arranged substantially as herein shown and described, in combination with the shoe, I, as and for the purpose set forth.

2d, Suspending the shoe, I, in the enter of the shoe chamber, by means of the springs, J, substantially in the mannerherera shown and described, and for the purpose set forth.

3d. The c mbi ation f the sliding gate, M. connecting rot or rods, N. lever, O, and ratchet bar, P, with each other and with the opening in the 'top of the case, A, substantially as herein shown and described, and forthe purpose set forth.

4th The rect vigular hopper, Q, constructed and arranged substantially as herein shown and described, in combination with the hopper shaped top of the case, A, as and for the purpose set forth.

5th, The fans, D, formed with projecting wings, d', upon their central parts, substantially as herein shown and described, and for the purpose set forth.

6th, The bag holder. W. constructed substantially as herein shown and

forth.

6th, The bag-holder, W, constructed substantially as herein shown and described, in combination with one of the posts, B, of the frame of the mill, as and for the purpose set forth.

7th, The receiving measure, formed by the combination of the sliding gate Y, and rod, Z, with the box. X substantially as herein shown and described, and for the purpose set forth.

83,097.—Pocket Safe for Friction Match Cord.—Wm.

H. Rogers, New York city.

FI claim the match afe. A, constructed substantially as described, or in any equivalent manner, wher-ny the coil match and the tube, E, may be properly secured and used, substantially as set forth.

In combination with a friction match cord, the tube, E, either hinged or attached to a math-safe or box. or not, and either cut away on one of both sides, substantially as and for the purposes described.

83,098.—FRUIT PICKER.—Jeremiah Schroy, Fortville, Ind.

83,098.—FRUIT FIGERER.—Jeremian Seniory, Forevine, Inc.
Antedate October 2, 1888.
I claim the curved metal plate, C, connected to the outer ends of the irregular shaped hoop. B, and provided at its upper portion with a series of narrow slots for forming the comb teeth, point d as shown, and used in combination with the pole, A, and conveyer, F, to operate substantially as set

73,099.—BEER COOLER.—Louis Schulze, Louisville, Kv. I claim, 1st, A heer cooling apparatus, consisting of a series of conitiguous and connects g doulle bottomed pipes or channels, one above another, in vertical line, and inclined towards each other, when said pipes or channels are made with "quare sides and bottoms substantially as and for the purposes set forth.

2d, A beer cooling apparatus, consisting of a series of contiguous and connecting double bottomed p peroference, and for the purposes set forth.

3d, A beer cooling apparatus, consisting of a series of contiguous and connecting double bottomed pipes of channels, one and for the purposes set forth.

3d, A beer cooling apparatus, consisting of a series of contiguous and connecting double bottomed pipes of channels, one above the other, in vertical line, the water channels of which, at concinuous ends, are closed by a packing of water-proof material, uon-conductor of heat, substantially as and for the purposes described.

a 4th, in a beer cooling apparatus, the application, in combination with water-forcoling purposes, of ablast of air which has been passe lover ice, and srikes the beer atright angles to its flow, substantially as and for the purpose setsforth.

5th, The combination, in a beer cooler, of the double bottomed channels, the first the combination in a beer cooler, of the rollers, i. provided with pad-73,099. - BEER COOLER. - Louis Schulze, Louisville, Ky.

forth. The combination in a beer cooler, of the rollers, i, provided with paddles, k, with the double bottomed channels, B, substantially as and for the purposes discribed.

83.100.—Soldering Vessel.—Conrad Seimel, G'np int.N.Y.
I claim 1st. The stands, A. in combination with the troughs, B. B. and the gas apparatus. C. as berein described, for the purpose specified.
2d, Th. troughs, B. incombination with the snelves, b, as and for the purpose set forth.

83,101,-LAWN MOWER.-John Shaw, Brooklyn, N.Y. Pat ented in Rugland January 23, 1864.

I claim folding the cut ing -nd of lawn mowing machines up toward the handle end, for the purpose of being used for rolling only.

83.102.—BUCKLE—Perry W. Smith, Abingdon, Ill.
I claim, as an article of ma infacture, the within described double buckle when constructed and operating substantially as and for the purposes herein

83,103.-Machinery for Printing Yarn.-E. J. Stephens

Pawtucket, R. f.
I claim, in combination with suitable ribbed printing evilinders, A. A, seeries of furnishing color rollers, D. b, bung in yielding hearings, and operated by means of pinions, G. with teeth of variable depth, or the equivalents thereof, in the manner substantially as described for the purposes specified

83,104.-GAS FURNACE FOR HEATING SOLDERING TOOLS.

ob, 194.—GAS FURNACE FOR HEATING SOLDERING TOOLS.—J. H. Stimpson, Boston, Mass.
I Claim the gas furnace for beating soldering tools, consisting of the double cones. A B, so porting the inclined cylinders, D E, containing the perforate cylinders, F G, composed each of two parts, 11 ft 2g 122, said cylinders, D, connected at their rear ends by the mourh pieces, dd e3, and at their jorward en s by the curved pipes, h2 h3, all arranged and operating as described for the purpose specified.

83,105.—Corn Planter.—S. L. Sweeney, Morrison, Ill. I claim, 1st, The combination of the roller wheel, G, arm, H, rod, I, at oscillating plate, F, arranged to operates ubstantially as and for the purpo

oscillating place, F, all larges wheel, G, the arm, H, connecting rods, I and N et torth.

2d. The combination of the wheel, G, the arm, H, connecting rods, I and N with the two oscillating wheels, F, arrang, d substantially as set forth ad, The combination of the wheel, G, with hole, G, and arm H, with holes H, for connecting and disconnecting the wheels and the dropping mechanism, substantially as set forth.

83,106.—Sugar-Juice Evaporator. — James Taylor, Can

ton, N. Y.

I claim the described construction of the pan, A, having its sides extended to torm legs, f, and the side walls of the line box, the latter provided will the door, h, at one end, and the claimey, B, at the other, all arranged to be moved upon the wheels, e, away from or over the frate, D, formed between the ways, C, as herein set forth for the purpose specified.

83.107.—SEAM JOINT FOR CANS, ETC.—E. A. Thomas, Phila

dchhia. Fa. seam or joint for sheet-metal cans or boxes, composed of a I c. at n astde seam or joint for sheet-metal cans or boxes, composed of a dovetail projection, a, struck or swaged upon the languaged edges of the metal, and then bammer or closes down, substantially as herein shown and described.

83,108. - STEAM GENERATOR.-J. L. Thomas, Alliance, Ohio. Ed. 108.—SIEAM GENERATOR.—J. D. IROMAS, ARBAICE, URIO. I claim, ist, me combination of the float, B. chain, C. and "eight J. with the serrated wheel, D, graduated wheel, E, adjustable plate, i, slotted arm, h, cook, G, and pipe, F, as herein set forth.
2d, the arrangement of the pipe, o, lever, R, and adjustable pin, S, with reference to the wheel, D, and whistle, P, as berein described.

83,10..-Device for Stretching Telegraph Wires. M. Thompson, Roston, Mass.

I claim the wiltin describe d instrument for stretching telegraph wires, consisting essentially of the plate or bar, A, and jaws, C C, as set forth.

83,110.—HAY RAKE AND LOADER.—J J. Thompson, Rich

wood, Ohio.
I claim the combination of the rotating device. F' H, rake, G, endless carried I claim the combination of the public of ingers, w, and stationary plate, 12, all constructed, arranged, and operating in the manner and for the purpose set forth. 83.111.—Cultivator.—J. J. Thompson and V. F. Collier

Richwood, Ohio.

Richwood, Ohio.

We claim the combination, in a quadruple plow or cultivator, of the inner
We claim the combination in a quadruple plow or cultivator, of the inner
V B', tongue, A, plate, I, and handles, L L all applied in the manner and for
he purpose set forth.

83.112.—Sash Lock.—E. H. Tobey, Bridgeport, Conn., as

egnor to humself and A. R. Hale.
I claim the arrangement of the bolt, A, within the cylinder, C, when the aid cylinder is provided with two slots, a and d, and the bolt with the stud, f, o operate in the said slots, substantially in the manner sp cified.

83,113.— DIAPHRAGM BELLOWS FOR DRY GAS METER.—A.
Tufus, Malden, Mass. Antedated Oct. 3, 1868.
I claims a gas-meter bellows in which one bead is abnular, with an attached fange, to which the flexible material of the bellows is secured, and in which head the opening through which the form r is extracted in parts is closed by soldering the dish, i. at its edge which is remote from the c-rd, h, which secures the flexible material, g, to the flange, e, substantially as described.

53,114.—CALORIC ENGINE.—H. D. Wallen, Jr., Fort Colum-

Thus, N. Y. Claim, let. The two parallel cylinders, A. B. when arranged side by side, and provided at both ends with air-heating chambers, A' A' B' B'', and the valve gear to cause the alternate movement and resting of the pistons, all substantially as shown and occurbed.

20. The rocks shafts, P' having rims, e R R', the connecting rods, S S' T ale angular liver 1', substantially as hirein shown and described in combination with and arranged with relation to the shaft, M, slotted piate, U, slotted arm, V, and cro sheads, R'', as set forth.

83,115.—PAPER CUTTER AND RULER.—S. W. Wilcox, Men-

don, Mass.
I claim, 1st, A paper cutter, provided with a series of parallel slits for ruling parallel lines, substantially as nevely described, 2n. The construction of a ruler with a perforated scale, substantially as and for the purpose herein set forth.

83,116.—Stop Motion and Indicator for Knitting Ma-

85, 110.—STOP MOTION AND INDICATOR FOR KNITTING MA-OHINE.—Elihu Wider, Chicopee Falls. Mass.
I chaim, 1st, i be shaft, H, carrying the adjustable fingers, b h' h", substan-tially as described
2d, The combination of the bolt, G with the pawl. G', and ratchet, G," and shaft. H. carrying the fingers, b h' h", made adjustabl, and bed if nposition by set screws or thumb screws, and operating upon he pawl of a ratchet, for the purpose of stopping the machine at any number of rounds or stytches, substantially as sci torth.
3d, The combination of the shaft. H. baving the adjustable fingers, h h' h" with the ratchet, G", pawl. G', bolt, G, sliding bar. E', baving the true doe"

with the ratcher, G", pawl. G', bott, G, sliding bar. E', baving 'he trip dog' E, and the cam grooved sylnder, C, applied to a knitting machine, substanially as described.

83,117.—CHAIN PUMP VALVE.—Orrin O. Witherell, Lewis-

plate, C, and washer. F, by means of the countersunk screw, E, extending centrally through the plate and washer, between the ends of the link into a nut, G, between the ends of the, link upon the plate, B, as herein described and shown.

83,118.—Pipe Coupling.—William H. Yeaton, Philadel-

53,118.—PIPE COUPLING.—William H. Yeaton, Philadelphia, Pa.
I claim, 1st, The combination of the portions, A and B, of the coupling with the yoke, D, the whole being constructed and arranged substantially as and forthe purpose described.

2d. The plug, U solated to the portion, B, of the coupling, and having a handle, I, arranged in respect to be yoke, D, substantially as set form.

3t, The combination, with the yoke, D of a lid or bonner, F, having lugs, t, and hinged or otherwise adapted to the portion, B, of the coupling, for the purpose specified.

82.119.—MANUFACTURE OF IRON AND STEEL. — Richard Yielding, Detroit. Mich.
I claim, 1st, The process of fusing and refining metal, and decarbonizing

1701. 1301,

83,120.—Table Cloth Protector.—Mrs. J. H. Mott, Wash ington, D. C.

I claim a table-protecting apron, formed with raised edges, a a, and attachness traps, c and e, the whole constructed and arranged substantially as lescribed, for the purposes specified.

83,121.- PROCESS OF ROASTING AND CHLORIDIZING ORE,-Heory Tindall, Chicago, 111.

I claim the process of treating ores, substantially such as is above decribed.

83.122.--Furnace for Roasting and Chloridizing Ore.

75.1.22.—FURNADE TO A ACCEPT THE PROPERTY OF STATES AND A COLOR OF THE PROPERTY OF STATES AND A COLOR OF THE ACCEPT THE A

Taneously with the roasting of the same, substantially in the manner described.

2d The chamber. E, of the furnace, as composed of a metal bottom, with metal sides and roof, said bettom and sides being protected from the action of the sulphur, substantially as shown and described.

3d, The combination of the chamber, E, and the gas generating apparatus, substantially as shown and described.

4to, The combination of the ore supplying conduit and the chamber, E, substantially as shown and describe.

5th The arrangement of the sole or hearth with reference to the chute, P, substa tially as shown and described.

6th. The arrangement of the wails or partitions, C C' by which they are made to support the sole or hearth, substantially as shown and described.

7th, The arrangement of the car, E, with reference to the chute, P, and chamber, E, substantially as shown and described.

83,123—P-STON Red PACKING.—Orrin Collier (assignor to himself and Erva B. Siliman, Sacramento, Cal.

I claim, 1st, The metal rings, a and n, as constructed, so that they have about the same amount of surface bearing against the rod, and both about the same amount of surface bearing against the rod, and both about the two shall wear equally, substantially as described.

2d, The construction of the packing with reference to the stuffing box, whereby a free space is left around the ring, so as to allow them to move freely with the rod, if it should not work perfectly true.

3d, The gland, U, and the lining, E, with the oil cup, F, when arranged subtantially as and forthe purpose herein described.

REISSUES.

35 925.—LAMP BURNER.—James Donning, Bridgeport, Conn. Dated July 22, 1862; reissue 3,158.
I claim a d fire or or cone, having a flame slot, in combination with a sliding support, the two being connected together, and removable from the wick tine, at dan air space b ing provided between the sliding support and the side of the wick tube, substatially as specified.

67,355 — Machine for Grinding the Cutters of Mowing MACHINES.—Henry Richardson, New York, assignee. hy mes e assignments, of Edwin M. Scott, and N. Y. Dated July 30, 1867; reissue

Claim. Ist, in combination with a revolving grinding wheel or stone, on the end of a shaft, the vertically, or nearly so, swinging frame. For holding the reaper k: ife to be ground, so that it may be swinging frame. For holding the reaper k: ife to be ground, so that it may be swinging frame. For holding the reaper k: ife to be ground, so that it may be swinging to the stone or back. To be examined by the operator, substantially as described.

2d, in combination or edges to be ground n.ay no brought in their entire length to the grinding surface of the stone, substantially as described.

3d, The combination of the .isk, slides, and thumb screw, as and for the purpose set forth.

4th, The combination of the disk, slides, bolt, and lever, substantially as and for the purpose described and represented.

65.963.—Slepping Car - John Swan, Baltimore, Md. Da-

00,905.—5LEMPING CAR —10111 SWan, Baltimore, Md. Datted June 18, 1867, relsave 3,160.
I claim, 1st, A spries of stater roms made crosswise of the part and provided with a side passage and independent ventilation, substantially as and for the purpose set forth.
2d. The Pastryon F., pipes, H H, and basins. J J, for supplying water to the statements, substantially as specified.
3d, The side passage, C, when used in combination with a series of cross berths or staterooms, as and for the purpose set forth.

EXTENSIONS.

IMPROVEMENT IN SPRING ROLLERS FOR WINDOW CURTAINS, ETC.—Benjamin Bray, of Salem, Mass.—Letters Patent No. 11,638, dated September 5, 1854.

I claim providing the tubular or hollow curtain roller with a long spiral spring within it, when said pring is used for the purpose not merely of drawing up the curtain by it recoil, as that is not new, but of bala cing it in any position in which it may be placed, substantially as herein described.

DESIGN FOR CLOCK CASE FRONT.—Elias Ingraham, Bristol, Conn.—Design No. 107, dated Sept. 3. 1860.

I claim the design for a clock case, as hereinabove illustrated and set forth.

Conn.—Beegn No. 101, dated spec. 3, 1800.

I claim the design for a clock case, as bereinabove illustrated and set forth.

CALENDAR CLOCK.—Wm. H. Akins and Joseph B. Burritt,

Ithaca, N. Y.—Lett-rs Parent No. 11,711, dated Sept. 19, 1854.

We clatin, 1st, The arranar-ment of the four rows of teeth on wheel, L. as shown 1s fis. 8, in combination with the corrugated blate, N, the detent X ard the arm, O, the rocking shaft. P, and the sloned arm, G or the equivalent of said arms and rocking shaft. And for the purposes set forth.

2.1, Raising the click, 37, over four or more of the teeth of the wheel, L (when run down), on the first day of the month, thereby acquiring a retaining power sufficient to be used in the short months, thus moving the wheel, L. carrying the haod, I, on the dial, from the 28th of February, bast the 29th, 30th, and 31st being removed, the detent, X, stopping the wheel, L. at the point marked, on fig. 8, indicating the first day of warp, the rod, 30, slipp, pig through the sud of 12 he lever, Y, the lever, Y, the right of the purposes described, that is, giving movement to the wheel, L, the rollers, F G and H, being moved by similar devices.

SAFETY WASHER FOR SECURING WHEELS TO Axles.—Wm.

SAFETY WASHER FOR SECURING WHEELS TO AXLES .- Wm Thornley, Phil delphia, Pa.—Letters Patent No. 11,705, dated Sept 19,1854. 1 olarin a washer baving a projective flauge and stop or stops; also the Cap, with the stop or stops, as described, for the purpose specified.

with the stop of stops, as nescribed, for the purpose specifical.

MACHINE FOR WASHING PAPER STOCK.—Horace W. Peaslee, Miden Bridge, N. Y.—Letters Paient No. 12,233, dated Jan. 23, 1855; and dated Sept. 20, 1854; reissue No. 340, dated Jan. 8, 1856; reissue No. 2,555, d. tea March 19, 1867.

I claim a rotating pervious cylinder, provided with projecting teeth on the inside and moduled substantially as herein described, so as to be substantial and rotated without a shaft and arms, that the inside and ends may be unobstructed for the passage of the stock, substantially as and for the purpose described.

And also claim, in combination with a pervious rotating cylinder, armed

described.

And I also claim, in combination with a pervious rotating cylinder, armed with teeth on the inside, substantially as described, the means, substantially as described, for the introduction of water through the meshes of the cylinder to the stock inside, as and for the purpose described.

FURNACE OR HEAT AND GENERATOR RADIATOR.

FURNACE OR HEAT AND GENERATOR RADIATOR.—Gardner Chilson, Boston, Mass.—Letters Patent No. 11,718, dated September 26, 1854; reissue No. 1,782, dated September 27, 1864; as described, made to communicate in the fire chamber essentially as specified, a conic al 'r tapering radiator closed at top, and arranged directly over the fire, and made to open near its base in the said tapering tube or tubes, and to operate, with respect to them, and the fire put or chamber and the surrounding air or medium to be wirmed or heate!, substantially as specified. I also claim arranging the feed or fire place door within the trunk or mouth piece to the fire pot or place, and so as to operate as specified. And in communation with the mouth piece, and the door a ranged in it as specified, I claim the passage in the mouth piece and its plate. c., for the thin sheet or stratum of air to pass under the door, while it is wholly closed, and said plate. c. and be heated by contact with the plate before it, the said air, receives the fuel.

reaches the fuel. And no combination with the inclined door of the fire place, the place, c, and the air passage directly under it. I claim the ledge or flange, a', arranged as described, he same being not only for the purpose of regulating the admission of air into the passage, but of Kepling it from passing under the door and over the plate, c, while the ledge is below the level of the top surface of shaft. H. carrying the fingers, b h'h', made adjustable and the dd in position by set screws or thumb ser-ws, and operating upon the pawl of a ratchet, for the purpose of stopping the machine at any number of rounds or statches, as substantially as set forth.

3d. The combination of the shaft. H. baying the adjustable fingers, h h'h' with respect to the shaft of the grape), in co. mointaition with the arrangement of the registry plate or opening as specified, the said arrangement of the outer end of said shart. viz. entirely within the throat of the ash pit, with the ratchet, G'', pawl. G', bolt, G, sliding bar. E', baying the trip dog of the outer end of said shart. viz. entirely within the throat of the ash pit, with the ratchet, G'', pawl. G', bolt, G, sliding bar. E', baying the trip dog of the outer end of said shart. viz. entirely within the throat of the ash pit, of the outer end of said shart. viz. entirely within the throat of the ash pit, of nappeal to Commissioner of Patents.

5d. The combination of a Patent, except for a Constant of the plate, c, while, the ledge is below the level of the top surface of On six such or graph of the plate.

5d. The combination of the shaft. H. baying the machine at any number of rounds or statches, as claim the arrangement of the registry plate or opening as specified, the said arrangement of the registry plate or opening as specified, the said arrangement of the outer end of said shart. viz. entirely within the throat of the ash pit, of nappeal to Commissioner of Patents.

5d. The combination of the shaft of the plates, as called the arrangement of the registry plate or opening as specified, the said arrangement of the registry plate or opening as specified, the said arrangement of the registry plate or opening as specified, the said arrangement of the registry plate or opening as specified, the said arrangement of the registry plate or opening as specified, the said arrangement of the registry plate or opening as specified, the said arrangement of the registry plate

pose of tur ing or moving the grate when necessary, and this without danger of ashes excepting out of the ash pit, privided its door be closed. I also claim the combination of a fire pot, a dome surmounting it, a series of flurs (I ad ong from the base or lower part of the dome), the whole being substantially asherelabefore described. I also claim the combination of a fire pot, a dome surmounting it, a series of flues (learing from the base or lower part of the dome), and a series of ounical or parts it conceal near the content of the contract of smoke and near into the content and its radiation toward the floor, and its reflection into the tabering radiators, the whole being substantially as specified.

I also claim the combination of a fire pot, a domesurmounting it or placed over it, a series of flues (learling from the base or lower part of the dome), and a hollow ring or annual radiator placed on and appring out of the said flues, the whole being substantially as accombined.

NEW PUBLICATIONS.

MANUAL OF PRACTICAL ASSAYING. By John Mitchell, F.C.S. Third Edition. Edited by Wm. Crookes, F.R.S., etc. London: Longmans, Green & Co., 1868.

We are indebted to the publishers for a copy of the above work, the merits of which have been thoroughly recognized by scientific men. The present edition contains all the important discoveries necessary to bring it completely up to the requirements of modern assaying, special attention having been paid to the Volumetric and Colorimetric Assays, as well as to the blowpipe assays. The portion of the work devoted to the subject of oil and gasblast furnaces is of great value. The work has been carefully and ably edited, and is printed in clear bold type. It is the best, in fact the only comnlet. English work upon the subject. The old nomenclature has been retained, but as the work is written rather for practical assayers than as a text book, this is hardly a defect. It would be difficult find any fault with the book, still more so to suggest any improvement.



ATENTS.

The First Inquiry that presents itself to one who has made any improvement or discovery is: "Can robtain a Patten?" A postdog answer can only be had by presenting a complete application for a Patent to the Commissioner of P tents. As applicate on consists of a Mo et. Drawning, Pettion, Oan, and full Specification. Various official rules and formalines must have pettion of the invento to do all this business bimself are generally will not success. After a season of great perplexity and delay, he is usually the work done over again. The best plan is to solicit proper advice at the beginning.

beginning.

If the parties consulted are honorable men, the inventor may safety conducted them; they will advise whether the improvement is probably patentable, and will give him all the directions needful to protect his

only patentable, and will give him all the directions needful to protect his Fights.

Messrs. MUNN & CO., in connection with the publication of the Scientiffs of American, have been scrively engaged in the business of obtaining patents for over twenty years—nearly a quarter of a century. Over fifty The usand inventors have had benefit from our counsels. More than one third of all patents granted are obtained by this firm.

Those who have nade inventions and desire to consult with us are cordially invited to do so. We shall be apply to see them in person, at our office or to advise them by liviter. In all cases they may expect from us an honest opinion. For such consultations, opinion, and advice, we make no charge A pen-and-ink sketch, and a description of the invenion should be sent, together with stamps for return postage. Write plainly, do not use pencil nor pale ink; be orief.

All business committed to our care, and all consultations, are kept by us seer et and strictly confidential. Address MUNN & CO., 37 Park Kow, New York.

Preliminary Examination.—In order to obtain a Preliminary Examination, make out a written description of the invention in your own words, and a rough pencil or pen-and-maketeth. Send these with the fee of 55 by mail, addressed to MUNN & CO., 37 Park Row, and in due time you will receive an acknowledge ment thereof, followed by a written report in regir dto the patentability of your improvement. The Pri liminary Examination consists of a special search, which we make with great care, among the models and patents at Washington, to ascertain whether the improvement presented is patentable.

ment presented is patentaine.

In Order to Apply for a Patent, the law requires tha a model shall be furnished, not over a foot in any dimensions—smaller if possible. Send the model by express, pre paid addressed to Munn & Co., 37 Park Row, New York, together with a descrip ion of its operation and merits. On receipt thereof we will examine the invention carefully and advise the party as to its nateniability, free of charge.

The model should be nearly made of any suitable materials, strongly faste ened, without give, and nearly painted. The name of the inventor should be enerayed or painted upon it. When the inventor consists of an improinment upon some other machine, a full working model of the whole machine with not be necessary. But the model must be sufficiently perfect to show with clearness, the nature and operation of the in-provement.

New medicinesor medical compounds, and useful mixtures of all kinds, are paten able.

with clearness, see as a second of the patents of a medicine or new leaful on paten able

When the invention consists of a medicine or compound, or a new article of manufacture, or a new composition, samples of the article must b furnished, neatly put up. Also, send us a full statement of the ingredients, proportions, mode of preparation, uses, and merits.

Reissues.—A reissue's granted to the original patentee, his heirs, or the assignees of the entire interest, when by reason of an insufficient or defective specification the original patent is invalid, provided the error has arisen from inadvertence, accident, or mistake, without any frau malent or deceptive interion.

ante non.

A parentee may, at his option have in his reissue a separate patent or each distinc part of the invention compresended in his original application, by paying the required fee in each case, and complying with the other requirements of the law, as in original applications.

Each division of a reissue constitutes the subject of a separate specification descriptive of the part of parts of the invention claimed in such division; and the drawing may represent only such part or parts. Address MUNN & CO., 37 Park Row, for full particulars.

Interferences.—When each of two or more persors claims to be first inventor of the same thing, an "Interference" is declared between them, and a trial is had before the toom wishoner. Nor ooes the fact that one of the parties has already obtained a patent prevent such an interference; for although the Commissioner has no power to cancel a patent already issued, he may. If he finds that another person was the prior inventor, give bim also a patent, and thus place them on an equal foother before the courts and the public.

Caveats.—A Caveat gives a limited but immediate protection, and is particularly useful where the invention is not fully completed, or the model is not ready of further time is want dior experiment or study. After a Caveat has been filled, the Patent Office will not ssue a patent for the same invintion to any other person, without giving notice to the Caveator. Who is then allowed three months time to file in sanap pilection for a patent. A Caveat, to be of any value, should contain a clear and conese description of the invention, so far as it has been completed, illustrated by drawings when the object admits. In order to file a Caveat the inventor needs my telescond words. Address MUNN & CO., 37 Fark Row, New York.
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.	On app ication for Extension of Patent	85
	On granticg the Extension	\$5
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Washington, D. C. Oct 10th, 1888.
Newell A. Prince, Simsbury, Conn. having eligible for line extensive of the patent granted him on the 23d day of January, 1831, for an improvement in Funcin Pen.
It is ordered that said neutrion be bearf at this office on the 28th day of December next. Any person may oppose this extension. Objections, depositions, and other papers, should be filled in this office twenty lays before the day of hearing.

183 S. H. HODGES, Acting Commissioner of Patents.

U. S. PATENT OFFICE.

Whichington, D. C., Oct. 7 1868.

Fanny Holmes, of Whitehall, N. T., executrix of the estate of John E. Newcomb, deceased having petrioned for the extension of a patent granted the said John E. Newcomb on the 9th say of January, 1855, for an improvement in "Gran Harvesters," it is ordered that said petrion be heard at this office on the 14th day of December next.

Any person may oppose this extension. Objections, sep-ositions, and other papers, should be filed in this effice twenty as before the day of hearing.

183 S. H. HODGES, Acting Commissioner of Patents.

Washington, D. C., Oct., 2d, 1893.
Marshall Burnet and Charles Vander Woed, 1803 on Mass., having petitioned for an extension of a patent granted them on the 2d day of January, 1835, for an improvement in "Grant and Grass Harvesters." it is ordered that said petition be heard at this office on the 14th day of December next.

Any person may oppose this extension. Objections, depositions, and chief papers, should be filed in this office twenty days before the day of bearing.

17 3 S. H. HODGES, Acting Commissioner of Patents,

U. S. PATENT OFFICE, * ;

Washington, D. C., Oct 3, 1888 {

Lysander Wright, of Newurk, N. J., having petitioned for the extens int of a patent granted him on the 2d day of Janary 855, for an imprevement in "Sawing Machine." it is ordered that said pention be heart at this office on the 11th ray of December n. xt.

Any person may "phose this extension. Objections, depositions, and "ther papers should be died in this office "wenty days before the day of tearing.

173 S. H. HODLES, Acting Commissioner of Patents

WASHENGTON, D. C., Oct 2d, 1868.

Ambrose Fester, of Lauraville, Md., for himself and the representatives of J. A. Messenger, deceased, having petitioned for an extension of the parent granted the said Ambrose Foster, on the 18th day of January, 1855. For an improvement in "Bulloing Blocks," it is or erred that the said petition be heard at this office on the 21st day December in X. Any person may oppose this extension, Object ons, desired and other papers should be then in X. Any person may oppose this extension, Object ons, desired and other papers should be then in this office liventy days before the day of hearing.

17.3 S. H. HODLES, Acting Commissioner of Patents.

U. S. PATENT OFFICE.

WASKINGTON D. C. Sept. 12, 1868

Martin P. M. Cassity, of Granda. Kansas, drn: intiator of the estate of Isaac H. Steer, dec-med. haying petuloned for an extension of the patent granted to Henry
Carter, assigne of said Steer, the 19th day of Jun; 1855,
anded ted the 19th day of December, 1854, for an improvemutin "Making Nuis," is is ordered that said portion
be heard at this fiftee on the 12th day of December 1.ext.
Any person may oppose this extension. Objections,
d-Dositons, and other papers, should be filed in this office
twenty days before the day of bearing.

17 3 S. H. HODGES, Acting Commissioner of Patents.

U. S. PATENT OFFICE,

WASHINGTON, D. C., Sept 24, 1868. {
P. W. Mackenzie, of Orangeville, N.Y. having networned
for an extension of the natent granted him on the 2d day
of January, 1855 for an improvement in "Machine for
Blowing Blasta" etc., it is ordered that said petition be
heard at this office on the 14th any of December next.
heard at this office on the 14th any of December next.
positions, and other papers should be filed in this office
twenny days before the day of hearing.
16 3 S. H. HODGES, Acting Commissioner of Patents.

WASHINGTON, D. C., Sept. 25, 1868. Allen B. Wilson, of Wilterbury, Com. naving petitioned for an extension of the patent granted to him on the 18th day of December, 1884, for an improvement in "Sewing Machines" it to ordered that said petition be heard at this office or be ful day of "cember next.

Ally person may oppose this extension. Objections, depositions, and other papers, sould be filed in this office iwenty days hefore the day of hearing.

163 S. II. HODGEN Acting Commissioner of Patents.

U. S. PAIENT OFFICE.

WASHINGTON, D. C., Sept. 5011, 1883 {
 Jesse W. Harch and Henry Churchill, of Roctester, N. T.
 baving petitioned for an (x ens); not the patent granted
to here or, the 2d day of January, 1855, and relayed on the
24th day of July, 1885, for an important to in "Machines
for Cutting Boot and Shoe Soles," this ordered that said
petition be heard at this office on the 18th day of December next.

Ary person may oppose this extension. Objections, depositions, and other papers should be filled in this office
twenty days before the day of kearing
16 3 S. J. HODGES, Actual Commissioner of Patents.

WASHINGTON, D. C., Sept. 30, 1868 |
Arnton Smith, of Girar, i.i., having p-thomes for an extension of the natest granted him on the 16th day of Jan. 1855, for an improvement in 'Plows,' it is ordered that said petition be beard at this office on the 21st day of Potenber next.

Any person may oppose this extension. Objections, and other papers, should be filed at this office themly days before the day of hearing.

163 S. H. HODGES, Acting Commissioner of Patents

16.8 S. H. HODGES, Acting Commissioner of Patents

T. S. Patent Oppice.

Wase inforced. D. Sept. 21, 1868.
Hannah M. Brown, of Woods Cket, R. I., Seministratik of the estate of Join E. Brown, deceased, and W. E. Barrett, of Providence, R. I., executor of the estate of Stephen S. Bartlett, deceased, having pertitioned for the extraording patent granted to the said John E. Brown and Stephen S. Bartlett, on the 2d day of Jan. 1855; relasued Jan. 18, 1861, and again ressued Fc. 25, 1862, in three divisions, numbered respectively 1281, 1282, and 1283, for an improvement in "Gran and Grass Harvesters," it is ordered that said perifor be heard at this office on the 14th day of December next.

Any person may opp se this extension. Objections, depictions, and other papers, should be filed in this office twenty days before the day of hearing.

16.3 S. H. HODGES, Acting Commissioner of Pstents.

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