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46,201.-Rotary Engine.-Edgar B. Adams, Robt. P Trimble and Horatio N. Adams, Salem, Ohio: We claim, first, The combination of an eccentric, bub, D, having a
groove, g, 1 ormed in it, with the revolving ring,
A, and , elongated yoke,

46202.-Churn.-David C. Aldrich, Anamosa, Iowa I claim the partition plates, $\mathbf{B}$ B, perforated at their lower end tube, $H$, in the central compartınent, e, aad the dabhers, $C$ C, in the be purpose herein set torth.
I aliocolaim the concave surfaces a* ${ }^{*}$, of the dashers, in con-
ection with the upper in inined surfaces, $\mathrm{b}^{*}$, the perforated partition nection with the upper in linined surfaces, ${ }^{\text {, }}$, 'the perforated partition
plates,
 perforated partition plates B B, asshers, Ct, air tube, $H$, and
mometer, 1 , as and for the purpose set forth.
(This invention relates to a new and improved churn, of that clas commonly termed atmospheric, and it consists in the employment or use of the dashers, perforated partition plates, an air tube, and a water chamber, all arranged in such a manner as to cause butter to be rapidly produced in good condition, and to separate the butter from the buttermilk.
46,203.-Steam Boiler.--John H. Ames, Baltimore Md.:

Tor claim, furposes, The arrangement of forth. secona, Froducing snperheated and saturated steam in a boile
and separating these two formsof steam from each other without injuriousiy interrupting the water level, substautialiy as described
Third, Alixing coovether unperteated and saturated steam in th steam pipe wituin the boiler, yubstantially as described. 46,204. Machine for Separating Lard, Tallow and

Grease from the Refuse of Rendering Tanks.-Peter I claim, trst, The trap, B, arranged as specified and shown, oper from the water, and for the separation of liquids of unequal spe
cific gravity.
fecond, I claim the use of wire screens, substantially as described
and pet forth, for the separation or lard, tallow or grease from the
end Bet iorch, ior the separation of lard, tallow or grease from the
reruseor slush taken trom steam rendering tanks, and tor the sep-
aration of any liquid having no atfnity for water, and of less spearation of any liquid having no atfinity for water,
Third, I claim the troughor guiter, D , tor the purp ose of skim
ming the rease from the suriace of the water in the vat, as specifled and in the mauner described.
Hourth, I claim the pertorated water pipe, $F$, for the purpose of and tor continuiLg the flow and driving it into the trough, subbtau tially as described and shown.
Frth, I claim the bottom oi the eat
scribed and for the purpose Bet forth.
46,205. - Presses.-Stephen J. Austin, Freeport, Maine



 $0^{\prime}$ ', levers, $D D^{\prime}$ ', and tollower, $e^{\prime}$, applied and operating substan 46,206.-Vessel for Holding Petroleum. -John M. Batch elder, Cambridge, Mass.:
I claim a barrel or other vessel. havng a lining or interior coat
formed subatantially as herein described and for the purpese speci
46,207.-Cartridge Retractor for Breech-loading Fire-arms.- Foruyce Beals, New Haven, Conn.
I claim, first, The hammer, $F$, provided with the notch, 1 m , in
hereinset forth.
Second, I claim the spring, $H$, when constructed and arranged to operate in combination with the ejec. or, $G$, as and lor the purpos 46,208.-Process for Manufacturing Twine from Paper claim in the manufacture of twine from paper, adding a wate proof sizing to the paper pulp, or applying the same to the pape previous to its passage through the final heated pressure cyli nders,
and previous to its being cut into strips and receiving its twist, as

46,209.-Molder's Bench.--Chas. L. Bishop, Meriden
Conn.:
I cl aim a molder's bench, comp;sed of a bracket, A, ribs, a, and
cleata, horizonal arnus, B, and brace, C, all constracted and fitted
togetherin the manner substantially as herein net forth. 46,210.-Mess Kit.-Erastus Blakeslee, New Haven

Conn.:
claim attaching the pan to the kettle in the manner and for the
pose substantially aa heroin set forth and described. purpose substantialy as herein set forth and described.
46,211 .-Tobacco Stopper.-John M. Brown, Portland Maine:
I claim. Grat, The pipe cover, perforated at the center, and fitte
With spring arme, having shoulders, suhstantially as and tor the pur
poses described.
second, The stopper or plunger, m combination with the rod and Second, The stopper or plunger, of combination with the rod and
aplral spin, substantiall as and for the purpuse enumerated.
Turird, Thecombination oi the detachablecover, as described, with
46,212.-Hzadle for Lamp Chimney.-Morgan W. Brown New Yurk City : I olaim a metallic chandle, formed as set forth, to clesp upon and
be attiched tace ordinary glase chimney, in the manner and for the
purpoes specifed.

46,213.-Crane.-Benajah J. Burnett, Mount Vernon I clatm, first, The cast-ron tower or column, of one or morepiece
n hight, withbotiom faanges or base, a, vertical cylndrical surface , and shoulder, t , all substantially as and tir the purpose here specifed. The construction of the top of said tower, substantially
as heorein desecribed. with a seat in its interior for the reception of
the inser pon which the cap or revolving head of the crane is supported. Third, The cast-metal cap or revolving head, 's provided wit tension bar pins. 1 m . and central downwardly projecting journal, p , the said cap or heud is supported, and receiving upon it the uppe
ring, i, of the said box, als suostantially as herein specied.
Fourth, The annular bor tor the reception of the antif riction bal
which
 seat in the top ot the tower or column, and the ot uer torming th
top ane in ner sides ot the box, fitted to the journal of the cap or $r$ -
volving head, substantluly as descrited. Firth, The construction of the circular traveler, B. with a flange
or the reception of the suspending side branch rods, and with bear for the reception of the suspending side branch rods, and with bear
ing for the reeeption othe ib slioess and counterweigit till s, so that
each thrustsagainst the other, and a rolhng jnint is provided torth each thrusssagainst the other, and a rollhng jnint is provided fort
sam shoes topermit the aul justment of the jib, all substantially a
herein set forth. Sixth, The branch side rods for suspending the circular traveler
rom the revoving head or cap, constructed with their upper part ingle, as shown at $G$, and and with their lower parts in two or more
branches, as shown atq q, in tig. and and combined with the cap or
bevolving head and traveler, substantially as herein described.
46,214.-Bottle for Oil.-Charles W. Cahoon, Portland
First, I I claim a wooden bottle, made by boring a solid blocis or
woor, and fitted with a st opper, reudered impermeable to liquid,
substantiall as herein described. ubstantialls as herein describe He ends of which fit intopper ines, sutustantially as mean decrifed a button,
Third Third, A bottle having a shoulder and a faring neck, in combin
ion with a straight side, unitorm stopper, as herein described.
Fourth, A Fourth, A bottle fitted with channels, as hereln desc.ibed.
6,215 .-Whip-socket Fastening.-H. W. Catlin, Bur 6,215. - Whip-so
lington, Vt.:
I claim the washer, B, in combination with the screw, C, passin
hrough the dash, D, into the socket, A, to be ar ranged substantiall in the manner as and for the purposeset forth. 6,216.-Bean Harvester.-Norman Chappell, Eas I claim the clearer or clearers, $H$, in combinatlon with the cutter or
atters, $G$ and a suitable $f$ rame, $A$, arranged and operatint substan In as heren set forth. In combination with the clearers, $H$, cutters, $G$, and frame, $A$,
also clam the coulters, $I$, arranged and operating substantially a herein speciried
46,217. - Packing for Uil Wells.-John R. Cross, Chicago I claim.:
I claim the arrangement for artesian oll wellsof a fibrous material
, consisting or hemp or other elastic substance in combination ith the rings, A A A, or or other sutable trame therefor, so arrange that when said ings apy, roach each other the packing material i
compressed lateraly, so as to till the space between the tobe an sides of the well, and relaxed when the ring ille made to receld
the same teing operated trom thetop ot the well ty the screw rod
dd substantially in the manner and tor the purpose set forth I'also claim, in combination with said packing device, the valve, and tube, g , operating in the manner and for the purpose herein se
forth.
46,218.-Ladies' Dress Protector.-Theodore D. Day New York City
1 clamm an interior llyning or facing for the lower edge or the skirt
of ladies' dresses or other garments, formed with springs introduced the manner and for the purposes specified.
6,219.- -Fire Engine.-John N. Dennisson, Newark
N. J.:

Iclaim the increasing or diminishing the effective area of the
pump or pump by means of a valve laced in the parcition betweet them, or other means, substantially the same as when attaclied to
the steam fre engines, so that the quautity of water discharged at stroke can be increased or diminisisied at pleasare
speed or stroke, for the purposes herein set forth.
46,220.-Ball Screw for Fire-arms.-Arthur De Witzle
ben, Washingrton, D.
I clain, the tines or iatw, $b$, with their threads or shoulders, a a
forming in combination the concave screw for the uses and purpose
6,221.-Paper-covered Wooden Boxes.-M. P. Dorsch New York City
er of wood, with the top and bottum pieces, made of a thin ven

46,222 .-Operating Guns in Turrets.-James B. Eads St. Louls, Mo.
First, I I claim mounting a gun or guns up on a rotary platform, ar
anged to bring the muzzles of the guns to different ports in the tur et or defense, within which it rotates, when the po wer which oper
tet the guns is com munnicated through devies actiug concentrially with the axi- of rotation or satinglatarm, to rotate, with a turret, when the power wo operate the guns on sai
patorm is conveyed to them throug h neeclanizal devices actan
pancentrically with the axis or saidplatto rm's

46,223.-Operating Guns and Gun Turrets.-James B
Eads, St. Louis, Mo.:
First I clain the use of a rotating tower, in combination with
notaing gun platiorm, when cach is arranged to rotite independ ntly of the other.
second, The corn
saece operated by means of power turret of devices for training or
nanteu through the Divot or
shaft of the platiorm on which the orananctis mounte ing platformand a rotating tower, cach arranged in -uch a mananter
inat the rainingor the gus, the rotatingot the platform and the re naving of the tower misy ue, perivomed independently of each othe
nbstantially as described.
46,224.-Bread and Meat Slicer. -John E. Dow, Boston I claim the apphcation and arrangement of the slicer in the mod 46,225. - Revolving Fire-arm. -Wm. H. Elliott, Platt burgh, N. Y.: 1ers intotwo concentric parts, and having the recoil plate or brees ral portion may be drawn out in a torward direction, for the pu
pose or introucmg the cartridges, substin tially as herin described
 46,226.- Machine for Clipping Hair or Wool from An mals.-Charles W. Emery, Dorchester, Mass.: I clain the upper guard, $i$, for hoding the hair , or wool erect
acilitate the cuttung, as herein set forth. 46,227.-Lanterns.-Chas. Engelskirken, Buffalo, N. Y. Iclaim the expanding and contracing button, $F$, constructed an
operating for the purposes and sulstantially as described. 46,228. -Fire-proof Safe.-John Farrell, New York City :
I claim the employment of sulphate of magnesta in flllng in the
fire-proof chambers of sates, cheots and other lite structures, when prepared and put in, substantially as and for the purpose speciffed. 46,229. -Trip Hammer. - H. E. Fessel and F. Krau
wadl, Chicago, Ill.:
I claim the combination and arrangement of the devices $\theta$ e ${ }^{\rho}{ }^{\mathrm{E}}$,
friction rollers. ce', crank shaft, $\mathbf{E}$, and hammer, $\mathbf{F}$ C. inthe manne
and for the purpose described. 46,230.-Combining Aluminum with Vulcanite and other materials.- Nathl. C. Fowler, Yarmouth, Mass.:
I claim so combining granulated aluminum with vulcan te or rub Ser or or composition of matter. Eubstantially as describea. a com
Second I claim the use of aluminum for the purpose of formin
pe he joinings of articles made of vulcanite, for attaching rubber o ycles of vulcanite.
Third, I claim the use of vulcanite, for the purpose of attaching
rticles made of aluminum to other mateials, or to other articles made of aluminum.
Fourth, claim inlaying articles made of aluminum with vil-
anite ana imitating articles made of aluminum by a clazp, rive or other fas.ening or ornamental device made of vulcanite. 6,231.-Lubric.
mouth. Va.
First, I claim the arrangement withir a lubricator of a single
ock having three or more openiuggs. arranged in such a manner as
cmake an unduction and eduction passage, when used as and fo - make an matuction and ed
he purposes herein described.
Second

Second, In combination with a lubricator. I claim the mode o
charging and discharging the reservoir, by means of a single cock arrangel within a lubricator, when used substantially as deseribed 46,232.-Ladies' Paper Collar.-Solomon S. Gray, Bos
ton, Mass.: ton, Mass.:
I clanm, as a new article of manufacture a paper, or cloth andpaper
collar,
one or its edthes the requisite curve or substantiape is given by contracting ne of its edges, substantially as described.
46,233 .-Tubacco Paper.-Holman J. Hale, New Yor 46,233.-Tubacco Paper.-Holman J. Hale, New York City:
I claim tob
I claim tobacco paper made substantially as above described.
I also claim the use or tobacco paper made substantially as de
scribed. in the manutactureof tobacco cartridges and tobacco rettea,
maae tromsaid material substabiall
46,234.-Voltaic Shoe Soles.-Thomas Hall, Boston Maim $t$
I claim the combination of the non-conducting sole or base with
a series of alternate plates of other, so that their points of contact may be kepi bright by the riction curved by the mution of the foot, and allowing the moistur
or persination of the fuot to act upon both metals at the junctur of
46,235..-Wire Fork for Toasting, Etc. -Thos. Geo. Har-
old, Brooklyn, N. Y.: olaim, Brooklyn, Nonstructing Y.:
1 claim, Brst, Construct toward each other by a spring or springs, in
of two clamps pressed to substantialiy the inanner described and shown
Second, I claim retaining the said clanpo in corset position to Second, i claim retaining the said clamps in correct position to
each other yygides, inthe manner and forthe purpose pecitied.
Third, I clatm the coinbination or the clamps, a at, spring, b, and Third, I claymuides, in the conbination or the
guides, c or e, for the purposes set torth
46,236. - Hanger for Lamps. - Thomas S. Hudson, Eas Cambridge, Mass.: I claim the lamp-support hanger, as composed of the series of
glass tubes, the end caps or caps, the rod or its equivalent, and the
end attachments, arranged relatively to one anotlier, sulstantially as described

## 6,237.-Shears for Cutting Metal.-Julius Hornig, Os

wego, N. Y.:
I claim, hirst, the
metal shears connecting the shear-lever to the eccentric by means of a strap guided in a groove on the eccentric
in conobination with a radial argu secured to dhe lever by means of
a pin, L , on which it is ir ite to vibrate, sulstantially as above de
seco $\mathrm{d}, \mathrm{I}$ also claim the curved face, d, of the upper end of the shea ever, in combination with an eccentric arannat whuse face tit moves,
and against which it is held by means of a radial vibrating arm, $K$, substantially as described.
Thir, I also claim forming shoulders, s , on the faces of th
washirs, tions, q, in order to prevent, the rotation of the wasturs during the
vilorations of the lever, substantially as descrited. (This invention consists in a novel method of holding the free end the lever of a shears up to, or rather of connecting it with, th ccentric which operates the shears, and also in the application of asher
46,238. -Device for operating Safety Valves.-William S. Hudson, Paterson, N. J.:

I cheir equivalents for ravidly changiuation with the means, $1, M$

46,239.-Key Fastener.-Henry Hungerford, Brooklyn, I claim the combination and arrangement of the bolt, C, con eriorated key, the whole combined and operating substantially a 46,240.-Extension Table.-Anthone Iske, Lancaster Pa.: C, and slots, , , in combination with the cr.s. slats, s, pand their
siding pivots, 234 and 5 , in said slot, d d d d, arranged and operat ing substantially in the manner aud for the purposie specitied.
46,241.-Lock.-Henry Jackson, Brooklyn, N. Y.: lates, c, of unequal lentert or projection, ennployed in combina
ion with the tumblers, E, in the manner and for the purpose spec tied.
The object of this invention is to prevent a luck being picked o opened illegitimately by obtaining a pressure of the stub on the umblers-a means usually resorted to by burglitrs in order to asce tain the position the tumblers
of the bolt being liberated.।
6,242.-Machine for Pointing Wires in the Coil.-C Jillson, Worcester, Mass.:
I claim counbining the cutter teead and pattern with a revolving
shart having a spring or yielding roll within it, as and for the purIose herein described and represeuted.
I also claim, in combination with a revolving cutter head and pat
ann the extending of the cutcer stock or cuttors that are operate by said paitern clear through the cuttur huad, so tiat said cutters
will not be thrown out or in a ny wise noved by the centrixugal 46,243. - Kevolving Firearm.-Benjamin F. Joslyn, Stonington, Conn
I claim the rod, I. and it, transverse rod, m, in combination with
the recessed and inclined end of the hammer-the whole being ar the recessed and inclined end of the hammer-the whole bining ar
ranged and operating for the locking and unlocking of the cylinder
substantially as and ior the purpose herein set torth
46,244.-Apparatus for evaporating and Calcining Al-
kaline solutions.-Morris L. Keen and Hugh Bur gess, Rogers Ford, Pa.
We claim a turnace constructed for the purpose of evaporating etable ubstances, in which the heat is utilized by means of an ar-
rangement of pans, or their equivalents, substantialiy as and ior the We also claim, in combination with the main evaporator, the fll
shing or cacining furnace or furnaces, substantially as describe 46,245.-Corn-sheller.-Charles Ketchum, Penn Yan N. Y. Ante-dated Jan. 29, 1865

I claim, first, The cylinder, H , when made as specifled and used for Second, I claim the concave when composed of the sections, $F$, Third, 1 claim the guides, M, and agitatora, I, when constructed,
arranged and used as sinecififd.
arranged and used as seecined.
Fourth, I claim encamg the concave, substantially as specifled

## as specifed and used

46,246...'Tappincr Branch for Water and other Pipes. Henry Knisht, Brooklyn, Y. I claim as a new and improved article of manufacture the flanged
46,247.-Process for Preserving and Restoring Natural Flowers.-Angelina J. Knox, Boston, Mass.: Flowers.-Ange the process fer restoring, treating and preserving natural
Iowers, substantially as herein betore described. 46,248.-Car-bumper Attachment.-John P. Laird, Altoona, P a.:
I claim, firct The guide plates, F , imbedded in the wooden blocks
E E, and secured to the beamss of the car, all substantially as and
for the purpose lierein set forth for the purpose titercin set forth
Second, The stirup,, contined between the beams, $\mathbf{E} E$, and se-
cured to the bumper beams, substantially as specified. Second, The stirrup, N, confined between the beams, E E, and se-
cured the the bumper beams, substantially as specined,
Third The adjutable stopping blocks, M, ad pted to the plates, $F$
and $G$, and to a bolt, b, whick passes through the same, all substanand $G$, and to a bolt, $b$, which passes throush the same, all substan
ially as set forth for the purpose specified. 46,249. - Ventilating and Check Draught Damper.I claim the employment of a horizontal damper in any stove or furnace exit-pipe and of less diameter than such pipe, aud obove a
vertical exlinder damper around such pipe, os as to more effectually
check the drauglt by bringing the hot aar with in the said pipe in contact or conjunction with cold air admitted from room surround
ing such pipe through sid vertical cylinder damper, in the manner
substantially as hereind described substantaily as herein described and set forth.
Jitso claizin the combination of the vertical cylinder damper, B2
with the horizontal damper, G, arranged immedately over the said
 nd set forth.
$6,250 .-$ Heaters for Buildings.-James
Troy, N. Y. Ante-dated Nov. 15,1864
I clairuy, the employmente-dated Nov. 15,1864 : combination with the vertical pipes, D and $E$, anl with the fire
chamber A, in the nannerand for the purposes substantially as
herein described and set forth. 46.251.-Shutter Hinge.-Robert Lee, Cincinnati, Ohio I claim as a new article of manufacture the shutter hinge herein
described, consistingof the parts, AB, flange C, tbe radial notches constructed, arranged and operat:ng as spe.ified. 46,252.-Feed Water Heaters for Steam Boilers.-Wm. A claim the heater, $I$, arranged City :
I claim the heater, I, arranged as described, and placed bntween
the exhaust of a steam engine and the condenser, $A$, as and for the
purposeset forth. purpose set forth.
46,253 .-Condenser Case.-Wm. A. Lighthall, New York City:

46,254.-Condenser.-Wm. A. Lighthall, New York
City: claim, I clain, first, The combination of the division plate, C', with the
section no cooling tubef, A, as and for the purpose set forth.
Second The connbination of the division plate, C, with the tube Second The combination of the division plate, C', with the tube
sheet and cover to the end of the case as shown), for the purpose of
dividing the space between the said tube sheet and coverinto two
sections as set forth

 46,255.-Funnel.-C. L. Lochman, Carlisle, Pa.: Iclaim the valve or stopper, e, with its handle and conn ecting rod, equival, or the cook, d, and springs or catcenes, wo m, $m$, constructed
and connected substantially as and for the purposes specified.
46,256.--Drafting Scale.- Josiah Lyman, Lenox, Mass. First, I clainn such an arrangement. application and graduation of
the beveled edge of the seale herein set forth as render in a universal
reliableguide to the needie pont in miting a dot on the paper at eliableguide to the needie pont in miking a dot on the paper
the end oi any required or given distance.

46,257.-Hoisting Apparatus.-Walter K. Marvin, New York City:
claim the method herein described of applying power to hoisting I clame the method herein described of applying power to hoisting
apparatus by the employment or friction pulleys operating by com
pression upon a rope or calle or the equivalent therefor, substan
tially in the manner herein set forth.
46,258. - Hobby Horse.-P. J. Marqua, Cincinnati, Ohio: First, I claim the conbination rearing hob y horse, A, vibrating
beam B, seat, I, and spring, K , arranged and operating substantally as set torth.
second, rine slots, $G$ G', and the devices for the relative adjust-
ment of the seat and horse as explained. ment of the seat and horse as explained.
Third, The arranzement of the rearing hobby horse, A, seat, I,
reins, $O$ O', and pulley, T, ataptel to operate as set forth. Fourth, I claim the india-ruster thong, $K$, ani clamp, L L' $M$, ar 46,259.-Breech-loading Ordnance.-John A. Miller, Paducah, Ky.:
 pose of tirmg cannon rapiuly.
46,260. - Evaporatorfor Saccharine and other Liquids. Junathan E. Morse, Boston, Mass.:
I clain a train of evaporating pans with furnaces and flues ar -
rangel to operiate in connection therewith, substantially as de
sciibed.
sciibed.
Also, the employment with an open evaporator of a cover and
steam jers, when arringerl to operate substantially as specitied. 46,261.-Machine for Hending Sheet Metal.-Samuel Pennock, Kennett Square, Pa.:
structed and operating as described. Siecond, In combination with the above, the mode described of ad
justing the bealpate, C, horizontally by means of the eecentric,
G,
urranged and ope ating, as shown, or in an equivalent manner, for arranged and ope atiog as shown, or in an equivalent manner, for producing the same result.
Third, In a machine for bending, metal constructed as described,
ad.justing the bedplate, C, vertically, by the employment oo the ec centric, R, arrianged and operated as shown, or it a equivalent, sub
stantialy in the inanner specited. 46,262.-Horse-shoe Calk.-James L. Pike, Lynn, Mass. : a new article of manufacture a horse-shoe calk of
chaim as a chilled or "case-hardened""
aud for the object specitied.
46,263.-Mangle.-Wm. Radbourne, Rahway, N. J.: rclaim the application to a mangle of the senni-elliptical spring, D,
acting simultanously on both boxxs of the roller, ( (i, in combination
withf with iriction rollers, e, supporting the gudreons of the lower roller,
constructed and operating substantially as and for the purpose set constr
forth.
or
[This invention relates to a mangle the lower rol'er of which has its bearings on friction rollers, while its upper roller is pressed down by the action of a semi-elliptic spring and thumbicrew in such a manner that one spring and screw are sumicientior both ends of
said roller, and that by the action of the friction rollers the power requisite to operate the mangle is materially reduced. Theframe of the rollers, and provided with hinged legs insuch a manner that when the mangle is not used, said tables can be readily turned down
out of the way, and when the same is used, one or both tables ca
be turned up instantaneously, and the clothes are run through the be turned up instantaneously,
rollers wlth great convenience.]
46,264.-Belt Coupling.-A. C. G. Rathburne and A. M Comstock, Lyme, Conn. We claim the plate, A. provided with a slot, a, and operating in com-
bnnation with the togle jaws, B, substantially in the manner and
or the purpose set forth.
[Th s invention consists in the employment or use of a plate provided with a slot to admit the ends of the belt to be coupled and with two toggle jaws in such a manner that when the jaws al brown open, the ends of the belt can be easily passed up between them, and the jaws are depressed atter the ends of the belt have or any other fastening, and a belt coupling is effected which leave the inner or working surface of the belt.perfectly flat and intact.] 46,265.-Washing Machine.-Orrin Reeve, Greenport, $\underset{\text { I claim in }}{ }$
Simeter extending from the bottom to the top thereot, and radia
 16,266. - Vapor Lamp.-J. J. Riddle, Cincinuati, Ohio
I claim, first, The use of the needie, n, workinr through the burne and rom, the outside of the lainp into the valve, d, in combination
with the oil tube, $O$, reservoir, $A$, and air pump, $P$, all constructed and operating in the reservoir, A, and air pamp,, , all constructed
and ond orer the purpose' substantially as
herein shown and de eribed. Second, The valve, st',
air pump $P$, as specifed.
Third. Placing the valve seat, d, in the top of the burner, substan
ially as shown fn figure 3 , for the purposes set thet
Fourth, The combination of the socket, $R$ ', and pipe, ${ }^{\prime \prime}$, with the
il tube, $O$ needle, n, valve seat, d, air
onstructed and operating in the manner and for the purpose herei
The obs
The object of this invention is a vapor lamp which combine and in which anl the parts are sc arranged as to be repaired easily and quickly.]
46,267.-Trip-hammer. -T. J. Root, Galena, Ill:
nation with the knuckle-jointed aru, $H$ I, provided with, the spiral
spring, $J$ and treadle, $F$, ull constructed and arranged to operate a and tor the purpose herein set for th
[This invention consists $n$ attaching the rod of a hammer to a rock shatt or head wh ch is connected by means of a bent $2 r m$ and all arranged in such a manner that the operator by means of his oot acting upon the treadle is enabled to give the proper movement o the hammer-the latter after giving its stroke quickly using and and with but a moderate effort on the part of the operator.]
46,268. -Machine for Jointing Oval Frames.-James E. Hogers, Chelsea, Mass.
 D, arrauged and constructed substantialy in manner and so as to
perate as and for the purpose spectied. 46,269.-Tobacco Pipe.-Louis Saarbach, Philadelphia I claim the curved tube, A, combined with the detachable bowl, 46,270. -Mode of constructing Dolls' Heads and other 270.-Mode of constructing Dolls' Heads
Toys. - Lucretia E. sallee, Decatur, Ill.:

I claim, first, Mak ag dolls' heads, and other toys of an outer cov
ring of leather, or its equivalent, aud an inner body oi cement Iring of leather or its equivalent, and an inner body of cement,
which sets und hardens, so as so support the said covering in shapes
 [This invention consists in making the heads of dolls and otber oys of such materials and in such a way as to prevent them from eing easily broken by falls or other violence which may happen them.J
46,271 .

Mich Seeding Machine.-William Saxton, Venice $\xrightarrow{\text { Mich }}$
 ranyed substantially as and tor the parpose herenn set forth.
second, The coverers, $J$, attached to the seed-box by links. $K K$, o connection with the co
purpose herein described.
[This invention relates to a new and improved seeding machine of that class which drops the seed a liils, and it consists in a nove and improved seed-drojping mechanism, and in a novel arrange ment of the seed-box or hopper and coverers, whereby several ad vantages are obtained.]
46,272.-Brick Molds.-John F. Schuffenecker, Sain I claim operating the bottoms or the molds by means of the lever
$D$, rod, $F$ and $G$, link, $I$, and axles, $E E$, for the purpose above spec
ited. 46,273.-Machine for making Bricks. - John F. Schuften First, I claim the manner adoptel by using the toe, $j$. pan,, 1865 k, and tube, I in combination, for the purpose herein ue cribed. lever, ${ }^{\text {j, and joint, } \mathrm{K} \text {, an sor the }}$ purpose above diescrived.
Third, I clam the inanner to : ecure the position of the scraper. A
 machne, by th ecanas, u u, lever, 1 , guide, g. set screw, , i, in combi
nation of the slot or the rod, $x$, as shown and described in the fore-
 16,274 .-Cultivator and Harrow.-Thomas Short, Fairmount, Ill.:
First, I clainu the frames, D D, provided with shovels, E, and with the adjusting frame, G H, the yatter permitting the cultiatator
trames to be operated sinnultaneously or independently, and adapt-
ing said frames when used as a harrow to be brought together at nheir rear ends, as herein specilied.
Second, I claim the connlination of the treadles, I , loops, J , and
onnecting rods or wires, i , for aldjustung the trames, $D$, substan-
ially as explained. connecting rods or
ially as explained.
(In this machine a novel and very simple arrangement of devices is provided to faclitate the vertical adjustment of the shovels to
avoid obstacles; and in addition to this feature the cultivator frames are provided with harrow teeth, and the frames are adapled to be reversed in such manner that the said teeth may be presented in a downward directon, so as to convert the implement into a harrow when desired. 1
46,275.-Drying and Glazing Gunpowder.-William S.
Bates, Westfield, Mass., and Catharine S. Smith,
Bates, Westfield, Mass., and Catharine S. Smith,
Kingston, N. Y., executors of John Smith (dec'd).
Kingston, N. Y., executors of John Smith (dec'd).
in which powder is glazed, while the prodess of glazing is going on,
for the purpooe of glazing and drying the powder at one operalion, substantially as abeve described
We also claim the mettod of carring the same into operation by
means of hot air and the apparatus above described, substantially as
above set torth. above set forth Food and for other purposes.-Daniel E. Somes,
Washington, D. C.: I claim, first, The wails and chambers as described in combination
with the cooling an ly ventilating plpes, constructed and used as and for the purpase set forth.
inecond The series or rooms and buildings, substantially in the manner and for the purpooms shownd buildings, substantially in the
rhird, the sertes of walls and chambers when used in combination with a proceess ot rarifcaation and ventilation and cooling a apliancee
Fouth, I claim cooling the air in buildings in which water Fourth, I claim cooling the air in buildings in which water ranks
or pipes are used by passing the air tubes or ducts through, in be
tween, or around the water pipes or tanks. 46,277. - Refrigerator for Preserving Articles of Food. I claime. first. A A. refrigera, Washingtor with muntiple waii and so constructed that the aterior shall ne se
hereby excludiug dampnes.
secund. The use of curk tor
second. The use of curk for the walls in the menner and for the purpose shown.
Third, 'the use of glass for the walls as and forthe purpose set forth.
Foirth, The pipe larger at the bottom than top substantially as Fifth, The air tight compartments substantially as and for the Sixth, The vulcanized rubber tubing orits equivalent when used
 or drawer' for a similar purpose.
46,278. -Eccentric Adjustment.-J. M. Stone, North An I claim or the purnose of adjusting the ammunt of throw of any
of two or more eccentrics on the. same thaft. Tve construction and 46,279.- Paper Collar Button-hole Punchers.-Samuel S I claulu, tirst, Two oblong male end button-hole nunchers $\mathbf{L} \mathbf{L}$
arranged lenych wise or nearly so to each otner upon, and adiustable ongit udinally wit h two separate simultaneously reciprocating slijue Hetin combization with two corresponding obloug lemate punce
rectiving ties, N N, having like arrankement and ongitudinal ad
justmell on astatlonary bed substant



 punch-receiving end dies, $N N$, and a transversely ${ }^{\text {two }}$ adjustable central

 ponding central aud longitucuinally adjustathe end punch-receiving
dies on a stationary bed, suostantially as hercin described.
I abo clain two oblong end button-hole punchers arranged length

 abl ecnt
icribed.
I also
Thasiable eclaim a central oblong button-hole punch and two axiall with the end punches separ ate simultanneously reciprocatign silide
and sides gajustable loogitudinaly and the
 herein described.
1 inse cinur
I adiustatiae asially on separate simuitaneously reciprocating slide with the end punches and shdes adustable longituuinalli and the
central unestransversely in comblnanon with corresponding axial. and longitudinally adiustable end punch-receiving dies and a trans
versely and axially adjustable central one' on a stationary bed sub-
santially as herein described. stantially aso herein descrived.
And I also claim the arrangement of adjustable guides, d , in com
bination with end or end and central buttonhoule punchers arranged
on and auljustable laterally with separate simultan ously recipro in and adjustable laterally with separate simultan ously recipro-
cating slides and workine into cortrsonding adjustable punchre-
ceiving dies on a fixed bed plate, substantially as and for the pur-
puse herein set forth.

6,280.-Apparatus for Carbureting Oil.-John B I claim the combination of one or more air cells, and vibratory
coops or buckets applied together and within the cistern, $A$, sub coops or buckets applied together and within the cistern A, Aub
stantially in manner and so as to opprate therewith as deseribec. stantially in manner and so as to operate therewith as desuribed.
In also claim the combination of the "Barker's Dill," or rotary alr
and agitaint distrimuter, $K$, with the vaporizing cistern, $B$, the cisnud agitatint disiributer, $K$, with the vaporizing cistern, $B$, the ci
I arn, A, and its it oir torcing apparatus.
I alain the combination and arrangement of the shaft, $F$, it I ass and sponges, or theirir equivalents, witht the apitating and and
aristributer, $K$, the cisterns, $A$, and the air forcing apparatus of I also claim the combination of the friction brake apparatus, con
the sisting of the lever, W, the constructing rod, $\mathbf{Y}$, the arm, $\mathbf{\chi}$, the
screw sinat, a, and the stud, b, or it equivalent for the por
set forth with the air for cing apparatus and the vaporizing cisterp, $\mathbf{B}$, provided with the bell, c, to operate as specified.
I allo clain tbe sald friction apparatus consiructed substantially
as descried ts well as its arraugeraent with respect to the bell, $c_{\text {c }}$

46,281.-Machine for Planting Potatoes.-Joseph S True, Garland, Maine : and arranged in relation with bottom plates one or more to operate
and in the mananer substantially as and for the purpose herein set forth
tecond, A horizontal stationary cutter or knife arranged wort a
reciprocating slide and boxes to operate substantially as and for the


IThis invention relates to a new and improved machine for planting potatoes, and it cons sts in a novel arrangement of parts where the potatues may be cut or not as desired, planted elther in hills as may be required, and the machine rendered capable of being may be required, and the machine rendered capable of being
manipulated or worked with the greatest facil ty and adapted for use on various kinds of ground, rough or smonth, mellow and friable or hard and clayey.]
46,282.-Bill Holder.-Charles T. Wakeley, Madison,
Wis.: I claim the haspsor fasteners, $C$, and $D$, in combination with tbe
straps and bands, I. and H , ajdustable in the manner and for the
purposes shown and described. 46,283. - Soda-water Apparatus. -Frederic A. Weber and Wm. H. Greene, Woonsocket, R. I. We claim the valva case, d, when arranged within the box, a, and
with the system or rup pipes, fountain pipe, e, and outlet pipe, f,
onnecting therewith, the valves in the sirup and fountain plpes be. ingoperated by a system valves in the siry pers and fountain plper be
constructed and arranged substanklally as ahown. and the whole

46,284.-D Draught Tube for Soda-water Apparatus.-Fred erick A. Weber and Wm. A. Greene, Woonsocket R. 1.

We claym the construction of adraught tube for soda-water appar
rattins, with an inner tube, b, having an outlet, f, and lateral orifces,
e, opening into the tube, and and ratus, with an inner tube, b, having an outlet, d, and iateral oriaces
e, opening into the tu be, a, and controllod by a gate, f the whol be-
ing constructed and arranged to operate substantialy as set forth 46,285.-Corn Plow.-Wm. S. Weir, Jr., Monmouth, Ill. I claim the curved rods, M , attached to the back end of the bars,
d d and bent in the form of hooks, , at at their lower ends, in cont
nection with the lever, 0 , attached to the back end of the dricught nection with the
pole, C. all being a
purpose specifed.
[This invention ment, for equalizin; the draught of the machine; second, in an i.t. proved manner of attaching the plows to the main frame of the macoinerally, as laterally, as mas requre, win novel and improved means for holding the plowsin an elevated place to place, or when being turned at the ends of rows.]
46,286.-Magazine Breech-loading Fire-arms.-Henry F. Wheeler, Boston, Mass:
I claim a fire-arm, han, vmg a sliding, barrel, the charge of which,
nserted at the breech, is fired by driving ba:k the barrel against a percussin orbreech block.
Ialao claim the swiging breech or percussion block, constructed
and arran thed to operate mith res pect to the barrel and the maga-
 I also claim the magazine or cartridge tube, when arranged to
connect with and be disconnected from the barrel, substantially as
set forth. set forth.
I alsoclaim holding the arrel in forward position, or the arm
cocked by the on ment of the forward end of the magazine
tube substantially as described. tube, gubstantially as described.
I aiso claim the arrangement of the breech or percussion block to
swing above the pathof movement of thee cartriuge tube, to permit swing above the path of movement of the cartridge tube, to permi
the connection of the cartridge tube and barrel and the cocking of
the piece Also.the
Alse the
ent to
nt to permit tbe descent int cartridge tube, to allow of its move-
ing movement of the barrel. spring movement of the barre.
I alsoc claim the manner of withdruwng and expelling the shell of
the exploded cartridge by detaining it upon the caitrldge tube or the exploded cartridge by detaining it upon the eaitridge tube or
brech block, , and thrown it therefron, , inbstantially as set forth.
Iaso claim producing the for ward movement of the barrel and the d ard movement of the cartridge tube of the trijgger lever, substantiall as aserrorthit a case or cylinder
I also clam the arrangenent of a barrel within a che
containing the sping, by which the rear or percussion movement of
 46,287.-Apparatus for Calcining Ores.-George W. White, New York City
I claim, first, The combination in the rotating cylinder of separate
compustion and calcining faes or passages, substantisly as and for
the purposes herein specitell. Second, The fur nace located at the opposite end of the rotating
cylinder to that a thich the ore or other substance to be calcined
enters, substantially pa and ior the purpose herein set forth. Tyirid, So combinin ot the calcining flues or passages of the rotating cylinder with the furnace that the gases eliminated from the ore or
other substance in the sald p pasager mayy enter into combustion in
the the furnace, substantially as and for the purpose specified.
Fourth, In a rotating cylinder, with separate combustion and cal.
 sages with grooves, cavities or projections, substaptially as and for
tape purpose herein specifed.
Fifth, The colled
sperforated water pipe. f, placed in the smoke stack or vertical flue, in combination with the rota
gtantially as and for the purpose herein specified.
46,288. CClasps for Wearing Apparel.-Frederick Wood, Somer ville, Mass.:
I Clam the improved fastener, as composed of two parts, A B
made substantially as described.
46,289.-Pencil Sharpener.-Rufus Wright, New York
City:
manner and employed for the tapering cutter, A, constructed in the manner and employed
Secord, I claim the guard, B, tormed in one piece, with the cut-
ter, A, and em oployed to protect the same, and as a protection from
thesame as set forth
Thiri, In combination with a guard, $\mathbf{B ,}$, constructed as herein de-
scribed, I claim the angular groove, 0 ,' for pointing the lead.
46,290.-Mop Holder.-Thomas C. Ball (assignor to Springfield, Vt., and said Henry Harlow and 4 . Thompson, administrator of the estate of Lewis
Graham, assignors to A. G. Washburn. Ante-dated Feb. 14, 1863
I claim the combination and arrangement of curved springs,
a a a a, substantially as described, with the slotted head, B, as set
forth.
46,291.-Forming Paper Collars.-William S. Bell (assignor to himself and W. S Bell, Jr.), Boston Mass.:
I clam theimproved method of tr eating paper collars or collar
blanks, to deflne and de termine the line of fold, substantially as set
46,292.-Cartridges for Breech-loading Rifled Fire-arms.- Hiram Berdan (assignor to Levi Pe Mor Berdan, Abia A. Selover and Wm. B. Benson), Boston, Mass.
claim anindestructible cartridge case, with an irregular exterior to correspond with the counter bore, with which it is to be usea, and
a ritled interior, to correspond tin size and form with the bore proper,
in combination with one or more projectiles previously prepared, to fit the rifing of the bore or me whe projectiles previously prepared, to
stantially as herein described, so that thic ctuamber will benged sub
stot iraminduling, and the balls properly located in respect to the the rifted
of the bore, without the necessity of thelr entering the latter in the
act or loading of the bore, w
act or loading.
46,293.-Coal and Ash Sifter.-Abijah E. and Josiah B Blood assignor to themselves and Wm. J. and Benjamin F. Larabec), Lynn, Mass.:
We claim, first, The construction of coal sifters. with a vibratory
bottom, C , searate from the inclosing case, B B A A, carryin the the
screen, D , or wire cloth, E , with free movement ind endenty on screen, D, or wire cloth, $\mathbf{L}$, with free movement ind ep endently or
the stationary case
Second, The consiruction of the vibratory bottom or screen, $\mathbf{E}$
with a decided convexity upward.
Thirr, The combination ot tlic case, A A B B, with the cross bar,
 forth
46,294.-Picking Cylinders of Machines for Disintegrating Fibrous Materials.-Seth Boyden (assigno to Henry H. Jacques), Newark, N. J.
I cla im binding the picker cylinders of pick ers for disintegrating
fibrou s materials, as and for the purpose described.
46,295.-Flexible Pipe for Mining.-Anthony Clark
(assignor to himself and Gorham Blake), Todds Valley, Cal.:

46,296.-Coat and Hat Rack.-George F. J. Colburn Newark, N. J., is gnor to James T. and Horace A Pratt, New York City:
Iclalm the combination of the

## ments, D D, constructed, for the purpose set forth.

46,297.-Rivets.-John N. Dennison (assign
self and Gould Brothers). Newark, N. J.
I claim a rivet or a washer, wlth a projecting edge, co
he manner and for the purpose herein above speci fled. Provi ton, Chinston, R. I.:
First, I claid the hood, C, for a tree protector, composed of the
flanch, b, rod, $\mathbf{c}$, and lip, a, and united by means of a clasp, $e$, the Nliole constructed substantlally as described.
Second, I claim the construction of a h hood, as described, or its Second, I claim the construction of a hood, as described, or its
equivalent, with a rougla or its equivalent, enircling the trunk of
a tree, sulsstantially as and for the purpose specified. 46,209.-Shoes.-Joseph B. Johnson (assignor to him-
self and Charles Buffune), Lynn, Mass.: self and Charles Buffune), Lynn, Mass.: claim the above-explained improvernent in lasting a shoe, the
sance consiting in the employment of a false inner sole,
nection in with the last
 alent thereof, extended across the inner sole, but without goingin\%
or through it.
I also claim the combination of two, or any other suitablenumoer I also claim the combination of two, or any other suitablenumoer
of pins and clamps, ab $c$, or therrequavalents, with the false inner
sole, $B$, $A$ nd for $t$ ne sole, B, And for the' $r$ wrpose of holding the mann sole in place with
respect to the uppr, when the latter is confined to the false sole by respect to the up pro, when the latter is confined to the false sole by
thread or sewng for in mazaler substintialy asispeciffel.
I alho claim the combunation of the spurs, gg, or their equivalents, with the false sole, B, a nd the upper, A, when lasted as specifled
such spurs being or the purpose of, maintaining the said upper and
the outer sole in thelr proper relation it or neart be ball of the foot. I also claim the combination of one or more pins a c cor or their
equivaents with the false sole, B, and the eswing i, extended across
such sole and about the said pin or pins substantially in manner as
heren halso claim the arrangement of the inner sole, B, and the sewing
herein befor
i by which


46,300.-Combined Rakes and Reels for Harvesters.Samuel Johnston, (assignor to himself and Rufus Lu Hownard), Buffalo, N. Y.:
First I claim mirking an automatic rake and reel combined so that
the operator can by means of a lever and cord, avd the arrangement
two tracks or ways in which the elbov af that one operator can by paeans of a lever and cord, ayd the arrangement
of two tracks or ways in which the elbow of the rake moves, cause
ither rake load to operate atheleasure an either rake liead to operate athle easure as are rak and movest the cause
time act continuously as a reel, all constructed in the ma nner herein described and substantially as and for the purposes set forth.
second, I claim in an automatic rake and recl combined for har second, Iclaim in an automatic rate and recl combined for har-
vesting machines, the arrangement whereby the operator without
stopping the action of reeining can trop either of the rake heads vesting machines, the arrangement whereby the operator without
stopping the action of reeing can drop either of the rake heads
down to the platform and hold it thereon, while removing the grain
the down to the platiorm and hindatially as described and for the pur-
therefrom constructed substant
poses set forth.
Third, I claim the arrangement of the trackg or ways when they
are arranged so that in reeling the rake or rake head wil drop down neary to the cutters and move the cut grain back rrom them and
then rise up and pass over the cut grain, substantially as described Fourth, I clam the arrangement of the drivol's seat in connce-
tion with the lever cord, and gate, substantially as described and Fine purposes set forth.
Fifthed I daim in acombined automatic rake and reel, chanking
he path of the roller which controls the motions of lie rake when it is removing thegrain from the platform, stbstantialy as describ.d
and for the purposes herein set forth. and for the purposes herein set forth.
Sixth, I claim the arrangement of tro tracks or ways in com.
ination with the gates or switches, tor the purposes herein set forth.
Seventh, I claim the lever and spring, attached to the forward
gate, in connection with the cord for operating the same, for the purposes set torth.
Elghth, Iclaim use of the pointed washer attached to the
elbow of the rake below thic roller for the purposes set forth. elbow of the rake below the roller for the purposes set forth
vinth, I claim the liinged extension attached to the outer end of
the rake head applied substantially as described and for the pur-
 49,301.-Coffee Roaster and Grain Dryer.-Gilbert D. New York City
I ciaim forming a ccffee roaster, of a series of horizontal plate
eacla a aranged to rotate with a a closed box, the botom of whicl
is also horizontal, and which boxes receive and disch
center, substantially in the manner set forth lierein.
46,302...Appatatus for Carbureting Air.-Hugh L. McAvoy, (asslguor to himself and Elias S . Hutchinson, ) Baltimore, Md
I claim manufacturing air gas and enrching ot her gas, by the
de scribed mode of using a holder, $C$, to conta in alr, receive the car bonaceous matter as it rises from the oil in the form of yapor, and
force the Easilto the pipe whlerein in is conducted off, as explained.
Second 1 clatm the plate, Ez employ in connection with the
pan, $E$, to cause the air to pass to the pipe, $B$ in contact with the pan, E, to cause the air to pass to the pipe, B in contact with the
oil and in a s.ate of compressure substantially as set forth.
Third, Ilaim the sealing device consisting of the cup, cylin-
ders, G,G, and a body of liguid between the latter, substantially as ders,
46,303.-Sewing Machine.-James S. McCurdy, Bridge port, Conn., assignor to Elias Howe, Fairliedd, Conn.:
I claim the combination in a serving machine of t the reciprocating
needle bar with a double headed rotating hook so formed that when rotated in combination with a reciprocating needle it will drave a
loop of necule thread through the two preceding loops, substantialy as set forth. I also claim the combination of the double headed looping hook
with the shaft that imparts motion to it by means of two pins
which are controlled by a cam the whole operating substantially as set forth.
I also claim the combination of the feeding instrument of the
sewing macline with a slaft making one revolution to two descents by the needle carrier through the intervention of two cams of
equal projection the whole operating substantially as set forth.
I also cha mm the coubination of the feedin instrument I also cianm the combination of the feeding instrument with a
shaftmaki ing one revolutionto two descents 1 y the needde carrie
through the inter vention of two cams and two adjustable wiper hrourh the inter vention of two cams and two adjustable wipers,
one of said cams baving two protuberances of equal projection, and
the other havig one protuberance of greater projecticirithan those of the other cam, the wnole operating sinntimetially as set forth
46, Table Cutlery.-Nathaniel Miles, Buckland Muss., assignol to "Bay State Hardware Co.," Northalupton, Mass.:
separately from the tane and liaviur cut fary fening part, D, narrower
than the scale, B, and let into and conc caled within the latter sub an the scale,, , and let into and conc ealed with in the latter sub
stantianly as and or the purpose within
Sect forth. Second, I claim in connoction with the eavove the employment of
the books additional parts, E E , adipeded tolock the separate bol
ster pieces to the scales, $\mathbf{B}$, the whole being concealed within the
 46,305.-Metallic Window Sash.-Charles Neer, (assign-
or to the "Architectural Iron Works,") New York or to the "Architectural Iron Works,") New York
City: City:
 fanged strins, , tho part mecting rail, B, plug, 9 , sties, $A$ A, and
fanged strips or bars, $\mathrm{c} d$, all substantially as berein slown and de-
Bcribed.
46,30G.-Machine for Washing Wool.-John Petrie Jr., and John Kenworthy, Lancaster, Eng., adminis assignors to Thomas Clegg, North Lndover, Mass.
Patented in England, July 8, 1853 .
What is considered to be new, and therefore claimed as the inven
ion or the said Petrie and Taylor, is the combination of a rotating
agtators, e e, and a rotating wheel or drum cylinder or frame, $\mathbf{r}$
armed with teth prons or thnes, the whole of such parts being
applied to a trouh
tind and actuated by mechanical means substan Wially as deccribed.
We alsoclaim the combination of the rotating plunger, c, and th
and mov vibrating or reciprocating arms, e, for stirring, ag the wool in the trugh.
in forwar
We further claim in combination with the trough the endles
Win We further claim iu com bination with the trough the endless
aprom, wr, or its equivalent, and the squezzing roulers, the Brting
drum or frame, $r$, above shown and described for raising the washe drum or frame, r, above shown and described for raising the wa she
wool out of the water, and depositinr itcan the traveling endless
band or other contrivance for conveying it to the squeczing roller or some receptacle for receiving it.
We also clam the combination of the squeezing rollers, the liflugg
wheel, one or more stirrers or agitators, and the plunger, the whole
wole heel, one or more stirrers or agitators, and the plunger, the whole
being arranged and applied to a trough substantially as and toop.
rate as speciled and also heir combination witn the vibrating
rame, $d$ arranged in the trough as described.
46,307.-Spark Arrester.-. Auguit Prusman, Lingen Hanover, assignor to Bernlard Schaffer and I claim the arrangenent ot the inverted eonical tube, $F$, cylindri-
cal deflector, $H$, jacket, $K$, and water tank, in in conbination with
he smokestack, $E$, jacket, $C$, and exhaust pipe, $A$, all constructed, pplied and operatmg as and for the purpose herein set forth.
[This invention relates to an improvement in that class of spark arresters in which by a superincumbent tube the products of combustion are separated from the jet of steam and returned to the passage of the jet of stcam stack.]
46,308.-Spark Arrester.-August Prusman, Lingen, Hanover, assignor to Bernard S
tian Budenberg, New York City
I claim a smokestick, A, for locomoti ves, expanding from the
point a, toward the topand botow in about the proportion hicrein
specined, and applied ln combination with the exhaust pipe, $B$, in specufied, and applied in combination with
the manner and tor the purpose described.
IThe object of this invention is to merease the draught created by the action of
locomotives.]
46,309.-Mode of Compensation for Loss of Motion.
Tronas Shaw (assignor to himself and Philip S.
I claim the combination of spring, $k$ and $m$, crank wheel, $d$ and
rod, when connected with the recording movement, $n$, in order to operate ensine counters requiring a regular m
manner and for the purpose herein described.
46,310.-Paper Shirt Collars.-George K. Snow, Water-
town, Mass., assignor to himself, March Brothers, Pierce \& Co., Boston, Mass.:
I claim my improved manufacture of paper collar, that is one
haviag on eacho fis two poposite sides indentatione or imp rints in
imitation of stitching, the whole being substantially as and for the imitation of sitit
purpose specificd.
46,311.-Machine for Making Metallic Tubcs.-IV. Valen-
tine and M. T. Ridout (âssignors to themselves and Wim. Beck. Milwaukce, wis.:
We claim in combination with a movable mandrel, , or its enuiv. We claim in combination with a movable mandrel, G, or its enuiv.
alent, ti:e linged siding jaws, A A, pi ioted upon a supporting block
or table, B, and operat ng substantially in the manner and for the purpose herein set forth.
we claim, also, in combination with the iaws, A A and movable
mandrel, $G$, or its equivalent, securing said laws by adjustable pivots mandrel, G, or itts equivalent, securing said aws by aijustable pivots
so as to adapt them to mandrels of ditierent proportions, substan-
stially in the manner herein set forth.
46.312.-Fanning Mill.-Henry W. Veregge (assignor to Cain, Jr.), Rlchmond, Ind.: I claim hanging the sli ies or shutters of fanning or other similar
mills to the frame, or to a piece conneted to the frame, by means of a tonvue, strip or block on said slides or shutters and a horizontal
groove or grooves in the face of said frame or piece, as and for the
purpose set forth U
46,313.-Ship's Galley.-William Young, Washiugton,
D. C., assignor to himself, and Chas. F. Stansbury, Philadelphia, Pa.:
 Second, The arrangement and combi ation of the fireplaces, A,
B,
B and $D$, with the oven, $E$, substantially in the manner and for Third, The arrangement and construction of the tireplaces, A, $A^{\prime}$
T', oven, $E^{\prime}$, and side recesses, $J \mathbb{K}$ and $J^{\prime} K^{\prime} L^{\prime}$, substantialy in the manner set forth.
Fourth, The arrangement in a ship's galley of three or more fire-
places varying in capacity, substantially as and for the purpose deplaces va
scribed.
46,314.-Machines for Dressing and Finishing Threads,
Etc.-Emanuel Burgy, Hasle, Switzerland, and Louis Guillemin, Dieboldsheim, France
We claim the combination of a winding trame, substantially such
as herein described, with the bobbins, bath, b, wipers, g, and
steamchests, $h$ and $i$, all constructed and operating in the manner nd for the purpose substantially as set forth.
(This invention relates to an apparatus which is applicable for the purpose of dressing, finishing, and imparting luster or gloss to all threads or tilaments of silk, cotton, flax, and other fibrous sub silk or floss silk, whicecially to yarn, thread, or flaments of wast equal in appe, which by the use of this apparatus can be in value. 46,315. - Hydraulic Apparatus.-Auguste Desgroffe and Achille Ollivier, Paris, France
We clain the employment or useof a rope, h, or its equivalent, in
combination with a box, A, provided with onc or more plungers or
ovable sides, or made of some expansible material, substintially movable sides, or made of some
as and for the purposes set forth.
[This invention consists in gradually introducing into a water-tight vessel or box, which is filled with water or other non-compressible and provided with one or more movable sides or axtures or e expansible, a cord or rope in such a manner that by said rop eiveruid in the box, or a portion of the same, is displaced and novable or expansible, transmit the power thus exerted on their nner surfaces to bodies placed against their outer surfaces, and a powerful pressure can be exerted with comparatively little powe and with an apparatus of a simple and cleap construction. 1
46,316.-Mode of regulating Motion of Railroad Car Trucks.-Charles Schoubersgky, St. Petersburg I claim the fil-w heels, A A, connected to an axle, B, and supported
the neripherie oo thr driving wheels of a truck, with or without nt ermed
set forth.
[This invention consists in the employment or use of two heavy
 or indirectly, upon the divmg wheels or atwo in such a manme thatby the action fr said fy-wheels the velocity of the truck is renthetruck is going down hill will revert to the locomotive in drawin train up on an incline]

## RE-ISSUES

1,861.-Cartridge Box.-Erastus Blakeslee, New Haven, Conn. Patented Dcc. 20,1864 : : manner described, to
 1,862. Supplemental Valves for Steam Engines.-
Richard Colburn and L. W. Hanson, Norwich, Conn. Patented May 20. 1856 :


 1,863.-Valve Gear.-Joseph F. Hamilton, Pittsburgh, Pa. Patented July 14, 1863
 usedin connection with a governor, rock slaft or eccentric, or steam
eng ines, the whole eeing constructed and operating substantially as engines the ehtole being constructed and opera
1,861.-Arrangement of Valves ior Steam Engines.-
Joseph F. Hamilton, Pittsburgh, Pa. Patented Juseph 24,1860 :
July 24, 1860:
I claim the use of the valve, i, placed in one of the receiving norts,
of steam engines, as herein described, and for the purpose set forth. 1,855.-Cirrding Machines.-Lawrence 0'Brien, Indian855 .-Cirrding Machines. - Lawrence 0
a apolis, Ind.
Patented Oct. 6,1863 : I claim the arrangement of the roll, $D$, between the main card cyl-
inder. A, and the endless apron, $C$, substantially as and for the pur-
poje set forth. pose set herth.
Also the construction of the endless apron, $C$, substantially as
herein deseribed, soas it carrv the fiberson top of the slats and
dnst and other foreign matters between them, the fibers being de-
 1,866.-Keyed Instrument of Music.--Fran
Salem, Mass.-Patented Nov. $10,1863:$ I claim as, my improvenent in meclanism for operating the
sound-producing parts of a musical instrument the above-described
 dents alternating with respect to one ancther, substantially as set
forth
thn in in combination witl the said arrangement of dents on a ro-
they plate, Ilaim the arrangement of the bass and the trellle. key
levers, or the parts whuch produce or aid in producing the musical levers, or the parts whach produce or aid in producing the musical
souds, in two separate series or sets, wheruby those of the bass
notes are in one set and those of the treb.e notes are in the other sounds, in two separate series or sets, whereby those of the bass
rotesare in one set and those of the treb.e notes are in the other
set, substantialy as specied.
And in combination with the keys of a keyed musical instru-
ment, I claim a series of operative bey levers and a rotary plate,
 plate,, , provided with dents, or their mechanical equivalents, ar
rangalso
a also clamp the combing equivalents,
mare claim the improved speed regulator, composed of one or
moustable wings, $N N^{\prime}$, and their stationary surface or wing or more aujustable wings, N No, and their stationary surtace or wing or
wings, and 12echanism for varying the position ot the aduistable
wing or wing reatively to one or more stationary wings, kubstan-
tially as and forthe purpose specifed. Tt arrangement of dents, the series of sey the rotart, plate, , with,
chanical equivalents, and a mechanism for imparting a rothery me
mo chanical equivalents, and a mechanism for imparting, a rotary mo-
tion to the plate, , the said key levers being applied to the keys and tion to the plate, G, the said key evers being applied to the seys an
tothe dents, hy means, and so as to operate therewith, substan
tially as spectied.
1,867.-Paper Collars.-Wm. E. Lockwood, Philadel
phia, Pa., assignee by mesne assignment of Walte Hunt. Ante-dated July 24,1854
As a new. manufacture, a shirt collar, in which paper is used to
imitate starched finen, and which is made of the desired shape by
dies or forms applied under pressure.

## DESIGNS.

2,028.-Military Belt Hook.-Erastus Blakeslee, New Haven, Conn.
2,029.-Badge or Breastpin.-Michael F. Ryan, New
York City. 2,030.-Trade Mark.-Stephen S. Winchester (assignor
to E. A. \& W. Winchester), Boston, Mass.


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 have no doubt that the public contidence thus indicated has been
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the ottice, a marked degree of promptness, still and fielity to the
intercsts or your Judge Mason was succeededby that eminent patriot and statesman,
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to thle outice of Postmaster General of the United titites. soon atter
entering upon his new duties, in March, 1859 , he audressed to us the entering upon his new doties. in
foilowing very gratif ying letter.

Hon. Wm. D. Bishop, late Member of Congress from Connecticut

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## 

S. J. A., of Vt.-No power is actually gained by either the lever, inclined plane, screw or wedge; what is ganed in powe the lever, inclined plane, screw or wedge; what i
is lost in time. This apylies to them all equally.
O. M., of Ind.-You have doubtless seen that the true inventor of the Ruhmkorff coil has already been named in our paper.
D. B., of Wis.-The "natural lime" in soll is carbonate of lime, and this would not injure guano. Sulphuric acid, mixed with guano, would combine with the ammonia to form su phate of ammonia, and then this would be alowly decomposed during the growth of the plants, yielding the ammonia as it wa wanted. Sulphuric acid is destructive to both animal and vegeta ble compounds, and would require diluting with many times it weight of water to be harmless to vegetation. It is not a fertilize T., of Mass.-We know of no method by which you can mix elaine oil with water.
J. W. P., of Me.-A sand bath for bluing steel is simply white beach sand, such as is used for scrubbingfloors. Place it in an iron pan, over the fire, and heat it hot. The steel must be pol-
ished bright, and laid on the sand. when it will gradually acquire a ished bright, and laid on the sand. When it will gradually acquire
bluish tint. At the right shade take it off and plunge it immedl ately in cold water. Anything that dittuses the heat evenly will do as well as sand; this material is only used for that purpose. J. M., of N. Y.-Ede, on steel working, is the book you fant.
G. F., of Mass.-The sample of paper you send is made

