

Third, The adjustable bar, K, or its equivalent interposed between the lever, J, and rod, L, for the purpose of controlling the action of said lever on the rod, L, and valve, N, as set forth.

Fourth, The employment or use of the valve, N, interposed between the ash-box and a passage communicating with the smoke-pipe and placed within a suitable box, B, provided with openings V, substantially as shown or many equivalent way to operate as set forth.

Fifth, Placing the arm, S, of the valve between the plates u, u', substantially as shown for the purpose of facilitating the adjusting of the valve, N, in the box, B.

Sixth, Adjusting the bar, K, through the medium of the arbor, P, index, Q, and graduated dial, R, as set forth.

Seventh, The adjustable plate, S, placed on the arbor, P, when used in connection with the index, Q, and for the purpose specified.

Eighth, The partition plate, A, in the valve box, B, in connection with the slot, C', in the valve, N, whereby one valve is made to answer for both compartments of the box B, as set forth.

(The object of this invention is to obtain a simple and efficient self-acting heat-governor for stoves and hot-air furnaces—one which will admit of being adjusted in such a manner as to govern the heat according to the state or temperature of the weather, and which may be adjusted properly to thus act or operate by any person of ordinary ability.)

42,241.—Cane-stripper.—William Todd, Barnsville, Ohio: I claim the within described process of stripping the leaves from the stalks of sorghum or sugar cane by compressing a quantity of cane by means of ropes, b, and weights, c, or their equivalents, and drawing one stalk after the other out of the bundle substantially in the manner shown and described.

[This invention consists in stripping the leaves from the stalks of sorghum or sugar cane by compressing firmly a quantity of canes into a large bundle and pulling one stalk after the other out of the bundle, the pressure being kept up continually by weights or their equivalent, so that by the act of pulling out the stalks the leaves are stripped off and the operation of stripping can be performed with much less trouble and labor and more perfect than the ordinary manner.]

42,242.—Water Wheel.—Wm. L. R. Valentine, Fort Edward, N. Y.: I claim the wheel D, constructed with two sets of buckets, F, F', one set being above the other, and the upper set, F, formed at their face sides, with a straight triangular surface, d', and a concave surface, d, and the lower set, F', formed with concave face sides, in combination with the conical lower plate, a, of the wheel, and the scroll, A, all arranged as herein set forth.

[This invention relates to an improved water wheel of that class which are fitted on a vertical shaft, and are commonly termed horizontal water wheels. The invention consists in the employment or use of two sets of buckets constructed of such a form and combined with a scroll in such a manner as to obtain a large percentage of the power of the water. The invention also consists in the employment or use of a wicket or gate within the scroll, arranged in such a manner as to admit of the escape of drift, mud, or other solid substances which may pass into the scroll, thereby avoiding the breaking of the buckets, a contingency of frequent occurrence in this class of wheels.]

42,243.—Water-heater for Steam Boilers.—H. N. Waters, Hartford, Conn.: I claim the arrangement of the tank, A, with the exhaust pipes, E, and D, and the distribution of the water through the cone-shaped attachment, in juxtaposition to the exhaust pipe, D.

42,244.—Machine for sawing Heading for Barrels.—Peter Welsh, Oswego, N. Y.: I claim, first, the combination of the shaft, S, pinions, Y, and W, (with their clutch jaws, a, and d,) double clutch, b, c, fork lever g, and racks e and f, substantially in the manner and for the purpose described.

Second, The feed mechanism of the carriage, y, consisting of the meks, i, pinions, j, ratchet wheel, j', pawl arm, m, and guide, a, arranged for conjoint operation in the manner specified.

Third, In combination with the carriage, y, the dogs, o, and p, lever t, and arc, v, arranged and operating substantially as set forth.

Fourth, In combination with the lever, g, the hooks, y, and z, and the springs, a' and b', arranged and operating substantially in the manner described.

42,245.—Piston Packing.—Jerome Wheelock, Worcester, Mass.: I claim the segmental packing rings, D, E, constructed in the manner and for the purpose set forth and described.

42,246.—Sawing Machine.—O. A. White and J. W. Bostwick, Norwich, Ohio: We claim, first, The combination and arrangement of levers, D and D', F G and H, and ratchet, E, constructed and operating substantially as specified and for the purposes set forth.

Second, The combination and arrangement of arm, K, cord, k, and lever, L, as and for the purpose set forth.

Third, The combination and arrangement of slide, O, cord, P, and lever M, constructed and operating as and for the purpose described.

42,247.—Paper Case Envelope.—J. W. Wilcox, New York City: I claim the pieces of wood, A, fastened to the ends of the envelope, as and for the purpose shown and described.

42,248.—Harvester.—C. P. Wing, Fayetteville, N. Y.: I claim, first, The pins or projection, S, in the shaft, N, in combination with the pin or projection, in the wheel, O, for the purposes specified.

Second, I claim the spring guard, L, for the purpose of protecting the standing grain or other material outside of the shoe, B, from the knife, V, and those following, as described and specified.

42,249.—Lantern.—F. W. Woodward, New York City: I claim a lantern provided with a glass flame protector or globe, cylinder, or other form, in one piece, with a metal cap and base secured to its ends by a screw or other equivalent fastening which will not require the aid of plaster of Paris or cement of any kind, substantially as and for the purpose set forth.

I further claim, in combination with the mode of connecting the metal cap, base and glass flame protector, as described, the guards, D, attached to the cap at their upper ends and secured at their lower ends to a band which encompasses the lower part of the flame protector, substantially as set forth.

[This invention relates to an improvement in that class of lanterns which are provided with glass flame protectors of spherical, cylindrical or other form, in one piece, instead of detached glass planes for protecting the flame of the lamp from the wind. These flame protectors of the kind first mentioned, have hitherto been attached to their metal caps and bases by means of plaster of Paris or other suitable cement, and in case of the breaking of a protector a new one cannot be placed in the metal frame by any one except a mechanic or one skilled in the manufacture of lanterns. Hence, in a majority of cases, when a protector gets broken, the remaining metal parts are thrown away as useless. The object of this invention is to attach the metal cap and base to the protector in such a manner that the parts may be connected together and attached by any one with the greatest facility, no cement of any kind being required, and hence in case of the breaking of a glass flame protector a new one may be adjusted to the metal parts without the aid of a mechanic.]

42,250.—Turning Lathe.—L. D. Wynkoop, Owosso, Mich.: I claim the bearing, F, provided with the knives, H Q, and attached to a sliding frame, D, on the lathe bed, C, in combination with the rising and falling bar, I, to which the knife, Q, if attached, the loaded lever, K, connected to bar, I, and the pattern, N, on the bed, C, on which pattern the outer part of the lever, K, rests, all being arranged to operate substantially as and for the purpose herein set forth.

This invention relates to a new and useful attachment for turning

lathes, whereby beads and similar ornaments may be turned or formed on sticks or other articles centered in the lathe, the device being self-feeding and capable of being applied to any ordinary turning lathe.]

42,251.—Mold for making Castings.—S. A. Corser, Northampton, Mass., assignor to himself, R. G. Marsh Holyoke, Mass., W. R. Marsh, Northampton, Mass., John A. Sims, Greenfield, Mass. Ante-dated March 28, 1864:

I claim the mold, as constructed, with a mechanism for lowering the pattern relatively to the flask and as provided with one or more sand-receiving grooves or recesses and discharging outlets arranged in the base of the mold, substantially as specified.

42,252.—Sap Conductor.—C. S. Curtis (assignor to himself and L. B. Wolcott), Farmington, Ohio: I claim a metallic sap conductor having an entire oblique lip, A', plug, C, channel, C', and conductor, B, the several parts being constructed and arranged as and for the purpose specified.

42,253.—Telegraph Register.—Robert Henning (assignor to J. D. Caton), Ottawa, Ill.: I claim, first, In combination with the many-grooved roller, B, employed to support the paper against the pen or style, a, the pen-holder, D, attached adjustably to head, C', so as to adapt the pen, a, to be moved longitudinally in respect to the roller, B, substantially as and for the purposes herein described.

Second, The movable pen-holder, B, provided with a series of holes, j, i, and the spring bolt, j, or its equivalent, combined with the lever and the many-grooved roller, substantially as and for the purpose herein set forth.

42,254.—Carpet-cleaning Machine.—W. H. Jordan (assignor to himself and T. Jordan), New York City: I claim, first, The employment or use of a series of flails or beaters, E, attached through the medium of disks, D, or their equivalents, to a rotating shaft, B, and arranged in relation with the carpet, E', to operate in the manner as and for the purpose herein set forth.

Second, The yielding or elastic cords, G, applied to the framing, A, and arranged in relation with the flails or beaters, E, substantially as and for the purpose specified.

[This invention consists in the employment of a series of revolving flails or beaters, arranged in a novel way and used with yielding cords and rollers, the latter having the carpet to be operated upon adjusted around them, all the parts being so arranged that by the turning of a simple shaft, the flails or beaters will be rotated and made to act upon the carpet while the latter is moved past the former, so that the whole of the carpet will be subjected to the action of the beaters.]

42,255.—Harvester.—W. A. Kirby (assignor to himself and D. M. Osborne), Auburn, N. Y.: I claim, first, In combination with a stud or pin, n, upon the plate or lever, A, the hinged and slotted arc, N, upon the main frame, for the purpose of suspending the main frame to the plate or lever, at a higher or lower elevation as may be desired, substantially as described.

I also claim, in combination with the lever, A, stud and arc, the lever, R, by which the driver from his seat may raise up, fasten up, or let down the main frame and cutting apparatus, substantially as described.

42,256.—Vapor Stove.—C. B. Loveless, Syracuse, N. Y., assignor to O. F. Morrill, Chelsea, Mass.: I claim, first, The stove, K, and chamber, H, constructed, arranged and operating substantially as above described, in combination with the independently-acting valve rod, c, and gas cock, G.

Second, The valve rod, c, passing through the reservoir and conduit into the vaporizing or retort pipe, constructed, arranged and operating as set forth.

42,257.—Mode of pulverizing and preparing for use Coal, &c.—J. E. Lundgren, Stockholm, Sweden, assignor to himself and C. E. Habicht, New York City: I claim, first, The method herein described of pulverizing to any given degree of fineness, vegetable, mineral or animal substances of a friable nature or substances capable of being reduced to powder by means of balls or the mechanical equivalent thereof in motion, in cylinders revolving upon their axes.

Second, The production of a substitute for lampblack and other similar carbonaceous matter in its various applications in the arts, by pulverizing in the manner referred to an impalpable powder, animal, vegetable or mineral coal.

Third, The production of new articles of manufacture in which coal, pulverized as referred to, is used in lieu of lampblack and other impalpable carbonaceous matter, as one of the ingredients.

42,258.—Gang Plow.—Robert Nation, Chebanse, Ill., assignor to himself and James N. Orr: I claim the combination and arrangement in a gang plow, of the plow beams, D, D', the guides, F, provided with the slots, a, a', the axle, H, provided with the slots, s, s', the chains, e, e', the roller, R, and lever, I, all constructed and operating as and for the purposes herein delineated and set forth.

42,259.—Washing Machine.—Nathaniel Otis, Chicago, Ill., assignor to himself and Joseph Fanyou: I claim the combination and arrangement of the beater, F, when provided with the peculiarly-constructed grooves, herein described, with the perforated block provided with the inclined face, all arranged, constructed and operating, as and for the purposes specified and shown.

42,260.—Card-holder.—L. A. Roberts (assignor to Louis Prang), Boston, Mass.: I claim my improved paper, as made with one or more recesses and with slits arranged relatively to such recesses or recesses, substantially in manner and for the purpose specified.

42,261.—Foot Stove.—John Thompson (assignor to E. N. Colt), Brooklyn, N. Y.: I claim, first, A T-shaped warming pan, a, b, with or without air chambers, e, h, as set forth.

Second, I claim the combination of the horizontal air chamber, e, and vertical air chamber, h, with the T-shaped reservoir, a, b, substantially as specified.

[This invention consists in the application to a warming pan of an air chamber with perforated or solid sides, in such a manner that the feet or other parts of the body can be warmed without coming in direct contact with the surface of the pan; also in a warming pan constructed in the shape of a T, so that in placing the feet on the two horizontal wings of the pan, the vertical wing extends up between the legs, and the beneficial effect of the pan is extended over a larger portion of the body than with warming pans of the usual construction.]

42,262.—Lamp.—William Webb (assignor to the Scoville Manufacturing Co.), Waterbury, Conn.: I claim the combination of the deflector, A, perforated base, B, and imperforate shield, B', constructed and applied as herein shown and described and for the purpose specified.

[This invention consists in having the slot of the cone or deflector of the burner extended horizontally at each end, whereby the size and brilliancy of the flame is very materially increased. The invention also consists in using, in connection with the slot formed as stated, a series of openings arranged in such a manner as to obviate the conducting of heat from the flame down to the lamp.]

RE-ISSUES.

1,649.—Machine for surface-sizing Fibrous Material.—Wm. Fuzzard and James Hatch, Malden, Mass., assignors of said Wm. Fuzzard. Patented January 12, 1864:

We claim the employment or use of a heated metallic cylinder, B, or one having a metallic exterior or periphery, in combination with a heated pressure cylinder, one or more, and a polishing roller, G, or its equivalent, arranged as shown, for the purpose of surfacing and drying, simultaneously or at one operation, fibrous materials, as set forth.

We further claim the distributing or throwing of the glazing or sizing upon or against the cylinder, or upon or against a web without a cylinder, by means of a brush, substantially as set forth.

1,650.—Hand-cuff.—George W. Reed (assignor to W. V. Adams), New York City. Patented June 17, 1862: I claim, first, A hand-cuff or shackle composed of the two sections, A and B, hinged together and constructed substantially as described, and provided with the lock, C, or its equivalent.

Second, In combination with the shackle, as above described, I also claim the clevis or staple, substantially as set forth.

1,651.—Apparatus for saving Silver, &c., from Waste Solutions.—Jehyleman Shaw, Bridgeport, Conn. Patented July 8, 1862:

I claim, first, The employment or use either in combination with the basin or sink, into which persons using solutions of gold or silver suffer them to be washed, or in place of said sink or basin, of a vessel, A, so arranged in combination with a bag, G, or its equivalent, that the waste solutions in running through said vessel, shall be brought in contact with such chemicals or metals which will cause the whole or any part of the silver or gold contained in said solutions to be precipitated and retained in said vessel, while the worthless material is allowed to escape.

Second, The use of the partition, B, in the vessel or sink, A, which serves to collect the waste solutions containing gold or silver, substantially as herein described so that the silver or gold is forced down to the bottom and prevented from being carried off by the current of the liquid.

Third, The filter, D, applied in combination with the vessel or sink, A, in which the waste solutions collect, substantially in the manner set forth so that said filter will retain such particles of silver or gold which may still be kept in suspension in the liquid.

DESIGNS.

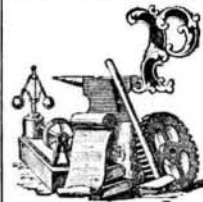
1,927.—Oil Can.—H. Everett, Philadelphia, Pa.:

1,928.—Floor-cloth Pattern.—George Green, Wappingers' Creek, N. Y., assignor to Deborah Powers, Albert E. Powers & Nathaniel B. Powers, Lansingburgh, N. Y.:

1,929.—Screen.—James L. Jackson, New York City:

1,930.—Revolving Pistol Handle.—Daniel Moore, Brooklyn, N. Y.:

1,931.—Floor-cloth Pattern.—James Paterson, Elizabethtown, N. J., assignor to Edward Harvey, Brooklyn, N. Y.:



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 past 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,

WM. D. BISHOP.

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.

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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 by 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.



D. B., of Ill.—The first thing to be done is to have your alleged infringer's plow examined and compared with the claims in your Letters Patent by a patent lawyer, and if the parties are infringing your claims it will be his duty to warn them of the infringement and summon them to appear and pay damages for infringing, buy a license and stop manufacturing; and if they do not regard your threat, get out an injunction to restrain them.

J. L., of N. Y.—Petroleum is a mixture of various hydro-carbons, and probably no two specimens have the several chemical compounds mixed in the same proportion. In the process of purification the more volatile substances are separated, and these are called benzine. As benzine is composed of a number of hydro-carbons mixed in various samples in different proportions, there is no fixed boiling point common to all the samples.

O. H. K., of N. Y.—Sulphate of soda may be decomposed by carbonate of lime and charcoal with intense heat, but your best plan will be to buy a pure article.

C. H. P., of Mass.—Articles of iron may be covered with copper by dipping them in a solution of sulphate of copper.

D. R., of R. I.—It is our opinion that very few of our readers are interested in the discussion of questions in pure mathematics.

F. A. W., of Mass.—King's "Notes on the Steam Engine" is a very useful and practical book for engineers.

P. S., of Pa.—We do not know of any machine in the market capable of dropping potatoes.

W. A. V., of N. H.—You can have the powder which you send us analyzed for \$15.

F. T., of N. Y.—Butter is one of the organic products that has never been produced by art.

C. R. W., of Ind.—We are informed by Prof. Seely that there are no stereoscopes yet for sale in market.

T. J. F., of Texas.—There are no two liquids known which will ignite by simply being brought in contact. There are liquids which on being brought in contact with certain solids will generate sufficient heat to create flame. Water poured on lime in sufficient quantity will set wood on fire.

A. W. H., of N. Y.—Aluminum bronze is an alloy of 90 parts of copper with 10 of aluminum. You can get aluminum of J. F. Lohme & Co., 556 Broadway, this city, and perhaps aluminum bronze and Aich metal.

Money Received.

At the Scientific American Office, on account of Patent Office business, from Wednesday, April 6, 1864, to Wednesday, April 13, 1864:—

- R. A. V., of N. Y., \$25; J. F. C., of N. Y., \$50; E. T. S., of N. Y., \$20; F. S. G., of N. Y., \$16; A. E. H., of N. Y., \$45; E. S. H., of N. J., \$20; W. G., of Ind., \$20; A. O., of N. J., \$16; J. D., of Canada, \$12; H. D., of Ohio, \$45; J. W., of N. Y., \$16; O. W., of N. Y., \$20; J. F., of N. J., \$16; L. G. K., of Mass., \$16; R. B. W., of Ohio, \$25; A. I. A., of Ill., \$16; S. T., of Ohio, \$20; C. B., of Ind., \$50; P. & B., of Pa., \$25; E. R. B., of Ind., \$15; J. G., of Pa., \$20; O. W. & B., of Ill., \$16; G. C. P., of Cal., \$40; G. H. M., of Ohio, \$20; A. C. K., of Wis., \$28; W. P., of Ark., \$26; A. W. T., of Ill., \$50; M. J. D., of Ohio, \$10; T. K. M., of Conn., \$16; W. M., of Mass., \$16; E. A. P., of Mass., \$30; H. A. A., of N. Y., \$20; B. M., of N. Y., \$25; G. W. B., of N. Y., \$41; W. M., of N. Y., \$16; J. S., of N. Y., \$16; J. B., of N. Y., \$16; C. A. S., of N. Y., \$41; C. St. J., of Mass., \$45; H. McK., of Ill., \$16; E. G. R., of Mich., \$20; D. S., of Cal., \$32; W. B. V., of Pa., \$20; T. R., of N. Y., \$20; J. B. K., of Ill., \$16; H. L., of Minn., \$25; A. M. W., of Mass., \$16; F. A. B., of N. Y., \$16; C. A. W., of Vt., \$25; D. & M., of Ill., \$25; E. H., of Minn., \$16; H. C. S., of Mass., \$16; E. R. C., of N. Y., \$25; J. H., of Conn., \$44; E. K., of N. Y., \$16; D. & B., of N. Y., \$25; D. E., of Ill., \$25; W. N. S., of Ill., \$25; W. D. S., of N. Y., \$25; J. H., of Wis., \$15; J. A. M., of Ill., \$15; J. D., of Ill., \$10; C. H., of Ill., \$16; J. T., of Ind., \$20; W. F. S., of N. Y., \$41; J. P., of N. Y., \$20; I. C., of Mo., \$20; B. & S., of N. J., \$16; J. F., of N. Y., \$16; W. L., of Md., \$100; I. S., of N. Y., \$20; C. H. R., of N. Y., \$16; J. K. U., of N. Y., \$16; N. A., of Ohio, \$20; B. & G., of Conn., \$20; C. W. B., of Conn., \$59; J. R. P., of Ohio, \$25; A. H., of Ky., \$16; H. & F. B., of Ohio, \$32; H. T. S., of Mass., \$12; W. C. G., of N. Y., \$25; J. M., of Mass., \$30; W. R. F., of Cal., \$20; H. H., of Mass., \$16; G. H., of Cal., \$15; W. P., of Md., \$15; J. H. P., of Mo., \$16; W. C. N., of Conn., \$25; F. J. R., of Ill., \$15; N. J. C., of Ill., \$10; L. D. C., of Mich., \$20; C. M., of Mass., \$16; P. D., of N. Y., \$16; L. B. B., of Ill., \$17; A. J. F., of Vt., \$20; H. L., of N. Y., \$56; J. F., of N. Y., \$25; J. S., of N. Y., \$25; A. J. C., of N. Y., \$25; H. McK., of Ill., \$25; J. F. C., of N. Y., \$181; P. A. C., of Ind., \$30; J. T. P., of Ind., \$30; J. J. R., of Ohio, \$20; J. E. G., of England, \$16; T. A. G., of Ill., \$16; C. & P., of N. Y., \$16; S. L. O., of Conn., \$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, 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 6, 1864, to Wednesday, April 13, 1864:—

- R. A. V., of N. Y.; B. M., of N. Y.; A. S. L., of N. Y.; G. W. B., of N. Y.; W. F. S., of N. Y.; E. R. C., of N. J.; C. A. W., of Vt.; W. C. G., of N. Y.; R. B., of N. Y.; R. B. W., of Ohio; W. P., of U. S. A.; D. E., of Ill.; T. J. E., of Ind.; H. T. S., of Mass.; J. R. P., of Ohio; P. & B., of Pa.; C. B., of Ind.; J. M., of Mass.; G. C. W., of Ohio; H. & R., of Pa.; H. L., of Minn.; D. & B., of N. Y.; R. W., of N. Y.; O. E., of Pa.; H. L., of Ky.; A. C. K., of Wis.; J. S., of Iowa; W. D. S., of N. J.; W. N. S., of Ill.; N. & J. C., of Ill.; A. W. T., of Ill.; W. C. N., of Conn.; J. H. H., of Conn.; D. & M., of Ill.; G. W. B., of Ohio; J. F. C., of N. Y., (5 cases); H. McK., of Ill.; J. F., of N. Y.; H. L., of N. Y.; H. A. A., of N. Y.; A. J. C., of N. Y.; J. S., of N. Y.; J. F., of Conn.; C. W., of Iowa; E. A. P., of Mass.; J. T. P., of Ind.; P. A. C., of Mass.

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.

BAIRD'S NEW AND REVISED CATALOGUE OF Practical and Scientific Books, complete to April 12, and fuller than any he has heretofore published, is now ready for delivery. He will send it free of postage to any reader of the SCIENTIFIC AMERICAN who will favor him with his address. In it will be found many new books of great interest and value just ready or in preparation. HENRY CAREY BAIRD, Industrial Publisher, 406 Walnut street, Philadelphia.

ARMY CLOTHING AND EQUIPAGE OFFICE, Cincinnati, Ohio, April 6, 1864.

PROPOSALS ARE INVITED BY THE UNDERSIGNED, until WEDNESDAY, April 20th, 1864, at 12 o'clock, M., for furnishing this Department (by contract) with—

- Blankets—Woolen.....Army Standard. 1 do.
Blankets—Cotton.....do.
Color Belts.....do.
Drums—complete.....do.
Felling Axes (first quality only and to weigh from 4 1/2 to 5 1/2 lbs.).....do.
Felling Ax Handles.....do.
Guldons (Cavalry).....do.
Kersey, Sky-blue.....do.
Pick Axes.....do.
Pick-ax Handles.....do.
Spades.....do.
Shelter Tents.....do.
Samples of which may be seen at the Office of Clothing and Equipage in this city.
To be delivered, free of charge, at the U. S. Inspection Warehouse, in this city, in good new packages, with the name of the party furnishing, the kind and quantity of goods distinctly marked on each article and package.
Parties furnishing goods must in all cases furnish samples, marked and numbered to correspond with their proposal, and distinctly state in their bids the quantity of goods they propose to furnish, the price and the time of delivery.
A guaranty, signed by two responsible persons, must accompany each bid, guaranteeing that the bidder will supply the articles awarded to him under his proposal.
Bids will be opened on Thursday, April 20, 1864, at two o'clock, P. M., at this office, and bidders are expected to be present.
Awards will be made on Saturday, April 21st.
Bonds will be required that the contracts will be faithfully fulfilled.
Telegrams relating to proposals will not be noticed.
Blank forms of proposals may be obtained at this office.
The right to reject any bid deemed unreasonable is reserved.
By order of Col. Thomas Swords, A. Q. M. G. W. MOULTON, Captain and A. Q. M.

ARMY SUPPLIES.

OFFICE OF ARMY CLOTHING AND EQUIPAGE, BROADWAY, NEW YORK, April 7th, 1864.

SEALED PROPOSALS WILL BE RECEIVED AT this office until 12 o'clock, M., on Thursday the 14th instant, for furnishing by contract, at the Depot of Army Clothing and Equipage in this city, SIX MULE-WAGON HARNESS, COMPLETE.

Specifications for which can be seen at this Office. Bidders will state the quantity they wish to supply, and the shortest time in which they can deliver it. All proposals must be accompanied by a proper guarantee for the faithful performance of a contract. The United States reserves the right to reject all bids deemed objectionable. Proposals should be endorsed, "Proposals for furnishing Harness," and addressed to

LT.-COL. D. H. VINTON, Dy. Qr. Mr. Genl.

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PATENT COMMISSION HOUSE!—SNYDER & WALTER, 229 Broadway, New York. Valuable Patent Rights sold for cash in New York within thirty days. Exchanges made for Real Estate. Consignments respectfully solicited. Address SNYDER & WALTER, 229 Broadway, New York. REFERENCES:—H. D. Smith, Esq., Chemical Bank, New York; J. W. Kirby, Metropolitan Bank New York.

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

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GREAT IMPROVEMENT IN OVAL LATHES.

We would call the especial attention of all parties who are engaged in oval turning, to a new and improved Lathe patented by James Burton, of Albany. It is the best and most scientifically constructed Oval Lathe ever made, possessing the facility of being run at a high rate of speed, without causing an undue amount of vibration. Any one desiring to purchase, with the right to use, can see one in operation at the Works of ROBERT MARCHER & BRO., 221 & 223 West 26th street, New York, where also all necessary information concerning the same can be had.

WANTED IMMEDIATELY TO SELL THE RIGHT of Best Patent Peg Float known. For circular, with cut, address—CHAS. H. ODELL, Poughkeepsie, N. Y.

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INDICATOR CARDS TAKEN AND POWER TESTED. Address—HOWARD ROGERS, 16 Beekman street, New York 17 1\*

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 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, 25 Whitney ave., New Haven, Conn. 17 3\*

ANDREWS & KALBACH WATER WHEELS.—I AM prepared to furnish these wheels of all sizes. They yield about 65 per cent useful effect, as per report of test of Turbine Wheels at Philadelphia, March, 1860, on a very rough model, and have proven themselves very durable and desirable for all purposes. For particulars, apply, stating size of head and work to be done, to THODORE H. BIRDSON, Mount Holly, New Jersey. 17 5\*

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

THE UNDERSIGNED, MANAGER OF THE CAROLINA RAILROAD, being about to change the plant of said road from Mule to Steam Power, solicits the Catalogues of Machinists' Tools with the lowest prices; 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 2500 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 26 inches diameter, and to not weigh over 200 lbs.; to have 3 1/4 inches tread, with 3/4 flange; the wheels to be red and slotted for keying; the axle to be 2 1/4 inches diameter in the wheel; to be flanged at head and tail. Address GEO. K. STEVENSON, Carrizal-bajo, Chile, South America. Agent in New York, HENRY F. FALLON, 142 Pearl street. 17 2

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WANTED.—A PAPER PERFORATING MACHINE (new or old). Address—M. M. LIVINGSTON, Office of SCIENTIFIC AMERICAN, New York city. 17 1\*

E. H. BELLOW, MANUFACTURER OF PORTABLE and Stationary Steam Engines, Worcester, Mass. 17 10\*

IMPORTATION OF SCIENTIFIC BOOKS AND PERIODICALS FROM EUROPE.—The Subscribers beg to call the attention of the readers of the SCIENTIFIC AMERICAN to their unrivalled 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. PENNINGTON & SON, Importing Booksellers, 127 South Seventh street, Philadelphia. 17 2

PATENT IMPROVED SOLID EMERY WHEELS, FOR Cutting, Grinding, and Polishing. Metal-worker should be without them. Orders promptly filled. Smyrna Emery by the Keg, warranted Pure. NEW YORK EMERY WHEEL COMPANY, 51 Beekman street, New York. 17 3\*

HAMMERED AND ROLLED CAST STEEL

FOR TOOLS, DRILLS, DIES, SPRINGS, CARBINES, also steel forged to any required shape, by the MONTAUK IRON AND STEEL CO. Office, 16 Beekman Street, New York. 16 11

A MOST VALUABLE PATENT FOR BLAST ON SALE.—Address, CHARLES SUCKOW, Box 4487, Buffalo, New York. 16 4\*

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. 16 3\*

WANTED.—INFORMATION IN REGARD TO "PORTABLE Houses" either iron or wood. Also Portable Sawmills Address, S. A. BARNES, Box 742, Nashville, Tenn. 16 2\*

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 Rods, and Stone, Iron and Wooden Bridges. 103 State street, Boston, Mass. 16 10\*

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. 15 6\*

DRAFTING INSTRUMENTS FOR ENGINEERS, SURVEYORS, Architects, Machinists, and Schools, Engineers' and Surveyors' transits, levels, compasses, and chains, Chesterman's Metallic and Steel Tape-measures, for sale, wholesale and retail, by JAMES W. QUEEN & CO., 924 Chestnut street, Philadelphia. Priced and illustrated catalogues gratis. 11 10\*

WANTED.—AMERICAN OR ENGLISH IMPROVEMENTS in machinery for manufacturing cotton or wool, old or new, patented or unpatented. CHARLES A. SHAW, Biddeford, Maine. 12 10\*

GROVER & BAKER'S HIGHEST PREMIUM ELASTIC Stitch Sewing Machines, 495 Broadway, New York. 12 11

ANTI-INCORUSTATION.—BEWARE OF COUNTERFEITS. Winan's Anti-Incorustation Powder—so long a success—is being pirated. Cost 10 cents a day or less. A certain remedy without injury. Apply for circular to H. N. WINANS, 11 Wall street, New York. 14 4\*

AGENCY FOR THE INTRODUCTION AND SALE OF PATENT INVENTIONS.—Inventors and manufacturers desirous of having their inventions introduced into this country and abroad, will find it to their interest to send descriptive, illustrated pamphlets or circulars to A. SCHELLER, 370 Bowery, New York. 11 4\*