## RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week; the claims may be found in the official list:-
Photograplac Picture Holder.-This invention consists in a revolving or movable cylinder or prisma the surface of which is divided off into a large num ber of parts, each capable of holding a photographic or other picture of that size generally used for photographic picture cards or of any other desirable size, in combination with a movable or stationary case surrounding said movable cylinder and proviled with windows corresponding severally in size and position to the several tiers of panels in the cylinder in such a manner tiat, ly revolving or moving said cyiinder or case, several rows of pictures, one after the other, can be lirought opposite the observer, and a large number of pictures can thus be exhibited in a simple and convenient way. James Bucket, of Harlem, N. Y., is the inventor.

Improvement in Fifes and Flutes-The olject of this invention is to produce a fife or flute which is so constructed that it serves to play on two or more keys, This object is effected bs the application of a revolv ing finger piece with one or more sets of Inger holes, in combination with a long slot extending through the main barrel, in such a manner that by turning the finger piece different sets of finger holes can be brought into action, and the fife or flute is lengthened or shortened for different keys. The length of the barrel is still further adjusted by the use of an ad justable mouth-piece, which is made to slide up or down on the main barrel, said barrel being provided with an oblong hole, so that, by sliding the mouthpiece up or down, the communication between its mouth-hole and the interior of the barrel is not interrupted. The plug which stops up the end of the barrel close over the mouth hole, is connected to the sliding mouth-piece, so that by adjusting saịd mouthpiece the plog is also adjusted. A. H. Stratton, 31 Ma:den Lanc, New York, is the inventor.

## Pump for Deep Wells.

We call atiention to the pump patented by Kingston Goddard, of Philadelphia, Pa., on the llth of Apr:l, 1865. This pump is said to be very efficient, and appears to utilize, in the best manner possible, a given weight of metal in the production of a pump rod foi deep wells. The piston or pump rod is tubular, and is lightened by the removal of portions, leav ing openings, which do not materially detract from its efficiency in other respects.

How is it Done? - A foreign exchange mentions a magic toy figure of a man which, when on the ground, immediatcly commences dancing in periect time to any tıne, astonishing all present, and deffing detec tion. It is sold at 6 pence and 1 shilling, English money. They have also a donkey which dances on a similar principle. Inventors on the watch for novel ties for the holidays should look into this subject.

## TO OCR READERS.

Patent Claims.-Persons desiring the claim of any in vention which bas been patented within thirty years, can obtalna copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and enclosing $\$ 1$ as fee fol copsing. We can also curnish a sketch of any patented machine issucel since 1853, to accompany the claim, on receipt of $\$ 2$. Ad
3. CN \& CO., Patent Solicitors, No. 37 Park Row, New York.

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Models are required to accompany applications for Patints under the new law, the same as formerly, excepton design pat nts, when twogood drawings are all that are required to accompan Inv ariable Rulie.-It is in established rule of this office to stop sending the paper when the time for which it was pre-paid lias expired
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VOLUME. IV., VII. AND VOLUME XI.. (NEW SERIES) complete (bound) may be had at this office and from periodcal dealers. Price, bound, $\$ 300$ per volume, by mail, $\$ 375$ which in. cludes postage. Every mechanic, inventor or artisan in the Enited S+ates should hare a complete set of this publication for referenceSubscribers should not fall to preserve their numbers for binding. VOLS. I., II., III., V., VI., VIII., IX. and X., are out of print and cannot be supplie


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${ }_{08}$ Pamphlets containing the Patent Laws and ful particulars of the mode of applying for Letters Patent specifying size of model required and much other in formation useful to inventors, may be lad gratis by addressing MUNN \& CO.. Piblishers of the Scientific american, New York.
47,507.-Churn.-Charles T. Anderson, Clarksburg, Md. First, I claim thie combination of the rod, C, arm. D, link, , , an ande, fi, the parts being so arranged that the motion of the haa
die will be transmittell to both the bellows and dasher, substantial
as set torth. a churn of the description herein fiven, I clamm the
second, In
in, $g$, and perforations, d , employed as and for thic object specifled 47,508.-Letrer Envelope.-James G. Arnold, Worces ter, Mass.:
I claim cutinng envelope blanks, in the manncr and for the pur
poses sul)stantially as set forth and described. 47,509.-Sick Chair.-Charles H. Bagley, Waltham Mass.:
I claim the sliding box, B , provided with the lid, II, and hole, O , in
connection mith the ve-sel, K , cover, L , slide, 1 , and the bar, $\mathrm{J}, \mathrm{pro}$
 ose set forth.
or bed-romion relates to a new and improved sick chair, designed Il unpleasant and constructed and arranged in such a manner tha therefrom, either while the device is in use or when closed, and the chamber also prevented rrom emitting any sunpleasant odor while eing removed from the chair.]
47,510.-Manufacture of Stecl.-Julius Baur, Brooklyn N. Y.:
num with iron in the manufacture of stecl, substantially as set
7,511.-Evaporating Pan.-George Bez, Mukena, Ill.: I claim the combination of fire and steam pans and pipes, a
herein set forth and shown, for evaporating sirups. 47,512.-Sofa Bedstead.-Elijah Brady, New York City I claim the combination and arrangement of a sofa with the be
and drawer, substantially as d escribed, for the purposes specifed. 7,513.-Shoe Lacing.-Mcllen Bray, Boston, Mass.: I claim the employment of staples, arranged in opposite pairs
each pair overlapping or interlocking. in conbination with a cord each pair verlapping or interlocking, in conbination with a cord
string or wire, or other such dexible or non-lexible locking device. 47,514.-Corn-planter.-Joseph T. Bryan, Lebanon Ind.:

 purpose of plowing and planting corn
47,515.-Photographic Picture-holder.-James Buckett Harlem, N. Y.:
I claim, First, The movable cylinder or prism, A, or its equiva ble or stationary case, Be constructed and operatiing substantially a Second. The purpose set forth.
he purp ose substantially as described.
7,516.-Machine for Printing Hats.-Thomas Byrne
and 1 homas Henry, New York City
We claim the employment or use of the conical printing roller. $F$
n combination with a in mor shape, and with a mechlanism for suppising color, constrabe
ed and operating substantially as and for the purpose set forth. [This invention consists in the employment or use of a conica printing roller, in combination with a suitable pattern roller, to which color is supplied by an endless apron or other mechanism, in such a mannerthat hats and other articles secured to the conical printing roller, and revolved with it, are brought in contact with the pattern rollers, and continuous stripes or other designs can be pro duced on said bats or other material, with little loss of time.]

## 7,517.-Picker Motion for Looms.-John Cads, Staf

 fordsville, Conn.:First, I claim the stop, $L$. constructed and fastened to the bed, H
n the manner substantialiy as above shown.
 neans of adiustable ends or inclined planes, substantially as de
scribed.
Third, I also claim the mode substantially as above described of
attaching the picker staft and its strap to eachother, and to the
Fourth, $I$ also claim forming longitudinal grooves, 0 , inclining in
he direction shown on the periphery of the part, $q$, of the box, $Q$ he direction shown on the periphery of the part, q, of the box, $Q$
for the purpose of lubricating its axis, suostantialiy as shown. Fith. I also claim the notiched flanch, M, of the part, q, of the
box. in combination with the key, $f$, sulstancially as above de-
scribed. $I$ also claim arranging the slot, g, in the bed. H, which re-
sives the key. f, so that the box and its axis can be lubricated from bove the sald bed, substantialy as sabed
(Trating the devices which guide the motions constructing and op-47,518.-Seeding Machine.-Cyrus C. Carter, Exeter I claim, First, The adiustable tubes. C, flted in the tnrining axie.
A, and provided with the funnel.
O, In combinntion with the seedox, $E$, provided with the reciprocating slide, $H$, having the pendan
plates,, attached, and the perforated plates, $g$ h, all arranged to op rase as set forth.
Second, The combination of the adjustable tubes, $C$, turning ax le,
, seed.box, $E$. provided with the slides, $f$ h $h$, the scattering board I, sedd the spring lever
stantially as set forth.
IThis invention relates to a new and improved machine for sowing
ced broadcast and in drills, and it consists in a novel arrangement of parts, whereby it is believed many advantages are obtained over the ordinary machines in use. 1
47,519.-Horse Rake.-P. S. Carver, Honeoye Falls,
I claim linclosing the pawls, $H$ I, in the groove, $b$, of the joint rim
 struction, said strap ased in connection with a single handle, E, the
parts together, and usian
whole arranged, combined and operating subtantially as and for
the purpooe herein set forth.
47,520 .-Coupling for Thills.-E. D. Clapp, Auburn. 47,520. $\mathrm{N} . \mathrm{Y}$ I claim the thill iron, constructed in tron parts. and with conica
erforated bearings, the said two part., berins pivoted together and perforated bearings, the said two part. boing pivoted toget her and
made te overlap ont anor under the thill., in combination with
the clip iron, constructed and arranged as described, all operating in the clip iron, constructed and arranged as
the manner and for the purpose set forth.
47,521.- Boot and Shoc.- Gcorge P. Clark, Drooklyn,
N. Y.: I claim Ynserting within or attaching to the sole and hecl of a boo
or slooe, or in and to any desired portion of the same, s series of lastic studs or projections, made or any suitable tiexible, and clastic material, and or any desired number, size and shape, substantiali [This invention consists in fastening within urface of a boot or shoe, a series of projecting elastic india-rubbe or gutta-percha studs, the principal object of which is to glve an elastic, ligat and soft.treading surface there: 0 , as well as to keep the eet warm and'drs. 1
47,522.-Crank-wrist
Brooklyn, N. Y.: Connections.-James Clayton First. I claim the combination of the lining piece3. $\mathbf{c} \mathbf{c}$, havin their exterior sides of sloping form, the independent iredge havinape
side pieces. b b, the screws, d, and the nuts, e c, substantial
and for the purpose herein set forth. and
Second. In combininarion set th the sald lining pieces, side picces,
screws and nuts, applied within, a cross-head, 1 claim the gutdes,
a a, provided for the cross-head, substantially as and for the purposo herein describe
47,523-Ox Yoke,-W. R. Close, Bangor, Maine :
1 claim my improved yore-ring adjusing mechanism, as con
structed of the supporting sadde, $F$, ithe vibrating hanger, $c$, it structed of the supporting saudle, F, the vibrating hanger, c, its
catch block, , its conning screw and nut or nuts, and the curved
rack, D, urranged together and applied to the yoke,
8o as to operate therewith, substan manner and so as
speci ited
then
47,524.-Awning and Reflector.-Jos. Cordnan, Brook lyn, N. Y.:
I claim, the combined awning and refector, constructed and ap-
plied substantially as spee:fied.
47,525.-Chimney Cap.-George W. .Demond, Boston I claims.: combining with the vanes, e, the blades, f, extending dorn
nto the cyllnder, and having open spaces between therr inne

7,526.- Paper Fastencr.-Z. W. Denham, Washington
D. C.: I. elim the fastener, A B C, substantially in the manner and for
the purp oses descrived 17,527.-Grinding and Polishing Metals.-Jas. Dodge, First, I clasm the method of and machnery apparatus for grind
ng and polishing spindles, toon, fled fled blanks and o her regular or
irregular-shaped arttcles, subtantiall as hercin described; that is to say, by the employment of two revolining grein described; that is is or polishing
wheels, in combination with a meclunism for moving in accord
and
 seconc, For grinding and pollshing round articles, I claim, in
combination with the above causing the said artices, to revolve in
contact with the gulde stone or polishing wheels, substantially as se
orth. conta
forth.
47,528.-Lock Joint for Railroads.-Aaron Douglass,
Paterson, N.J.:

 plains, an
borizizata
specified.
47,529.-Kerosene Stove.-Wm. H. Elliot, Plattsburgh N. Y.:
First. I colam so constructligg a lamp with its connecting piece, $g$ amp and stove may be made by sliding the lamp under the stov Second, Jolning the several rings of said connecting piece togeth
er substantially as represented at, g , for the purpose set forth. 47,530.-Oil Pump.-Wm. H. Elliot, Plattsburgh, N. Y. First, I claim the main pump, b, appiled to the elevation of oi om the well, and the auxiliary pumps, g, applied to the exhaustion
gas or air thom a higher position $\mathrm{n}_{\mathrm{n}}$ said well cooperatlig sub stantially as described. pumps, p, arranged in
Second The auxill y pum
gol ng substantially as shown and described.
Third, A suction or gas pump, g, and gas
arranged above the surface of the earth and separator, f, the one
seed-bug or packing, substantlally as dezcribed.
Fourther below the Fourth, A reversible suction and force gas pump, $g$, and lifting
pump, , so arranged in relation to the seel.bagt or packing and to
the surface of the earth suostantially as set forth. 47,531.-Grading Scrapers.-Charles Evans and Wm C. Bartlett, Morton, Ill.:

We claim the revolving scraper, $G$, in combination with the sta
tionary mounted irame, A, and lever, $E$, all arranged substantially
as and for the purpose eset forth. in connection with the wheel, $\mathrm{H}, \mathrm{o}$
We further claim the lever, J, in
their equivalents, for the purpose specified.
47,532.-Manufacture of Boxes, Packages, Etc.-H 7,53.-Manufacture of Boxe
Everett, Philadelphia, Pa.:
I clalm the bent strip, $D$, applied to the formation of the joints of
oxes, packages or other vessels, in the manner described, for the 47,533.-FanningMill.-Abram Fanckboner, Schoolcraft I clain, First, The arrangement in relation to each other above
described of the double screne $B$, the inclined board, $P$, and the dirisions, $F$ and $G$. of the receiving box, E, when the parts are so
constructed as to operate in conjunction with each other as hercin set forth. The construction and arrangement of the receiving box,
Esecond,
substantially za and for the purpose set forth. 47,534.-Cultivator Plow.-Jas. R. Finley, Delphi, Ind.: I claim the equal or symmetrical mold boards, when said part, tonfguration, as set forth and described.
47,535.-Heat Radiator.-Darius G. Fletcher, Racine,
47,535.-Heat Radiator.-Darius G. Fletcher, Racine
W claim. First, The cast-iron ring, c, and arms, d, for supporting
I claim, First, The cast-Iron ring, c, and arms, d, for gunporting
the chamber, B, within the case, A, substantially as and for the pur pose specified. rectangular openings, ef, of the upper register of the
second, The
chamber, B, for the purpose of faciltatiog the construction of the
device. The cast-Iron ring or cover, E, for the space between the
Thamber, B , and cslinder, as set forth.
(This invention relates to a new and improved heat radiator ior tove pipes, and is an improvement on a similar radiator for which 1860.] 860.]

47,536.-Shovel Plow.-C. Ford, Forest City, Ill.:


J. as herelin net forth. in ench maneer that the operator, by loging


47,537.- Window Lock.-F. G. Ford, Washington, D. C.: Io claim the face plate, to which is attached the doubie nght angle slotted tube, the sem-rotating siling spring boit, the recessed
gulding plate, and the double Inclined recessed plate catch, the same
being applied and operating in the manner as and for the purposes beiding appliated an and
herein specifled
47,538, -Preparing Hemp, Flax, Etc., for Splnving.-
Jim B. Fuller and James P. Upham, Clarcmont,
Nim B. Fuller and James P. Upham, Clatcmont We claim dr
specifed, previousto ar carding, picking, or beating operation, for the pufposen and as set forth.
dition, for claime carding the fibers of flax, hemp, etc., in a moist con-
ditposes specifed.
47,539.- Process for Separating the Fibers of Hemp
Claremont, N. H. Antedated April 18 . $1865^{\circ}$ pham
We claim the mode herein specified of separating, vegetable aber
We craim the mode herein specided of separating vegetable abers
whil rets.ned in a suitable vessel, by subbecting such vepetable flober
to the action of steam under presure, and then to a seres of expansions derived from the sudden dlscharge ot stea,
from such vessel, as and for the purpose specifed.
47,540--Instrument for Curing Piles.-J. P. Gilbert M. D, Long Island City, N. Y:

Iructed and operating substantialis as and for the a nipple, B, con structed and operating substantially as and for the purpose specifed.
Second, The groves, A. In the nipple, B, applied and operating
substantially as and for the purpose set forth. bstantially as and for the purpose set forth.
[This invention consists in the employment or use of any cold body provided with a nipple to enter the rectum in such a manner that by said cold body the blood in the tumor is deprived of lts super to keep the cold body in its place, and in order to allow the blood to trculate tron the tumor paid nipple is provided with grooves near circulate from the tumor, said nipple is provided with grooves nea this instrument can be improved, and the ointment is kept m a box placed in the cold body, which is made hollow for this purpose, and provided with a cover that can be readily removed and replaced d 47,541.-Mode of Mounting Drills.-Herman Haupt, ambridge, Mass
I claim, First, Mounting drilling, boring, or other like machinery huld, upon a columnar frame, whether solid or tubular, nnd whether
steam or other fuld is conveeyed to sald machner by independent pipes or through the columng, substantially as set forth.
Second
In combunation with the colum nar frame for
of machinery for drilling or boring rocks or other sibterranea operations, I claim the pointed set screws, or the eouivalent thereof,
to brace and steady the said frame, in the manner substantially as Third, In combinstion with columnar frame, which, for the pur-
pose of conveying steam or other fuld is hollow, Iclalm the thimbles pose of convering gsteam or other fluid, is hollow, I clalm, the thimble
ncasing the eset screws to protect the same and prevent leakage
substantially as set for th. Fourth, The combination of the columnar frame with adjustable
Fontion or the trunions of drills or other jike ma supports for the bearings of the trunnions of drills or other lize ma
chininery, so as to admitit of adjustment of said drills at and hatt and
at any angle in the plane pelp endicular to the axis of the trunnlons. at any angle in the plane perip endicular to the aris of the trumnlons,
Firth, Making the supports of a segmental forit, and forming the
bearing therein adjustable, so as to admit ot universal motion of the bearing therein adjustable, so as
drills, substantially as sec forth.
47,542.-Chair and Cradle.-George W. Hawk, Chicago, III. First, I clamm the comblnation and arrangement of the two sec
tions, A, the ends, C , and the rockers, B Be operating substan
tially as and $\mathbf{D E F}_{\mathrm{E}}^{\text {Becond, I claim constructing the bottom of the cradle of eve parts, }}$ 47,543.-Die for Cutting Screw Threads.-Benjamin S. Hill, New York City:
I clatim the arrangement of thasing or cutting, points of a die or chaser for cutt ng male screwthreals in a line or lines diagonally
across the cutting faces or edges, or prinal to the axis, substantially across the cutting inces or edges, or spir
47,544.-Explosive Shells.-B. B. Hotchkiss, New York
I claim the employment of the webs, $B$ and $C$, or either of them arranged to extend from the inner surface of a shell nearly to the
conter or axis, substantiall in the manter and so as to serve the
double purposes herein set forth double purposes herein set forth.
47,545.-Tomato Soup.-James H. W. Huckins, Boston, I claim the composition made in manner and ot materials sub-
stantially bereinbefore specifled. 47,546.-Rotating Stop Cocks.-Daniel Hurd, Chicago, First, I claim the combination and arrangement of the jacket, $\mathbf{E}$,
and the barrel, F, provided with the three series of holes, $a^{2} a^{"}$ and 8, operating as and for the purposes specified and shown.
Second, Iclaim in combination with the above, the employment
of the dial and polnter, arranged as and for the purposes described. of the dial and pointer, arranzed as and for the purposes described.
47,547. Jacks and Mules for Spinning Yarns.-John 47,547.-Jacks and Mules for S
Goulding, Worcester, Mass.:
First. I claim the combination of a serles of prostrate spindles, roubstan tialiy as set forth
second, The combination of a series or second, The combination of a eeries of prostrate spindles, roller
jaws turning spool sup port, movale carriage, and upright, guides
for the carriage, substantialiy as set forth. for the carriage, substa ntialily as set forth
Third. The combination of the rising and descending cariage and
roller jas With apright guides for the carriage and a rack, sub-
stantiall as set forth.



 motion to roiler jaws and zurlung spoo support, wit instrumenta.
ities for stopping the revolution of sald jaws and spool supprot,
when the length or roving requred for one sinning operation has Seventh, The combination of a series of prostrate spindles with
swotrains of driving mechanism and wit shiting mechanism io
put the spindles In connection with one or other train of driving two traing of driving mechanism and wit shifting mechannsm to
put the spindles lin connection with one or other train or driving
mechanism and disconnest them therefrom, substantially as set
 stantially as set forth.
Nlinh, The combination of a series of prostrate spindles and the train or backing-ouinechanis, ment, mectanism for varying the
 moverenth, The combination of a serles of prosirate spindles and
the train or drivig mech anism for impelling then with varyng
the train of ding ding
speed during winding, with mechanism for changing the varying speed during wing inge, with mechanism for changing the varying
speed substantially as set forth. Tweifh, The combination of two series of prostrate spindles and
their apurtenances arranged back to bact with one set of driving
mechanism, substantially as set forth. 47,548.-Machinery for Making Screws.-H. A. Harvey, First, I claim the comb



 machine with an elevator and a hopper and its accessories, substan
tially as described, whereby headed banks may be converted lat acked blanks, substantially as specilied.
Third, The combination of a nicking machine and a threading machine Tith an elevator and a hopper and its accessorles, rubstan-
 specifled.
47,549-Machinery for Making Screws.-H. A. Harvey I claim. First, The combination substantially as described herein of hoppers or receptacles, forwarding ways, de liverlng apparatus,
and shaving, nlicking and tlireading machines, whereby headed
blanks may be thrown into and Fthout manuel labor, the machine operating on the blanks, beews arranged on different levels as decribed, and the blank d descenuin
rom one machine to another subsiantlally as ret forth. siecond, The combination of a nicking and shaving machine, on
different levels, and in working connection with each other by
means of as
 threading machine, on different levels and in wor king connectio
with each other, by means or apparaus, substantialy such as de
scribed, the whole arranged and operating substantially as specifled I also claim arranginged and operating substantially as specifled
Ind nicking, also nickng and
threading and also shaving, nicking an ic tireading machines, on direrent levels, in such manner substantially as described, hat
lanks may be transferred from one machine to another without
landling, substantially as set forth. 4,550.-Apparatus for Carbureting Air. Daniel Hurd
(assi,rnar to himself, Edwin K. Hurd and Amasa E
Swift, Jr.) Chicago, Ill.:
rical vessel, A, the flo ors, g hi, the peculiar curved vertical parti-
 7,551.-Lanterf.-John H. Irwin. Chicago, Ill.:
Frts I claim ylviding the guard of a lantern, in two or more Second, I Iclasm connecting the parts of the guard by a hinge upon
one side and the catch, , or its equivalent upon the other, substan tially as shown and described.
Third, I claim providing the parts of said guards with the curve
projections, a, substantially as and for the purposes specifled and Fourth, I claim the combination and arrangement of the guards,
a and b, etc,, the rings, c d, substantially as slown and set forth. 47,552.-Toy.-H. C. Ketcham, Bloomfield, N. J. ratam the a pparatus called the mystic cord constructed and ope [This invention consists in the construction of a toy called the yystic cord, the cord being concealed in the sides of two or mor to pass each other.]
47,553_Horse Hay Rake_George W. King, Green
ville, N. Y.: I daim. First, The lever. N, in combinatlon with plate, h , a nd arm anner substantially as and forthe purposes hereln set forth.
Second. The lever. D , in combination with lever, E , arranged an operating as and for the purpose herein specitied.
47,554. - Coupling Shafts of Boring Tools.-Robert H Lecky, Allegheny City, Pa.:
I claim the use of the conlformed base, $\mathbf{E}$, and angular groove, $R$
 The whole belng constructed, arranged and operating sub
tartially in the manner hereln described and for the purpose se
47,555.-Coupling Shafts for Boring Tools.-Robert H.
Lecky, Allegheny City, Pa.:
I clalm constructing the screwthreads of nocket joints for oll
ools, etc., in the manner substantlally herein described and for the purpose set forth
7,556.-Belt Buckle_Ferdinand and Charles Lemme,
 substantially as described.
7,557.-Gold Separator_-Wm. H. Long, Mountain City,
First, I claim conveying Ithe I productof the battery through the mercury and dischargling it beneath the same, by creating a avacuum
at the end of the conveying tubes, $D$ ' $D$, substantially as and for the purposes hereln specitied and shown.
Second, I claim the employment of or more tubes, $D D^{\prime}$, ar Second, I claim the employment of one or more tubes, D D', ar
ranged and operating substantially as and for the purposes set forth and described.
Third, I claim the combination of one or more air tubes, $C^{\prime} C^{\prime}$, with
the tubes, $D D^{\prime}$, arranged and operating as and for the purposes shown and set forth,
Fourth, Icaim the combination and arrangement of the aprons,

47,558.-Pulley Block-Peter Luck, Williamsburg, N. Y.
I chim the movable side wing or wings applled in combination With the locking pin and with the ar whe of the sheave or sheaves of a
pulley block substantially as and for the purpose, set forth. [This invention consists in tie application to a pulley block of one mung upon the axle of the sheave or sheaves in the pulley bin and such a mannerthat by with frawing the locking pin said movable side wing or wings are liberated and free to turn down, ana thereby free access is given to the sheave or sheaves in the block. By this arrangement much time is saved in hitching up the rope.]
47,559.-Lunch Box-John F. Morgan, Boston, Mass. scribed either with or without a bottom receptacle.
(This invention principally relates to a peculiar construction of a lunch box whereby when empty it can be folded intoa very compact 7 convent shape for being carried.
47,560.-Means for Adjusting the Driving Wheel of Sewing Machines.-Nicholas Niederpruem, Buffalo, I claim the arrangement of the sliding frame, F, thumb screw, E,
and jouanal boxes, e e, in combination with the table top of a sew-47,561.-Lubricator.-L. H. Olmsted, Newark, N. J.: I claim a hollow shait with an aperture or apertures open from the
interior to the exterior. said apertures being closed with leather or nterior to the exterior. said apertures being closed with leather or
any other substance that will produce the Intended effect, for the pur-
pose any other subs
pose set forth.
, 562.-Preparation of Nitrate of Potassa-H. S. OsI claim the manufact, Nure of nitrate of potansa form the lixifum of
ood ashes, in the manar substantially is ce: cribed.

7,563-Animal Trap-George W. Pagett, Adam's Trap, I claim. the comblnation of the catch and head board thereby
holding a poised platform stationary until the treadle holding a polsed patform stationary until the treadie is depreaned.
Also the sationary bait pans in combination with the efla alucing
lever treadle, so arranged that the rat must come in ewotact will ever treadie, so arranged that the rat must come in crontact wink
the treadle betore it in in reach of the ball, consequently the plat-
corm falls, leaving the bait untouched. 47 564.-Apparatus for Preparing Peat for Fuel-Nathaniel $F$. Potter, Providence, $R$. I.
scribed, with a movable carriage, for the pur poses speciffed peat, as de second the combination of the cluthe, $H$, with the pinions, $F F^{\prime}$,
and the toothed gears, $G$ G , for the purpose of imparting motion to Thed. as described for the purposes specifled
47,565.-Globe Cock.-James Powell, Clncinnati, Ohio r claim thecombined valve and valve stem constructed and guided
substantially as hereln set forth. 47,566.-Stone Gatherer-J. L. Quinby, Pleasant Grove,
Pa. Antedated April 26, 1865 :
 , and for the purpose hercin set torth, 1, arms, $M$ M, M, and cords, $q$, in
second, The shant. H, the bars, I
combination with the lever, d, bearing, a, shaft, E, and lever, G, all
arranged substantially as shown.
IThis invention relates to a new and improved machine for gath le from which they may be reaully discharged at the will of the driver.]
47,567.-Cooking Stove-Lewis Rathbone and William claim gratang, N. Y.
We claim grating the back plate of a stove so that the drart Que of sald a paint near the base to the top thereof, in such for mamber in rea oal are caused to burn. substantially as described.

 cross
described.
47,568.-Cultivator.-William Rhodes and Moses Porter, Lovington, Ill. Antedated April 20,1865
 Sraft in the manner and for the purpose herein set forth. Will from the tonsue, $E$, to the roller, $F$, in the manner and for the
purpose described.
47,560, - Apparatus for Heating Buildings.-Hamilton First, I claim the series.of of radiating pipes, 12 , etc., arranged in a
ot atrchamber with in the chumney and so provided with cro.s or ot air chamber within the chunney and so provided with cro.ss or
oonneting pipes and valves that the dratt may be varied at pleas-
ure from a direct to an up and down dratt substantially as and for Second. II combination with the hot air chamber above described,
claim the flues or passages, d and e , constructed and arranged to I ceaim the fuues or passages, d and e, coostructed and arranged to
operate substantial a a and ror the purpose set forth.
Third, In combination with the hot alr chamber above described
I chaim the flues orp ansales, claim the flues orp asasages, g and h, for the purpose oi admitting
cold or fresh air from the room or from outside of the building, as
herein set forth. 47.570.-Tug Buckle.-Clark D. W. Ries, Edwards, N.Y I claim the comblnation of the hinged bar. Il, with the tongue, $K$,
prolecting from the inner bar of the buckle, substantlally as de-47,571.-Tool for Marking Dice, Etc.-Calvin B. Roger I clal re the implement. A, constructed and operated sabstantial,
as a bove der crived, for the purpose of blacking dice tablets and oth
articles IThis
[This invention consists in the construction of an implement for alined in the work, and whereby also the same can be done with reater neatness than has been possible with the implements hereto ore used.]
47,572.-Machine for Cutting Ivory.-Calvin B. Rogers
Deep River, Conn.: First. I claim the cutter, $\dot{H}$ operated from below the bed upon the Fider side of the work while it is held upon the beu, substantially
us above described. Second, I Ilso claim the combination in machines forcuttingivory and other substances of a hoding rod applied withn the kerf of
cutter with a cutter which dvides the work from the stuff, and with atter with a cutter which divides the work from the stuff, and with
a drIII or centering or marking cutter operated trom below the work
ubstautlaly as described. This
(tting invention consists in various improvements in machines for an to cut out his work with perfect edges and with great facility. 47,573.-Bucket Ear.-Lynford Rowland, Philadelphia I claim as an improved article of manufacture a baill ear for buck.
ets and other vessels, made substantially as hereln shown and de
scribed.
(This invention relates to a peculiar construction of ball ears fo ant, etc, wherejy they can be set upon the buckets ha such ame, the advantages of which are manifest.]
7,574.-Harness Buckle.-Cyrus W. Saladee, Putnam Oirst, $\mathbf{I}$ cla
 Sccond, The buckle, $G$, in continuation with the tongue, $F$
Third, Pivoting the buckle to the tongue in the manner described.
Fou:th, Forming the tongue, $F$, as a combination of plate, $A, 10$ Fimanner The stud , , or its equivalent, operating as described, in
Fombination with the indentation, V . 47,575.-Lock.-James Sargent and H. W. Covert Rochester, N. Y.:
We claim a magnet, emploved in combination with the mechanism
of a lock, in sucl, a manner as to dlisconnect the action of the don,
equivar equivalent, In conndination with the magnet, $E$, we also claim the employment
of the armatures, $G \mathbf{H}$, the former liaving the dog, $g$, attached, and
 to enter the notches, substantially as set forth
In combination with th gate I, we also claim the shoulders, m
and the cam pin, 0 , arranged and operating substantially scribed.
W, aliso clalm the tumbler, $K$, in combination with the armature W, substantiaily as herein set forth.
We also claim retanning the permutation wheels in place on their
bearing and preventing them from coming in contact with each other, by means of the grooves, $J J$, and $\operatorname{pins}, Z \bar{Z}$, or equivalent We also claim the combinaticn of the spring ring, u, and center,
w, constituting the permutation wheels, substantialis as and for the

47,576.-Machine for Boring Hubs.-Peter Schuttler, Hrat, I ciap the employment, In combination with a machino
pivoted bed, C, or its equivalent, substantlally in the manner and





 47,577.-Mode of Anial gamany the Precious Metals. Charles A. Seely, New York City:
Ine melaim the injection of steam or water, or both, at the bottom or 47,578.-Steam Gage.-Thomas Shaw, Philadelphia, Pa
 47,579.-Circular Knitting Machine.-Charles Shirtclif Philadelphia, Pa.
 47,580.-Sleds or Carriages.-Henry Smith, Naubuc, Conn.:

 47,581.-Lining for P'etroleum Barrels.-Wm. H. Stone,

[This solution conssts in furnishing barrels with a lining of pure wax, procurec by heating sald barrels or packages to 180 or 200 de
rees, with a quantity of wax in them, so that the wood will absorb rees, with a quankity of wax in them, so that the wood will absorb
quantity of wax, and the surplus can be readily made to run of, reaving the inner pores of the wood saturated with the wax.]
47,582.-Fifes and Flutes.-A. H. Stratton, New York
 nithe, orstructed and operating substantlally as and for the purpose

 47,583-Apparatus for Shifting Sugar Pans.-Milberı Frist Ibets, Lancasters, Ind.:



47,584.-Globe Time Piece.-Theodore R. TYmby, Saraclaim Sprags, N. Y.:
revoling bitachng the axis of a terrestrial globe to a dial, and
poses herein spoce in tenty four houra, substantall [This invention consists in attaching an ordinary clock dal. to a dial, and revolving both once in twenty-four hours, in such a manner that the globe stands out besond the front of the clock case and the ellect of the time-piece is materially enhanced, while it serves at the same time to show at a glance the difference of time in places of difrerent longitude, or the difference of the time between
any place on the whole globe, and the place where the clock is used. without being compelled to turn the clock [round or to.look behind
the case.] the caso.]
47,585.-Globe Clock.-Theo. R. Timby, Saratoga Springs. N. Y.:
I clafn a \&iobe revolving once in 1 wenty-four hours, in combina
tion with a ined dial and mo ving hands. substantarlaly in the man
ner and for the purpose lierein shwwn and described described.
n twenty-four hours, under a stationary index, one or more once revolving upon a clock dial in such a manner that by said cloct dia and revoling hands the local time isindicated in the usual manner and at the same time the globe and the stationar index affords the means to read off the diff erence of time in places of different iong the place where the clock is used.]
47,586.-Timing Explosive Shells by Clock-work.-FredFirst I Tlaim exploding a Chicago, Ill.:
First, I claim exploding a bombshet, by means of a clock-work Second, Providing the clock-work used within a bombsh hell for ex-
ploding the same 1 ith a re gularing apparatus, by means of which
 Fourth, The combination of the clock-work movement with the
roo, M , and the fulminating capsuule for exploding the shell, sub-
stantially in the manner described. Ftantially in the manner described.
 47,587.-Horse-rake.-H. Tunison, Whitehall Grove, Ill:: the series of teeth, ata, and pr. Frded with the reversible rods, w, or
their quilalents, atached separately, as shown for the purpose of
enabling it to be drawn and operated by anim, their equivalents, attached separately, as shown for the purpose of
enabling it obe drawn and operated by animale acting ndepted-
ontly at each end, substantially as herein shown and described. 47.588.- Lock.-Conrad P. Wagner New York City :


from the other parts of the lock, forming a guicle for the bolt. $D$,
and a bearine for the tumblers and their central spindle sulstan-
tially as herein Third, The sleeve, M, with one or more slotted flanges or tumblers, tially as and for the purpose herelin specifled.
Fourth, The cover,
cured by mean incloslog of the permutation plates, secured by means of tive or more revoring buttons. $Q$, a plates, se catches,
u, subs tantially as and for the purpose herein tepecifted. 47,589.-Blank for Scythes.-Hervey Waters, Northbridge, Mass.:
I claim the double rod or blank for two four or more plates, when
shaped and arranged substantlally as and for the purposes specifed 47,590.-Machine for Rolling Metal.-Hervey Waters,


47,591.-Horizontal Baling Press.-John D. Wilber
Pleasant Plains. N. Y.: First. Iclaim thains, N. Y.:
 Second, The opening, e, employed in the described com bination,
sith and relation to the follower, D, and slots, cand $d$ to admit $\alpha$, ith and relation to the
the introtoction ot the mat
use of doors, an explaned.
IThis invention relates to a new and improved baling press, of
that class in which two horizontal press boxes are employed, in orde hat the material to press box, while the material which was previously placed in the therpress box is being compressed within it.]
7,592.-Ox Yoke.-Erastus S. Woodford, Winsted, Conn.:
I claim the spirally grooved rod, $D$, by which their simultaneous
movement is directed, thus adjusting the length of bow by which
ach $0 \times$ works. 47,593.-Seed Planter.-Lum Woodruff, Ann Arbor, Mich.:
First. I claim the conical dropping tube, A, consisting of the cone
a, with the partitions, b b, separating the space between the con a, with the partitions, b b, separating the space between the cone channels, for the more effectual scatiering of the seed the whole
being constructed and arranged subsiantialiy in the manner and for
the purpose above the purpose above specifled
Second. I claim the arrangement of the small triapsular dras
B, with the teeth, $t$, when placed on each side and in irint ofthe urrow tooth, d, and the covering teeth, e e substantially in the manner and or the pheposes set forth in, the e ebove specitication.
Third, I clalm the adjustable cross bar or cage c , Third, I ciaim the adjustable cross bar or cage, c, when movably
attached behind the eteethe e, sothat it may be ralsed or lowered to
control the depth of workiog of the teeth, e e, as described in the
47,594.-Spring Bedstead.-Wm. Woods and E. Smith . Mass.
ve ning crososs the combsind andzation of the two sets of springs, inter the manner and for the purpose
47,595.-Chain for Water Elevators.-Philander Ander
son (assignigr to himself and P. K. Bronson), East I claim as an improved article of manufacture, the malleable 1 ron
quare, or fat link chain. the links and swivel betng constructed and
onnected in the manner shown and for the purposes specifed. 47,596.-Grain Dryer.-Lewis S. Chichester (aksignor to Mills), Brooklyn, N. Y. Ante I claim, First, The combination with a drying or cooll np app aratue
or grain, of two or more ele vators, suostantialy as specifien, so that for grain, of t tro or more ele vators, suastantialy as specififen, so that
the grain can be passed through the dirying apparatus, and again
elevited and delivered, or elevated and uelivered at once, substanLally as s ecifled.
Second, I claim
Second, I Claim a series of flat drying ta bles for grain, inclined in
alternate opposite directions, and receivng the grain from the bot
om of one set of tables upon the apex of the tables below, substan om of one set of tabies upon the apex of the ta bles below, substan
thall as specifled
Third, 1 clalm the combination of the series of tables, $o \mathrm{p}$, incline n alternate opposite directions with the hollow walls, q t , formin 47,597. - Hanging Circular Saws.-W. R. Close (assigno to himselt and G. W. Merrell), Bangor, Maine I claim as my improvement or invention, for centering a circular
saw, or applying it to its arbor, the combination describu, the same
 provided with the recess, i, and the polygonal head, k, or the irequiver
alents, and the whole belng arranged substantially as specif ed.
47,598.-Pulley Block.-Robert P. Fuller, Machias
Maine, assignor to Henry Richmond, San Fran
cisco, Cal.:
I caime the combination of the grooved checks, A A, strips, C C
netallic strap, a a b b', a nd hook, $\mathbf{D}$, all constructed and arranged as and for the purpose herein specifed.
(The object of this invention is to construct skips ${ }^{3}$ blocks in such manner thatithe cheeks of the same will be prevented from splitang, and to this end the cheeks are arranged with the grain of the
wood, at right angles with the metallic strap which encompasses the block, the straplbeing fitted in grooves in (the cheeks, so that the outer surfaces of the former will be flush with'the;outer surfaces of the latter.]
47,599. - Borer for Wells.-Thomas J. Lovegrove (as signor to himself and Henry Raldwin, Jr.), Phila delphia, Pa.:
I claim, Frist, A A rill, with two or more culting edges, eloped from
toc to heel, at an angle to its line of vibration, substantially in the me to heel, at an angle th its sine of vibration, substantially in the
manner described,
er than the the drill, as set fo the the of boring a hole of larger diameSecond, The combination with the drill of the inclined wings or
ane the drill automatically, and of smoothing and rounding the hole, a set forth,
third, A tubular jar, so constr
moving detritus from the well.
Fourth, A cylinder containing a chamber which serves the double
purpose of an air cylinder and a detritus chamber purpose of an air cylinder and a detritus chamber
manner that one of the tubes of the fir shall torm the fiduction sixth The comb hamation. in an instrument for boring wells, of a hol
ow drill and a tubular jar. Seventh, The combination of a hollow drill, a tubular jar, a sand
pump, and a flexble hooe or discharge pipe. and ratchets, $d$ d', $t$ ') prevent its backward movement, substantialify as described.
47,600.-Borer for Wells.-T. J. Lovegrove (assignor to 1 claim, First, Rotating a baring tool by Jiydraulc pressure, sub stantlally In the manner described
second The ombination of a tubular jar, rotated by The fint paselne tirough it, substantially as described in one direc Third, rbe camb nation with a tubular jar, rotated in one direc
tion by hyd ratic pressure ot a ratchet or vhpr detent, to prevent its
rotation yo the opposite direction, substantially as described. rotation In the opposite direction, substantlaily as described.
Fourth, The comb ination of a rotating drill with a discharge pipe
with a swiveling joint, substantially in the manner deecribed, forth ${ }^{\text {Fifth }}$ Suspending and viorating a rock drill by two popes as set
two

47,601.-Rock Drill.-T. J. Lovegrove (aselgnor to him self and Henry Baldwin, Jr. S, Phitadelphla, Pa. :
I claim a rock drill, Ing cutting edges around the perforstion in combination with
zative substantially as described, for the purpose of removing the
detritus tirough the drill. Second, A drill having part of its cutting surface radial to its ce
tel, and at a right angle to its line of vibration, and the other part
sloped downward trom hull to toe, at an obtuse angle to its line sloped downward trom hull to toe, at an obtuse angle to its line of
vibration, substantially in the manner described, for the purpose of
cuting forth.
Third, A drill having two or more cutting surfaces on one side,
and a
 onif suriaces to be removed by the single cuitur.
Fourth, A drill having cutting edges on diflerent planes, the one
horizont, land the other at an obtuse angle thereto, substantlally
and described.

diffierent horizontal planes, of the wings or :langes for rotating the
drill, substantially as described. 47,602. - Machinery for Forming. Baskets.-John W M R. Jenkins and Cyrus Sumner, Ediaburgh, N. Y.:

 Tribed. I claim the vibrating lever, $R$, a nd the guide spring, $T$, sub 47,603. - Device for Securing Grain Bands.-John Nelson assignor to himself and Wales Needham), Rock ford, Ill.
I claim securing the ends of the twine or cord bands used for bind-
ing sheaves of grain by means of metallic clampe applied in the
manner, without any knoting of the band in fastening as hereinbe ore set forth
47,604,-Machlne for Cleansing, Dressing, and Cutting Flax, Etc.-Ezekiel Phillips, Blackstone, Mass., as-
signor to himself and Danlel B. Pond, Woonsocket,
R. I.: 1 claim t
claim the combination or machine as consisting not only ofthe
nter mittent feeding mechanism, a and the movable knife or mechan are grid or grating (arranged in the case as set forth) and a rotary Deater, so arranged as nut only to operate with the knife and causs
it to cut ofrithe flax or forous material, as explained, but to beat and in
comb or or dress it, and subsequently discharge it from the maclune
substantially as specifled. And furthermorecticledim for use in this particular class of ma
Anines the sectional driving gear, 1 , as made not only with an arc o eith, but with an auxiliary tooth, supported by a aprito arranged pose as bereinbeforc explained.
47,605.-Machine for Cutting Nails.-Edwin Reynolds eld, Conn., assignor to himsels a nd Benjamin I claim as my improvement
zation with two pairs of cutter heads, each on machines their organ
 any other movecient than its progresson or feed the nail plat 47,606.-Manufacture of Metal Boxes.-Wm. T. Slocum
(assignor to James S. Mason \& Co.), Philadelphia

## Pa.:


 end bed
serbe
7,607.-Pneumatic Churns.-A Abie J. Smith, Litchffeld
Conn., Administratrix of the Estate of Andrew $P$ Slaim, deceased
I claim, First, The double-action bellows, operated by a crank and
pitman from the drivig shaft, the vertical rotatigg hollow shaf pitman from the driving shaft, the vertica rotating hollow shat
having holes in its lower bearing to receive the wind from the be
ows and distribute it in the cream. in the ows and distribute it in the cream. In the manner herein described
Second, 1 claim the valve, it, in the recess, in, and the air chambe in combination with the induction holess, o o, in the bearing of the Third, I claim the horizontal air tube, I, with its openings, $n$ n, in
comblnation with the beaters, $, m, 0$, operating in the manner herein escribed for the purposes specifled.

## REISSUES.

1,943.-Magazine or Self-loading Fire-arm.-G. W
Hughea, Bloomington Inl. Patented Nov. 15, 1864 First. claim pivoting the rolling breed h-piece, C, upon the circu Sal
Second, I claim the sliding breecl, block, D, when constructed
rith the flange, having an opening for the hammer to strike
through, and operating in connection with block, e , as hereln set Third, I claim pivoting the lever guard, b, hreech-plece, C, ham
mer, E, and the lidependent cooking device, all upon a single boit Fourth, I claim the retractors, $\mathbf{g} \mathbf{\Sigma}$, when constructed and operat Ing as set forth
FIfth, I Caim the use in a magazine gun of a chain, constructed
and operating substantlally as set forth sixth, I claim the plate, G. or lis equivalent, constructed and op
erating as and for the purpose herein set forth. rating as and for the purpose herein set forth.
Seventh, I claim the nidependertcocking device, when constructed and operating as shown and described.
Ligitith I Iaim diliding the rear portion of the stock longitudin ally and horizontally, for the purpose of con structing a magarine
thereln, and obtalning access to the same, su betantialy as and fo $1,944 .-$ Feathering Paddle Wheel.-Manley Paddle Wheel Company, New York City. Patented Jun 4, 1862 :
We claim the combination and arrangement of the paddle of a the paddie wiheel. in such manner that the center of the padd is situated in such position that the pressure at the end of the pad
deadiacent to the feathering mechanism is dilidide equally or sub
stan tially so, between the adjacent gide frame of the paddie whee and the
1,945.-Mode of Preparing Concentrated Food.-John H. Schenck, St. Louls, Mo. Patented Nov. 22, 1864. Antedated July 15, 1863 :
First. I claim the process lerelt described of preparing, cooking,
dessicating and pressing conce trated food, substantilily as set'


1,946.-Barrel Machinery.-Wm. Trapp, Jr. Elmira,
N. Y. Patented Oct. i, 1845. Reissued March 10, 1849, and extended: 1,181 . I claim, First, The combination of the slide rest, k, guided in the second, The combination of the cylinder, E, open at both ends, 80
that voth ends of the cask may be worked oft without changing with the ring chucks, 0 , for fastening the cask into the cyllinder, and Third, The crozing tool, $v$, with the changeable face plate, w, as
hercin set forth.
 sented. Ffith, Ilikewise claim the peculiar construction of the tool for
howeling the cask, substan tially as degcribed. Sixth., Also. the, pecullar constructlon of the tool for chamfering
the end of the barrel, as above described. 1,947.-Barrel Machinery.-Wm. Trapp, Jr.i Elmira, 1849, and extended: 1, 1845. Reissued March 10, First, In barrel machinery I claim Jointing the edges of staves,





