## Recent American Inventions

The following inventions are among the most useful improvements lately patented:-

## POWER LOOM.

This invention consists in a novel system of cones of pulleys for supporting and operating the harness, whereby several important advantages are obtained. It also consists in certain means of producing a slower movement of the harness at the time of crossing the sheds as compared with the greater portion of its movement, whereby the loom is enabled to be driven at a higher velocity ; that is to say, to make a greater number of picks per minute, withoutliability to injury to the warp at the time of crossing, the shed. The patentee of this invention is Benjamin F. Knowles, of Providence, R. I.
fire brick oven.
This invention consists in a novel arrangement of a furnace, heating flues and escape flues, in combination with a chamber of arched form, whereby a great saving of time and fuel is effectedin the baking process, and, by a quick baking at a regular but not too intense heat, fire bricks or other articlesof betterthanusual quality are produced. Louis Auguste Boisson, of Lyons, France, is the patentee of this invention.

## tire heater.

This invention consists in the employment of a cylindrical furnace with a movable top, having two or more concentric chambers in it for receiving tires of different diameters, and furnished with dampers or valves, whereby the draught of the furnace may be conducted through either one of the concentric chambers from a door in the outer box to an escape pipe diametrically opposite to this door. The credit of this contrivance is due to Alfred Ingalls, of Independence, Iowa.

## hoisting apparatus

The object of this invention is to obtain a simple apparatus which is easy of manipulation, by which barrels or any unwieldy cylindrical vessei may be tiered with very little labor. The invention consists in the employment of a derrick with a movable jointed leg, in combination with a prop, whereby the barrels, \&c., will be raised perpendicularly to the desired hight and then rolled over on the first tier with a comparatively short derrick. This invention is patented by G. B. Vroom, of Jersey City, N. J., and Solomon Kenzie, of Brooklyn, N. Y.

## machine for sewing boots and shoes.

The objectof these improvements for making stitched boots or shoes by mechanism is to hold the work done on the table or bed plate of the machine as near the awl and needle as possible, and to keep the channel formed on the outside of the outer sole, open, so that the seam will follow closely in this channel, that the raised lip of the channel may be pressed down after the shoe is finished, and present a neat appearance, as if the stitching had been done by hand. The invention also provides for stitching the shanks of the boot or shoe, in which operation the work can be presented to the awl and needle with great facility ; and it further provides for keeping the upper from the needle, ani for guiding the channel to receive the seam, through the machine ; and for sewing light or heavy, large or small work. The patentee of this invention is Francis D, Ballou, of Abington, Mass.

## Tempering Steel.

From the large number of inquiries that we have recently received in regard to tempering steel, we think many of our readers will be interested in the following table, which was prepared several years ago by Mr. Stoddart, of England. The steel is to be hardened in the usual way, by heating it to a cherry red, and plunging it in cold water. The temper is then to be drawn by moderately heating the steel again. Different tempers are required for different purposes, and the degree of heat for each of these, with the corresponding color, is given in the table.



ISSUED FROM THE UNITED STATES PATENT OFFICE for the week ending january $22,1861$.
$* *$ Pamphlets giving full particulars of the mode of applying for
patents, size of model required, and much other inf ornation usectul to

140.-P. J. Ackerman, of Paterson, N. J., for an Improved Combination of Cooking Stove and Air-heating Furnace:
I claim the combination and arrangement of the ovens, C C, fire-pot, Claim the combination and arrangement of the oven
B, and chambers, $E H$, as and for the purpose set forth.
iThe object of this inventlon is to obtain a combined cooking stove and air-heating furnace by a very simple and economical arrangement of parts which renders the stove more desirable than the ordinary ones,
While all the advantagesot an air-heater is obtained. The invention con while all the advantagesof an air-heater is obtained. The invention consists in placing the fire-pot of the stove within the ovens, or having the
iormer in direct communication with the latter, and having the ovens ormer in direct communication with the latter, and having the ovens communicate with hot-air pipes.]
141.-Wm. R. Axé, of Beloit, Wis., for an Improved Clamp
ing Machine for Carpenters:
I claim the employment of the ratchel hars, E E , in combination with
 he purposes set forth.
42.-Louis Bauhoefer, of Philadelphia, Pa., for an Im-
provement in Gum Shoes ind Boots: provement in Gum Shoes and Boots

143. - A. John Bell, of Ashland, Ky., for an Improvement in Steamboat Staging

144.-G. Bennett and R. Dalzell, of Waddington, N. Y., for
an Improved Machine for Tapping Nuts and Cutting Screws:
We claim the combination of the expanding die-box the revolving
plate or blank looler and expanding bolt horider, when the sanne are ar-

145.-A. E. Blood and J. B. Blood, of Lynn, Mass., for an Improvement in Sieves:
 146.-L. A. Boisson, of Lyons, France, for an Improve ment in Ovens, for Baking Fire Bricks:
I claim the arrangement of the furruce or fyurnaces, B B, heating flues

147.-Wm. Chesterman, of Peosta, Iowa, for an Improve-
ment in Apparatuses for Evaporating Saccharine Juices:
claim, first,
I claim, first. The arrangement of the train of pans, A B C, the con-
inuous fue, E , running under the whole in succession, and a chimney
 Second, The arrangement of a water vessel, I, float, J, and lever, $K$,
with the pans tuues, and chimeydampers of a sugar evaporator, in the TThis invention consists in $i$ ant derscribed.
[This invention consists in a certain arrangement of a train of pans in ombination with a single continuous flue running under the whole of them, and a separate chimney for each pan, and in a certain system of
dampers operated by an automatic regulator applied in connection with dampers operated by an automatic regulator applied in connection with
the said arrangement of pans, tlue and chimneys, whereby a very effecve and economical apparatus for evaporating and concentrating cane juice or other saccharine liguids is obtained. ]
148. -G. F. J. Colburn, of Newark, N. J., for an Improved Evaporator for Hot Air Pipes:
I claim, frst. The arrangement of the reflector, C , in combination
with the evaporating vessel, $A$, and hot air pipe, $\mathbf{B}$, as described, for the

 or its equivalent, substantially
149.-George Cooper, of Thompsonville, Conn., for an Im-
rovement

## I claim, as a new article of manu facture, the seving in the specification, and reppesente din the drawing.

150.-Reuben Daniels, of Woodstock. Vt., for an 1mpro
ment in Machines for Reducing Fibrous Material
I claim providing the working face of each with pointed teeth, a and

 able to and with
purposes set forth.
151.-N. E. Doane, of Hannibal, Mo., for an Improvement in Weighing Carts or Wagons:
 graduated beam, K, and frame, L, combined, arriz
a cart or wazon, as and tor the purpose set forth.
(The olject of this invention is to obtain a simple weighingattachment for carls and wagons, one that may be applied at a very moderate cost, 152. ment in Sewing Machines
I claim, first, The combination of the feeding hand and nippers with a connecting adingstab le inks. osonstructed and arranged as described,
whereby ${ }_{\text {a }}^{\text {a }}$ positive lateral vibratory motion is communicated directly



153.-Lewis Eikenberry of Easton, Pa., for an Improve. provement in Iron Bridges
 for the purposes set torth
Second, The combination of double angle iron or U-shaped braces

## with single angle iroa uprights or diagonals, substantially as and for the purposes set forth. purposes set forth. Third, A side frame for a bridge which has its uprights or diagonals constructed of U-shaped or double a angle iron, su bstantially as described. 154.-George Esterly, of White Water, Wis., for an Improvement in Harvesters:  slotted sanciek $G$, the dividing apparatus and a set screw, $k$, substan- tially a a and for the purposes set forth. Second, The combination of the angular adjustable bar, $M$, curved slots, $x$, , and axial pivots, S3 and and a, hinged platform, $K$, sub-  

. Fifth, The employment of the vertical pendant tension rod, S2, in
combination with the reel bearer, S , ividider, F, and the \&rain wheel
axie. S 3 , substantially as and tor Sixth, ,he combination with the the divider, $F$, $G$, and inn inner adjustable
wing , of an outer adiustable wing, $J^{\prime}$, arranged substantially as and
for the purposes set forth. Seventh, The combination of the short angular platform, $K$, with the
continuation, $L$, and raker sempel, $L^{\prime}$, facing the platiorm laterally; he continuation, $L$, forming e minitr, shand and being located berween
he sill, $A^{\prime}$,of the driving wheel frame the driving wheel and the axle the sil, A', of the driving wheel frame, the driving wheel and the axle
ther eft, and otherwise constructed so that the raker shall be located be.
tween the front sill, A, and the exle of the driving whel, and be sup-
 connection, one or more knife edge bearings or pivots, $\mathbf{Z}$, one or more
screws or bolts, $x^{\prime} x^{\prime}$, and a thrust plate or bar, $\mathbf{N}$, substantially as and
foren or the purposes set forth.
155.-George Esterly, of White Water, Wis., for an Im-
provement in Harvesters:

$$
\begin{aligned}
& \text { provement in Harvesters: }
\end{aligned}
$$

provement in Harvesters:
I claim, first, The arrangement of the reel and cutting apparatus ob-
liquely to the side of the driving wheel frame and platferm, P n, when
the rear line of the platform is oblique to the driving whecl fon the rear line of the platform is oblicue to the driving whel frame, and
its inner corner terminates near the axle of the driving wheel, substan its inner corner terminates near the axie of the driving wheel, substan
tially as and for the purposes set forth.
Second, The arrangement of the thrust or screw rod, $I$, and curved brace, J, with the dividing apparatus, grain wheel axle
port, a, substantially as and for the purposes set forth.
156.-O. C. Evans, of New York City, for an Improvement in Lamps:

## A, constructed with horns, $t$, and slitied openints, as described, with

Second, In combination with the aas, cc. chamber and openings in the
wick tube of the guards, c c, and petticoat cone, D, the same being ar
157.-I. N. Felch, of Hollis, Maine, for an Improvement in Hub Machines: I claim the combination lat he attachment, the arrangement of the re-
ciprocating knife frame, and the wibrating swing feed frame, in the
manner and for the purposes sel forth, and boring the hub whil it
being turned by pressing up the auger through the hollow spindle. 158.--F. F. Fowler, of Crane Township, Ohio, for an Improvement in Machines for Gathering Hay:
I claim the arrangement of runners, $F$, braced as descri claim the arrangement of runners, $F$, braced as described, with the
revoving rake, $R$, tongue, T, shati, $r$, and braces, f, when the several parts have the loose connection descrived, whereby the machine may
conform to the inequalities of the surface passed over, the construction 159.-E W Fulle of
ment in Cultivators: I claim the arrangement of
I claim the andingement of the adjustable bars, E E, plows, G, rotary a, and frame, $A$, all in the manner and tor the purpose shown and de-
cribed. [The object of this invention is to obtain an implement of simple construction that will admit of the plows being ad justed both vertically and laterally, and, at the same time, admit of the use of either ordinary wheels or of a rolles and revolving harrow, and a seed-distributing at tachment, when required; the
and economical implement.]
160.-G. G. Gabrion and N. B. Whitney, of Copenhagen, N. Y., for an Improved Stave Jointer: We claim the combination of the planes, 1 and 2 , secured in the
frame 4, and made adjustable, 1 the mannerdescribed, with the car.
riage, 7 , slidingon the rod or shaft, 6 , all being constructed, arranged and operated substantially as set forth.
161.-John Griffin, of Louisville, Ky., for an Improvement in Cotton Pickers:
I claim the arrangement for joint operation ofthe tubes, A FII, valves,
C and pipes, 1 m , essentially as and for the purpose set forth. [This invention relates to certain improvements in cotton picking crops, for which Letters Patent were granted to this inventor, bearing date March 8 and Nov. 22, 1859.]
163 .-Robert Heneage, of Buffalo, N. Y., for an Improvement in Hemp Breaks:
 versing the motion of the machine, so that the parce of hemp, as it
passes through the brakes, will be bent at right angles (or nearly so) and passes through the brakes, will be bent at right angles or nearly so and
directed ownward to the dressers, the brakes operatng and holding on
to the parcel of hemp while the dressers are performing their work, substantially as set forth. , C. Louis, Mo., for an Improvement in Gas Regulators
In claim the appication of the currved plates, a a, to the fiexible dia-
phragm, C, substantially as described, for the jurpose specified.
165.-Edward Holmes and Britain Holmes, of Buffalo, N. Y., for an Improvement in Stave Machines:
We claim, first, The endless revolving iron bed, A, constructed of
jointed inks, and having stops, a' in combination with cams, whose
velecity nust he increased or diminished according to the length of the velocity must be increased
stave second, The arrangement of the jointers in frame, $L$, said frame
being operated by levers which have a connection to a cam, which canı being operated by levers which have a connection to a cam, which cant
has a horizontal adjustable movement upon its slaatt, so that the revolu-
tion of the cam (through the arrangement ot the levers) will communi-
 substantially as described.
Fourth, The arrangement of the frame, $R$, including the cutier, $T$, with the other parts of the machine , substantially as descre ced, so that
the stid frame will have a periodical movement which will cause the the said frame will have a periodical movement which will cause the
stave to be chessed thinner in the middle portions thereof than it is at Finth, The arrangement of the gages, 1234, , 8 , in comhination with
Fin lever, 1 , and rest, v, in the purposee of locating the prest, v, in the
 Alfred Ingalls, of Independence, Iowa, for an Im. proved Tire Heater:
claim combining with the horzontal circular furnace described, the inside concentric partitions, D D, movable covers, C C C , the dampers,
e e and zand and suppring rois, p p p p, all arranged substantially as and
for the purposes described.
167.-_Charles Irwin, of Buffalo, N. Y., for an Improvement in Sewing Machines:
I claim the adjustable arm, b . on the front end of the shuttle carrier,
in cumbination with the spring, f, for guiding and protecting the needle 168.-William Jarrell, of Trenton, Tenn., for an Improvement in Plows:
I claim the combination of the landside, $B$, sockets, and $f$, belt, e,
and nut, $g$, constructed, arranged and operating in the manner and for and nut, g, constructed, arranged and operating in the manner and for
the plirgostset forth, side of a plow, the advantages being facility in casting, perfect security when in posstion, and ease of removal for repair or substitution.]
169.-Levi Jewell, of Stratham, N. H., for an Improvement
in Fire Escapes: caps, EE , set serews, a a and cords, GH H,
stantially as and for the purposes described.
(The object of this invention is to combine with the roller of an ordin ary window shade a means for escaping from the building in case fire. The invention alse provides for removing articles of furniture om the upper stories of buildings in case of fire. The invention con sists in the use of a metal roller, furnished with pulleys for rolling up and unrolling the shade, and hung in strong metal brackets, which are - constructed that a brake can be applied to the roller. The fre es-
 netal casing; but when they are in use, one rope will unwind from the oller, while the other winds upon it. 1
170.-D. G. Kettell, of Worcester, Mass., for an Improved

Harness for Preventing the Fore Legs of Horses from Interfering:

 or close to
specified.
171.-D. A. King and T. Norris, of Lexington, Ky., for an

Improved Dove-tailing Machine:
We claim, irst, The boring bits, d d, and sliding bench, I , in com bination with the chisel bits, w, w, when constructed and arranged te nialy in the manner speciffed
tian wind we
Second, We claim the ombination and arrangement of the tenoning
bits, ee, the sliding bench, $K$, and the adjustable stop, y , constructed
172.-B. F. Knowles, of Providence, R. I., for an Improve - B. F. Knowles, of Providence, R. 1., for


 in the earlier and laters stages of the opening and closing of the shed,
substantially yas described.
173.- J. H. La Bau, of New York City, for an Improve-
ment in Machines for Fivisitiny Hats:

 ranged substantially as shown, to caune the heat heater, brish and spenge to

 cified.

The object of this invention is to obtain a machine by which silk or fur hats may be finished, that is to say, sponged, brushed and ironed automatically, the whole mechanism necessary to perform the work
174.-A. B. Lefler, of Canton, Ind., for an Improvement in Cultivators:
 the said parts being constructed
and for the purposes described.
175.-C. B. Loveless, of Tom's River, N. J., for an Improvement in Vapor Lamps: p.s chamber, C, having the burner, $\mathbf{B}$, and the elongated heat conduct-
ing rings, $\mathbf{R}$, performing the double function of generating gas and aid-
ing in the lateral spreading of the flame; the whole being constructed
176.-T. J. Mayall, of Roxbury, Mass., for an Improvement in Polishing Tools:
facture, the tool described forpolishing shafts reds or ther objects ol cylindrical or round formation, and
capable of revolution, the same consisting of two pieces provided with capaber on revolution, the same consisting of two pieces provided with
corresponding avaties and hinged together to admitiof their being separ-
ated and biught together for operation, as describet, the polishing sur-
faces being compesed of indiar faces being composed of india-ruber or gutta. percha, or of the varivus
compesitions of these with which emery, sand giass, or other suitable
gritty substance is incorporated, substantially as set forth.
177. $-\mathrm{J} . \mathrm{B}$. McCormick and W. R. Baker, of St. Louis, Mo., for an Improvement in Hemp Brakes:
We claim the combination of the endless belt, $k$, with the radially
sliding armed bars sliding armed bars, , as and for the purpose shown and described.
We alles claim giving a lateral movement to the said radially sliding
armed bars, f, in the manner and for the purposes shown and de-
[This invention consists in the employment or use ot a retating drum, provided with spiked or toothed bars, and stationary or operated in a novel way, in connection with an endless siatted apron arranged to
operate conjointly with the drum, whereby the hemp may be heckled and scutched or cleaned very expeditiously and without injury to the
178.-Hiram McDonald, of Union Springs, N. Y., for an Imclaim the eccentrics, 1 m , sliding plates, $\bullet p$, slides, $t \mathrm{u}$, and the ke ys, r, , place eiact the outer parts of the
stantially as and for the purpose set forth.
[This invention has for its $\bullet$ bject the bending of steamed wood, such as wagon bews, felloes, $\& \mathrm{c}$, into proper shape, by a very expeditious and simple means, and in a perfect manner.]
179.-D. S. Morgan, of Brockport, N. Y., for an Improvement in Harvesters:
I claim the combination of the peculiarly curved reel support, $A$, with
the horizontalarm, E, and supplementary divider, D, when the whole
are arranged relatively to each other and to the frame of the machine,
substantially as described, for the purpose set forth.
180.-D. A. Morris, of Pittsburgh, Pa., for an Improvement in the Manufacture of Sheet Iron:
iron (without removing the iron scale or black oxyd from the surface or iron (without removing the iron scale or
the sheets), and fort he purpose specified.
181. G. C. Munson, of New York City, for an Improvement in Tucking Gages:
I cla im an instrument or implement forming a turking gage for
attachm ent o sewing machine, cssentially as deaccibed a nd having
for its elements
 any desired width of tuck with a gentle, pressure from the edge through-
out the with of tuck, a devico or means for regulating the pressure of
the elomping plates and varin their widt apart, an outside guide to
the folded ed ede of the cloyh, at justable at pleasure, and a device or the folded edge of the cloth, adjustable at pleasure, and a device
means for urging the cooth up againt said guide all for overnijes
gether, substantially as and for the purpose or purpeses set jotith.
182.-J. Y. D. Murphy, of Half Moon, Pa., for an Improve ment in Corn Planters:
of the reciprocating seed chamber, $T$ as and for the purposes set forth. side plates, M, depesiting chamber, 'r, conducting tube
spring, a, bar, $H$, and slide, $J$, substantially as set forth
183.-Arthur Ncill, of Boston, Mass., for an Improvemen in Mold for Shaping India-rubber Pencil Heads: I claim a mold composed of a core plate, C, with its cores, a a a
marrice plate,
substantially and a described and fore, A, combined and arranged together
184.-F. H. Purington, of Willimantic, Conn., for an Im provement in Drawer Alarms.
claim the catches, $G$, arranged relatively with the springs, $D$, as
own and used in connection with the slide, $F$, to operate as and fo shown and used in con.
the purpose set forth.
[The object of this invention is to obtain an alarm for tills and drawer which will give warning when an illegitimate attempt is made to open so as to prevent them being will cause the tills or dred thereby obviating the contingency of a successful illegitimate result by repeated trials.] 185.-L. C. Rodier, of Springfield, Mass., for an Improve
ment in Tool Handles
I claim a handle for awls or other tools having the ferrule, $B$, and
screw cap, co combined and operating in the manner and tor the pur-
pose substantially 186.-T. W. Roys, of Southampton, N. Y., for an Improve ment in Harpoon Guns:
I claim, first, Encircling the barrel of the gun with one or more trans-
verse fanges, Br , prvided with valves, C, for the purpose of protecting
the face of the gunner, and at the same time enable him to take his sight.
Second, I claim placing before the rear end of the barrel a stop to
receive the back fire of the recket, substantially as described, for the purpose specified.
Third, I claim
Third, I claim the long bar, $m$, across the top of the link, $n$, to prevent
the harpon. irora being forced clear through the whale.
Fourth, I claim the vent

187.-Samuel Schuyler, of Brooklyn, N. Y., for an Improve ment in Grain Dryers:
I claim the combination of the series of platforms, $B$, with the eleva-
tors, $M$ and $N$, as set forth, and for the purpose described.

## 188.-William Sellers, of Philadelphia, Pa., for an Improve-

 ment in Ovens:I claim, first, The arrangement of the cars or pans in the oven in two
series, one ascending and the other descending, substantially as de.
scribed, in combination with the means described, or the equivalent scribed, in combination with the means described, or the equivalent
thereof, fortransferrinstrom the ascending to the descending series
within the vev, and with means for inserting and discharging at orr
near the botom of the oven and on one side thereof, substantially as near the bottom of the oven and on one side there of, substantially as
described, and forthe purpospecifed.
second, I alse claim machinery or an instrument for measuring time,
in combination with the machinery which operates the oven, in the
 ber at the lower part thereef, and in which the fire is not separated there-
from by any roof or partion, substantally as denibed the empley.
ment of the blower, or equivalent means, tor forcing in a current of air
at or near the top, substantially as described, to reduce the temperature at or near the ep. substantially as described, to reduce the temperature
when required.
189 .-Oliver Sweeney, of Norwich, Conn., for an Improved Knife Cleaner:
claim a knife cleaner having in combination a clamp, A, and a perclaim a knife cleaner
orated reversible board, $\mathbf{B}$ B, const
having
[This invention consists in the arrangement of a clamp, which serves to retain the handles of two or more knives, in combination with a supporting perforated platform, in such a manner that, when the clamp with the knives is placed on the platform, the blades of the knives rest dozen of knives can he cleaned by means of this device simultaneously and by one operation.
190.-Jeremiah Sweitzer, of Mishawka, Ind., for an Improvement in Plows:
standard, $\bullet$, and arace, ant with thanges, $s$, the whole constructed as
and for the purpeses set torth
191.-A. C. Teubner, of New York City, for an Improved Composition for Rendering Textile and other Fabrics Air and Water Tight:
I claim the composition made of the ingredients, and prepared in the
manner and used for the purpeses recited
Spring. Thistle, of New York City, for an Improved Spring Bed Bottom:
tially as described, in combination helical springs or crossbars, substan-
them, substantially as described.
193.-G. B. Vroom, of Jersey City, N. J., and Solomon Kinzie, of Brooklyn, N. Y., for an Improvement in Machines for Hoisting Barrels and Placing Them in Tiers or Rows:
or which are stationary a and the otherting on fuppor legs or supports, twe
scribed, I claim the frame, $\mathbf{B}$ and $\mathbf{B}^{\prime}$ when the whele on wheels, as described, , claim the frame, $\mathbf{B}$ and $\mathbf{B}^{\prime}$, when the wholeis constructed and
applied substantially as described for the purpose set forth.
194.-Joseph Warner, of New Britain, Conn., for an Improved Kettle Handle:
I claim a handle for lifting vessels that is composed of a curved por-
tion, A, havinga tongue and should er,
alt, at its upper end, which form tion, A, hav inga tongue and should er, a b, at its upper end, which form
a slot to grasp the edge of the vessel, the whole made as shown and de-
scribed.
[To many varieties of metallic kettles or boilers which are used in the culinary department handles are very objectionable, particularly such handles as are soldered or riveted to the sides of the vessels. The object or detached from such kettles, and which will answer every purpese of the ordinary handles that are fixed permanently to the kettles.]
195.- Sarah Jane Wheeler, of New Britain, Conn., for an

Improvement in Curry Combs.
aving concave back edges of a sufficient degree of curs of curry combs having concave back edges of a sufficient degree of curvature to give the
necessary firmness and strength withut the assistance of side projec-
tions or tions or supports, , but having rivet proiections thereon, with a back oi
corresponding curvature, so as to fit the concave backedgesof said bars,
and either made of a single piece so as to be "close," or of separate and either made of a single piece so as to be "close," or of separate
pieces so to be "open, and unobstructed between "all the bars, sub-
stantially in the manner and for the purposes specified. 196.-H. S. White, of Newport, R. I., for an Improvement I claim the employment.
clam the empleyment or use of the button, $\mathbf{C}$, and staple, $D$, at-
tached to ne of the miny
 |The object of this invention is to obtain a paper and letter file which will admit of papers and letters being readily adjusted in it, and in such by side, precisely the same as if they were bound in a book, thereby voiding the inconvenience of turning over a number of leaves in order to find consecutive pages, as is the case when the sheets are placed an
197.-W. C. Willey, of Princeton, Ill., for an Improvement in Corn Planters
I claim the arrangement of the hoppers, $F$, oscillating perforated
 purpese shown and described.
[The object of this invention is to obtain a simple and efficient ma chine for planting corn either in hills or drills, and at a greater or les epth, as may be required. The invention also admits of having it ed-distributing apparatus operated automatically or manually, as may e desired, and without the liability of choking or clogging.
98.-_W. H. Auld (assignor to himself and R. C. Brown) of Fairfield, Iowa, for an Improvement in Circular
Sa wing Machines:
Ir claim the arrangement of the pivot, a, upon which the adjustable
frame, $\mathbf{C}$ thrns. in front of the cutuing edge of the saw, , , as shown
and described, whereby the angle of the face of the saw blade may be arled at pleasure without changing the position of the cutting edge, al
val
[This invention consists in arranging the saw in such a way that the ame may be adjusted in the most ready manner to prevent its binding the kerf or marring its work.]
199.-F. D. Ballou (assignor to himself and J. L. Nash), of

Abington, Mass., for an Improvement in Sewing Ma chines:
claim, first,
I claim, first, The construction of the presser, $D$, with separately-ad-
ustable foot that es, $\mathbf{C} \mathbf{C}^{\prime}$, as shown aud described. justable foot plates, C C C', as shown aud described.
Second, The curved bearing plate, $\mathbf{B}$, with its its, c in combination
with the presser bar, $\mathbf{D}$, and foot pieces, $\mathrm{C}^{\prime}$, arranged as and serving ith the presser bar, D, and foot pieces, $\mathrm{C}^{\prime}{ }^{\prime}$, arranged as and serving
or the purpeses set forth. Third, The arrangement of the separately-adjustable foot plates, $\mathrm{C} \mathrm{C}^{\prime}$,
with the curved plate, B, openers, $\mathrm{G}^{\prime}$, and disk, E , in the manner
shown and described 200.-W. B. Bartram, of Norwalk, Conn., assignor to A. S. Dodd, of New York City, for an Improvement in Fare Boxes:
Iclaim the giving of exact change, as desired, by means of tubes, A,
adapted to dilferent coins, in combination with the nperi valves, D,
levers, B, and springs, E, constructed and operated salsmajilly in the manner and for the purpose set forth.
And, in combination with the above, I also claim the money box
lever, M, movable plate, UT X , bell, J, and register, R-the whole being
constructed and operated substantially in the manner and for the pur-
201.-N. S. Bean (assignor to the Amoskeag Manufacturing Company), of Manchester, N. H., for an Improvement
In Picker Staff Motion:
I claim the arrangement and combination of the rocker of the picker
staff within the link and upon the piece, $e$, when the rockers and link start within the link and upon the piece, e, when the rockers and link
are hinged and are operated upon by a spring, and the link is provided
with guiding ears, g. 202.-Albert Bellingrath (assignor to himself and Leonard Bellingrath, Jr.), of Atlanta, Ga., for an Improvement in Pumps:
I claim the construction and arrangement of the piston, $B$, cylinder,
A, wedge, $D$, in the manner and for the purp eses set forth.
203.-A. H. Brown (assignor to James Burton), of Albany, N. Y., for an Improvement in Machines for Cutting


This invention has forits object the ready forming of moldings on the face of frames, or similar work of oval or circular form, which may be turned in a lathe. The invention is applicable not only to the cutting or forming of moldings on frames for glasses, pictures, and the like, but also for cutting moldings on segments or sections of ovals and circles, 205.
J. T. Bruen, of Brooklyn, N. Y., for an Improvement in Sewing Machines:
frame moved and held up to its place by the socket ioint arm, $\mathbf{u}$, and spring constructed and arranged as described, and the hook, t, , and
bined with the lower needle in the manner and for the purposes set
205.-A. F. Johnson, of Boston, Mass., and J. E. Bartlett, of Stoneham, Mass., ussirnors to I. M. Singer and EdSewing Machines: I claim the combination in the same machine of two needles with a
shuttle in such a manner that the needles form two parallel rows of stitching, and that the shuttle reciprocates across the pine of direction
of the feed molion, and comnects the two rows of stitching by the shuttle thread, substantially as described, se as to form a compound seam
of three threads presenting twe separate rows of stitching on one sur-
206.-Josee Johnson, of New York (Cib, assignor to himself and John Ward, Jr., of Brooklyn, N. Y., for an Improvement in Stilts:
Iclam a stilt constructed of two pieces, A and B, joined together by
a metal socket, $\mathbf{C}$, in such a manner that the part, A , reeerves the strain
in the direction of its length, and the socket, C also serves for the foot nest or step, substantially as and for the purposes descrihed.
207.-S. W. Langdon (assignor to himself, Hiram Wells and D. G. Littlefield), of Northampton, Mass., for an Improvement in Sewing Nachines:
claim producing tension upen the shutle thread, by means of the
ssure plate, $i$, and spring, $g$, constructed and combined substantially pressure plate
as described.
208.-John McMurtry, of Fayette county, Ky., assignor to I. A. Bostwick, of Lexington, Ky. for an Improvement I claim the combination of the ribbed or corrugated back with the air
chamber and regist ers, as shown in the accompanying drawings, sub.
209.-J. P. Reynolds, of Mirabile, Mo., assignor to H. H proved Harness for Shoeing Horses: I claim the combination of the straps, e $\mathrm{e} \mathrm{c}^{\prime}$ and $v$, cords, $1 \quad u$, and
movale post, , the sald parts bellng applied, arranged and secured sub-
stantially as and for the purposes set forth. [This is an ingenious device for securing wild or vicious horses while eing shod.]
210.-Quartus Rice, of Nevada, Cal., assignor to Lorenzo Sewing Machines: I claim, first, The combination with a sewing maehine of any suit
able construction, of the gage, $K \mathrm{~K}^{\prime}$, constructed and operating substan able construction, of the gage, $\mathrm{K}^{\prime} \mathrm{K}^{\prime}$, constructed and operating substan
tially as set forth, to produce continueus tubular work.
Second The adiustable guide rollers, N N, operating in combination

 sired diameter and of indefinite length, for hydraulic hose or other uses.]
211.-G. J. Wheeler, G. W. Dunnell and William Sharp (assignors to J. C. Beach), of Bloomfield,
Improvement in Paper-makingMachinery:

 for an Improvement in Fire-escapes






## re-isstes

25.-Samuel Barley and J. H. Barley, of Longwood, Mo., for an Improvement in Harvester:






26.-Willis Humiston, of Troy, N. Y., for an Improvement in Maclines for Molding Candles:



 clamps. fre reme


27.-Willis Humiston, of Tros, N. Y., for an Improvement in Apparatuses for Molding Candles:







## 

S. A. W., of Mass.-We thank you for the list of names you send us. We do not than your hand power adached to a clum, on
any other domestic machine liker a washing or siwings machiue, is patentable; int it you desite it, we call have an examination mate a advice. 'Jhe price of the examination is $\$ 5$. A mumher' of patcolted straw-culter's have the knife arranged on a whesi, so adjusted as to American you will find engravings of sucll machines
R. R. T., of N. Y.-ludia-rubber varnish, made by dissolving india-rubher in henzole, is suitahle, we think, for protecting the seams
of glass dom phates and preventing the entramer or moisture. Indiaof glass dom phates and preventing the entramer of moisnupe Indiaslowly. To make a superior black japan tarnish for iron work, take 50 lbs . of asphatum and 8 lhs . of giom auinm, ankl fuse them together in an iron ressel. In anoti, er vessel place 12 gallons of dyying linseed oil aull bring it to the loiling prin $t$; thell pour this among the fused asplath and gum, and boil them all together with entirethal stirring tutil they are complefely inemporated and have attained to a ropy consistency; take it off and cool, then thin it down for use with spirise of turpentine. It should be applied to iron work in sereral success, sive $212^{\circ}$ or $300^{\circ}$ which shoulcher bomphly dried in an oren heated to $212^{\circ}$ or $300^{\circ}$ Fal. 'The addlition of some "amber rarnisl,", made with amber boiled in finseed oin
A. T., of (banada.-lour plan for superseding the negro minstrels by a bank of singers dressel in hurlespuce costume to represent different nations, we lave no doub would be a rery profiable enterprise if well managet. The commmity is a ways ready to pay
forgood simple music. There would be no possibility, hoseret, oi your oblisining a grant for an exclusive wight the lusiness from the Enited States govermment. Exclusive rights are gramted only hy generai laws, and the idea is not patentalle. The right of acting any ariginai play may be secured under the conyright law.
J. V. B., of Ind.-We did not receive your plan of a school honse. 'The waterraised by an Archimides screwdixelharged upon a
 chinery or of the water in its passage throngh the tule, uor any other resistance except mere gravitation, and provided that the watpr conld then you would barely raise the water, and would have no surplus power for other purposes.
P. D. G., of Minn.--'So harden a steel plowshare without having it twist, prepare a bath of naphtlin. heated to $200^{\circ}$ Fah., and after heating your steel, as nsual, to a cherry red, plunge it into the
bathtill the naphtha boils, then withdraw it and plunge it into cold water. Draw the temper in the usual mamer.
J. S., of Pa.-You can buy steel punches with letters on their ends, for making stamps, at William Ward's, 47 Chat ham-street, this city, for 18 cents apiece. These are tapered at their lower end, but he will havethem made for yoll in the form of type, at about the same price. These punches, as well as the stamps, are mate hy men
who have learned thir art, like any other trade.
I. M. L., of Ind.- You can make the iudia-mbber cement, voursel, fir shoc soles, ,y wiscolting blipon, of indiat rubhere in refined
 surch cemments are soll.
C. $W$., of N. Y.-A horse power is a power which will raise $33,000 \mathrm{lbs}$. one foot high in one minute. The machinist's trade is a $33,000 \mathrm{lbs}$ one foot high in one minutc. The machinist's trade is a
vely good one for a boy to learn. It would be well for lim to get as vely good one for a boy to learn. It would he well for
gaod anl education as possible lefore going to lis trade.
. C., of Ind.-Boiled linseed oil is the best substance known to usformaking waterproof tarpaulins. Resin varnishes will
not imswer for this purnose, hecause thry becone quitie lard when
R. M. (., of N. Y.-Large numbers of envelopes are man-
 Hise par
surnt-
A. W. T., of Del.-A continnous motive power camot be (1)tained from a permanent magnet. Was not hle machine which you
saw driven liy stetmor some other powers
N. S. B., of Ill., and J.W. H., of lowa.-Our opinion coin-

F. W., of Wia-Your jhan for superseding flat belts


W. P. K. of Mask.-The hight to which meremy wouk





A. McE.; of N. Y.-We really do not know how yon can mite cast iron with wronght iron "perfectly," in a mold, hy pouring
the cast around the wooght iron, umles, the tatter is: heated to abont the cast around the wought iron, umles, the tater is: heated to abont
the welding: temperature. Wrought irom rods, for railings, are tledtai
 harel molds: but althongh this method hatho them wefther more firmly than simple riveting, still the two metals are not fased togethem
.M. G., of Ohio.-No power is lost by yoking the cranks of two piston rols in line with the shaft of a saw mill. The cranks: of twe engines are nanaly y
T. B., of Ind.-We Velieve that a patent may be obtained for treating molds for gold castings, as you have deseribed, if it is found to be an improriment on the common modes of casting. All the engines of steamships are fitted with comnters which indicue the r-whutions of the main shaft during each voyage; yon therefore could

 iron

1. N. O., of Wis.-The substance which you send us is

H. M. H., of Pa.-We are not able to give yon the names or the princman operators at the oil mills at Franklin,
S. T. R., of N. Y.-The aerophon is essentially the same instrumem as the calicipe. It compiste of a series of steam whistles, of differems sizex. so stmud the several notes of the gammut, with ralve the musie dessired. It waspatented by J. C. Stoddard, in the Euiced States and Great Britam
M. Q. P., of Mass.-The old way of polishing cabinet work, withont rarnish, was by rubhing over its surfare with a litte sweet oil. then rubling down vigorously with a cnshtion of silk: an old silk
handerehief would answer ymur purpuse.
A. J. B., of Kansas.-The pencil point which you have selut ins appears to be composed of tin and lead. Without

## Money Received

At the Scientific American Office on account of Patent Office business, forthe week ending Saturday, Jan. 26, 1861:-
H. $\&$ N. LL., of N. Y., $\$ 30$; T. D. J., of Mich., $\$ 75$; s. F., of Pa., $\$ 5 ;$ R. \& Mer., of N. Y., $\$ 40$; 'r. II. G., of Wis., $\$ 100$ : E. C., of Comin., $\$ 32$; M. S., of N. Y.. $\$ 55$; A. M., of N. Y., $\$ 150$; (. T. S., of N. Y., $\$ 311$, J. A. M., of Mo., \$30: A. R., of Mich., \$25; S. \& R. W. C., of Ohin, $\$ 25$;
J. E. 'r., of N. S., $\$ 150:$ N. \& S., of Cmme. $\$ 10$; D. K., of Pa., $\$ 2.5$ L.

 C., of Ind., $\$ 20 ;$ A. L. W.. of N. Y.. $\$ 20$ T. T. C., of N. Y., $\$ 48 ;$ J. (O.
Jr., of N. H., $\$ 20 ;$ S. \& S., of N. Y.. $\$ 30$ E. E., of Comn., $\$ 55 ;$ L. R. of Comn., $\$ 64 ;$ S. \& R., of N. Y., $\$ 30 ;$ A. D. B., of Mass., $\$ 25$; S. T. B., of R. I., $\$ 100 ;$ A. M., of Maine, $\$ 35$; F. D., of Ohio, $\$ 25$; 'I. \& E., of
Pa... $\$ 30$ J. J. M. W., of N. Y., $\$ 40 ;$ J. E., of Maine., $\$ 30 ;$ B. R., of N. Y., $\$ 30$; J. \& D. B., of N. J., $\$ 2.5$; G. \& C., of N. Y., $\$ 25$; S. McL., of N. Y., $\$ 25$; G. S. T., of Mich., $\$ 25$; ,T. S., of Texas, $\$ 25$; B. R., of N. Y., $\$ 21$; R. \& T. S., of Cal., $\$ 250$; W. N. M., of Mass., $\$ 30$; W. F. S., of Ohio, $\$ 2.5$; C. G. D., ofN. Y., $\$ 25$; I. D. S., of N. Y.., $\$ 30$; E. T. C., of Mass.,
$\$ 25$; S. K. W.. of N. Y., $\$ 10$; F. D. K., of Mass., $\$ 25$; W. H., of Iowa, $\$ 25 ;$ S. K. W.. of N. Y., $\$$
$\$ 21$; I. \& M., of N. Y., 25.

Specifications, drawings and models belonging to parties ing the week ending Jan. 26 , 1861:
R. \& MeC., of N. Y.; L. P., of Com. ( 2 cases) : D. K., of Pa.: H. D., O Ohio; A. M., of Maine; A. D. B., of Mass.; J. M. R., of Ky.; T N. I.: E. P., of Conn., J. S. S., of N. Y.; J. R. R., of Mass (3 cases): N. Y.; W. F. S., of Ohi• ; E. T. ©., of Mass. ; S. McL., of N. Y.; T. \& N. Y.; W. F. S., of Ohic; E. T. C., of Mass, ; S. McL., of N. Y.
t., of Mich.; B. R., of N. Y.; I. S., of Texas; W. W. V., of Oal.

## New Books and Periodicals Received.

Negrofs Axd Negro "Slateri:" The first an inferior
 The Ambanric Monthly, for February.... Published by
 tweenty-seventh letrerno the alphabet-the,
sonant which it takes two to speak plain."
The American Journai of Photography, - Edited and
 Bibliotheca Sacta and Biblicat Pepositort.-Published
by Waren F. Draper, Andorer, Mas.



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The annexed letters, rrom the last three Commissioner of Patents,
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| :--- |
| emplor | Yomrs, very truly, chas. Mason.

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duties of sotiditerss ne vatents while I had the honor of holding the offire


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