Platinized Mirrors,

The diathermanous, properties possessed by various substances are precisely analogous to those of transparency and translucency with which they are endowed, except that the former refer to rays of heat and the latter to those of light. Although in some degree the two descriptions of rays may be confounded, yet they are in reality separate, and the actinic rays of the sun are perfectly distinct from his luminous ones.

It might be supposed that the substance which showed great power of translucency would also evince similar capabilities with respect to diathermanancy, but experience has proved this assumption to be perfectly erroneous. If we select chloride of sodium in its crude condition, common crystal, and alum, they will be found nearly all equal in their power of transmitting light, but a wide discrepancy will be found in the manner in which they transmit heat. Their diathermanous capabilities are in the proportion of 9, 62, 93. It is quite possible to modify these proportions of bodies so as to produce quite contradictory and almost apparent paradoxi- war pumphets containing the Patent Laws and full particulars of the mode cal results. Thus a mirror can transmit light, and a perfectly translucent surface is capable, under certain conditions, of reflecting it. We really know the imponderable elements by their effects alone, and in spite of many learned surmises and ingenious theories of their origin and nature, we are as much in the dark as ever respecting their true cause and character. The effect of platinum upon glass, and the modification it produces upon its optical properties, has been turned to account by M. Dodé some time ago. He takes an ordinary plate of glass, and by a chemically mechanical operation coats it upon one side with an almost infinitely thin layer of platinum. By this plan he obtains a mirror with direct reflection, and which mey also, curiously enough, be employed as a common window pane by turning the coated surfaceoutside. A slight tinge is imparted to the objects beheld through this medium, but otherwise the vision is clear, and the outlines of the objects well defined.

As all rays of light and heat must be disposed of by reflec tion, absorption, and transmission in different proportions, it is manifest that when a transmission and absorption accompanies a reflection, there is a loss incurred when the end in view is to bring into play the reflective powers only of the body. To prevent this, it is the practice to cover the nonplatinized surface of the mirror with a slight coating of varnish. In this condition they are, of course, not translucent but when they are intended to be manufactured in the form of kitchen and domestic utensils the varnish is omitted They are, moreover, covered with a variety of designs, produced by corroding the surface of the glass and platinizing the engraved portions, which, therefore, are rendered alone transparent. Very beautiful and elaborate designs can be produced in this manner. One of the distinguishing features characterizing the light transmitted by glasses playinized in the manner described, is its peculiar softness and tone. M. Leroux was the first to notice this particular attribute of the light, and stated that it might be turned to good service in shielding the vision when engaged in regarding any intense source of heat, such as the sun, smelting, or gas furnaces When the natural sight is weak or temporarily deranged. these platinized glasses might be advantageously substituted for the tinted or colored ones usually employed, which are supposed to possess powers of neutralization that in reality rarely belong to them. They have already been replaced by the former in some astronomical instruments, to modify the intensity of the solar rays. All that is necessary is to place one of the glasses before the object-glass of the telescope, by which means a large proportion of the rays are reflected, and only a number pass through sufficient to enable the observer to study the aspect of the luminous body, without fatigue or annoyance to the eye. This property of subduing and softening rays of ardent light is not confined solely to platinized glass. The same effect is produced by the application of different metallic substances. If a pale blue glass be simply covered with a piece of gold leaf, the light transmitted is instantly endowed with a peculiar soft tone. A slight characteristic tint is also imparted to the light, which depends upon the nature of the metal employed. Thus, if pure gold be used, the tint is of a light greenish hue, while the ordinary or jeweler's gold, which always contains a certain proportion of silver, gives a bluish shade, varying in depth of color with the amount of alloy in the gold. The effect of thin sheets of metallic substances upon light has been known for a long period, and M. Foucault has proposed to silver the object-glasses of telescopes employed solely for taking observe vations of the sun. He himself made the experiment upon the lens of a large telescope in the French Royal Observatory, and found that the image lost none of its clearness or

Scientific American.

OFFICIAL REPORT OF PATENTS AND CLAIMS Issued by the United States Patent Office, FOR THE WEEK ENDING SEPTEMBER 8, 1868.

PATENTS ARE GRANTED FOR SEVENTEEN YEARS, the following

	a solitorate of foost	
	On filing each Caveat On filing each application for a Patent, except for a design Quitsung each original Patent	\$10 \$15
	On issuing each original Patent.	\$20
	On appeal to Commissioner of Patents On application for Reissuc	\$20
	On application for Resauct	\$3U
	On granting the Extension	250 250
	On Alor a Disclother	\$10
1	On Slieg a Disclaumer On Lat.' application for Design (three and a balfyears)	8:D (
1	On this application for Design (seven years) On filing application for Design (fourteen years)	15
	On filing application for Design (fourteen years)	\$30
	In addition to which there are some small revenue-stamp taxes. Resider	at6
	of Conside and News Section new \$500 on unnighten	

of applying for Letters Patent, specifying size of modelrequired, and much other nformation useful to Inventors, may be had gratis by addressing MUNN & CO., Publishers of the Scientific American. New York.

81,861.-GRAIN MOISTENER.-L. J. Adams and J. H. Esale,

Avon, Ill. We claim the combination of the steam pipe or pipes, F. perforated shield, G, and drip pipe or pipes, H, with the hooper, A, substantially as herein shown and described and for the purposes set forth. 81,862.—SAFETY ATTACHMENT FOR POCKETS OF APPAREL.-

Alred Arneman, Guttenberg, lowa. Islaim a prokerbook protector, consisting of the wire clasp, A, and of the plate, B, spring, c, hook, d, and knob, f, all arranged and operating substan-tially as herein shown and described. \$1,863.—STEAM SAFETY VALVE.—E. H. Ashcroft, Boston,

 $^{\prime}$ Mass. I claim the arrangement of the projecting jacket, d, with the cross head, C, with reference to the valve and spring, substantially as herein shown and

81,864.—PORTFOLIO.—G. Ashworth and E. Ashworth, Man-

51,004.— FORTFOLIO.—G. ASIIWOITIN AND E. ASIIWOITIN, MAIn-chester, England Patented in England, March 25, 1867. We claim the spring clops or fasteners, G. constructed and applied to a port-folio substan iaily as described, in combination with a band or bands, c, of leather, or other suitable material, and which are adapted to staples or bind-ers secured to sheets to be bound, substantially as specified.

81.865.—Operating Shuttle Boxes in Looms.—John Ash

81,865.—OPERATING SHUTTLE BOXES IN LOOMS.—John Ash worth (assignor to George L, Davis, John A. Wiley, and Joseph M. Stone), North Andover, Mass.
 I claim, 1st, The combination of the lever, E, with the two cam wheels, H and L, arranged with and acting on said lever, at different points in its length substantially as and for the purpose set for the Add The combination of the lever, E, the cam, H, and its hook rod or rods for operating the same, and the cam, I, and its hook rod or rods to coverating the same, with the vibrating pawl or driver, N, and the levers P, and the pattern chain, and their accessories, for controlling the movements of the shuttle boxes substantially as described.
 8166.—WATER WHEEL.—Vincent M. Baker, Preston, Minn.

I claim the chutes, x_i in combination with the sliving gates. d, operated through the medium of the ring, H and gearing, k i, all arranged substantially as and for the purpose set for the

81.867.-STILL -G. O. Baldwin, Hillsborough, Ohio.

I claim the slide, D, and condenser, E, constructed as described, when used a combination with the boller, B, and steam pipe, C, substantially as and for he purposes herein set forth. the purposes herein set lorin. 81,868.—Apparatus for Rectifying Spirits.—W. G. Bar-

SI,868.—APPARATUS FOR KECTIFYING SPIRITS.—W. G. Bar-ette, Canton, Md. I claim the conduitation, with the still, A, of the cylinder, B, provided with the condensing chambers, D and E, refrigerator, F, and pipes, H and I, sub-stantially as and for the purpose describel. The arrangement of the supply pipe, G, discharge pipes, K and M, the arr tube, L, and refrigerator, F, substantially as and for the purpose de-scribed.

The combination, with the cylinder, B, of the stop cock, R, tubes, S and for the purpose de-cribed.

81.869.—COFFEE MILL. -W. H Barns, New London, Conn. Iclaim the combination and arrangement of the coiled spring. a, with the arbor of the runner. C.shell., D, and an art, b, all operating substantially as shown and described and for the purpose set forth.

81,870.—Register for Knitting Machines.—B. B. Bollin-

ger, Loulsville, Ohio. I claim, ist, the knitting machine register composed of a pattern wheel, y, aspring hammer, F, and an alarm bell, substantially as and for the purpose

2d, in registers for knitting machines, the combination of the alarm bell, hammer, and mechanism for moving the pattern wheel, substantially as here

in described. 81,871.—PRINTING TELEGRAPH INSTRUMENT.—R. K. Boyle

(assigner to himself and Guseppe Taghabue), New York city, I claim, Isr, Arranging a pair of electro magnets on each side of two horse-shoe magnets, which are instemed to an oscillating shaft, substarvially as here-in shown and described, so that one por of each horseshoe shall be attracted by hit one electro-magnet, for the purpose specified. 2d, The application of the adjustable springs, de', to the stationary part of adjust the same in the center of forces, substantially as berein shown and de-scribed.

adjust the same in the center of forces, substantially as octain shown and se-scribed. Sd, The insulated sleeve, f, attached to the horseshoe magnet, in com bin a-tion with the slotted pillar, s, and with the wires of the local magnet, all made and operating so that when the oscillations of the horseshoe magnet, will cease, the connection of the wire of the local magnet will be completed, substantially as and for th. purpose herein shown and ds scribed. 4th. Connecting the local magnet, F, by means of an escacement lever, j, with the friction wheel, H, substantially as and for the purpose herein shown and described. 5th, The lever, I, when connected with the sleeve, m, in combination with the friction wheel, H, and spring, p, all made and operating substantially as

sth, the lever, 1, when connected with the sleeve, m, in combination with the friction wheel, H, and spring, p, all made and operating substantially as berein shown and described. Grit, The device, here in shown and described, for looking the bar, n, into the toothed disk, L, by the action of the horseshoe, and subsequently of the local magnet, said device consisting of the sleeve, n, lever, i, spring, p, and friction wheel, H, the latter having upright pins, l, and all made and operating substantially as and for the purpose herein shown and described. The Connecting the friction wheel, H, with the scrapement levers, j and M, all made and operating substantially as and for the purpose herein shown and described. S h, Connecting the sleeve, m, which is operated by the action of the local magnet, F, with t e sleeve, m, which is moved oy the action of the horseshoe magnets, E', substantially as herein shown and described. 9th, The device here is hown and described. 9th, The device here is hown and described. 10th, Combining the sleeve, is surned, said device consisting of the cam, u, arm, w, forked bar, v. arm, c', ratchet wheel, y, and block or pin, b', all made and operating substantially as here in shown and described. 10th, Combining the here show mand described. 10th, Combining the here show mand described. 10th, the type-wheel shaft that, by the action of the horse-shoe magnet, it receives the required motion, while, by the action of the horse magnet, it instantaneously stopped in the desired position, substantially as shown and described. 11th, The arm, N, when secured to and projecting from the shaft, J, in com-

described. 11th, The arm, N, when secured to and projecting from the shaft, J, in com-i bination with the arm, n, which projects from the revolving and sliting sleve, m, and which, by being locked into the stationary disk, I, also lockstine shaft, J, substantially as and for the purpose herein shown and de-sorthad

scribed. 12th, The type-wheel. O, when provided with a pin, h', in combination with 12 the second provided with a pin, h', in combination with 12 the second provided with a pin, h', in combination with

2d, The combination of the seat, E, box or tr ugh, G. and pivoted box. I with each other, and with the movable platform, B, and frame. A, substan tially as herein sh was nand described, and for the purpose set torth. 81,876.—MEDICAL COMPOUND.—J. H. Butts, Stroudsburg,

Pa.
Claim the compound above described, composed and operating substantiality as and for the purpose herein set forth.
81,877.—PESSARY.—W. F. Chrisman, Trenton, Tenn.
I claim a pessary, of the form, construction, and method of operation, substantially as shown and described.
81,878.—STEAM SAFETY VALVE.—Gilbert H. Clemens and Everett Clemens, New York city. Antodated August 28, 1868. We chaim is, the arrangement of the enclosed chamber, it, with reference to the valve within said chamber, the levers, h h, and weight, k, below the same, substantially as et forth. to the valve within said chamber, the evers, h h, and weight, k, below the same, substantially as set forth. 2d, The arrange near of the levers, h h, radially, whereby their shorter ends act directly upon the valve stem, and their longer ends sustain the weight substantially as set forth. 81,879.—PLANE.—Alfred H. Comp, Mount Joy, Pa. I claim the beveled shding plate, A and beveled grooved plate, B B, with their screw bearings, when constructed to operate in the manner and for the purpose specified.

purpose specified. 81.870.—BED LOUNGE.—J. L. Cox, Manchester, N. H.

I claim the ratchet, b. and lock, x, in combination with the hinge, a, operating lack, A, arm, A', with ratchet, m, arm, C, with ratchet, h, and joint, D, the several devices operating relatively to each other, as described and for the purposes specified. 81,881.—Hot-bed Sash and Frame.—Matthew Cridge, Alle-

short.—Information of the same and the short of the same and the second second

81,882.-WAGON BRAKE.-H. Davidson, New Salem, Ill.

81,882.—WAGON BRAKE.→H. Davidson, New Salem, 11. I claim the arrangement, here is shown and Gworibed, of the brake bar, S. slotted plate, P, U-shaped levers, O H, connection, N, rod, K, formed with an eyear. its rear end, bolt, G, arms, E. slotted plate, D, formed with hooks, alot-ted strap, F rod, C, having a hook at each end, and sliding sleeve, A, all con-structed as described, and arranged with relation to the reach, Q, king bolt, M, and pole, B, to operate asset forth. =Mat J. Dawknos, Brookston, Ind. I claim, 1.t, ettingor adjusting the wheel, with the pokes inserted there-in, to the three, by means of came caston to a thimble, said came being located within the hub, and their faces bearing against the spokes, substantially as described and set forth.

within the first, and within the source and a genue of the source of the

3d, The step-shaped form on the lower part of unespone, when there are the cans. the cans. 4th, in combination with the foregoing, the tapering sockets in the cen-traily divided hub, substantially as described. 81,884.—MANUFACTURE OF SOLID FATTY ACIDS.—Louis Adolphe De Milly, Paris, France. I chaim, 1st, Complete saponification, by means of sulphuric acid in the space of three minutes or less, substantially as and for the purpose set forth.

forth. 21, Also, saponifying by means of sulphuric acid, without distillation or the fatty acids, and without the usual deposit of carbonaceous, insoluble, tarry matter, which accompanies the existing mode of using sulphuric acid, as described in the specification. 3d, The use of water and white of egg for giving the brilliant whiteness to the candle stuff, substantially in the manner and for the purpose set forth.

Att, The due mixture of the pair and animal fat, substantially as described, for givi g the crystalline structure found in this compound. Sth, While I do not claim the use of pressure to s parate liquid and solid fast treatred with subjuratic acid, I do claim treating this material with the succession of hot and cold pressure, substantially in the manner and for the purpose described. 81 885.—COFFIN.—Edward Ellingen, Mineral Point, Wis. L claim the confin. coated upon the inside with a composition impervious to

81.885.—COFFIN.—Edward Ellingen, Mineral Point, W18. I claim the coffin, coated upon the inside with a composition impervious for moisture, as described, and rendered air-tignt by the 10-14 rubber packing, b, let hato the under surfare of the lid, and field in place by the metallic strip, B, as herein set forth and shown.
81,886.—MACHINE FOR SIZING AND POLISHING BRAID.—John

S Fenner (assignor to the The Inman Manufacturing Company), War

S Fenner (assignor to the the final manufacture, overlap, it is ren. R. 1. ren. R. 1. I claim, ist, The arrangement of driven guide and feed rollers with a rotative, substantially in the manner shown and described, and so that the britsher, substantially in the marking shall be repeatedly subjected to the action of the brish or brishes, substantially as described 2d, The arrangement of guide and tension rollers, jj' c c'd d'g g' and h h', upon opposite sides of brush drums, C D, substantially in the manner and for the nurose described.

for the purpose described. So is a substantially in the manner and 3d, in combination with a dressing and polishing machine, mechanism, sub-stantially as herein described, for communicating an intermittent movement to the braid, while it is being actea upon sy brashes, substantially as spec-

ified. 4th, The wrrangement of the weighted roller, F2, and the roller, F, with a sizing trongh and drying and dressing bruspes, as described. 5th, The wrrangement of the guide and tension rollers, c d g, with the brush-es, C D, substantially in the manner described. 6th, The combination of the real, E, sizing trongh, F, brushes, C D, guide and tension rollers, i c d g and h, and reet. El all arranged substantially as described.

CULINARY APPARATUS.-Joseph S. Field, Brook-81.887.-

OLOSI.—CULINARY APPARATUS.—JOSEPH S. FIELD, DIOM-lyn N.Y. I clam ist, The apparatus for cooking by steam, when made to be one com-pl-te and in-sparable vessel, having disruct compartments, for the recep-tion of pars and dishes, each compartment provided with a door, and so arranged that they are all supplied with steam from a common boiler, by means of a side flue, having one of its walls perforated, as herein shown and described.

described. 2d, The vessel, A, when divided, by means of partitions, B, into compart-ments, which are connected by means of the flue, F, with a boiler, C, each compartment provided with steam-tight doors I, and the flue, F, and boiler admitting of the passage-pipe, G, arranged as described for the purpose specified.

Bonch admitching of the passage epipe, it, arrange das described for the purpose specified. 81,888.—STARCH SEPARATOR.—Colgate Gilbert, Buffalo, as-signor to J. J. Gilbert. Little Falls, N.Y. I claim, 1st, The method of supportin: and vibrating the bolting frame, A of a star of separator, substantially as shown and described and for the pur-pose set forth. 2d, The method of supporting the bolting cloth, B, of a starch separator by long tudinal ribs, a a, etc., arranged and combined substantially as shown and described and for the purpose set forth. 3d, The extensible and adjustable tube, composed of the parts, S T U V V when forming part to a surch separator, and arranged and combined to oper-ate substantially as shown and described and for the purpose set forth. 4th, Tue method to adjusting the incline of a starch separator by means of screws, g, when the same are arranged in combination with the receiver, C, frame, A, and bed, (+, all substantially as shown and described and for the purpose set toith.

purpose set forth. 5th, An improved starch separator, when constructed and arranged to oper-ate substantially as shown and described and for the several purposes set forth. 81,889.- SASH FASTENER.-L. D. Gould, Newark, N. J.

L claim the combination of the t-olt e, with the eccentric, a, when combined therewith, by sliding the eccentric in the manner and for the purpose shown.

81,890.—ANTI-SLIPPING PLATE.—W. B. Gould, Boston, and W. E. Harris, Taunton, Mass. We claim a pate, provided with a device for securing it to a table, substan-lally as set forth. 81,890.

We claim a plate, provided with a devicer recurring it to a table, substan-tially as set forth. I claim, lat, The rake, C, constructed as described, in combination with chain, E, guide rail a, plate, D', hook, e, plate, D, pin, g', and guide, F, or their equivalent devices, the whole arranged and operating substantially as herein set forth and specified. 2d, The. compresser, R, consisting of standard, W. provided with cam, y, hook, c', and plates, u and v. the compressing arms, Y, plates, Y' T, and adjustable spring lever, Z, each part constructed as described, and all arrang-ed and operating substantially as herein set forth. 3d, The regulating device, consisting of segment, M. pawl. N, adjustable plate S, bent rool, 2, and connecting plate, q, all arranged and operating sub-stantially as and to the manner herein described and sp cified. 4th, in combination with the compresser, R, the canH, provided with open ing 1, and flange, 1', with its pawl, 2', substantially as and to the purposes set forth

Reported Officially for the Scientific American.

and Nova Scotia pay \$500 on applicat

sharpness, and the plan was greatly superior to the ordinary	the turning cam, P. sl. eve, i', on shaft, R, pin, j', on sleeve, i', arin, T, and	ing, 1, and hange, 1', with its pawl, 2', substantially as and for the purposes
one of interposing a colored medium before the eye-glass of	spring, m, all made as described, and operating in combination with each other, substantially in the manner set forth.	5th, the combination of the knile, 3, fork, 4, and device, 1 y, and cam hanges,
the instrument.—Mechanics' Magazine.	13th, be sliding sleeve, i', which is moved when the type-wheel shaft is stopped, and which is combined with the pin, S, having the arms, M T and U	U', all arranged and operating substantially as set forth. 6 h. The binding device, consisting of case, A", shaft, B", rod. H", pin, G".
	level operating the ninting cushion, V. substantially as and for the Durnase	spring, h", fingers, K" K", pillon, C", head, c", flaiges, d" d", yoke, e", and tork d standard, D", or their equivalents, each and all constructed, arranged,
VARNISH FOR IRON WORK Dr. Lunge has published a	the fight of a start of mhan reading motion from the friction my col	and operating substantially as and in the manner herein described and
method of making an excellent black varnish for iron work.		7 th, The bent lever, L", brace, m", case, A", and arm, 7. of the device, IV,
0	15th, The printing cushion, V, when pivoted to an upright pin, and when	same, the whole constructed and aganged substantially as herein described
he distills gas tar until nearly all the volatile products are	operated by a spring, o', which is secured to one of the arms of the pin, S, substantially as herein shown and described, so that it will be forced with	and for the purpose set forth. 81.892 — HAS HEATER — I T Greenwood Beloit Wis
gotrid of. He then stops the distillation and dissolves the	sufficient power against the edge of the type-wheel, and will still be yielding,	I claim a kerosene stove, herein described, or its equivalent, when made of
residual pitch either in the heavier oils, or, if a very quickly	181.872.—PIANO HAMMER.—C. W. Brewer, Racine, W 18.	wood, in combination with cold-air drafts, a a. tin lining, E, cold-air cham- bers, e e a a, heat deflector, d, cones, L L, tank, M, cover, M', and cooler, 1,
drying varnish is required, in light oils or naphtha. This	I claim a piano hammer, constructed substantially as and for the purpose set forth.	when the whole is constructed and arranged substantially as and for the pur- pose herein set forth.
varnish is, of course, the original tar minus the ammonia,	81.873RAILROAD CAR HEATERHiram M. Britton (as-	81,893 — GLOBE VALVE.—G. D. Hadley (assignor to himself
water, carbolic acid, and other things which give it its dis	signor to himself and Joel F. Richardson), Cincinnati, Ohio. Aptedated March 9, 1868.	and Gardner Waters), Cincinnati, Ohio. I claim a globe valve when constructed with a blank surface, A, above the
agreeable odor, and make it so long in drying.	I claim, the relative arrangement within the car. A, of the hot-air chamber.	screw. a, in the body or shell of the valve, and the corresponding blank sur- face, B, above the screw, b, on the stanu, D, so that when the screw, b, is re-
	pipes, H, conducting pipes, 1 I'M N, and fan, J, substantially as and for the	lieved from the screw, a, and the valve, E, is bearing upon its seat, the blank surfaces, A and B, shall form a perfect guide for the purpose of grinding the
EFFECT OF FLANNEL ON THE SKIN Dr. Fox remarks that		valv. to its seat without being obliged to remove the handle or the packing from its stuffing box or the body of the valve from its connections.
under the use of flannel, local heat is intensified and itching	Mansfield Certer, Genu.	81 894.—Explosive Compound.—Joseph Hafenegger, San
often increased and kept up. He gives as a practical rule	in a cill minding machine so asto produce an automatic vibratory change	Francisco, Cal.
"whenever you have a congestive state of the skin, or any		I claim the within described explosive compounds consisting of Nos. 1234 5, made of the ingredients enumerated, mixed or compounded in about the
disposition to neurosis, take off the flannel and place it, if	Iowa. claim, 1st, The movable platform, B, hinged or pivoted bars, C, and cord	proportions specified. Also, the self-igniting match, compounded of the liquids or fluids enumer.
necessary, outside the linen, this will prevent any catching	c rain, D, in combination with the frame, A, substantially as herein shown	ated , whether applied separately or mixed, to the explosive compounds or mat; 3, al asought to be ignited or exploded, substantially as described,
cold."	I secribed and for the purposes set forth.	

81,895.-SERVICE PIPE FOR BUILDINGS.-Edward Hagan, 81,915.-LAMP SHADE.-E. A. Locke and W. N. Weeden,

S1,030. — DERVICE ITE FOR DETERMINE THE FOR DETERMINE New York city. I claim thecasing, E G and N, inclosing the service pipes, forming spaces around the latter, the casings b-ing provided with apertures, d, for the in todact on of steam or hot, air to the spaces surrounding the service pipes which latter are connected by union joints immediately at the points of junc-tion or the several sections of the casing, E G, doors O P QR, being former in casing, N, opposite the joints of pipes, L J R, all constructed and ar-rang d in the manner and for the purposes substantially as shown and de-scribed.

204

81,896.—CHURN.—T. Haigh (assignor to himself and C. M Lightner), Harrisburgh, Pa. I claim, 1st, Suspending the cubical box between the posts, B B, by attach-ing the trunnons, b d, to two of its diagonally opnosite corners, whereby, as the box is ro ated, the inclusations of its sides are rapidly changed, as herein shown and described.

wn and described. , The cog wheels, E G, and pnlleys, D H, and hollow trunnion, d, all oper g toge: her, substantially as described, in combination with the diagonal ispended box and its dasher, all substantially as shown and described and be ournose set forth. by suspended box and its dasher, all substantially as shown and described and for the purpose set forth. 81,897. — CRANBERRY GATHERER.—Warren Hall, Dennis,

Mass. I claim the arrangement of the joint axle with respect to the chute, when hinged to the carriage body, as set forth, the said axle, undersuch arrange-ment, being fastened to the chute. Also, the combination and arrangement of the series of knives, k k l, with the coulte, its rech and carriage combined, as set forth. Also, the combination of the receiver, made as described, with the carriage and the chute combined, and constructed in manner and so as to operate as specified.

-PLANING MACHINE.-S. M. Hamilton, Baltimore, 81,898

Maryland. I claim the combination of the adjustable suides, D. with the cutter head. onsuracted and operating substantially as described and shown. 1,899.—STOVEPICE THIMBLE.—Gunder E. Hammer, Roch-81.899

Side of the store indical casing, A, and perforated h ads. the lower head being made it yoo parts, one of which is inzed to the cylinders, A B, while the colter, E, is uged to the outer cylinder, and provided with fastening devices, as herein own and described for the purpose specified.

shown and described for the purpose specified. 81,900.—COCK OR FAUCET.—Chas. Harrison, New York city. I claim, lst. The piston h, formed bollow, in combination with the guide, way here and cylinder t, as and for the purposes specified. "d, the groves, t, within the cylinder, t, in combination with the piston, h, and valve, n, as and for the purposes set forth. 81,901.—BRICK MACHINE.—Peter Hayden, Pittsburgh, Pa.

1 claim, 1st, The intermetingly rotating cylinder, M, provided with the press baxes. L', followers, T, recesses, d, and teeth, i, in connection with the track arm, f, on shaft, N, all arranged to operate in the manner substantially is and for the purpose specified.

crank arm, f, on shaft, N, all arranged to operate in the manner substantially as and for the purpose specified. 2d, The plunger R, operated substantially as shown and arranged, in rela-tion with the followers. T, for the purpose of compressing the clay in the press box's, surstantially as st t forth. 3d, The plunger, U, overated from the plunger, R, through the medium of the lever, V, for the purpose of discharging the oricks from the press boxes, L', surstantially as shown and describ. d. 4th, The combination of the pressure rollers, F I, rotary shaft, K, proyide d with the spiral wings or blades, b and b', the cylinder, W, provided with the press boxes, L', with the followers, T, therein, the plungers, R U, and the lived cam, X, all arranged to operate in the manner substantially as and for the purpose specified.

•ne purpo 81,902 -

the purpose specified. 81,902 - 1 IFTII WHEEL BENDER.—G. W. Heckart (assignor to bmself and C. Kramer), Columbiana, Ohio. I clam a bending machine for fifth wheels consisting of a series of forms, B, clamping screw, C, and adjustable bending device, formed of the arm, x, rollers, i and h, levers, D 78 % and 12, hnk, 11, and arm, 10, the whole being constructed, arranged, combined, and operating as he em described and for the purpose set forth. 81,903. -M ANCFACTURE OF SHEET AND PLATE IRON.—C. C. Hinsdela Cheedand Obo

OI, NO. - MASTRACT, MC OF DHEET AND FLATE IRON.—C. C. Hinsdale, Cieveland, Oho.
I claim, 1st, The herein described compound, and the manner of using the same, in the process of mode of making plate or sheet iron, substantially as and for the purpose set forth.
2d. Coaring the metal with plastic alloy separately, and in combination with lamp black, or its chemical equivalents, for the purpose set forth in the process described.

Cress described. 81,904.—STOVE GRATE.—Benjamin F. Holbrook and Ebene-zer B Rumrill, Boston, Mass. We claim a movable bed-plate, B, substantially as and for the purpose set

Also, a bed plate, B, revolving on balls, c c c c, substantially as and for the

Also, a bed plate, b, revolving on bans, cere, substantially as and for the purpose described Also, the movable bearing or loop, g, in combination with the revolving bed platy. B, and arbor, i), of the revolving grate, C, substantially as described for the purpose set forth. Also, the annular ring, H, for protecting the revolving bed-plate and sup-porting the liming, substantially as describe i. Also, the sliding and removanle port cover, F, in combination with the port E, and an bor, D, with its spirm; m, constructed and operating substantially as and for the purpose specified. Also, an arb r. D, so pivore to its grate as to admit of being readily con-nected therewith or disconnected therefrom, substantially as and for the pur-pose set forth.

-VENTILATOR.-William Holzhauser. Buffalo, N. Y I claim, 1st, The combination with the system of pipes, B b' F, of a tan blower. C for the purpose and substantially as described. 2d, The combination with sais system of pipes, of the revolving wind catch-er. D, constructed and operating substantially as and for the purpose de-

, d. In combination with the above, the main regulating dampers, G G', and stors, H H', arranged and operating as described. crib

registers, HH', arranged and operating as described. 81,806.—COTTON SEED PLANTER.—Gilbert Jessup, Shortsville,

S1,300.—COTTON SEED PLANTER.—Gildert Jessup, Snortsville, N. Y. Antedsted Amen-427, 1868
I claim, 1-t, The construction and arrangement of the revolving cylinder, A, or us equivalent, for the equivalent for the purposes herein described.
2d, The tock shaft, b, arm, H, and spring, o, in combination with the revolving cylinder, B, and described.
3d, The spring, G, or its equivalent, in combination with the pins, v, for the purposes set forth, G, or its equivalent, the construction of the single process.

3d, purpe 4th

Ath. The longitudinal adjustment of the shaft, P, and cylinder, B, in com-bination with the stationary cylinder, A, or its equivalent, for the purposes of r gulating the quantity of seed being distinuied. 81,907.—WATCH REGULATING ADJUSTMENT.—Frank G, John-

son, Port Richmond, N Y. I claim the fixed screw shift, a upon which the grooved nut, c, carrying the end of the regulating hand, d, is rotated, all airanged and operating as de-scribed, for the purpose specified. 81,908 — MANUFACTURE OF IRON AND STEEL. — John Allcock

S1,908 — MANUFACTORE OF IRON AND STEEL.—John Allock Jones, Middlesb rough, England. I cl.im, 1st. The production of iron and steel, from cast or refined iron, by frastme.hung or lundling the same, adding thereto purity mg asens or fluxes, then separating as much of the slag as it is practicable to separate ther from, and removing the crule iron or metal resulting to furnaces or crucibles, and melling the syme, as hereinbetore described 2d. The preparing the crude iron or metal without the employment of a pudding process, and melting the same into cast steel, as hereinbefore de-scribed.

2d, The preparing the crude non of method cast steel, as neremotive a pudding process, and melting the same into cast steel, as neremotive a scrited. 3d, The conversion of castiron intom 'leable iron without the employment of the pudding process, by allowing the metai to remain for a sufficient period in the pudding or other furnace, as hereinbefore described. 4th, The employment of a hath, consist is of a slag or cinder, in which the crude iron resulting from the processes before referred to is melted, so as to be converted into steel, as hereinbefore described. 5th, The subjecting the crude iron resulting from either of the processes hereinbefore described to pre-sure, so as to asport the the ortion of the clin-der ir s we therefrom, prior to fits inclug placed in or upon the skel melting hearth or iurnace. 81.909 — Ice Boar, — Thomas B, Kelley, D undee, Ill.

Boston, , ass. We claim a lamp shade ring made from a strip, when the abutting ends of the strip are held together by projections thereon, which are inserted into a loop formed on one of the spiller supports, f, as specified. S1,916.--VARNISH FOR METAL, WOOD, AND PAPER OR OTHER DESTRICT POPERTIANE Hondran N.J.

81,916.-

81,916.--VARNISH FOR METAL, WOOD, AND FAPER OR OTHER FARRIO.-Robert Love Hoboken, N. J.
1 claim an enamel paint, or variable, composed substantially as described, for the purpose specified.
Also, for infig or compounding an ensmel, paint, or variable of the materials specified, substantially as described.
81,917.-LAMP CHIMERY CLEANER.-M. N. Lovell, Erie, Pa. Iclaim, 1st, The haadle, A, of a tamp chimney cleaser, provided with the spring clamo, b, and took as, substantially as and for the purpose described.
2d, The haadle, A. of a tamp chimney cleaser, provided with the grouped and euryed portion, B. in combination with the clamping spring, b, and hook set substantial variable or the purpose described.

20. The handle, A. of a lamb chimesy of eacher, provided with the grooven and curved portion, B. nr combination with the clamping spring, b, and hook e, substantially as an dior the purpose described.
81,918 — STUMP EXTRACTOR. — Charles C. Manuel (assignor to himself, William G. Eklins, and O N. Elkins). North Troy, Vt. I claim, 1st. The arrawement or the main tumbers, A and their accessory cross beam. B, braces, D and E. aprights, C and H. cross beams, G. boarser, J. when mounted on tour wneels, and constituting the frame of a machine for extracting and removing stumes and other heavy bodies, all substantially as shown and described, and for the purpose set forth.
2d. The arrawement of the chain, a, and its accessory sheaves or pulleys, deg, aud books, bb C., and roller, in combination, in a stump extraction, of the accessory gearing, k i h 1 m, and rope, n, allarranged tooperatesubstant. ally as and for the purpose.

Set forth.
Set forth

81,921.-CLOTH MEASURING MACHINE.-David Max (assignor

to bimself and Thomas Waltz!, Newton, Ill. 1 claim ist. The indicator, consisting of the shaft, H, worm, I, spurwheel, 7, pointer, K, a d annulls index, G, in comonation with the rolk, C D L L', ind filtion brakes, N N'all arranged and operating substantially as de-centered for the numeron encode ad

scriped for the purpose specified. 2', fn combination with a cloth measuring machine, substantially as here in described, the rolls, LL', composed of the roll proper, a, and clamomic proce, a', connected wy.means of the flaring ferrules or bands, b, substantially as and for the purpose set forth. 81,922.—GAS MACHINE.—Hiram S. Maxim, New York city. Loburg the standard in which the prescripting of concentration and the standard in the standard city.

any as and your the purpose set 107th. 81,922.—Gas MaCHINE.—Hiram S. Maxim, New York city. 1 claim, 1st, a gay machine, in which the production of gas is automatically stopped when its presente as well as its quantur is excessive, and as a suto-matically restarted when the difficulty is overcome, as set forth. 2 d. The cylinder, e, connected with the enclosed tank, D, to show the bight and pressure of the contents of the tank, and to convey part of them to the heading champer as specified. 3 d. The current tube, G, when provided with a valve, h, which is connected by a diaphragm, j, so as to be closed when the pressure of the gas is too high, as set forth. 4 d. The combination with each of the four separate vessels. A B D and I, the latter liaving the elastic diaphragm, J, stretched across it substantially as herein shown and described. 5 th, The device for automa ically operating the vive, s, which regulates the flow of eas into the gas holder, L said device consisting of the diaphragm J, pin, o, lever, L, lever, t, aring, w x, and springs, y, all arranged, combined, and ocerating, substantially as herein shown and described. 5 th, The pipe', M, for conducting the evaporated gas of the diaphrage J, pin, o, lever, L, when the there diaghragity of ar, said tube contamine the perforated partition, h', the inferror have, c' and the valve, e', all made and operating substantially as herein shown and described. 7 th, The cam, z, tor keeping the valve, s, closed, as set forth. 8 th, The pipe', for conducting filluminating gas from the gas-holder, I, to the heating chamber, a, substantially as and for the purpose herein shown and described. 81, p23.—SPRING BED BOTTOM.—A. McDaniel (assignor to himself at (8, 2, 4 mon). how was there

and described. 81,923.—SPRING BED BOTTOM.—A. McDaniel (assignor to bimself at dS. J. H nion), Dubuque, Iowa. I claim the combutation and arrang ment of the rails, B, rock, C, spring, D, and rails, F, provided with the upper springs, L, all substantially as and for the purpose described.

81,924.—Forward AxLE FOR CARRIAGES.—Hiram McIlroy.

Poplar Ridge, N. Y. Foplar Ridge, N. Y. I claim, let, The central pivot and socket, in combination with the hooke yield sugges on the circles for nunning the bead block and axie, substantially

a described. 2d, The chambered upper circles and hooks, and pivot socket, provided with the leather packing, enbstan ially as and, or the purpose described. 3d, The upper circle bar or olare, provided with the chambered circles and hook, and with the central pivor, all cast in one piece, and united to the head block in the manner described.

81,925.—COMBINED SPUE AND CREEPER.—Ferdinand Mehr

mann, Four-tain City, Wis. I claim a combin d spur and creeper, made and operating substantially as berein show, and described. 81,926.—Corset.—EmilieJ. Meriman, New York city. An-

61,300.—CORSET.—DiffileJ. Intrimut, New FOrk City. Alt-tedated September 4, 1868. I claim supporting the corsets and the clothing depending therefrom, by means of straps. I, the e dsof which are attached by an adjustable laring or other fastening to the waistband or middle of the corset, substantially as and for the purposes set torth. 81.927.—MILSTONE VENTILATOR.—John Metherell, Rockford, JUL

Ill. I claim the arrangement of the pipes, F. provided with fans, as described in combination with the cooling chamber, G. central passage, H. and fan, I, as and for the purpose set forth. 81 928.—BRICK MACHINE.—John C. Miller, Bushnell, Ill.

I claim the tun, E, and shaft, G, in combination with the frame, A, ways, c c, cog wheels, H and II, and molds, D D, all constructed as d.scribed, and operating substantially as and for the purpose's herein set forth. 81,929.—PLANE FOR CUITING BLIND SLATS.—John H. Mil-

ler, Oskaloosa, lowa. I claim the pivoted arms, G, and connecting rod, H, upon the carriage, F, when constructed and operating substantially as and for the purpose speci-

forth. 81,932.—ORE AND BONE CRUSHER.—Amos Newell, Rcdwing, Minn., as-tenor to himself, Henry S. Brown, Frederick Arnold, and Al. fred Arno'd. I claim two distinct sets of hammers, somade and arranged as to revolve in oppolite directions, adapted to and in combination with the case, A, suo-stantially as and tor the purpose describel. 81,933.—MILL FOR PULVERIZING BONE, ETC.—Amos Newell, pedging, Minn., assignor to humself. Henry S. Brown, George F. Arnold.

ther by a point and socket, of the spring, U, substantially as and for the pur-81,941.-DROPPER FOR HARVESTERS.-G. M. Peters, Lancis-

[September 23, 1868,

81,941. - DROPPER FOR HARVESTERG. - 4. P. Louis, Letter, Obio.
Iclaim. 1-t. Hinging or pivoting the platform to a bent arm or support, by means of which it is operated, it such manner as to admit of a reciprocating and cilting movement, substantially as described.
2d, The bent arm or roi to which the platform is hinged, and by means of which said platform is vibrated, in combination with the rod or link for tilting the platform upon its operating arm.
3d, The bent rod or arm. J, link, J' crank, K, connecting rod, L, and lever. M, or ther equivalents, in combination with the platform, I, arranged and operating substantially as described.
81,942. - GRASS SEED SOWER. - Darius G. Pickett, Stockton, N. Y.

N. T. I claim the combination, with the seed slide, B. of the pits, ff, holes, d d, and cross partitions, g g, the whole arranged as described, and operated in the manner and for the purpose specified. 81,943. — WHEBL FOR VENICIE — Henry Poth, Pittsburg, Pa. I claim, let, The combination in a vehicle wheel, of the tenon plates, e, bev-eled ring, d, screw box, B D, and metal bub, A, substantially as herein shown and described. 3d. The combination, in a vehicle wheel, of the screw box, B D, packing rings, c and f, when arranged to form an oil tight space, h, between the box, B and the metal hub, A, and provided with boles for the screw, i, all sub-stantially wherein shown and described.

\$1,944. — GAS PRESSURE REGULATOR. — Charles C. Ramsay,

Chicago, nll. Chicago, nll. I claim the combination of chamber, B, having the diaphragm, b, with the piralspring, H, arranged as shown, with the valve, C, resting on the lever, c, connected to the diaphragm by a rod, F, all arranged to oper see substan-ially as herein set forth. 81.945.—CLOCHES-PIN.—Joseph A. Rand, Morrisville, Vt., assignor to Thomas A. Mitcaell, Washington, D. C. Antedated August 27, 1868. arrangement and construction of the pieces, A and B, with the square bead, C, and its aperture, D, at one end, as herein described, an i for the purposes set forth.

81,946.—DEVICE FOR LOADING COAL.—Daniel Risher, Jr.,

51,940.—DEVICE FOR EXAMPLE STATES STATES TO A STATE FOR EVALUATION OF THE STATES AND A STATES AN

either end of the hopper into the boat, flat, or barge, substantially as here-inherore set forth. 2d, The tipping coal hopper, g, made with the bottom concave or sloping down toward the middle from the alscharging en is, substantially as and for the purposes hereinbetore set forth. 3d, The tipping coal hopper, g, connected by bearers, d, with a rocking shaft, d', mounded on a car or truck, substantially as and for the purposes hereinbefore set forth. 4d, Sliding bars, m', carrying a coal-hopper, so connected with the bear-ers, d, as that, by a slight longitudinal motion in inparted thereto, the center of gravity of the loaded hopper may be shifted, substantially as and for the purposes above setforth. 5 h, A tipping hondle, i, attached to therocking shaft, a, of a coal loading car, in conclumators with tripping devices, constructed and used substantially as and for the purposes hereinbefore expressed. 81,947.—CHALK AND SAND-PAPER HOLDER FOR BILLIARD-TABLE — Charles F. Ritchel (assignor to bimself and Henry S. Haynes), (bicazo, II) 1 claim an improved chalk and sand-paper holder, formed by the combina-tion of the recessed plocks, A and B, with each other, said blocks being con-structed and arrange dsubstantially as here in shown and described, and for the purpose set forth. 81,944.—FAUCER,—Francis Roach (assignor to himself and

the purpose set forth. 81,948.—FAUCER.—Francis Roach (assignor to himself and

81,94%.—FAUCET.—Francis Koach (assignor to nimsen and Joseph Zane), Boston, Mass. I craim the arrangement of the induction and eduction sizes, b c, the valve sevt, a the valve, D, the case, A, the spring, D', the stem, C, the cap, B, the neck, d, the key, E, ind the curlis, if, and stops, g z, the whole being as and to operate as hereinbefore discribed, and as represented in the accompany-ing orawings. Also, the airangement and combination of the two holes, h i, with the key, E, and the spindle, C, arranged and combined with the valve, its spring, and case, as specified. Also, the combination of the adjusting screw, F, and the annulus, k, up pined to the spindle, C, as described, with the k v, E, arranged with the pindle, C, its valve, and spring, and the neck, d, substantially in the manner and under circumstances as hereinbel. The Specified. 81,949.—SorA BEDSTEAD.—S.R. Hoscoe, Obion County, Tenn. I claim the combination of the cushions, D and E, with the fol ling head-

I claim the combination of the cushions, D and E, with the folling head-boards, A and B, the hooks, d a, the eyes, b b, and the couplings, m, all constructed and one rating substantially as and for the nurpose described.

81,950. BRIDGE.-Henry A. Rust, and Ludwig Hermann,

Chicago, Ill. We claim, ist, The arrangement of one or both ends of the main braces, when constructed in a c.a.ex or rounded form, m corresponding concave grooves or recesses in the blocks, B and E, substantially as specifica. 24. The arrangement of the mechned end of the coulter braces, in a corre-sponding inclined recess in the top block, to operate substantially as set forth.

81,951.-GRAIN SEPARATOR.-David Shannon, and William

10710.
81,951.—GRAIN SEPARATOR.—David Shannon, and William Spencer, Winslow, Ind.
1claim, 1st, The combination of the cylindrical drum, M, case, C, with Inclined plates, I, openluss, H, lever, E, strap, G, and par, D, all substantially as here nget for the outpose of giving proper pitch to the box, C, substantially as and for the purpose of giving proper pitch to the box, C, substantially as and for the purpose of giving proper pitch to the box, C, substantially as and for the purpose of giving proper pitch to the box, C, substantially as and for the purpose of giving proper pitch to the box, C, substantially as and for the purpose, I, to feed the gran from the hopper, O, into the drum, M, substantially is and for the purpose, sherein set forth.
81,952. -LATHE HEAD.—Henry F. Shaw West Roxbury, assigner to James A. Woodbury, and Solomon S. Gray, Boston. Mass.
1claim, lst, The combination of the gives, D and E, the disk, P, having the spring purpose specified.
2d, The combination of the guley block, C, provided with the cam sleeve, d, disk, P, and eccentric collar, c, catch, S, and gear wheel, E, substantially as and for the purpose set forth.
81,953.—MECHANISM FOR OPERATING THE BED OF PLANING-

81,953.—MECHANISM FOR OPERATING THE BED OF PLANING-MACHINES -Henry F. Shaw, West Roxbury, assignor to James A. Wood-bury, and Solomon S. Gray, Boston. M.ss. I claim, ist, In combination with the bed of a planing machine, the rack, e, pinlon, d, and shaft, g, or their equivalent, and the internal and external gears, i.e. eccentric sleeve, i', and the fast and loose pullers, when arrange and operating substantially as specified, and for the purpose set forth. 2d, the arrangement on the shaft, g, of the fast and loose pulleys, the ec-centric sleeve, i', and the fast and loose pulleys, the ec-centric sleeve, i', and the internal and external gears, e e', substantially in the manner shown, and for the purpose set tott. 81,954.—LADDER OK STEEP FOR STREET LAMP-LIGHTER.—M. M. Smith, Nashville, Tenn. I claim a step ladder for lamp posts, constructed substantially as and for the purpose shown and described. 81,955.—FANNING-MILL.—H. A. Snyder, Shullsburg, Wis. I claim the hinged heard B acting the acting the stanting of the purpose stanting the stan

the purpose shown and described. 81955.—FANNING-MILL.—H. A. Snyder, Shullsburg, Wis. I claim the hinged board, B. actuared by spring tension acting against the blast of a faming mill, and connected with gates or valves. H. dosing the ingress aperture, I. of the fan wheel box, A, all substantially as shown and described, and for the purpose set forth.

of the puddling process, by allowing the metal to remain for a sufficient	81 932 - OPE AND BONE CRUSTER - A mos Newell Redwing	described, and for the purpose set forth.
period in the pudding or other furnace, as herein before described.	Minn., assignor to himself, Henry S. Brown, Frederick Arnold, and Al.	81,956MACHINE FOR SEWING THE UPPERS TO THE SOLES
4th. The employment of a bath, consisting of a slag or cinder, in which the	fred Arno'd.	OF BOOTS AND SHORS Michael Joseph Scein, New York city.
crude iron resulting from the processes befor e referred to is melted, so as to	I claim two distinct sets of hammers, so made and arranged as to revolve	I claim, 1st, in combination with the needle and the self-adapting rest,
be converted into steel, as hereinbefore described.	in opposite directions, adapted to and in combination with the case, A, suc-	which is to rest and ride on the sole of the shoe or boot that is being sewed,
5th, The subjecting the crude iron resulting from either of the processes bereinhefore described to pre-sure, so as to separate the portion of the cin-	stantially as and for the purpose describe l.	and which is to bear against the bottom of the inner channel cnt in the leather, to resist the pull of the needle, a second reat, so formed that it shall
der ir s vg therefrom, prior to its heing placed in or upon the steel melting	81,933.—MILL FOR PULVERIZING BONE, ETC.—Amos Newell,	isstand ride on the surface of the sole, that in sewing it may not interfere
hearth or furnace.	Redwing, Minn., assignor to himsen, Henry S. Brown, George F. Arnold,	with the loop of thread, the two being connected and having a mode of oper-
81.909 — ICE BOAT. — Thomas B, Kelley, Dundee, Ill.	and Alfred Arnola. I claim the case, A, hammers, B, and partitions, C, combined and arranged	ation in connection with the needle, substantially as herein described.
I claim a boat, provided with the watertight compartment or case, B, open	substantially as shown, for the purpose herein set for'h.	24, The curved needle, when made and mounted so that its inner curved
at top and bottom, with the propelling wheelmount d in a sliding adjustable	81 934 - WASH BOLLER - Joseph Okey Indianapolis Ind	surface is concentric with its axis of vibration, and eccentric on its outer surface, substantially as a id for the purpose specified.
frame. D, fitted within said case, B, for the purpose of adapting the boatfor	assignor to himself and Ferdinand A. Lehr.	3d, the pointed cast off, with its outer surface eccentric, in combination
use either on the ice or water, substantially as set forth.	I claim the door, m m, when constructed with slotted sides, in combina-	with the needle, the co tiguous surfaces of the two being flat, and both
81,910.—ESCAPEMENT.—Wm. C. Kellum, San Francisco, Cal.	tion with the chambers K K, and pipes, d c, and f, substantially in the man	being mounted, so that they shall work in contact, substantially as and for
I claim, 1st, The detent, F, and the adjusting screw, d, together with the	ner described, and for the purpose set forth.	the purpose set forth. 4th, Attaching the lamp and its cap, and the flue through which the thread
curved arm, H. a d the spring, I. operated by the liberating pin a, or its equivalents, k caing by spring or gravitation, substantially as and for the pur-	81.93) — SEEDING MACHINE.—Lucius M. Olden, Pana, Ill.	passes, to the movable plate which carries the sewing mechanism, substan-
pose a scribed.	I claim, 1st, The apolication to the seed passage of a drill tooth, of a feed-	tially as described, that the means for heating and guiding the thread may
² 2d, The escape wheel, B, moving in a plane parallel to that of the balance	ing device, 1, or its equivalent, substantially as described.	be always in the same relative positions, as set forth.
staff and of the plates. A A, and giving impulse to the pallet, c, either from	2d, The combinition of feed wheel, y, hisged tunnel, G3, and a drill tooth, which is constructed with a feeding device, 1, or their respective equivalents.	5th, The feeding pawl, with its projections, working in cam-formed recesses, or the equivalent thereof, having a like mode of operation, in combination
the sides or point of the teeth, in combination with the deter, t, F, arm, H, and spring, I, substantially as described.	substantially as described.	with the movable table on which the last holder moves, or the equivalent
31, The balance staff, C, standing p rallel with the plate, A, and the liberat-	3d. The vibrating frame, C, carrying coulters, Ct. and suspended by means	thereof, by means of which combination the freding pawl spaces the stitches
ing pin, a, passing alternately above and below the lip, J, at each vibration,	; of a litting chain, L, in complication with drill teeth, which are suspended	equally, notwithstanding it acts on the undulating surface of the sole, as
substantially as described.	from said frame, C, by means of chains, L' substantially as and for the pur-	described
81,911.—CORN PLANTER.—I, J. Kidd, Young Settlement,	4th. The devices, substantially as described, for disengaging wheels. D.	6th, The welt guide, substantially such as described, in combination with the mechanism, or the equivalent thereof, for guiding the sole on the last
Texas. Antedated August 28. 1868.	from their axle, D', when frame, C, is lifted, in combination with drill reeth	relatively to the sewing mechanism, as described.
I claim the arrangement of the feed wheel, c, pulleys, K K, plow beam, B,	which have feeding devices applied within them, substantially as described.	81.957.—FANNING MILL — William Stoddard, Winona, Minn.
cords or bands, jj, roller, I, spout, F, and Nows, B and H H, the several parts	81,936 — BEDSTEAD AND QUILTING FRAME, - John Park.	I claim, 1st, T pecombination, with the hopper of a fanning mill, of the os-
being constructed and operated substantially as and for the purpose specified.	Joliet, Ill.	cultating feed in r har. A, substantially as and for the purpose described.
81,912.—FACE TESTER FOR MILLSTONES. — James Kuhn,	I claim the arrrangement of the shaft, A, legs, B B B, with their pawl.	2d, The combination with the screen, C, of the endless apron or belt, D, sub-
Mount Pleasant, Pa.		stantially as and for the purpose described.
f claim the circular block. A, of wood or other suitable material, provided	pawls, g, the whole combined, adjusted, and operating as herein set forth.	3d, The rotary screens, L and M, arranged as described, in combination with the chute, G, screen, C, and fan blower, substantially as and for the
with concentric annular projections, a, on its face side, substantially as and	31,937.—Steam Generator.—Quintin Parker, New York	purpose described.
for the purpose set for the	city.	81,958 SAFETY BRIDGE FOR RAILROAD CAREli Stur-
81,913.—BURGLAR ALARM.—N, P. Larsen, Chicago, Ill.	I claim the combination of the pipe, G, with the boiler sheet, A, susponded	geon, Columbiana, Ohio.
l claim, 1st, The lever, D, plate, E, with pin, f, spring, F, and wire H, all	from the upper plate of the deflector, E, in rear of the flue sheet, substan- tially as berein shown and described.	I claim the adjustable bridge, A, with spiral springs, b b, attached to
combined and operating as and in the manner herein described, and for the purpose specified.		the bumpers or platforms of railroad cars, C, by means of hook, d d, on the
2d, In combination with the above, the pin, b, of the hammer, B, and the	Antedated August 27, 868	four uorights, c c c c in the manner and for the uses and purposes set forth and herein more fully described.
boubin, O, arrangea substantially as set forth.	Toloine an an a barrier with the sectors and means on tenning to and	
3d, The key, K, when used as described, and provided with cam. L, for the	shart. S, the sciew or threaded eye-bolt, f, and clamping screw, s, as and for	81,959.—TAILORS' PRESS BOARD.—Howard M. Thompson
purpose of operating the trigger, N, as herein shown and specified.	the purposes setforth.	and Charles W. Burbank (assignors to themselves and George H. Knowl-
81,914.—Seeding Machine.—J. L. Linderman, Rockford, Ill.	81,939.—MEAT CHOPPER.—Thomas Payne, Grand Rapids,	ton), Alfred, Me. We claim the pressboard supporter substantially as described, that is, as
1 claim, 1st, The wheels, E, provided with seed channels upon their periph-	Mich	composed of the base board, D, the stan lard, C, the arm, E, and the clamp-
eries, extending rearward from the seed cups, and made tapering in form, as		jaw, F, connected in the manner so as to operate as explained.
shown and dest fleed, for the purpose set forth.	M, crank wheel, N. pitman, O. arm, P. rack shaft, Q. cross head, R, short con-	Also, the combination and arrangement of the adjusting screw, e, and nut,
2d, The wheels, E. constructed as described, in combination with partitions, F, constructed and arranged as described, touble inclines, G, and spouts, G',	necting rods, S stems, T, and gnives, U, with each other and with the frames	f, with the connection rod, c, the clamp jaw F, the base hoard, D, the stan- dard, C, and the arm, E, arranged and combined substantially in manner and
the whole, being combined and operated substantially as and for the purpose	B, and revolving chopping box, C, substantially as herein shown and de-	for the purpose as specified.
		Also, the combination of the press board, B, and mechanism, substantially
3d, The wheel, C, and sbaft, c, and slotted bearings, c', in combination with gear wheels, B D', and frame, A, as and for the purpose described.	01,940.— BHAFT COUPLING Fullip Feller, Milloy, Pa.	as described, for supporting it above, and fixing or clamping it to a table, as
goar a neoro, D 1/1 and trame, A, as and for the purpose described.	I claim the combination, with the shatts, D and E, when connected toge.	explained, such mechanism consisting of the base board, D, the standard, C.

Scientific American.

the arm. E, the clamp jaw, F. and the connection rod, c, or their mechanical equivalents. 81.960. – BRIDGE. – James K. Thompson, (assignor to himself

and William B. Howard), Chicego, Ill. I claim the wrought iror chords, A A, each consisting of several bars placed apart and references, nh and stays. E E connecting the said bars, when used and arranged substantially as herein described and

81,961.—CAR COUPLING. — Anson C. Tichenor, Council

Binds, lowa. I claim the combination of a draw head, A, constructed substantially as described, and provided with a transverse locking ledge, a, with a hinged block B, constructed with a shoulder, c, when said block is so concrected to the draw head that the forward motion of the cars will antomatically lock the shoulder, c, beneath the ledge, a, in the manner and for the purpose provided. described, and provid

sperified. 81.962.—ENVELOPE.—Sigmund Ullman, New York city.

I claim securing the eyelet, d, in the open flap, c, of the end, by gumming : strip of paper over said eyelet, at the outer side of the flap, as herein shown and dreacticed. 81,963.—ENVELOPE.—Sigmund Ullman, New York city.

I claim an envelope baying its ends cut and folded in the manner as herein sbo.n ahu described. 81,954 — STEAM CONDENSER. - Augustus Van Orsdale, Jas-

per, N. Y. I claim the combination of the exhaust pipe, C, and deflector, D, with the fates, a a, heater, A, and pipes, B B, arranged and operating substantially selectibed. -MAKING FORKS.—Heman Whipple and Elon Denio. 81,965

Baldwinswile, N. Y. We claim. 1st, The cutters, e e, formed wider apart near the stock than at a curding edge, in combination with the shear, b, for the purposes and as

set forth. 2d, The rocking support, i, in combination with the cutter, e, and bed shear, h, for the purposes and supstantially as set forth. 3d, The swinging supports, 12, in combination with the winding wedge shaped, bending punger, m, aranged and operating substantially as an t for the purpose set forth. 4th, The connecting rod, b, and ball, 1 in combination with the screw, 3 head, 4, and bollow plunger, c, carrying the cutting or bending tools, substan-tally as set forth.

81,965.— BRUSH.—John L. Whiting, Boston, Mass. I claim the combination and arrangement of the series of projections with the other parts of the brush, as described, the series being productive of new and useful effects, as specified.

andusefuleffects, as specified. 81,957.-DOUBLE RATCHET LEVER POWER.-John S. Wil-

") nams, Chica o, ill. I claim, ist, The com bination of the donble ratchet pawl. A D ratchet pin-on, F, lever, E, connecting rod, 14, lever, ilg. 4, arm 32, treadle, fig. 5, un : alancing weight, fig. 6, substantially asset forth. 2d, The combination of the ratchet pinon, F, and gear wheel, g', as and for

the purpose set forth. 81,968.--OIL TANK.—Arthur Gates Wilson, New York city.

I claim, lst, The bottom, F, strainer, H, and tube, G, all arranged and com-bined substantially as described and for the ourposesset forth. 2d, Tue detachable head B, when so arranged within the cylinder, A, as to have us upper surface fail below the walk of said cylinder, to operate in con-nection with the supplementat cover, C, substantially as and for the purposes

81,969.—Bow Spring for RAILWAY CARS.—T. F. Allyn,

Nyack N. Y. I claim a bow spring, composed of one or more plates of metal, either square, rhombic circular, oval, or any equivalent shape, bent to the form of a bow, so as to have two on tside nearing surfaces or points opposite to each other, or nearly so, substantially as described. Also, the an phenion of the foregoing described plates, in combination with the blaters or frames of cars or carriages, substantially as described, and for he purpose set forth.

anu ior ine parpose set iorta. 81,970.--COMBINED SCREW DRIVER AND WRENCH.-Edgar John Amor, New York city. I claim the blade, B, provided with a series of angular-shaped openings, a, near its handle end, with an oblong slor, b, in combination with a renovable or detachable fork screw, driving blade, or other bit, arranged to stand at right angues to the blade, B, near its forward end, for operation essentially as described.

describe3. 81,971.— FEED WATER HEATER AND FILTER.—James Arm-surong, Budyrus, Ohio. I cisum, 1st, The pans, B, when constructed and arranged substantially in the manues shown and escribed. 2d The combination of the steam pipe, G, chambers, F and F', substan-tially in the manner shown and described. 3d, The chambers, F F', and the filters, e and f, when constructed substan-tally in the manner shown and described. 4th, The arrangement of the pans, B B', and the disk, B'' substantially in the manner described.

81,972.-STEAM GENERATOR.-James Armstrong, Bucyrus,

Obio. I claim, 1st. The arrangement of the outer and inner tubes of the boiler whereby the heat is caused to circulate around the inner ones, substantially as the wa and described. 2d. The construction of the fire box with the surrounding tubes, as herein shown and described.

uesci locu, onsuraction of the hollow screws, a, and the arrangement of them beca. B as borein shown and described.

3d, The construction of the hollow screws, a, and the arrangement of them with the tubes, B, as herein shown and described. 81,973.— ROLLING MILL.—J. H. C. Bachelder, Winsted, Conn. I claim, 1st, The shdes, J J, with their racks 0, movable bearings, B, H, graduated wedges, K, guards, L, and phonons, P, w. en arranged, construct ed, and operating as described and for the purpose set forth. 2d, The tongs, V, with their lever, Z, spiral sping, X, lever, W, and cam-wheel, U, when arranged, constructed, and operating as described, and for the purpose sct terth. 3d, The pin, b, on sliding wedge, in combination with dog, c, shaft, d, up-right slout-d arm, e', beil lever, f, horizontal side, g, clutce, h, moy ble coupling I, treadies, m and p. rod, n, spins spring, wo loose sieve, s, arm, u, and shoulder, v, all arranged and operating as set forth. 81,974.— APPARATUS FOR THE MANUFACTURE OF HEATING AND ILLUMINATING GAS.—JOHD A. Bassett, Salem, Vass.

SI, J.H.—YFARATOS FOR THE MANOFACTORE OF ITALING AND ILLUMINATING GAS.—John A. Bassett, Salem, Mass. I claim, 1st, 1he arrangement of the valve, J, in connection with a reser-voir of bydrocarbon inguid, for the purpose set iorit. 2d, The combination of the chamber, E, with the pump, B the chamber containing a series of foraminous dhaphragms or fibrous material, for the purpose substantially as described. 81,975.—YELLOW WASH FOR BARNS, BUILDINGS, ETC.-Henry Probled and John Nargemeter converter control for the purpose.

purpose: substantially as described.
81,975.—YELLOW WASH FOR BARNS, BUILDINGS, ETC.--Henry Bechtold and John Nunamacher. Lancaster county, Pa.
We claim the composition of a yeilow wash or pant, combined substantially in the manner and to the purpose specified.
81,976.—STEAM SAFETY VALVE.—Horatio B. Beckman, Newburg, N.Y.
1 claim the arrangement of the safety valve, A, adjustable elliptical springs si s2:8, and pate, C, substantially as hereius pecified.
81,977.—Sk.WER PPEE.—Charles Birkenshaw, Chicago, III.
1 claim the combination of the charles birkenshaw, Chicago, III.
1 claim the combination of the charles birkenshaw, Chicago, III.
1 claim the combination of the charles birkenshaw, Chicago, III.
1 claim the combination of the charles birkenshaw, Chicago, III.
1 claim the combination of the charles birkenshaw, Chicago, III.
1 claim the combination of the charles birkenshaw and valve, C, arranged substantially as and for the purpose set forth.
81,978.—HARVESTER HAKE.—George Blake (assignor to himself and Thomas Connar), Whitby, Chanda.
1 claim. 1st, The case, G, and bollow petestal, F, for containing and supporting the genering that operates the rake, substantially as berein shown and described.
23, The combination of the connecting rod, J, internally toothed segment, gear wheel, H, shaft, E, bracket, D, and rake n-ad, C, with each other and with the hollow pedestal, F, and faced plane, O, all ranged and operating as described, for the purpose specified.
34, The combination of the finger, N, stop pan, P, and plane, O, with the rake need, in combination with the finger, F, and faced plane, O, all ranged and operating as described, for the purpose specified.
31, Arbe, and and onlow pedestal, F, whether said plane, O, with the rake head, C, and nollow pedestal, F, whether said plane, O, with the rake head, C, and nollow pedestal, F, whether said plane, O, with th

81.979.-MODE CF PURIFYING WATER.-M. S. Bringier, As

cension parish, La. I claim the process of filtering water by passing it through a vessel con-structed and operating substantially as described, whereby it is subjected to the action of centringal force, and a more rapid filtrat.on is effected, as set forth 81,980.—POTATO DIGGER.—Albert Burhaus (assignor to him-

to the attaching strap on the reverse side of the body, when shoulder straps are provided with eyelets, d d, and a bracing cord, D, substantially as de-scribed and for the purpose specified. 81,965.—CAR COUPLING.—James M Cook, Washington, D. C. I claim the coupling link, B, provided with a shoulder, b', the Lever, C, spring, D, and rod, F, when the whole are arranged and combined substan-tially as described as and for the purposes sp culcd.

tially as described as and for the purposes specifica.
81 986.—FLEXIBLE ABRADER AND POLISHING FABRIC.—John H. Crane, Charlestown, Mass.
1 claim as a new article of manufacture, the double surfaced flexible abra-der, substantially as shown and idseribed.
81,987.—M&THOD OF PREPARING, DISICCATING. AND PRE-SERVING FISH.—William D. Cutler, Philadelphia, Pa. I claim, st., The boned and distocated nsb, as a new manufacture and commercial article.
2d, The berein erscribed process or method of treatment of fish, substan-tially as set forth for the Juriose spe filed.
81,988.—DOOR AND SAFF. Lock.—John Dillingham, Turner, Me.

Me. I claim, 1st, The peculiar constructed key, having projections or bits, a b c, substantially as and for the purposes set forth and described. ^{2d} The arrangement of the main bolt, in combination with the plunger m, and levers, g g, substantially as described and for the purposes set forth. ^{2d} A free arrangement of the plunger, in combination with the levers, g g, acting on the paws, if, substantially as described. ^{2d} the arrangement of the sliding plates, which effectually close the sev-eral key holes, as and for the purposes substantially as described. ^{2d} 1,989.—Lew WATER DETECTOR FOR BOILE×8.— Thomas Duriton (assignor to himself and Thomas Maguire) Port Jervis, N. Y.

Durton (assignor to himself and Thomas Maruire) Fort Jervis, N. Y. Iolaim the construction of the plug, a, substantially as here i set forth. 81.999.—COMBINED LATCH AND LOCK.—Nathaniel Edwards,

1 claim the construction of the plug, a, substantially as herel is de forth.
81.990.—COMBINED LATCH AND LOCK.—Nathaniel E.dwards, Newark, Ohio.
1 Claim, 1st, the manner of connecting and disconnecting the two knobs, in connection with any opening lace plates of locks, by maining an indenture G', in connection with either one of the knobs, and a corresponding projec-tion, G, in the other, substantially as above described.
2d, The plate or tumbler bearer, E, in fir. 5, he ng a slotted plate, with a projection, P, turne out at one end to hold the tumblers in position so that the holt may work as lach and with another projection, y, or indenture in such a position as to enter a corresponding indexine, y', or projection in the spindle of the knobs, so as to engage with the same when the tumhlers are dropped, when constitucted substantially as herein shown and described.
3d, the lever, D, fig. 7, which has a lifter, p, for the joint purpose of raising, the tumblers and bracing hack the oolt, and in combination with the lock is gropection, a, and the sud, A, and the projection, R or its equivalent on the boilt in the same operation, by elevating the linck into a night boilt by raising the tumblers too h, y to be operated apon by the key, and bracing the boilt in the same operation, by elevating the linck mg the same in its elevated position. Are cansing the stud, A, to empare with the projection, a. by pulling out the tumbler bearer as above specifie i.
81,991.—MEANS FOR SECURING SPRINGS FOR BEDS AND SEATS -J, resiah D. Eggleston, Canaan, Con..
1 claim the screw nut, A, combined with the spring, B, substantially as and for the purpose storts.
902.—DYE STUFF.—C. E. Fox, and Mary E. Fox, Gilroy, Coli

51,992.—Dye Stuff.—C. E. Fox, and Mary E. Fox, Gilroy,

Cal. We claim the extract, or coloring matter, of mancineta, as a new article of nanulactule, for its various uses, as herein specified. manufactule, for its various uses, as herein specified. 81,993.—WEDGE-BUCKLE FOR HARNESS.—Kasson Frazer,

Bayolf .--HAMMER AND MALLET.—Wm. S. McNeil, Spring-neld. Mass.
Iclaim, ist, A mallet and hammer combined, in which the mallet, B, fits in a socket, a, constructed in the pieve, A, having the head, C, with pene, C, the parts b ing combined an oarranged substantial ya sherein shown.
20, The arrangement of the pene, c, npon the head, C, of the hammer, sub-stantially as shown.
82,018.--SWING.—Henry F. Metzler (assignor to Louisa Metz-ler), New York city.
Iclaim, ist, The four suspended vibrating rods or bars, in combinations with the pivoted cross bars, for supporting the seat or seats, substantially as and for the pivoted cross bars, for supporting the seat or seats, substantially as and for the pivoted cross bars, tor substantially as described.
82,019.-STOVE PIFE DEUM --Henry Meyer, Richmond, Ind. I claim the parabolical flues and damper. constructed and arranged in rela-tion to each other and to the casing of the drum, substantially as set forth.
82,020.-SEWER PIPE.-Philip Meyercordt, Chica..., Ill. I claim the ingredients herein named, when manufactured into pipes, sub-stantially as herems set forth.
82,021.-GATE.-Reuven C. Mighell, Plano, Ill.
I claim, ist, The lever, C, constructed and operating substantially as de-scribed. 81,993. — WEDGE-BUCKLE FOR HARNESS.—Kasson Frazer, Syracuse, N. Y. I claim, ist, The wedge, W, when made with the transverse sloti, hole, m, and glop, r; the tongene, T made with the journal, o, shank, p, and guard q, each sub-tantially in the form and for the purposes described. 2d, Also, the same parts, in combination with each other, when connected by a joint. and 'torming a wedge and tongue, substantially in the manner and for the purposes described. 3d, The wedge, W, and tongue, T, when made as aforesaid, in combination with the buckle frame, A, having an angular box, x, as described, aloperat-ing in the manner and for the purposes substantially as above set forth. 81,904.—MALT MILL.—John Gardimer, Philadelphia, Pa. I claim the construction of the checks D b. with seel olar & E E and the

I claim the construction of the checks, D D, with seel plar s, E E, and the arrangements of the said checks with the mashing rollers, B C, substantially in the manner hereinbefore described, and for the purpose set forth. 81,995.—SMOKE HOUSE.—Christian Good, Arcanum, Ohio.

81,995.—SMOKE HOUSE.—Christian Good, Arcanum, Ohio.
1 clam a stationary smoke-house, when constructed as discribed, and provided with a frepot, H, trap duot, C, in the root, and with openings in its sldes, said openings noting towered with wire netting and closed by means of smutters, F, F, substantially as and ior the purposes herein set forth.
81,996.—PLOW.—Charles T. Grimes, Garrard county, Ky. I clam, ist, The modes of making handles, H and is, and so arringing them on beams, G and J, toat they may be used as handles for two turing plows, and as heres for two snovel plows, when the turning plows and making handles, H and K, and beams, G and J, by means of cross-bars, A a and B b, andrads, C c and J, and rods E cand Z z, so that the two plows are used by one person.

81,997.-Moulding Machine.-J. P. Grosvenor, Lowell, Mass. I claim the described arrangement of the hand wheel, J, at the side of the

achine, nnder the edge or the table, A, the preveled gearing, h' i, shaft, H, a on wheels, h G, screw, F, vertically sliding mandrel-trame, D, and guides, as herein set forth, for the purpose specified.

E, as herein set forth, for the purpose specified. 81,998.—ANTI INTERFERING BAND.—William H. Hall and Jobn R. Clifford, Boston, Mass. We claim, as an article of manufacture, an interfering rubber guard, when constructed as described, and attached to kersey, as herein shown and for the purposes set torth.

the purposes set forth. 81,999.— CONSTRUCTION OF DOLLS' HEADS. — George H. Hawkins, New York. city. I claim a toy figure head, when composed of a textile fabric, which is previously stiffened with a glotious material, then pressed in parts between heated dies, and afterwards having the eages or se us of such parts joined by means of heated dies, in the mainner substantially as berein described. 82,000.—CANDLESTICK.— William H. H. Hinds, Groton, Mass. I claim, ist, The cap, a, with its support or supports, n. for the purposes set for to, and substantially as herein described, and as shown in figures 1, 2 and 3.

and 3. 2d, Tho receptacle, g, and the slide or sleeve, h, with the catch, p, for the purposes set for th, substantially as herein described, and shown in figures 1

The snu flers, f f, supported and operated by means of the cylinder, c, be collar, d, substantially as herein described, and as shown in figures 1

4th, The slit, o, and the notches, 12345, together with the thumb piece, z, or the purposes t forth, substantially as herein described, and shown in fig-82,001.—ABDOMINAL SUPPORTER.—S. L. Hockert, assignor to G. W. Perrine), Milwankee. Wis.

'to G. W. Perrine), Milwaukee, W18. I claim, 1st, Connecting the side spring to the front pad by hooks, in the

anner shown. 2d, The side or hip pads, D, sttached loosely to the cylindrical side springs. B, by staples, F, so that the said bads may be perfectly free to move in any direction to adapt themselves to the surface of the hódy. 3d, Securing the cylindrical side springs to the back pads by screwing the ends of said springs into the button studs, in the manner shown. 82,002.—Horsse HAY-RAKE.—William Holmes, Clarksville,

N.Y. I claim, 1st, The locking bolt, M, moving on a guide way on the axle, and perated by means of the lever to hold the teeta down, substantially as set

forth. 2d, The combination, substantially as set forth, of the lever operated by the foot of the driver, and the device for depressing and elevating the rake

raising the cutters and forcing them into the ground, substantially as set forth. 6 b, The combination of the frame, t' e drag bars, the rear frame, and ver-tical value rods, L, substantially as set forth. 82,027.—RECIPR (CATING STEAM ENGINE.—Joseph B. Pe-drick (assignor to himself and Joseph F. Gent). Lowell Mills, ind. I claim th arrangement of the vilve, K, valv-boxs, G M, and the pipes B A and C D, substantially as show 1 and described. 82,028.—APOTHECARIES' LABELS.—G. G. Percival, Philadel-phia. Pa. I claim the combination of a graduated scale with an otherwise ordinary paper isbel, substantially as above described. 82,029.—MARTINGALE.—W. B. Perrie, Horse Head, Md. I claim. 1st, the loose ring, G, in connection with the part, D, pro ided with the stud, C, as shown in figs. 1234 and 5, substantially as and for the purpose set forth. 2d, A solid ring marking ale, D, with the stud, C, prolecting from is per-phery in the direction of its center, substantially as and for the purpose set Tool of the driver, and the device for detrices in detricing the driver, and the device in detrices and detri

52,004. — MCRISHE MACHINE. — Jas. Al. Johnson and John Herig, Cleveland, Oho. We chaim chisel holders, F, constructed as described, in combination with the cross head, E, to operate as and ior the purpose set torb.

with the cross head, E, to operate as and for the purpose set for the 82,005.—BUTMER COOLER.—Ernest Kaufmann and Antony Weber, Philadelphia, Pa., assignors to Ernest Kaufmann.

2d. The closing with covers the ends of a revolving roller, within which are suspended one or more cressets for holding fire, substantially as and for the purpose sat forth. 3d. The arrangement of cylinder, A, revolving on a "xed sxle, D, from which are suspended one or more cressets, J and to which are secure the

205

tch are superdelone or more cressels, J and to which are secure the forated heads, F F', as and for the purpose set for th. h, In computation with the elements, A D J F F', one or more doors. H the purpose explaines.

4 h, in combination with the elements, A D of F P, on or many state of the purpose explaines. 82,010.—Jug Top.—Peter Lauster (assignor to Lang & Lauster), All glueny, Pa. Iclain, Ist, The hinge, knob, and lid, made separate and distinct from each other, and united together: by making p forations in the binge and lid, as described, and casing the knob, to unite with them by metal used in pro-duing the knob entering said perforations, to form a rivet, and whereby so der, to establish the junction of said parts, is avoided, and, after riv.ting of the knob, dispensed with. 24, the combination, with the lid, hinged to rotate from the inshe of the body, of the plate or filling, b, connected with the lower part of the interior flange, a, of the hody, substantially as and for the purpose berein set forth. 82, 011.—FANNING-MILL.—Elijah Lindsley, Neenah, Wis.

Range, a, of the nony, substantiary as and in the purpose here the set forth. 82,011.—FANNING-MILL.—Elijah Lindsley, Neenah, Wis. I claim, 1st, The sieves, b and c, when cent as described, and operating as and for the ourposes herein set forth. 2d, The screen, d, in combination with the sieves, b and c. when construct-ed and operating as and for the purposes herein set forth. 82,012.—SPRING BED BOTTOM.—John M. Losie, Indianapo-like for the screen set of the set of th

and operating as sufficient the purposes around the construction of the solution of the purpose specified.
82,012.—Spraing BED BOTTOM.—John M. Losie, Indianapolis, Ind.
I caim the slotted metallic plates, E F, constructed as described, in combination with the elastic gum, fi. as and for the purpose specified.
82,013.—HORSS SHOE.—Henry D. Lyman. Kalamazoo, Mich.
1 caim the attachment of adjustable clips, B, to the heel of a borse shoe when operating w.t. a pivot substantially as set forth and shown.
82,014.—VISE.—A ustin Z Mason, and thichard B. Robbins, Adrian, Mich., assignors to Richard B. Hobbins.
We claim, 1st, In combination with the ring, C, constructed with the obline ends of the manner substantially as set forth and described.
2d, The pherical bilg, D, with one of more projecting stops c and e, to prevent it from rurning more than one fourth of a circumference, the whole constructed in the manner substantially as set forth and described.
2d, The emi-anniar ring, K, in combination with the ring, C, and washer plate, B, substantially as described.
82,015.—BREAST PUMP.—Morris Mattson, New York city.
I caim the combination, with a vacuum glass constructed substantially as described.
82,015.—BREAST PUMP.—Morris Mattson, New York city.
1 caim the combination with a vacuum glass constructed substantially as described.
82,016.—BREAST PUMP.—Morris Mattson, New York city.
1 caim the combination with a vacuum glass constructed substantially as described.
82,016.—Breast Pump. Sarge.--Wm. McFarland and Wm. H. Butler, Willia (Sburg, N.Y.)
We claim, 1st, 1 he insult ou of each section or recess of the door, in com

81,016 — FIRE PROOF SAFE. - Wm. McFarland and Wm. H. Butler, W.: University of factors of factors and the section or recess of the door, in combination with the ar spaces as and for the purposes berein set forth.
2d, The method of forming spaces, in the filling of the safe, ny inserting paterns ot wood, to be withdrawn after the filling substance has set, and supplying said spaces with a vaporaring substance, substantially in the manner as and for the purposes herein described.
3', The meanner of 's curing the separate sections of th' doors by placing subporting slocks, made of material which is a non or inferior con actor of heat between them, so that there is no continuation of metal or good beat conducting substance from the outside covering to the inside repository, as herein set (orth).

82,017.--HAMMER AND MALLET.-Wm. S. McNeil, Spring-

scribed. 2d. The spring, V, in combination with the fulcrum, H, forth; purposes

2d. The spring, V, in combination with the function, I, for the purpose specified. 3d, The combination of the gate. A, lever, C, hinge, D, weight, E roller, G, and pivot, F, all constructed a 1d op rating subst-unially as described. 82,022.--SHOE LACING. --Willard F. Oliver, Lynn, assignor to Boston Shoe-Stud and Button Company, Boston, Mass. I claim, ist, A shoe, provided with a series of books, or their equivalents, for receiving and folding the string, when arranged substantially as set forth.

I claim, ist, A snoe, prover when arranged substantiany as set for receiving and holding the string, when arranged substantiany as set for h. 24, The catch or clamp, a, with its arm c, pivoted to the hook, D, and ar-ranged for holding the string, substantially as described. 82,023.—LIME KILN.—Clark D. Page, Rochester, N. Y. I claim, ist, The combination and arrangement with the grate hars, g, of the cross bars, ki, the first ben fixed, and forming a futurum for the leverage of the grate bars in shaking, and the latter heing binged so as to thrn np and down to secure the grates, or allow them to be shaken as herein set forth. 2d. The fines, b, constructed as described, next to the inner edge of the wooden binders, a, of the kill, to operate in the manner and for the purpose substantially as described.

I daim, in the spice box or can, as made with a series of holes in its cover or end, or as having a disk or cap to cover such holes, the constructing both the cover or end or head of the box and the disk, with an annular groove in the one, and a corresponding aroutar head to project from the other, and to fit to or not such groove, in manner substantially as described.

It to or into such groove, in manner substantially as described. \$1,025. — Low WATER ALARM FOR STEAM GENERATOR.— Stewart B. Palmer, Syracuse, N. Y. I chaim, ist, The combination of the chamber, B, tube; CC, with their sur-mounting chambers. D. D. rods, E. E. livés, a a, and rod, H, arranged and operating substantially as shown and described. 2d, The arrangement of he rod, H, lever, I, and spring, b; with references to the whistle, J, and its valve. 82,026. — WHEAT DRILL.—Charles W. Patton, Exeter, III. Leiam, Ist, The honper, divided into compartments by the partition D.

82,026 — WHEAT DRILL.—Charles W. Patton, Exeter, Ill. I claim, ist, The hopper, divided into compartments by the partition, D, and door, D', substantially as and for the purpose set forth. 2d, in combination with the perforated plates. E and F, the graduated key. Gf for regulating the amount of grain to be sown, substantially as set forth. 3d, The combination of the lever, H, shaft, H1, arms, H2, and the shiding plate, E, with projection, E2, substantially as and tor the purpose set for th. 4th, The combination of the living plate, E, key, G, stop, E1, and springs, I, arranged to operate substantially as described. 5th, in combination with the cutters, O, and drag bars. K, the springs on the rods, M, segments, N1, shaft, N, and lever, N2, and cord, N3, for raying the cutters and forcing them into the ground, substantially as at forth. 6 b, The combination of the frame, the drag bars, the rear frame and ver-

2d, A solid ring marxingale, D, with the stud. C, projecting from is per-phery in the direction of its center, substantially as and for the purpose set forth.

 ¹ and Henry A. Burhausy, Albany, N. Y. ¹ Claim, Ist, The scoops, I. formhade with the lateral slots, e.e.s. in combination with the land slots, e.g. since the purposes of the p	81,980.—POTATO DIGGER.—Albert Burhaus (assignor to him-	82,005.—BUTTER COOLER.—Ernest Kaufmann and Antony	forth.
 I claim, ist, The scoop, E, formhed with the lateral slots, e e, in combination of the slots, a slot e e effort. We claim, ist, The slots, z in connection of the slots, R, slots, and the claim slots, with the slots, a slots, e effort. We claim, ist, The slots, z in connection of the slots, R, slots, and the claim slots, with the slots, a slot, a slots, a slo			82,030.—ADJUSTABLE TUMBLER FOR PERMUTATION LOCK.—
 and the cribed. and nonle share, B, in combination with the land shoe, C, and the comparison of the purpose set forth and described. and nonle share, B, in combination with the land shoe, C, and the combination of the silp collars, E, journals, a, and bearings, b, and grave, C, and and price in the purpose set forth. and and a price in the purpose set forth and described. and its carriage, as and tor the purpose set forth and described. b) estimation with the land shoe, C, and the company of the purpose set forth. b) estimation of the silp collars, E, journals, a, and bearings, b, and grave, C, and and exciting excited, and for the purpose set forth. b) estimation of the silp collars, E, journals, a, and bearings, b, and grave, C, and the upper land described. c) estimation of the silp collars, E, journals, a, and bearings, b, and grave, C, and the upper land described. c) estimation of the silp collars, E, journals, a, and bearings, b, and drided as at 6 in combination with the land silp set estimation of the collar barbon of the collar	I claim, 1st, The scoop, E, furnished with the lateral slots, e e e, in combi-	we claim, 1st. The construction of the part, A, with the ring, C, and com-	O. E. Pillard (assignor to F. H. North). New Britan, Conn.
 The doule share, B, In combination with the land shoe, C, and the scoop, E, and the suppose set forth and described. 36, The sizer, J, operated by the rod, o, shaker piece, s, rod, d, crank, c, mithe part, A, and cover, B, and spring, C, substantially as described. 36, The sizer, J, and its carriage, as and described. 37, The combination with the sizer, L, and boxes, K, K, in combination with the sizer, L, and the combination of the sizer constructed and applied in the manner and for the purposes set forth. 38, 006.—BEE HIVE.—H. A. King, Nevada, Ohie. Telam, ist, The side runners, L I, and boxes, K K, in combination with the sizer corts. 38, 2031.—WINDOW SUBTER.—OH, M, L, and vale, C, and the process set forth. 39, 007.—ROTARY STRAT STRAT	nation with the rollers, r r, or their equivalents, as and for the purpose set	biging the chamber, D, therewith, substantially in the managrand for the	I chaim the circular tumbler, formed of the plates, I and 2, and harges, 3 and
 second E, as and for the purpase set forth and described. 3d, The stere, J. operate us by the rod, o, shaker places, sr, od, d, crark, c purplet of the purpase set forth. 3d, The stere, J. operates us by the rod, o, shaker places, sr, od, d, crark, c purplet of the purpase set forth. 3d, The stere, J. operates us the rod balaction with the steres, J. and its carriage, as and for the purpose set forth. 31.981. — BTOCKING OSTRETCHER,K. K. C. Chandler, Ruther deta, The store purpose set forth. 32.007. — BEC HIVE. — H. A. King, Nevada, Ohie. 32.008. — BTOCKING OSTRETCHER,K. K. Chandler, Ruther deta, saperided, and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purposes set forth. 32.007. — Mithed and for the purpose set forth. 32.007. — Mithed and for the purpose set forth. 32.007. — Mithed and for the purpose set forth. 32.007. — Mithed and for the purpose set forth. 32.007. — Mithed and for the purpose set forth. 32.007. — Mithed and for the purpose set forth. 32.007. — Mithed and for the purpose set forth. 32.007. — Mithed and for the purpose set forth.		purpose above described.	4, and divided as at b, in combination with the hink plate, e, and we can it, i,
 3d. The sieve, J. operated by the rod, ope		2d, The combination of the silp collars, E. Johrhalb, a a, and bearings, b b,	00.021 WINDOW SHITTEP Niels Pollson Washington
 pmin, p, and gair, r, and all in combination with the wholes, N N, and faste, F, sand for the propose set forth. 408, The sled runners, L, and hoxes, K K, in combination with the slore, J, and its carriage, as and for the propose set forth. 418, The sled runners, L, and hoxes, K K, in combination with the slore, J, and its carriage, as and for the propose set forth. 420, and its carriage, as and for the propose set forth. 430, The sled runners, L, and hoxes, K K, in combination with the slore, J, and its carriage, as and for the propose set forth. 430, and its carriage, as and for the propose set forth. 440, and its carriage, as and for the propose set forth. 450, 007.—ROTAIN STRAM K ENGINE.—Abraham Kipp, Jr., Sing and the carcong cevice, D, at pred at the upper side of the section at the appendix of the propose set forth. 450, 007.—ROTAIN STRAM K ENGINE.—Abraham Kipp, Jr., Sing and the carcong cevice, D, at pred at the upper side of the section at the appendix of the propose set forth. 450, 007.—ROTAIN STRAM K ENGINE.—Abraham Kipp, Jr., Sing and the carcong cevice, D, at pred at the upper side of the section at the appendix of the propose set forth. 450, 007.—ROTAIN STRAM K ENGINE.—Abraham Kipp, Jr., Sing and the carcong cevice, D, at pred at the upper side of the section at the appendix of the propose set forth. 450, 007.—ROTAIN STRAM K ENGINE.—Abraham Kipp, Jr., Sing and the carcong cevice, D, at pred at the upper side of the section at the appendix of the propose set forth. 450, 007.—ROTAIN STRAM K ENGINE.—Abraham Kipp, Jr., Sing and the carcong cevice, J., at the appendix of the propose set forth. 450, 007.—ROTAIN STRAM K ENGINE. 450,	scoop, E, as and for the purpase set forth and described.	with the part, A, and cover, B, and spring, C, substantiary as described and	
 The construction of the suppose set forth and described. Atter the side runners, L, and boxes, K F, in combination with the store, K F, in combination with the store, K F, in combination with the store, K F, in constructing the close fitting top bars, O, with comb guides, U, and K Carriage, as and for the purposes set forth. All, BL, SC, Destructing a stocking stretcher with the hinged sections, I, and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, D, at need at the upper side of the sections, Ia and the catching device, C, subtart is a sectified, and for the purposes sectifort. Sor, PATH, CHAR, M, K, With CHAR, K, Weith, The source of the sections, Ia and the catching device, C, and D, point is the sectified device of the sectified device of the sectified. Sor, PATH, CHAR, M, K, With CHAR, K, Weith, K, Weith, CHAR, K, Weith, CHA	but in and gear y and all in combination with the wheels N N' and		D. C. \mathbf{T}
 the The sled runners, L L, and boxes, K K, in combination with the sleve, J, and to scriptions set forth. 31, and to scriptions and described. 31, 391.—STOCKING STRETCHER, -R. K. Chandler, Ruther is constructing a stocking stretcher with the hinged sections, A and the actuality as increding the source is stocking stretcher with the hinged sections, A and the anner tail the superscription is expansible atter the stocking has been is storing in the description of the part of the part of the part of the part of the superscription. The combination of the part of the store actions, a superscription is store in the store of the sections of the sections of the part of the part of the part of the sections of the sections	frame, G. and axie. F. as and for the purpose set forth and described.	82,000.—DEE HIVE.—II. A. King, ive vada, Ohie.	1 Claim, 18, The combination of the forming bars, A As, and correspondences
 a) and its carriage, as and for the purpose set forth and described. a) and its carriage, as and for the purpose set forth. b) and its constructing a stocking stretcher with the hinged sections. b) as a by a regression of the purpose set forth. c) constructing a stocking stretcher with the hinged sections. c) and the catching cervice, 0, as r need at the upper side of the sections is the stretcher stock as specified, and for the purposes set forth. c) constructing a stocking stretcher with the hinged sections. c) and the catching cervice, 0, as r need at the upper side of the sections is the stretcher is expansible to estocking has been chamber or space, pistons. EE and F, with "outh combination with the saming. D = and the data been chamber or space, pistons. c) and the catching cervice, 0, as r need at the upper side of the sections is the stretcher is the the stretcher is the st	4th, The sled runners, L L, and hoxes, X K', in combination with the sieve,	I Claim, 1st, The slots, Z, in connection with a double tier of honey boxes	
 81.981.—STOCKING STRETCHER.—H. K. Chandler, Kuther Ge, as the calculation of the sector of	J, and its carriage, as and for the purpose set forth and described.	With commissions, as pecheci, and the purposes sector with 9 d Constructing the close fitting top bars O with comb guides II and	2d. The sliding plates M. in the described combination, with the folding
Gign, Ya. 1 cl.im, ist, Constructing a stocking stretcher with the hinged sections, in Band the catching device, D, at r nged at the upper side of the sections, in such at mainer that the vertice trip is expansible atter the socking has been craw moon t, substantially as described. 30, Forwhite for the purposes described. 30, Forwhite to rescale and the support of the socking stretcher, substantially as described. 30, Forwhite to rescale at the socking the synchronic the socking stretcher, 30, Forwhite to rescale at the socking stretcher. 30, Forwhite to rescale at the socking stretcher. 31, Stretcher. 30, Forwhite to rescale at the socking stretcher. 31, Stretcher. 32, The combination of the socking the private scenario of the private scenario of the socking stretcher. 30, Forwhite to rescale at the socking stretcher. 30, Forwhite the private scenario of the socking stretcher. 31, Stretcher. 32, The stretcher. 34, The socking stretcher. 34, The stretcher. 34, The stretcher. 34, The stretcher. 34, The stretcher the socking stretcher. 34, The str	81,981.—STOCKING STRETCHER.—R. K. Chandler, Ruther	glots asspectified and for the nurnoses set forth.	shutter, A A2 B, to mask or protect the vertical edges of the said shutter,
 Band the catching revice, D, at The upper side of the sections, in study at an entrinal the system is expansible atter the stocking has been the stocker. By unsues of a longitudinally adjustable to e section C, subtain the stocking has been the stocker. By unsues of a longitudinally adjustable to e sective C, subtain the stock of the other stock is to each other, and with the inter ends to a steam chamber or space, pistons, subtaintially as central or intermodes, and for the purposes described. Sing, N.Y. The combination of double cylinders, L and stock of the stock o	Glen, Va.	82 007 - ROTABY SUFFAY ENGINE - Abraham Kinn, Jr Sing	substantially as solutiond.
 The state intermeter is expansible after the stocking bas been drawn in the stocking is expansible after the stocking bas been drawn in the stocking is expansible after the stocking bas been drawn in the stocking is expansible after the stocking bas been drawn in the stocking is expansible after the stocking bas been drawn in the stocking is expansible after the stocking bas been drawn in the stocking is expansible after the stocking bas been drawn in the stocking stocking is expansible after the stocking stock	I claim, 1st, Constructing a stocking stretcher with the hinged sections, A	Shaw N V	3d. The arrangement of the tenons, b' D', of the plate, B, alternately on op-
 and a mainer bar de structure in the subching has obeching has boeching in or ends to a steam chamber or space, pistons, E. F., and F. F., with stantially as described. a. Frakk of a long internet of a stocking stretcher, by dear of the section C, substantially as the deards of the pistons. essentially as her diverse of a stocking stretcher, by dear of the part of the pistons, to each other, and with the internet of the sources of the pistons, to each other, and with the internet of the sources of the pistons, to each other, and with the internet of the pistons, to each other, and with the internet of the sources of the pistons, to each other, and with the internet of the pistons, to each other, and with the internet of the pistons, the tartically as socribed. b. Bar, dd', unchaid of the sources described. cham, is, The combination of the solution of the sources of the solution of the sources of the solution of the sources of the pistons, sub-tantially as described. b. Bar, dd', unchaid of the sources of the solution of the	B, and the catching device, D, a r nged at the upper side of the sections, in	Light 1st The combination of double cylingers, C.C. and D.D. open at	posite edges of the bars, A, substantially as and for the burpoves set forth.
 a) providing torientation are or shortering the foot portion of a stocking stretcher, by successful and yas described. a) providing torientation are or shortering the foot portion of a stocking stretcher, by successful and yas described. b) weak soft and form the backs of the prisons, c seasentially as the chi seasential and the seasential and the seasential and the seasential as the chi seasential and the seasential as the chi seasential as a the chi seasential and the seasential as a the chi seasential and the seasential as a the chi seasential as a the chi seasential and the seasential as a the seasential and the sea	such a frainer that the stretcher is expansible after the stocking has been	their inner ends to a steam chamber or space, pistons, E.E. and F.F. with	82,033.—AWNING.—Nells Poulson, Washington, D. C.
 start coer, by inclusion of a longitudinally acjustable to é section C, substantially as discribed. a), Forming no.ches or serrations, C, npon the eiges of succking stretch, and the band riom riom the band riom the band riom riom riom riom riom riom riom riom		their rods and voke. Gand H. crauk, I, and valve controlling the flow of	I claim, 1st, Thefolding hars, DD', working upon metined supports, A, and
 tilling as an effective i. a), Forming tooless or serrations C. upon the edges of a stocking stretch. a), Forming tooless or serrations C. upon the edges of a stocking stretch. a), Forming tooless or serrations C. upon the edges of a stocking stretch. b) and the annual annual and the annual annual and the annual annua	Stre the start used to a long triding to another high the top section () substant	, steam to and from the backs of the pistons, essentially as herein set forth.	carrying plates or sh ets, E, attached to the inner bars, D, substantially as
 a) for manipular ball of the manner and for the purposes described. b) for manipular ball of the manner and for the purposes described. b) for manipular ball of the manner and for the purposes described. b) for manipular ball of the manner and for the purposes described. c) for manipular ball of the manner and for the purposes described. c) for manipular ball of the manner and for the purposes described. c) for manipular ball of the purposes described. c) for manipular ball of the purpose described. d) for manner and for the purpose described. d) for manipular ball of the purpose described. d) for manipular ball of the purpose described. d) for manipular ball of the purpose described. d) for manner described. d) for manipular ball of the purpose described. d) f		2d, The combination of the double cylinders, C C, and D D, arranged,	and for the purposes specified. 2π The theory P emply used in combination with the awning D E and trongh.
er, stustautially in the manner and for the purposes described. 81 982. — FAAM (FATE. — Lewis Charles, Clear Springs, Md. 1 claim, 1st, The combination of the spring stop, a, with the purvote sup- port, g bar, d', substautially as described. 20, The combination of the spring stop, s, bar, d', panel, B, and gate, A, substantially as described. 81,983. — STEAM GENERATOR. — Jonathan M. Clark, New 1 claim the angular hollow head, B, constructed with passages, c. for the crouits on of water or sheam, secured together. by pin projections, g, and taily as shown and described for the purposes efforth. 81,984. — SUSPENDER. — C. H. Cleveland, Selma, Ala. 1 claim the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle, within the	30, Forming notches or servations, C, upon the edges of a stocking stretch-	either pair at right angles, or thereabolits, to each other, and with their inner	C both as a means of support and for conducing water, as explained.
 and yokes, G. H., crank, I., and valve control ing the admission and escape of the previous of the previous of the previous substantially as described. and yokes, G. H., crank, I., and valve control ing the admission and escape of the previous substantially as described. bard, d', substantially as described. co, the control ing stop, s, bar, d', panel, B, and gate, A, substantially as described. and yokes, G. H., crank, I., and valve control ing the admission and end from the backs of the previous, substantially as described. and the valve, K, when control ing the admission and errors and crank, substantially as described. and the valve, K, when control ing the admission and errors and crank, substantially as described. and yokes, G. H., crank, I., and valve control ing the admission and errors substantially as described. and the valve, K, when control ing the admission and errors and crank, substantially as described. and with removable covers, a, combined with the tubes, A, substantially as shown and described for the purposes set forth. and with removable covers, a, combined with the tubes, A, substantially as shown and tescribed for the purposes set forth. and with removable covers, a, combined within the case, having a hinged cover, F, substantially as and for the purposes here. bask, N. Y. claim the suspension of one or more cressets to the axle, within the 	er, substantially in the manner and for the purposes described.	elestean Chamber or space pictors E E aud F F with their rods b b cc	89.039 W BENCH - E. W. Ouincy (assignor to himself and
I claim, is, The combination of the siling stead, A, with the provided sup- port, g bar, d d, substantially as described. 20, the combination of the spring stop, s, bar, d d, panel, B, and gate, A, substantially as described. 81,983.— STEAM GENERATOR. —Jonathan M. Clark, New York city. 1 claim the angular hollow head, B, constructed with passages, c. for the creation of water or sheam, secured together by pin projections, g, and tilly as shown and described. 81,984.—SUSPENDER.—C. H. Cleveland, Selma, Ala. 1 claim the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle,	81 982.—FARM GATE.—Lewis Charles, Clear Springs, Md.	and vickes G H crank L and value control that the admission and escape of	
 a) The valve, K, wien constructed and arranged for operation, in combinistion of the spring stop, s, bar, d d', panel, B, and gate, A, shown and described. 3) The valve, K, wien constructed and arranged for operation, in combinistion and crank, substantially as described. 3) The valve, K, wien constructed and arranged for operation, in combinistion and crank, substantially as described. 3) The valve, K, wien constructed and arranged for operation, in combinistion and crank, substantially as described. 3) The valve, K, wien constructed and arranged for operation, in combinistion and crank, substantially as described. 3) The valve, K, wien constructed and arranged for operation, in combinistion and close structure. 3) The valve, K, wien constructed and arranged for operation, in combinistion and close structure. 3) The valve, K, wien constructed and arranged for operation, in combinistion and close structure. 3) The valve, K, wien constructed and arranged for operation, in combinistion and close structure. 3) The valve, K, wien constructed and arranged for operation, in combinistion and close structure. 3) The valve, K, wien constructed and arranged for operation, in combinistion and close structure. 3) The valve, K, wien constructed and arranged for operation in combinistion and close structure. 3) The valve, K, wien constructed and arranged for operation. 3) The valve, K, wien constructed and arranged for operation in combinistion and close structure, e, in the claim the constructed with passages, c. for the valve, H, with the durated by the partitions, C and E, of the valve, H, with the personated ball, we constructed as described. 3) The valve, K, with the durated cover, F, substantially as and for the purposes here in action of the valve, H, with the durated ball, we constructed as described. 3) The park N. Y. I claim the bin constructed as described, consisting of t	I claim, 1st, The combination of the sli ing gate. A, with the provided sup-	steam to and from the backs of the matons, sub-tantially as specified.	
 20, 1 he control the spring stop, s, bar, d d', panel, B, and gate, A, stop with the double cynders, their pistons and crank, substantially as escribed. 81,983.— STEAM GENERATOR. —Jonathan M. Clark, New York city. 1 chaim the angular hollow head, B, constructed with passages, c. for the livide dynthe performs and cover, F, substantially as and for the purposes steriort. 82,084.—TILE MACHINE.—William L. Reck, Drake county, Ohlo. 1 claim the combination and arrangement in the rectangular frame, A, substantially as herein set. 82,084.—TILE MACHINE.—William L. Reck, Drake county, Ohlo. 1 claim the combination and arrangement in the rectangular frame, A, substantially as herein set. 82,084.—TILE MACHINE.—William L. Reck, Drake county, Ohlo. 1 claim the combination and arrangement in the rectangular frame, A, substantially as herein set. 82,082.—ANIMAL TRAP. — T. B. Kirby, Flowerfield, Mich. 1 claim the combination and arrangement in the rectangular frame, A, substantially as herein set. 82,083.—Bus constructed with passages, c. for the divide dynthe performance of shown and described. 82,083.—Bus FOR SUGARS, ETC. — Morgan L. Rich, Sand that y as shown and described, consisting of the radial portions, and index of the suspension of one or more cressets to the axle, within the 82,094.—TILE MACHINE.—William L. Reck, Drake county, Ohlo. 1 claim the suspension of one or more cressets to the axle, within the 	porti, g bar, d d', substautially as described.	3d. The valve, K, when con-tracted and arranged for operation, in combin-	stantally as describe.
 shown and described. 81,983. — STEAM GENERATOR. —Jonathan M. Clark, New York cty. 1 claim the angular bollow head, B, constructed with passages, c, for the individed by the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions, C and E, of the varye, H, with the performance of the partitions of water or steam, secured together by pin projections, and the standard, B and k, N. S. (2005. — BIN FOR SUGARS, ETC. — Morgan L. Rich, Sand that y as shown and described for the purposes set forth. 81,984. —SUSPENDER.—C. H. Cleveland, Selma, Ala. 1 claim the suspension of one or more cressets to the axle, within the 	20, The computation of the spring stop, s, bar, d d', panel, B, and gate, A,		83.034 TUE MACHINE William L Reck Drake county.
 81,983. — STEAM GENERATOR. — Jonathan M. Clark, New York city. 81,983. — STEAM GENERATOR. — Jonathan M. Clark, New York city. 82,008. — ANIMAL TRAP. — T. B. Kirby, Flowerfield, Mich. I claim the onzional rocking frame, N, actuated by the system bar, J, and York city. 81,984. — SUSPENDER. — C. H. Cleveland, Selma, Ala. I. claim the suspension of one or more cressets to the axle, within the bin constructed as described, consisting of the radial portions, C and B. ot the suspension of one or more cressets to the axle, within the bin constructed as described, consisting of the radial portions, C and the standard, B all inclosed within the case, having using edge of the 	substantially as described.	shown and described.	
York city. I claim the angular bollow head, B, constructed with passages, c. for the circulation of water or steam, secured together. by pin projections, g, and intis, f, and with removable covers, a, combined with the tubes, A, substan- tally as shown anr described for the purpose set forth. 81,984.—SUSPENDER.—C. H. Cleveland, Selma, Ala. I claim the suspension of one or more cressets to the axle, within the subset and the standard, B all inclosed within the case, having unclined sides. I claim the suspension of one or more cressets to the axle, within the subset and the standard, B all inclosed within the case, having unclined sides. A conditioned to class a standard	81983 — STEAM GENERATOR, —Jonathan M. Clark, New	82,008 — ANIMAL TRAP. — T. B. Kirby, Flowerfield, Mich.	I claim the horizontal rocking frame. N actuated by the sweep har. J. and
I claim the singular bollow head, B, constructed with passages, c for the circuistion of water or steam, secured together by pin prejections, g, and that is and with removable covers, a, combined with the tubes, A, substan- tually as shown an described for the purposes set forth. 81,984.—SUSPENDER.—C. H. Cleveland, Selma, Ala. I claim the suspension of one or more cressets to the axle, within the Light in st. The suspension of one or more cressets to the axle, within the standard, B all inclosed within the case, having in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the standard in the suspension of one or more cressets to the axle, within the suspension of one or more cressets to the axle of the clean the suspension of the standard is the standard in the suspension of the standard is the standard in the suspension of the standard is the standard in the suspension of the standard is the standar		Legim the combination and arrangement in the rectangular frame. A.	on rating the gate M, to open and close alternately the aperture, e. in the
circulation of water or sieam, secured together by pin projections, g, and nuts, f, and with removable covers, a, combined with the tubes, A, substan- tually as shown anr described for the purpose set forth. 81,984.—SUSPENDER.—C. H. Cleveland, Selma, Ala. I claim the suspension of one or more cressets to the axle, within the Light as the suspension of one or more cressets to the axle, within the standard, B all inclosed within the case, having nuclined gives of the a set of the suspension of one or more cressets to the axle, within the standard of the standard, B all inclosed within the case, having nuclined gives of the standard of the standard, B all inclosed within the case, having nuclined gives of the standard of the standard, B all inclosed within the case, having nuclined gives of the standard of the standard, B all inclosed within the case, having nuclined gives of the standard of the standard of the stan			feeding here, E of my improve i machine, substantially as herein set forth.
nuts, f, and with removable covers, a, combined with the tubes, A, substan- thally as shown and described for the purpose set forth. 81,984.—SUSPENDER.—C. H. Cleveland, Selma, Ala. I claim the suspender or shoulder brace, composed of two single straps. I claim is, the suspension of one or more cressets to the axle, within the		box, K, having a hinged cover, F, substantially as and for the purposes here-	
81,984.—SUSPENDER.—C. H. Cleveland, Selma, Ala. I claim the suspender or shoulder brace, composed of two single straps. I claim in far. The suspender or shoulder brace, composed of two single straps.	nuts, f, and with removable covers, a, combined with the tubes, A, substan-	lu set forth.	
51,954.—50.954. Develand, Selma, Ala. I claim the suspender or shoulder brace, composed of two single straps. I claim ist. The suspension of one or more cressets to the axle, within the a, and linged doors, al, the latter adapted to cleese spans the edge of the	tially as shown and described for the purpose set forth.	82 000 PANNO BOLLER -Edmund W Kittredge Cincin-	Baux, N. 1. Legistry the bin constructed as described, consisting of the radial portions.
I claim the suspender or shoulder brace, composed of two single straps. I claim, ist. The suspension of one or more cressets to the axle, within the a2, and hinged doors, a1, the latter adapted to close against the edge of the	81,984.—SUSPENDER.—C. H. Cleveland, Selma, Ala.		C. ground the standard, B all inclosed within the case, having inclined sides.
		I claim 1st The suspension of one or more cressets to the axle, within the	a2, and hinged doors, a1, the latter adapted to close against the edge of the
D b each bassing from the attaching strap at the one side over the shoulder i revolving cylinder and standard as and for the burbose set forth.	B B. each passing from the attaching strap at the one side over the shoulder	revolving cylinder substantially as and for the purpose set forth.	op, D, which forms a scale support, as herein shown and described.

82,036.-HAY AND COTTON PRESS.-James Robertson, Gos-

206

port, 10. I claim the combination of the press beam, A, rollers, B B, connecting beam, C C lever. D, which an sxie, G, and rone connecting the axie, the lever, D, and the beam, A sub parts bend, arranged in relation to one an-other substantially as described. 82,037.—BRICK MOLD.—William Sangster and John Bretz

Springfield III. We claim the combination of the frame bars, B, with the bars, D, pivoted ereto, supporting the partitions, C, with the slotted mold hex. A, bandles, and ledges, F, all constructed in the manner described and for the pur-use cell toric

82.038.—MEDICAL COMPOUND.—Irving W. Scranton, West berty, lowa. am, the above improved compound for the treatment of Cholera in any

stag 81,039.- CORN SHELLER AND CLEANDR.-Nicholas Shock

Baltamore, Md. I claim, 1st, the combination of the serrated disks, F F, and feed spout, G.

I claim, ist, the combination of the serrated disks, F F, and feed spout, G, sunstantially as shown and described. 20, The combination of the toothed disk, C, the revolving apron, m, and chute board, n, all as shown and described. 30, The combination of the rhute board, n, the elevator, and the spout, t, substantially as shown and described. 4th. The combination of toothed disk, C, and the chute board, n, substan-tially as shown and described. 52.040.—HORSE RAKE.—Francis Smith, Highgate, Vt. I claim the lever, H, belt, I, pulleys, F and G, bar, b', arms, e', and rake teeth, ti n combination with the pivoted bar, L, bar, N and fingers, p', all constructed, arranged, and operated in the manner and for the purpose set forth.

- асти. 82,041.—Віт Stock.—Robt. D. O. Smith, Washington, D. C. telam a bit stock with the μ ws, DD, having a parallel movement, and sleeve, C, or the qu valents of these parts, construct as a sto hold the bit truly centered by seizing it by the cylindereal by the cylinder of the best of the set of the state of the set of
- 82,042 DEVICE FOR TURNING SHAFTING.—Norman C.Stiles.

Meriden, Conn. I claim. 1st, The plate, A, and cutters B1 B2 B3.

Mericell, John.
Iclaim. Ist, The plate, A, and cutters Bi B2 B3.
26, The arrangement of the c-ntering device, the cutters, and the milling tool, substantialy as and for the purpose herein described.
82,043.—POTATO PLOW.—Michael Stoll, (onestoga township, assenor to himself, Benjamin Snavely, and Anthony Is.e. Lancaster, Pa. 1 claim the arrangement and construction of my shovels, 12 and 3, with their respective beams, slots, screw pois, b, and conterstunk segment, e. and adjustable bearings, E, in combination, with or without the seperate center pit ce. A, fig. 2, all made in the maner and for the purpose specified.
82,044.— Bit Stock.—O. H. Taylor, Brooklyn, A. Y., assignor to Wm. E. Partish, New York city.
Iclaim the atool which may be secured in the stock by 9 strew. or its equivalent, so appled as to jorce the shak into the contracted portion of the socket, substantially as described.
82,045.—METHOD OF FASTENING HAMES.—W. S. Thompson and R. Vincent Love, Mongemery, Ala.

82,045 — MERTHOD OF FASTENING HAMES. — W. S. THOMPSON and R. Vincent Love, Monitgomery, Ala. We claim the bar. A. latch B, book D, and button, c, constructed, operat-ing, and arranged substantially as and for the purpole set forth. Also, the dovedail, d. in combination with the bar, A, and latch, B, con-structed and arranged substantially as and for the purpose described. Also, the hook, B, when arranged with the eves, f f, and un combination with the bar, A, and latch, B, substantially as audior in the purpose described. S20, 46. MERDING, CONDUCTION Theorem H. Linking M. D.

with the bar, A, and latch, B, substantially as a s

Norfork Va. I claim a predicting for piles, compounded of the ingredients, in the man-ber, and substantially of the proportions herein spec fie d \$2,047.—Saw FILING MACHINE.—James H. Van Nortwick,

Surgis, Mich. I claim, 1st, The combination of cam, G, secured to the shaft, D, arm, H, levers, 1 d, connecting rod, d, pawl, f, and spring, e, all constructed as de-scribed, and operating for the purpose of urraing the terd screw, M, by means of the driving wheel, K, thereby moving the cairlage, N, substantially seberoin set forth.

Refiled, and operating to the thereby moving the chiral age, N, substantially as herein set forth. 2: The arrangement of the shaft. D, movable collar, k, wheels, O P and R, in combination with the pitman, m, and walking beam, u, all constructed as described, for the purpose of moving the file nancle, s, bac and forth, sub-stantially as herein set forth. 3: The arrangement of the movable plate, T, carriage, and screw, U, to turn the file as any angle desired, substantially as herein set forth. 4: The arrangement of the file nancle, S, conscructed and operating sub-stantially as and the purpose of moving the file nancle, S, bac and forth, sub-stantially as and ion the purpose of moving the discrete with the walking beam, u, and provided with the optical, p, constructed and operating sub-stantially as and ion the purpose forth of the frame. A, clamps, C, subft, D, feed screw, M, and Carriage, N, all with their different ports constructed as described and operating sub-sintally as and for the purposes herein bet for th. 52(048.-BUTT&R PAIL.-Henry P. Westcott (assignor to Sence Fails, toru Manufacturing Company), Sence of Fails, N T. I claim the metallic ear, C, socker.d as described, to contain the bar E, in combination with the said bar, and ear, B, with inward projections, as de-scrible.

82,049,-SELF-BALANCING CENTRIFUGAL MACHINE.-David

S2.049.—SELE-HALANCING CENTRIFUGAL MACHINE.—David M. Weston, Boston Mass. I claim, 1-t, The application of the easily-yi lding spring, e, as the sole supplort of a centifugal machine "revolving upon an upright shaftersting upon a fixed backing as machine trevolving upon an upright shaftersting when a fixed backing as machine the output of the shaft and pivot bearing, substantially as above described Xd. The fixe hile structure, it combination with the upright shaft, b, made or sufficient length to priver the instrument oscillation of the machine at an object of gld, substantial as described. As The public, c. flixed to the shaft, b, below the floor or platform, i, so that the driving obver of the machine is wholly appled below the floor. S2.054.—II at VESTER REEL AND RAKE.—Wm. N. Whitely, Networked, Ohio.

Spectrachi, Ohio. Carbo, 1st, The rake bead H, with the arms, G G, and with a long tube arms for the joint bolt, in the manner described, independent of the wood-

en arm, F. 2/1, Attaching the friction roller, N, to the cast rake bead, H, by means of a groupht bole one and of which forms the journal or bearing of said roller wrought bolt, one end of which forms the journal or hearing of suid roller and the other penetrates through said head, and is secured therein by a screw nut, or the equivalent thereof. 3d, The pendent stud, W, with a tapered socket for the correspondingly shaped bolt. O, which a taches the friction roller to the head, H, as set for the

Super bor. 0, when aucres the friction roller to the head, H, as set forth and described. 82,051.—LAMP.—Abel Whitlock, Danbury, Conn. 1 (Jaim a lamp pot constructed with the therior chamber, B. said chamber communicating with the reservoir is heing replenabled, in combina-tion with valves, 6 and 1, substantially as shown and set forth. 82,052.—FLOVER POT - Epitrain Whitman, Fitchburg, Mass. 1 claim a flower pot made with inner and outer walls, a b, and gn inter-vening water scace, c, the walls, a b, being connected or relatively fixed in position, substantially as shown and described. Also, in combination with the water caamber, c, the cap ring, i, substan-tially as shown and described.

65,202.—PROPELLER.—Dated May 28, 1867; reissue 3,113.— F. G. Fowler. Springfield, Ill. I claim, 1st, The blades a", constructed. arranged. a'd operating substan-stantially as and for the purposes herein shown and described. 2d. The eccentric, e, with its band, and the rods, e', arranged and operat-log substantially in die manner and forthe: purpose sestiorti. 3a, The r-movable eccentric, e, applieu to steering purposes, and arranged in the manner and for the purpose set forth. 4th, The sleeve, E, chain wheels, r and fr", chain, r', and shaft, s, or their equivalents, when us d unbrainfully as and for the purpose described, 3d. A propeliel constructed of the parts above described, arranged and operating as a combined steering wheel and propeller, substantially as set forth.

20,647.-GANG PLOW.-Dated June 22, 1858; reissue 3,114.-

Don ' arlos Matteson, Stock on Cal. I claim the arrangement as described of the 'alse beam, N, Foose neck, G, axle, u, lever, i, catch, L, and the syste n of plows at mached to their frame, as set forth, the whole being constructed and operating substantially as and for the purposes specified. 14,245.—SEALING PRESERVE CANS.—Dated Feb. 12, 1856

reissue 3,115. - S. B. Rowley, Philadelphia. Pa., assignce of R. W. Lewis. I claim. 1st, A preserve can or jar having a plate interven ing between the gum packing, and a cover, or its equivalent, for compressing the packing to its seat on the jar.

Its seat on the jar. 2d, The plateo: its equivalent, stuated below the packing, and filling the throat of the jar, as set forth, for the purpose specified. 3d, Ribs. H., or recesses on the jar, in combination with notches or projec-tions on the plate above the packing, for the purpose specified.

EXTENSIONS.

MOLDS FOR CEMENT OR EARTHEN TUBES - Bradford S. Pierce, and Charles M. Pierce, of New Bedford, Mass.—Letters Patent No. 11,440, dated August 1, 1854. We claim the combination of a core and spring case, substantially as here-n Set forth.

CULTIVATOR-Daniel W. Shares, Hamden, Conn.-Letters

We claim the combination of a core and spring case, substantially as here-in set forth. CLUTIVATOR.—Daniel W. Shares, Hamden, Conn.—Letters Patent No. 11,450, dated August 1,1854. PLOWR.—Joshua Gibbs, Canton, Ohio.—Letters Patent No. 15,53, dated August 1, 1854. I claim providing the expanding and contracting hocing wings to neither side with continuous the expanding and to the purposes specified. PLOWR.—Joshua Gibbs, Canton, Ohio.—Letters Patent No. 11,535, dated August 1, 1854. I claim Dashing the working surface of the molt board in the form of a section of the interior surface of a holiow cylinder, the center or axis of said cylinder being parallel, or nearly parallel, horizontally to the base of the mold board or bottom of 'he plow substantially as escribed. MACHINE FOR PLANING LUMBER OUT OF WIND.—Solomon S. Gray, Boeton, Mass. Letters Patent No. 11,582, dated August 22, 1854; reissue No 245, cated April 17, 1860. Letaim read theil being construction of cutter head herein described, the cut read theil being each the potentiar construction of cutter head herein described, the claim is the service of the purpose of dogging the lumber to the bed of the machine, the body of the claim being pivot d at d, a'd forced up by the server. F. or its equivalent, ite dog. I. being adjustable therein, in the maner and for the purpose of form and bring stable therein in the maner and for the purpose of form and stable therein in the maner and for the purpose of form and stable there in the dumber of a scarling the dog. I. being adjustable there in the maner and for the purpose of form and and and forced up by the server. F. or its equivalent, in combination with a rotary cut-ter bead and traveling bed. I, provined with suitable dogs for plasing straight and out of wind, sub-tantially as set forth. Set within described mig machine, of an anomatic feed, a work supporting suiface, and a needle, when the needle is arranged to oper ate from below the table or work supporting suiface. Also the combination, in a sewing machine

Also, the method of electing the rotation of the book, substantially as specified. CARDING MACHINE.—Horatio N. Gambrill, of Balti-more, Md., and Thomas D. Bond, of Washington, D.C., administrator of Singleton F. Burgee, deceased.—Letters Patent No. 12,469, dated February 27, 1855; andedated August 22 1854; reissne No. 509, dated No vember 17, 1855; We claim the application of two or more sets or pairs of feeding rollers to the working cylnider of carding engines, ubstantially in the manner and for the working cylnider of carding engines, ubstantially in the manner and for the working cylnider of carding engines, ubstantially as set forth. material directly on to the main cylnider of the substantially as set torth. We also claim the reversing of the relative velocities of the p ripheries of the working cylnider and stipper. M. at intervals, by an automatic movement for the purpose of cleaning or preventing the clogging of the main cylnider, nor the QLADING CARDENTIES' SOLAPES.—Nor

MACHINE FOR GRADUATING CARPENTERS' SQUARES .- NOT

MACHINE FOR GRADUATING UARPENTERS' SQUARES.—Nor-man Milington. of Shaftesbury, Vt., and L. J. Martison, S. M. George, and A. B. Garener, of the same place, executors of Dennis J. George, de-cessed. Letters Patent No. 11,489, dated August-8.1554. We claim that harrangement in a snigle frame, substantially as set forth, of as many gravers as there are units to be divided, so as, by the action of the cam wheel, W, or its equivalent, smultaneously to trace, of the proper length, each set of division and fractiona intes. 2d, The balance frame, V, with its appendages to equalize the pressure of the spiral springs on the graver handles, g, so as to give the same depth of mark on the thin as well as the thick end of the taper square. 3d, The included plane, i, with its appendages for moving the square longi-tinghally, and dividing the in. b into auy desirable number of equal parts.

the models and patents at Washington, to sectra in whether compressions mentpressented is patentable. In Order to Apply for a Patent, the law requires that a model shall be furnished, not over a foot in any dimensions—smaller if possible. Send the model by express, propaid addressed to Munn & Co., 37 Park Row, New York, together with a description of its operation and merits. Our receipt thereof we will examine the uncertainty made of any suitable materials, strongly faste end, with utglue, and neatly made of any suitable materials, strongly faste end, with utglue, and neatly made of any suitable materials, strongly faste end, with utglue, and neatly made of any suitable materials, strongly faste end, with utglue, and neatly made of any suitable materials, strongly faste end, with utglue, and neatly made of any suitable materials, strongly faste end, with utglue, and neatly made of any suitable materials, strongly faste end, with utglue, and neatly made of any suitable materials, strongly faste end, with clearness, the naure and operation of the inventor shouldby-engraved or planted upon it. When the move function consists of an improve will not be necessary. But the model must be sufficiently perfect to above with clearness, the naure and operation of the invertor fail kinds, are paten able. When the investion consists of a medicine or compound, or a new article of manufacture, or a new composition, samples of the article must b farmished, neatly put up. Also, send us a full statement of the ingredients, proportions, mode of preparation, uses, and merits.

arts. 4th, The carriage, C, arranged to press the square up against the points of the gravers by a cam, or oth rwise, all of the several parts, or their equira-lents to be arranged and combined as above specified, or in my, other man-ner substantially the same which shall produce the intended effect.

ner substantially the same which shall produce the intended effect. CENTRIFUGAL PUMP.—William O. Andrews, New Yorkcity. Letters Patent No. 11,544, dated August 22, 1854. i claim the construction of the pump as herein described and shown, viz., having a lub, E. in the shape of the base of a cone inverted, with a rune, a, attached to its periphery, of a gradually decreasing with as they approach its base, placed within a shell corresponding in shape to the outer creating-ence of the arms, and baving induction presarges of a spiral form, gradually decreasing in pich to their point of deivery, and eduction passages of a spiral form, of a gradually decreasing without sudden change of direction or eddies, in an unproken volume through the pump; ind t do not limit myself to the precise mechanical construction as shown, but may modify the different parts, only retaining the same general combination.

forth, which consists in heating and curing them with steam, and under pressure, and in regulating the application of steau, and the induration of the product by the "induction of steam and water. as descibed, by which a very grear saving is inade in the time and fuel required for the process, as hereinabove stated.

SEPTEMBER 23, 1868,

Inventions Patented in England by Americans.

[Compiled from the "Journel of the Commissioners of Patents."] PROVISIONAL PROTECTION FOR SIX MONTHS.

2,395.-FLAME SPREADER AND AERATOR FOR GAS AND OTHER BURNERS.-Joseph S. Machuy, Washington, D. C. July 30, 1868.

2,396 — DISTILLATION, AND MEANS AND APPARATUS EMPLOYED THEREIN.— Thos. Prosser, New York city. July 30, 1868. 2,400.—MANUFACTURE OF AND REPAIRING RAILWAYRAILS.—Hugb Baines, Toronto, Canada. July 30, 1868.

2.104 -- SUBSTITUTE FOR INDIA RUBBER.-- A. G. Day, Seymour, Conn. July 31, 1868.

2.422.-MACHINERY FOR MANUFACTURING METALLIC EYELETS.-Wm. R. -Landfear, Hartford, Conn. Aug. 1, 1868. 2,465.-FELTED FABRICS.-Henry Hayward, New York city. Aug. 6,1868.

2.473.-SEWING MACHINE.-Benj, P. Howe, New York city. Aug. 7, 1868.

1.821.-DECORATING WALLS, ETC.-WM. Howell, Philadelphia, Pa. June 3,1868.

2,444.-HARVESTING MACHINE.-George Harding, Philadelphia, Pa. Aug. 4, 1868.

2,448.-BOOT AND SHOE SEWING MACHINE.-Michael J. Stein, New York city. Aug. 4, 1868.

2,453.-MANUFACTURE OF IRON AND STEEL. -L 'r. 123 Sibert, Mount Solon; D. C. E. Brady, Buffal. Forge; and John D. Imboden and Seth M. Barton; Richmond, Va. Aug. 5, 1865.

2,458 -INDICATOR AND SAFETY VALVE FOR STEAM BOILERS.-Chas. Bailey, Cinci nati, Outo. Aug 6, 1868. 2,466.-BOOTS AND SHOES.-John M. Hunter, Morristown, N. J. Aug. 6, 1868,

2,471.- INDIA RUBBER FABRIC.-John Haskins, Boston, Mass. Aug 7, 1868. 2,478.-FIRE-ARM --Wm. Gardner, Toledo, Ohio. Aug. 7, 1868.

2,485.—STEAM ENGINE GOVERNOR.—Edwin L. Bomeisler, Philadelphia, Pa. Aug. 8, 1868.

2,486.—SCREW AND SCREWDRIVER.—Peter N. Jacob us, Flatbrookville, N. J. Aug. 8, 1868.



ATENTS.

the work done over again. The boop has to be a set of the printing of the parties consulted are honorable men, the inventor may safely confide his ideas to them: they will advise whether the improvement is probably patentable, and will give him all the directions needful to protect bis rights. Messrs.MUNN & CO., in connection with the publication of the SCIENTIFIC Messres.

Messrs. MUNN & CO., in connection with the publication of the SciENTFIC AMERICAN, have been actively engaged in the business of obtaining patches for over twenty years—nearly aquarter of a century. Over Filty Thousand inventors have had benedit from our counsels. More than one third of all patches granted are obtained by this firm. Those who have insel inventions and desire to consult with us are cor-dially invited to do so. We shall be napov to see them in person, at our office or to advise them by 1-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 sketch, and a description of the invention should be sent, together with stamps for return postage. Write plainly, do not use encel hor pale ink ; be offet. All business committed to our care, and all consultations, are kept by us secret and strictly confidential. Address MUNN & CO., 37 Park How, New York. Preliminary Examination.—In order to obtain a Preliminary Ex-

Nork. **Preliminary Examination.**—In order to obtain a Preliminary Ex-amination, make out a written elsecuption of the invention in your own words, and a rough penell or per-sadd-tck kettelt. Send these with the fee of \$5 by mail, addressed to MUNN & CO., 37 Park Row, and it and time you will receive an acknowledgement thereof, followed by a written report in reg rd to the patentability of your improvement. The Pre-iminary Exam-ination consists of aspecial search, which we make with great care, among the models and patents at Washington, to ascertam whether the improve-ment presented is patentable.

Reissurs, -A reissue is granted to the original patentee, his heirs, or the sagnees of the entire interest, when by reason of an insufficient or defective pecification the original patent is invalid, provided the error thas arisen rom inadvertence, accident, or mistake, without any fraudulent or deceptive ute.ton.

tion with valves, G and I, substantially as snown and set forth.	l claim the construction of the phup as herein described and shown, viz., having a lub, E. in the shape of the base of a cone inverted, with arms, a	assignees of the entire inferest, when by reason of all insumclent or defective
82,052 - FLOWER POT - Ephrain Whitman, Fitchburg, Mass.	having a lub, E. in the shape of the base of a cone inverted, with arma. a,	from inadvertence, accident, or mistake, without any fraudulent or deceptive
I claim a flower pot made with inner and outer walls, a b, and an inter-	naving a tub, E. in the shape of the base of a concluvaries, with a rup, a, attached to is periphery, of a gradually decreasing width as they approach its base, placed within a shell corresponding is shape to the outer creamfer- ence of the arms, and baying induction passages of a spiral form, gradually	The hadvertence, about the, or mistake, without any fraudulent of deceptive
vening water s, ace, c, the walls, a b, being connected or relatively fixed in	its base, placed within a shell corresponding in shape to the outer circumfer-	A patentee may, at his option, have in his reissue a separate patent for each
position, substantially as shown and described.	ence of the arms, and having induction passages of a spiral form, gradually	distinct part of the invention compresended in his original application, by
Also, in combination with the water chamber, c, the cap ring, i, substan-	decreasing in pi ch to their point of derivery, and eduction passages of a spiral form, of a gradually increasing pitch until they attain as raight line,	paying the required fee in each case, and complying with the other require-
tially as shown and described.	spiral form, of s gladually increasing pluci until they attain a straight line,	ments of the law, as in original applications.
82,053WINDOW ECREEN R.S. Whittier, Dorchester, Mass.	by which construction the water is made to pass, without sudden change of	Each division of a reissue constitutes the subject of a separate specifica-
I claim, 1st, The combination and arrangement of the shaft, B, bushings, C	direction or eddies, in an unbroken volume through the pump; ind I do not	tion descriptive of the part or parts of the invention claime ; in such divis-
and D, disk, F, and spring, E, with the body, A, of the roll, in the manner	limit myself to the precise mechanical construction as shown, but may modify the different parts, only retaining the same general combination.	ion; and the drawing may represent only such part or parts. Auress MUNN
and for the nurnose specified		& CO. 37 Fa K Kow, for full particulars.
2d, The plate, a, provided with a concave bearing, in combination with the	MACHINE FOR CASTING METALLIC EYES OR MAILS OF HED-	Interiferences. — When each of two or more persons claims to be first in- ventor of the same thing, an "Interference" is declared between them, and a
square ended shaft, B, and its connections, and with the case, G, for the pur-	DLES FOR LOOM Jacob Senneff, of Philadelphia, Pa. Letters Patent No.	ventor of the same thing, an "Interference" is declared between them, and a
pose and substantially as described.	11,589, dated August 22, 1854.	trial is had before the Commissioner. Nor does the fact that one of the par-
3d, The plate, b, provided with a slot, p, when used in combination with	I claim, 1st, The method, within described. of casting the eyes or mails on	ties has already obtained a patent prevent such an interference; for although
the roll, 4, and with the case, G, and the screen, S, for the purpose and sub-	the strands of varn or other material, by inserting the varns successively	the Commissioner has no power to cancel a patent already issued, be may, it he finds that another person was the prior inventor, give him also a patent,
stanually as described. 4th, The curved spring plates, d, slotted as shown and described, in combi-	within a mold secured on a vibrating frame, L, operated at the proper inter- vals of time by means of the eccentric cam., I, suid cams being opened at	and thus place them on an equal footing before the courts and the public.
nation with the case, G, and the screws, c, or bolding devices, which connect	vals of time by means of the eccentric cam, 11, said cams being opened at	CaveatsA Caveat gives a limited but immediate protection, and is par-
the case and the roll with the sash, as described.	times to disengage the mail therefrom, and provided with a core, 24, for	ticularly useful where the invention is not fully completed, or the model is
5th. The slotted p ates, f, constructed as described, in combination with	I rming the eye in the mail, and capable of being withdrawn therefrom be-	ticularly useful where the invention is not fully completed, or the model is not ready, or further time is wanted for experiment or study. After a taveat has been filed, the Fatent Office will not issue a patent for the same inv niton
the bar. H, and the screws, e, for the ourpose and substantially as described.	fore the mold opens, substantially in the manner and for the purpose herein set forth.	has been filed, the Patent Office will not issue a patent, for the same invention
6th. The combination with the sash, K, of a case, G, constructed as de-	2d, The manner of operating the core. so as to enable it to be so withdrawn '	to any other person, without giving notice to the Caveator, who is then al-
scribed, the case serving as a cover and protection to the roll and the screen	from the eye of the mail after the same is formed, and while it is firmly em-	low ed three months time to file in an application for a patent. A Caveat, to
and also as a certer for detaching the bar, H, and the screen from the sill, for	braced within the mold, by means of the spring, S, and screws, 25 and 33,	be of any value, should contain a clear and concise description of the inven-
the purpose and substantially as described.	operating in the manner described.	tion, so far as it has been completed, illustrated by drawings when the ob-
711. The trangement and combination of the roll screen, and Case, and	3d, The ore carrier, 27, resting in a notch formed in the top of the spring,	ject admits. In order to file a Cavear the inventor needs hily to send us a
the supporting plates, with the sash, and the bar, H, with the sill, M, so that	S, and Laving pice, 26, on its face, which have through slots in the mold plates	letter containing a spetch of the invention, with a description in his own words. Address MUNN & CO., 37 Park flow, New York.
b series shall more perfectly over the open space produced by raising	and spring, W, for moving the core horizon(ally from the stationary half of	Additions out he medate () worth at uny tune. A (lawoot wans one week
the sash, as and for the purpose set forth. Sth, The combination of all the operative parts specified, arranged to op-	the mole, and keeping it hid way between the mold plates, when they are	an i cyn berenewed on naymant of \$10 a year for as long a period as desined
erate substantially as and for the purpose set forth.	the mole, and keeping it hid way between the mold plates, when they are opened by the lever, T, and preventing it being thrown violently either way,	Quick ApplicationsWhen from any reason parties are desirous of
82,054. Spur WIIEELC. F. Woodruff, Newbern, Tenn.	as derein set forta.	applying for Patents or Caveats, 10 GREAT HASTE, without a moment's loss
1 claim, 1st, the senes of cogs, M, the rim, A, shoulders, m m, and pins, e,	4th, The manner of operating the headle frame holder, D, by means of the	of time, they have only to write or telegraph us specially to that effect, and we will make special exertions for them. We can prepare and mail the
constructed and arranged substantially as described.	eccentric cams, I, on the shaft, B, capable of being moved long indinally over the grooves in said shaft, right-angled levers D , to which the heddle-	we will make special exertions for them. We can prepare and mail the
2d, TLESpokes, N N, when formed with the trifurcated end, n n'n, sub-	frame is secured, and spiral springs, 21, for keeping the ends of the levers al-	necessary papers at less than an bour's notice, it required.
stantially as described.	ways in contact with the eccentric cams; and. in combination therewith, 1	Foreign PatentsAmerican inventors should bear in mind that, as a
30, The combination of the trifurcated spokes, N N, with the projecting	claim the s rew shaft. ", and claimps, J, and the adjustable gearing, K. at the	general rule, any invention that is valuable to the patentee in this country is worth equally as much in England and some other foreign countries. Five
ends, R R, of the congated cogs, substantially as described.		Patents-American, English, French. Belgian, and Prussian-will secure an
82.055 — Mor. — John A. Wright, Keene, N. H.	operating in the manner and for the purpose herein fully set fortb.	inventor exclusive monopoly to his discovery among ONE HUNDRED AND
l claim a shdin ; and revolving handle, A, with its projection, c, and screw	PACKING FOR STUFFING BOXES, ETCJOS. H. TUCK, Broklyn,	THIRTY MILLIONS of the most intelligent people in the world. The facilities
th read, d, in combination with the jaws, B C, one or both of which are pro-	NV Latter Development No. 19 Jack dated Lung 90 1957 in touck, Diokiyin,	of business and steam communication are such that patents can be obtained
vided with a screw thread, h substantially as and for the purpose set fort i	N. YLetters Patent No. 13,145, dated June 26 1855; patented in England, August 25,1854.	abroad by our citizens almost as easily as at home. The majority of all pat-
Also, a mop cloth sewed substantially as described, to insure the projec- jection, c. catching into and retaining the cloth when it is to be twisted for	I claim the foreward of packing for pistons or stuffing hoves of steem on	enrs taken out by Americans in for ign countries are obtained through the
jection, c. catching into and retaining the cloth when it is to be twisted for	i claim the forming of packing for pistons or stuffing boxes of steam en gines, and for like purposes, out of saturated canvas, so cut as that the thread	SCIENTIFIC AMERICAN PATENT AGENCY. A Circular containing further in-
the purpose of being wrung out.	or warp shall run in a diagonal direction from the line or center of the roll	formation and a Synopsis of the Patent Laws of various countries will be
83,056 EXELCISING CHAIR J. A. Wroe, Hagerstown, Md.	of packing, and rolled into form either in connection with the india-rubber	furnished on application to Messrs. MUNN & Co. For instructions observing Foreign Patents, Reissues, Interferences,
I chaim a virtuary and exercising chair when the same is constructed	core or other elastic material, or without, as herein s.t for th,	Hmts on Selling Patents, Rules and Proceedings atthe Patent Office, the Pat-
withhollow back, seat, srins, and foot hoard, and is so supported upon piv-	GOVERNOR OF WINDMILLS.—Daniel Halladay, Batavia, Ill.—	ent Laws, etc., see our Instruction Book. Scit free by mail on pplication.
ots or lockers that the chair can be readily operated by means of springs, or their equivalents, substantially as described, as and for the purpose speci-	COVERNOR OF WINDMILLS.—Danici Halladay, Datavia, III.—	TOTAL AND AND A REAL AND AND A REAL AND A
or their equivalents, substantiany as unseribled, as and for the purpose speci-	Turtono Decent No. 11 (00 decud America 0, 10%)	Those who receive more than one copy thereof will oblige by presenting
	Letters Patent No. 11,629, dated August 9, 1854.	them to their trunds.
29 057 VALUE DOD WARD- CLOSERS DOR'S MORNIGON	I claim attaching the spindles, b, of the wings or sails. F, to a sliding head, i	them to their trunds. Address all communications to
82,057VALVE FOR WATER CLOSETSDavid Morrison,	I claim attaching the spindles, b, of the wings or sails, F, to a sliding head, G, by means of the levers, fh, or their equivalents, and operating said head.	them to their true ads. Address all communications to MUNN & CO.,
New York city.	I claim attaching the spindles, b, of the wings or sails, F, to a sliding head, G, by means of the levers, fh, or their equivalents, and operating said head.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city
New York city.	I claim attaching the spindles, b, of the wings or sails. F, to a sliding head, i	them to their true ads. Address all communications to MUNN & CO.,
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their trunds. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corder of F and ith streets. Patents are granted for Seventeen Years, the following being a
New York city. I chain, i.t. The plunger, D , valve, J, and hollow spindle, D, with its groove c, substantially as anown and deter bed.	I cl im attach in the spindles, b, of the wings or sails, F, to as liding head, G, by means of the levers, fl, or their equivalents, and operating sail head. G by means of the lever, fl, or its equivalent, and a governor of any proper construction, for the purpose of giving its desired obliquity the wings or sails, and thereby insuring an equal motion and power during the variable velocity of the wind.	them to their truends. Address all communications to MUNN & CO. , No. 37 Park Row, New York city Office in Washington, corner of F and ith streets. Patents are granted for Seventeen Years, the following being a