42,423.—Composition Soles and Molds for the same. Preston Ware, Jr., Boston, Mass.:

Preston Ware, Jr., Boston, Mass.:

I claim, first, A vulcanized rubber sole, or made of any suitable composition whether vulcanized or not in which the holes designed to contain the nails or truets, whereby it is fastened to the boot or shoe are countersumk so that the leads of the nails, rivets, &c., may be ben ath the surface of the sole, substantially in the manner and for the purposes set forth.

Second, I claim forming such holes by means of pins of the form, and inserted in the molds in the manner described.

Third, I claim the method of molding rubber or composition soles provided with holes by first filling the molds with the compound or composition in its plastic stase, and by subsequently forming therein the holes by driving the pins or cores into the molded mass, as described.

42,424.—Grain Drill.—T. W. Watts, Rushville, Ill.: I claim the arrangement of these ed-box, A, shaft, B, arms, i, plates, c, triangular openings, b d f, spouts, F G H, and scattering board, F, all constructed, combined, and operating in the manner and for the purposes specified.

[This invention relates to a new and improved seeding machine for sowing seed broadcast, and for sowing grass seed simultaneously with grain. The invention consists in an improvement in the seed-distributing device and also in the scattering board, whereby the desired end is accomplished in a perfect manner.]

end is accomplished in a perfect manner.]

42,425.—Alarm Gage-cock for Steam Boilers.—Henry Wilkins, Brownsville, Pa.:

I claim combining a gage-cock or valve applied to a steam boiler, with a cam, or its equivalent, operated by a clock movement or other device for producing rotary motion, in such manner that the said cam or equivalent shall produce the periodical opening of the said cock or valve, substantially as and for the purpose herein set forth.

[This invention consists in combining an ordinary gage-cock or with the valve annied to the boiler, inst below the extended water.

suitable valve applied to the boiler just below the extended water level, with a cam operated by a clock movement or other device for producing rotary motion, in such manner that the said cam shall produce the opening of the said cock or valve periodically, and so indicate by the sound of the issuing water or steam whether the water is above or below the said cock.]

42,426.—Apparatus for molding Pulleys.—James Yocom,
Philadelphia, Pa.:
I claim, first, The vertical cylinder, D, arranged in respect to the
plates, A and C, and for operating in conjunction with the said plates,
substantially as and for the purpose herein set forth.

42,427.—Nursing Bottle.—Sigismund Zeno, New York

City:

I claim the application of a flexible connecting tube, C, between the spout and body of a nursing bottle, substantailly as and for the purposes shown and described.

[This invention consists in the employment or use of a flexible tube to form the connection between the spout and the body or a reservoir of a nursing bottle in such a manner that a baby nursing from said bottle can take the reservoir in its arms and the spout in the mouth, and while sucking move its head in either direction without losing the spout, or change the position of the reservoir withou pushing the spout up in its mouth or drawing it out therefrom.]

42,428.—Steam Bell-ringer.—Wm. H. Beach, Chicago, Ill., assignor to J. S. Beach, Ballston Spa, N. Y.: I claim the combination of the wheel, A, steam casing, B, shaft, a, and crank, b, with a bell, substantially as and for the purpose herein specified.

[This invention consists in a steam bell-ringer of novel and very simple construction, intended more especially to be applied to locomotives for ringing whenever desired by the engineer whether the locomotive is running or standing s ill, but applicable to other pur poses. It is composed of a wheel with suitable floats placed in a suit poses. It is composed to a wheet with suitable poster in a suit able easing to which steam is admitted by a small pipe from the boiler to act upon the floats, and from which, after acting upon the buckets to produce a rotary motion of the wheel, it escapes by another pipe or opening to the atmosphere, the shaft of the said wheel being furnished outside of the steam casing with a crank which is connected by a rod either with a rocker to which the bell is attached to produce the swinging of the bell itself or with the clapper, so that by the rotary motion of the crank the ringing of the bell is effected.

12,429.—Steel Shirt-collar.—Louis Billon (assignor to himself and John Foggan), Brooklyn, N. Y.: I claim a steel shirt-collar made with indented edges, concealed tud, b, eyes, cf, and flexible loops or rings, g, in the manner herein hown and described.

shown and described.

42,430.—Gas Regulator.—James E. Boyle, Brooklyn, N. Y., assignor to himself, Dudley Kavanagh, and Geo. Stevens, New York City:

I claim the hollow valve-stem and valve and two diaphragms of unequal diameter combined in a gas regulator, substantially as and for the purpose specified.

I also claim the opening and closing of the valve of a gas regulator by the pressure of the gas upon the surfaces of two diaphragms of unequal diameter, substantially as described.

unequa unameer, suosamenty as described.

42,432.—Sash-sustaining Window-frame.—Hartzel H.
Center (assignor to himself and Theodore Marsh),
Cincinnati, Ohio:
I claim the combination of the four separate flat-faced strips, G G'
G'' G''', springs, I I I I, and sockets, H H' J J', all constructed, arranged, and operating in the manner and for the purposes herein
specified.

specified.

42,432.—Cooking Stove.—Addis E. Chamberlain (assignor to Chamberlain & Co.), Cincinnati, Ohio:

I claim the deflecting plate or screen, F, constructed as described with cheeks, G G', flanges, H, ears, J J, and a register, K, the said screen being secured within the fire-chamber, as herein specified and for the purpose set forth.

42,433.—Roller for rolling Iron.—Andrew B. Clemons (assignor to himself and Royal M. Bassett), Derby,

Conn.: claim in combination with rolls so arranged as to admit of the tance between their faces being varied, a mechanism substantially the as described for operating upon the roll, in the manner and for a purpose described.

42,434.—Cuff-fastener.—Alexander Douglas, English Neighborhood, N. J., assignor to himself and Samuel S. Sherwood, Aquackanonck, N. J.: I claim the fastener, C. constructed substantially as described, that is asy one end thereof being formed into a spring link, to secure it from displacement by interlocking with the eye of a button, in the manner set forth, and the other end extending from the link so as to be capable of securing other buttons in their proper places, substantially as set forth.

tially as set forth.

42,435.—Locking the Cylinder of Revolving Fire-arms.

—Thomas Gibson (assignor to the Starr Arms Company), Yonkers, N. Y.:

1 claim the arrangement and combination of the bolt, E, with the fulcum pin, a, of the pawl or finger, D, in the manner and for the purpose herein shown and described.

[This invention consists in the employment or use of the pivot of the pawl or finger which serves to impart motion to the revolving winder in place of the court or place to both or the part to the from the

cylinder, in place of the cam to release the bolt or latch from the cylinder in such a manner that the construction of the hammer is simplified, and the cam brought in such relation to the bolt that the end of the shank of said bolt is less liable to wear away than it does with the means of the ordinary construction, and consequently a correct operation of the bolt in regard to the cylinder is insured.]

42,436.—Spring Pen-holder.—David E. Hall (assignor to himself and James H. Beardsley), Brooklyn, N. Y.: I claim the spring portion, b, of the pen-holder extending from the cylinder, a, as and for the purposes specified.

42,437.—Air-pump.—H. H. Hendrick (assignor to himself and J. J. Riddle), Cincinnati, Ohio:

I claim, in air pumps of the construction specified, the combination of the elastic valve, D, with the seat, E, spring, F, cylinder, A, and piston, B, all arranged and operating as described.

This invention consists in the application of a cone valve made of covered with india-rubber, leather or other flexible material, in embination with a common hard-metal valve seat and with a reciprocating piston, in such a manner that any impurities, such as hairs which may detach themselvee faom the packing of the piston and lodge between the valve and its seat, do not prevent the valve down air-tight, and the operation of the pump is no interrupted.)

42,438.—Sun Blinds.—Julius Jeffreys, Upper Norwood, England, assignor to R. L. Jeffreys and Lindsay Wilson. Patented in England Jan. 28, 1860: I claim combining the parts, c d e f h i, in a case, a b, substantially as above described.

42,439.—Water Elevator.—S. F. Jones (assignor to himself and E. L. Floyd), St. Paul, Ind. Ante-dated April 8, 1864:
I claim a water elevator, comprising the wheel, G. Spool, H. spool, I., chain, L., weight, C, and bucket, B, all substantially as arranged and combined.

and combined.

42,440.—Harvester.—W. A. Kirby, Auburn, N. Y., assignor to himself and D. M. Osborne:
claim, first, The clearing rod, B, constructed, arranged and operating as and for the purpose described.
I also claim the combination of the adjustable clearing rod, adjustable reel and adjustable rake, for the purpose of adapting the machine to the cutting, gathering and delivering of ordinary as well as short crops, as herem described and represented.
I also claim the rake head, k, so made as that the rake may be set forward or back thereon, in the manner and for the purpose described.

scribed.

I also claim, in combination with an intermittent rising and falling and sweeping rake, the overpoised switch and cam ledge, for actuating the same, as set forth.

I also claim, in combination with the wheel, J, and its radial slots,
and the arm, L, with its spring bolt, for operating the rake, the wedge
or trigger, 5, for disengaging the two at every revolution, substantially as described.

tially as described.

42,441.—Desulphurizing Metals and Ores.—L. G. Marshall (assignor to himself and Andrew Cochran), New York City:

I claim the use of petroleum oil intermingled and combined with the heated water, borax, sal ammoniac or prussiate of potash, to be applied in a fluid state, through a pipe or pipes, to my tubular furnace or any other furnace for desulphurizing ores.

42,442.—Steam Cooking Apparatus.—B. G. Martin (assignor to W. Sanford, J. L. Seabury and J. Truslow), New York City:
I claim the pipe, c., with branch pipes, c', in combination with the heating chamber, A, jacket, B, and steam space, b, constructed and operating in the manner and for the purpose substantially as herein shown and described.

[The object of this invention is to obtain an apparatus which will cook, roast or boil provisions of any desired description, either by the direct application of heat from the fire to an oven, or by the action of steam brought in contact with the articles to be cooked, or by the application of heat derived from water and steam combined, which urround the heating chamber.]

42,443.—Steam Boiler.—C. M. Miles (assignor to himse f and C. F. Jones), Vineland, N. J.:

I c aim the combination of the fire-box, B, the chamber, D, the short ascending flues or tubes, d d, the long-descending flues or tubes, B e e, and surrounding water tubes, G and ff, and lower chamber, F, substantially as herein specified.

I further claim, in combination with the parts above specified, the casing, I, applied substantially as described.

[This invention consists in a novel arrangement and combination of fire and smoke or gas boxes, water, fire and gas or smoke tubes, and water spaces in a vertical boiler, by which is obtained a very large and effective heating surface, and extract from the gaseous products of combustion all their available heat before permitting them to escape to the chimney, and so greatly economize fuel.]

42,444.—Soap Composition.—J. B. Rand, Fishersville, N. H., assignor to himself and Jason Smith, Benning.

ton, Vt.:

I claim the combination and process of mixture and incorporation of the ingredients above-mentioned, for the purpose herein set forth.

42,445.—Manufacturing Casks.—William Reid (assignor to himself and Thomas Reid), West Hebron, N. Y.

2,445.—Manufacturing Casks.—William Reid (assignor to himself and Thomas Reid), West Hebron, N. Y. Ante-dated April 15, 1364:

I claim, first, The hollow or tubular cylindrical and rotating cutter, in combination with the sliding clamp, D, arranged substantially and for the purpose set forth.

Second, The particular manner of constructing the cylindrical cuter, C, to wit, by having the spaces, c, between the teeth, a, filed or cut of form grooves with leather edges at their outer ends, and having he teeth, a, project out beyond the periphery of the cylinder with a piral flange, b, attached to the latter, as and for the purpose herein lescribed.

[This invention relates to an improved machine for manufacturing casks in an expeditious and perfect manner, and it consists in the employment of a rotating hollow cylinder provided at one end with teeth or cutters formed or constructed ma novel way, and having a spiral flange attached to its periphery, in combination with a cla and feeding device, all being arranged in such a manner as to effect

42,446.—Puddling Furnace.—F. M. Raschhaupt (assignor to A. J. Fleury and J. G. Kershaw), Philadelphia, Pa. Ante-dated April 6, 1864:

I claim the application of the dender or waste of puddling and other furnaces, pulverized and solidified with day and lime, to the protection of puddling and other furnaces, substantially as and for the purpose described.

pose described.

42,447.—Apparatus for generating Carbonic Acid and other Gases.—Fr. M. Raschhaupt (assignor to A. L. Fleury and J. G. Kershaw), Philadelphia, Pa. Antedated April 9, 1864:

I claim the vessel, A, with its air pump or other device for imparting pressure to the interior of the vessel, the cylinder, G, and reservoir, H, or their equivalents, and the system of pipes and cocks, or their equivalents, the whole being constructed substantially as and for the purpose herein set forth.

42,448.—Steam Boiler.—T. Shaw, Philadelphia, Pa. I claim a gauze cylinder when constructed so as to surrous opening for the passage of the steam.

42,449.—Sewing Machine.—Rosewell Thompson, Boston, Mass., assignor to Alfred B. Ely:
I claim, first, Making the shuttle stitch by means of a double-revolving hook, so constructed as to close together when entering the loop formed by the needle, and spread the thread or loop apart wide enough during its revolution to encompass a commercial spool, substantially as described.

Second, The spool case, R, so constructed that its lower end may

stantially as described.

Second, The spool case, R, so constructed that its lower end may
end upon its center only to facilitate the passage of the thread under
and around the same, substantially as described.

Third, The hinged wire, T, in combination with the spool case, R constructed and operating substantially as described.

Fourth, The shield, W, combined and arranged substantially as set forth, for the couble purpose of protecting the cast-off thread from the revolving booker, and causing the under thread to draw perpendicularity from the center of the spool case. bstantially as set

42,450.—Sizing Paper.—Geo. E. Vanderburgh, Mamaroneck, N. Y., assignor to C. E. Hodges and Wm. B.
Newbery, Dorcester, Mass., N. D. Silsbee, Roxbury,
Mass., and John Richardson, Boston, Mass.:
I claim the application of sizing of soluble alkaline silicate, sub
stantially as set forth.

42,451.—Lasting Pincer.—Andrew West, Canton, Ohio, assignor to himself and John Staub, Sparta, Ohlo: I claim, as a new article of manufacture, a pair of boot and shoelasting pincers constructed substantially as above described and as shown in the accompanying drawings.

snown in the accompanying drawings.

42,452.—Holder for Car Doors.—Germond Crandell,
Washington, D. C.:
I claim the combination of a sliding door supported on wheels or
rollers with an indentation, depression in, or removal of the track, of
, at the points, cc c, in which to admit the wheels, b b, to adjust
themselves, when the door is either open or closed, arranged to operate in the manner and for the purposes herein set forth.

RE-ISSUES.

RE-ISSUES.

1,653.—Melodeon.—Stanley A. Jewett, Cleveland, Ohic. Patented Oct. 13, 1857:

I claim, first, The production of a perfect mute by combining the action of the air passages, m N O, or their equivalents, with the mute valve, L, as herein set forth.

Second, The formation of a gradual swell or crescendo and diminend by means of operating the swell valve, T, by the contraction and expansion of the bellows or its equivalent, as herein specified.

uendo by means of operating the swell valve, T, by the contraction and expansion of the bellows or its equivalent, as herein specified.

1,654.—Apparatus for disinfecting Foul Air in Vessels.—
Alois Peteler, New Brighton, N. Y. Patented Sept.
9, 1861:
First, I claim disinfecting vessels, rooms or other closed spaces by foreing the air contained therein through contracted passages which are reduced in temperature by means of a cooling agent confined within a chamber without contact with the external air or with that which it is desired to disinfect, substantially as described.

Second, The air conduit, C D H, or its equivalent, applied in combination with a fan or other blower, B, a refugerating chamber, F and with the deck or other part, A, of a vessel or other closed space, substantially in the manner herein specified, so that the air, while passing through said conduit, will become cooled and flow into said vessel or other closed space, without coming in contact with the ice or freezing mixture contained in the ice chamber.

Third, The arrangement of the rotary hollow shaft, E, with chambers, e, apertures, g g', and drums, G, with abutments, h, in combination with the fan blower, B, or its equivalent tubes, C and H, and with the rangerating chamber, F, constructed and operating in the manner and for the purpose substantially as herein specified.

1,655.—Tape for Spring Skirts.—L. S. Scoffeld, Boston.

1,655.—Tape for Spring Skirts.—L. S. Scofield, Boston, Mass., assignce of T. D. Hoxsey, Paterson, N. J. Patented Feb. 12, 1861:

I claim the combination of the longitudinal sack, B (made either as a continuous pocket or composed of a series of pockets or loops), running lengthwise through the tape, with the transverse bags or pockets, P.

pockets, P.

1,656.—Preserve Can.—N. P. Stanton, New York City, assignee of W. D. Ludlow. Patented June 28, 1859:

I claim, first, The employment or use for closing a can or vessel for preserving provisions, &c., of a key or cross-bar, D, and lugs, E, attached to the inner side of a rim or cavity, a, on the can to prevent the disruption of said lugs, in closing the can and to avoid projections.

ections. The use of a convex cover, C, in combination with a crossbert D, or its equivalent, applying the force by which said cover is
bed down to grabout themeter of the same.

Third, In combination with a crossBed down to grabout the cover, C, and lugs,
E, I claim the elastic cross-bar, D, protest to the cover, C, and
adapted to hold t down with a yielding pressure, as explained.

[This invention relates to the means employed for securing the

cover down upon the neck of the can or vessel.]

1,657.—Grain Separator.—Joseph Van Houten, Mount Morris, N. Y. Patented Dec. 22, 1863:
I claim, first, Providing the upper end of wheat sieves, C, with an adjustable plate or covering, D, substantially in the manner and for the purposes set forth. Second, So constructing and arranging the adjustable division plate, E, that one edge may be raised or lowered within the groove, c, substantially as described and for the purposes set forth.

DESIGNS.

1,932.—Trade-mark.—D. F. Packer, Pittsburgh, Pa.

1,933.—Ornate Letters.—W. H. Page (assignor to W. H. Page & Co.), Norwich, Conn.

1,934, 1,935 and 1,936.—John Rogers.—Group of Figures. (Three cases).

NOTE.—The number of patents issued last week and recorded above. ncluding five designs and five re-issues, amounts to one hundred and twenty-six. Of this number FIFTY-FIVE of the cases were pre pared at this office and obtained through the Scientific American Pat-



SATENTS

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

en inventions in the United States and in all foreign countries during the past seenteen 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 thetransaction of all business before the Patent Office; but they take pleasure in presenting the annexed testimonials from the three ast ex-Commissioners of Patents :-

ast ex-Commissioners of Patents:—

MESSRS, MUNN & CO.:—Itake 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 Than one-fourth and the no doubt that the public confidence thus indicated has bee fully deserved, as I have always bestved, 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 states man, lon, Joseph Holt, whose administrat on of the Patent Office was so istunguished that, upon the death of Gov. Brown, he was appointed the office of Postmaster-General of the United States. Soon after

entering upon his new duties, in March, 1839, he addressed to us the following very gratifying letter:

MSSER, NUNN & Co.:—It affords me much pleasure to bear testimys to the able and efficient manner in which you discharged your nuties 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.

ments.
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 regining the office he wrote to us as follows:

MESSRS. MUNN & Co.:—It gives me much pleasure to say [Mat, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of it ventors 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 shill and accuracy. Very respectfully, your obedient servant, Wm. D. BISHOP.

THE EXAMINATION OF INVENTIONS.

Persons having conceived an idea which they think may be pate bele, 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 with the whole of the through the desired and the place taken out pat abroad. Thousands of inventors for whom they have taken out pat ents have addressed to them most flattering testimonials for the seres rendered them; and the wealth which has inured to the individ s whose patents were secured through this office, and afterwards uals whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! Messrs. MUNN & CO. would state that they never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in their extensive offices, and that they are prepared to attend to patent business of all kinds in the quickest time and on the most liberal terms.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

The service which Messrs. MUNN & CO. render gratuitously upon examining an invention does not extend to a search at the Patent Office, to see if a like invention has been presented there; but is an opinion based upon what knowledge they may acquire of a similar invention from the records in their Home Office. But for a fee of \$5, accompanied with a model, or drawing and description, they have a cial search made at the United States Patent Office, and a repor special search made at the United States Fatent Office, and a report setting forth the prospects of obtaining a patent, & , 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 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.

HOW TO MAKE AN APPLICATION FOR A PATENT.

ery applicant for a patent must furnish a model of his invention if susceptible of one; or, if the invention is a chemical production, he must furnish samples of the ingredients of which his composition consists, for the Patent Office. These should be securely packed, the oonsists, for the Patent Office. These should be securely packed, the inventor's name marked on them, and sent, with the Government fees, by express. The express charge should be pre-paid. Small models from a distance can often be sent cheaper by mail. The safest way to remit money is by a draft on New Yerk, payable to the order of Messrs. MUNN & CO. Person who live in remote parts of the rountry can usually purchase drafts from their merchants on their New York correspondents; but, if not convenient to do so, there is but little risk in sending bank bills by mail, having the letter registered by the postmaster. Address MUNN & CO., No. 37 Park Row, New York.

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

On filing each Caveat	\$10
On filling each Carlestion for a Potent except for a de	ocion \$15
On filing each application for a Fatent, except for a di	caigir.pio
On leguing each original Patelli	
On appeal to Commissioner of Patents	
On application for Re-issue	\$30
On application for extension of Patent	\$50
On application of extension of rate of the Congranting the Extension	\$50
Ongranting the Extension	Ø10
On filing a Disclaimer	
On filing application for Design (three and a half year	S) \$10
On Sling application for Design (seven years)	
On filing application for Design (fourteen years)	\$39

The Patent Laws, enacted by Congress on the 2d of March, 1861, are now in full force, and prove to be of great benefit to all parties wh

are concerned in new inventions.

The law abolishes discrimination in fees required of foreigners, excepting natives of such countries as discriminate against citizens of the United States—thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners, except the Canadians, to enjoy all the privileges of our patent system (except in cases of de aigns) on the above terms. Foreignerscannot secure their invention by filing a caveat; to citizens only is this privilege accorded.

CAVEATS.

CAVEATS.

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

EXTENSION OF PATENTS.

Many valuable patents are annually expiring which might readily Many valuable patents are annually saying be extended, might prove the source of wealth to their fortunate possessors. Messrs. MUNN & CO. are persuaded that very many patents ar suffered to expire without any eff sion, owing to want of proper information on the part of the paten tees, 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 patente. Patentees, or, if deceased, their heirs, may apply for the extension of patents, but should give ninety days' notice of their intention.

Patents may be extended and preliminary advice obtained, by con sulting or writing to MUNN & CO., No. 37 Park Row, New York.

REJECTED APPLICATIONS.

Messrs. MUNN & CO. are prepared to undertake the investigation and prosecution of relected cases, on reasonable terms. The close

proximity of their Washington Agency to the Patent Office affords erences, models, drawings, documents, &c. Their success in the prose cution of rejected cases has seen very great. The principal portion of their charge is generally left dependent upon the final result.

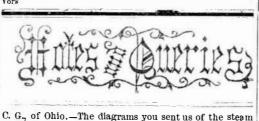
All persons having rejected cases which they desire to have prose cuted, are invited to correspond with MUNN & CO., on the subject, giving a brief history of the case, inclosing the official letters, &c.

ASSIGNMENTS OF PATENTS.

The assignment of patents, and agreements between patentees and manufacturers, carefully prepared and placed upon the records at the Patent Office. Address MUNN & CO., at the Scientific American Patent Agency, No. 37 Park Row, New York.

It would require many columns to detail all the ways in which It would require many commiss to deteat an the ways in which the Inventor or Patentee may be served at our offices. We cordially in-vite all who have anything to do with patent property or inventions to call at our extensive offices, No. 37 Park Row, New York, where any questions regarding the Rights of Patentees, will be cheerfully

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



C. G., of Ohio.—The diagrams you sent us of the steam engines in your vicinity have been received. If the drawings had been made to scale, and accompanied by the bore of cylinder, length of stroke, pressure of steam, and revolutions per minute, we should have been able to give a satisfactory answer. As you have drawn the diagrams there is too much "lead" on the exhaust side of the valve. The diagram marked No. 2 is also incorrect from the reasen that you have gone to the other extreme and put too much "lap" on the exhaust. Forcommon work, where fuel is plenty. tet the exhaust side have about the same "lead" the steam side has, then the steam will "punch" the piston through to the end of the stroke, and the exhaust will be as free to go out as the live steam is to enter. Advising about a steam engine, without seeing it, is about as satisfactory to an engineer as prescribing for an absent patient would be to a physician. There may be a complication of disorders which affect the whole system.

C. C., of Conn.-Your improvement in sewing machines does not appear to embrace anything new, and we advise you not to apply for a patent. We send you by mail one of our pa of advice how to make application for a patent.

W. T. S., of Mo.-Your suggestions in regard to the Atlantic telegraph appear to us reasonable, but we presume the points have been fully considered by the manufacturers.

E W., of Mass.-If you succeed in making a gas engine work economically for any purpose, under any conditions, we should be much pleased to receive a description of it.
W. P. B., of Wis.—The excitement about gravel-wall

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