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 center of the shoe chamber, by means of the springs. J, substantially in the mannerherein shown and described, and for the purpose set forth. 3d. The c m bi ation f the sliding gate, M, connec ing rod or rods, N, lev-er, O, and ratchet bar, P, with each other and with the opening in the 'op of the case', A, substantially as herein shown and described, and for the pur-pose set forth. 4th The rect signlar hopper, Q, constructed and arranged substantially as herein shown and described, in combination with the hopper shaped to for the case, A, substantially as herein shown and described, and for the purpose set forth. 5th, The fans, D, formed with projecting wings, d', upon their central forth. 5th, The bag-holder, W, constructed substantial's se berein shown and 6th.

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forth. fth, The bag-holder, W, constructed substantial'y as herein shown and de-scribed, in combination with one of the posts, B, of the frame of the miil, as and for the purpose set forth. Th, The receiving measure, formed by the combination of the sliding gate Y, and rod, Z, with the box, X, substantially as herein shown and de-scribed, and for the purpose set forth.

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

Obj01. — I OUREL FOR THE FOR A MOTION AND A STREET A STREET AND A STREET A

83,098.-FBUIT PICKER.-Jeremiah Schroy, Fortville, Ind.

83,098.—FRUIT FICKER.—selecting control, Fortwire, Inc. Antedate O-toher 2,1868. I claim the curved metal plate, C, connected to the outer ends of heirreg-ular snaped hoor, B, and provided at its upper portion with a series of nar-row slots for forming the comb teeth, point d as shown, and used in combi-nation with the pole, A, and conveyer, F, to operate substantially as set forth.

73.099. - BEER COOLER. - Louis Schulze, Louisville, Kv

73,099. — BEER COOLER. — Louis Schulze, Louisville, Kv. I claim, ist, A heer cooling apparatus, consisting of a series of contrguous and connects g double bottomed pipes or channels, one above another, in vertical line, and included towards each other, when said pipes or channels are mase with 'quare sides and bottoms substantially as and for the pur-poses set forth. 2d, A beer cooling apparatus. Consist: in of a series of contiguous and con-necting double bottomed pipes or thankels, and for the purposes that hey can be opened, substantially as and for the purpose, set forth. 3d, A beer cooling apparatus, consisting of a series of contiguous and con-necting double bottomed pipes or thannels, one above the other, in vertical line, the water channels of which, at the consiguous ends, are so construct-ed that they can be opened, substantially as and for the purpose, set forth. 3d, A beer cooling apparatus, consisting of a series of contiguous and con-necting double bottomed pipes or channels, one above the other, in vertical line, the water channels of which, at conductor of heat, substantially as and for the purposes described. 4 th. In a beer cooling apparatus, the application, in commination with waterforconing purposes, of ablast of air which has been passe 1 over ice, and srikes the beer at right angles to its flow, substantially as andfor the purposes setforth. 5 bh, the combination, in a beer cooler, of the double bottomed channels, 6 mith perforated air pipes, E, substantially as and for the purposes setforth.

forth. The combination in a beer cooler, of the rollers, j, provided with paddles, K, with the double bottomed channels, B, substantially as and for the purposes d. scribed.

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 purp se specified. 2d, Th troughs, B, incombination with the shelves, b, as and for the pur-pose set forth.

83,101,-LAWN MOWER.-John Shaw, Brooklyn, N.Y. Pat

O3,101,— LAWN WOWER.— John Blaw, Drowing in, it. 1. 1 at ented in Renizad Jacuary 23, 1884. I claim folding the cuting +nd of lawa mowing machines up toward the headle end, for the purpose of being used for rolling only.

83,102. -BUCKIE -Perry W. Smith, Abingdon, Ill. I claim, as an article of main facture, the within described double buckle when constructed and operating substantially as and for the purposes herein set forth.

83,103.- MACHINERY FOR PRINTING YARN.-E. J. Stephens

Pawtozet, B. C. Schultzer, P. C. This inder TARK. D. S. Stephens. Pawtozet, B. C. I datm, in combination with suitable ribbed printing evliders, A A, a series of furnishing colo rollers, D D, hung in yielding basin, Es, and oper-ated by means of pinions, G. with treth of variable appli, or the equiva-lents thereoi, in the manner substantially as described for the purposes speci-

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

65,104.—GAS FURNACE FOR HEATING SOLDERING TOOLS.— J. H. Shmpson, Boston, Mass. I. Gauni the gas furnace for beating soldering tools, consisting of the double cones. A B, so porting the inclined Cylinders, D B, containing the performate cylinders, F G, composed each of two parts, 11 f2 g2 g3 d0 cylinders, D B, connected at their rear engs by the mourt pieces, d3 e3, and at their roward 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. Iclaim, 1st, The combination of the roller wheet, G, arm. H, rod, I, an oscillating plate, F, arranged to operatesubstantially as and f.r the purpo

Oscillating place, r, all allows we heel, G, the arm, H, connecting rods, I and N 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 3d, The combination of the wheel, G, with hole, G, and arm H, with holes \mathbf{H}^{\prime} , for connecting and disconnecting the wheels and the dropping mechan-ism, substantially as set forth.

83,106.-SUGAR-JUICE EVAPORATOR.-James Taylor, Can

ton, N. Y. Italian the described construction of the pan, A, having its sides extended I claim the described construction of the line box, the latter provided with the door, h, at one end, and the crimney, B, at the other, all arranged to be moved upon the wheels e, a way from or over the Frate, D, formed between the ways, C, as herein set for th for the purpose specified.

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

daphia, Pa. 1 c.am as de seam or joint for sheet-metal cans or boxes, composed of a dovetail projection, a, struck or swaged upon the lapped edges of the metal, and then hammer or closes down, substantially as herein shown and de-scribed.

83,108.-STEAM GENERATOR.-J. L. Thomas, Alliance, Ohio **ED**, 103. — DIRAM CRARKATOR.—J. L. INDIRAS, ANNARCE, UDIO. I clasm. ist, we combination of the float, R. chair, C. and 'eight J. with the serrated wheel, D, gradnated wheel, E, adjustable plate, i, slotted arm, h, cock, 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 herein described.

83,10,.-DEVICE FOR STRETCHING TELEGRAPH WIRES.

M. Thompson, Roston, Mass. M. Thompson, Roston, Mass. I claum the wilbin described instrument for stretching telegraph wires, con sisting 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 D pins of ingers, w, and stationary plate, i i2, all constructed, arranged, and operating in the manner and for the purpose set forch.

83,111.-CULTIVATOR.-J. J. Thompson and V. F. Collier

Richwood, Ohio, Richwood, Ohio, We claim blie combination, in a quadruple plow or cultivator, of the inner ovable beams, B B, staples, h b, rod, F, blates, D D, onter stationary beams 'B' tongue, A, blate, I, and handles, L L, all applied in the manner and for pe purpose set forth.

83,119.-SASH LOCK.-E. H. Tobey, Bridgeport, Conn., as

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

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-

63,113.—PTPE COUPLING.—William H. Yeaton, Philadel-phia, Pa. I claum, 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 for the purp use described. 2d, The plug, C adacted to the portion, B, of the coupling, and having a handle, i, arranged in respect to be yoke, D, substantially as set torin. 3', The combination, with the yoke, D, of a lid or bonnet, F, having lugs, t , and hinged or other wise 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

Totaling last, has proceeded and the provided and the use of the fore-and the converting of iron into carbonized steel. and the use of the fore-going articles, in the manner and for the purp wesherein set forth, and the general combination of the principles, and the use of the articles, combined and separately, and for the use of the oil alone, in the manner and for the purposes set forth in the foregoing specifications.

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 attach-ing straps, cc and e. the whole constructed and arranged substantially as described, for the purposes specified.

83,121. - PROCESS OF ROASTING AND CHLORIDIZING ORE,-

Henry Tindall, Chicago, 111. I claim the process of treating ores, substantially such as is above de-cribed.

83.122.--FURNACE FOR ROASTING AND CHLORIDIZING ORE.

Henre Tiodall, Colcago, Ill. I caum, Isl, A fu have for treating ores, in which the operation of desul burizing and chloridizing or chlorinating such ores is performed simul-aneously with the roasting of the same, substantially in the manner de-

I ancousify with the roasting of the same, substantially in the manner de-caribed. 2d The chamber. E, of the furnace, as composed of a metal bottom, with metal sides and roof, said bottom and sides being protected from the action of the subplury substantially as shows and described. 3d, The combination of the chamber, E, and the gas generating apparatus, substantially as shown and described. 4n, 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, enheat tailly as shown and describe. 6th, The arrangement of the wals or partitions, C C' by which they are made to support the sole or bearth, substantially as shown and described. 7th, The arrangement of the car, R, with reference to the chute, P, and chamber, E. substantially as shown and described.

chamber, E. substatially as shown and described. 83,123 -- P. STON Rop PACKING. -- Orrin Collier (assignor to himself and Erva B. Siliman, Sacramento, Cal. I claim, 1st, The metalring, a and n, as constructed, so that they have shout the same annount of surface bearing against the rod, and both about the same amount of urface nearing against the face of the glaad, whereuy the two shall weare qually, substantially as described. 2d, The co.struction of the packing with reference to the stuffing box, whereby a free soarce is left around the ring, so as to allow thein to move freely wit the rod, if it should not work perfectly true. 3d, The gland, C, and the hinne, E, with the oil cup, F, when arranged sub-tantially as and for the purpose here in described.

REISSUES.

35 925.—LAMP BURNER.—James Donning, Bridgeport, Conn. Dated July 22, 1862; reissue 3,158. I claim & d fie: or or cook, having a flame slot, in combination with a slid ing support, the two being connected together, and removanle from the wick tune, and an arr space b ing provided between the sliding support and the side of the wick tube, substa tially as specified.

67,355 - MACHINE FOR GRINDING THE CUTTERS OF MOWING MACHINES. - Henry Richardson, New York, assignee, by mes e assign-meus, of Edwin M. Scott, unurn, N. Y. Dated July 30, 1867; reissue

I claum. Ist, in combination with a revolving grinding wheel or stone, on the end of ashaft, the vertually, 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 swing to the stone or back. To be examined by the operator, substantially as described. 2d, in combination of the swing frame, the including of the clamping har, so that the sections or edges to be ground nay be brought in their entire length to the ground sufface of the stone, substantially as described. 3d, The combination of the .isks, shides, and thumb screw, as and for the purpose set forth. 4tr, The combination of the disk, slides, bolt, and lever, substantially as and for the purpose described and represented.

65,963.-SLEEPING CAR-John Swan, Baltimore, Md. Da-

50, 903.—SLEWPING CAR — 10111 SWan, Baltimore, Mu. Date ted June 18. 1867, refesse 8.160. I claim, 1st, A s-ries of state r ome made crosswise of the *ar, and provi-ded with a side passage and independent ventilstion, substautially as and for the purpose set forth. 2a. The reservoir F, pipes, H H, and basins, J J, for supplying water to the staturooms, substautally as specified, 3d, The fide 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 forviding he tubular or hollow curtain roller with a long spiral spring within it, when said spring is used for the purpose not merely of draw-iog up the curtain og it recoil, as that is not new, but of hala 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 bereinabove illustrated and set forth.

interion. A parentee may, at bis option, have in his reissue a separate patent of deceptive interior deceptive distinc part of the invention compre-ended in his original application, hy paying the required fee in each case, and complying with the other require-ments of the isw, as in original applications. Each division of a reissue constitutes the subject of a separate specifica-rion; and the drawing may represent only such part or parts. Address MUNN & CO., 37 Park Row, for full particulars. CALENDAR CLOCK.-Wm. H. Akins and Joseph B. Burritt

CALENDAR CLOCK.—Wm. H. Akins and Joseph B. Burritt, Itaaca, N X.-Lett-rs Paten: No 11,711, dated Sept. 19, 1854. We claim, 1st, The arranz-ment of the four rows of teeth on wheel, L, as shown 10 ff. 8, in combination with the corrugated plate, N, the detent X. at due arm, O, the rocking shaft, and for the parposes set forth. 2.1, Rassing the click, 37, over four or more of the teeth of the wheel, L (when un down), on the first day of the month, thereby acquiring a retain-ing ower sufficient to be used in the shorts, thus moving the wheel, L, carryi g the haod, I, on the dial, from the 28th of February, bast the 29th, 30th, and 31s divisions of the wheel, L to the ffst day of March, those teeth (the 29th, 30th, and 51st) being removed, the detent, X, stopping the wheel, L at the polat marked, on on g. 8. Indicating the 'first day of every month, one tooth only being need, except at the last day of a short months, the rod, 30, slopp, og through the click 137, or the list day of a short month, Y, W, also Chaim the combination of the heilx, V, the lever, Y, Infing rod 30, the detent, A, the pin, 55, the click, 37, the wheel, L and spiring, 7, and 7 the pin pose 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 Thornley, Phil delphia, Pa.-Letters Patent No. 11,705, (lared Sept 19,834, 1 claim a washer having a projecting flauge and stop or «tops; also the cap, with thesiop or st tops, as theoribed, for the purpose specific.

and thus place them on an equal rooting before the courts and the phone. **Caveats.**—A Caveat gives a himited but immediate protection, and is par-tcularly useful where the invention is not fully completed, or the model is nor ready, orfurrber time is want; dior experiment or study. After a taveat has been filed, the Faten office will not study and the transformer to study to any other person, without giving not ke to the Caveator, who is then al-lowed three months time to file in a papification. Ber a payent. A Caveat, to be of any value, should contain a clear and concise description of the inven-tion, so far as it has been completed, illustraten by drawings when the ob-ject admits. In order to file a Caveat the lavenor needs any to srid us a words. Address MUNN & CO., 37 rark Row, New York. Additions can be made to Caveat of \$10 s yearfor as long a period as desired the tenseed on payment of \$10 s year for a slong a period as desired

I claim the arrangement of the bolt, A, within the cylinder, C, when the sold cylinder is provided with two slots, and d, and the bolt with the stud, f, to operate in the said slots, substantially in the manner sp clifed. 83,113. – DIAPHIRAGM BELLOWS FOR DRY GAS METER.—A. Tatis, Malden, Mass. Antedated Oct. 3, 1868. I claim a gas-meter bellows in which one bead is abrular, with an attached fiange, to which in: flexible material, g, to the flanger, c, substantially as and for the purpose soldering the disks, 1, at its edge which is remote from the C-rd, h, with the se-urges the flexible material, g, to the flanger, c, substantially as described.

OCTOBER 28, 1868.

pose of tur ing or moving the grate when necessary, and this without danger of asnes see aping on to the sample, privided it, door be closed. I also claim the combination of a fire pot, a dome surmounting it, a series of flurs (I ad ng from the base or lower part of the dome), the whole being substantially suberclobefore described I also claim the combination of a fire pot, a dome surmounting it, a series of onical of partial V concal base or lower part of the dome), and a series of conical or partial V concal base or newer part of the dome), and a series of conical or partial V concal bases or newer ones, serving nor only to facilitate the entrance of smoke and meat into the conical radiators or fines, but the absorbio of heat and its radiation tow ard 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 dome surmounting it or placed over it, a series of flues (leading from the base or lower part of the dome), and a hollow ring or annual radiator production of the said flues, the whole being substantially as hereinbefore explained.

NEW PUBLICATIONS.

MANUAL OF PRACTICAL ASSAVING. By John Mitchell, F.C.S. Third Edition. Edited by Wm. Crookes, F.R.S., etc. London: Longmans, Green & Co., 1863. A

We are indebted to the publishers for a copy of the above work, the merits of which have been thoroughly recognized by solentific 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 blowassays. The portion of the work devote i to the subject of oil and gaspipe blastfurnaces 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 pract cal 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.



beginning. If the parties consulted are honorable men, the inventor may safely con-fide histokas to them: it tey will advise whether the improvement is proba-bly patentable, and will give him all the directions needful to protect his

by patchtable, and will give him all the unbettions hereduli to protect ins rights. Messrs, MUNN & CO., in connection with the publication of the SciENTIFIO AMSRICAN, have been scively engaged in the business of obtaining pat-his for over twenty years—nearly a quarter of a century. Over Filty The usand inventors have had benefit from our counsels. More than one that of all patents granted are obtained by this firm. Those who have inade inventions and desire to consult with us are cor-dially invit d to do so. We shall be apport to see them in person, at our office or to advise them by l-iter. 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 sketth, and a description of the invention should be sent, together with stamps for return postage. Write plainly, do not use pencil inor pale ink; be orfef. All business committed to one care, and all consultations, are kept by us seeret and strictly confidential. Address MUNN & CO., SI 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-mk sketch. send these with the fee of \$5 by unail, addressed to MUN& CO., 37 Park Row, and in due time you will receive an acknowledge ment thereof, followed by a written report in regr dt ot the patentability of your imployeement. The Pr liminary Examination consists of a special search, which we make with great care, among the models and patentas the Washington, to ascertain whether the improvement presented is patentable. mentpresented is patentance. In Order to Apply for a Patent, the law requires tha a model shall b) furnished, not over a foot in any dimensions-smaller if possible. Send the model by express, pre paid addressed to Mann & Co., 37 Park How, New y Jrk, together with a description of its operation and merits. On receipt tiereof we will examine the invention carefully and advise the party as to its nate nability, free of charge. The n-odel should be neatly made of any suitable materials, strongly faste enerd, without gine, and neatly painted. The name of the inventor should by-entrayed or painted upon it. When the invention consists of an improin-ment upon some other machine, a full working model of the whole machine's with not be necessary. Bat 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 patent able.

With obtained on medical compounds, and useful mixtures of all Kinus, are paten able. When the invention consists of a medicine or compound, or a new article of manufacture, or a new composition, samples of the articlemus: D fur-nished, neally put up. Also, end us a full statement of the ingretients, pro-portions, mode of preparation, uses, and merits.

Reissurs.—A reissue s granted to the original patentee, his heirs, or the assures of the entire interest, when by reason of an insufficient or deferve specific tion the original patent is invalid, provided the error has arisen from inadvertence, accident, or mistake, without any frau, nlent or deceptive inte tion.

Interterences, — When each of two or more persors claims to be first in-ventor of the same thing, an "Interference" is declared between them. and a trial is had before the Loom insider. Nor cose the fact that one of the par-ties has already obtained a patent prevent such an interference; for all hough the Commissioner has no power to cancel a patent already issued, be may lif he finds that another person was the prior inventor, give bin also a patent, and thus place them on an equal footner before the courts and the public.

83,113 DIAPHRAGM BELLOWS FOR DRY GAS METERA.	d ten March 19 1867.	and can be renewed on payment of \$10 a yearlor as long a period as desired
Tufis, Malden, Mass. Antedated Oct. 3, 1868.	I claim a rotating pervious cylinder, provided with projecting teeth on the	Quick Applications, - When from any reason parties are desirous of
I claim a gas-meter bellows in which one bead is appular, with an attached	inside and mounted substantially as herein described, so as to be sustained	applying for Patents or Caveats, in GREAT HASTE, without a moment's loss
flange, to which the flexible material of the bellows is secured, and in which	and rotated without a shall and arms, that the inside and ends may be much.	of time, they have only to write or telegraph us specially to that effect, and
head the opening through which the form, r is extracted in parts is closed by	structed for the passage of the stock, substantially as and for the purpose	we will make special exertions for them. We can prepare and mail the
soldering the dish, 1, at its edge which is remote from the C. rd. h, which se-	described.	pecessary papers at less than an hour's notice, if required.
cures the flexible material, g, to the flange, e, substant ally as described.	And I also claim, in combination with a pervious rotating cylinder, armed	
	with teeth on the inside, subs antially as described, the means, substantially	Foreign Patents.—American inventors should bear in mind that, as a
53,114.—CALORIC ENGINE.—H. D. Wallen, Jr., Fort Colum-	as described, for the introduction of water through the meshes of the cylin-	generalrule, any invention that is valuable to the patentee in this coun ry is
ous, N. Y.	der to the stock inside, as and for the purpose described.	worth equally as much in England and some other foreign countries. Five
I clam, 1st. The two Darallel cylinders, A B, when arranged side by side.		Patents-American, English, French, Belgian, and Prussian-will secure an
and provided at both ends with air-heating chambers, A' A" B' B", and the	FURNACE OR HEAT AND GENERATOR RADIATOR.—Gardner	inventor exclusive monopoly to his discovery among ONE HUNDRED AND
valve gear to cause the alternate movement and resting of the pisto.is, all	Chilson, Boston, MassLetters Patent, No. 11,718, dated September 26.	THIRTY MILLIONS of the most intelligent people in the world. The facilities
substantially as shown and oe cribed.	1854 : reissue No 1.782, dated September 27, 1864.	of business as a steam communication are such that patents can be obtained
20, The rocks shafts, P P', having arms, e R R', the Connecting rods, S S' T,	I claim, in combination with one or more tapering tubes, substantially as	abroad by our citizens almost as easily as at home. The majority of all pat- ents taken out by Americans in foreign countries are obtained through the
and angular I ver 1', substantially as birein shown and described. in com-	described made to communicate in the fire chamber essentially as specified,	SOIENTIFICAMERICAN PATENT AGENCY. A circular containing further in-
bination with and arranged with relation to the shall. M, slotted plate, U,	a conit al 'r tapering radiator closed at top, and arranged directly over the	formation and a Synopsis of the Patent Laws of various countries will be
slotted arm, V, and cro sheads, R", as se' forth.	fire, and made to open near its base in the said tapering tube or tubes, and	furnished on application to Messrs MUNN & Co.
83,115PAPER CUTTER AND KULERS. W. Wilcox, Men-	to operate, with respect to them, and the fire put or chamber and the sur-	For instructions "opcerning Foreign Patents, Reissues, Interferences,
don. Mass.	rounding air or medium to be warmed or heate f, substantially as specified.	Hints on Selling Patents, Rules and Proceedings at the Patent Office, the Pat-
I claim, 1st, A paper cutter, provided with a series of paralle! slits for rul-	I also claym arranging the feed or fire place door within the trunk or	ent Laws, etc., see our instruction Book. Set free by mail on .ppl cation.
ing parallel lines. substantially as herein described,	mouth pieceto the fire pot or place, and so as to operate as specified.	Those who receive more than one copy thereof will oblige by presenting
2g, The construction of a ruler with a perforated scale, substantially as and	And in combination with the mouth piece, and the door a ranged in it as	them to their triends
for the purpose herein set forth.	specified, I claim the passage in the month piece and its plate, c_i for the thin sheet or stratum of air to pass under the door, while it is wholly closed, and	Address all communications to
	said plute c and he heated by contact with the plate hefore it the said air	MUNN & CO.,
83.116.—STOP MOTION AND INDICATOR FOR KNITTING MA-	reaches the fuel	No. 37 Pa. k Row, New York city
CHINEElihu Wilder, Chicopee Falls. Mass.	And in combination with the inclined door of the fire place, the place, c,	Office in Washington, corner of F and 7th streets.
I claim, 1st, i be shaft, H, carrying the adjustable fingers, b h' h", substan-	and the air passage directly under it. I claim the ledge or flange, a', arranged	Patents are granted for Seventeen Years, the following being a
tially as described	as described, the same being not only for the purpose of regulating the ad-	schedule of fees:
2d, The combination of the bolt, G with the pawl, G', and ratchet, G," and	mission of air into the passage, but of keeping it from passing under the door	Ou filing each Caveat\$10
shaft, H, carrying the fingers, b h' h", made adjustabl , and beld in position	and over the plate, c, while the ledge is below the level of the top surface of	Oh filing each Caveat
by set screws or thumb screws, and operating upon the pawl of a ratchet, for	the place.	On issuing each original Patent
the purpose of stopping the machine at any number of rounds or striches,	1 aise claim the arrangement of the register hole (viz, in line of or axially	On appeal to Commissioner of Patents
substantially as set forth.	with respect to the shaft of the grace), in combination with the arrangement	Qu spplicati in for Reis-ue
3d, The combination of the shaft. H. baving the adjustable fingers, h h'h"	of the outer end of said sbart. viz . entirely within the throat of the ash pit,	On app ication for Extension of Patent\$50
	or in rear of the registry plate or opening as specified, the said arrangement	On grantic g the Extension
	not only enabling m. to dispose the grate shaft entirely within the ash pit mouth (the end of said shaft, when projecting from the front face of the fur-	On filing a Disclaimer
	nace, being, generally speaking, more or less in the way, besides presenting	On filing application for Design (sever years)
83,117.—CHAIN PUMP VALVE.—Orrin O. Witherell, Lewis-		On filing application for Design (four teen years)
ton, Me.	ing answer the purpose not only of admitting air to the fire when required.	In addition to which there are some smallrevenue-stamp taxes. Residents
I claim the plates, A B, having the links, DD, secured upon the elastic	but of enabling a person to place a key or crank upon the shaft for the pur	of Canada and Nova Scotla Day \$500 on application.