I further claim constructing the shoe of two equal parts, A A connected at their front ends by a pivot, a, when used in connection with the plate, F, attached to said parts by screws, H, and either with or without the flanges, c, as set forth.

[This invention relates to a new and useful improve class of horseshoes which are attached to the hoof without the aid of nails. The object of the invention is to obtain a means for se curing the shoe to the hoof without the use of nails, and which will prevent the animal becoming hoof-bound, and at the same time firmly secure the shoe to the hoof.]

-Stirrup Fastening .- C. H. Wellman, New York

CITY:

I claim the combination with a sliding book or pin of a buckle,
made of any desired shape, a hinged or pivoted side, amanged and
operating together substantially in the manner described and for
the purposes specified.

49,814.—Loom.—Joseph Welsh, Philadelphia, Pa.: I claim producing the herein-described chazes in a loom means of any suitable device, to be operated by hand at the of the attendant, substantially as and for the purpose described 49,815.—Baling Press.—Joseph P. White, New York

City:
I claim the rack rod, E, and hollow screw spindle, F, when emplayed in connection with the worm wheel, G, worm, I, and pinion d, to operate the follower, K, in the manner described.

49,816.—Plow.—E. G Whiting, Northfield, Minn.:
I claim lapping be forward portion of the share, E, around the standard, C, as described and represented at b b', Fig. 4.

This invention consists in a novel and improved manner of constructing steel plows, whereby the same may be readily kept in repair or proper working order, the several parts being capable of being detached when worn, and new parts inserted in their place.]

49,817.—Grain Register.—Jonas T. Wiley, Claytown,

49,817.—Grain Register.—Jonas T. Wiley, Claytown, Iowa:

I claim, First, The registering apparatus, substantially as described, consisting of the crank. Shafts, wheels and indices, in combination with the projection on the shaft and the snapping spring, which audibly indicates the scoring, and prevents the revolution of the shaft in the wrong direction. Second, The combination of the plate, Q, with the spring, F, and shaft, B, by which the machine may be seen in the reverse direction when the plate is interposed to prevent the engagement of the projection, E, on the end of the spring, F. L. and the strap, M, with the opening in the side of the box, and the unshipping slot, S, substantially as described.

-Seeding Machine.-Henry Williams, Kenosha

49,818.—Securing machine.

Wis.:

I claim the employment or use in a seeding machine of two shafts, p. p. provided with oblique seed-distributing wheels, E, and having the wheel, B, on which the machine is mounted secured to them, substantially as and for the prurpose herein set forth.

Second. The peculiar form or construction of the seed-distributing wheels, E, substantially as herein specified.

was seed broadcast, and it consists in a certain construction and arrangement of parts, whereby the seed may be sown in greater of loss quantity over a given area, as may be required, and the work performed in a superior manner, and with very little labor or manipulation on the part of driver or operator.

49,819.—Gate Fastening.—John P. Woodcock, Bedford, N. Y.:

N. Y.: I claim the combination of the thumb spring levers, m m, spring levers, h h, with hook-shaped ends and hollow casing or socket, r, arranged together substantially in the manner described and for the purpose specified.

[For an illustration and description of this invention see No. 1, present volume, of the SCIENTIFIC AMERICAN.]

49,820.—Fence.—Wm. D. Woodruff, Phelps, N. Y.:
I claim the combination of the metallic feet or angle irons, C, with the posts, B, and longitudinal bars, C, the whole constructed and operated substantially as described.

49,821.—Chest and Table.—G. W. Zeigler, St. Louis, Mo. I claim the double lids, a b, the same being hinged together at e.e, and the lid, a, linged to the box, A, by means of the straps, ff. so that in one position, a and b only serve as a lid to the chest, so that when in another position a b and the chest form a kitchen table, and in a third position the same form a dough-kneading board, arranged and constructed as hereinbefore set forth.

49,822.—Fastening for Scythes.—Wm. C. Barker, Providence, N. Y., assignor to B. B. Yale, New York

dence, N. 1., assigned.
City:

I claim the securing of scythes to snaths by means of an eye bolt, arranged in such a manner as to claim tirmly the heel or tang of sescythes to the chamfered surface of the snath, and at the same me admit of being adjusted laterally, so as to place the scythes in more or less angular position with the snath, substantially as shown and described.

ng scythes to their snaths, whereby the scythe may be readily ad-usted more or less angularly with the snath; that is to say, the point of the scythe adjusted nearer to or further from the operator, as may be desired, and the scythe at the same time firmly secured to

49,823.—Steam Blower for Furnaces.—John A. Bassett,
Salem, Mass., assignor to Oliver Burnett, Farming,
Mass.:
I claim a steam blower constructed of the mechanical elements,
and to operate substantially in the manner and by the means as
hereinbelore specified, such elements leing the rotary steam jet
wheel, its hollow arbor, the fan wheel, and an opening or case surrounting such iall wheel, the whole being for application to a furnace, in manner and for the objects as set forth.

49,824.—Galvanic Battery.—John Blackie (assignor to himself, William C. Dodge and William S. King), Washington, D. C.:
I claim, first, The cup, B. suspended by the insulated rods, g, and plate or ring, h, as herem shown and described.
Second, I claim the perforated plate, a and a', provided with the stud. c, and nut, d, when constructed as and for the purpose herein set forth.
Third I claim the combination of the cup, B, provided with mercury, the zinc plates, C, and the silver plate, D, all submerged and arranged to operate substantially as and for the purpose set forth.

49,825.—Machine for Covering Cord.—John Buser (assignor to Heinemann & Silbermann), New York City:

First, I claim the trough, v, in comoination with a series of rollers, or equivalent apparatus, to present the foundation threads to said trough and apply to them the required tension while being drawn along said trough and twisted, substantially as specified.

Second, I claim, in combination with the trough v, the ring covering head, with its pins for guiding the covering threads as they are twisted upon the foundation as the latter passes from the rough to the fly or spool, as specified.

49,826.—Process for Rendering Leather Water-proof.—
G. Conklin (assignor to Caroline A. Conklin), Conklingsville, N. Y.:
I claim the within-described process of dipping the leather, either manufactured or unmanufactured, into heated liquid at a temperature of about 175 degrees, and suspending it in an atmosphere heated to about the same temperature, substantially as and for the purpose specified.

27.—Machine for Making Cement Pipe.—John E. Circumstances, serving to hide the cups more or less from view Earle (assignor to John P. Lindsay), New Haven, when the article may be in use with its stand on a table.

49,841.—Castor Bottle Holder.—Alonzo E. Young, Dor

I claim raising the core in the flask during the process of filling, and only as fast as the flask becomes filled, so that the top of the core is always down in the flask at or near the point of filling, substantially as and for the purposes specified.

49,828.—Machinery for Making Cement Pipe.—William Goodwin (assignor to J. P. Lindsay), New Haven. Conn. Antedated Aug. 28, 1865:

1 claim, First, The construction and arrangement of the shoe or shoes, F. with a core and flask, when the said core and shoes rise as the flask becomes filled, substantially as and for the purposes specified.

shoes, F, with a core and flask, when the said core and shoes rise as the flask becomes filled, substantially as and for the purposes specified.

Second, The combination of the flanges, f, with a revolving head, substantially as and for the purpose specified.

Third, The arrangement of the crane, M, in combination with one or more flasks, constructed to operate substantially as and for the purposes specified.

Fourth, The combination of the crane, M, table, B, and two or more flasks, substantially as and for the purposes specified.

Gustan, the combination of the crane, M, table, B, and two or more flasks, substantially as and for the purposes specified.

49,829.—Machine for Making Moldings and Frames.—
Gustave Heuze (assignor to himself and Edward Sommerkorn), New York City:
I claim, First, The hand screw, q, applied in combination with the leveler, J, and belt, I, substantially in the manner and for the purpose set forth.

Second, The tubular attachment, P, to the discharge spout, J, of the box containing the preparation, in combination with adjusting plugs, P, constructed and operating substantially as and for the purpose specified.

Third, The vertically adjustable box, H, applied independently of the leveler, J, and acting in confunction with the same, substantially as and for the purpose described.

Fourth, the splitter, L. in combination with the belt, I, and leveler, J, applied and operating substantially as and for the purpose specified.

specified.

Fifth, A machine combining a saw, a molding cutter, a leveler and splitter, and a polisher, all constructed and operating substantially as and for the purpose described.

49,830.—Picker Check for Looms.—L. J. Labounty (assignor to himself and Allen P. Bickford), Lowell, Mass.:

Mass.:

claim the combination of the bunter, c, made and provided with
rings, as explained, with the adjustable holding frame, B, having
justments, substantially as specified.

49,831.—Manufacture of Super-phosphates.—G. A. Liebeg, Baltimore, Md., assignor to Navassa Phosphate Co., N. Y.:

I claim the use of sulphurous acid, or muriatic acid, or chloride of sodium, as a substitute for sulphuric acid in the production of a super-phosphate from Navassa guano, or other phosphatic compounds Skate.—Edgar Murray, New York City, assignor Wm. J. Coombs, Brooklyn, N. Y. Antedated 49.832.

19,832.—Skate.—Edgar Murray, New York City, assignor to Wm. J. Coombs, Brooklyn, N. Y. Antedated Sept. 1, 1865:
I claim the lever, e, formed with the cam-shaped clamp, f, in combination with the rod or bar, g, adjustable, as set forth.

And in combination with the said lever, e, clamp, f, rod, g, and must, I, claim the clamps, k k, acting at the sides of the boot sole, as set forth.

as set forth.

49,833.—Sulky Plow.—Ira C. Pratt (assignor to himself and L. F. Pratt), Morton, Ill.:

1 claim, First, The plank, A, to which the plow beams, B, are secured, connected to the draught pole, I, by joints or eyebolts, f, and operated or adjusted by the driver on his seat, through the medium of a lever and arm, or their equivalents, substantially as set forth. Second, The adjusting of the plank, A, and consequently the plow beams and plows, higher or lower, with the axle, D, in order to regulate the depth of the penetration of the plows, by means of the plate, E, secured to one end of the plank, and proviced with a series of holes, c, in a vertical line, through any one of which the bolt, b, passes into the axle, at one end, in connection with the slotted plate, C, through which the axle passes and the lever, F, attached to the plank, and bearing on the axle, substantially as and forthe purposes set forth.

[This invention relates to a new and improved sulky piow, and is applicable to gang as well as single plows. It has for its object the ready adjustment of the plows, so that they will penetrate the earth at a greater or less depth, and raised entirely out of the ground when necessary, as in turning at the ends of a field, or in drawing the device from place to place.

49,834.—Horse Hay-fork.—O. P. Secor, Chicago, Ill., assignor to C. L. Bellamy, Catskill, N. Y.:

I claim the tines, a a a a, each formed in a continuous curve, in one piece, with its shanks, b, which shanks converge and are connected together at their upper ends in the described combination with the cross bars, c.c., catch, c.f., springs, mandeye, e, all constructed, arranged and employed in the manner and for the purposes specified.

[This invention consists in a novel tripping device for causing the fork to discharge its load; one which will admit of the fork being readily adjusted, so that the latter will hold or retain its load while being elevated, and which will also admit of the fork being cheaply constructed and easily manipulated.]

constructed and easily manipulated.]

49,835.—Knitting Machine.—Asa Sessions, Jr. (assignor to Lamb Knitting Machine Co.), Springfield, Mass.; I claim, First, The combination of the arm, C, lub, c, and bridge, B, with the slider, n, and bed piece, A. substantially in the manner and for the purpose described.

Second. The combination of the wire, h, or its equivalent, and the spring, k, when used in connection with the other parts of the machine, substantially as described.

Third, The spring, D, when used in combination with the other parts of the machine, in the manner and for the purpose described. Fourth, The bridge, B, slotted as described, when applied to a knitting machine, as and for the purpose herein set forth.

49,836.—Grater for Spices and Fruits.—H. S. Shephardson, Shelburne Falls, Mass., assignor to H. S. Shepson, Shelburne hardson & Co.:

I claim punching a plate or plates for grates, so as to have a fin or p, a throat and a conducting channel, substantially as herein depribed and represented.

49,837.—Sewing-machine Stitch.—J. J. Sibley, New York City, assignor to the Bruen Manufacturing

I claim the sewing machine stitch, described and shown in the

49,838.—Machine for Punching Horseshoes.—Samuel D. Turner (assignor to the Union Horseshoe Co.), Providence, R. I.:

I claim a machine for punching horseshoes, consisting of one or more elastic gage points, b b, operating in the manner substantially as described, for the purposes specified.

49,839.—Apparatus for Removing Hair from Hides.—Samuel S. Weed, Stoneham, Mass., assignor to Edgar M. Stevens and James L. Hall:

I claim, First, Removing hair and lime from hides or skins by means of a rotating cylinder covered with rubber, substantially a described.

described.

Second, The combination of the cylinder, D, feed rollers, I and K, levers, L L, and treadle, P, substantially as and for the purpose de-

evers, L L, and treadle, P, substantially as and for the purpose described. Third, The brush, W, when combined and operating with the sylinder, D, substantially as described.

cylinder, D. substantially as described.

49,840.—Castor Bottle Holder.—Alonzo E. Young, Dorchester, Mass., assignor to himself and John W. Haines, Somerville, Mass.:

I claim the improved manufacture of glass castor bottles holder, made not only with a disc, a plate and a flange to extend around and project below such disc, but with cupsto open out of, and extend below, the disc, in manner as specified, the flange, under such

49,841.—Castor Bottle Holder.—Alonzo E. Young, Dor-chester, Mass., assignor to himself and John W. Haines, Somerville, Mass.:
I claim, in the manufacture of the castor or bottle holder mada of glass and in one piece, the arrangement of the cups, feet, con nection and handle-fastening socket, as specified.

nection and handle-fastening socket, as specified.

49,842.—Electro-magnetic Regulator.—Francois Ferdinand Auguste Achard, Paris, France:

I claim an electro-magnetic apparatus composed of a sectional ratchet wheel, A, working beam, D, double ratchet, E, electro-magnets, F, and armature, O, constructed and operating subsumtially as and for the purpose herein shown and described [Thus invention relates to an electro-magnetic apparatus which is apparently for the purpose of grown the bellow force as of regulating

appplicable for the purpose of operating boiler feeds or of regulating the pressure of steam or gases in closed vessels, and which also may be used for the purpose of operating car brakes, and for various other purposes.]

49,843.—Writing Fluid.—Henry C. Bailden, Edinburgh,

49,843.—Writing Filiu.—nemy c. Behaves, 2007.

Scotland:

I claim the use, for the purpose described, of paper tinted or colored with a coloring matter susceptible of being acted upon by sulphuric or other destructive acid, combined with the use of an ink composed of sulphuric or other destructive acid and a coloring matter, such ink being capable of discharging and changing the color of the paper, and changing or weakening the texture thereof in the parts written upon, substantially as herem set forth.

49,844.— Breech-loading Fire-arm.— James Dabziel Dougall, Westminster, Great Britain:
I claim, First, The combination of the breech-piece, E, its recess, e, the pin, c, eccentric, b, and barrel, A, with its annular projection, f, the whole being constructed, arranged and operating substantially as and for the purposes herem set forth.

Second, The projection, t, on the breech-piece, in combination with the notch, k, in the tongue, oa the underside of the barrel.

Third, The pin, 1, on the breech-piece, in combination with the inclined or curved notch, n, in the breech-piece, for the purpose specified.

REISSUES.

REISSUES.

2,063.—Die for Stamping Rings.—Oscar M. Draper,
North Attleboro, assignee of Vorgil Draper. Patented May 24, 1864:

I claim the combination of the separate, removable, centering
piece, a, with the punch, C, the die, b, and the mold plates, A and
B, or their mechanical equivalent, the whole being substantially as
specified.

B, or their mechanical equivalent, the whole being substantially as specifical.

2,064.—Steam-engine Governor.—Bobert W. Gardner, Quincy, Ill. Patented Aug. 14, 1860:

First. I claim the governor operated as described, namely, by using the centrifugal force of the pendulum balls to close the valve, and the gravitation of the adjustable weight on the lever to open said valve, the two forces working against and independent of each other, substantially as herein specifical.

Second, The spindle, o, of the governor, supported on the head of the valve stem, but unconnected therewith, in combination with a weighted lever tending to keep the several parts in close contact, and partly balancing the weight of the moving parts of the governor, substantially as and for the purpose described.

Third, The toos, if, on the upper end of the pendulous arms, I, in their arrangement with the Silving block or cap, n, and vertical valver od, o, constructed and operated substantially as and for the purpose described, whereby the upward vibration of the governor arm is caused to act immediately and intependently to close the valve, in opposition to the influence of the weighted lever.

Third, The combination of the lever, p, adjustable weight, q, link, r, tet, g, and ver od, e, spindle, o, and pendulum arms, i, all constructed and operating substantially as and for the purposes hearting section and operating substantially as and for the purpose hearting section.

2,065.—Hoisting Machine.—William Miller, Cincinnati, Ohio. Patented May 12, 1863:
First, I claim elevating or depressing the platform of a hoisting machine or elevator, by means of traveling worm wheels, gearing with corresponding screw jacks or segmental nuts.
Second, The combination of the described or equivalent actuating mechanism platform worm racks and worm wheels, for the purposes set forth.

set forth.

2,066.—Hoisting Machine.—William Miller, Cincinnati,
Ohio. Patented July 4, 1865:
First, I claim elevating or depressing the platform of an elevator or hoisting machine, by means of a single traveling worm wheel which meshes within two or more corresponding screw racks or segmental nuts.

mental nuts.

Second. An elevating platform, supported by rollers, G, or their equivalents, on a single worm wheel, resting in worm racks or segmental nuts, substantially as set forth.

mental nuts, substantially as set forth.

2,067.—Breech-loading Fire-arm.—B. S. Roberts, U. S. A. Patented Sept. 23, 1862:

I claim the relative position of the breech-piece hinge and spur to the line of bore by which a muzzle-loadingmus-ket may be converted into a breech-loader, which is capable of partially retracting a metallic cartridge without the necessity of cutting entirely through the stock or barrel of the arm, substantially as described.

2,068.—Breech-loading Fire-arm.—B. S. Roberts, U. S. A. Patented Sept. 23, 1862:
I claim the adaptation of arms, such as described, to the use of metallic cartridges, in combination with a hammer, a projection from the breech piece and a lock of the breech piece, when these three elements are so constructed and arranged as to prevent the arm from being fired in the usual way until the breech piece is locked againstit upward tendency, cause by the pressure of the gas during a discharge of the arm, substantially as described.

gas during a discharge of the arm, substantially as described.

2,069.—Apparatus for Carbureting Air.—Hugh L. McAvoy and Elias S. Hutchinson, Baltimore, Md., assignees of Hugh L. McAvoy. Patented Dec. 13, 1864:
First, I claim generating gas by forcing air through, or mixing it
with, hydrocarbon fluid, by means of a partially submerged airforcing apparatus arranged substantially as described, to pass the
air through the wheel. Second, I claim using an air-forcing apparatus within a chamber
supplied with air, through an automatic valve, or by any other
means adapted to prevent the evaporation of the fluid when the apparatus is got in operation.

Third, I claim the employment, in connection with the vessel, A,
and air-forcing apparatus, B, of a valve, H, adapted to automatically
open when the appparatus is in operation, for the purpose of supplying; air to be carbureted, and to close when the operation is supended, in order to prevent the oil from evaporating, as explained.



MATENTS

FOR SEVENTEEN YEARS.

MUNN & COMPANY, In connection with the publication of

the SCIENTIFIC AMERICAN, have act ed 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-HALF of al the applications made for patents in the United States are solicited through this office; while nearly THREE-FOURTHS of all the patents taken in fereign countries are procured through the same source. It is almost needless to add that, after eighteen years experience in preparing specifications and drawings for the United States Patent Office, the proprietors of the SCIENTIFIC AMERICAN are perfectly con versant with the preparation of applications in the best manner, and the transaction of all husiness before the Patent Office; but they take pleasure in presenting the annexed testimonials from ex-Com ioners of Patents.

MESSIRS, MUNN & CO. :—I take pleasure to stating that, while I held the office of Commissioner of Palents, More than one pout the office of Commissioner of Palents, More than one pout that he public confidence thus indicated has been fully described, 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,

[See Judge Holt's letter on another page.]

[See Judge Holt's letter on another page.]

[See Judge Holt's letter on another page.]

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

MESSES, MUNA & Co.—IL gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, every large proportion of the business or inventors before the Paten Office was transacted through your agency: and that I have ever found you faithful and devoted to the interests of your citents, as well as eminently quanted to octor the duties of Patent Attorneys with kill and accuracy

Very respectfully, your obedient servant, WM. D. Busine.

THE EXAMINATION OF INVENTIONS.

Persons having conceived an idea which they think may be patent able, are advised to make a sketch or model of their invention, and submitti to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corresponding with the facts, is promptly sent, free of charge. Address MUNN & CO., No. 37 Park Row, New York.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE. The service which Resrs. MUNN & CO. render gratuitously upol examining an invention does not extend to a search at the Paten 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 esting forth the prospects of obtaining a pattent, etc., made up and mailed to the inventor, with a pamphlet, giving instructions for rurther proceedings. These preliminary examinations are made through the Branca Office of Messrs, MUNN & CO., corner of F and Seventh streets, Washington, by experienced and competent per sons. 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.

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

The law abolishes discrimination in fees required of foreigners, ex cepting 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 de-signs) on the above terms. Foreigners cannot securetheir inventions by filing a caveat; to citizens only is this privilege accorded

CAVEATS.

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

INVITATION TO INVENTORS.

Inventors who come to New York should not fail to paya visit to the extensive of tices 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 interes to inventors, and is undoubtedly the most spacious and best arrange

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 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 cheerf lly

FOREIGN PATENTS.

Messrs. MUNN & CO., are very extensively engaged in the prepara-tion and securing of patents in the various European countries. For the transaction of this business they have offices at Nos. 66 Chancery iane. London: 29 Boulevard St. Martin, Paris; and 26 Rue des Eper enniers, Brussels. They think they can safely say that THREE-FOURTHS of all the European Patents secured to American citizens are pre-cured 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 pat

Pamphlets of information concerning the proper course to be pur sued in obtaining patents in foreign countries through MUNN & CO. ^2 Agency, the requirements of different Government Patent Offices, &c. rate Row. New York, or any of the branch offices. 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 time ready to make examinations as to titles, ownership, or assignment of patents. Fees moderate.

ASSIGNMENTS OF PATENTS.

signment 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.

HOW TO MAKE AN APPLICATION FOR A PATENT.

Every applicant for a patent must furnish a model of his invention of susceptible of one; or, if the invention is a chemical production, be must furnish samples of the ingredients of which his composition

inventor's name marked on them, and sent, with the Governmen 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 or Postal Order 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 Ross. New York.

REJECTED APPLICATIONS.

Messr.s. MUNN & CO. are prepared to undertake the investigation and prosecution of rejected cases, on reasonable terms. The close proximity of their Washington Agency to the Patent Office atlords them rare opportunities for the examination and comparison of re erences, models, drawings, documents, &c. Their success in the prose cution of rejected cases has been very great. The principal position of their charge is generally left dependent upon the final result

All persons having rejected cases which they desire to have prose cuted, are invited to correspond with MUNN & CO., on the subject

giving a brief listory of the case, inclosing the official letters, etc.

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

owgranted for seventeen years, a fee required on filing an application for a patent is \$15. Other change in the fees are also made as tollows .-

On alling a Disc kimer \$10
On tling application for Design (three and a half years) \$10
On filing application for Design (seven years) \$15
On filing application for Design (fourteen years). \$35

EXTENSION OF PATENTS.

Many valuable patents are annually expiring which might readily be extended, and if extended, might prove the source of wealth t theirfortunate possessors. Messrs. MUNN & CO. are persuaded tha very many patents are suffered to expire without any effort of exten sion, owing to want of proper information on the part of the patent ees, their relatives or assigns, as to the law and the mode of proce dure in order to obtain a renewed grant. Some of the most valuable grants now existing are extended patents. Patentees, or, if deceased. eirs, 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 con sulting, or writing to, MUNN & CO., No. 37 Park Row, New York.

Communications and remittances by mail, and models by expres
(prepaid) should be addressed to MUNN & CO. No. 37 Park Row. New

RATES OF ADVERTISING.

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

TOR SALE—TWENTY VOLUMES SOIENTIFIC

AMERICAN, commencing 1849—all well bound and in good order.

Will be sold for the best offer. Address P. O. Box 4,257, Boston,
Mass.

PORTABLE SAW-MILLS-CIRCULAR, VERTICAL and Gang-Steam Engines and Boilers, made and sold by WM. MONTGOMERY, No. 157 Bloadway N. Y. (successor to the N. Y. Steam Saw-mill and Mr nufacturing Co).

SOLID EMERY WHEELS, SILICATE OF VULCAN-ITE of every size, promptly made or shipped from stock. N. Y EMERY WHEEL CO., No. M Beekman street, New York. 124

TO SAVE FUEL IS TO SAVE THE NATION'S Wealth.—The Improved Argand Formace, for hituminous cost, will save from 24to 40 per cent in fuel. The Improved Grate Surface, for nathractic, will save from 10to 20 per cent in fuel. They are in daily ase in steamships and in factories in different parts of the country.

JOSEFH A. MILLIER, C. F.,
No. 65 John Street, N. Y.,
1* Combustion Heat Drying and Ventilation Specialties.

A BELL-MAKER, WHO CAN WORK AND UNDER STANDS the nature of bell metal, is wanted by the under signed, who will pay expense of coming. S. S. REMBERT (Care of J. & J. Steele & Co.), Memphis, Tenn.

TOR SALE—THE PATENTS FOR SELF-CLOSING Door and for Step Ladder. Illustrated in the SCIENTIFIC AMERICAN of Sept. 2, 1886. Address D. I. STAGG No. 15 Morton street, New York.

PLATINA—WHOLESALE AND RETAIL—FOR ALL purposes. H. M. RAYNOR, Importer, No. 748 Broadway, New York, Platinum Scrap and Ore purchased.

FIRST-CLASS MACHINISTS' TOOLS, READY FOR immediate delivery. Photographs sent on application.

E. & A. BETTS.

PORTABLE ENGINES, SUITABLE FOR THE OIL
Regions, from 8 to 20 horse power, with large fire place, independent steam feed pump, steam gage, and improved water heater.
The most complete and best engines in the market. For particulars
address
WM. D. ANDREWS & BRO.
11 th No. 41 Water street. N. Y.

PATENTEES DESIROUS OF SELLING THEIR PATENTS will hever have a better concernity to the level have a better c ENTS will never have a better opportunity than is now offered by the undersigned, who will exhibit Machines and Models at the state Fair and at their Salesrooms, with a view to negotiate Patent Rights. For further information address

SPENCE & CO., No. 47 Hanoverstreet, Boston, Mass.

A NOREWS' PATENT OSCILLATING ENGINES.—
Double and Surpe Engines, from 1; to 125 inrise power, Ensired at short notice. These erigines leave the shop roady for user required as special found of our pair complete, high, and simple, and remonitied of power. For descriptive proophlets and price has all gress the manufacturers,

W. D. ANDERWS & BRO, 11 U.

TO SOAP MANUFACTURERS.—PLANS OF FACTORIES and Apparatus, Processes to prepare the following Soaps:—Castile, White, Family, Soft, Transparent, Silicated, Fancy, Etc. Analysis of Lyes, Alkalies, Greases, Otle, Soaps Address Prof. H. DUSSAUCE, Chemist, New Lebanon, N. Y.

SOAP STONE, FROM THE CELEBRATED HAWKE'S Mountain Quarry, in Blocks or in Slabs of any dimensions, fur ed in any quantity, at short notice, on application to L. B. DARLING, 806 Providence, 12* P. O. address, Providence, R. I.

PORTABLE STEAM ENGINES—COMBINING THE maximum of efficiency, durability, and economy with the min mum of weight and price. They are widely and favorably known more than 800 being in use. All warranted satisfactory or no sale Descriptive circulars sent on application. Address J. C. HOADLA. & CO., Lawrence, Mass.

\$2.000 A YEAR MADE WITH STENCIL PAYS, Steel Letter Cutter, corner Church and Cherry Streets, Burlewin P.

POR SALE -- Λ LARGE AND WELL-SELECTED ME CHANICAL LIBRARY.—French, English and American Books Papers, Receipts, Etc. For particulars address A. F. WARD, Harmar, Ohio.

SIX THOUSAND AGENTS WANTED, TO SELL SIX 15 cents and get 80 pages, or 25 cents and get 80 pages and leg and leg and leg and leg and leg gratis. [9 12*] EPHRAIM BROWN, Lowell, Mas

PANAMOMETERS OF ANY REQUIRED POWER, indicating from 5 pounds to 500 pounds, or from 25 pounds to 400 pounds, or from 25 pounds to HOUSE, No. 222 Broadway, N. Y.

BALL & CO., MANUFACTURERS OF ALL KINDS of Wood-working Machinery—Planers, Sash Molding and Tenoning Machines, Power and Foot-mortising Machines, Scroll Saws, Saw Arbord, Pullers, Etc. All from the latest improved patterns. For particulars see our illustrated catalogue, R. BALL & CO., 610*

A VALUABLE PATENT FOR SALE.—ADDRESS 6 9*

NOW'S PATENT SAFETY GOVERNOR AND VALVE
COMBINED. Patented Oct. II, 1859. Reissued May 13, 1862.
Mannfactured only by the undersigned. The Executors of the
Estate of Joseph Hall, deceased, would announce that they will continue the manufacture of Snow's Patent Safety Gevernor and Valve
Combined, and will be prepared with increased facilities to fillor
ders promptly. This is the only Governor in market capable of
shutting off the steam and stopping the engine in case of accident,
such as breaking the crank or slaft or parting of the belt. We also
manufacture Governor's for Portable Engines, which, in point of
efficiency cannot be exceeded. Circulars and Frice Lists furnished
on application. Address all orders as below. F. W. GLEN, M. E.
HOLTON, Executors of Estate of Joseph Hall. deceased.

Fochester, N. Y., July 1, 1885.

5 10*

ROSS'S NEW PATENT OIL CUP, FOR LUBRICAT-ING the Cylinders of Steam Engines This is acknowledged by all with have used tito be the most durable and cheapest oil cup ever made, as it dispenses entirely with the three cocks on the old fashioned oil globes, having two valves which are operated by one lever handle.

lashing on gives, having the varies must be lever handle lever handle.

Engme Builders will find it to their advantage to use these cups, sthey are both cheap and durable.

Send for descriptive circular and price list.

Orders addressed to the undersigned will receive prompt attention.

Manufacturer of Steam Cocks, Globe Valves, Gage Cocks, Etc., Lehkgh Valley Bassa Works, Bethlehen, Pa.

Recommended by Hubbard & Whittaker, Burden Engine Works, Brooklyn, and by J. J. Walworth & Co., No. 18 Devonshire to 12 tr

A SAFE STEAM BOILER.—THE SUBSCRIBER IS Drepared to receive orders for the "Harrison Steam Boiler," in size in suit purchasors. The attention of manufacturers and others is called to this New Steam Generator, as combining essential advantages in absolute safety from destructive explosion, first cost, and durability, in ecenomy of fuel, facility of cleaning and transportation, etc., not possessed by any holder now in use. May be seen in use at the following places in Philadelphia:—Wm. Sellers & Co.8 Foundery; Stephen Robbins's Robling Mill (2 boilers); S. W. Cattel's Woolen Mill (2 boilers); Lewis Taws, Brass Foundery; Girard Flouring Mill, Ninth street; G. W. Simons & Bro., Jewelers, Sansom street; Murphy & Allson's Car Pactory; Pennsylvania Hospital for the Insene; The House of Refuge; Richard Garsed's Cotton Mills, Frankford; Science of Stewart, Chemical Works, Frankford; Science Cook & Co., Tool Factory, Germantown; American Wood Paper Co., Manayunk. In Pittsburgh. Pa., at Park Brothers & Co., Iron Works. In Pottsville, at G. W. Snyder's Fou dery. In Schuylkill Co., Pa., Tremont Coal Co.'s Mines and Salem Coal Co.'s Mines (2 boilers); In Camden, N. J., Machine Shop of Camde and Atlanta (2 hollers); In Camden, N. J., Machine Shop of Camden and Atlanta (2 hollers); In Camden, N. J., Machine Shop of Camden and Atlanta (2 hollers); In Camden, N. J., Keller Stillig's Brewery. In Syracuse, N. Y., Sweet, Barnes & Co.. Steel Works. In St. Lours, Mo., Fiber Disintegrating Company's Paper Works (2 boilers). In Wyandotte, Mich., Durfee's Lumber Mills (2 boilers).

N. E. Corner Market and Junior streat. SAFE STEAM BOILER.—THE SUBSCRIBER IS

er Mills (2 boilers).

JOSEPH HARRISON, Jr.,

N. E. Corner Market and Juniper streets,
Philadelphia.

DODGE'S GRAIN SEPARATOR, PERFECTED AND found to be farahead of any Grain Separator in existence. It is state of New Yorkis now for sale in large or small quantities. It is a superformation apply to D. D. HODGAIAN, Bath, Steuben Co., N. Y.

CHOOL OF MINES, COLLUMBIA COLLEGE, EAST of Forty-math street, New York.—Instruction given in Mathematice, Mechanics, Physics, General and Analytical Chemistry, A-saying, Mineralogy, Geology, Metallurgy, Technology, Mining Singincering, Machines, Drawing, Muting Sorveying, Etc. School is well sunpled with Laboratories, Collections, Etc. Gives the Degree of Mining Flucturer. For Further information and catalogues apply to Dr. G. F. CHARDLER, Dean of the Faculty.

BRASS WARPING MILL HECKS, WITH STEEL Address THOS. LAMB, No. 2,027 Frank 8 6*

CAPITALISTS SHOULD TAKE NOTICE, THAT A reliable Agency, where patented inventions can be examine by practical men, is established at No. 119 Massua street, Room id 8 14tf.

J. H. BEARDSLEY, Proprietor.

DAMPER REGULATORS - GUARANTEED TO EF-AMPER LEAGULATORS—COMPANY THE RESIDENCE OF THE PROBLEM OF THE PROB

MERY PAPER AND CLOTH, AND FLINT SAND Paper, all grades and lengths.
Ground Emery and Ground Flint or Quartz—all sizes; Glue for all purposes; Curlet I lair; Planetring Hair; Staffing Hair; Eawhide Wings; Rawhide Cord or Rope; Hawind cut to any size; Bottes and Bonedust; Neat's Peot Oil--for sale by the manufactures.

BAEDER & ADAMSON,

Shores (No. 67 Beckman street, Now York, and No. 14 South Fourth street, Philadelphia.

WORK FOR THE INGENIOUS—CONTRIBUTIONS wanted for the Inventors "Pamphlet, from those who in their various pursuits have suggested to their minds new inventions and improvements, and plans for constructing them, but from various causes make no effort to reduce them to practical and patentable inventions. These pamphlets offer to the energetic an extensive collection of ideas, suggestions and plans for new inventions and improvements of almost every classand kind, ranging in value from a child's toy to a steam engine. They rest chiefy in theory, requiring more or less experimenting to be patentable. Rare opportunities for mechanics, manufacturers and all others possessed of any inventive skill. Tamphlets containing 100 proposed inventions sent free to any address on receits of fractists. The same rateslor larger or erstrom those who desire a greater collection. A liberal sum will be paid for all contributions of new plans and ideas different from any herotoric received and of practical value. The war has opened new fields to inventive skill, and there is a fair prospect for a new era in the progress of improvements of every kind. Address 112*

GEO. A. ULBY, Box 2,169, Cincinnati, Ohio.

ALE OF CONDEMNED ORDNANCE STORES,—WILL
be sold at Public Auction, at the Waterviiet Arsenal, West Troy,
N. Y, on the 24th day of October next, at 10 o'clock A. M., a large
quantity of Ordnance Stores of oil patterns or interior quality, consisting in part of the following articles, viz:—
8 Iron Columbiast, two 8-inch and six 10-inch.
170 CavalrySabers and Swords.
43,500 Mustets and Rifles, new and old, U. S and foreign, of various
calibers.
(6) Norther the processor of the control of the contro

3,500 Mayets and Riftes, new and old, U. S. and foreign, of various calibers.

61 North's Carbines, in serviceable order.

101 Pistols, U. S. smooth-bore, new.

82 Pistol Revolvers Stare's patent, and others, with a large lot of spare parts for repairs of U. S. and foreign small-arms of various pateerns.

103 Copper fowder Hasks, new.

203 Bullet Molds for muskets and rifles.

2,340 Jurb Molds for muskets and rifles.

2,400 Jurb Molds for muskets and rifles.

2,401 Jurb Molds for muskets and rifles.

2,402 Jurb Molds for muskets and rifles.

2,402 Jurb Molds for muskets and rifles.

2,403 Jurb Molds for muskets and rifles.

2,404 Jurb Molds for muskets and rifles.

2,405 Jurb Jurb Molds for muskets and rifles.

2,406 Jurb Jurb Molds for muskets and rifles.

3,407 Journel Pinters, percession.

3,270 Journel Powder, amount.

3,270 Journel Powder, muning.

30 Spaire Wheels, for artillery carriages.

3 Truck Carriages.

Percussion caps and fuses, old hose leather, pistol holsters (saddle and belt), and leather accourtements; carpenters' and laborers' tools, shot and iron castings, and pieces of wrought iron.

8 Samples of the principal lots of small-arms may be seen at the Waterviiet Arsenal, or at the U. S. Ordnance Agency, No. 45 Worth Street, New York

Terms of sale—Cash.

11 8

P. V. HAGNER Lieut.-Col. Ordnance, Commanding

A NDREWS' PATENT CIENTRIFUGAL PUMPS—CA—
PACITY from 90 to 40,000 gallons per minute. For draining and irrigating lands, weeking, coffer dams, condensers, cotton, wool and starch featories paper mills, tanneries, and all places where a large and constant supply of water is require, these pumps are unequaled. They are compact, require little power, and are not liable to get out of order. For descriptive pamphiet address

It for W. D. Andrews & BRO. No. 414 Water street, N. Y.

CLARK'S PATENT FERRULES FOR LEAKY BOILER U TUBES.—Illustrated No. 9, Vol. XII., SCIENTIFIC AMERICAN. State Rights for sale. E. CLARK, 321 Spring st., New York. 8 8*

PRESSURE BLOWERS.—B. F. STURTEVANT, MAN-UFACTURER, No. 12 Sudbury street, Boston. Blowers for all purposes where pressure of air is required, such as Cupola Furnaces, Forges Brazing, Elc. Pressure of 1 to 1½ pounds to square incle asily obtained; runs easily, and warranted to need no. 2 pairs for five years; makes no noise. This Blower will take the place of ordi-nary Fan Blowers, which make pressure of about ½ pound, and run with one-half the power; will take the place of the largest and most expensive Blowers now used in from Founderies, which make press ure of ½ to ½ lb. Price from \$45 to \$175. Also, ån nufacture Fan Blowers of all sizes, up to No. 45, for Steam ships, Iron Mills, Mines, Dry Houses, Etc.

THE EIGHTEENTH ANNUAL EXHIBITION OF THE Maryland Institute of Bullianore, for the Mechanic Arts, will commence on Monday Evening, the 2d of October, and continue to Monday Evening, the 3d of October, and continue to Monday Evening, the 3dth of Center, 1865.

The hall will be open for the reception of goods on Monday, the 28th of Sentember.

25th of September. Goods for Competition and Premium must be deposited before Thursday Night, the 28th of September. Circulars, embracing details, may be had of the Actuary at the In-

stitute.

Communications addressed to the undersigned, or Joseph Gibson.

Actuary, will be promotely attended to. W. W. MAUGH LIN,

3 3m Chairman Committee on Exhibition.

LOR DANIELLS'S PLANING MACHINES, CAR MORTISING, Boring Machines, Car-Tenoning Machines, Car Planing and Beading Machines, Etc., address J. A. FAY & CO., Cincinnati, Ohio.

MOR WOODWORTH PATENT PLANING AND MATCHING MACHINES, Patent Siding and Resawing Machines, address J. A. FAY & CO., Cincinnati, Ohio. 3 ly

MATCHING clines, address J. A. FAY & CO.,
CINCINNATI, OHIO
Patentees and Manufacturers of all kinds of
PATENT WOOL WORKING MACHINERY
of the latest and most approved description,
particularly designed for
Navy Yards
Ship Yards,
Wheel, Felly and Spoke,
Stave and Barrel,
Shingle and Lath,
Planing and Resawing
Planing and Resawing

Thomps,

Tenning and Resawing

Railroad,
Car and
Agricultural Shops,
Mills, Etc.
Warranted superior to any in use.
For further particulars address
Corner John and Front Streets,
Cincinnati, Oblo,
Who are the only manufacturers of J. A. Fay & Co.'s Patent Wood
working Machinery in the United States.

TEAM GENERATORS AND ENGINES.—THE AMERICAN Safety Steam Logine Company are manufacturing Bray ton's Patent Steam Generators and Engines. There is a saving of 5 per cent in fuel over ordinary engines and boilers and they cost but little to keep them in repoir There is no possibility of exploding the generator. For particulars and circular address GEO. WOODMAN, Treasurer and Agent, 84 Washington st. Boston 2 12*

C. STILES'S PATENT POWER FOOT AND DROP
OF a circular.

N. C. STILES & CO.,
1 Vol.XIII.3*

West Meriden, Conn.

CTEAM ENGINES—WITH LINK MOTION, VARIA—
BLE automatic ent-off, of the most approved construction; Mill M. & T. SAULT, 126*
New Haven, Conn.

INVENTORS' EMPORIUM, NO. 37 PARK ROW, N. Y. —New and useful inventions manufactured, introduced and solon commission. Agents wanted. [Str] RICE & CO.

HARTMANN & LAIST, CINCINNATI, OHIO; MANU-facturers of Glycerin Acetic Acid, Grape Sugar and Sirup. 1260

DORTABLE STEAM ENGINES.—THESE WORKS have lately increased their facilities for the manufacture of their so popular engines. Prices reduced to a peace standard Fourteen feet and incre of herting surface given to the nonlineal horse-power. Delivory to the Oil Regions by part navigation much prompter and cheaper than from more eastern points per railroad. Send for circular before buying Ames Iron Works, Oswego, N. Y.

WHEELER & WILSON, 625 BROADWAY, N. Y.-Lock-stitch Sewing Machine and Button-hole Machine. btl

ANCOCK'S PATENT STEAM BLOWER.—THIS instrument, after two year's use has proved a perfect success. It is the cheapest appliance for increasing the steaming capacity of boilers where there is a defective draft, or where cheap fuel is required to be used, like the screenings of anti-racite or bituminous coals, syreonings from coke, tauner's spent bark sawdus, tanner's chips, shaveurs, etc. It requires no attachment to any other motor than the builer; is noiseless, and requires no room available for other purposes. Send for a curvular. F. W. BACON & CO., Agents, No. 31 John street, New York.

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

TOR WOODWORTH PATENT PLANING AND MATCHING MACHINES, Patent Siding and Resawing Machines address J. A. FAY & CO., Cincinnati, Onio.

Oil! Oil Oil

For Railroads, Steamers, "Id for machinery and Burning PEASE'S Improved Engine Signal, and Car Oils, indorsed and recommended by the highest authority in the United States and Europe. This Oil polesess qualities vitally essential forlubricating and burning, and found in no otheroil. It is offered to the public upon the most reliable, thorough, and practical test. Our most skillful engineers and machinists pronounce it superior to and cheaper than anyother, and the only oil that is in all cases reliable and will not gum. The' Scientific American, "after several tests, pronounces is "superior to any other they have used for machinery." For sale only by the Inventor and Manufacturer, F. S. Pi-ASE, No 61 and S. Main street. Buffalo, N. Y.

N: B.—Reliable orders filled for any part of the world.

TRIP HAMMERS.

Parties using or intending to erect Trip Hammers are invited to call and examine the Hotchkiss Patent Atmospheric Hammer, made by CHARLES MERRILLI, & SONS. No. 556 Grand street. New York They are run by a belt; occupy 2½ by 4 feet space; strike 200 to 400 blows per minute, according to size, and, the hammer runing in slides, each blow is square and in the same place, Diework can be done under them more rapidly than under a drop, and for swaging it is unequalled. They are very simple in their construction, under perfect control, and require much less power than any other hammer. Send tor a circular illustrating the hammer, which gives full Darticulars.

2.000 BOLTS PER DAY CAN BE MADE ON PATENT MACHINES. Also Rivets and Spikes

HARDAWAY & SONS, Philadelphia, Pa.

Finladelphia, Pa.

REFERENCES.

Jos. Rawland & Co., Kensington Fron Works, Phila.

Tiers & Bradshaw, Monot Pleasant Foundery, 351 Beneh st., Phila

Jas. W. Landel & Co., 955, 58, 62 Beach st., Phila.

Chouteau, Harrison & Valle, Lectede Rolling Mill, St. Louis, 14 ff

PATENT EXCHANGE TO BUY OR SELL PATENTS call or address PATENT EXCHANGE, No. 229 Broadway.

GROVER & BAKER'S HIGHEST PREMIUM ELAS-TIC Stitch Sewing Machines, 495 Broadway, New York. 1 tf

UNKENHEIMER'S IMPROVED GLOBE VALVE;
A complete assortment of Brass Work for Locomotives, Porta
ble and fationary Engines.
For samples and catalogue address
GINCHINATI BRASS WORKS,
No. 13 East Seventh street, Cincinnati.

HOWE SEWING MACHINE COMPANY.—ELIAS HOWE, Jr., President, &9 Broadway, N.Y. Agents wanted.5tf

HOR FIRST-CLASS, EASTERN MADE, WOOD-working Machinery address J. A. FAY & CO., or E. C. TAINT ER, succeeding partner, Worcester Mass. 77*

 ${f T}^{
m o}$ manufacturers and merchants! STUTTGART, CARLSRUHE AND NUREMBERG.

INVITATION.

The Industrial Museum of the Royal Wurtemberg Board of Trade and Commerce at Stuttgart; the Industrial Museum of the Grand Duchy of Baden, at Carlsruhe, and the Industrial Museum of the Town of Nuremberg have made an agreement, according to which they will receive from manufacturers and merchants of all countries objects such as mentioned below, for the purpose of exhibiting the same in turn at each of the three towns named, under conditions, offering great advantages to the contributors.

1. Raw productions, for which new applications have been found in the art and industry.

2. Newly invented or improved tools and machines.

3. Newly invented or improved manufactures, which are not generally known.

Those who are destrous of scutting objects for exhibition have to apply to the Reavise of the second second.

crally known.

Those who are desirous of scutling objects for exhibition have to apply to the Boards, of one of the institutions mentioned, raming the objects to be sent in, and stating at the same time their size, weight and peculiarities, as well as their selling prices, either at the place of manufacture or at the place of exhibition, with indications as to the names of the firms of which the like objects may be ordered, and of the agents charged with the sale of the article to be exhibited.

The recognion of goo s at cuch of the three towns named above will begin on the 1st of May, 1865, and the time allowed for each object to remain in the exhibition will be generally four weeks at each

nect to remain in the exhibited labels will be affixed, stating, on the objects thus to be exhibited labels will be affixed, stating, in case that patents have been granted, and statements to the same effect will be made in the weekly papers, published by the locards of the sud institutions.

Manufacturers and merchants desiring to avail themselves of this opportunity of bringing their products in the shortest time to the knowledge of the people of Southern (cromany, and of securing by this means a more extensive sale for them are now invited to adverse themselves to one of the under-signed Boards, who will be happy to communicate to them copies of the printed sketches, containing all the particulars.

to communicate to them copies of the particulars.

The Board of the Royal Wurtemberg Judustrial Museum, at Stutter.

The Board of the Industrial Museum of the Grand Duchy of Baden, DELYZ.

Contembs The Board of the Inuusaia, manufacture at Carlsruhe.

The Board of the Nuremberg Industrial Museum, at Nuremberg.

DR. BEEG.
2 27334

WOODWORTH PLANERS IRON FRAMES
Plane 18 to 24 inches wide, at \$120 to \$150. For sale by S
HILI S No. 12 Platt street, New York.

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

TO INVENTORS OF NEW ARTICLES OF TIN PLATE AND SHEET BRASS—The subscriber offers special facilities for their manufacture. J. W ROCKWELL, Ridgefield, Ct. 86*cow

MESSIEURS LES INVENTEURS.—A VIS IMPORTANT Les inventeurs non familiers avec la langue Anglaise, et i préférensient nous communiques leurs inventions en Français, urient nous addresser dans leur langue malaie. Envoyez nous un ssin et une description concise pour noure examen. Toules casa un callons seront récues en conditions.

MINE A CO.

Auk. Row, New York.

A FIRST-CLASS IMPROVED WATER POWER, one-find in null from Railroad Station, and 28 miles west of Milwaukee. Address II. M. HIGOX, Genesee Station, Wis.

PATENT DRILL CHUCKS -ONLY 7-STH INCH IN diameter, holding from 3.16th down to 1-100th. They are made of the beststeel.and hardened; are in-th, true and strong. Address THOS. H. WORRALL, Lawrence, Maiss.

BEICK! BRICK! BRICK! THE UEST AND MOST improved Power-press Brick Machines, worked by either horse or steam power, and now making mine-benths of all the brick used in the City of New York and its surroundings, can be had by applying to R. A. VERVALEN & CO. Haverstraw, Rockland Co., N. Y.

UBBER FACTORY FOR SALE,—THE LAMBERT—
VILLE Manufacturing Company offer for sale their Rubber Factory at a very low price, and on favorable terms. It is now in successful operation and in complete order. The Machinery, consisting of Washers, Grinders, Calenders, Currers, Etc., are equal to all purposes for carrying on the manufacture of Rubber Goods in the various branches. The location has all the advantages of cheap labor, fuel and transportation to Philadelphia and New York, by Canal or Railroad. Water is supplied in abundance from a nourian spring, and carried through the factory. This is a rare opportunity offered to any party wishing to carry on the Rubber business. Apply in person or by letter for further information to Ingel Manufacturities, New Jersey.

August 10, 1865.

POKE AND HANDLE MACHINERY.—THOSE DE-SIRING to purchase the best machine in the United States for making Spokes, Yankee Ax Handles, Plow Handles, and irregular forms generally, should send for cut and description to E. K. WISELL, Manutacturer and Patentee, at Warren. Ohio. 966

\$150 A MONTH MADE BY DISCHARGED SOL-for our free catalogue containing full particulars. Address S. M. SPENCER, Brattleboro, Vt. 10 4*

CTATIONARY AND PORTABLE STEAM ENGINES,
Doiler and Tank Work of every description; Sugar Plantation
Machinery, all kinds; Planers, Lathes, Drills, Bolt Cutters and Shaping Machines, Boiler Machinery, Shears, Punches, Rolls and Drills,
Portable Engines and Lathes constantly on hand. Manuactured by
BELLOWS & WILTCOMB,
9 12* Worcester, Mass.

WATER WHEELS.—THE HELICAL JONVAL TURBINE, Patented by J. E. STEVENSON, Bydraulic Engineer, 200 Broadway, N. Y., is being extensively manufactured and adopted in first class mills throughout the country. Address as above.

GALVANIZED IRON.—GALVANIZING DONE WITH despatch and castings furnished if desired, either Malleable or Vol.XI. 23 26 eow*

NEEDLES.—SAND'S NEEDLE CO., MANUFAC-TUILERS of Machine Spring Needles. These ne. dles are made by patented machinery, and consequently we claim a uniformity of spring which ezhnot be obtained in the ordinary way of making. Address, with two samples inclosed, SAND'S NEEDLE COMPANY, Laconia, N. II.

MACHINERY FOR SALE.—1 GRAY & WOOD DI-mension Planer, 40 feet long by 24 inches wide; 1 large-size from-frame Molding Machine Side Cutters; 1 No. 1 Tenoning Machine; 1 Power-mortsing Machine; 1 Splitting Saw Table. Made by Ball & Williams--all new. Apply to

MERRITT, WALCOIT & CO., No. 64 Courtlandt street, N. Y.

THOMAS ANTISELL, M. D., ANALYTICAL AND Consulting Chemist (Late Chemical Examiner in U. S. Patent Office, Washington, D. C.) Chemical investigations made and advice given on unperfected inventions. Analysis made; Ores and Mineral Lands Examined. Address Georgetown, D. C. 4 12*

TO MACHINISTS AND MACHINE MANUFACTURERS.—Chas B. Long's Patent Improved Gem or Cog Wheel, calculating rules 24 inches long correctly graduated, giving the number of cogs in figures directly opposite their diameters, for 2 JNM different gears. Price \$5 U. S. currency, sent free. Send stamps for illustrated circular. Address CIIAS. B. LONG. Worcester, Mass.

TOR SALE—THE ERIN IRON FOUNDERY, COMPRISING Molding Shop, Machine Shop, Blacksmith Shop,
Woodwork Shop, Dwelling House, Stable, Shedis, 2½ acres of Lind,
in the Village o. Erin, County of Wellington, C. W. This is a desirable property for a mechanic to do a good business in Stoves and
Agicultural Implements; is a first-rate farming country round
about. Address for particulars,
10 3*

Erin, County Wellington, C. W.

DOILER INCRUSTATIONS.—A MOST VALUABLE discovery and perfect remedy for the removal of scale in fresh and saft-water boilers. Has been thoroughly tried, with perfect success. High testimoutals and circular furnished on application to 5 12*

POWER FOR RENT.—WE WILL RENT SHOP Rooms, with from 1 to 100-horse power, as wanted. Terms very reasonable. Rooms light, airy, comfortable, and suited for every work. Heated by steam. Located in Baltimore. Address MERRILL PATENT FIRE-ARM CO. Baltimore.

ETS, VOLUMES AND NUMBERS.

Entire sets, volumes and numbers of Scientific Americae and New Medicae can be supplied by addressing A. H. C. Box No 73, care of MUNN & CO., New York.

CAN I OBTAIN A PATENT?—FOR ADVICE AND instructions address MUNN & CO., No. 37 Park Row, New York, for TWENTY YEARS Attorneys for American and Foreign Patents Caveats and Patents quickly prepared. The SCHENTIFIC AMERICAN \$3 a year. 36,000 Patent Caseshave been prepared by M. & Co.

EYNOLDS' TURBINE WATER WHEELS.—COM.

FFFENT men are employed to measure streams, make plans and put in flumes, wheels, and gearing. TALLCOT & UNDERFILL NO. 170 Broadway, New York.

TOLSKE & KNEELAND, MODEL MAKERS. PAT ENT Office Models, Working Models and Experimental Machinery, made to order at 528 Water street, mean Jellers of special New York. Refer to Munn & Co., SCHENTER AMELIAN Office.

CCREWS.- COMSTOCK, LYON & CO., OFFICE NO. 73 Beekman street, N. Y., manufacture Turned Machine Screws (a superior article to a headed screw), of all sizes under & inch in diameter, 3 inches long. Also Steel, Iron and BrassScrewsfor Guns, Pistols, Instruments, Trusses, Artificial Limbs, Etc., of the finest quality, to order. 111*