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50,888.-Vegetable Washer.-Francis Arnold, Haddam Neck, Conn.:
I claim the arrangement of the grate, $C$, with the tub, $A$, and
shatt,, as and tor the purpose ssecified. 50,889.-Potato Dicger.-L. Augustus Aspinwall, Water-
Vliet, N. Y.:
I clairc a vibrating screen or screens, suspended in the rear by
hangeris from the same line of axis asthe plow arms, and in front hangers from the same line of axis ast the plow arms, andin front
upou rollers under the plow, the ront end of the side bars, which
traverse the rollers, betng so formed as to give them anupward traverse the rolers, be thg so frmed as to give them an upwara
lirting movement ast sereens move from the front to the rear
the screens, when two are used, vibrating alternately with each other.
50,890.-Potato Planter.-L. Augustus A spinwall, Wa tervliet, N. Y.:
First, I claim the construction and arrangement of the chambers
attached to the revolving plates with thrirtrap valves.
Second, The trip for opening the valves and discharging the potacoes. $\mathbf{5 0 , 8 9 1 . - S c y \text { the Snaths.-SS. B. Batchelor, Lowville, }}$ I ciaim a scythe snath constructed of two or more picces of I ciaim a scythe snath constructed of two or more proces of
crooked timber, joined togelher substantally in the manner and
for the purpose herein described. 50, the purpose herein descrined.
0,892.-Coal-oil Lamp for Cooking Purposes.-Wm. B. Billings, Brooklyn, N. Y. Antedated Sept. 11, 1865:
First, I claim the water bath, B, constructed with the no-chimney
burner, for cooking and heating purposes, substantially as described
and set forth. and set forth. insulation or the water bath, B, from the oil vessel,
Second, The then
s, substantially as dexcribect and for the purposes set forth.

 forth.
50,893 .-Ejector for Deep Wells.-John Bleckie, Wash ington, D. C
First, I claim a pump consisting of a series of chambers in com one or more tubes constructed and arranged to operate substan
tially as and tor the purpose herein set torth.
second 1 elinm the prucess or nethou herein described, of ele vating liquids, hy meatu; of at alternate pressure in one set o
chamuer: in combinauinn wiit at vacuum in the correspondin chambers, or by means of a pressure in one set of clambers al
ternating with theremoval of the atimospheric pressure in the other
set of chinnibers.
The usid In combion with the pump herem described, I claim the use of heated air as and tor the purpose set forth.
Fourth, In combination with the pump, constructed as described I claim the use of a steam jet for the pump, constructed as describe of exhausting the al 50,891.-Fruit or Step Ladder
Ohio:
I clain the chords, A, and arches, I, in combination with the
steps,
pose set constructed undarran redin tie manuer and for the pur-
pose ser rorth.
second, I cliun, in cominination with the above, the making the
steps narrowed in the rear itun ia front, in combination witli the 50,895.-Drying Apparatus.-Daniel K. Boswell, Cor
inth, Miss.:
Frrst, I clain a drying house or apartment comprising a central
chamber, B, und one or more wiugs, $\Lambda$, hinged to said chambe a nu mounted on suitable wheels or casters, e, for the purpose o
ready access to the apartment aud easy removal from place to place.
second, The suit of vertically separated chambers or compart-
ments, A B , capable or being readily ustrinped from one another

 K, and deflector, s, ror the equal heating and venilation of every
part or the aparrment in the nanner set torth.
Fouth, The arrangemcnt or connected valves, $J$ and L , for
 Fitth, The arrangement of flexible rod, $H$, cink, ©, and hole, C
for the ready hanging and unhanging of the clotnes, in tine manne
explained. 50,896.-Tool for Removing Obstructions in Oil Wells. William Broowden, whites Corners, N. Y.:
Ciaim a cylindrical tool, A B, having a faring mouth, a', and
taper core, aj, in co noinination with metallic batls, C , or equiva-
lent for the purpose and sunstantially as described. 50,897.-Pen Holder.--Frederick Brackett, Calais, Antedated, Nov. 5, 18*5:
I claim the construction of the double tube pen-holderat tachment,
d en and the adjustable spring guide rou f f f i, combincd witl an
ordinary pen handle, substantially 50,898.-Adjusting the Packing of I'istons in Deep Wells.-Erasmus D. Brown, Buffalo, N. Y.:
I claim so constructing the lower end of the screw follower, $D$,
and the upper end ot the font valve, $E$, as that they inay be coupled together and the packing adiusted through the pump be coupled 50,899.-Claw Bar.- George Brownell, Mitchell, Ind.: felaim, First, The bar, A, in combination with the rib, C ,' and
shackle. E G G , as and for the purposes set torth. Second, the combination of the soackle, E F.G. G , with the shoul
ders, D , and bar, A , when constructed and arranged to operate as explained. Weclaim, First, The apparatus for

second, The apparatustormoving the carriage, C , to and from the
of the carriage, the weight and cord or chain, Z, the coupling clutch,
Q, wheel, R, bell cranks, L, and V, ripping arm, h, with its adjusta-
ble plate, W, springs, f, and u, and tripping pin, w, construc eit and operating together as described.
Third, The apparatus or canting the bolt bed, to wit: the bell
cranks, j and k , with the pins, $m$ and $n$, guide groove, $p$ and trip-
 that for moving the carriage to and rom the saw, and that to
canting the bolt bed, substantially as the same is described and set
corth in the within specincation. orth in the within specincation.
50,901.-Hair Restorative.-R. Wilson Carr, Baltimore, $\underset{\text { I claim co }}{\text { Md. }}$
Inlic tincture of the the expresped Juice of the onion with the alco
hol
and holic tincture of the residuum or pulp thereor. as above set for th
and favoring the compound with he oils of rosemary, lemon, and
bergamot, as herein described, and alsousing the same as hair pre bergamot, as herein described, and alsousing
server and re torative, as herein spectifed.
50,902.-Mode of Operating Oil Wells.-Paul Casamajor New York City:
I claim the within-described method of operating oil wells, by ex
teenting rom the main well, A, aseries of radiating dirills or chan
nels,, in a horizontal or inclined direction, subsiantially as and for the purposes set forth
50, 903.-Mode of Operating Oil Wells.-Paul Casamajor, New York City.:
I clain an oil well composed of a main shaft, which terminates at
a suitable distance above the rock containing the oil, and from
which galleries extend in a horizontal or oblique direction, in com which galieries extend In a horizontal or oblique direction, in com.
bination with rells sunk trom said galleries in a vertical or oblique
direction, substantially in the manner and for the purpose set forth. 50,904.-Boot Crimp.-Abram and George W. Caywood Ithaca, Ohio:
First, Weclaim the combination, substantially as described, of a
jointed or hinged form, operating in conjunction with a hinged and yielding mold.
Second, A boot crimp, composed of a mold having the pair of
hinged cheeks, J and J, having a flexible and a hinged cheeris, and having a fex ible and adjustabe connection
when conbined with hanged orn, A B in the manner set forth.
Chird, The arrangement of rod, $I$, and hinged form, $A$, as de-50,905.-Apparatus for Carbureting Air.-John Chase, Windsor Locks, Conn.:
I claim the chambered wheel, $B$, constructed, arranged, and ope
rating substantially as described, tor the purpose specifled. 50,906.-Drinking Cup for the Sick.-Martha P. Cod-
man, Boston, Mass.:
$\begin{gathered}\text { I clain the application of a to a drinking vessel, constructed } \\ \text { with a partialcovering, as described, in the manner substantially as } \\ \text { described. }\end{gathered}$ 50,907.-Betort for the Manufactnre of Prussiate of Pot-
ash.-D. B. Coles and A. D. Coles, Newark, N. J.: First, We claim the double $V$-shaped ribs, b, arranged in the inte-
rior or the retort, $A$, substautially in the manner and for the pur pose described,
Second, The employment of a cylindrical retort with rounded corne:s a
sel forth.
[This invention relates to an improvement in that cless of retorts which are generallyconstructed of cast iron or other suitable mate rial,cylindrical, with gudgeons on which it can be rotated, and one of which $s$ bored outso as to obtain an aperture for the pur
of introducing the charge, or removing the same, when ready. 50,908.-Machine for Attaching Teams to Farming Im-plements.-Henry A. Cook, Hillsdale, N. Y.
I claim the combination of the rabber spring compressed between of said springs, and the attochering stap les and hooks or rings, al
arranged to operate as and tor the pur poses described. 50,909.-Pocket-book, Port-monnaie, Etc.-B. F .Cow an, New York City:
I claim attaching to port-monnaics, pocket-books, memorandum
books, etc. a serrated or roughened
ening the fallict strip or plate, or rough of portemonnaies, etc.; substantially as and for the books, etc. a serrate orr roughened
ening the frame of portemonaies, e
purpose het 'eio shown and described
50,910.-Packing for Oil Weils.-John R. Cross, Chicay claim the :
wires, a a, pivoted to the thing, A, , , D , Dorm a with or without the packing, c , and ring, A, with huspension rods or wre ropes, if, ar-
auged $m$ operating substa ntially as and for the purpeses show 50,911.-Pump.-William H. Culp, Hammondsville, Ohio:
I claim the
I claim the prston head, $C$, in combination with bolts, $F$, and
hollow piston rod, $D$, substantially in the manner described. second. The piston head,, , constructed and operating substan
tially in the manner and for the purposes herein set fortb. 50,912.-Bellows.-Gecrge W. Dalbey, Wheeling, West Va.:
T caim the combination and arrangements of the parts, consisting plunger, D, weight ed plunger, ©, and springs, e, the motion being
derived through the lever. H , and frame, E Fif substantially as
described and represented.
IThis invention relates to certain improvements in the construc tion of that class of bellows used by smilhs and in smelting house, etc., whereby the same can be easilyoperated, and will insurea con tinuous blast.]
50,913.-Grain Separator.-John Davis, Alleghany City I Pa. Antedated, Nov. 2, 1865.
 ng in the manner and by the means describel, and for the purpos
50,914.-Grain Drill.-John Davis, Alleghany City, Pa I claim thed NOV. 2, 1865
 hoppers, $h$ and $h$, the whole weing constructed, sheatrange, B , and
operating substantially as herein describestand for the purpose set
torth operati
forth.
50,915
50,915.-Corn Planter.-John Davis, Alleghany City, Pa. Antedated Nov. 9,
I 1865.
f, with extension, $p$, scrapers, 11 , shaft, $j$, rollers, $x \times$, $h$ heat teeth
 arranged substan
0,916.-Broadcast Seeder.-John Davis, Alleghany City, Pa. Antedated Nov. 5, 1865.
1 clain the use ot gum or softleather strips placed in the groove
or seed rollers, used in connection with a hoper and chiving gear he purpose set forth.
0,917.-Thread-waxing Attachment for Sewing Ma-chines.-Job S. Dawley and John Bloeher, Buffalo
N.Y.:

We ciaim, First, Maintaining, by a proper feeding device, a sup-
ply of wax in aliquid or seml-liquid state, at or near the needle
throat, tor the purpose and substantally as herein described.
Second, The combination with the wax-holding cylinder or reser
viir of a movable piston or bottom, for the purpose and substantially as herein described
Third, The combination with the cylinder and piston of automatic
wax feeding mechanism, operating in the manner and for the pur
wax-f eeding mechanism, operating in the manner and for the pur
posedescied.
Fourth, The wax receptacle, f3, formed at or near the needle
throat, for the purpose set forth, in combination with the closed
Firth, The Wax reoeptacle, Y , in
shuttle, $\mathrm{D}^{\prime}$, for the purposes and aubstantlally as described.

50,918.-Wagon Shaft Shackles.-Ferdinand Dickenson Jr., Hartford, Conn.:
I clain a tapering bolt, e, having the screw cut the entire length,
in combination with the hinge straps, a b, washers, e x, and nut, $i$,
substantially as and for the purpose d escribe 50,919.-'Tubular Apparatus for Deep Wells.-M. J Dickerson, Titusville, Pa., and Jacob Stubor, Uti ca, N. Y.: rate from the eduction tube, by means of the a aplication and use
of a packing tube, C, riving tube, A and seed bapor other packing
D, for the purposes and substantially and describea.
 50,920.-Bedstead.-J. P. Dorman, Galesburg, Ill.: I clatim the $c$ nstruction. of a bed having a spiral spring. D, so ar-
 tiaily in the manner and for the purpose set forth
 set rorta. The arrangement of the chair, $H$, chamber, $h$, and leg, $f$, in
Third, Tomation with the head or foot pieces. A and B, substantially in
the combination with the head or foot pieces.
the manner and for the purposes set forth
50,921.-Beefsteak Crusher.-James J. Doyle, Sharon Conn .:
Iclaim a beefsteak crusher formed by combining the cylinders, E with H, heos frame, substantially as described, and for the purpose (This invention consists in combining with each other two cylin ers covered with teeth, in the form of truncated square pyramids. The teeth are arranged in rows and are at a distance apart about equal to the base of the truncated pyramids or teetli. These teeth esh into each other, and, as the beersteak is passed between the cylinders, it is crushed and made tender without having its grain
destroyed, its fuices expelled, or being mangied and reduced to a destroyed, its fuices expelled, o
shapeless and unsightly mass]
50,922.-Washing Machine.-James K. Dugdale, Richmond, Ind.:
 Second. I I also clain the device, $K$, in combination with frames
$B$ and, , and washboards $E$, 0,923.-Nut Machine.-George Dunham, Unionville Conn. Antedated July 1, 1865 :
I claim the yieldus clamp, B, composed of jaws, a a, grasping the nandrel shat for the hole in the same, the clamp. B shall recede in of the stock, A, hy the ccelap se of the springs, DD D, and the reced inandrel the
saved tion ractuue or denection, the whole arranged as described
and represented.
50,924.-Stovepipe Thimble.-Samuel Eddy, Brooklyn N. Y. Antedated Nov. 2, 1865: I ciaim the horizontal annular flange, A, ring, B, passages, D,
guard, F, and pipe, C, combined to form a ventiliting stovepipe
rins, made in the inanner and for the purposes herein specified. 50,925.-Bale Hoop Strainer.- Edward A. Fiel d, Sidney Me.:
I caiane bale hoop strainer, composed of the holding bar, B , the er substantially as described.
I also claim the combination of the cushioning block, $d$, the lever
 50,926.-Fly Brush for Tables.-Henry Fisher, Canton Ohio:
 50,927. - Bnttons.-Henry Gerner, New York City:
First, In buttons haviug a spring to torce the detachable disk
asainst its locknge device. Iclain the central tixed diske B, consti
tuting an abutneut for the spring, and separating the latter from
 with the wahers or springs. b, and detachable d, disk, chd shank, D D
being arranged and employed in the manner and for the purpose 50,928.-Water Wheel.-Uriah H. Goble, Dubuque, Iowa: a1e curved sirally in the manner shown so as to have a concav
face side and an inclineci surface, both, longitudinally and trans
rerssil, and projecting beiow the rim, $a$, of the wheel into tre space rersalv, and projecting beiow the rim, a', of the wheel into the space
nclosed by the curb, n suct a manner as to me the water adrec
non toward the outside of the wheel, substantially as and for the
ion tion tow by the the curb, in
tide
purpose herein set forth.
50,929.-Puddling Furnace.-Daniel Hall and Joseph We claim, First, In iurnaces for
We clain, First, In rurnaces for boiling and puddling iron and
other metals. surmounting the iron chamber or basin with fire brick
sulsstantially as above shuwn.
Second, we also claim surrounding the basins of iron rurnace
sith and tube or tubes through which water is forceed a against thine exte-
riors of the basins, substantially as and for the purpose above de-
scribed. We also claim placing the door rrame of the furnace in
raridly, as above shown. wherety the iron chamber or basin is mad ardly as above shown, whereby the iron chamber or basin is mad
to bee in range with the flre chamber , substantially as described. Fourth. We alse chai m placing ribs verticalor otherwise, on the
inside or the inclosing or outside plates of iron furnuces, so as to inside or the inclosing or outside plates of iron furnaces, so as to
formo air flues co the turpose ot keeping thebricks andplates cool,
and for strengthening the plates and for preserving the furnace, ubstantially as described.
The object of this invention is the improvement of furnaces for boiling, puddling, and heating iron and other metals. It consist in several novel reatures, among which are surmounting the usua
iron basin with fire brick; also surrounding the exterior of the ba $\sin$ with a perforated water tube from which water is ejected hrown against the sides or the baain at the pleasure of the work man; aso sore the work plates and the brickwalls, by making vertical ribs on the Inside of he plates $]$
50,930.-Cultivator.-Starkey Hall, Russellville, Ky.:
I claim the combination in a cultivator of laterally adiustable with a longitudinally adiustable harrow, having a rigid at tachmient to the rear of the frame, when constructed, arranged.
and opera ing substantially in the manner and for the purpose set
a 50,931.-Reversible Latch.-Edward Halley, Branford Conn.: $\quad$. I. claim constructung the latch bolt of the form substantially a
described, so as oto be reversed without withdrawal from the case, in
combination with the slide or key, a, or its equivaleax, in the man ner and for the purpose specifed.' Emilius Hewes, Albany N. Y.:
I claim, First, In pumps for deep wells, securing the pump cy lin
der at top and bottom to the well tube, substantially as above do scribed.
Second, I also cl aim extend ing the lower section of the well tub
elow the pump cy inder to the bo tom of the well, and perion its sides occasionally throughout its length. to admit gas and liquic
to the pump, substantially a shown and described.

Third I alsc claim bringing the lower part of the piston, below
the seat of its valve, to a sharp edge, substantially as and for the the seat of its valve, to a sharp edge, substantially as and for the
purpous above deseribe.
rourth, $\mathbf{I}$ a also claim the arrangement of the hollow piston rod pistoin valves, and cylind er, constructed and operating as describe tions and operations are alternate and distinct.
50,933 .-Cooking Range.-Maurice C. Hull, New York
City: the ash pit and fre pot, in combination with the dellecting plates
$s$, , to cainse the air to circulatethrough said space, in the manne
 set forth. Claim forming the water heater lower at the front por
third, Ion
tion as seen at $\mathbb{W}$, in combination with the feeding chute, x , as an

 Fifth, I claim the ascending flue, $\mathbf{n}$, between the oven, $\mathbf{i}$, and th firereceiving the products of combustion rrom the flue at at de but
tom on the oven and conveying the same away by the escape, $n$,', a
the ate
 space, o a around the trie pot, whereby tre
vented from cooling the oven, as set forth
50,934.-Device for Opening Artesian Wells.-Edga Huson, Ithaca, N.

0,935.-Apparatus for Evaporating Liquids. -James
Johnston, Alleghany City, Pa. Antedated Nov. 1865:
I claim, First, Applying heat by means of steam or beated ait
separately or combineat to the upper and iower surfaces of oill



50,936.-Process f fr Tanning.-John Jay Johnson, Kal amazoo, Mich. and E.J. Murray, Wyoming, N. Y.
 process:
we alino cla:m specifically the use of oatmeal, or its equivalent o tarch, in the compositions and proportions of ingredients, substan 50,937.-Puddli
337.-Puddling Furnace.-Philip Keenan, Chartier
burgh, Pa Anted Eeward O'Connor, West Pitts
burgh, Pa. Antedated Aug. 26, 1865
and used in conniection withpudding or boiling furnaces, prepred $\underset{\text { set forth. }}{\substack{\text { manac } \\ \text { s. }}}$
50,938.-Burner for Gas Stoves.-Thomas J. Kelly, New York City:
Tith idime the combination of a vertically arranged diaphragm, d
50,939.-Extension Sofa Bedstead.-John Kena, Brook-
1yn, N. Y.
 50,940.-Fertilizer.-Orazio Lugo, New York City: with suipharic or other acield, boiled ground and after ward tre treate 50,941.-Planking Clamp.-Joseph Macotter, Baltimore Ma.
 50,942. - Plowshare. - Anton Maschka, Chicago, Ill.:
 It forth
50,943.-Mechanical Movement.-Silas C. Matteson Osceola, Wis.
First, Iclaim the combination with the double rack bar, $\mathbf{A}$, of the
lever,
pose
porme posecerplainiodiam the adjustable e guddes, E E E, for steadying the rack
bar, orawin its movement substantially as described. bar, drawing its movement, substantially as described.
50,944.-Water Elevator.-H. H. May, Galesburg. Ill. I claim a conic water-tight wheel, p, casing, ${ }^{\text {g , and outer casing, }}$, , the purpose herein dereribe
seconas In combination th
 and C , substantally in the maner and tor the purpose herein 'set
torthird, The gate, f , lever, f , and pins, $\mathrm{f}^{\prime}$, and the holes, $\mathrm{F}^{\prime \prime} \mathrm{E}^{\prime}$, for

 sifith, Flume or tunnet, D, with its enlarged area for the gates
and the gates, E " " ${ }^{\text {E }}$, as constructed and arranged, substantially in
 and holes. E, For a bet ter adiustinent or the quantity ot water in'ts

 50,945.-Tanning.-John M. Muller, North Becket, First, I ciaim
hereer mentioneu, and combineel in about the proportions set forth Second, subjecting sturfied or unstuffed stins. atter they yh
been tanncd, to the action or steam, substantially as described.
50,946.-Sirnal.-Albert J. Myer, Washington, D. C.:
 50,947.-Splint Plane.-Harrison Ogborn, Richmond,
 structed and combined substantially as and tor the, purposes set
forthond
Second
claim the arrangement $I n$ a splint plane of the plate, $K$, bite , D, bevelelea guide, C, and one or more bent kiveres, ', at all cont
structed and combined substantially as and for the purpose set


50,948. - Journal Box for Land Carriages.-Ebenezer P. Palmer, Milton, Del.:

said box is used in corobination with the rollors, D, and journal, E
substantially as described and for the purposes set torth. 50,949 .-Mode of Sinking and Tubing Wells.-G. D


 B. the op erating rod. F, and the pipe, Ac de cribe
he purposes
0,950.-Constantillily an shown and

50,950.-Condensing Milk.-Julius R. Pond, New Hart-
ford, Conn.:

 ondan as attained, daily appications of oie
0,951.-Knife Sharpener.-D'Arcy Porter, Cleveland Ohio:
 0,952.-Horse-shoe Calks.-Isaac R. Potter, Dart mouth, Mass.:
I cllim the wedge.shaped calks, in combination with the taperiug
sooketa, in the auxiliary shoe, substantially as described. 50,953.-Coal Scuttle.-Henry S. Pratt, Hartford, Conn. h claim as a new improved article of manuracture, a coal scuttle
the combiation of the base, D , rim, E , and body, A , constructed

50,954 . - Grain Planter.- Neal H. Purcell, Avon, N. Y. res, and hole or orifice for the passage or the tube, Second I $\mathbf{I}$ claim the movabie grain-box, K K, in combination with
tiall Second, I claim the movable grain-box, K K , in combination with Thra, I Ilaim the thadustabuility of th ese boxes transversely to th ne or motion of the maciine or planter, in combination with the
ateral adjustability of the beams, e e, as set torth, forthe purpos of reaulating the width of the driuls from each other
50,955 .-Machine tor Making Chair Seats.--Ezra Ran In a mach, Fhint, Mich.
In a machine lor making chair seats, I claim the arrangement
consisting of the parallel formers, N N, actuating vertically oue
 in the seutional nut, G. Which is riseaseu by the contact of the
lever, F , with the aujustable stop, I as as described and represented. 50,950_-Harvester.-Samuel Ray and Eli Grant, Alliance, Ohio:
We claim, the link,, , and lever, $R$, in combination with the rods
m , and shoe, G , substantially Second, We claim the adjustable brace, D, in combination with
the shoe, wonstructed and airangeu as aud tor the purpose set torth
 the shatt, C, and aran, F, Fone,
and for the purpose set forth.
50,957.-Mold for Enema Syringes.-Francis B. Rich-
ardson, Boston, Mass
 therein, ,o as as to insure the formation of a true and symmetrica 50,958.-Malting Apparatus.-Michael Riley, Morrow First, I claim, the arrangement of vat, $A$, seam space, $D$, and
 50,959.-Harvester.--E. P. Russell, Manlius, N. Y.
 aso as a draw var, substiantially as and for the purpose set torih. Second, The Vsprins, E E2, constru teted and anppolied to the har har
vestron trame and cuting apparatus, substantially as and or the
purpone set torth. Third, The combination and arrangement of the spring, E E2, ar Fourt arvester, substantialy as and for the purpose set forth
 Orth
Hifth, The bar, H, attached to the hinge of the cutting apparatus by one ofits ends and itted to a slotted Hithe, J, by its other end
and operit ting in the manner described, all ior thespurposeset ford 50,960.-Apparatus for Ventilating Railroad Cars. Thomas H. B. Sanders, Pittsburgh, Pa.

scribed.
 50,961.-Wool Washing Machine.-Charles G. Sargent Graniteville, Mass.
I claim in connection witu the squeeze rollers of wool washing



 50,962.-Tobacco Pipe.-Frederick Slulte, Philadel phia, Pa.:
 $\stackrel{\text { Second, }}{ }$
50,963.-Churn.-R. L. Shute, Philadelphia, Pa.
I claim the combination with tha box, B, of the churn, of the
beaters, C C, perfurated near the outer euges, and the beater, $A$, loaded at its outer edge and perforated uear its shatt, the, saad
beaters, $C$ and $A$, bieg arranearadially upon a horizontal slaft,
substantallily as above described.
$50,964 .-$ Family Laundry.-Hamilton E. Smitl, Cin-
cinnati, Ohio: cinnati, Ohio:
Frist. Ventilatiny a dry house or chamber from the bottom, sub
stantiall in the manier and tor the purpose specitica.

 50,965 .-Process for Preserving Animal and Vegetable Substances-Francis Stabler, Baltimore, Md.
 Vessels, and expeliing the atr by the substitution
not support tomustion, substantall|, as described.
50,966. - Valve Gear for Steam Engine.-Wm. H. Stanton and A. D. Spencer, Dunmore, Pa.:
First, We claim the rocker arm, a, applied and operating in com
nation with the valve, substantlally as and fur the purposes set
Also the combination of a supplementary crank, a, with the
rocker at, G, main crank, f, and valve rod, $e$, substantially as
and for the purpose described.
[This invention consists in the employment or use of a slotte

 the valve rod, in such a manner that by adjusiing said slide in the rocker arm the motion of the valve is regulated and that the valv teach end of its stroke remains stationary for a short space ime, giving a full head of steam as the crank passes the hal CEnters.
50,967.-Method of Sinking Wells.-R. H. St. John,
Belletontaine, Ohio: Belletontaine, Ohio. A claim the constructiop of the boring device, Bab, and tube wo parts are permanentiy connected together, and the tupe con
stitutues boti
the penstuck F Tilton, Salem Mass. Antedated, Nov. 1, 1865
 sraces, $r$, and upright, $B$, substantially as and for the purpose de 50,969.-Gearing for Harvester.-Alanson Warner
 Oosely on silu axles and provided wihn two or more bevel pitions
F. jeto which the bevel wheuls, D . Eear, sutsstantially as anit tur the 50,970.-Tatting Shuttle.-Joel Sylvester Warner Ogdensburg, N. Y.: as described and represented, as a 50,971 -Cotton Press.-Isaac J. Way, Memphis, Tenn. 0,971.-Cotton Press.-Isaac J. Way, Memphis, Tenn.
iclaim the cotton press constructed, arranged, and operating as nd tor the purpuses set torth
50,972.-Railroad Switch.-Albert Watson and George W. Miller, springrield, Mass.

 arpose set torth Tuire, rha comination of the shaft, F, cam, G, piu, H, wit ae block, A, and slide, B, substantially in the manner and for tio 0,973. - Washing Machine.-John Welding, Cincinnati

 0,974
,974.-Composition for Buttons.-Elonzo S. Wheeler
westport, Conn
 50,975.-Quartz Crusher--James D. Whelpley, and
 recon purpose described


50,97c.-Process for Uniting Cast Steel or Cast Iron
with Wrought or Uast Iron Surfaces.-James D Whelpley and Jacob J. Storer, Bostun, Mass.:

 eie purpose describe



 ent, oit he latter, aiso simuar alloys of iron with zinc mol mbletenper

 pulverizug mills and quariz ceusthe's ot cast nifetal attacised of
 cess d77.- Lange.-Edward Whiteley, Cambridge, Mass. stinntally as describeu for the purpose set ioril.
 rucea mant
$50,978 .-$ Cane Mill.-O. E. Woodbury, Madison, Wis. inks, $N$, Cunnected to the stavdiards, $N$, at at atd for the purpose de. scived , The arrangement of the rollers, A B, with their respective
sece whe
gear whels, F $(t$, anul side levers, $J$, forming by means of tension

 Fourth, Thearrangement oi the rollers, $A$ B, upon the levers

 50,979.-Trace Buckle.-H. S. Woodruff, Janesville W is.:
I ciaim ihe trace buckle herein described, the same consisting or
he circular tulued plate or bar haviug iit tongue or pin, and ar
 50,980.-Yarallel Ruler.-W. L. Woods, Washington
 50,981.-Photographic Bath.-Nelson Wright, New York City:
stactany rubber packing, $\mathbf{D}$, constructed and operating sub-50,982.-Railway Journal Box.-Ranson C. Wright,


[This invention relates to a new and improved axle box which it 50,983.-Steam Engine.-George Yellott, Baltimore County, Md.:
I claim, First, The cylinder constructed as above described, in
twc sections of wunequal diameter each section being one-half, the
whole length oi the cylinder, with the whole length ot the cylinder, with the end of the section of larger
diameter open, and the end of section of smaller diameter closed,
with a piston fitted arr tight and steam tir ht in each section, and
 the two pist ons connected by a piston rod; so that when steam i
admitted into the smaller section and acts against the piston in
that section, the other piston the the larger section may be drive
out against the resistance ot the atmoshert and the reactiv
pressur ofthe that section, the orher piston on the larger section mathe driven
out againt the resistance of the atmosphere and the reactive
pressure ofthe steam on the cosed end of the smaller setion of
naid cylinder occasioned by said resintance, may be used as the
motive power of the engine in the manner and for the purposes motive power of the engine in the manner and for the purposes
set forthin this specification.
Second, I allosoclaim the cylinder eas above described in com-
binalion with and placed horizontally on the platform, supported bination, with and placed horizontally on the platform, supported
atits outward edge by the wheel resting on the circular ranl, and
attached to and revolving with the vertical shaft, with the upper
 and
ol pecification.
Third, I alio clamm said cylinder in combination with the said
Ttform and vertical shaft with all their appendages as above de

 Pourth, I I also claim azaid cycinder, in combination with the two
pistons conneced by the piston rod, with the hollow tube in the
center of sand rod extending through the smaller piston, and con-
nected with hollow spaces in the pistons, said hollow nected with hollow spaces in the pistons, said hollow spacees in the pistons being open at the oottom and cosed at the top in the man-
ner and 1or the purposes set forth in the reference to drawng, $F$,
ln the drawings accompanying and making part of this speesica-
tion.
50,984.-Meat Cutter.-David Bearly (assignor to James J. Hamilton), Newcastle, Ind.: I claim, First, The combination of the case, A A, and vertica
shaft, I, sustantialy as described and for the purposes specitied
Second, The contination of the funnel shapeos mouth, B, and
 tical screw shaped shaft, 1, , the washers, $E$, knives, G, projec
$\mathbf{Y}$, substantially as described and for the purposes indicated.
00,985.-Drilling Machine.-Jesse Button (assignor I claimselfand R. F. Hawkins), The Lpringfield, Mass.: the springs, A B, and beam, C, with the drill shatt, E, substanalis
in the manner and tor the purpose describd.
Second, The automatic teed motion. when constructed and applied to a dril
forth.
50,986.-Dcep-well Elevator.-Thomas Bryne (assigno I claim, First, The method, sumoot), New York Citall as herein described, of accomplishig the two-fold function of elevating the oil and melting
the paramin. by means of air, as set forth.
Second, Constructing the valve seat so, that they answer the twofold purpose of a seat tor the valve, and also as a valve, substan Third, The connection between the conical valve seats of the vari
ous alves and the discharge pipe, substantially as and for the por pose described.
Frourth, An elevator, constructed with one or more valved cham
bers, and with an outer and inner tube, substantially as described bers, and with an outer and inner tube, substantially as described,
in combination with a vacuum apparatus and a forcing apparatus,
substantiall as and substantially as and for the purposes set forth.
Fifth, The combination of the compressed air chamer and the
ver accuum chamber, with the elevator, which has one or more work
ng chambers, sumstantially in the manner herein described and for the purpose set forth.
Sixth. The arrangement of a series of elevators, acting within
each other in such a manner that each can aet independentiy of the other, and so that the liquid in each will be acted on by Seventh, So arranging the several independent elevators, within
one another that all the stuffing boxes may be above the level of the earth's surface, substantially as described.
Eighth, Applying presure to the top of the column of oil within
the outer or, maingtube of the elevator, and, at the same tine, sub the outer or, maintube of the eleleator, and, at the same time sum sub-
jecting it to the litting action of a vacuum, iv means of appa-
ratus, constructed and operating substantially as described. 50,987.-Apparatus for Carbureting Air.-John Chase (assignor to S. E. Horton), Windsor Locks, Conn I claim. First, Entirely surrounding or covering the open ends or
the. Whei chambers or compariments with a sheet or sheets of wire
 Sec ond, Regulating the am ount of gas or other vapor ge ner ated
or eonected by the operation of the chambered Wh heel, B, as de- de
8cribed. by means of any suitable arrangement of devices, connected
 ating substantially in the manner specitied.
Third, fassing the gas or other vapor, after being generated or
collected, and previous to its being burned or otherwise employed collected, and previous to its being burned or otherwise employed,
throughwire gauze or any other suitable open and porous material,
substantially as and for the purpose described 50,988.-Button Fastening. - Florian Dahis (assignor to himself and Francis Thill, assigno
I claim a fastening for Barments, composed of the parts, a and $d$
held together by the spring, $f$, taking a notch in the perforater, $b, a$
set forth.
50,989.-Sewing Machine for Working Button-holes,
Etc.-James Emerson, Lowell, Mass., assignor to
himself and C. D. McDonald, Ellsworth, Me.:
I claimserirst, The arrangement of the screw, $N$, and half nut, $P$,
n the lever, $M$, when constructed substantially as described, for on the lever, $M$, when construated substantially as described, for
the purpose of equalizing the movement of the arm, $D$, with the loss
 Third, I claim the method of feeding the work to the needle, by
thairregular gear,
nation with made ith the form of a butale device for passing the netdon-hole, in combit nation with suita
the cloth, and then through the button hole, as io hand sewing.
Fourth, 1 claim the lateral motion or the table, B. in combonation
with the arrangement of the needle carrier, E and $D$, and looper, $G$, when constr ucted su bstantially as described.
Fifth, I claim the segment, W, when made with a $V$-shaped groove,
the sides of which are lined with cloth, to prevent the thread from kinking.
50,990.-Loom for Cross-weaving.-Conrad Roder (as signor to M. Landenberger), Philadelphia, Pa.:
First, The within-described combination of a shatle, the hande
rame. 0 , with its eye-pointed guides, n , which carry a portion of

 50,991.-Steam Gage.-Christian C. Schmidt (assignol I claim the combination and arrangemeut of spring,


50,992.-Buckle.-C. S. Stearns and Thomas Corey (as Mass themselves and Samuel Boyd), Marlboro We claim our improved buckle. made substantially as described
that is to say, with itt body constructed with the recess and holding ip, and with the tongue formed as a bent lever, in manner and a he holdinglip, in manner so as to operate as specified.
50,993. - Jacquard Apparatus for Looms.-L. D. Valet
don (assignor to helphia, Pa.:
draiphia, Pa.:
I claim the ajustable arms, M M, with their projections, $n^{\prime}$ '
combined with the cand shaft, $G$, substantially as and for the pur-
pose specifed. 50,994.-Car Coupling.-E. W. Wilson and J. E. Erwin Springfield, Mass., assignor to E. W. Wilson:

 tially as showr an described.
second, We claine in combination wihh the boll. shaped jaws,
a a K, a movable detachab e bolt, g. inserted transversely through
the upper jaw, a a, as sbown in fig. 4, substantially as and tor the purpose set forth, 1 him, in combination with the bell,shaped jaw coup ling a a a K, the fork-like hooked lifting device, pp, and the link, r ,
havingt wooking ends, s s, substantially as set forth, shown, and
describe
50,995.-Sewing Machine.-John Keats and William Ste phens Clark, Street, Eng. Patented in England April 14, 1863:
We claim, First, The combination in a sowing machine of the fol
owing instrumentalities, viz, a table on which the material rest lowing instrumentalities, viz, a table on which the material rest
and is supported, a recproating feedin ginstrument, to move the
material along said table, and a hook, rotating guide, and shuttle to material along sald table, and a hook, rotating guide, and shuttle to
produce a lock stitch with two threads, all operating in combination, produce a lock stitch
substantialy as set forth.
Sco
Second, The com bination in a machine for making a lo k -stitch o
s shutte and hook, both arranged on the dupper side of the table
substan tially in the man ner
 be sewed rests.
Fourth, The arrangement of the apparatus herein described for
Fperating a hook, a shuttle, and a feeder from eccentrics in one perating a hook, a shuttie, and a feeder
needle box, as above described.
Fifthe The ardngementof the aparatus herein described, for di
iding the loop of thread that is drawn up by the hook, and for spreading the toop over the shattle,
sixthin The arrangenent of the apatus herein described fo
hortening or lengthening the stitch, aud tor feeding the work in shortening or lengthening the stitch, aud tor tee
different directions, in the manner above described.
50,996.-Furnace Grate.-Eugene Langen, Cologne, Prussia:
Itiaim a grate, composed of three or more tirrs, in combination
with a firebox and trap grate, constructed and o:jerating substan
tially as and for the purpose set forth
[The grate which forms the subject matter of this present inven ion is so constructed that the fuel is introduced from behind or nder the incors and, consequent nd the air requisite for the purpose of supporting combustion passes through the cold fuel to the incandescent mass, and no por tion of the fuel is wasted,]
50,997.-Machinery for Making Fluted Rollers.-William
Weild, Manchester, Eng.


## REISSUES

2,103.-CondensingMilk.-Gail Borden, America, N. Y Again reissued Feb. 10, 1863:
I clam, First, The within-described process or method of opera ion for concentrating and preserving milk, by means of co aculat
ng and rearranging the albuminous particles in combinatio n with
nhe evaporation of the fuid in vacuo Second, the preparatory coagulating and rearranging of the albu-
St of of the operation of second, the preparatory coagulating and rearranging of the albu
minous particles, when this 18 done as a part of the operation of
ma king concentrate or condensed mill. 2,104.-Self-centering Chuck.-George H. and John T. Clark, Meriden, Conn., assignees by mesne assign ments of Edgar B. Beach. Dated Sept. 6, 1864: We claim forming the Buldes or the longitudidally sliding.aws
n that part of the chuck by the turningof which the closing of the
jaws is produced, substantially in the manner herein set forth Second, The nclined converging guide ways, c , in combination
witt the jaws, C, head, D, and screw sinde,
operating in the manner and for the purposes substantially ated and herein
op perating in the mann
shown and described.
2,105.-Baling Press.-Charles H. Robinson, Bath, Me.
Patented January 10, 1865
I claim as my in ention and improvements in toggle lever press
es, fixing the first of the three invots of the toggle levers or lank at, to, or near the platen; the second pivot to the follower. and
naving the second pivot toward the first, aud virbating the thit
pivot so as to bring tie toggle itnks or levers nearly or quite paral. moving the second pivot toward the first, and vibrating the third
pivot o a asto bring tine togcle inks or levers nearly or quite paral-
felin pressing the ba le.
Second, I Icaim working or operating the follower of the press,
at the beginning of the pressing operation, and while the cotton or
Second, 1 cain working or operating the follower of the press
at the beginning of the pressing operation, and while the cotton or
ay is compiratively but little compressed by the direct action of

Third, f claim working the wysle links or levers by a rope or
chain, arranged to run around pulleys at or in the opposite ends of
thelevers orlinks which carry the follower. 2,106.-Flour Sitter.-Howard Tilden, Boston, Mass.
Patented, May 16, 1865:
I clain, First, A hemispherical or concave sieve, provided with
case frame or other proper sup port, for the purpōa set forth. Second, In con:bination with a concave si eve, I claim a rotating
stirrer for agitatin the flour and forcın it throgh the sieve.
Third, In combination with a concave sieve, I claim a rotary stirrer, armed and provided with flexible edges, or
to press the flour through the sieve of the sifter.
2,107.-Shingle Machine.-W. P. Valentine, Fond dı Lac, Wis. Patented March 22, 1859:


 Fourth, I claim the tilting plattorm, f, in combination with the
shaft, $r$, provided with the projections, m, araged to operate as
shown, for the purpose of presenting the block to the saw in such a manner as to cut the but alternately from opposite ends of the
block
Fifth, I claim the ratchet wheel, $N$. arranged to operate in connection with the pawl, t, of the carriage, as shown and described,
for the purpose of imparting motion to the shaft, r . and therebs tilt the platform or frame, $f$, as and for the purpose set forth
Sixth, I claim the double inclined ways, in combination with the
carriages, $l^{\prime}$ and cariages, 1 and P , when the latter wre arranged to operate alter
nately on opposite sides of a single saw, as herein shows and de
scribed.

## DESIGN.

,220, -Trade Mark.-Martin Leippe, Lancaster. Pa.

## OATENTS on $M=8 \mathrm{D}$ <br> 107 MUNN \& COMPANY, <br> connection with the pabication

C SCIENTIFIC AMERICAN, have ac d as Solicitors and Attorneys for procuring "Letters Patent" for an moentions inthe United States and in all foreign countries durin edeon years. Statistics show that nearly ond-ralr or he applications made for patents in the United States are solicod aken in foreign countries are procured through the same sodrea is almost needess to add that, after eightem yoars' experienee im per paring specifications and drawingsfor the United States Patent Offic he proprietors of the SCIENTIFIC AMERICAN are perf ectly Con versant with the preparation of applications in the best manner, and
the transaction of all business before the Patent office ; but they the transaction of all business before the Patent ofice, but chem take pleasure in presen
missioners of Patents.
 have no doubt that she pubirc condidence thus indicated has been
ully deserved as I Ihave allays observe, In all our intercoure with
the ottice, a marked degree ot promptness, skill, and fldellity to the $\begin{aligned} & \text { ne ottice, a marked degree ot promptness, skill, and adelity to } \\ & \text { interests ot your employers. } \\ & \text { Yours very truly, }\end{aligned}$
CaAs. Masos
[See Judge Holt's letter on another page.]
Hon. Wm. D. Bishop, late Member of Congress from Connecticut fice he wrote to us as follows:
 very farge proportion or the busness or hoventors before the paten
Office was transacted through vour agencv: and that inave ever
found you faithful and devoted to the interests of your clients, as wed is eminentiy qualised to perrorm the duties of Patent. Attorneys wit
skill and accuracy. Very respectfully, your obedient servant,
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 in deposit at the Patent offige, and cannot be withdrawn.
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