., of N. J., \$25; T. D., of N. Y., \$16; W. B., of Iowa, \$16; R. K., of Tenn., \$17; C. H. S., of Mass., \$16; R. G., of Mo., \$15; E. C., of Iowa, \$15; W. H. R., of Ky., \$16; L. P. & N., of Pa., \$16; S. D., of C. W., \$25; H. & R., of Ohio, \$25; A. W., of N. J., \$15; H. M., of N. Y., \$20; C. H. H., of N. Y., \$25; J. B., of N. Y., \$25; E. B. R., of N. J., \$16; G. W. W., of N. Y., \$16; J. A. H., of Vt., \$20; W. W., of N. Y., \$20; C. F., of N. Y., \$41; G. R., of N. Y., \$20; W. E. R., of Iowa, \$20; J. T. W., of N. J., \$20; J. S. C., of N. Y., \$16; G. V. B., of N. Y., \$43; S. B., of Ind., \$16; J. Y., of Maine, \$25; J. H. M., of N. Y., \$16; C. M. J., of Ill., \$25; J. S., of Ohio, \$25; A. P. K., of Mass., \$16; A. P. A., of Ill., \$16; J. L., of Pa., \$25; S. J. F., of Cal., \$20; A. B. B., of N. Y., \$10; W. L., of Md., \$25; W. & F., of Pa., \$16; J. P., of Canada, \$30; J. F., of Pa., \$20; P. C. R., of Mass., \$16; J. J. A., of Mich., \$16; J. G. T., of N. Y., \$16; H. & B., of Conn., \$31; A. H., of Conn., \$16; H. P., of N. Y., \$20; C. A., 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, April 13, 1864, to Wednesday, April 20, 1864:—

- B. & S., of N. Y.; J. K. U., of N. Y.; C. & F., of N. Y.; A. McP., of N. Y.; S. D., of Conn.; C. A. S., of N. Y.; J. R. J., of N. Y.; H. & R., of Ohio; S. G., of N. Y.; S. & A., of N. Y.; J. B. of N. Y.; W. M., of N. Y.; G. W. B., of N. Y.; C. H. H., of N. Y.; S. H., of Mass.; J. N., of Ill.; S. L. S., of Ohio; S. K. K., of Pa.; J. C. J., of Mass.; J. H., of Maine; E. W., of N. Y.; A. W., of N. Y.; J. L., of Pa.; J. S., of Ohio; D. E. B., of Ohio; L. C., of Minn.; C. M. J., of Ill.; D. G. H., of Mass.; B. F., of Maine; A. A., of N. J.; D. C. H., of Pa.; Z. W., of Cal.; A. W., of Scotland; P. & J., of Maine; J. S. B., of N. J.; J. B. H., of N. Y.; E. S. J., of Mich.; H. B., of N. Y.; W. L., & T. W., of England (9 cases); H. J. V., of Germany.

RATES OF ADVERTISING.

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

**UNITED STATES AUCTION SALE.**—S. H. DRAPER, Auctioneer.—SIMEON DRAPER will sell, by order of the Secretary of War, on Saturday, April 30th, 1864, at 12 1/2 o'clock, at the New York Arsenal, Governor's island, N. Y., the following Ordnance Stores—449,576 pounds of 12, 24, 32, and 42 powder and 9 and 10-inch shot; 407,940 pounds of 12, 24, 32, and 42 powder and 8 and 10-inch shells; 72,245 pounds Old Iron (scraps). Terms of sale, cash on delivery of the property. S. CUSPAIN, Captain of Ordnance Commanding. New York Arsenal, April 18th, 1864. 18 2

**THE CELEBRATED CRAIG MICROSCOPE, COMBINING** instruction with Amusement, is mailed, prepaid, for \$2 25; or with 6 beautiful Mounted Objects for \$3; with 24 Objects, \$5; by HENRY CRAIG, 140 Centre street, New York.

**SELF-FEEDING HAND SAWING MACHINE, TALLEY'S PATENT.**—Invaluable to Carpenters and Builders. One man can easily do the work of three, with less waste of stuff, and in a far better manner. It is produced by hundreds, who are using them, to be the greatest wood-working machine ever invented. Send for a Circular. HOAG & HAMPSON, 36 Maiden Lane, New York. 15 5

**PAGE'S PATENTED LIME KILN WILL BURN 300** bushels lime per day, with three cords wood or 1 1/2 iron coal, hard or soft. Address C. D. PAGE, Cleveland, Ohio. 17 cent

**BAKER'S ONE DOLLAR BAROMETER OR** Weather Indicator sent by express on receipt of \$1. Agents wanted. BENJAMIN MOORHOUSE, Providence, R. I. 18 2\*

**THE IRON-CLAD QUESTION.**—A LARGE AMOUNT of interesting and valuable information in regard to the character and operations of our Monitor Fleet may be obtained from the Official Reports of Admirals Dahlgren, Dupont, Goldsborough, and Forter; and the letters of Major-General Hunter and Brigadier-General Barnard, published exclusively in the "ARMY AND NAVY JOURNAL." See Nos. 34, 35, and 36 of the JOURNAL. For sale by all news-dealers, or sent by mail postpaid. Price 10 cents a copy. Subscription \$5 a year. Address "ARMY AND NAVY JOURNAL," 122 Broadway, New York.

**AN EXPERIENCED DRAUGHTSMAN AND MACHINIST** wants a situation as Master Mechanic or Draughtsman in a Railroad or Machine Shop. Address X, Box 435, Detroit, Mich. 18 4\*

**A NEW SYSTEM OF ORDNANCE—THE PATENT** Rights for which are secured in the United States and the principal countries of Europe, is offered the one-half for sale to capitalists. A rare opportunity is hereby afforded for the formation of a Company to establish Works for the manufacture of Ordnance and Projectiles; or to build a large gun and demonstrate the wonderful powers of the system to the Governments of the world. It has already been proven on a small scale, and want of capital only causes the Patents to make the liberal offer which they are prepared to do. Address for ten days ORDNANCE, Post-office Box 2459, New York City. 1\*

TO MANUFACTURERS OF WAGON AND CARRIAGE Axles.—For sale, the right to use a recently patented machine for turning axles. Will do as much work as twelve engine lathe.

LARGE LATHE FOR SALE.—WE HAVE ONE second-hand lathe, with 6 feet, will turn shaft 15 feet long. Price \$950. FAIRMAN & WILKARD, 53 John street, New York.

TO CANDLE MANUFACTURERS.—THE UNDERSIGNED offers for sale, on reasonable terms, two hydraulic presses, one for cold and one for hot pressure; both in perfect order and of best workmanship. Address EDWARD RING, Post-office Box 1,720, St. Louis, Mo.

FOR SALE.—ON ACCOUNT OF FAILURE IN THE Proprietor's health he offers for sale his Foundry and Machine-shop at low rates. A desirable location with a good business. Address F. M. ROBINSON, Conneautville, Crawford county, Pa.

ENGINEERS AND MACHINISTS ARE SCIENTIFICALLY prepared for all the duties of Marine Engineering for the United States Navy or Merchant Service. Address, with a stamp, J. HARRIS, 335 North 10th street Philadelphia, Pa.

THE BEST IS ALWAYS THE CHEAPEST.—WE manufacture a Windmill for pumping water that has been thoroughly tried during the last 4 years. For simplicity and durability we challenge competition. It is no vague chimera, but a practical and thoroughly tried machine, first-class in every respect. Will pump from wells 10 to 150 feet deep. Price, without pump, No. 1, \$1000; No. 2, \$1200. E. W. MILLS & CO., Mercersburg, Pa.

SHIMER & MILLER, AGRICULTURAL AND COMMISSION Dealers, Hillsboro, Ill., give personal attention to the introduction and sale of all kinds of Machinery. Business solicited and references given.

UNITED STATES GOVERNMENT MUSKET AND Carbine Barrels.—I am constantly manufacturing to order and under contracts the above barrels, which are forged out of the very best material and other imported iron. They never fail to pass Government inspection. Address P. L. HAIN, Wernersville, Berks county, Pa.

STEAM AND WATER GAGES, GLASS TUBES, PATENT Gage Cocks, Whistles, and Engine Counters for sale. Also Indicators for ascertaining the working high pressure of Steam Engines. Heat Gages and Signal Gongs for Steamboats. E. BROWN, 311 Walnut street, Philadelphia, Pa.

TO MANUFACTURERS OF MACHINISTS' TOOLS AND DEALERS IN RAILROAD SUPPLIES.

THE UNDERSIGNED, MANAGER OF THE CARROLL Railroad, being about to change the plant of said road from Mule to Steam Power, solicits the Catalogues of Machinists' Tools with the lowest price; of the different articles marked on them in American gold; the articles to be delivered in the city of New York.

He also solicits the prices of Railroad Wheels, Axles, Boxes, Guides, Springs, Draught Bars, and Articles appertaining to Cars, Freight as well as Passenger; all for light cars of 2,500 lbs. weight. The prices to be marked in United States gold, the articles to be delivered in the city of New York, and to be there paid for in said coin, or its equivalent in currency on delivery.

The wheels of the cars to be 28 inches diameter, and to not weigh over 200 lbs.; to have 3 1/2 inches tread, with 3/4 flange; the wheels to be bored and slotted for keying; the axle to be 2 1/2 inches diameter in the wheel; to be slotted for a key also. Address GEO. K. STEVENSON, Carrizal-bajo, Chile, South America. Agent in New York, HENRY F. FALLON, 142 Pearl street.

THE EVANS & BURGESS PATENT WATER FRONT FORGE is the best for using Lehigh or other hard coal now known to the public. Will save 33 per cent of fuel over any other forge now in use. Besides will so protect the workmen from the gas and heat as to remove all objections whatever. They are being extensively adopted in many of the first armories and workshops in the country. Please send for a circular and price list. G. W. BIGELOW, sole proprietor, 28 Whitney ave., New Haven, Conn.

ANDREWS & KALBACH WATER WHEELS.—I AM prepared to furnish these wheels of all sizes. They yield about 50 per cent useful effect, as per report of test of Turbine Wheel at Philadelphia, March, 1860, of a very rough model, and have proven themselves very durable and desirable for all purposes. For particulars, apply, stating heights of local and works to be done, to HENRI-DORRE, H. RINGOLD, New York, New Jersey.

PORTABLE STEAM ENGINES.—COMBINING THE maximum of efficiency, durability and economy with the minimum of weight and price. They are simple and favorably known, more than 200 being in use. All warranted satisfactory. Circulars and Descriptive circulars sent on application. Address J. C. HOADLEY & CO., Lawrence, Mass.

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IMPORTATION OF SCIENTIFIC BOOKS AND PERIODICALS FROM EUROPE.—The Subscribers beg to call the attention of the readers of the SCIENTIFIC AMERICAN to their unrivaled facilities for the importation of Books and Periodicals from England, France, Germany and Belgium. Having established this special branch of business in 1841, and since given it their exclusive attention, they are prepared to fill with systematic care all orders which may be entrusted to them. Particular attention is given to the importation of Scientific Publications of all kinds.—J. FENNINGTON & SON, Importers Booksellers, 127 South Seventh street, Philadelphia.

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SELF-REGISTERING CALIPERS, CAUTION.—THE public are hereby cautioned against purchasing, making, vending or using self-registering calipers under or by virtue of letters patent alleged to have been granted to William A. Morse, as we claim his supposed invention is an infringement on the patent issued January 7, 1863, to David C. Talbot, and assigned to and now owned by the subscribers, KIMBALL & TALBOT, Worcester, Mass.

CIVIL AND MECHANICAL ENGINEERING.—F. W. EVANS, Ancien Eleve de l'Ecole Imperiale Centrale des Arts et Manufactures, de Paris, gives particular attention to the construction of Iron Roofs, and Stone, Iron and Wooden Bridges. 103 State street, Boston, Mass.

MACHINERY AT PEACE PRICES.—A LOT OF BARREL and Keg Machinery for sale very low, to close an estate. Address RUFUS TYLER, Administrator, Ausable Forks, Essex Co., N. Y.

ARMY SUPPLIES.

OFFICE OF ARMY CLOTHING AND EQUIPAGE, 502 BROADWAY, NEW YORK, April 20th, 1864.

SEALED PROPOSALS WILL BE RECEIVED AT this Office until 12 o'clock, p. m. on Monday the 25th instant, for furnishing by contract, at the Depot of Army Clothing and Equipage in this city— 1,000 Uniform Jackets of the New York State pattern, but with the United States Infantry Button.

Further information in regard to which can be obtained at this office. Proposals for which will be endorsed "Proposals for furnishing Uniform Jackets." Sealed proposals, endorsed "Proposals for furnishing Burlaps," will also be received at the same time and place. A guaranty must accompany each bid for the faithful performance of a contract.

The United States reserves the right to reject all bids deemed objectionable. Proposals must be addressed to LT.-COL. D. H. VINTON, Dy. Qr. Mr. Genl.

HACKLE, GILL, COMB CARD PINS, &c., &c., promptly supplied by J. W. BARTLETT, 442 Broadway, New York. Refers to leading Plas, Linen and Cordage Machy Manufacturers.

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AMERICAN NEEDLE COMPANY, 442 BROADWAY, New York, J. W. Bartlett, Needle manufacturers for all the Sewing Machines. Bartlett's Burnished Hand Needles, Hackle pins, &c.

ROUND AND SQUARE MATCH MACHINES, Woolen Cards, Rag Pickers, &c., Manufactured by RICHARDSON & CO., Athol Depot, Mass.

IMPORTANT TO RAKE MANUFACTURERS.—COLLUMBUS COLEMAN, Marion avenue, Allegheny City, Pa., continues to fill orders for Steel Rake Teeth, adapted to the latest improved Horse Rakes.

THE BELLEVUE STEREOSCOPE, WITH SLIDING FOCUS and Field Piece, accommodating all eyes, recently noticed in the SCIENTIFIC AMERICAN, is mailed, prepaid, for \$3, or with 12 Assorted views, \$6, by HENRY CRAIG, 335 Broadway, New York.

THE CELEBRATED CRAIG MICROSCOPE, COMING with instruction with Adjustment, is mailed, prepaid, for \$2.25; or with a beautiful Mounted Object for \$3; with 24 Objects, \$5, by HENRY CRAIG, 335 Broadway, New York.

CHLORATE OF ZINC FOR BURNETTIZING TIMBER.—A Pure Article. For sale by BOYD BROS., 159 Front street, New York.

HARDAWAY & SONS, MANUFACTURERS OF IMPROVED Spike, Bolt, Rivet, and Horse-shoe Machines. St. Louis, Mo. REFERENCES.—Chateau Harrison & Valle Laclade Rolling Mill; Collins & Holliday, Broadway Foundry; Marshall & Co., Western Foundry; all of St. Louis.

A SURE FORTUNE FOR AN ENTERPRISING MAN.—The whole of the Patent for Post's Combined, Sawing, Planing, Boring, and Moulding Machine will be sold cheap; the proprietor being engaged in other business cannot give it his attention. For information and circulars address—JOHN P. POST & SON, Carriage and Builders, Paterson, N. J. Application for State rights will be received.

STEAM ENGINES AND BOILERS OF EVERY DESCRIPTION; Shafting; Pulleys and Machinists' Tools, for Sale by C. GAY, 25 Doane street, Boston, Mass.

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