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Pag Pamphets containing the Patent Laws and ful particulars of the mode of applying for Letters Patent specifying size of model required and much other information useful to inventors, may be had gratis by addressing MUNV \& Co., Pablishers of the Scientific american, New York.

44,586.-Ball Screw for Fire-arms.-John J. Aliscs, I claim the nippers, A. C. and gouges, B B, in combination with the 44,587.-Ejector for Oil Wells.-J. D. Angier \& Frederick Crocker, Titusville, Pa

 hy and for the purpose specified. 44,588.-Fuse for Explosive Shells.-Clifiord Arick, St claim, trist, The form
raciasu, of a Bormant or curved fues, fy cor fre-chamber within the


magazize, as describcct.
mithird of an annular file firechamber, situated
within the radius of a Bormann fuse with an independent primer, so

uses, , substantially as described.
Fourth, So combining with a soft metal fnse

44,589.-Composition for Pavements, etc.-Richard At
Kinson, Mount Vernon, N. Y.:
elaim combining broken stone gravel, boiling coal tar and hy
 44,590.-Wire Toaster or Broiler.-Samuel Ayres Henry J. Chamberlin, Worcester, Mass.
We claim the combination, of the collars, bars, and frame, when
constructed and operating in the manner and for thepurposes above eet forth
44,591.-Method of repairing Casks and Barrels. Charles $\Lambda$. Baldwin, Boston, Moss. ormation, substantantially as described
44,592.-Petroleum Lamp.-Wm. B. Billings, Brooklyn N. Y.:
r claim the combination of all the parts of my burner, in the
mand
and ser sphtstantially as described and for the purposes represented and set forth.
44,593.- Water Elevator.-J. s. Brown, Washington, D. ${ }^{\text {C }}$.

I Claim the curved link, 9 , constructed and operating substantiall
 with the eurved link, , or, or it
he purpose herein set iorth
44.594.-Device for transmitting Motion.-John W Browning, Mattoon, lil.:

44,595.-Churn.-Ebenezer Buel, Sheridan, N. Y.:
I claim, irist, In combination with1 the brackets, $F$, a rectangula

 ozes set forth
41,596. - Faucet.- G. F. Burkhardt, Roxbury, Mass.

 er and for the purpose herein shown and described.
nfastoned from the hend of a barrel or cask without strainig head by blows and which will be closed, while the faucet is remore a as to prevent the cask or barrel from getting musty.]
44,597.-Steam Gcyerator.-George B. Brayton, Provi dence, R. I.:
ing a constant tupply of water th combenm instion withed in tubes hat urrounding ot the eame with tu bes capabbe of being highly heated
 44,598.- Steam Gencrator.-George B. Brayton, Provi
dence, R. I.:
I Plasm the tuse of p'ates in the furnace of a stenm generating ap
aratus,
,ubstantially as and for the purpose specified. 44,599.-Steam Generator.-Grorge B. Bravton, Providence, R. I.:
In combination with a steam, generator I Illaim the employmen
 hamber under the body of the feed-water so that an exh haust steam
$44_{0} 600$, - -steam Generator.-George B. Brayton, Providence, R. I.:
In a tubular steam gcparator substantially as deseribed I clain
ontrolling the esupply of water and regulating its action by combin nor by means or a contracted tube the said generator with a resee
not the water in both being under llike preasaren substantially as de 41,601.-Steam Generator.-George B. Brayton, Prov dence. R. I.:
reservoir under the arrangement described so that the water shall be
maintained therein at a temperature less than $2122^{\circ}$ Fah. and be en tered the evenerator by tending to equilibrate hydrostatat pressure
betweeu the gencrator and the reservorr, substantially as set forth
bet 44,602.-Curtain or Shade Fixture.-Wm. Campbell, I claim the wedge, E, and pulley, D, in combination with the spring roller, A,
herein set forth.
(This invention relates to a new and useful improvement in that Cass of ixtures for window shades in which the roller on which the haje is wound is provided with a spiral sprring to render the rolle er-acting in winuing ap the shade. This invention consists in a ne m winding up the 1 any desired light

44,603.-Horse Shoe.--Morgan Chittenden, Danbury, Conn.:
I claim as a new improvzd article of manufacture an anfinal shoe,
the upper, a, band, $e$, sole, b, substantially as and for the purpoee as
lescribed.
4,604.-Loom Shuttle.-Thomas Clark, Ware, Mass. I claim the weight resting upon the flling yarn within the shu 44,605.-Finishing Eaves Trough.-C. A. Codding, Bat I claim the comblnation with the bed or platform, A, and con-
ves, $\mathbf{B}$ and $\mathbf{C}$, of the adjustably pivoted levers, $\mathbf{D}$, and hooks, $\mathbf{E}$, he whole being constructed
the purpose herein set forth.
44,60G.-Saw Mill.-Wm. S. Colwell, Pittsburg, Pa., and Utilles Baird, Alleghany, Pa.:
 onstructed, arranged, oper
and for the purpose set forth
second,
 with the rollers, t and $\mathrm{f}^{\prime}$, as herein desicribed and for the purpose set
4,607.-Watch.-Simeon Coon, Havre de Grace, Md. I claim, Hrst, Placing the barrel wheel, A, on the center of the arich by means of the hinged stationary winder, B, as herein de Second, I also claim the fanged rim, E, for securing the barrel Third, I also claim attaching the main spring, I, to the center
Thecl, $J$, the outer end attached to the rim of the barrel whel, A. Fourth, I also claim the arrangement and combination of the bar ren wheel, A, hinged winder, B, flanged rim, E, and center wheels, J
and
watch. for winding a watch and setting the hands at the center of a 44,608. - Hinge.- Joseph V. C. Crate, Waterbury, Conn. And inserted intas space betwen the two eyes of the hinge and be
iween the pintle and the inner edges of the leaves which abuts ween the pintle and the inner edges of the leaves Which abuts
gainst sid stop, and all constructed and arranged in the manner

IThis invention relates to a new and improved butt hinge and it onsists in providing the hinge with a stop arranged in such a man er as not to augment the cost of construction over the ordinary att hinge, and still be equally as strong and durable as the ordinar butt hinges without stops.
44,609.-Sawing Machine.-Jonathan Creager, Cincin nati, Ohio
I claim, frst, The rests, I, attached at their lower ends to the back
 of a hinge, m, to the chite, D, and whose upper edge is supported in
near proximity to without touching the saw blade, substantially a set forth
44,610.-Lifting Pump.-Frederick Crocker, Titusville, a.:
omb I claim combining with a piston of a lifting pump a sustaining
valve, when such valve iis placed above, concentric and free to play
on the rod of the piston and has its seat in the barrel of the pump,
substantial 2minn
4,611.-Weighing Apparatus.-Samuel Darling, Ban
gor, Maine
1 claim the improved scale beam as made with a series of separate
ulara and scales of divisions ar ranged therewith, and to be u sed stantially or more explained. I also claim the movable beam weight as mate with the index arm
and so as to straddle and be capable of sliding on the bean, a And with the scale beam as made with a series of separate fulcra and scales of divisions as described, I claim the construction of the
saddle eox, $x$, with the two nothenes $x$, the same be used in man
ner and for the aer and for the purpose as specitied.
,612.-Cooking and Heating Stove.-Henry Decker First, Duncansville, Pa.:
anamber by the continuation and conjunction of the vertica lues, 4 and 5 , with the flue, 6 , so asto expose the smoke and gases to
an intense heat, and thereby cause them to be consumed befor hey escape rrom the stove, substantially as described.
Second, The metallic caps, 11 and 12, In the front wall of the fire
chamber, constructed and applied substantially as and for the pur chamber, constructed and appled sume
pose described. phirs, The combination of the lime drawers, 3 and 8 , or either of
Them, with the flues of a heating or ceoking stove, substantially a escribed
Chis invention is designed for stoves wherein bituminous coal ects of the invention is the consumption of the smoke, and anothe is the absorption of the carbonic acid gas evolved by the combustion of the fuel.]
4,613.-Weather Strips.-- Abraham Dodder, of Wash ington Iowa:
I claim the hinged or pivoted plate upon the door strip or bed attached to the door, the parts being constructed and arranged in
elation to each other and opera:ed as herein set forth. Harlson Dollttle of
4,614.-Churns.-Harrison Doolittle, of Aurora, Ind.: First, I claim the arrangement of horizontal dash, B B b b', driv-
ing arbor, D d, flaring undercut and grooved recess, a $J$, and taper
ing dovetail key. E, the whole being arranged and operating sub ing dovetail key, E , the whole being arranged
stantially as seet forth
Second, The arrangenent of the removable horizontal brake, L led a N and pin , 0 , as describe

44,615.-Folding Paper Collars.-Merriman P. Dorsch of New York City :
line, by subjecting the paper, while resting on a a able or equivalen and And I also claim comple ing the fold of paper collars which are
folded in a curved line, by drawng them between two rollers which is shorter
described.
4,616.-Leather-pressing Machine.-Gerhard F. Dres ring, of Buffalo, N. Y.: thereof, for the support of the upper roller, and slots, g, for grindin
the lower roller, and forked fulcrum lever, $\mathbf{D}$, in combination wit
the convex and concave rollers, $B \mathbf{B}$, pedal, $\mathbf{E}$, and connecting rod, $F$,
for the purposes and substantially as set forth. 44,617.-Camp Stove.-Jacob Dunton, of Philadelphia, Pa I claim the hood or casing, B, employed in connection with the
boiler, A, to adapt the same to be haeated by. a fire bullt upon the
ground, and to protect the fire in the manner and for the purposes
explained. 44,618.-Machine for Shearing Sheep.-Wm. M. Eccles, I of Oberlim, Ohaio: orth. 4,619.-Apparatus for Evaporating Saccharine Liquids -George E. Evans, of Boston, Mass.: equivalents for conveging steam equally to all parts or the heating
clamber with separate vessel or steam trap, so arranged and op
erating as to prevent the presence of water in the said heating Second, In combination with rotating disks or plates a revolving
pan or pans, operating substantially as described. 44,620.-Reefing and Furling Sails.-George H. Felt, of New York City. Ante-dated Sept. 25, 1864: I claim the combination of ropes ing sails, the said lacing lacings ing stationary and the sail being reeed bed by the said lacings remain, being lowered,
ind and 44,621.
44,621.-Anchor Clutch.-Henry Fleming, of Chicago, I claim the bed piece, A, the slide, B, and the prongs, D, when ar-44,622.-Furnace-grate Bar.-Henry Gerner, of New York City
I claim, first, The groove, a, extending in a longituainal d ection,
throughout the upper edge of the erante bar, A, in combination with
the transver ane holes, b, constructed and oper ating substantially as the transverse holes, b, consof tructed and oper ating substantially as
and for the purpose set forth. Second, In combination with the aforesaid groove, a, and holes,
b. I claim the diamond--shaped corrugated projections. c c, conucted and operating as specifie
[This invention consists in the arrangement of a groove, extending ar, which is provided with holes passing transversely through the ame near its uppergrooved edge in such a manner that by the ashes accumulating in said groove, and by the current of air passing hrough the transverse holes and through the ashes in the groove, the upper edge of the grate bar is kept comparatively cool, and the burning out of the same is obviated or prevented.l
4,623.-Machines for Making Bolts. - Moore Hardaway, of St. Louls, MO.
I claim the combination of the die box, b, header, $k$, and clamp
dies, d d, in a bolt or rivet-heading macthine, when operating in the
nanner and for the purpose herein set forth. 44,624.-Curtain Fixture.-Stewart Hartshorn, of New York City
I claim a pawl, E, attached to the bracket or other fixture, near a wid roller, when sald parts are with a spiral spring, $C$, placed within the shade roller, and andion ar
anged to operate substantially as and for the purpose herein set 44,625.-Grain Screen.-James Hatfield and John Wall, of Ogden, Ind.
We claim the hopper, H, and reel, B, when constructed and ar
anged substantially as show n and described, and operating in the
manner and for the purposes set forth 4,626.-Bucket for Preserving Butter, Fruit, etc.-E. G Horman, of st. Loais, Mo.
Iescribed, and represented as an new article of manufacture and 44,627.-Pumps.-Benjamin J. C. Howe, of Syracuse N. Y.:

I piston, as, shown and described. I aliso claim the extend on of the valve, $d$, in combination with the
iston, b b, and valve, $c$, substantially as shown and described. 44,628.-Mowing Machines.-M. G. Hubbard, of SyraI claim the curve, D , in the corner plate, substantially as and for 44,629.- Mowing Machines.-M. G. Hubbard, of Syra cuse, N. Y.:
I claim the manner of conducting and strengthening the cutter
4,630.-Percussion Locks for Discharging Mining Blasts.-E. Hughes, of McCartysville, Cal. Ante dated Oct. 4, 1864
Fin st, I claim the barrel, $A$, ;provided with a hammer, $D$, tip, $B$ stantially as herein shown and described,
Second, The combination of the trigger,
D, with,$F$, and hammer
with the prop,, , dog, $H$, and cord, $J$, substantially as and for the D, with the prop,
purpose set forth.
4, 631.-Submarine Shot Conductor.-E. H. Hull, of Millersburgh, Ohio
F F when arranged and operating in the manner and for the pur
4,632.-Slide Valves for Steam Engines.-William Hus ton, of Wilmington, Del.
I claim a valve, D, with channel d, and apertures, e e' f, arranged
n combination witt the seat, A, and ports, a a $\mathbf{a}^{\prime}$ b b' $\mathbf{b}$, substantially
as and for the purpose set forth Also, the exharpose, se, appliled in combination with condenser ex
aust, bb', and valve, or its equivalent, in the manner and for he purpose substantially as described
[This invention consists in a valve with a double exhaust-one int echuney or open atmosphere and the other into a condenser, i re of the steam in the exhaust-end of the cylinder is reduced to of the $f$ the remaining steam can be in the mener and by the same means as by a common low-pressure-condensing engine. 4,633.-Machines for Cutting Files.-James Jervis, o Baltimore, Ma.
I claim, frst, The combination of the regulator, $\mathbf{Y}$, with the mova
Becond, The of the blow of the chisel.
sito of the regulator aforesaid with the lever Second, The combination of the regulator aforesald with the levers,
through the action of which as described in the specification the
thicknesg of the shape is made to impart a lateral movement to the onical cam.
Third, The arrangement of the devices. Whereby the shape is kep ongitudinal rocking motion, and the regulator is made to impart
der the chisel, so as to secure a perfect resistance to the brward un
rew on the atter, notwithstanding the shape and the flatness of the anvu.
Fourth, The combination of the saddle-shaped anvil proper, per
mitting the screw moving it to be placed beneath it with the res

 be cot sharper or blunter, as requifred.
Seventh, I alsio claim the arrangement of the chisel frame with the
anvil frame, in the manner herein described,
from each other may be varied as described
44. W3. W 44,634.-Working Oyster Tongs.-George Jury, of Balti more, Md.:
I claim the method above described of combining a common strong
barrel as an elevator, with cords and blocks to several pair of rakes, barrelas an ele geared as abo
operating and gith but few hands.
44,635.-Distributing Fertilizers.-Horace M. Keith, of
Pontiac, Mich.:
I claim the cylinder, $A$, the forked rod, B, the bands, e, and bands
d, the whole arra nged, corretructed and operating sub stantially a
herein set forth.
44,636.-Rubbing Seams of Boot
I claim the combination of the convex and grooved rolls, when ar-
ranged substantially as described, for the purpose of rubbing or pressing down thic seams at the heel end and rirpose of of rubbing or
posed boot I also clain the combiname tion of the cylindrrical roller, $r$, with the
hollow open roll, $s$, in the manner and for the purpose substantially hollow open res
I also claim the arrangement of the lower roll upon the top of a
post (or any arm projecting the refrom) to allow said roll to extend
nto the inside of the upper, sebstron post (or any arm projecting therefrom) to allow said
44,637.-Nail Machines.-Jacob B. Kingham, of East Bridgewater, Mass.:
 vided with mechanisu for operating them, substantialy as speciticd
And Iaso clain the combination of the sme and the steadying
strut, $W$, the object of the latter being as hereinbetore explained. 44,638.-Artificial Arms.-John H. Kocller, of New


 he flexion and extension of the forearm, and the alternating right ned motion of the slide, T. Yor the flexion and extension of the
 44,639.-Washing Machine.-C. W. Theo. Krausch, of I claim, foust. A mochis
I claim, first, A machine provided with a horizontal rotating shaft,
, having stirring wngs on it, operating sulstantially as described.
Sccond, The bracket sup sort, E , for the shaft, F , in combination with a vertical turning stappo G , substantially as described. Third, 'The combination on a horizontal slaft, F, for the stirrers, whecl, g , arranged and operating substantially as described.
Fouth, The construction of the stiring wings, h, with tecth or
 Vorking within the tun, sulbitatitially as described.
Skxth, Elevating, and at the same time giving a lateral motion to
the matt during the wasthing proces; by means substantially a 44,640.-Apparatus for Bending and Folding Paper Col lars. - WIm. E. Lockwood, of Philadelphia, Pa.: other a convex surface, in combination with a reciprocating plate,
c, of a form corresponding with that or the rollers, substantialiy as and of a form corresponding with that
and forthe purpose herein set torth.
Second, Cutfing away the circu
Second, Cutting away the circummerence of one or both ot the rol
lers at one point, in the manner and for the purpose described.
44,641.-Marine Propeller.-Thomas Mason, Boston I claim the combination of the feathering fpaddle blades, a, and
procket chains, b, when the links of the clains (and the blades at sprocket clains, b, when the links of the cluains cand the blades at
tached thereto are so arranged as to have horizontal movemen
between the sprocket wheer, $c$ c, gabstantially as and for the pur
pose set forth.
44,642.-Horse-collar Block.-B. W. McClure, Wyoming
claim, first, The crossing of the hame cord, H , with its ends at tached to an adjustable bar, I, when said corld is used in connection
with the mold - block, B, nd rim-setter, C, substantially as and for
the purpose hercin set forth the purpose herein set forth.
Second, The attaching of the rim-setter, $C$, to an elastic bar, $E$,
by means of a hinge or oint, D , to admit of the ready manipulation
of the rim-setter, as described. of the rim-setter, as described.
Third, The bar, ep provided ith a plurality of legs, P , at each side
, When used in combinaticn with the rim-setter, C , and mold-block, B ,
for the purpose specinied.
Fourth, Fhe en larged stretcher, L , in combination with the inold Fourth, The enlarged stretcher, L , in combination with the mold
block, , , and rim-setter, C , all arranged substantially as and for the
purpose set forth. purpose set forth.
[This invention relates to certain improvements in a horse-collar
block, which was patented Aug. 24th, 1859. The within described in vention consists in an improved arrangement of what is technically termed the "hame cord," by which the groove in the collar to re The invention also relates to an improvement in the "rim-setter," he invention also relates to an improvement in the "rim-setter," and certain parts pertaining thereto, whereby the manipulation of the same is greatly facilitated. The invention further relates to an mprovement
44,643. Ambulance.-Edwin R. McKean, Washington, I claim, first, The falso bottom, B, constructed substantially as
described, and supported upon the rubber springs, a, or their equivalents.
Second, I claim the roller, F, arranged to operate as described,
whether the same may be attached to the false bottom, $\mathbf{B}$, or to the bottom ot the boly, A.
Third, I clairm the stretcher, D, provided with the roller, E, and
hook, c, or its equivalent, when constructed and operating as and
for the purpose hereln for the purpose hereln set forth.
Fourth,
Iclaim providing an andanee with a water vessel, havFourth, I claim providing an annbulanee with a water vessel, hav
ng tules so arranged that the occupants cann supply themselves at
plensure.
Yifth, I cham arranging a fan in connection with an ambulance in
 Sixth, I also claim constructing the sides of the body ot an ambu.
lance with vertical slats having beveled edges, so that when said
slats are closed they shall present e plane surf ace, both externally
and internally, as shown and described.

44,644.-Artificial Leg.-Joshua Monroe, New York
City : the employment or use of raw hide in the manufacture of
artiticial limbs, substantially in the manner hereln specitied.
[This invention consists in the employment or use of raw hide for strong, and durable limb can be produced, which can be readily engthened or shortened to sult patients of different stature, and which can be fastened to a stump with ease and facility.]
44,645.-Soda Water Apparatus.- $\Lambda$ ndrew J. Morse
Melrose, Mass.: I clain in conncetion with one or more strup vessels or jars, the I alsoclaim in combliation with the sirup vessels and indicators the charging cups, e, arranged upon the top of the box
into the sirup vessels, as and for the purose set forth.
And with an apparatus constructed with the charging
And with an apparatus constructed with the eharging cups and in
dicators, I claim the construction of the to of the top of the box,
with the fixed part, $f$, and hinged cover, $i$.

44,646.-Ejector for Oil Wells.-George M. Mowbray, Titusville, Pa.:
I claim, frst, The ejector composed of a plpe closed at the botton
nd perforated at the sides, in combination with tha conical cup, nd perforated at the sides, in combination with tha conical cup, D, scribed.
Second, The upper tube, e, or its equivalent, for the purpose of in
creasing or diminishind the annular space, b, at the upper edge o
the ejector, substantially as described.
44,647,-Saw-filing Machine.-S. P. Ochiltree, W. S We claim, Jr., and A. P. Baymonnt, Monmouth, In.: We claim, first, The adjustable guide, O, in conneetion with the
sllde, M, crank, , and pitman, N, 耳or giving motion and a proper direction to the file, , , substantially as and for the purpose set forth
Second, The slide, W, provided with the pin, $c$, in combination Second, The slide, W, provided with the pin,, , in combination
with the pin, ant of of whee $^{\text {K }} \mathrm{K}$, for the purpose or
ing the feed movement of the saw, as set orth.
[This invention relates to a new and improved machine for filine imply turning the driving shaft of the machine all the marts ting automatically and in a perfect and efficient manner.]
4,648.-Apparatus for washing and drying Photographs Adalbert Paersch, New Orleans, La.:
material.
Secoud, I claim the combination of the whole apparatus as se forthin drying wheel for photograwhic, prants, and other textile or

4,649.-Bellows Pump.-Ezra Parker, Beverly, Ohio I claim the claim the combination and arrangement of the uppe isks, ce, discharge pipe, D, lever,' E, small plates or valve seats, f
44,650.-FFeed-cutter.-J. J. Parker, Marietta, Ohio :
I claim, frrst, Suspending the box, G, on the shaft, G. in combina
ion with the rake head, $\mathbf{M}$, or its equivalent, in the manner and for
Second, $\begin{aligned} & \text { clatimallso the } V \text {-iron, when combined and connccted } \\ & \text { substantally in manner described. }\end{aligned}$. 44, 65l.-Claim, first The Mill.-H. K. K. Parsons, Harrisburg, Pa.: reast-board the concave, in combination withi the adjustab Second, I claim the elongated yooke, c, in combination with the
oncaves I and rranged to operate as and for the purpose herein set forth
44, 652.-Pitchfork.-Isaac D. Peck, South Bristol, N. Y. correspondingly taperes recess formed in a socket piece, a, by mean
of wedges or keys inserted between the shanks, substantially as de
scribed
44,653.-Wrench.-John W. Penney, Mechanic Falls Maine :
I asim the sliding aw, C, provided with a tenon, a, which is fitte with the rack, f, on the back of the shank, A, the spring, D, fitte ip, e, to engage with secured to jaw, C , by a scre w, d, and having
iall being arranged substantially as an
[This invention relate
lass which is provided with an and n improved arrangement ot the latter whereby the wrench may be readily adapted or applied to nuts of different sizes.]
44,654.-Horse-cover.-E. L. Perry, New York Clty I claim, $\operatorname{trst}$, A cover for horses and oother animals, constructed
o asto permit the circulation of air throufh the same, and between
t and the body of the animal, substantially as and for the purpose
above described. Second, Jaking a ventilating cover for horses and other animal
by means of louvers, 3 and D, or either of them, constructed and


4,655.-Mowing Machine.-James Pine, Troy, N. Y.: 1chaim, firit, The movable or adjustable lev
santially shown for raising the cutter bar.
Second, , The brace, H , arranged and applied substantially as shown, ame an entrient brace or stay for the cutter-bar, and at the as set forth
Third, The draught lever, $P$, applied to the draught pole and bar
G, of the cutter-bar, M, to operate in the manner set forth. Fourth, The traok-clearer. B, applied to and mude adjustable upon
he outer end of the cutter-bar, M , by means substantially and for 44,656.-Foot-rest for Blacking-boxes.-John H. Porter New York City
I claim the combination of the box, A, with the toot-rest, C, when
the latter astached to the former by means of a spring, B, to ad-
mit of the adiustment of the boot or shoe while on the foot of the mit of the adiustment of the boot or shoe, while on the foot of the
wear er, to the brush, substantially as and for the purpose set forth [This invention consists in combining a convenient and portable he boot or a blacking-box and brush, with a root-rest on which enner as to aftord a very desirhled, alion ber ang in such hich boots or 1 feet, with the greatest facillty.]
44,657.-Skimmer for Sugar Evaporators.-Thomas J Price, Industry, Ill::
I claim, first, The rock shaft, J, and rods, $O$ o, in combination with
skimmer he purpose set forth.
Second, The arrangenent of the sloping end, $c$, and gutter, $i$, in
oombination with ther rock shaft, $J$, skimm , substantially combined arrangemente of the defecating apartment r, the skimming apparatus and sloping end as shown and described
or the purpose specified.
4.658.-Cultivator and Seeder.-T. Louls Ray, Flora Ill.:
flain, first, The application to cultivators of the rudder, A. for
he purpose of steerin the machine, and raising the front end of
he machine from the ground. Second, I also claim the arrangement of the wheels, Q and H , a 44,659.-Furrowing Device.-W. S. Riggs, Hightstown N. J.

I claim the adjustable shares,, , When constructed with mold
boards, c c, curved outward at the upper and rear ends of the
hanks, a whicler bhanks, a, which are secured in the rear ends of the runners, A A,
by pins, , to form a new and improved furrowing device, for the
purpose specifed.
[ $\quad$ his invention relates to a new and improved device for furrowing rills. hares constructed in consists in the employment or use of tho dragging or raking up weeds, trash, etc., said shares being attached to the runners in such a manner that they may be capable of being adjusted higher or lower, according to the depth of furrow required 41,660.-Primed Metallic Cartridge.-E. K. Root, Hart ford, Conn.:
I claim the employment within the case of the cartridge of movabe sections of solid material, having fulminate contined or arranged
between their sdiacent surfaces or edges, substantially as and for
the parpose set forth.

44,661.-Nail Machine.-Marcus T. Rounds, Taunton, Mass I claim, ifrst, The movable back piece, $t$, on the heading side of
he dies, operated by means of a ca ne or other suitable device, sub tantially in the mann er and for the e purpose set forth.
Second, I claim extending the nipper, L, beeond the heading sido
of the dies, to grasp the head of the blank between said nipper and the movable back piece, t, sabstantially as set forth.
Third, I claim the nip per, L, working on the heading side of the Third. I claim the nip per, L, workyng on the heading side of the
dies, in combination with the movalo back piece, t, and the gaie
c, arranged and operating substantially in the maner and for the 44,662.-Machine for charging Fireworks.-Theodor Scharfenberg, Brooklyn, N. Y.:
I claim, first, Combinloy with a series of spindles, a a, arrange
upon a bed plate, the guide plate, $F$, to insure a proper position
he upon a bed plate, the quide plate, F, to insure a proper position o
the tubes, b b during the processof charging with composition, sub
stanti ally as described and specifled.




44,663.-Refrigerator.-Jacob F. Schneider, Brooklyn, I claim the combination and arrangement of the cold water
trough, air passages, and blower, when placeal in the lower part of
and
 the air in the lower part of the rerrigerator without causing a cur
ont of air to come in contact witt h ite iceabove. I claim also the arrangement ant combination of the valve and
and outlet passages above with the blower, cold water truugh, aud
induct and outlet passages above with the blower, cold water truagh, aud
induction arr passages below, substantially as described.
And tinally I I claim the arrangencent or thick pate And tinally I claim the arrangennent or thick pasteboard, or layers
of thick paper, with the walls of refrigerators, substantially as de 44,66t.-Preserving Fruit, etc.-Nathaniel S. Shaler, Newport, Ky.:
I claim the e employment of carbonic acid gas, and a refrigerating
mperature, together and relatively to sucl substance, substautially temperature, together and relatively.
I manner as herein-before set forth.
Ire also claim the combination of a preserving chamber, a a moist
ref rigerating apparaitus, and a means of circulating the carbonic ure ref rigerating apparatus, and a means of circulating the carbonic
acid gas of such clamber through or so in contact with the surf aces of the refrigerating apparatus as to not only cover the gas, but cause
such mixture to be frozen or condensed and aistracted from the gas, substantially as specitied.
I also clain the preservatory as constructed of one or more dumb $x$, the gas refrigerating or the equivalent thereof, the gas clamber as, the whole being arranged and combined substantially as and so
$4,665 .-A p p a r a t u s$ for throwing Horses.-Silvester
Shaw, Russelville, Ohio :
Shaw, Russelvile, onio:

I claim the combination or the stiap, I, the rope, P, the straps, A
and F, the spancel, B1 and B2, and the strap, C,the whole conssruct
ed and arranged for the purpose substantially as herein specitied.
44,666.-Tag-holder for Bags, etc.-Richard Shepard Brooklyn, N. Y. Ante-dated March 17, 1864 : I clamm the blade, b, in combination with the thin slide, gi k , and
the instrument, C , when operated as shown and described. 44, 667 .-Tree Protector.-Forrest Shepherd, New Haven, Conn.:
I claim, as a new
I claim, as a new article of manufacture, an apparatus made by
attacling strips or plates of mica to a band, to be placed around the attaching strips or plates of mica to a band, to be placed around the
body ot the tree, to prevent the ascent of grubs, worms, and othe
insects, when constructed and fitted to be attached, substantially as 4,668.-Spring for Carrlages.-William Smith, ShrewsI claim the frame composed of the longitudinal beams, A and A
 gether by any desired number ot cross bars, J . K L , all substantiall
as and for the purpose herein deseribed.
4,669.-Packing Projectiles for Rifled Ordnance.-W H. Smith, birmingham, Conn.: projectile, when constructed and arranged to operate in the manne
ult and antially a described for the purpose set torth. 44,670.-Jacket for Sub-caliber Projectiles.-W. H Smith, Birmingham, Conn.: I claim making the metallic holder-case or centering jacket to fill
the bore of the gun, at both its rear and forward endes, and its in
termediate portion to tlt to the bolt or body of the shot, substantial $y$ as and for the purposes set forth. 4,671.-Mode of securing Pure and Wholesome Air in
Dwellings, etc.-Daniel E. Somes, Washington, D. C.:

I claim tie manufacture of articles of household furniture with
receptacles for confaining charcoal, substantially as hercin set forth I also claim. the mode herein described of purifying the air in I also clanm the mode herein described of purifying the air in
dwellings, halls, hospitals, and onther places, by means of a charcoa
receptacle, constructed substantially as herein specificed. 4,672.-Mode of cooling the Air in Buildings.-Danie

## E. Somes, Washington, D. C.: <br> I claim, first, Lowrering the temperature in buildings or excava- ions in the earth, by rarefying the atmosphere of the same, in the

 tions in the earth, by raref ying the atmosphere of the same, in themanner and for the purpose set forth.
Second, Ventilating the interior of buildings or rooms, in the man

44,673.-Hay Press.-Charles S. Stevens and Alonzo T Boon, Galesburg, Ill.
We claim, first, The combination of the endless carrier cloth, f
compression rollers, $a^{\prime} \mathbf{a}^{\prime}$, and band roller, $a^{\prime \prime}$, with the metallic compression rollers, a a ${ }^{\prime}$, and band roller, $a^{\prime \prime}$, with the metallic
knife edge plate, $a$, substantially in the manner and for the purpos Second, We claim the swing lever, $\mathrm{C}^{\prime}$, and slotted cane wheel, c , in
combination with the toggle.-.jointed levers, C C, and follow
substantially in the manner and for the purpe herein set forth. D 44,674.-Piston for Steam Engines.-Nathan P. Stevens Boston, Mass.:
I claim the improved piston or piston head, as made with the vi-
bratory ring andits groove, and the steam tight clumuiar openin
into the saiu grove, the whole being in manner and so $: s$ to operate
I also claim the combination of the annular proicction, e, or its
auivalent, with the vilratory ring and its groove, and the steam
ightchamber and its opening.
44,675.-Mode of protecting and repairing Shingle 1 claim the application of rooting cement on n ked shingles, sub 1 claim the application of rooting cement on ned hed shingles, sub
stantially as above described, which makes durable roof, and a
complete protection against all weather, and nearly so against all complete pro
4,676.-Attachment for Ladies' Shocs.-O. H. Taylor San Francisco, Cal
I claim the clastic strap or band to br attached to and passed ackle, and adapted to fit over a stud, $L$, ill as herein described and
bur the purposes set forth. 44,677.-Washboard.-0. H. Taylor, of San Francisco, Cal.:
1 clann, as a new article of manufacture, a separate and complot hand washboard, constructed with a rubbing surface of corrugated
zinc, straight at its upper end ind concave at the lower end ail as
hercin represented and described, and for the purposes specifiled.
4, 678.-Apparatus for Drying Photographic Plates. Julius 'Thompson, of Taunton, Mass.:
I claim the chimney or flue, A B, with one or more plain surfacee

44,679.-Harvesters.-Julius Thompson, of New York

 manner that the sail orocket perfornhi the touble cunction of sus.
taining the said axic and of stiftening the frame transversely, sub.







 as sit forthil,
 1orthe centh, I Iaso claim the combination of the bevelled wheels to
getilier, by means of tlanges wilich engage with eachl otliler and pre Yent tiee separation or the teeth of the wheels by movement in the


 44,680-Apparatas for Handling Vicious Horses.-Owen Turner, of Clinton, Wis.:
 Second, The elastlo-supporting strap, $\mathbf{C}$, in combination with the controiling strap, A, whiten the taiter is arranged substantially as and
forthe purpose deseribed
Third, The combination of the controllung rein, A, fetlock straps,

 trolling straps to silp fit
stautially as described.
44,681. - Mechanical Movements.-Maximilian Wappich, of Sacramento, Cal.:

 44,682.-Horse-hay Forks. $-J$. L. Wells, of Stockbridge, I claim, first, The


 and for the purpose set 1orth.
TThis nnvention relates to a new and improved mode of construct load readily discliarged, aud device rendered capable ofbeing easily managed by the operator.
44,683-Apparatus for Preserving Provisions.-Charles Clainm conducting coveled air to and causing the same to circulate hroan Hest
44.68t.-Method of Stopping Bottles.-Albert Albertson, (assignor to J. N. McIntyre) of New York City:
 constructed to oper
tialy andecrived.
second in iluin



44,685.-Apparatus for Filling Bottles.-Albert Albertson, (assignor to J. N. McIntire) of New York City
claim I claim thing itulu closing the filledor or suppplied
as set torth, iy the gravitation or the sopper.
44,686.-Running Stitch Sewing Machines.-John D. Dale, (assignor to himself and A. M. Badger) of


 ing and holding g commonnor sewing gededer tirm enurvalent, for clamp.
silpping whilie the cloth is being pulted off. 44,687.-Apparatus for Cutting and Creasing Paper for
Envelopes, etc. - Martial Dimock, of Newark, N. J., assignor to Fitcll, Estee \& Co., of New York City

 pose set forth.
44,688 . - Mai
44,688.-Machine for Puring the Edging of Boots and Shoes. - Horatio Hollges, (ass,
I claim the rotary or sole edge autter or combthationo of the cannu
peran and the guard or suide, arranged together and on a shatt, as
pectiled. peciliea. elaim the combination of the tubular split, tapering shank
and its cserew and nuts, with the bur and the giud or guard, the
and 44,689.-Caster for Trunks. - Heury T. Lee, (assignor to himself and David Frost) of Jersey City, N. J.:
 [This invention consists in a yielding spring caster, applied in comVination with a cap, forming a cavty to receive the spring and shank of the caster, in such a manner that by the cap the cover of the
trunk or otier articic to which it may be attached is preventel from uplifting, and at the same time the cap forms a guide for the shank of the caster, and prevents the same being exposed to a lateral
strain.] strain.]
44,690.-Machines for Making Bozes.- Thomas C. Lu-
ther, of Lee, Mass., assignor to the American Flask and Cap Compuny, of Wi.terbury, Conn.:



This invention is more especially designed for putting the covering on external paper band or cylindrical paper boxes, for the purpose of securing the top and bottom to the body of the box. It may, howev.
boxes
44,691.-PeggIng Machine.-Joseph F. Sargent, (as

 lateral curvature.
I also elaim so
 and peg.
I also clalm operating the swing plece by the ecentric, to produc
the feed and transier of contact substantially as set forth
 Vertical motion, substantially as and for the purposeset forth.
I also clamm the employment of the swinging brake, e2, operating
 a slot in the same vertical plane with the retainer (instead or thanounh
os tin manner and for the purpose substantially Ialso claim the construction by which the blow of the awl and peg
driver bar is arrested at the bottom of the swing plate, substantially And in combination with an awl bar (or an a awl and peg dri ver
bar, laving its downward movement imparted by a spring, C
cla im the metho or regulating the frece of the blow given to the bar by
an adusting screw, ot, substantiany as shown and described.
44,692.-Priming Cartridges. - Charles Edward Snelder
assignor to himself and Thomas Poultney), Balti-

 Sevious to tring. the combination of the recessed end of the cart, ridee case eand the central cartridge pin, which form a gastight
joint by the contration of the rear of the case around the pin, un-
der the force ont the uscharge
44,693.-Buckle for Harness Tugs.- Richard Tattershall (assignor to himself and A. J. Battin), Belvit, Wis. I claim the frame, A, provided or cast with the plates, co d, in com 1ever plate, C, provided with the eccent ic projection, D, ittt
bar, $e$, substantially as and for the purpose herein set forth.
[T? his invention relates to a new and improved buckle for harness ugs, wherein the use of a tongue is dispensed with and oonsequently he perforating of the trace. $]$
44,694.-Car Truck.-Charles D. Tisdale, East Boston, Mass., assignor to himself and Joseph H. Clapp, Boston, Mass.

 44,695.-Cigars.-S. Davis, Montreal, Canada : 1 claim as a nevv article ot manuracture a medicated segar com-
posen or tooacco oeares mixed with the eeives of belladona, in the
[This invention consists of segars made of a composition of tobacco leaves mixed with a small quantity of the leaves of belladonna, specilics contained in said plants are introduced into the system of the human body together with the tobacco smoke in a finely divided state, and thereby the healing qualities of said plants are enabled to exert a much more powerfuleffect than they can when introduced into the system in the ordinarylmanner.]
44,696.-Propeller and Steering Apps.-Henry Ressel Vienna, Austria
I claim, first, The studs
combination with the socket, $c$, and globe, $d$, and with the shaitts, $C$ and $\mathbf{F}$, in the manner and for the purpose substantially as set forth
Second, The use of the cap, $\mathbf{b}$, in combination with the ball and
 Third, The grooves, i, and rings, j, applied in combination with the
ball and socketjoint,
iame, propeller screw, A , shafts, C and F , and frame, B , in the manner and for the purpose substantially as set
forth.
44.697.-Ventilating Sweat Leather tor Hats and Caps. I claim, first, The appplication to a hat or cap of a corrugated swea
lining, said corrugations running diagonally with the plane of the under side or rim as shown in the drawings, the corrugations rul-
ning around the inside of the hat or cap with the exception of a portion in front, which is smooth to fit the forehead.
Second, I claim the smooth part or the lining in front in combina-
tion with the diagonaicorrugation, as described. Third, I claim corrugating a sweat lining, in the manner shows
and specited (as ocupying the complete inner circle of the hat or
cap, with the exception of the portion in front, which is made and specitied (as occupying the complete inner circle of the hat or
cap, with the excepting of the portion in front, which is anade
smooth to fit the forehead of the wearer), substantially as shown and smooth to tit the
set forth herein.

## RE-ISSUES

1,790.-Horse-shoe.-O. A. Howe, New York City. Pa-
tented Sept. 15,1863 : climim a horse-shoe provided at its under or face side with a
groove, Having pendant projections or their cquivalent within it to
 1,791.-Water Wheel.-James Leffel, Springfleld, Ohio. Patented Jan. 14, 1862


 cally yis charging buckets, b, when
ate as and forte purpose set fort Fourthi, In combination with an upper plate, B , whose Inner sur
face shal be silightly concanve in that portion directly over the buck ets, Claim makin the surface upon when the lower edge of said 1,992 C Wor Water Whe
1,992.-Case for Water Wheels.-James Leffel, SprIng
field, Ohlo. Patented Jan. 14, 1862: I clain, first, The crown plate, A, provided with the horizontally
rooiecting rim, c, and hub, $A^{\prime}$, as and for the purpose set forth. Secont, fie cylindrical tube, R, provided with the horizontally
projecting fiange, $e$, when used in combination with plate, $A$, as



 $\underset{\substack{\text { constr } \\ \text { forth. }}}{ }$

1,993.-Cider Mill.- H. K. K. Parsons (assignnee by mesnePatented Aug. 30, 1853



 with the
set forth.

Extension.
Water Wheel.-Timothy Rose, Cortlandtville, N. Y. Patented Sept. 24, 1850



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 have no doubt that the public contldence thus indicated has been
fully deseerved, as I have alwaysobserved, in all your intercours with
thee oftice a narke decree of promptness, sinl, and fielity to thic
interests of your emplogers.

Judge Mason was succeedded by that eminent patriot and statesman
Hon. Joseph IIolt, whose adininistration of the Patent Ottice was so
 to the ollice of Postmaster -General of the United sitates, soon at ter
entering upon his new duties, in March, 1859, he aiddressed to us the
following very gratifying letter

MrssRs. MUNN \& CO.:-It affords me much pleasure to bear testi
mony to the able and efficient manner In which you discharged your
duties as Solicitors of Patents, while I had the lionor of holding th
 Very respectfuly, your obedient servant,
J. Holt

Hon. W m . D. Bishop, late Member of Congress from Connecticut,
succeeded Mr.
Holt as Commissioner of Patents. U pon resigning the ottice he wrote to us as follows:
MESRS MNN \& Co. -It Myives me much pleasure to say that, dur-
ing the time of my hoiding the ot ice of Conmisioner of Patents, a very large proportion of the business of inventors before thie Patent
Office was transacted through your agency; and that I have eve found you faithful and devoted to the interests of your clients, as well
as eminently qualified to per form the dutlesof Patent Attorncys with
and


## the examination of inventions.

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

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Every to make an application for a patent.
\& susceptible of one; or, if the invention is a chemical production, he must furnish samples of the ingredients of which his composition consists, for the Patent Office. These should we securely packed, the inventor's name marked on them, and sent, with the Governmen ices, by express. The express charge should be pre-pand. Sma

