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Pamplets containitg the latent laws and full particulars of the mode of applying for Letters Patent specifying size of model required and much other information useful to inventors, may be had gratis by addressing MUNN \& CO., Publishers of the sumevtific american, New York.

52,657.-Head Block for Holding Boots :and Shoes.Isaac E. Allen, Windham, Me.:
 spriag, risfer tupst
 52,653.-Spring Bed Bottom.-Joshu: Barnes, New York City. Antedated Feb. $5,186 \mathrm{G}:$





52,659.- Paper and Cloth Collars.-Joseph Barton, Bat tle Creek, Mich.:
I clamm a paper colitur wthl a woven sworat ba nd linury and nexi
 the collar, ure ssane oeng an 101 ,
and claimed 18 such as set forth.
52,660. - Pump.-John Bean, Huds on, Mich.
claimo the combination of the , valve plates
wedge.shaped ound
$F$ arst o, the whote constructed and arranged as and for the purpose
52,661.-Press and Strainer for Cream Paste, Etc.-Lu-
man Bishop, Cortlandville, N. Y.: First, 1 claim tue cylndrical-iorimed stra
 described. clain the lateral apertures, H H , or their equivalents, in
combindtion with the tube and piston, as described 52,662.-Printers' Chase.-Allen M. Blanchard, St. Louis, Ho.:

52,663.-Sled.-Samuel R. Bowie, Portland, Me.
 second, The combination of the parts, n band c , with the device
shown in Yis. 3 , suisiantially as described and for the purposes set
(orth 52, Gcia.-Churn.-William Boynton, Lub urn, N. Y.:

52,665.-Skirt Hoop.-J. W. Bradley. New York City:

52,666.-Hand Stamp.-Stephen B. Bragne, New York Citity: the attachment of the prepared ribbon directly to the face
of the stamp bJ means of a band or otlier tasteuiug anplict a around of the stamp bj ineans of a band or other tasteuiug anplicu around 52,667.-Sponge Cup.-Stephen B. Bragne, New York Iclaint tie combination of the sponge, C, the spring, B, and the cup, $\Lambda$, subustantality as herein specite.t. . Hragne and William - We ciam he he rutating rink city:
 52,G69.-Pocket Toilet Case.-Francis F. BraiHard, New York Cty:
 scribed
52,670.-Well-Boring Machine.-C. N. Briggs, Philadelphia, Pa.
 52,671.-Hot-air Furnace.-Lorenzo W. Brown and

Isace L. Frankem, Indianapolis, Ind.:
 $52,672 .-L e n s .-C h a r l e s$ B. Boyle, New York City. Antedated Feb. 16, 1866:

52,673. - ProcessforGiiding and Ornamenting Surfaces.





 52,674. - Brick Machine. -Henry C. Bull, Louisville, Ky.:







 52,675.-Hen's Nest.-Charles Campbell, Yellow Head, Ill.


(This invention consists in providing a hen's nest with a pivoted or suspended door, counterpoised and arranged in such a manner
thatbut oue hen can enter and sit upon the nest at once. The obthat but oue lien can enter and sit upon the nest at once. The ob-
ject of the iuvent ion is to provent hens laying eggs in the nests of ject of the invent ion is to prevent hens laying eggs in the nests of
getting hens, and also to prevent one hen troin driving the other off the nest.1
52,(670.- Track Rope Hay Elevator and Carrier.-E. H. Carpenter, Dexter, Mich.:
First. 1 clititu the ues ot the track and draught ropes,, 11 A2, com-
 52,677.-Valve Gearfor Oscillating Engines. - Henry T. 2,677.-Valve Gearfor Osc
Carter, tortland, Me.:
 stem,, ,icd
sijee
sicond
icond.
 52,678.-Machine tor Mixing Dough.-George Clark, Jr., Dorchester, Mass., and Lemuel P. Jenks, Bos-
ton, Mass.:






 dastantial.y as and for the purpose described
 Sorthe purpose descriled.
Sevent , We claim the
the whole' Wachine, substantially as and ior the purpose deascribed. 52,679.-Cartridge Retractor for Breech-loading Fire Arms.-J. w. Cochran, New York Ulty:
 is made to serve a't ie counection betwesu the said lever and
coorh and as the means of returning them to their proper places on the liberation oi the tever atter the retraction of a cartridge shell. 52,680. - Horse Rake Teeth.-Columbus Coleman, Alleghany City, Pa.
 ranged and operation susustantially in the manner herein described
and lior the purpose set torth. 52,681.-Counting Machine.-Samuel Comfort, MorrisVille, Piu.:
First. I claiin the combination of a registering bar, or its equiva-
ent, witin the numberng wheels of a machine for indicating or printing numbers or the purpo ofe of securing the correct alignament





 sidiating mution to utie par, N

 52,682.-Self-operating Gate.-Norman Comstock,Westtield, 111 :
C I cl.im tue combunation and arrangement of the gate, B, arms, frlus g.te belongs to that class designe.l for opening and olosing without the trouble of getting out of a vehicle or without dismount
ing from a horse. ng from a horse.
52,683.-Car Wheel.-John L. Constable, New York I claint the combination of the whecls and independent flanges, 52,684.-Cupola or Blast Furnace--Anson G. Cook Burlington, vt.:





 portion of the coung atane and even circulation dif bast through every


 Foirth, I clatin tiue mode of operating the cupola in combination
with the otier teatures of my Hivention, by which I melt the iro
 c, lect efle
suctibed.
scribe
52,685.-Stovepipe Drum. - Henry Cook, Bluffton, Ind.


52,686.-Watch Key and Toggle Combined.-Rlchard Cross, Providence, Re. P. P: the claim a watch bey and toggle combine din surh manner that
cifed. shall be concealed wilfun he tosgl:, suusiantially as spe-52,687.-Watch Key, Toothpick, and Toggle Combined. - Richard Cros, Providence, R. I.: I claim the combination of a watc.
substantially as shown and described.
52,688.-Mill Mick.-Charles Crossley, Philadelphia,
Pa.:
 52,689.-Vise for Carpenters' Benches.-W. H. Cutter, Sti. Louis, Mo:
3ubs: ant:ally aly ale vise for work be benches, constructed and arranged 52,690.-Corn Sheller.-Jacob Davis, Oaks, Wis.:
 tramer in which they hare placed, substantially as described and tor
the purpose set forth. the purpose set forth.
[The object of tuls invention is to furnish a simple and durable machine for shelling corn. And it cousists of a machine by which the corn is shelled from the cob by rolliug the ear between a pair of
iaw $\delta$, the corn passing down through thic buttom or the sheller, and aws, the corn passing down through the buttom of the sheller, and the cob being eiected at its top.
52, Gi1. - Milk Can.-John Q. Davis, Salem, N. J.;

 er, substancually as an for the purpose described.
52,692 .-Skirt Wire.-Theodore D. Day, New York Gity:
 52,693.-Spice Sifter.-Wm. Devines, Brooklyn, N. Y. Frrst. I clalm the combination of the blocks, W and $X$, with the
sieve, E, cap. S, and box, substantially as described and for the
 blochs. E, spring. F', and with the
scribed and for thie purpose pet forth.
(The object of this invention is to furnish a eifter by means ot which powdered drugs, spices. flour, etc., may be siited readily, rap Idy, and wi thout dust or waste. And it consists, especialls, in the com bination with the hopper of an apparatus for crushing any lumps that may be in the material sifted; and, second, in the con struction of the stirrer, by means of which the material is agitated while in contact with the sieve.]
52,694.- Apparatus for the Manufacture of Paper Pulp. - Jonn W. Dixon, Philadelphia, Pit.

 under press.
deseribed.
52,695.-Furnace-door Regulator.-Onvi $\Lambda$. Dodge, Burlington, Vt .

 pose as herein set forth.
52,696.-Elastic Mallet.-Albert C. Eddy, Providence, R. I.:
 52.697.-Liniment.-David Edwards, St. Anthony, $\underset{\text { I claima }}{\text { Minn }}$ :
I claim a liniment composed of the ingredients, in the propor
52,693.-Sewing Machine for Sewing in Sweat Linings of Hats, Etc. - Rudolph Eickemeyer, Yonkers, N. Y.:
First, I claım tue anguiar cuiding plate, 1, so applied in relation
 substantially as herein specified.
 the purpose hercin described. T:urth Giviug the reeding device, beside its forward and backward
roveuputit, a movement oblique to the neeule and to the angle oi
the paes, Hi, and of the band of the hat, substantially as and for
the purpose herein specifed.
52,699.-Method of Desulphurizing Coal for Welding Iron Etc.-John H. EdWard, Pol, Ill: nurızing mineral coalin blacksmiths' tires, substantually in the 52,700.-Harvester's Rake.-Elias T. Ford, Stillwater, N. Y.: I claim the combination, as described, torming a contracting and
expanding harvesting rake, the said cuinuinaion consisung or the
 ranged on shaft, t, and un erated by bevel plidio. E, on shatt, I, and
bevel gear, $D$, in the manner as set torta and for the purpose speci-52,701.-Harvesting Machine.-Elias T. Ford, StillWater, N. Y.
I claim, Fir t, The tube, $D$, provided with end boxes, $h$ vh $r$, and
in
 second, I also claim hinging the pole section,, , to the rear ex-
ension or the lelt and right hounds, D i. D a, fornied uvon and
and Fik. . .
 tremist of arm, V, bv the p, vot or hinge bol, v, at the orifice, VQ.
Fourth, I also claim the lever, $M$, provided with the cavilies 1, and the steel cepoter bar. aid as connected to rear and tront bar,
N, N N in combinition with the guide, , and lever, $K$, or elevat ing and ait, opr. combination with the arm, $L$, supporting the pillow
 specification. 52,702.--Pocket Book.-Wm. T. Fry. New York, City lonts. in conbinuaiion with the place, G, secured to the vocket
books, aud having a proection with an inclined opening, adapted
lots to the rezeption ot the said
huostatian.ly as described.
52,703.-Wagon Brake.-C. W. Gage, Homer, N. Y.: the brakes by meaus ot the congecting rod, r, made in two or more
sectlons aubstantially as berein described and for the purposes
specided.
 $\underset{\substack{m \\ \text { specifled } \\ \text { and } \\ \text { Intis in }}}{\text { min }}$
IThis invention consists in so arranging and connecting the brake. as the horses and with the yoke pins on the outer end of the Dole., toa bear upon the wheels; and also in a new and peculiar arrange meat of parts, whercby the brakes are prevented when so desired from operatlag or bearing upon the wbeels. 1
52,704.-Rallroad Station Indicator.-C. C. Gale, Columbus, Ohio:
 52,705.-Mop and Scourer.-W. T. Grant, Jackson I claile, an iliplement consisting of a mop, a mop wringer and
 52,706.-Grain Huller.-William C. Grimes, Philadelphia, Pia.:
First, 1 lialu the mode as herein described, of hulling corn or
other grau by moans or a meu or aijustalle plovy ucung upor




 52,707:-Steam and Cut-ofl Valve.-Elbert E. Groom, N. Y. Clity:



 forth.
Thls invention refers to the use of a double piston valve, each piston being provided witn a cavitr be,ween its ends to operate in ombination w.th steam supply and exhaust ports in the same manner as an ordinary :D valve, steam being admitted through he carities in the piscon to the steam ports, while said cavitie haust ports, and small recesses extending from said carlties allow
 he pressure of steam $\ln$ which they act.]
52,708.-Hanging Center Boards of Vessels.-J. F. I claim the swivel yoke, $C$, in combination with the center board 52,709.-Pump.-H. A. M. Harris, Philadelphia, Pa.: Hirst, I claim the described arranzement in the cyluder, A, of
the lower inlet valve, $D$, hollow piston rod, $B$, hollow piston, if
 Second, The arrangement within the hollow piston, Hy of the
double ackng valve. C, when said valve is fitted to the bore of
che piston and formed with annular recesses at its upper and Thrd, the arrangenent of the annular valve, E, hollow piston
od, B, head, J, cap. G, and openings, a, and for the purpose set 52,710.-Railroad Alarm Signal.-Jabez H. Harris Yoint Isabel, Ohio:
First, I claim the mode of automatically raising and relea, ing a
migual board by
means of an approaching train, substantially as set 1ortb. The arrangement of compound levers, $C$, bell cranks, $D$
Second,
and $E$, rods and chains ${ }^{\text {F and } G \text {, triggers, }} H$ and $I$, and spring, nd E , rods anati, raising and iowergug of the signal board, $\mathrm{K}, \mathrm{b}$,
for the automation as described.
Thirc, It clam the lever, $r$, slotted lever, m, in combination with
he componillevers, for the ringing of a bell, 0 , simultaneously the compoundlevers, for the ringing of a bell, $O$, simultaneousiv
with the elevatingor the signal board, $K$, as and for the purpose herein described.
62,711.-Lamp.-Alexander Harroun, Jr., Onondaga I claim the regulator. AA in combination with the mica cap
62,712.-Molasses Faucet.-W. H. Hartman, Fostoria, Ohio:
I clain the trough or spout, $\mathbf{B}$, and head, d, in combination witt
barret, A, and cut-off, E, when arranged and operating as and
52.713.-Farm Gate.-William G. Hermann, Albany N. Y.:
First. I claim the construction of tho roiler, D, with flanged
and seribed. a, and support the gate unon said catch, substantially as describ. $d$ Third. The conbination of a swiveling roller, D. tor sustaining
the gate at one end with a caster, he, for sustanning the opposite end
ofthe gite substautially as deccribed.
52,714.-Shears for Cutting Bolts.-D. H. Hitchcock Rocktord, Inl.:
I claim the shoulders, a a, on the outerends of the blades of the
anears, for the purposes herein described.
52,715.-Tool for Cutting Gas Pipes, Etc.-William S Howarth, New fiaven, Conn.:
tion witb the adjustal culter, 9 , wbenthe whole is constructed and
tited for use, substantially as herein deseribed and set tortlo
52,716. Quartz Crushing.-Dhanicl Hughes, Rochester,
First, I claim placing the ends of the piston rods, d, loosely into
the sockets or the stamper rous, D , substantially as and for the second. The comblnation of the leather disks, f, with the rotary
stamp rads, D, and loose piston rods, $u$, as and tor the purposes
specifed.
52,717. - Fence.-C. B. Hunting, Clinton, Ill.:
I claim the combination with the ruils, a, and battens. b. of the
stakes D
E, and adjustable ron bands, $c$ ', as and for the objects

## pecitted.

(This invention relates to a new and improved portable fence and it consists in a novel construction of the same, whereby the fence finmly secured in position so as to ettectualy resist the action of the wind and the efliects of stock to prostrate it.]
62,718. - Machine for Weaving Covering for Whip Handles.-Liveras Hull, Liharlestown, Mass.:
I claima mechanical combination comprised not only of ma-
helix about the whip stock or article while ooling so roved, but also
of mechanism for la ying bin sing or conn ecting threads about the
 the Wiap stocks so as to cause tha
be laid in a 1 clis therein set torth.
52,719.-Carpenters' Shooting Boards.-Joseph Jones, Newark, N. J.:
I claim the ellooting board constructed and arranged substan-
tially as hereinabove specifed, as an in proved Implement or tool. 52,720.-Journal Box.-Edward F. Light, Worcester, Mass.
I claim a journal box or bearing enmposed of a a base piece, $A$,
cored out as seen at $D$, and baving inclined $\varepsilon$ rooves
 holos, e, the parts being all constructed and arranged for joint op.
eration as set forth. 52,721.-Pump for Railroad Stations.-Henry S. Lansdell, New York:
ipe a, and ascension sivel head, $s$, 1 combination with the steam

 Third , The supporting globe, i. in combination with the swivel
pout, e, ascension pipe, c, anil steam pipe, a, constructed and oppout, e, ascenslon pipe, c, anil stesm pipe, a, constru,
erating substantually as and for the purpose set forth.
52,722.-Reel for Grain Binders.-Sylvanus D. Locke, Janesvile, wis.
I clamm an adjus able reel constructed with extensile arms, sub.
 52,723.-Sluice for Quartz Mills.-Hugh Logan, Washoe
City, Nevada: $\begin{aligned} & \text { Calse bottoms, } m \text {, in the compartments, } c \text {, of } \\ & \text { claim }\end{aligned}$
 as and for the purpose set forth.
seconds. The triangular abutments e in combination with the on,part ments, c d, of the sluice, substantially as and for the pur
 With the longitudinal partiti,ns $b$ of the sluice. cons.
52,724-Harvester.- 1 lpheus Lowmiller, Jewett, Ohio: Iclaim tho arranging and appiving of a sickle to a grain ir grass
harvet, , in the manner as herein shown and described, or in any
equivalent way so that the sictle may qualvalent way so that the sickle may be moved for ward or back-
(This invention consists in arranging and applsing the recipro cating sickle to a gram and gra3s harvester in such a manner that in case the sickle becomes choked or clogged by grass, grain, or ubbish of any kind, the operator or drivermay, while in his seat and by manipulating a single lever, draw the sickle back out from the fincers or guards and thereby relieve tilem from the obstruc on, and then throw the slckle forward again to its proper working position. 1
59,725.-Iron Frames for Piano Fortes.- $\Lambda$ ugust LuThe arrangement of the plate, A A' $A^{\prime}$, with flanges, $B$ and $C$ on che underside, in combination with the wre wt planks. $L$ and $I$,
against the eame, constricted substantially as described. 52,726.-Window Screen.-Abner B. Magoun, West Hanover, Mass.
I claim an adiustable erreen as made of two frames, their gaides,
and two separate coverings, aranged and combined substantially
as and so as to operate as degcribed
52,727.-Boit-heading Mectine.-Merrick D. Marcy, orcester, Mass.:
First. Iclaim the slotted bolster or buttress attached to the slju nglatiorm ioruolding the beading die, substantially as set forth.
Second, In combination with the above I claim the closed headng die. as shown
the finished bolt.
52,728.-Machine for Rolling Leather.-Wm. P. Martin, I clalem, Mass.
I clainn the fmployment of a reciprocating carriage io combing-
tion with the yieldisg bed and a sultable mechanism for effiecting
torth. $\begin{aligned} & \text { Ialso claim the employment of the screw shaft, } v \text {, in combination } \\ & \text { with the stationary stand, } i \text {, and sliding adjusting bar, } h \text {, the whole }\end{aligned}$ arranged to operate as set torth.
I also claim the combinacion ot the springs, $p$, and regulating
nuts, $O^{\prime}$, with their serew rods, the whole arranged to operate with nuts, $O^{\prime}$, with their screw rods, the whole arrann
the bed, substantially as hereinbefore described
52,729-Flour Sifter.-W. C. McGill, Cincinnati, Ohio: I cl aim the combination of to stationary ease, A, wings, $H$, the
revolvg conical seive, $\bar{G}$, socke cover, $\mathbf{I}$, and shatt, $F$, subetin2,730. -Mode of Working a Capstan by Steam -John S. McMillen, Pittsburgh, Pa.:
 he whole being constructed, arranged. and orerating su bstantially
as berein described and for the purpose setforth. 52,731.-Wagon Brake.-Joseph McQuead, Mount Stirling, Ill.:
by


52,732.-Shoc.-Frederick Merkle, New York City I clam as a new article of manu acture a leather shoe having its
uppers crimped and formed of a single piece at the rear, as hereinuppers crimped.
52,733.-Washing Machinc.-James M. Meschutt, New York City. $\Delta$ ntedated Feb. 9,1866 :
I claim in combination with the box, B, constructed as shown, The use or employme. $t$ of the shaing washboard, $K$, and beater, $G$,
when the same shailbe constructed and operated substantially as
thown, for the purposis hertintu,ly de.cribed. 52,734.-Brecch-loading Fire-arm.-Isaac M. Milbank, Greenfleld Hill, Conn.:
First, I claim, in combination with the swinging breech pin,
and boit.g, At ed as spectived, the lever. h , jointed to the upper end
 Second. I It,im the sininging spring claw, $n$, in combination with
the winging breecis block, $f$, substancially as and for the purposes

52,735.-Fire Place.-Allen Moon, Bethlehem, Ind.: I claim the movable grate, ${ }^{\prime}$, the movable extra back, 10 the
regulator wh its throat valve,
? and the sliding front with its he purpose aioresaid.
52,736. - Car Coupling.-William L. Newell and Jacob S. Simmerman, Millville, N. J.
ith the springs, E E or their tructed an" applied to the cars, equstantially as and for the pur pose specitit The combinati $n$ ot the inclined and hooked arms, $\mathbf{B}$ B, With the loterlucking liver, F F, thewhole being constracted, ap-
pled to the cals, , and pose herein set rorthination of the above with the levers, $\mathrm{D} D$, the
Thblid, the coing arranged and operating substantally as d. bcribed.
whole being 62,737.-Inner Sole.-Isaac Newhall, Lynn, Mass.:
or fillings, coated or covered either upon one or both of its sides
with a coveriv: of paper or other similar material, substantially as bereln described.
IThis invention relates to a new and impro:ed inner sole, especially intended for use in boots and stoesthe soles of which are attachento the uppers by means of sewing or stitching, and it con sistsiuforming the body or main portion of the inner sole of leather scraps or fillings, so called, over which, upon either one or both of its sides a covering or coating of paper, cardboard, or other similar material is placed, and secured (thereto by any suitable cement,
whereby an crtremely cheap, light, and strong incer sole is obtained.)
52,738.-Hot-air Furnace.-S. W. Norton, Lemont, Ill.: l'clam the sleeve, E , so arrangea with rerard to the feed spout,
D. the furnace, and the air blast forced through atid across the Eame, as to be busceptible of being raised or lowered, substontially
rThis invention reta
with srain-diying apparatuses, ind it to be used blast through the products of combustion contained in the are pot of the furnace in a novel and peculiar manatio whereby it is caused to act upon a greater or less quantity of the combustible product stherein.
52,739.-Apparatus for Pouncing Hats.- Emile Nougaret, Newark, N. J.
 substantlally as an d for the purpose described.
Second, The swivel bar, i, covered with sand paper or ot her suita-
ble material, and ap plied in cumb: nation with the revolving biock, 2,740.- - pple Corer and Slicer.-Robert Onderdonk, New York City:
First. I claim the arranging of the shcing cutters, bo so to form
a hollow semispherical socket to receive and hold the aprile while a hollow semispherical socket to receive and hold the apnle while
being cut and to obtain a drawing or oblique cut, suostautially as et 10rth.
Second, The combinatiou of the coring cutter, E, slicung cutters,
, semispherical plunger, $G$, lever, $F$, arranged to operate in the manner and sor tue purpose berein specitied.
This iuvention relates to a new and improved machine for slicing and coring apples, and it consists in having a series of slicing cut. ters arranged so as to form the half of a!hollow sphere, with a tubular coring cutter at the lower end, the above cutting device being used in connection with a'semi-spherical plunger to force the apple through the cutting device. 1
52,741.-Detaclable Rocker for Chairs.-Wm. Pinkerman, Bridgeport, Conn. $\Lambda$ ntedated Feb. 16, 1866: I claim the adjustatele socket tor the rockers of rocking chairs,
constructed and arranged substantially as herein described and for 52,742.-Piston-rod Packing.-George S. Prindle, $4 u-$ rora, Ill.:
I claim constructing stutling-box packing of hollow divided or
slitted cones, it herein set forth so that the steam or orther pressure shallclose tne pack mg cones around the rod, makins a tack ioint while allowing the rol to move freely, and sinall oyen and re-
lieve the rod from friction when the steam or otlier pressure is re$52,7 \pm 3$.-Cultivator.-George W. Prugh and William H. leard, 4 rmington, Ill.:
First, we claim cana bining and unting in one machine the shaft,



 the eto
forth.
52,744.-Stereoscope.- $\Lambda$ ntonio Quirolo, New York City :


52,745. - Manacles.- Andrew Rankin, Philadelphia, Pa.: Frrst, I claim a manacle composed of the vortions. cand $c^{\prime}$, con
structed and combined substantially as and for the puipose speci-
fled. fled.
52,746.-Flour Sifter.-Henry F. Read, Brooklyn, N.Y.: sieve. I, The packing, $f$, at the lower edges of the hopper, in combination with said yop per and the oscillatiug sieve.
Thrd The stationary patition, g, in the hopper, in combination 52,747.-Tobacco-cutting Machinc.-F. W. Kitterhoff New York City :
First, I claim a device cor taking up the wear of the slaft, oper-
and scribed, The combination and arrangement of the follower with the hand whicel and screw, arch piece and cheek soi the to bacco
box , perating substantially as and for the purpose herein slown
and describel s. 52,748.-Developing Stick.-Thos. C. Roche, Williamsirstirg I. N. Y.: suction pad, B, as a new article of manufacture,
Second, The guard, C, incombination with the stick, :A, and pad,
B, substantially as and ior the purpose set 1orth. [ 4 lis in invention relates to a stock or handle provided at one end with a suction pad of india-ruboer or other suitable material, in such a manner that, hv the application of such suction pad, a plate of glass or other material can be conveniently raised and held in the proper position for applying the developing solution, and all necessity of handling the plate and of solling the fingers is avoided. The stick is also provided with a iguard at aboutlie midente of its length or at a convenient distance from the end carrying the pad in sucl a manner that tbe hand of the operator is protected aga:nst the liquids which may run down on the stick.]
52,749.-Guide for Folding and Uniting the Edges of Two Pieces of Cloth, Etc.-Israel M. Rose, New York City:
I claim the employment of the spiral-shaped pieces, $B$ and $D$ and

52,750.-Door Latch.- $\boldsymbol{\Lambda}$. H. Rowe, Har Cord, Conn. claim as a new articie of manufacture the latch constructed as described.
IThis invention relates to a door latch, the bolt of which is placed in an upwardly-inclined position, and has its point curved so tha when the door is slammed or closed, without raising the iatch, the point of the bolt, in coming la conala with the cap, rises eponta
inherent gravity and catched behind the cap. The use of springs can thus be dispensed with, and a latch can be produced which sur passes in simplicity and cheapness everything heretofore made.]
52,751.-Apparatus for the Manufacture of Illuminating Gas.-Tyler Sabbaton, New York City
I claim the combination in a ras apparatus, of several distillatory
retorts, with one reenenerathg retort, substantially as set forth.
I also claim the comb, nation I also claim the comb, nation of sev ral retorts of a bencl, with,
the hyraulle main by means of onedip pipe fitted with a cup seal, substantially as set fortli,
I also claim the coub
I also claim the conbination of the retorts of a bench with a
double-clambered superleating retort by pipes in sucl manner
that the steam to be superheate that the steam to be superheated passes through in soth chamblanner of
the superlheatug retort before it pasies to a distillatory or decom the superheatur retort before it passe's
posing retort, sul stantially as set forth.
52,'i52.-Wool Packer.-Absalom Saeger, Meadville, Pa.:
I claim the tubes, $A$ and $E$, in combination with the racks, $G G$
and the levers. $F F$, with che follower, $X$, and the roller. $H$, over and the levers. FF, with che follower, X k, and the roler, H, oper
ated by the wheel, c, an the crank, M, when the same are con
structed as descrbed and in the atoresaid combination and for the structed as describ
purposes set torth.
52,753.-Horse-power.-G. W. Sanor, Hanoverston, Ohio, and Jacob Stofrer, New Chambersburg, Ohio
 second, The slaatt, E. having its upper journal within and oper-
ating conjointly wih the shatt, F, in combination with the dish, D, and shat I, loose within said disk, arranged and operating conjoint
 52,754.-Cultivator.-John Savill, Monmouth, Ill. first, I claim the bent axle, A, provided with arms, a a, in com. on the arms, a, substantiaily as and tor the purpose set iorth.
secon. Connecting the tront ends or the pow beam, E, to the
upper ends of the bracket., C e, by pivot botts, b, arraned witl

described.
['This invention relates to a cultivator of that class in which the plow beams arerendered adjustable so that theymas penetrate a greater or less depthinto the earth, be raised out of the ground when the device is to be turided or moved from place to place, and the plow
sirel.]
52,755.-Bottle Stopper.-Augustus Scarlett, Newark, I claim making use of the tube by which air is supplied to the
vessel for the aduitional purpose of con veying the dnppogs back 53,7,56.-Burial Case.-Geo. W. Scollay, Washington, D. C.:
First, I cliam, in combination with the coffins and a plastic ce-
ment, the metallic lining being applied therets for the purpose ment, the metallic lining being applied therets for the purpose
speciifed.
Second, In combination with the coftin a metalic sheet lining Second, In combination with the cortin a metali, ic sheet lining
made to cover the bottom of the cottin and only a porion of the
sides and ends thereot and applited thereto, so as to form a tightit joint at the junction of the edje of the lining and the inside ot the
cottin, thus preventing the tiuls or gases irou passing down be-
t ween the lining and the cotfin.
52,757 .-Clamp for Stages.-William H. Seymour, Liverpool, N. Y.:

52,758.- $\Lambda$ pparatus 'for Teaching Spelling.-Halcyon
Skinner, Yonkers, N. Y.:
Mirst, I claim holding the wheels, if, stationary when required
by means of the pitys, gg, and catches, if, and releasing them in any required numper by the keys, II h, or all together iy the key. j ,
and
anccking bar, k , substantially as descrited and tor the purpose set forth. In combination with the other parts described, mountine
Second,
a series of pictures upon one or more rollers, substiantially as spect fled. 759 .-Farm Gate.-A. Smith and G. S. Hudson 759.-Farm Gate.

First, We ceaim the combination of the swinging bar, E, and
guide, F, with the rails, Cand G, and with the post, B, in a tarm or guide, F ' with the rails, C and (i, and with the post, $B$, in a ararm or
entrince gate, substantially as de:cribed and for the purpose set
fortli. Second, The combination of the separators, I, with the pickets
II, and rails, $\} \&$, in a farmor or entrance gate, substantianly as de
scribed, and for the purpose set forth.
scribed, and for,the purpose setiorth.
52,760.-Medical Compound.-William C. Smith, La-
fargeville, N. Y.: $\underset{\text { claim a medical comp }}{\text { targeville }}$
I claime a, metical compound madeas herein set forth for the
purposeset $f$ ortll.
[This invention relates to a compound
and all chronic diseases of the bowels.]
52,761.-Telegraph Insulator.-W. W. Smith, Cincinnati, Ohio
I claim forming the insulating block with the reflexed, convolu-
ed or measuring chamber, $B$, which incloses, without touching the metallic stem or shank or hoo, substantally as and for the object
52,762.-Water Wheel.-Henry :Soggs, of Columbus,
irst. I claim the combination and arrangement of the screw First. I claim the combination and arrangement or the screw
whel, , and over-siot wheels. D D', includivg the gearing thereot,
with the slaft, $\mathbf{B}$ so as to admit of a double use of the water, sub
 and cap, G, for the purpose of raising and lowering the mill stone
substantially as set forth.
Third The adjustable gate composed of the half circles, $L L$ '. and substantially as set ferth. Third , The adjustable gate composed of the half circles, $L$ L $L$, and
operated by the shaft, $S$, and arrangement of levers, substantially as described.
52,763.-Machine for Separating Bristles.-Nathan H. Spafford, Baltimore, Md.:
Firsp, W eclaim the grooved bulleys, S s, the round belt thereon
constructed and operated substantially as and for the purposes specitied. The endless trareling platform, W, with the anti-iriction
sicond,
ollers thereon on the inside, a nd the small guidiug strips on the roliers thereon on the inside, and the small guicling strips on the
outside combined with the large pulley,
stantially and the druns, a a sub stantially as and for the purpese set forth.
Third, The three bolts, $\mathrm{Y} Y \mathrm{Y}$, in combination with the traveling
platiorin, W, and rollers, a a, winen constructed and operated subplationin, W, and rollers, a a, woen constructed and operated sub
stantialy as and for the purpose leerein 8 ectitied.
Fourth, The shatt, Fourth, The shatt, E, and worm gear thereon, in combination
with the cos wheels, D D, and pulleys, CC and $\mathbf{F}$, substantially as
and for the purpo, ses forth. Fifth. The arms I I, oscillating shaft, $\mathbf{V}$, with the small rollers on
the underside thereof, the boxes, $O$ o, nuts, n n, and theset screws
connected therewith, combined and arranged substantiall connected therewith, combined and arranged substantially as and
ior the purpose descriled.
Sixih, The variable boxes $u$ u, combined with the sharts. $P$ and Sixih, The variable boxes u u, combined with the shatts, i and
T, and the pivot boxes, z, atud stt screws therein, substantially as
and for the purposesei tirt
Seventh, phe entire machine, with its described devices con-
 52,664.-Machine for Extracting Essential Oils.-Vincent Squarza, San Francisco, Cal.:
I clam the compartments, C D E F, laving one or more perfora-
ted flxed covers, $L$, auljustable cover, $K$, with points, $t$, or their

## equiva fort!.

52,765.-Quartz 'Crusher.-Charles W. Stafford, New
York City : York City :
First, I clam the reciprocatng roller, H, in combination with
the segmen
pose set forth suriace or foor, substantialy as and for the pur

52,766.-Link Motion for Steam Engines.-N. P. Ste-
vens, Lowell, Mass.:
 being constr
as specified.
52,767.-Churn.-J. L. Stewart, Homer, N. Y
 ers, the several parts being constructed and used as aud for the
purpose lierein set torth. 52,768.-Lamp Shade.-Mathew Stewart, Philadelphia, $\underset{\text { Frst, }}{\text { Pa }}$ : First, Iclaim a circular shade having the vertical sules, B. con

 tog.t ther with their re-pective shoulders, c ,' and screw nuts. c 2 , as
and for the purpose descalved. Tliurd, 1 clairp minikiescrilued picture or transparency-holding frame

 the shade the deea ached reflector, A, the same being suported by
fimply resting on the upper tim, b, as and sor the purpose speci-
fled. 52,769-Graver-F. R. Stockton, New York City each other and with the hande. .t, the sistance apart oft e ponts
of tie blades being regulated ly the screw, D, the whole being con truct d substantially a descibel andior 52,770.-Cultivator.-D. C. Teller, Terre Haute, Ind.:
 52,771.-Mechanism tor Operating the Swell of Reed Organs.-Artemus E. Thompson, Brooklyn, N. Y.
 52,772.-Barrel Head Machine.-John S. Thompson, I claim the circular dish:-shaped saw, E. and cutter head, F, pro. vided with cutters, a, in combination with a rotary clamp, I, fitted
oa swinging yoke, in, substantially as and for the purpose herein ${ }^{\text {set }} 1$ frorthier claim having the bar, B, to wh:cll the supports or bear-

 52,773.-Wind Wheel.-Henry C. Thrall, Springfield, Mass.:
Frist.. claim the combination of one or more wings, , , with one
or more arms, a, piece, $F$, and shatt, B, when arrangel substan-



 heconi, 1 alaso claim thie stone as described in combination with
the curb.c.and hooks, botts, a a, substintailly as and lor the pur-

52,775.-Sluice Box.-R. E. Washburn, San Francisco,
 he frorpose set toth.
Second, Iclaim the
rranged as described, for the phap od taperinegratingor bars, B B riar to pass of without choking, substantially as set forth.
 huer material and water passes aown (G, miting a gain at, F , so that
he box can be used in any part of the flume, subitantially as de-
cribed and for the purposes set fortl)
5,776.-Countersink.- $\boldsymbol{A}$. Williams, Wellsville, Ohio:. I claim the bur, A, stem, B, provided with a screw at each end,
in compination with the nut,
as andanged and operating conjointly as and for the purpose set forth.
52,777 .-Derrick.-D. D. Winant, Brooklyn, N. Y.
First. I claim the arrangement of the grooved barrels, e $f$, and
gear wheels, $\mathrm{g}, \mathrm{h}, \mathrm{kI}$ and m , in combination with the slaft and gear wheels, ghikl and m, in combination with the slaft and
clutcl, , for the purposes and substantalal.y as specified.
second, In combination with the barrels, ef, and ear whects, $g$
 52,778.-Liniment.-John W. Woodring, Greensburg, Ky.:
d prepared as aforesaid
52,779.-Prepared Paste for Book Binders, Etc.-Joseph I claim as a new arucle oi manuf Mass.

號
52,780.-Let-off for Looms.-Edward Wright, Worcester, Mass.
I claim the construction and arrangement of the let-off mechan ism consisting of the pa wl ratcluet guard le ver having loose connec.
tion will the whip rolla and the friclion device, all constructed and
orerating substantially as described. 52,781 .-Head for Picture Nails, Etc.-Heman I Brooks (assiwnor to Turner \& Clark, Manufactur ers, Etc.), Wolcottville, Conn.
I claim the lead for picture nails, knobs, or tassel hooks, formed
with a wooden bodv or nut, and an ornamental metallic covering or urface in the manner specitied.
52,782.-FancyDoll.-Dominco Chickini, Marion, Conn.. assignor to himself and L. Il. I'hompson, New Haven, Conn.:
inclaim masing ihe doll'shead with four faces, and suspending it in the wig srame obrinp either of the four faces in iront at pleas-
vertically, on as to
ure whe the whole is constructed and fltted to operate suustan-
tially as herein described.
52,783. - Screen-cutting Die.-Christopher G. Cross, (assignor to himself and Charles S. Crane), Chicago, cla im
I cla im a \& crew cutting die, const ruct ed of steel a nd cast iron or
or suitable me tal, substantially ay set forth and specitied.
52,784.-Paper Shirt Bosom.-Theotore A. Curtis (as signor to George $W$. Kay and Varuuin $N$. Taylor), Springfield, Mass.:
de seribed.
Second, enameling said bosom, substantially as described.

52,785.-Apparatus for Pressing Paper Collars.-J. H.
Darlington, New York City, assignor to Joseph R.
and Frederick A. Blossom, Brooklyn, N. Y.
I claim the combination of two or mure rollers with a central or
maim roller and with a quard throught whicl. the collar is centered to
the rollers, substantially as and for the purposesspecitied.
52,786.-Hay and Cotton Press.-Erastus M. Day and
Mn M. Day), Lower l.ake, Cal.:
First, We claim the arrangument in
ented ratchet bar, rock slaft, eccentrics and pawls, substantiolly
asand for the purpose herein sf ecified, wle ele y mand for the purpose herecin sr, ecitied, wherel.y rhe ratchet bar is
mawe to serve as a shield for the protection of the latclet teeth pawis and eccentrics ret press laving the ratchet pawls worket by ec-
Second, In a ratch
centrics on a rock shatt we claint the pawls, two or cach eccentric, centrins on a rockshatt, we claimt the pa wls, twu for cach ecceptric,
arranged in relation to the ratclet t"eth, substantially as herein arranged in relation to the ratchet theth, substantially as herein
described, whereby the operation of the ratchet bir, iy a longer or
shorter stroke of the lever, by which the rock sliatt, is worked is provided for
Third We clatim the disengaging cam and its sunporting shaft,
arranged in retation to the bed of the press, the ratelhet bat and

 52,787.-Blacking Brush and Boot Jack.-Samuel Gessinger, Alleghany City, Pa., assignor to himself
and Peter Kolbecker, Pittsburgh, Pa.: I claim the combination of blackugh hru:l, aull a boot iack, said
lacking brusl and bootjack being construct ed, combined and opebacking brush and bootinck being construct ed. comb
ratmg substantially as lierein described and set for 1 .
52,788.-Process for Saturating Wood, Cloth, Paper,
Etc., with Parafine.-Stuart Gwynn, of New York
City, assignor to Aifred B. Ely, Newton, Mass.: I clam the $u$ e of ofrafine melted and lieared to a high de.ree for
saturatngg cloth and wood in the manner and for the purpo es saturating cloth and
substantially as described.
 such tothe action of the elements are desired as alure for linning.
ance to and
for hats, shoes, garments and other articles of tibrous materials. 52,789.-Steam Engine.-Alvin Lawrence (assignor to
,789.-Steam Engine.-Alvin Lawrence (assignor to
himself, Ambrose Lawrence and John T. Crane),
himsell, Ambr
I claim the combination and arrangement of the valve, $n$, with
the cvlinder. A or its equivalent, when the'said valve is connected the cylinder. A, or its equivalent, when the said valve is connected
with andoperated by the governor, substantially as andfor the purpose specified.
sincond, And in con.junction with the cylinder, $A$, or its equaralent, the valve h lest, E, and valve, D, said valve being connecthd
with and operated by the overror, the use and anplication of thid
under pressure, for the purpose of operating the throttles, valves or under pressure, for the purpose of operating the throttles, valves or cut-off gear of steam engines, substantially as specified.
Third, And in combination with the vaive, D, the same being con-
nected wit
and operated by theguvernor, the emplosment of the Fourth, And in combination with the cylinder, A, valve chest, F,
and valve, $\mathbf{D}$, said valve being connected with and operated by the governor, asaanove stated, the supply pipe, F, and regulating cock G, substantially as and forthe purpos." specifed.
Fift,l, I claum the general construction and combination of the
apparatus. consisting of the cylinder, A, piston heall, B, piston rod
 ranged substantially as and ior the purpose set forth.
52,790 .-Mold for Cationg Heads Upon Screws, Tacks, Etc.-Duncan MeArlhur (assignor to Sargent and Company), New Haven, Conn.:
 52,791.-Bottle Stopper.-Eli Morris Jr., (asssgnor to himself and Edward Heaton), New Haven, Conn.: I claim the lever, C, and stopper, D. when combined and arranged
su betantially in the manner and for the purpose herein set forth. 5ochester, N. Y., assignor to Charles W. Kinne Cortland, N. Y.
I clatm the cylnder or slort section of tube, $B$, in combination
with the tulung. $A$ arranged in such a manner that in $t$ he act of diving, the earth is excluded, but mhen driven the water
may tee admitel by simply turning the cylinder, and without rais-
ing the tubing, substantiall as describel
 substantially as described. $\quad$ D. Parker Genesce, Y., assignor to C. L. Burtis, Thomas A. Barrows and EliS. Hart:
I claim coupling the ends. A A, of two sections of rod, by means
of the wedging sockets, $B$ B, connecting bolt, $D$, or equivalent, and wel.es, C, , operating substantially in the manner and for the 52,794.-Fly Trap.-Nicholas Pike (assignor to Emma Taylor), Brooklyn, N. Y:
wire or rocl arranged in such a manner that by moving either the string wire or rot, or the box, the former may be lrawn or passed
through thee composition and the fies at the rame tinie strpped
from the string, wise or rod substantially as and tor the purpose sel forth. 1 also claim in connection with the string, wire or rod, constructing the lid or cover, B , of the box with a thanye, a, to form a $\mathrm{l}_{\mathrm{y}}$ receptacle as set fortli.
I further claim the box, A, cover. B, tubes, F, bar. ©, and string
or wre, $\mathbf{D}$ all arranged and combined sulstantially as and for the 52,795.-Fence.-Russel Pronty, (assijuor to J. Elder and J. B. Wilson), Springfield, Iowa:
 ferent distances apart in the successive or, adjiacent, pick. (t) so as
to force the wires into a zigzag shape, and cause the two wrres to strain in opposition upon each picket, as and for the purposes 52,796.-Process for Converting Iron' Into Steel.-Eliot Savage, West Meriden, Conn., assignor to himself George S. Harwood, and George $H$. Quincy: First, I craim the improved method of hardening and tempering
steel by heating the same in cyanide of potassium previous to its immersion in a cooling lquid.
Secsod, The improved mode of treating iron for the purpose of producing upon it t be effects of case lardening by heating the same
in a bath of cyanide of potassium, and by submerging it in cooling liquid. Thir, Theimproved mole of treating cast iron for the purpose
of converting it into steel, or asubstance resembling stel, by leatof convertime in a bath of cyanide of potassium and sulfmergiug it
ing the same in a cooking liquphet hod of treating iron, steel and other metals by means of cianaide ot potassium as and for the purpose her einbefore
set forth, Iclaim the useor metallic solutions asthe cooling liqu iu 52,797.-Hydrant.-Edward Stucker (assignor to himself and Emanuel Shober), Lancaster, Pa.:

52,798.-Boot and Shoc.-Cliarles H. Trask and J. B.
Johnson, Lynn, Mass. assignors to themselves and Johnson, Lynn, Mass. assigno
G. L. Thayer, Boston, Mass.:
W e claim our inproved cliannel, C, a made with two lips. i $k$,
grranged so as when closed to meet together disectly over the chan
 52,799.-Driving Ipparatus of Metal or Wood into the (iround.- $\overline{1}$ iiliam w . Winter (assignor to himself and stephen brower), Corllandville, N. Y.:
 be drivin. and alio the anplicition of the pulley thereto, substain 52, wow.-Fastening for Paper Boxes.- George. F
Wright, Clinton, Mass., assignor to himseli and
 pasictionur
52, 801.-Brick Machine.-'Thomas Matthew Gisborne, Lymington, Eng








52,802.-Machine for Making Boots and Shoes.-Charles Henry Southall, and Kobert Heap, Staleybridge Eng.:
First, , , e claim the brake, it lever, fr, and lever, ${ }^{\text {S }}$, tor instants


 sizes or boots and shoes.
Fith, The cam or pate
and down m movement witht ,ertatiuty.








 not
nd n, ne for cor enabling the thols to follow the surface and sides of sole
nd


 the surfiace of the sole or heel. Fitteenth, The apparatus in Figs. 15 and 16, for holding the


 heelis on to the uppers or coveripgs, or vo one employed only tor
paring and tinishing as all such
and 52,803.-Mode of Printing Photographs.-W. Bentley Woodbury, Manchester. Eng.:
claim tine use, in conncetion with the plates herein deseribed, or mith any engraved plate. of semi transparent or partially transpa.
rent inks, substintially in the manuer and for the purpose specifled 52,80t.-Machine for Cutting Files.-James C. Cooke, Middletown, Conn.:











 52,805.-Horse Hay Fork.-B. F. Hisert, Norton Hill, First. I claim the bar. A, provided with the pivoted tine, H, in
 set forthi, The bar, A, with i ipipoted tine, $\mathbf{H}$, in combination with
the cond $j$, pivoted to the tine, $H$, near $/$ its center or motion, the

 lecribed. ling Plate for Bollers.-Andrew O'Neill, 2,806.--Guard Plate for Bollers.-Andrew O'Neill,



 Fourth, In combination with the gard plate I claim the s.ot. E,
r the passage of the rivets in case or the unequal expansion of the :807.-Plow.-Thomas J. Cornell, Decatur, IIl.:
edges of thip land side and mold boaru when used in connection with
the wheel, F , or the purnose specified.
 52,s08.- perating Horse Hay Forks.-Henry Maycock I claim the arrrngement of the guard rope, $\mathbf{D}$, weight, $F$, puley E, and winiflerree, D. constructed and operating in the mauner


## REISSUES.

2,176.-Eyelet for Lacing Shoes.-Charles Goodyear r., New Yor ciry, assignor of Philadelphia, Pa. Patented Jan. 6, 1863:
and id iran eed substantiilly as describeu.
Second, Tbe metallic lacing. eyelet or loop constructed and ar anged substaniaully as herein described, so that the lacing cor


2,177.-Apparatus for Drawing Soda Water.-William
Gee, New York City. Patented May 19, 1863. Re-
First, I claim the arvive, D, and its parts, $G$ G $\mathbf{H}$, and passage
 set freth.


Third, I Iaim the small passaeeor aperture, a, for the purpose of
ompressing the soda water while beink admitted into the large
 Frith. Cliam drawng soda om mineral waterin a large and smant
stream from one nozzle or doniny in connection wrth a

2,178.-Distributing Grain to Different Bins.-Charles
Si, Hamilton, Fond du Lac, Wis. Patented June
21, 1864:



 Lise attendant to prop
,179.-Manufacture of White Rubber.-F. Marquard,
Rahway, N. J. Patented Dec. 5, 1865:
 pose of washing them, atter they have been writut, why bleached

eflore set torthl claim the method or process of treating india

 2,180 .-Manufacture of White Rubber.-F. Marquard,


 sicond I alaso ciaim the e methed or process of washing the diss.
solved and bleached gum as hereinbef ore set forth with 10 water,


 pressu.
orth.

## DESIGNS.

2,265.-Coffin.-Thomas Devins, Cambridgeport, Mass

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. C. D.. of Tenn.-The object glasses of the best com pound microscopes are usually made by the combination of three lenses; the distance from the object glass to the eye piece is $10 \frac{1}{2}$ inches, that being the distance of most distinct vision. The re on the other. Carpenter on the Microscope is a standard work For a practical treatise on eptics write to Henry Carey Baird, of Philadelphia, or to John Wiley, of this city. Compound micro one for $\$ 20$ or $\$ 30$
H. B., of Wis.-Your plan of suspending a rod of iron without material supportin a coil of wire through which a curren fectricity is passing, and then giving the rod a rotary motion xpenditure calted "perpetual motion," as there would be a engine several years ago in which an iron rod was alternately drawnin and out of a hollow helix by changing the poles of the battery. This engine would drive machinery, but as the power was obtained by consumption of zinc, it was more costly than

## C. B. of

 lary tubes is due to atmospheric pressure has been suggested; but the fact that the liquids will rise verticaily more than 34 feet is fatal to this theory. H., of Pa.-No substance will dissolve lampblack. B. Q., of Mass.-"The ingredients which supply the motivepower of Ericsson's caloric engine" is hot air, and it is power is needed.
W. B. G., of N. Y.-If you will read W. J. Macquorne Rankine's treatise on shipbuilding you will get a different idea of the attanments of he buidera.
H. S. W., of Conn.-You can take steam from your heater in the manner pronosed, but the heat sou derive from it will be in proportion to the pressure in the heater; as your engine cuts off short, it will probably not be very great. Why do you dry your wet substance over the top of your boiler, not in contact ere is heatenough radiated from most boilers to do a . S.-If an inventor applies for a patent, and the ratent Office erroneously rejects the case and for many years maintain its refusal but finally courect patent, we know of no reason why the patent is not vald. The factthat the thing has come intogeneral public use dering theee vedrs of delay docs not prejudice the rights of the in ventor
H. B. S.-There is no more pressure in the steam drum of your bollers than in the boilers themselves; there is less, it R. O, of Ohio,-We cannot give you the information you desire about the latest method of getting ice out of the water into the house.
W. V. V., of N. Y.-You will see by the files of the Scientific Americanthat your question has been asked several timen, without any satisfactory answer.

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CHARLES A. SEELY (LATE PROF. OF CHEMIS-


TO INVENTORS.-THE FOLLOWING M $\Lambda$ CHINES mber would find a mari et:-
nemachine, simple and sirong.to work by hand or by a horse,
draw water quickly and in large or small quantity, as needed, from wells 15 to 45 feet deep.
Also a mathine to cut a stoummv underbrush of the thistle
gumb

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$2^{*}$
THE HARRISON BOILER-A SAFE STEAM BOILER.







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PORTRAIT AND LANDSCAPE PAINTERS, ARCHI-



$T$ OWNERS OF MACHHINE SHOPS AND ENGI-


W iter wheels.-MILLER'S WATER WHEEL
 as a motive power wiil, for further
A. B. CLARAKE AR
Caldwell, Noble Co., ohio.

POWER-LOOM WIRE CLOTHS AND NETTINGS

DODORTH \& SUN'S MUSIC STORE.-IMPROVED


A PERSON WITH CAPITAL WANTED-TO TAKE


GOULD'S IMPROVED MIST FORGE- ILLUS-

FOR SALE-STATE RIGHTS of a valuable


