THE MOST COMMON FAULT IN SCHOOL BOOKS.
We very frequently receive new school books for examination, and take them up with a disposition to give them a friendly notice, but in nine cases out of ten meet with something on the first page that determines our decision against them. The feature that is so common, and that we regard as so objectionable, is a series of unintelligible definitions, definitions that are unintelligible, at least, to minds that are not familiar with the subject which the book is designed to teach. For instance, we have now on our table a pile of school books by Horatio N. Robinson LL. D., and we take up one entitled "The Rudiments of Written Arithmetic," when we find the first chapter headed Definitions, and commencing thus,

1. "Quantity is anything that can be increased, diminished, or measured ; as distance, space, weight, motion, time.
2. A Unit is one, a single thing, or a definite quantity.
s. A Number is a unit, or a collection of units.
3. An Abstract Number is a number used without reference to any particular thing or quantity; as 3, 24, 756."

We have no fault to find with these definitions whenever they are in a proper place. The objection that we make is to their position on the first page of a work designed to teach the rudiments of arithmetic. To a child, having no knowledge of arithmetic, these words convey no meaning whatever. To lead his mind to a knowledge of the study, it would be just as profitable to teach him to repeat abracadabra, or any other unmeaning sound. We remember perfectly well the time when we could re cite "Murray's Grammer" verbatim from beginning to end, and not a sentence in it conveyed any clear idea to our mind. When we repeated the definition of a verb, "A verb is a word which signifies to be, to do, or to suffer," a confused notion was excited that we were talking in a vague way about physical pain; and we believe this is a fair sample of the effect produced by those learned and abstruse definitions with which it is so fashionable to commence school books.
a few men have undertaken that most delicate and difficult task, the writing of school books, who had that instinctive perception of the powers and requirements of a child's mind which is the most essential requisite for the undertaking. The most illustrious of these is Warren Colburn, whose mode of commencing his arithmetic forms, in our judgment, a model for all school books :-
"How many thumbs have you on your right hand?
"How many on your left?
"How many on both?
"One and one are how many?"
Proceeding from the concrete to the abstract; letting the particular come before the general ; and reserving the definitions to the close of the study, when only can they be made intelligille. "Smiths Grammar'' displays in its author the same instinctive faculty for teaching, and we presume that there are many other school books free from the objection that we have been considering. We regard this objection as one of considerable importance. It is natural for the human mind to desire knowledge, and if studies are presented at the right age and in the right way, children are always pleased with them. But when a child is set to study an abstruse definition which he cannot understand, the task is exceedingly irksome, and he is disgusted with the study at its very commencement. It is by tasks of this sort that children are turned from the pleasures of learning, and are led to neglect their studies, to play truant, and to create all of the disorders that prevail in schools.

## Canadian Patent Office.

N. F. Belleau, the Minister of Agriculture in Canada, in his report on agriculture and statistics, gives the following respecting the business of the Canadian Patent Office:-
The business of the Patent Office is steadily increasing. During the past year, the fees received for Patents of Invention amounted to $\$ 3,020$, those for aesignments, copies of specifications and registration of Trade Marks to $\$ 19430$, amounting together to the sum of $\$ 3,214$, which has been paid to the credit of
the Honorable the Receiver General. This department of the Bureau has now become self-supporting. The Royal Patent Commissioners in London, continue to present to the Bureau the specifications and engravings of patents issued in the United Kingdom. They now amount to 500 volumes.
Since the removal of the Government to Quebec, 443 models have been received by the Patent Office.
It is much to be regretted that want of accommodation has hitherto deprived the public in a great measure of the advantages which they would otherwise derive from the museum of models and valuable library of books. The models should be classified, numbered, arranged, and a descriptive catalogue should be prepared. The room might then be open to the public, say daily during the session of Parlament, and perhaps twice or thrice a week during the remainder of the year.
[The advantages to the people of Canada, and the income and efficiency of their Patent Office would be greatly increased if the right of obtaining patents were opened to the citizens of all nations.-Eds.

## RECENT AMERICAN INVENTIONS.

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 on another page :-
Cane Stripper.-This invention consists in the employment of a series of cutters or strippers constructed and arranged in a framein such a manner that they will be capable of adjusting themselves to suit cane of different thickness, and olso to suit the varying thickness or taper of each individual stick or cane, as the latter is drawn through or between them and the leaves stripped therefrom. The inventors are Messrs. B. Haworth and E. Haworth, of Ridge Farm, Ill.

Iron-Built and Iron-Clad Vessels.-This invention consists in constructing a vessel of frames of iron and interposed frames of wood, and in covering the said frame with two or more series of flat diagonal bars crossing each other in opposite directions, and an outer series of longitudinal plates, the whole being bolted together and combining to make a very strong vessel, capable, in a very high degree, of resisting the impact of heavy projectiles. Its ports are made with angular or V-shaped faces, that the projectiles may glance off in striking. Between the portholes there are constructed heavy wooden buttresses, winich make the ports like the embrasures of forts. W. Ballard, of New York city, is the inventor.
Grain and Grass Harvesters.-This invention relates, first, to a novel and improved means employed for operating the sickle, whereby the desired end is attained with but few parts and in a very direct manner, and the device admitting of being readily thrown in and out of gear so as to render the sickle operative or inoperative whenever desired. Second, in a novel arrangement of the main frame of the machine with the sickle, having mechanism whereby the main frame and sickle are allowed tos move or work independently of each other on the same axle, and the sickle allowed to conform perfectly to the inequalities of the ground over which it passes withoutbeing in the least affected by any swinging movement of the main frame. B. H. Smith and G. W. Archer, of Ipswich, Conn., are the inventors.
Cartridge.-The object of this invention is to obviate the necessity of biting or tearing the cartridge before its insertion into the gun and prevent the waste of powder which is almost unavoidable in opening the cartridge before loading ; to this end the invention consists in fitting the cartridge with a loose bottom which is driven into the body by the act of ramming the cartridge down upon or against the breech of the gun, and so caused to contract circumferentially and allow loose powder to escape and come in contact with the breech and insure its ignition. J. C. Mayberry, of White Rock, Ill., is the inventor.
Shrinking Tires.-The object of this invention is to obtain an implement by which the tires of wheels may be shrunk or contracted so as to fit the wheels to which they are to be applied without being cut and rewelded, one which will admit of the tires being readily applied to and removed from it, and at the same time hold the ties firmly in position so that they cannot casually move nor sag down while being operated upon. George McKown, of Altona, Ill., is the inventor.


ISSUED.FROM THE UNITED STATES PATENT OFFICE. for the week ending june $24,1862$.

## ** Pamphlets giving full particulars of the mode of applying for  Inventorg, may be had gratis by addressing ofthe Scientinic Axerican. New York.

 35,660.-H. F. Adams and William Berry, of Syracuse,N. Y., for Improvement in Kerosene Lamp Burners:

 ings as specified, and the whole being combined and arranged, specifi
eally as described, and for the purposes set forth. 35,661 John Allen and Edward Pick, of
,661.-John Allen and Edward Pick, of Brooklyn, N. Y., for Improvement in Ovens:
of the claim, inst, The draught and steam flue opening from the mouth ontaining the reel apparatus and bake-pans, substantially as de Second, The side draught flues, in combination with the baking
chamber of a reel oven, when opening below the mouth of the oven and above the floor, substantianlly ap desgeribed.
Third, The double series of horizontal heati.
Third, The double series of horizontal heating flues, in combination
with the furnace and flonr of a reel oven, constructed and arranged
substantially as described.
35,662.-George Archer, of Massillon, Ohio, for Improve
ment in Combined Hounds and Fifth Wheel :
I claim the described special construction and arrangement of the hpecified.
5,663.-S. A. Bailey, of New London, Conn., for Improved
Rollers for Wringing Ma Mines:'
I claim, first, The employment of the wooden or metal cy inder, $\mathbf{B}$,
constructed int the manner and used for the purpose specified.
Second, The hee of the remer Second, The the manner and the ruber parking between the slats of the
Slinder and the shaft, $A$, for the purpose of supporting said slats, ae tinly set forth.
Third, Connecting the external rubber with the rubber between the
lats and the sbaft, through the interstices or openings in the cylinder lats and the sbaft, through the interstces or openings in the cylinder,
substantially as and for the purpose specified. 35,664.-James R. Baker, of Kendallville, Ind., for Im proved Mode of Removing Chimneys and Filling I claim the attaching of the annular plate, D, which hat the cone or
deflector. E, and draught chimney secured to it, to a siding twbe, C , deflector. E, and draught chimney secured to it, to a sididing te be, C,
fited in the burner, A, and provided with a hole or opening, b, sub-
stantially as shown, otere the doulle purpose of a guide and fillig.
tube. alld ad mit, by the ratsing of the tube, the wick being tighted and Cube. and admit, by the rasing of the, tube, the wick being lighted and
the lianp filled, without detanching the chimney from the burner, or
the burner from the lamp, as set forth.
35,665.-William Ballard, of New York City, for Improved Metallic Defensive Armor for Ships :
 nal bars or plates, DD, and E E, and covering plates, F F, substan-
tially as and for the purrpose specified. 35,666.-James Beck, of New York City, for Improve
ment in Pliers for Closing Skirt Clasps: ment in Pliers for Closing Skirt Clasps :
I claim the combination in the pliers of the flat ma
I claim the combination in the pliers of the flat male die, a, and the
concave rounded female die, b, substantially as specifed. Socone rounded The arrangemement of the dies obliquell to to the length of the
Silers, substantially as and for the purpose sel torth. [This invention consists in fitting the jaws of a pair of phers with à flat male die and a concave rounded female die, by which means, in closing a metallic skirt clasp upon the hoop, the lips of the clasp are brought tighter upon the hoop than by pliers having dies or faces of other form. It also consists in the arrangement of the dies in an oblique position relatively th the length of the pliers, for the purpose of enabling both the hoops and tapes to pass the jaws in the operation of closing the clasps.]
35,667.-Solomon E. Blake, of Worcester, Mass., for ImMrovement
I claim the apparatus described as an attachuent to a sewing ma. the same consisting of the following elements combined :
Frrst, An adiustable gaze fur the determination of the distanees from fold th fold, and by which the material to be folded and sewed, is
gulded to the sewing mechanism as described. Second, Two folding blades, either or both of which are movable
within planes paralill, so as to allow of heir ad ustment in relation to
each other, and in relation to the gage as des ribed.
 that the edge of said foldn
substantially as described.
35,668.-A. B. Cass, of Muscatine, Iowa, for Improvement
 support, I, all arranged as and for the purpose specified.
IThe object of this invention is to obtain a corn plow or cultivator, which will admit of having its plows shifted or moved by the driver on his seat, so that the plows may be adjusted with the greatest facility
to conform to the sinuosity of the rows, and, at the same time, admit to conform to the sinuosity of the rows, and, at the same time, admit
of being readily raised above the surface of the ground when it is de of being readily raised above the surface of
sired to have the implement inoperative.]
35,669.-N. B. Clabangh, of Frederick City, Md., for Improved Washing Machine :
First, I claim a rubbing cylinder, B, armed with eccentric rubbers,
C. in the manner and for the purpose set forth,
Second, I Claim a rubbing board, $\mathbf{H}$, having its rubbing plates, $\mathbf{H}^{\prime}$, Second, I claim a rubbing, board, $H$, having its rubbing plates, H', ${ }^{\text {' }}$,
'srmed with a seriesof ribs, h1 h2 h3 and h4, of increasing hight, in the
manner and for the purpose specified. Third I I claim a rubuing cyll nder, B, in combination with a rubbing
board, $\mathbf{H}$, substantially in the manner and for the purpose set forth.
35,670-J. D. Cochrane, of Milford, N. H., for Improved Clothes Wringer :
I claim an improved clothes wringer, the various parts of which are
constructed combined and arranged to opperate in relation to eacb
other, substantially as shown and described. other, substantially as shown and described. Stand:



[This invention consists in the arrangement of two diagonal frames, connected together on the principle of lazytongs, and hinged at their opposite ends to the rising and falling platform, which supports the Camera, and to the stationary top of the stand in combination with ing to their higher or lower position, in such a manner that the $p$ at form with the Camera can be raised or lowered in parallel planes, and that the same is supported perfectly firm and steady, in front and rear, in whatever position it may be brought. It consists, also, in the employment or use of a wedge-shaped hinge slide, moving in groove in the sides of the plat
35,672.-Herbert Curtis and Alfred Tufts, of Charlestown Mass., for Improvement in Sweat Leather Ventilators for Hats:

 Rnnulus, b, with the series of springs, $\mathbf{D}$, the flexile annulus, a and
the swent band,, , to be applied with a hat body, and with a venti
latingor air space, C , between such body and band, substantially as
specficed.
35,673.-R. D. Dodge, of Adel, Iowa, Improvement in Cultivators:
I claim the arrangement of the stirrips, b, connecting the front end $s$

[Theobject of this invention is to connect the plows of a cultivator to each other, and to the main frame, so that each plow can accommo date itself to the inequalities of the ground, entirely independent of the other, and that a side motion can beimparted to the plows or to a
portion of them, so that, in cultivating, both sides of a hill can be reached, as close to the plants as may be desired.]
35,674.-W. H. Doane, of Cincinnati, Ohio, for Improved Barrel Head Circling and Beveling Machine : I claim, first, So arranging the feed or driving shaft and the pullegs
thereon reatively the the saw arbor rame that the moement of tue
sawarbor frame will case the beitto change from tbe fast to the loose pultey, and vice versa, and thas cause the saw to be put in opera-
ton by its movement th the work, and out of operation by the oppo
site movement of said frame, substantially as described Second, The manner of makis mithe disk or clamp self. yielding on
different parts of its clamping surface, by means of yielding pins or different parts of its clamping surface, by means of yielding pins or
projections, so that it wwll adat itself to pieceso of heading of uneven
thickness, and hold them firmly while being cut, substantially as described. The angular connection sliding bar, and slotted slide with
Tbird,
prongs, operated with or without the toont lever, for drawing the prongs, operated with or without the tont ever, for drawing the
prongsback out of the way, so that the heading may revole when
ckamped and the fed started, and for producing a last motion, sub-
tantially as set forth. Lantially as set forth.
Fourth, Making the lower half the box or bearing, $11^{\prime}, 1$, which
Mol
 Fint Arranging the headngg-supporting. prongs, as described, and
alpothe gearing and shafting within he conical structure, entirely out
of the way and substantially as described.
 35,675.-Edwin S. Gaylord, of Hartford, Conn., for Im
 ially in the manner as and for the purpose described.
35,676.-Davis and Josiah Gray, of Wayland, N. Y., for Improvement in Axle Skeins
substantially as dessribed, wift a the arm or reach clip , sin, constructed
and arranged on the asle. as to grasp and compress the sides of the and arranged on the axle, as to grasp and
skeln, and thus bold it frmly to the axle.
35,6 in -JJames Greaves, of Utica,N. Y., for Improvement







35,678.-Joseph Harrison, Jr., of Philadelphia, Pa., for Improved Dev

## Steam Boilers

I claim the comblnation of the tube, A, with the rod, $\mathbf{B}$, and the bar,
and and the cutters, e and e, whereby the cutters which are to operate
inside of a steam chamber, may be introduced through an opening of
35,679.-M. Harter, of Independence,
35,679.-M. Harter, of Independence, Iowa, for Im


scribed. The employment or use of the rotary agitator, $H_{1}$ in combi-
nacoon with the evaporating pan, $\mathbf{B}$, as specifed.
nadinn, The arrangement of the convex cover, $I$, in combination with
the pand, $A$, as and tor the purpose set forth.
CThe object of this invention is to arrange the several pars which furnace, that one batch of juice or liquid can be completely finished before introducing some fresh juice.]
35,680.-B. and E. Haworth, of Ridge Farm, Ill., for Im-


35,681- - V. W. Houck, of Buffalo, N. Y., for Improvement in Stave-Dressing Machines:
I claim, frrt, The adjustable and yelding guide ston, $\mathbf{s}$, in combina-
Hon with the guide feed roilers, $\mathbf{E} \mathbf{K}^{\prime}$, for the purposes and substan Second The yielding gide pice in in

 35,682.-Charles Howard, of Morris, N. Y., for Improved Washing Machine :
I claim the combination of disks, B B B, on scparate shafts, connected
o the arms, D D , by means of the pitmen, FF, whereby both disks
are moved in oposite directions, by one motion of the hand operating are moved in opposite elrection
on the handle $E$ as described.
35,683.-Mrs. Isabella J. H. Howard, of San Francisco,
Cal., for Improvement in Abdominal Supporters: I claim the arrangement of the comparatively hard and yielding
pads, a a, and cc, the triangular spring e, the strap , b, the pad d,
the elastic atraps, $g \mathrm{~g}$, and $\mathrm{h} h$, and the buckles, i , and $\mathrm{j} j$, substan-
 35,684.-Charles A. Hunt, of Urbana, Ill., for Improved
Clothes Dryer : I claim the combination of the pedestal or slide bar, $C$, with the
hinges, DE, and fingers, A arranged and operating, substantially as
and for the purpose specil ed. 35,685.-P. J. Jarre, of Paris, France, for Improvement in
Repeating Fire Arms :
First, I claim the combination with the trigger, a, of the slide piece,
b. when the atater is aranged in relation to the hammer and the
reech bar, so as to actuate them to operate by the puiling of the breech bar, so as to actuate them to operate by the
trigger, in the manner and forthe pnrpose set forth.
Second, In combination with the adjustable breet
nd operating as described, I claim the packing ring, $r$, when located between the breech bar and the rear part of the barrel, and when ar-
Tanged, substantiall| I the manner and for the purposes set fnrth.
Third, $\mathbf{I}$ claim the construction and arrangeement Third, I claim the construction and arrangement of the breech bar,
the same consisting of series of cartridge chambers, set in a slide
rame, provided with suitable cams in combinationw ith the movable frame, provided with suitable cams in combination with the movable
rear plate, latch and other essential appurtena nces as described. 35,686.-George B. Jewett, of Salem, Mass., for Improve-
ment in Artificial Legs
 Second. I claim connecting the socket with the foot, by means of the
edestall, E , having an adjustable connection with the secte, and bepedestal, $E$, having an adjustable connection with the sock
ing hlnged to the foot as described, for the purpose specified.
35,687.-Algernon K. Johnston and Lorenze Dow, of New
York City, for Improvement in Rendering Cartridge
Water Proof: We claim the applic
ny of them, collodion, $\& \mathrm{c}$, to the envelope of a cartridge ior ith 35,688-- B. F. Joslyn, of Stonington, Conn., for Improvement in Breech-Loading Firearms
I claim the curved wedge-f ormed proiection, x, combined with, and
arranged on the movable breech, $\mathbf{B}$, sulstantially as and for the pur-35,689.--Elijah Kemper, of Thorn Township, Ohio, for Improvement in Gates:
I claim, first, The combination with a sliding gate of the hinged or
pioted piece, 2 2 the parts being a mranged in such a manner as to operate as set forth, and secure the advantages stated.
Becond, The ocmbination with a siding and hinaged gate, as above
described of a silding latch, 12, substantilly as and for the purposes set forth
cam and lever, su
purpose specified.
35,696.-G. W. Ler the Mode of Constructing and Arranging Foot Lights for I claim the nosition and mode of arrangement of the lights with the
continuous reflector as distinguished from the mode now ordinarily in use.
I claim a kso the power of throwing colored lights on the stage, as
abore described. above described.
AndI clain by means of the guard formed by the sunken trough,
and the wire clôth covering greatly increased safety to performers. 35,697.-W. R. Manley, of New York City, for Improved Feathering Paddle Wheel : I claim making the length of the arm or crank, 6, so proportionate
to the distance which the horizontal center of the axis is from the
horizontal center of the bucket, that the center of the journal bearing it the outboard bucket flange, and the center of the jornal bearing in
it feathering flange, are equidistant froma traight line projected
indeninitely the ndetinitely, trom the center of the tournal bearing in the inboard
bucket Ilange, through the center of the bucket, as has betn described
and as is represented in figure 3 .
35,698.-Richard Martin, of Brooklyn, N. Y., for Improved
Packing for Piston and Valve Rods: Packing for Piston and Valve Rods:
Tith a lining of wire gauze the thed of a folded strip of woven hemp
as and for the purpose sein forth. 35,699_J. C. Mayberry, of White Rock, Ill., for Improve-
ment in Cartridges: ment in Cartridges :
I claim the construction of a cartridge with a loose contractible
bottom, B, and a central peg, d, or its equivalent, applied and opera-
ting substantially as and for the purpose specii ed. ting substantially as and for the purpose specii ed.
$\mathbf{3 5 , 7 0 0}$-H. W. Oliver, of New Haven, Conn., for Improvement in Kilns for Drying Lumber
I clainn providing a kiln with steam chambers, D D, separated from
he drying chamber or central portion of the kiln by means of per-
orated or reticulated and wadded partitions, and applying ow the lumber to operate in conjunction with the steam hadmitted
(This invention consists in certain provisions within a klln tor subjecting the lumber to heit in an almosphere of steam, whereby the sap is extracted very thoroughly, and the lumber dried in a very superior manner in a short time.]
35,701.-J. J. Palmer and A. Plamondon, of Chicago, Ill.,
 purpose set forth,
We further clain the extension of the upper end of the funer side,
i. of the shoe, B, above the discharie orifice of the hopper, $L$, sub stantially as shown, sio as to have a moving surface at one side of the
dischargulg orffice of the hopper nnd a stationary surface at the ppos
This invention consists in the employment of a series of inclined a blast spout in such a manner, that the grain is made to pass con ${ }^{-}$ secutively over the screens, and subjected to a blast in passing over
each one of them, thereby rendering the separation of forelgn substaces from the grain far more thorough than it otherwise would be.] 35,702.-Leonard Parker, of Winterset, Iowa, for ImI chim the use or the side knives, mand $n$, when used in combina-
tion writh the knives, 1 and $k$, spring bottom, $p$, and the spiral spring,
o, as described and represented. 35,703.-S. P. Parmelee, of New Haven, Conn., for Improvemert in Pianofortes:
 I also claim making meach ot the bushing sockets with an opening, hy
extending out of its bottom, a nd with respect to the bushing, as aet Ifth aiso claim arran ging the string, holes or passages through the
bridge, and dircectly underneath the juncton of each of the braces bridge, an bridge, in combination with arraning the hitch pin of the
 as described, the bridge thereby serving to connect the brace and the
plate. Ia a so claim insulatinge each straining pin from the fron frame bv
mea os of a wooden bu shing, or its equivalent. 35,704.-S. T. Parmelee, of New Haven, Conn., for ImHovement in Pianofortes:
Itaime constructing the iron or string frame with the metallic
racket or standard, $B$, for connecting the iron frame with bottom frame, as specified.
Inlato claim supprting the iron frame on the bottom frame, and in-
sulating the former as described rrom the sounding board, and those sulating the former as described from the sounding board, and those
parts of the case which extend above the bottom frame.
ralso claim the above-described arrangement of the top plate, each of the braces, the bridge and the wrist pin plate of the iron frame.
I also claim arranging the iron frame racket or supporter, With
respect to the iron frame and the sounding board, in manner so as to respect tothe irron frame and the soonding board, in manner so so at o
pass down through the hammer openings of the sounding board, as
described Iescribed.
I also extending the sounding board across the entire interior
ofthe case. vi., from side to side., and end to end therenf, and making
such board with a passage for the hammers and the frame socket, as
35,705.-Thomas Pool, of Brunsvick, Ohio, for Improveed Clothes Wringer:
I claim the combination and arrangement of the spring or springs,
N, sliding bearing blocks, $\mathrm{P} Q \mathrm{Q}$, having M N, sliding bearing blocks, P P Q Q, having guide siots and bearings,
d dg g, and stationary guide screws or ping, f, applied to the ronlers,
substantially as and forthe purposes specified. I also claim giving an equal or nearly equal, elastic pressure to
to
both rollers simulianeousig ry meansof thedouble longsprings, M N, arranged in combination wit h the slotted frame, substantially as and
for the purposes set forth. 35,706.-Mary Jane Pulte, of Cincinnati, Ohio, for Improved composition or Cleaning Gloves:
I claim the within described composition of matter fur cleaning kid
goves, com bined in the proportions and in the manner, substantially gloves, com bined in the proportions and in the manner, substantially
as set forth. 35,707-W. H. Richards. of Newton, Mass., for Improve-
ment in Head Cushions to Prevent Sun Stroke : in claim a head protective cushion, made and to be used, substantially 35,708.-Gelston Sanford, of New York City, for fr-
provement in Machinery for Separating Fibers from proveme
Plants: I claim the eombination of the cylinder armed, substantially as de-
scribed, withbars formed for scrapngand combingor either, with the andless belt, also armed, substantially as descrाed, with, wars the
scraping and combing or either, substantially as and for the purpose seraping and combing or either, substantially as and for the purpose
specifies. claim in combination with the cylinder and endless belt
I also
armed with bars, substantially as described, the covering of the armed with bars, substantially as deescribed, the covering of the
periphery of the cylider with elastic substance between the bars,
that the teeth or edgesof the bars may act against yietdiug surface, that the teeth or edges of the bars may act against yietdiug surface,
the better to perform the operations required, substantially as de-
 described, which crushes the fiber-yielding planes, and separates the
impurities from the fibers, s ubstantially as described. And I also claim arranging the two series of moving combs, so that
the combs on one of the moving surfaces shall act mine the
tween the combs on the oppoite moving surfece,

35,709.-Gelston Sanford, of New York City, for Im-
provement in Machinery for provement in Machinery for Dressing Flax and Hemp:


scribed.
Iala claim the combination of the two series of hatchels arranged
on
the cyllider, and on the belt or endess apron, or the equivalents
 selt, or their equivalens as whed on of the erad endiess apron or
 And Iallo oclaim the feed rollers, one of which is elastic, it combination with the cylmder and belt, or end ess apron or thenr eotuiva-
leans, bod prouded with breaking rollers and hatchels or either, sub-

35,710.-Gelston Sanford and J. E. Mallory, of New York
City, for Improvement in Machinery for Breaking and
Cleaning Hemp and Flax:
We claim in combination with reciprocating futed surfaces for
breankin and oundig whether the fute be mate of equal or rard
well

35,711.-S. M. Seley and Peter Hopkins, of Peoria, Ill. We claim admitued Ping team with in the pis then frem :
venting ilits escamitung on theam with in the pis int from one side, and pre
 purpose set torth.
35,712.-B. H. Smith and G. W. Archer, of Ipswich, Mass. for lmprovement in Harvesters:
 accing adjust ment of the cutters asesthe machine pasese along over the
earth, and so that the cutters may at any be instanty lifted from the
 35,713.-J. D. Smith, of Peoria, Ill., for Inprovement in

 seediad Altactining the furrow share bar, P. To the
of the spring, 0, as and for the pur pose set forth.
[This invention consistsin a novel and useful arrangement of seed gage. levers, furrow share and certain other parts, whereby the seed gage is operated or adjusted alternately, from the movemsnt of
the lever, $G$, by which the furrow share is raised and lowered.

35,714. - F. B. Stevens, of New York City, for Improved Method of Heating Feed Water for Steam Engines Patented in England, October, 10, 1861
 for beatiagt hef eed water of steem engines bys steam withdrawn from

 shownand described. Fourth, The diaphragm in the closed heater and the valve attached

steam withdrawn from the induction side of the piston.4
35,715 .- . A. Thayer, of East Boston, Mass., for Improvement in Tools:
I claim, frst, A s shan or bar graduated to form a scale, the ends of
which are shaped respectively into a screwdriver and claw, as descri.
bed. Se ond, A handie or sleeve capable of adjust ment upon and along
thesaids shank or bar, substantially as set forth.
then


35,716.-J. D. Tifft, of Cuyahoga Falls, Ohio, for Improve ment in Clothes Wringer and Mangle Combined:

35,717.-Benjamin Trukey, of Fairfield, Maine, for Im proved Fruit Gatherer

35,718.-C. A. Uhl, of Millersburgh, Ohio, for Improve-

 conbination with the pin in singerted in in the holest $f$, in the sail guide
bands, $F$, substantially as described and shown. 35,719.- Joseph Vendrand, of Paris, France, for Improve-
ment in Planes. Patented iu Furland March 4, 1861 :




 35,720.-Charles Wanzer, of New York City, for Improved Cement for Slate Roofing
Caim a combination of grease
 es, other ocher, and linsed. or other oil, about in the proportions
specifed, to form a cement, for the purpose set forth. This cement is designed for slate rooting of that class in which the slabs are latd without a lap, the ends simply abutting against each
other as well as the sides. The object of the invention is to obtain a other as well as the sides. The object of the invention is to ottain a
cement which will be impervious to water, insoluble, and at the same time not harden by age so as to be liable to crack and shell ofi from the surface to which it is applied.]
35,721.-P. L. Weimer, of Lebanon, Pa., for Forming



35,722.-W. H. Wellsteed, of Buffalo, N. Y., for Improve ment in skates :

 [This invention relates to a novel way of attaching the skate to the
foot, whereby the use of straps is entirely avoided and much time foot, whereby the use of straps is entirely avoided and much time

saved in adjusting the skate to the foot, and the latter prevented from ecoming cold and cramped, as is the case when straps are used for | becoming cold |
| :--- |
| he purpose.] |

35,723.-T. E. M. White, of New Bedford, Mass,, for Im provement in Artificial Legs :
Firse I claim a perfectly vent liated and plable socket con strncted
of stel braces covered with caivas, and surround ed by wire gauze, as
described.
Second A ratchet and catch in the knee jont, as set forth.
 35,724.-Dytee Wilcox, of Providence, R. I., for Improvement in Sleeve Fasteners
 25,725 5,725.-Fenn Willcox, of Newark, N. J., for Improve I claim, frinst, , The rrame, D. constructed as shown, in connection
with the plate, $S$, attached to said frame, $D$, by hooks, $K$, as and for the





35,726.-R. P. Wilson, of New York City, for Improved Clothes Wringer
 (This invention relates to an; improvement in that class of clotheswringing machines in whieh pressure rollers are employed to effect for the purpose of obtaining the necessary pressure, the springs being endless india-rubber belts fitted on loose pulleys placed on the jour ollers allowed to rotate with the least possible degree of friction, the belts, whenstretchedor distended to a certain extent, being permitted to move under the action of the rollers.]
35,727.-A. I. Ambler (assignor to himself, R. N. Ambler proveruent in Railroad Car Brakes :
elaten, frist, The rotating rod or shaft, $\mathbf{C}$, in
 Second, Operating or turning the rna or she brakes, as described.


 [This invention consists placed underneath each car and provided with cams so arranged as to actuate the brakes. The invention also consists in a novel and improved way of applying steam power to the brakes as well as to an mproved arrangement for operating them by hand, and also to an improved mode of conne cting or coupling the cam rods or shafts.]
35,728.-I. S. Barber (assignor to himself and L. N. FulMachines. York City, for Improvement
 cigars, in the manner described. with the foregoing frist claim, the
Second Also, in ocombination
 35,729.-H. V. Butler, of New York City, and J.C. Hoadley, of Lawrence, Mass., assignor to said H. V. But-
ler, for Improvement in Device for Changing Speed in Machinery
 IN , and belt sh
and described.
[The object of this invention is to obtain a device by which the speed any cessation may be chained at will and very expeditiously, wrat ac quisition applied to machinery which requires to have its speed changed during its operation from fast to slow and vice versa, in order to favor the manufacture of certain articles, as for instance, machine ry for mannfacturing naper, printing calico, \&c.]
35,730.-Z. E. Coffin, of Newton Center, Mass., assignor
to himself and W. P. Hunt, of Boston, Mass., for Improveld Capstan
Yarrel and ny arrangement of the hollow shaft, $\mathbf{C}$, within the capstan
hindle. $B$, said hollow shaft heing arranged

 nd for the purposes sel forth.
35,731.-Samuel French, of Boston, Mass., assignor to provement in Safety Pockets:
claim the combination
I claim the combination , of the flexible arm and bolt actuator, or
their equivalent or equivalents, with the pocket and its fastening ap
35,732.-W. Froehlich, of Harbury, Kingdorn of Hanover
assignor to Morris Richter, of New York City, for Improved Mattress :
I claim a mattress having its cover or case divided into a series of
co mparmentsor tri-lateral form, by means of a partition of ziib-zag Corm, stitched or otherwise secured alternately at about equal distan-
ees apart, to the top and bottom of the cover or case, substantially as shown and described.
[This invention consists in dividing the cover or case of the matress into compartments of tri-lateral form running transversely across the es of ordinary construction. 1
35,733.-John Gallagher (assignor to himself, Christopher Dorflinger, Anson Judson and Antoine Regan), of
Brooklyn, N. Y., for Improvement in Lighting and
Trimming Lamps:
claim, first, Suspending the wick tube, C , by means of the jour-
nals, II, or their equifalentata and operating substantially as and for
the purposes deeceribed. Secord. I clatim the opening, $\mathbf{B}$, with its door, D, for the purposes
described and set forth. 35,734.-John Gault, of Boston, Mass., assignor to himself and W. V. Barkalow, of New York City, for Improvement in Chai
 35,735.-Josee Johnson, of New York City, assignor to himself and John Ward, Jr., of Brooklyn, N. Y., for claim the construction and use


35,736.-Nelson Kidder (assignor to B. F. Linville), of
Moscow, Iowa, for Improvement in Ditching Machine:
 35,737.-La Fayette Louis (assignor to G. A. Prince and
Thomas Stephenson), of Buffalo, N. Y., for ImproveThomas Stephenson), of Buffalo, N. Y., for ImproveI claim the construcueions of a device which I name the " basso tenu-
oo," and the use and cembmation thereof f witha melodeon, organ or lo," and the use and combmation thereof with a melodeon,
pianoforte, for the purposes and substantialiy as described.
35,738.-John North, of Middleton, Conn., assignor to W. H. and J. A. Daniel, S. and S. F. Appleton, of New York Cit, for Paper Folding Machine:


 combination, as described, in combination with wrire or rods to sup.
port sheets of paper, the combination being substantially such as


 struted, arranged and operating substantially $m$ the manner de-
scribed,
Fifth, 1 claim, in cam tination a






 terpoised vibrating frame.





35,739.-Lewis Patric (assignor to himself and Henry
Reed), of Victor, N. Y., for Improvement in Grain Separators:


35,740.-G. B. Phillips (assignor to John R. Crockett), of Newark, N. Y., for Improvement in Wrenches:
 In mit.
in it.
35,7
35,741.-Cornelius Van Derzee (assignor to himself and
$\mathrm{W} . \mathrm{S}$. Valentine), of Albany, N. Y., for Improvement in Bung Cutters:

 35,742.- James Webster (assignor to J. H. Porter and Robert Porter , of Birmingham, England, for Im-
provement in Manufacture of Oxygen Gas. Patented inEnglanid, Oct. 19, 1861
I claim tha obtan, ing. the oxygen nitrogenous compounds, and the
ba se of the salt employed in the manner stated.
1,319.-W. W. Shaw, of Troy, N. Y., assignor through Mesne Assignments, to L. L. Tower, of Cambrigge,
Mass., for Rubber Head for Lead Pencils, \&c. PatMass., for Rubber
ented ApriI 5,1859

 I also claim. as a new manura,
made substantially as described.

## Books and Publications Received.

American Jowrnal of Ophthalmology. Published by
Balliere Brothers, 440 Broadway, New York City Balliere Brothers, 440 Broadway, New York City. This is the title of a new monthly journal, devoted to the specialty Julius Homberger, M. D. Price $\$ 2$ per annum. Diseases of the eye are very numerous. An ably-conducted periodical like this should ob-

Tife atlantic Montily. Published by Messrs. Ticknor \& Eields, Boston.
We bave recelved the July number of the Allantic Monthly. It is an excellent nimmer. In "The Poet to His Readers" we think we dig-
cover the peculiar rhythm or Whit tier ; "roude's Hearry the Eighth" is ably reviewed, and the "Literary Notices" are admirably written, From Agasai?'s articie we give some extracts on another page.

