## OFFICIAL REPORT OF <br> Patents and Claims

## Issued by the United States Patent Office,

 for tee treit ending july $9,188 \%$. Seported Oftcally for the Saentutic American
## Patents ARE GRA


On ingring each orisinal Patent.aiteitis.
Onapplication for Beilener or Patenis.

In adaition to which there are sme small reve

66,440.-Sewing Machine.-Wm. W. Abbott, Boston, Mass



 I claim the handie, with its cross piece B in pinneil in the mortise at righ
 66,442, Cis.



 refresen
664 , Cover for
dint







 the edd of tand glass tube as set forth, W. W. Beach, New York City


 64 forth 48 . - Inkstand and Mucilage holder Combined.-W. What tialima isa mucl late recertacte and instand combined, substantialy







 66,452. -Converting Iron into Steel.-John F. Boynton,

 66 , 453 .





 66,455 . Cons HUSKER AND STALK CUTTER.-ELisha Briggs,




















 pump. M , and air cham ber. I. operating subbetantially as deseribed:
$66,460 .-$ CTTAVE CoUPLING FOR REED INSTRUMENTS.-B. O

 Hetam the midiod of numbering conpons, bank notes, and other tokens, 66,462. - Steam-Engine Lubricators. - Frank Colligon









 ne continuous automatic operation. FURNACES.-Andrew Cowan

 setforth.
2.
The










 nerenbefore described.
66.468 . BIICK MACHINE.-L. B. CLittenden, Pittsburg, Pa



 66,469.-CHORN. James Davies, Mazomania, Wis.




## $66,470 .-T$ Tweer.-Hiram Dean. Clyde, Ohio

 66,471.- Journal and Axle Boxes.-P. S. Devlan, Jersey
 66,47?.-Lining for Journal and axle Boxes.-P. S



66,474.-Coupling, Jounnal and Box.-D. H. Dotterer







66,475. - PANT BRUsi - B. Adams Drayton, Utica, N. Y.

 66,476.-HAR Culurer-Sallie Ann Early (assignor to Sam-
















 G6.482. - ANTI-RUEUMATIC LINIMENT-U Galeste. in. Y. City


 parts arranted substantiant as herein stiown gyand , Stant ianly asana for the purpose thown
 $66,485 .-$ CorN SHELLER.-HI. A. Graeff, Birlsboro, Pa.
 6ob,486.-Mode of Drying Brichs.-Isaac Gregg, Philadel-








 66.489.-Foot Scraper and Umbrella Stand.-Charles
 66.490.- PrRINA For BEDS.-D. F. Haasz. Philadelphia, Pa.






 6f,492.-EEG ToNGS.-W. F. Hellen, Washington, D. C.












 66,497. LOCK FOR VALISES, EFTC.-Thomas James, Ncw
 66,498.-FIRE ANNIIILLA TOR.-Chas. T. Jerome, Minneapolis,

 66,499. Amalahamarar and Concentrator.-George Johns

 apron 66,500.- Process for Manveacturing Bank Notrs, etc.-


66,501.-Farm Gate.-Henry H. Kelty. Northfield, Ohio.
 $6 \uparrow, 502$ - Pernuutation Lock.-W. F. Kistler, Chicago, Ill.





 the spiudle, a, so as to operate in the mane mar and or tie purposes I claim, 1st, The combination of the eccentric rim, F, with the vertical or
nearly
as and fortical fume dut,
 6,504.-SHADE HOLDERS FOR LAMPS AND GAS BURNERS.
 tially as described.
66 , $505 .-$ FEED BARS FOR SEWING MACHINES.



 scribed axd set forth.
66,506 .- WELU Tubes and Points.-Ira A. Livingston, Hor
 erating in the manner as and tor the purposes herein set forth.
66.507 .-AUTOMATIC FAN.-Wm. O. Loefller, New York City.
 forth, The slats, F , and sloted cross bar, g , in combination with the tan, F ,
and oscilitating freme,
the purpose described. constructed and operating substantially as and for
 the parpose set forth
 2d, The adjustable tapering and bevel edged guide ge, on on one portion of a
molding box
other in combination with the lugs, h $h$, or their equivalents on the
 Iclaim the above componand pre pared a a a nd lor ture purpose set forth.
66,510 .-WINDOW BLID FASTENING.-N. F. Mathew

Barring ton, assig nor to himself ant Nathaniel Grant, Providence, R.
 propriate catches, substantially as set forth.
66,511 .-MANUFACTURE OF ILLUMINATING GAS.-George McKenzie, Glasgow, Scotland. .
I claim the combining of pulverized coal and mineral oil to form a com.
pound to
fore describep. fore describep.
 scribed, proportions of the ingredients forming the solution for the treat
ment The to the above mentioned substance, substantially as set forth.
met men
$66,513 .-$ Thallons' Craten
and We claim the cutter as composed of the cross bar and tube arranged and
slotted as deribed.
We arso
waste-intercene combination and arrangement of the cutter and the


 for the parposes described. . E. Nicholson, Rockport, Ohio.
 8et forth. -Stove Pipe Shelf.- Luther Olds, Battle Creek,Mich.






 the cotton, duck or other fobrous or textile tabric used, that the warp threads
of the fararic, Fill intersect or cross each other, substantially as and tor the
purpose specified. purpose specified.
66,519 .-PLaNing Machine.-F. J. Plummer, Worcester.



 Springs, N. Y.
I clainn , , Tt, The combination of the sliding tube, D, mounted on the square
post, and collar, E, provided with recesses
 and lowering the reep as herein set forth.
sd, The blocks. b c, or tbeir equivalants attached to the post, B, for hold.
ing the arms when putting them ap or taking them down as shown and
described. 4th, Providing the base, A, with the staples, a, for securing the apparatus in place, substantially as described.
66,521.-TEA KETTLE. Ezra Ridley, Troy, N. Y.
I claim a tea kettle havint an edgewiseswinging cover pivote

 66,522.-Piano Forte Stool-George Schmidt, Dobbs








 Edmands
 6, thir Ctarting Engines and other Machinery off
 Bides or other equivalent devices to o operate in combination with the crank,
B6abstantill aum and for the purposer described.
66,588 . STAMP AFFIXEB AND CANCELLER.-T. A. Slack, Peoria Ills.
I claim the
amp canceller tamp canceller, substantially in the manner and for the purposes as here


 66,529.- Amalgamating the Precious Metals. - H. J. Smith. Boston, Mass,
Illaim, 1 It, An Aaliamating apparatus in which mercury is made to
asss from anamalgamating chamber to as regenerating tank in which its





 tus, of an amalqamating chamber, regeneracing tank and electric battery
substantally in the manner and for the parpose decsiode
$66,530 .-$ Horse Har. Fork.-Frederick Snyder, Hinkleton, Pa

 combination with the link, E. and tripper, C, with its shoulder, N, and IPop,
M, hen whole arranged and operating in the manner and for the purpo.e 66,531.-Tor Gov.-Ebenezer Sperry, Miami Village, Kan
 Ton-anca, N. Y
I claim the partialy submerged floating wheel, A, consisting of the
 with, substantially as and for the parposes set forth.
$66,533 .-$ STEELYARD. $W$. A. Starratt, Boston, Miass Iclaim thecombination of the elastic custhon, c, with, the herd, b, of the
weiglitarm and with the weight, Darranged to slide on such arm in manner


 66,535.-SADIron.-E. H. Taylor, Batavia, N. Y

 purpose set forth.
$66,566 .-$ Machine for Grinding Clay.-William H. Thom-

 66 ,537.-Steam Piston Paceing.-Theodore Thurber, AuI balin, N. Y. grooves or recesses in the edges of the packing ring, C , as and 66,538.- Door SPRIN.--T. Van Kannel, Cincinnati, Ohio.
1st, I claim a door spring,,made and operating substantially asherein shown and descr.bed.
ha, Then Cl .
shown and describe


66,539.-Larpet Wadding.-Enoch Waite, Franklin, Mass.





 structed and arranged that such packing may be inserted after the rivet
has been completed, substiantially as and for the purpose leserib bed.
66,541 . CoNDENSER. N. W. Wheeler, Brooklyn, N. Y. I claim, 1st, The combination of the piston, 1 , with the valved circulating
heads orintes, $F$ F,or their equivalents, substantially asand for the pur





 of that portion or the cartriage whic h contans
otantiaily a a and tor the purposespe cified.
66,543 .-OVEN OR F'URNACE FOR HEATING THE BLASTS OF BLAsT FURNAOES. Thomas Whitwell, Stockton on Tees, England. Pat -

 the purpose of cleansing the interior or such furnaces, ovens or chambers
from dunts, as pereinefolore described.
66,544, CARRIAGE-SHAFT CoUPLING.-C. A. Willard, Belle-
 66,545.-Apparatus for Carbureting air and Regulat-




 described.
sth, llaim the air farcipg arraigernent. T, T, in combination with the car
bure ting air arrangement, $\#$, substantaily as described. 66,546.-ANNEALING SHEET IRON W. W. Wood, Borough
of McKee's Port, Pa


 3d, Annealing imitation Russia or other glazed or pollshed sbeet iron in
acks or layers forcibly compressed together and held under rigid compres packs or iayers forcibly compressed together and held under rigid compres
sion during the process of annealing.
66,547 . Combintion oo PAPER WEIGHT AND PEN WIPER.
-Dright, New York City. I clam a paper weight and pen wiper combined, constructed substantially
in the manner as and for the purposes set forth. in the manner as and for the purposes set forth.
66,548 .-Boot AND SHOE SOLE.Frederick Ashley. New York City.
I claim thetrenthod of securing the rear end of the detachable half sole
by lamam arranged in realation to thenotches, a, substantallab as set forth
66,549 .-BED BoTTOM.-Dwight Babcock, Seneca Falls, N. Y 1st, I Claim securing the upper slats, D, to the spring, C, by meansof rib
ons, E, substantially in the manner and for the propposes herein specifed


 awn and descri bed and for the purpose est forth.
2at, Forming a bait chamber in the pivoted platform, $F$, substantially as 6,551.-WAsHING MAciIINE.- 1). S. Beckley. Toledo, Iowa

 the rem on able strainere C, when ar ranged as described th combination wi made and operati ng substantially as hereil
shown and described.
 3nd A A cream strainer made and operating substantially as herein show
an,553.-W Whibhing Machine.-Wm. Bicknell, Hartford, Me 1st, I claim the combination witb the tub B, of the fited removablecover
 66,554.-Bag HoLDEr.-Benj. S. Boydston, Richmond, Ind I claim the metallic hoop C, with its spars, when secared tothe bard B
means of the keepensm min mach a manner as to be contracted or ex 66,555.-W WSHING MACIINE.-Samuel Brackett, Port Huron
Mich.
 evolving o
ein show


 and for the porpose specified.
66,557. lice PICK. James H. Bridgins, Astoria, N. Y.
Iclaim an improved ice pick made with a suitable handle or hol 66,558 -
 66,559.-GRAIN DRYER.- John Burt, W estport, Mass.



 When its position is to be clanged upon the die plate.
66 ,561.-HAND S'TAMP.-Dexter H. Chamberlain, West Rox-
 diameter as and for the pirpuse specifed.



for tiaim an ax having its edge shaped as a semi-circle, substantially as and
 D. C. C.laim the combination of the extra frame B, or its equivalent, , with
1st,
the ordinary spring bed bottom when arranged and operating substantially

 66,56i.-Device for Stretching and Drying Skins.-Ver-

 frame and stretcher as aforesaid. Machine.-Heli Conklin, Kirk-
 for the purpose set torth. - Henry A. Cooke, Charlestown, Mass.
 66,5f8.-MACHINE FOR MAEING SCKEWs.-Edward Croft,
Watertury, Conn.

 If as shown ror the parposes set for th.
66,569 .-MACHINE FOR FORMING Wagon Ayles.-J. E.
 weights g2, substantialiy az herein shown and described for the purposes
specified.
66,570 .-Rotary Steam Engine.-Jeremiah Darling, Cin1st, The combination of the semi-circular valves $\mathbf{E}$, with their springs $F$
 and 571 . CAR Covpling.-James Depeu, Peekskill, N. Y. 1,tt, I clain the bar B, provided with hooks ff, in combination with the link.
c, inclinediotom plate d, and stop h, substantially as described forthe par:-
pose specified.
 as herrin shown and deseribed. R. Dugdale, Penn Township, Incl.
 66,573.-Compound for the Treatment of Oils for Lu bricating.-Charles J.Eames and Charles A. Seely, New Yorkr Citr.
we claim the conpond or preparation herein described for treat ny ons
wn the manne rand forthepuroosc described. 66,574.-LLoom.-John Earnshaw, East Greenwich, R. I.




 6 substantially as asesribed. Ropes or Wire.-John H. Elward,
 asbettiorth. LAMP Shade--James Emery, Busksport, Me.
 substantially in manner as specife ed
66,577 . CorTON IIN. A .



 66,579.-GAGE Cock. Albert Fuller, Brooklyn, N. Y


 aperture, mo, re eontroiled. substantially as set forth. AND NEGATIVE






 substantelly asandior the purpose specited
$66,584 .-\mathrm{HARVESTER}$ AKE. J J. C. Hall, Monroe, Wis.



 6, Philadelphia, Pa.. assignor to Harvey \& Fora, New York City and Phila deliphi, Pa, Re handes tor parasols, umbrelas, canes, and other articee




 66




 spe,591.-Door Holder.-Edmund Huddart, Prairie du Sac
 66,592 - - An Mmal Trap-George Irwin, Elizabethtown, Ky


 (6if,5933-Doiler SAFETY, GaGE--R. H. Jackson (assignor to

 66 seffort.- Apparatus for Drying Lumber.-R. P. Johnson




 66,596.-Magazine Fire-arm-E. C. Kirk and E Sneider




 66,597.-Subsoll Attachment for plows.-John A. Krake,



 ${ }_{\mathrm{I}}^{\mathrm{I}} \mathrm{e}$ elater, $\mathrm{N}, \mathrm{Y}, \mathrm{Y}$, Y , The combination of the metallic frame inclosing the spring




 $66,601 .-$ NALL. - Williart E. Lock wood, Philadelphia, Pa

 manner anifor the purpose speciffed --W. A. Lyon, Danbury, Conn.









 sentally as ana for the purp ose herein seeffrith.

 degribed. Tea Ketrle.-Edward McGrann, Louisville, Ky.


 ${ }_{20}{ }_{2 d}$ describe In com bin ation with the dredging yessel the pins, L, for the purpose o








 66,613.-Submarine Telegraph Cable.-S. E. and G.L








 66,614 - Bag Holder.-E. S. Molton, Plymouth, Mich






 6.617.-GovERNor.-F. J. Nutz, and Philip Estes, Leaven



 66,618.-Locomorive Ash PaN.-A. Ohlenslager, Jersey Cit



 66,619.-Spice Grater.-H. W. Oliver, New Haven, Ct


 1et, flaim a reservoir or beater tan $k$ sitatated in front of adiving fun
cooking stove or ran ge or placed and atached thatit shall form the fron



 ind of the bail from siie to tidel ide
$66,621 .-$ Horse HAY Fork.--S. W. Patterson and S. Dewey









 f6,625,-HARVESTER RAKE-G. ML Peters, Granville, Ohio 1st, elaim reciprocating and turning rike, operated from ten athit through

 Side Thin reciprocating turning rake in combination with the lever, J , and







 6,







 66,600 .- Mode OF Coating Wrovaht Iron or Cast Iron




 tially as herein set forth. -Horace B. Robbins, Boston, Mass



 66, 643 .


 ind shine motat of adausting the cone by means of incinnea planes, e e, operat
 Icelim. anash
ppeified. 63,637-ADVERTISINGAPPARATUS-J. A. Royce. Lee, Mass





 4th, Afor ine arrangement together of a safety pocket, locking as describee
and an ordinary pocket. 66.639.-Mop Wringer.-H. Russell, New Richmond, Wis

 66,640-MACHINE. For Dressing Hides AND SkiNs.-John

 ${ }^{\text {tin }}$


















 I clanm the improvede implement, ,ieretn described, asa new article of man









 seycral appricalions and positions, separately or combined, in the manne


 seriocceaso anew artucle of or manulasacturs. 66,688 . UNTNG THE ENDS OF LEAD PIPEs.-Nathan Foster
 $65,509 .-$ Cournhing Faucets to Preses.-Nathan Foster Wes
 tagos ganed cesentaly as expained.












 66,664.-Plastering Machine.-Josiah Keene, Washington,







 66,665.--Avcron.-G. A. Lloyd, and C. A. Stewart, San







 fintho. - Machine for Cuttina Paper.-Hervey Law, New




 2,672.-SNow PLow.-Samuel Richards, Philadelphia, Pa.







 675-Sarety Valve.-Herry Waterman, Hudson, N. Y






 2,677-PDED BorToM_-Gcorge L. Gerard, New Haven, Conn.
 Mhas Patentech May 19,18 , 8 B.


 2,697.-TRADE MMAKK.-Isaac Cook, St. Louls, Mo.
phia, Ba bial Case or Coffin.-E. S. Earley, Philadel ${ }^{2}$, ${ }^{\text {phaia }}$, Pa. 2,700-STVOE PLATE. LLuther W. Harwood (assignor to 2,701, 2, 720. - R1m Locr.-安. M. Mix, Westfield, N. Y. Two
 2,704.-Group of Statuarx.-John Rogers, New York City. Notre-Fortroons patents in the above list were procured through the
Home ofllce of the Scientific $A$ merican Pater number obtained by our Wasmington Branch agenecy.-Ems.

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T WHEEL, Patented by Ttout, Mills, and Temple, pos-



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Wright's Patent Variable Cuttoff Ensine,


 WASHLNGION IRON WORES,

 IRON WORKS FOR SALE.IM Machine Shop and Foundery In a New England City busiuess at speclal manuractures, but the proprietor
onlied to give it ap from lil heallh. Address
Box 1762 . New Haven, Conn.

Wantrian iorog ana dmpame $\xrightarrow{\text { Whe }}$

 The 20thannualexhibition









L E Countws Patent Hollow Lathe Dogs


$\mathbf{B}^{\mathrm{UERE}}$ TETS WATCHMANS TIME DE








$\mathbf{M}^{\text {achine card clothing- }}$



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 B $^{\text {RAUN'S }}$ fUANACET GRATE


THE SMOLELESS FURNACE
 the reflective arch warm-air Tor Rumh Pea and Nut Coal, 1 III

 cutoowJ. SHEET AND ROLL BRASS,


AMES' ${ }^{\prime}$ Celebrated Portable and Sta

M ANUFACTURERS PARTICLLARLY

TOTIn MCHINISTS AND WORKERS OF



A. Bunler, Macon, ©a. THE
HARRISON BOILER DESTRUCTIVE EXPLOSION.

 $D^{\text {OUGLASS MANGACTURING }} \mathrm{CO}$ comp patent BORING IMPLEMENTS.
MECHANICS' TOOLS.


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 IMPRTANT:





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$\mathbf{W}^{\text {Oodworth planers a spe }}$
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$\mathbf{P}_{\text {Ravin }}^{\text {ATEES }}$ TAKE NOTICE.


$\mathbf{M}_{\text {GLeerababer iron castings }}^{\text {alim }}$

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TYLOR, BROTHERS OD CO'S BEST

I RON PLANERS, ENGINE LATEES,
 $\mathbf{F}^{\text {IRST-CLASS }}$ RAAT, WACHINTSTSS'











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 mim in bent f(d)er spradye herausgegebent, und werben 9 rat is an alfe erianbt, welde barum Mant abrefifive

MUNN \& CO.
37 Park Row, New York

## Improvement of Cutting Nippers.

The ordinary wire cutters, or cutting nippers, have no device to prevent the edges of the jaws from bearing powerfully one upon the other, and thus becoming speedily dulled or broken, which once being the case there is no remedy but to procure a new pair.
The one represented in the engraving differs essentially from others in these points, and also in the fact that it acts with a much more powerful leverage. Its construction and mode of operation are apparent from an examination of the engraving. The cutting portion of the stationary jaw is capable of being removed and ground when dull, being secured by when dun, being secured by scre parg in the ter, and being also seated at its inner edge in that portion of the stock that forms a fulcrum for the movable jaw, which does not, as is usual, extend to the hand end to form one of the levers, but ends a short distance back from its fulcrum in a rule joint, on its underside, which

HALL'S IMPROVED CUTTING NIPPERS.
bringing the two handles together, an immense leverage is portion, if injured, may be readily replaced by a duplicate. brought to bear upon the movable cutter, while a spring The patent for the United States was obtained through seated under it raises the cutting edge when the pressure the Scientific American Patent Agency, May 14, 1867, and is removed. An adjustable screw, passing through the lower foreign patents are now pending through the same agency. jaws and coming in contact with the inside of the upper jaw Furtherinformation may be obtained by application to Hall when closed, prevents the edges from coming into injuri-


Furtherinformation may be obtained by application to Hall
\& Gifford, 187 Bowery, or at the office of the European \& Gifford, 187 Bowery, or at the office of the European
Company, 85 South street, New York City Company, 85 South street, New York City.

## CURIOSITIES OF IRON.

In some marked respects iron differs from all other metals. If it was as scarce as gold and silver there is no doubt it would be deemed much more valuabie than either, not only for its usefulness but because of its singular qualities. While gold, sllver, copper, and other metals are softened by heating and sudden immersion in cold water, the effect of this process on iron is directly the reverse. Although its grain is coarse compared with that of the metals just mentioned, it will re ceive and retain fine edge impossible to be induced upon them. It can be changed from a brittle, impure mas with out tenacits, to a pubstance so tough, ductile malleable, and lo to elastic as to be quite unapproachable in these respects; or it can be made into steel as brittle as glass while as elastic as it is possible to conceive of any metallic substance.
While cast iron is one of the most brittle substances known, yet the manipulations of the puddler, aided by fire and oxygen, readily change it to the toughest and most fibrous material. Yet even as cast iron it possesses much elasticity. A larg steam cylinder if allowed to rest upon its side will sink by it own weight, so that if five or six feet in diameter it will be depressed from top to bottom of its diameter over an inch Wire drawn from iron is worked just as wax would be by the moving of the outside particles over the inner asit passes through the dies ; yet this process makes it almost as hard and compact as steel.

ous contact. The jaws are made of the best cast steel and tempered so as to cut pianoforte wire without showing a | It will be understood that by depressing the outer lever, or | $\begin{array}{l}\text { tempered so as to cut pianoforte wire without showng } \\ \text { mark. All the parts are manufactured by gages, so that any }\end{array}$ |
| ---: | :--- |

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