#### 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 quan tity.
  - 3. A Number is a unit, or a collection of units.
- 4. 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. remember perfectly well the time when we could recite "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
  - "How many on your left?
  - "How many on both?
  - "One and one are how many?"

Proceeding from the concrete to the abstract: let ting the particular come before the general; and re serving the definitions to the close of the study. when only can they be made intelligible. "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 increas ing. During the past year, the fees received for Patents of Invention amounted to \$3,020, those for assignments, copies of specifications and registration of Trade Marks to \$194 30, amounting together to the sum of \$3.214, which has been paid to the credit of inventor.

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 Parliament, 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 frame in such a manner that they will be capable of adjusting themselves to suit cane of different thickness, and slso 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, which 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 to 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 without being 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



ISSUED FROM THE UNITED STATES PATENT OFFICE.

FOR THE WEEK ENDING JUNE 24, 1862.

Reported Officially for the Scientific Amer

Pamphlets giving full particulars of the mode of applying for nts, under the new law which went into force March 2, 1861, speci-size of model required, and much other information useful to ntors, may be had gratis by a ddressing MUNN & CO., Publishers e Scientific Americas. New York.

35,660.—H. F. Adams and William Berry, of Syracuse, N. Y., for Improvement in Kerosene lamp Burners: We claim the combination of the large concave flange, F. and comical air chamber, A. having bottom openings as described, with the small concave flange, R. inclosed within the cap, C, and said flange, R. being constructed with peculiarly-formed center and outside openings as specified, and the whole being combined and arranged, specifically as described, and for the purposes set forth.

35,661.—John Allen and Edward Pick, of Brooklyn, N. Y., for Improvement in Ovens:

We claim, first, The draught and steam flue opening from the mouth of the oven, when combined with a baking chamber suitable for, and containing the reel apparatus and bake-pans, substantially as described

scribed.

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, substantially as described.

Third, The double series of horizontal heating flues, in combination with the furnace and floor of a reel oven, constructed and arranged substantially as described.

35,662.—George Archer, of Massillon, Ohio, for Improvement in Combined Hounds and Fifth Wheel:

I claim the described special construction and arrangement of the hounds and fifth wheel, when combined and operating conjointly, as

specified.

35,663.—S. A. Bailey, of New London, Conn., for Improved Rollers for Wringing Machines:

I claim, first, The employment of the wooden or metal cy inder, B, constructed in the manner and used for the purpose specified.

Second, The use of the rubber packing between the slats of the cylinder and the shaft, A, for the purpose of supporting said slats, as is fully set forth.

Third, Connecting the external rubber with the rubber between the slats and the sbaft, through the interstices or openings in the cylinder, substantially as and for the purpose specified.

35,664.—James R. Baker, of Kendallville, Ind., for Improved Mode of Removing Chimneys and Filling

proved Mode of Removing Chimneys and rining Lamps:

I claim the attaching of the annular plate, D, which has the cone of effector, E, and draught chimney secured to it, to a stiding tube, C, fitted in the burner, A, and provided with a hole or opening, b, substantially as shown, to serve the double purpose of a guide and filling tube, and admit, by the raising of the tube, the wick being tighted and the lamp filled, without detaching 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:

I claim the combination of irou frames, A A, interposed wooden frames, B B, longitudinal covering bars or plates, C C, reversed diagonal bars or plates, D D, and E E, and covering plates, F F, substantially as and for the purpose specified.

35,666.—James Beck, of New York City, for Improve

ially as and for the purpose specified.

5,666.—James Beck, of New York City, for Improve ment in Pliers for Closing Skirt Clasps:
I claim the combination in the pliers of the flat male die, a, and the oneave rounded female die, b, substantially as specified.

Second, The arrangement of the dies obliquely to the length of the pliers, substantially as and for the purpose set forth. pliers, substantially as and for the purpose set forth.

[This invention consists in fitting the jaws of a pair of pliers with a 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 t tighter upon the hoop than by pliers having dies or faces of orm. It also consists in the arrangement of the dies in an oblique position relatively to the length of the pliers, for the purpose of enabling both the hoops and tapes to pass the jaws in the operation closing the clasps.]

35,667.—Solomon E. Blake, of Worcester, Mass., for Improvement in Folding and Tucking Gages for Sewing Machines:

Machines:

I claim the apparatus described as an attachment to a sewing machine, for automatically folding or plaiting the material to be sewed, he same consisting of the following elements combined:

First, An adjustable gage for the determination of the first, An adjustable gage for the determination of the distances rom fold to fold, and by which the material to be folded and sewed, is judded to the sewing mechanism as described.

Second, Two folding blades, either or both of which are movable within planes parallel, so as to allow of their adjustment in relation to tach other, and in relation to the gage, as described.

Third, Rollers so hung on spindles fixed to or in folding blades as bat the edge of said folding blades shall impinge upon the said rollers, inbstantially as described.

35,668.—A. B. Cass, of Muscatine, Iowa, for Improvement

15,668.—A. B. Cass, or managed and in Cultivators:

I claim the pivoted share standards, a\* a\*, and sliding share standards, ag, connected to the jointed adjustable lever, E, in combination with the seat, H, and lever, F, connected to a lever, E', and the seat support, I, all arranged as and for the purpose specified.

[The 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 of being readily raised above the surface of the ground when it is desired to have the implement inoperative.]

35,669.—N. B. Clabaugh, 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, H, having its rubbing plates, H', drymed with a series of ribs, h lb 2 B and h4, of increasing hight, in the manner and for the purpose specified.
Third, I claim a rubbing cylinder, B, in combination with a rubbing board, H, substantially in the manner and for the purpose set forth.

70.—J. D. Cochrane, of Milford, N. H., for Improved Clothes Wringer:

Clothes Wringer:
I claim an improved clothes wringer, the various parts of which are other clothes wringer to operate in relation to each ther, substantially as shown and described.

5,671.-E. M. Corbett, of New York City, for Camera

Stand:

Stand:
I claim, first, The arrangement of the diagonal frames, E E', connected together by pivots, a, on the principle of lazy tongs, in combination with sides, fg, and with the movable platform. B, and stationer, top, C, the latter being supported by three legs, D, substantially in the manner and for the purpose shown and described.

The employment of the wedge-sbaped hinge slide, H grooves, O, in the side flanges, n, of the platform, B, a sand apose specified.

[This invention consists in the arrangement of two diagonal frame 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 slides, which permit said diagonal framestoadjustthemselves accord 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 platform, for the purpose of adjusting the inclina

aon of the camera.]

35,672.—Herbert Curtis and Alfred Tufts, of Charlestown,
Mass., for Improvement in Sweat Leather Ventilators
for Hats:

We claim, as our invention, the combination and arrangement, substantially as described, of a fiexile annulus, or thin metallic hoop, a,
and a series of springs. D, with the sweat band, B, and an air-ventilating space, C, the whole being for the purpose or purposes specified.
We also claim the combination of the secondary or holding hoop or
annulus, b, with the series of springs, D, the flexile annulus, a, and
the sweat band, B, to be applied within a hat body, and with a ventilating or air space, C, between such body and band, substantially as
specified.

35,673.—R. D. Dodge, of Adel, Iowa, Improvement in Cul

tivators:

I claim the arrangement of the stirrups, b, connecting the front end of the beams, G G', in combination with the treadles, c, hand levers, k and guide bars, m, all constructed and operating in the manner and for the purpose shown and described.

The object of this invention is to connect the plows of a cultivato I herospector this inventories we have a provided a contraction to each other, and to the main frame, so that each plow can accommodate itself to the inequalities of the ground, entirely independent of the other, and that a side motion can be imparted 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.]

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:

1 claim, first, So arranging the feed or diving shaft and the pulleys thereon, relatively to the saw arbor frame, that the movement of the saw arbor frame will cause the belt to change from the fast to the loose pulley, and vice versa, and thus cause the saw to be put in operation by its movement to the work, and out of operation by the opposite movement of said frame, substantially as described.

Second, The manner of making the disk or clamp self-yielding on different parts of its clamping surface, by means of yielding pins or projections, so that it will adapt itself to pieces of heading of uneven thickness, and hold them firmly while being cut, substantially as described.

Third, The angular connection sliding bar, and slotted slide with prongs, operated with or without the lead lever, for drawing the prongs back out of the way, so that the heading may revolve when clamped and the feed started, and for producing a last motion, substantially as set forth.

Fourth, Making the lower half the box or bearing, 11' 1', which supports the worm shaft on the inside of the structure, A, hollow, so that it may be filled with oil for the worm to run in, and arranged inside of the hollow pedestal, thus preventing friction and wear and eusuring lubrication, substantially as set forth.

Fifth, Arranging the heading-supporting prongs, as described, and also the gearing and shafting within the conical structure, entirety out of the way, and substantially as described.

Birth, The combination of the inner beveling tools, j, of a heading manning, with the flattened wedge screw bolls, j', and their nuts, substantially in the manner and for the purpose described.

35,675.—Edwin S. Gaylord, of Hartford, Conn., for Improvement in Mica Chimneys for Lamps:

I claim, as a new and improved article of manufacture, a mica chimney for lamps, &c. The combination of mica, a, from compression rings, c, and a lateral joint bar, b, or double-S clasp, b, substantially in the manner as and for the purpose described.

35,676.— Davis and Josiah Gray, of Wayland, N. Y., for Improvement in Axle Skeins:
I claim the combination of a hollow steel axle skein, constructed substantially as described, with the arm or reach clip; so constructed and arranged on the axle, as to grasp and compress the sides of the skein, and thus hold it firmly to the axle.

35,677.—James Greaves, of Utica, N. Y., for Improvement

35,677.—James Greaves, of Utica, N. Y., for Improvement in Pumps:
Iclaim, first, Making the barrel, A, with the exterior enlargement, B, and valve seat. L, in one piece, the washer, D, as used in combination with the enlargement, B, and fiange. C, the float valve 2, water chamber, R, and small pipe. S, as constructed and combined with haarrel, A, and pipe, 3, the lead lining, 4 or equivalent, fastening the flange. F, to the wood pipe. E, the combination of the flange, G, with the pump, H, the iron bottom, O, as made and combined with the wood, H, the ornamental cap, I, as constructed and covered with the pump, H, the pilosper, No. 3, as constructed and covered with the pump, H, the pilosper, No. 3, as constructed and combined with the pump, H, the pilosper, No. 3, as constructed, the feet of the cross piece, I, projecting it to sposte directions, in line with the valve seat outer edge, and riveting it to said seat, the washer, 5, as fastened with the screw, 6 6, to the seat, 2.

Second, The rubber strips, 22 22 2, No. 4, or equivalent, as combined with strip, O, and projection, 7, the guide 8, and its lining of leather or equivalent, all as and for the pur ose described.

35,678.—Joseph Harrison, Jr., of Philadelphia, Pa., for Improved Device for Removing Incrustations from Science Policy Inc.

Steam Boilers:
claim the combination of the tube, A, with the rod, B, and the bar,
nd the cutters, e and e, whereby the cutters which are to operate
de of a steam chamber, may be introduced through an opening of
naller diameter than that of the chamber itself.

a smaner diameter than that of the enamoer itself.

35,679.—M. Harter, of Independence, Iowa, for Improvement in Evaporating Saccharine Liquids:

First, I claim the arrangement of the secondary fire door, F, in the side of the flue, C, in combination with the damper, G, placed between the door, F, and the main fire door, D, and with the pans, A, B, all constructed and operating in the mamer and for the purpose described

constructed and operating in the manner and to the partial seribed.

Second, The employment or use of the rotary agitator, H, in combination with the evaporating pan, B, as specified.

Third, The arrangement of the convex cover, I, in combination with the pan, A, as and for the purpose set forth.

[The object of this invention is to arrange the several parts which

constitute the evaporator, in such relation to each other and to the 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 Improvement in Sugar Cane Strippers:

We claim, first, The employment or use of cutters or strippers, formed of plates, cc', the latter being allowed to yield or give under pressure, and both sitted in a suitable frame, A, one over the other, and curved at one end in semi-cliptical form, substantially as shown to operate as and for the purpose set forth.

Second, In combination with the strippers, B C, the supplemental or auxiliary strippers, E, applied to the frame, A, and arranged, substantially as shown to operate, in connection with the strippers, B C, as set forth.

as set forth.

Third, The manner as shown of securing in the frame, A, the plates, c', of the strippers, BC, and likewise the manner of attaching to said frame, the supplemental or auxiliary stripper, E, to wit by having the plates, c, may be fixed, and the plates, c', allowed to yield or give under pressure, and the strippers, E, formed at the inner ends of the plates, D, which cover the recesses, b, whereby the strippers may be very readily applied to the frame, A, and detached therefrom, when necessary for the purpose of repairs, the substitution of new ones, &c., &c.

35,681.—V. W. Houck, of Buffalo, N. Y., for Improvement in Stave-Dressing Machines:
I claim, first, The adjustable and yielding guide ston, 8, in combination with the guide feed roilers, E E', for the purposes and substantially as described.
Second, The yielding guide piece, U, in combination with the cam W, for the purposes and substantially as set forth.
Third, 'The cam, P, in combination with the bar, P1, arm, P2, friction wheel, p4, and vibrating rod, p3, and rack shaft, O, for the purposes, and substantially as set forth.
Fourth, The curved bed plate, K, having flutes exactly corresponding to, and placed in line with those of the lower feed rollers, for the purposes, and substantially as described.
35,682.—Charles Howard of Morrie N. V. for Improved.

-Charles Howard, of Morris, N. Y., for Improved

Washing Machine:
I claim the combination of disks, B B, on separate shafts, connected the arms, D D, by means of the pitmen, F F, whereby both disks e moved in opposite directions, by one motion of the hand operating the handle E as described.

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 straps, gg, and h h, and the buckles, i, and j j, substantially in the manner and for the purpose set forth.

35,684.—Charles A. Hunt, of Urbana, Ill., for Improved

Olothes Dryer:

I claim the combination of the pedestal or slide bar, C, with the inges, D E, and fingers, A, arranged and operating, substantially as nd for the purpose specified.

and for the purpose specified.

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 latter is arranged in relation to the hammer and the breech bar, so as to actuate them to operate by the pulling of the trigger, in the manner and for the purpose set forth.

Second, In combination with the adjustable breech bar, constructed and operating as described, I claim the packing ring, r, when located between the breech bar and the rear part of the barrel, and when arranged, substantially in the manner and for the purposes set forth. Third, I claim the construction and arrangement of the breech bar, the same consisting of a series of cartridge chambers, set in a slide frame, provided with suitable cams in combination with the movable rear plate, latch and other essential appurtenances as described.

35,686.—George B. Jewett of Salem Mass. for Improve-

35,686.—George B. Jewett, of Salem, Mass., for Improvement in Artificial Legs:
I claim, first, The rigid socket, A, in combination with the removable socket. C, operating in the manner, substantially as described.
Second. I claim connecting the socket with the foot, by means of the pedestal, E, having an adjustable connection with the socket, and being hinged to the foot as described, for the purpose specified.

5,687.—Algernon K. Johnston and Lorenze Dow, of New York City, for Improvement in Rendering Cartridges Water Proof: We claim the application of the said substances and solutions, or

e claim the application of the said substances and solutions of them, collodion, &c., to the envelope of a cartridge for ose of water proofing the same, substantially as above describ

35,688.—B. F. Joslyn, of Stonington, Conn., for Improvement in Breech-Loading Firearms:

I claim the curved wedge-formed projection, x, combined with, and arranged on the movable breech, B, substantially as and for the purpose set forth.

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 bivoted piece, 22, the parts being arranged in such a manner as to operate as set forth, and secure the advantages stated.
Second, The combination with a sliding and hisged gate, as above lessented of a sliding latch, 12, substantially as and for the purposes let forth.

set forth.

35,690.—Nehemiah Kimball, of Pascoag, R. I., for Improved Self-Setting Head Block for Saw Mills:

I claim the combination and arrangement of dog, F. carriage, E. with rack, I. pinion, J., shaft. K., ratchet, L., pawi, M., link, N., slide, F. bent lever, R., and stop pin, V, the whole being constructed to operate as described for the purpose set forth.

as described for the purpose set form.

35,691.—J. H. Knickerbocker, of Philadelphia, Pa., f
Improved Method of Securing Tubes in Tube Sheet
I claim securing the flues, B, of boilers in the tube sheets, A, the
of by means of the ferrules, C, grooved at their exterior, tapered, a
driven in the ends of the flues so as to cause the ends of the same
close around both edges of the holes, a, in the tube sheets, and adr
of the flue being of equal diameter throughout, as set forth.

[This invention consists in the use of a ferrule having a concave ter surface of slightly tapered form, and of such diameter that it nay be driven into the flue and expand the end of the same in such a manner that it will close snugly around the hole made in the tube sheet to receive the flue, and form a tight and permanent connection of the flue to the tube sheet.]

of the flue to the tube sheet.]

35,692.—Henry Knight, of Jersey City, N. J., for Improvement in Machines for Molding Cement Pipe:
I claim, first, The combination of the table, B, movable platform, I, mold or flask, M, plate, K, core, I, and jackscrow, G H, or its equivalent, the whole constructed and arranged, and operating substantially as and for the purposes described.

Second, The combination of the wheeled truck, I, and railway bars, F, with a cement pipe molding machine, substantially in the manner and for the purpose described.

Third, The combination of the pliable washer with the hard shoulder of the core, substantially as described and for the purpose set forth. Fourth, The construction of the plate, K, with flaps, d d, and with apertures of different diameters, substantially as and for the purpose described.

described.

Example on university distributions and for the purpose described.

Example of arranging the guides, a, and the short posts, Example of a conditions of the purpose set forth.

Sixth, The connection of the shoulder or collar, J, to the core, I, by means of an adjustable through pin, b, in the manner and for the purpose described.

oose described. Seveuth, The lifting of the base plate, K, and the flask or mold bove the truck platform by means of the ends of the pin, b, or an equivalent means, substantially as described.

Steering and Propelling Apparatus:

I claim the combination of the screw propeller, F, arranged in the Idder, and having adjustable blades, the capstan, K, shafts, L J, earing, M N I G H, and lever, S, the whole applied and arranged instantially as set forth.

The object of this invention is to enable sailing vessels to enter harbors without the aid of towboats, and to provide for the effective steering of such vessels in intricate channels, and channels, and in all waters where the navigation is difficult, and to this end it consists in the employment for propelling, and as an aid in steering; of a screw propeller arranged in the rudder, and worked through the interven-tion of suitable gearing by a capstan on board the vessel. It also consists in employment, in combination with movable blades pivoted to such screw propeller, of means by which the said blades can be adjusted from on board thevessel, to set them at a suitable angle to the plane of the rudder for propelling or steering, or bring them to ne phase of the rudder for propering or steering, or oring them to position parallel with the plane of therudder, when it is not desired o use the propeller, that they may offer the least possible obstruction to the progress of the vessel.]

35,694.—E. B. and J. S. Lake, of Absecom, N. J., for Improvement in Circuit Closers for Telegraphs:
We claim the circuit closer, D. combined with the telegraph key, C, substantially as set forth.

35,695.—J. W. Lawson, of Ann Arbor, Mich., for Improvement in Machines for Upsetting Tires:

I claim the combination and arrangement of the silding bed and stationary bed, stationary jaws and silding jaws, wedge-shape keys,

cam and lever, substantially as set forth and described, and for the purpose specified.

-G. W. Lloyd, of Detroit, Mich., for Improved le of Constructing and Arranging Foot Lights for Mode

Theaters:

I claim the position and mode of arrangement of the lights with the continuous reflector as distinguished from the mode now ordinarily in

se. I claim also the power of throwing colored lights on the stage, as

I claim also the power.

Linding and I claim by means of the guard formed by the sunken trough, and the wire cloth covering greatly increased safety to performers.

and the wire cloth 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 busins is from the horizontal center of the busins line the outboard bucket flange, and the center of the businal bearing in the outboard bucket flange, and the center of the busins line projected indefinitely, from the center of the journal bearing in the inboard bucket flange, through the center of the bucket, as has been described and as is represented in figure 3.

35,698.—Richard Martin, of Brooklyn, N. Y., for Improved Packing for Piston and Valve Rods:
I claim the packing ring composed of a folded strip of woven hemp with a lining of wire gauze, the whole being constructed substantially as and for the purpose set forth.

is and for the purpose set forth.

15,699.—J. C. Mayberry, of White Rock, Ill., for Improvement in Cartridges:

I claim the construction of a cartridge with a loose contractible oottom, B, and a central peg, d, or its equivalent, applied and operaing substantially as and for the purpose specified.

35,700.—H. W. Oliver, of New Haven, Conn., for Improvement in Kilns for Drying Lumber:
I claim providing a kiln with steam chambers, D D, separated from the drying chamber or central portion of the kiln by means of perforated or reticulated and wadded partitions, and applying heat below the lumber to operate in conjunction with the steam admitted through the said partitions, substantially as specified.

(This invention consists in certain provisions within a kiln for subjecting the lumber to heat in an atmosphere of steam, whereby the sap is extracted very thoroughly, and the lumber dried in a very erior manner in a short time.

superor manner in a short time.]

35,701.—J. J. Palmer and A. Plamondon, of Chicago, Ill.,
for Improvement in Grain Separators:
We claim the inclined screens, I, and chutes, J, placed in a suitable
shoe, B, in combination with a blast spout. H, provided with openings, d, arranged relatively with the screens to operate as and for the
purpose set forth.
We further claim the extension of the upper end of the inner side,
i, of the shoe, B, above the discharge orlice of the hopper, L, substantially as shown, so as to have a moving surface at one side of the
discharging ortice of the hopper, and a stationary surface at the
opposite side, for the purpose specified.
[This invention consists in the employment of a series of inclined
screens and chutes, placed within a suitable shoe, and arranged with

creens and chutes, placed within a suitable shoe, and arranged with 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 foreign substaces from the grain far more thorough than it otherwise would be.]

35,702.—Leonard Parker, of Winterset, Iowa, for Improvement in Straw Cutters:

I chaim the use of the side knives, m and n, when used in combination with the knives, I and k, spring bottom, p, and the spiral spring, o, as described and represented.

o, as described and represented.

35,703.—S. P. Parmelee, of New Haven, Conn., for Improvement in Pianofortes:
I claim constructing the wrist pin plate of the metallic string frame with a metallic prijection, G. to receive and support each of the strain ing pin bushings, in manner as specified.
I also claim making each of the bushing sockets with an opening, hextending out of its bottom, and with respect to the bushing, as set

extending out of its votabil, and with respect to the causing the forth. I also claim arranging the string holes or passages through the bridge, and directly underneath the junctions of each of the braces and the bridge, in combination with arranging the hitch pin of the string underneath the bridge, all substantially as described. I also claim the arrangement or combination of the arched bridge with the socket plate and each of the braces, in manner substantially as described, the bridge thereby serving to connect the brace and the plate.

olate. I also claim insulating each straining pin from the iron frame by neans of a wooden bushing, or its equivalent.

means of a wooden bushing, or its equivalent.

35,704.—S. T. Parmelee, of New Haven, Conn., for Improvement in Pianofortes:

I claim constructing the iron or string frame with the metallic bracket or standard, B, for connecting the iron frame with bottom frame, as specified.

I also claim supporting the iron frame on the bottom frame, and insulating the former as described from the sounding board, and those parts of the case which extend above the bottom frame.

I also 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 bracket or supporter, with respect to the iron frame and the sounding board, in manner so as to pass down through the hammer openings of the sounding board, as described.

I also claim extending the sounding board across the entire interior of the case, viz., from side to side, and end to end thereof, and making such board with a passage for the hammers and the frame socket, as described.

35,705.—Thomas Pool, of Branswick, Objected Institute of the case when the sounding board are solved.

35,705.—Thomas Pool, of Brunswick, Ohio, for Improveed

35,705.—Thomas Pool, of Brunswick, Ohio, for Improveed Clothes Wringer:

I claim the combination and arrangement of the spring or springs, M.N., sliding bearing blocks, P.P.Q.Q., having guide slots and bearings, dd g.g., and stationary guide screws or pins, f., applied to the roulers, substantially as and for the purposes specified.

I also claim giving an equal or nearly equal, elastic pressure to both rollers simultaneously by means of the double leng springs, M.N., arranged in combination with the slotted frame, substantially as and for the purposes set forth.

15,706.—Mary Jane Pulte, of Cincinnati, Ohio, for Improved Composition for Cleaning Gloves:
I claim the within-described composition of matter for cleaning kid loves, combined in the proportions and in the manner, substantially a set forth.

35,707.—W. H. Richards, of Newton, Mass., for Improvement in Head Cushions to Prevent Sun Stroke:
I claim a head protective cushion, made and to be used, substantially in manner and for the purpose specified.

35,708.—Gelston Sanford, of New York City, for Improvement in Machinery for Separating Fibers from Plants:

I claim the combination of the cylinder armed, substantially as described, wit hoars formed for scraping and combing or either, with the endless belt, also armed, substantially as described, with bars for scraping and combing or either, substantially as and for the purpose specified.

scraping and combing or either, substantially as and for the purpose specified. I also claim in combination with the cylinder and endless belt armed with bars, substantially as described, the covering of the periphery of the cylinder with elastic substance between the bars, that the teeth or edges of the bars may act against jetchiug surface, the better to perform the operations required, substantially as described.

scribed.

Seriod:

Takso claim the elastic griping feed mechanism, substantially as described, in combination with the mechanism, substantially as described, which crushes the fiber-yielding plants, and separates the impurities from the fibers a 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 in the spaces between the combs on the opposite moving surfaces, substantially as described, and this I claim, whether the two series of combs be attacked to a bek and a cylinder, or to any other form of moving surfaces, so long as the said surfaces move at or nearly the same velocity.

35,709.—Gelston Sanford, of New York City, for Improvement in Machinery for Dressing Flax and Itemp:

1 claim the combination of the two series of breaking rollers, on

11emp: I claim the combination of the two series of breaking rollers, one series arranged on a cylinder, and the other on an endless belt, or on the equivalents thereof, the one series being driven and imparting motion to the other series, substantially as and for the purpose described.

I also claim the combination of the two series of hatchels arranged in the cylinder, and on the belt or endless apron, or the equivalents hereof, the one series being driven and imparting motion to the other eries, substantially as and for the purpose described.

I also claim the two series of hatchels, in combination with the two eries of breaking rollers, arranged on a cylinder and endless apron or elt, or their equivalents, when one of the said series of breaking ollers and hatchels is driven, and imparts motion to the other series, and I also claim the feed rollers, one of which is elastic, in combination with the cylinder and belt or endless apron, or their equivalents, and provided with breaking rollers and hatchels or either, substantially as described.

stantially as described.

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 fluted surfaces for
breaking and pounding, whether the flutes be made of equal or gradually less size, a reciprocating whipping or jarring rod, substantially
as and for the purpose specified.

35,711. S. M. Selev and Pater Hopking of Paoria III.

35,711.—S. M. Seley and Peter Hopkins, of Peoria, Ill. for Improved Piston for Steam Engines:
We claim admitting steam within the piston from one side, and preventing lis escape on the other side, alternately by means of valves sliding on stationary longitudinal pins, and covering apertures in the respective plates or heads of the piston, substantially as and for the purpose set forth.

purpose set forth.

35,712.—B. H. Smith and G. W. Archer, of Ipswich, Mass., for Improvement in Harvesters:

We claim the combination of the rock shaft, S. finger bar, L. caster wheel, Y. and lifting lever, V. with the swinging bar, I. driving wheel, H. and frame, A. as shown and described, so that there will be a self-acting adjustment of the cutters as the machine passes along over the earth, and so that the cutters may at any be instantly lifted from the ground, all as specified.

The combination of the curved swinging arm, J, with the bar, I, and axle, B, as and for the purpose shown and described.

and axle, B, as and for the purpose shown and described.

35,713.—J. D. Smith, of Peoria, Ill., for Improvement in Seed Planters:

I claim, first, The gage plate, G, and lever, H, arranged with the shaft, I, provided with the pin, h, and lever, M, substantially as shown to operate as and for the purpose set forth.

Second, The set screw, K, in connection with lever, H, gage plate, G, and spring, J, for the purpose of regulating the discharge of the seed, as specified.

Third, Attaching the furrow share bar, P, to the shaft, I, by means of the spring, O, as and for the purpose set forth.

[This invention consists in a novel and useful arrangement of a seed gage, levers, furrow share and certain other parts, whereby the

seed gage, levers, furrow share and certain other parts, whereby the seed gage is operated or adjusted alternately, from the movement of the lever, G, by which the furrow share is raised and lowered. j

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:

I claim, first, The additional eduction valvecommunicating with the cylinder of a steam engine by an aperture placed at, or near the middle of the length of the cylinder, in combination with apparatus for heating the feed water of steam engines by steam withdrawn from the induction side of the pison, substantially as shown and described. Second, Forming the aperture or nozzle last named by a number of small holes, a a a, pierced through the middle of the cylinder, substantially as shown and described.

Third, Opening and closing the additional eduction valve when placed in the middle of the cylinder by a motion derived from the secentric that works the main valves of the engine, substantially as shown and described.

nown and described.

Fourth, The disphragm in the closed heater and the valve attached the cup, or its equivalent, and balanced by the weight in combination with apparatus for heating the feed water of steam engines by eam withdrawn from the induction side of the piston.

35,715.—J. A. Thayer, of East Boston, Mass., for Improve

ment in Tools:

I claim, first, A shank or bar graduated to form a scale, the ends of the holes are shaped respectively into a screwdriver and claw, as described as the scale of the holes of the holes

bed.

Second, A handle or sleeve capable of adjustment upon and along the said shank or bar, substantially as set forth.

Third, A hammer head adjustable along the said shank or scale and provided with a bulging center piece so arranged as to act as the fulcrum to its own claw as well as to that of the bar, the whole being constructed, arranged and combined as set forth.

35,716.—J. D. Tifft, of Cuyahoga Falls, Ohio, for Improvement in Clothes Wringer and Mangle Combined:

I claim the eccentric fulcrum, P. arms, m'm', wedges, mn, bearings, c, d, in combination with the clastic springs, G. collers, C C' and D D', in the manner described, when operating conjointly for the purpose set forth.

35,717.—Benjamin Tukey, of Fairfield, Maine, for Improved Fruit Gatherer:

1 claim the method of gathering fruit described, without danger of bruising the fruit, and without ascending the trees, using for the purpose the instrument described, or any other substantially the same.

35,718.—C. A. Uhl, of Millersburgh, Ohio, for Improvement in Cultivators:

I claim, first, The arrangement of the lever, L, rods, m, beam, I, and plows, E, as described, for the purpose of lifting the plows from the earth, as described.

Second, The guides, F, for regulating the depth of the furrows in combination with the plus inserted in the holes, f, in the said guide bands, F, substantially as described and shown.

35,719.—Joseph Vendrand, of Paris, France, for Improvement in Planes. Patented in England March 4, 1861: I claim, first, The combination with the plane iron, A, provided with mortises, R, as described, of the adjusting screw, V, sliding block, B, and tenon, a, the said tenon and mortise being relatively so constructed as to allow the iron sufficient lateral play to permit the perfect adjustment of the edge parallel to the face of the plane, as set forth Second. The combination of the nut, A', which secures the cap to the cutting is an, with the lever, E, and ears, E' E', as and for the purpose set forth.

the cutting i on, with the lever, E, and cars, Z, you set forth.
Third, The arrangement of the lever, E, and screw, e, as described that is to say, in such a manner that the screw shall take its point of support apon the top of the plane and extending up through the nut, E2, terminate in a head for operating above the lever, E, as set forth instead of behind it, where it would be in the way of the operator.

35,720.—Charles Wanzer, of New York City, for Improved Cement for Slate Roofing:

I daim a combination of grease pitch with the quicklime or hydrate of lime, or the chloride of lime or bleaching powder, venetian red, or other ocher, and linseed, or other oil, about in the proportions specified, to form a cement, for the purpose set forth.

[This cement is designed for slate roofing of that class in which the labe are ladd without a longthe and simply abutting account each

slabs are laid without a lap, the ends simply abutting against each other as well as the sides. The object of the invention is to obtain 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 off from the surface to which it is applied.]

35,721.—P. L. Weimer, of Lebanon, Pa., for Forming Molds for Shot and Shells:
I ciaim, first, Rotating the flask which receives the sand composing the mold, while the sand is supplied to the flask and is being compacted by one or more rollers, for the purpose set forth.
Second, I claim ferming the cavity in the mold within which the shotor shell is to be east by means of a rotating reamer.
Third. I claim a rotating polisher for finishing the Cavity formed by he reamer, for the purpose set forth.

35,722.—W. H. Wellsteed, of Buffalo, N. Y., for Improvement in Skates:

ment in Skates:

I claim the jointed toe, D, of the runner, spring, E, an pressure spring or pad, F, in connection with the screw proper heel fastening, substantially as and for the purpose.

[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 saved in adjusting the skate to the foot, and the latter prevented from becoming cold and cramped, as is the case when straps are used for

35,723.—T. E. M. White, of New Bedford, Mass., for Improvement in Artificial Legs:

First, I claim a perfectly ventilated and phable socket constructed of steel braces covered with canvas, and surrounded by wire gauze, as described.

escribed. Second, A ratchet and catch in the knee joint, as set forth. Third, A leverfor bringing the catch in contact with the ratchet by leans of the weight of the hody, and liberating it, as specified.

35,724.—Dutee Wilcox, of Providence, R. I., for Improvement in Sleeve Fasteners:

I claim my improved sieeve catchup or fastener as made with the duplex hooked spring tongue, B. and with the guard hook, C. constructed, arranged and applied to the body part, A, in manner and so as topperate, substantially as specified.

as to operate, substantially as specified.

35,725.—Fenn Willcox, of Newark, N. J., for Improvement in Gig Sawing Machines:
I claim, first, The frame, D. constructed as shown, in connection with the plate, S, attached to said frame, D, by hooks, k, as and for the purpose set forth.

Second, The adjustable plate, R, connected by a hinge or joint, i to the plate, S, and operated by a set screw, n\*, for the purpose of regulating the rake of the saw, as set forth.

Third, Connecting the frame, D, to the shaft, G, by means of the strap, E, and pulley, F, the latter being connected to its shaft. G, by the clutch, H, to admit of the adjustment of the frame, D, as described.

scribed.

Fourth. The combination and arrangement of the gearing I J, and spring, L, for the purpose of straining the saw, N, as set forth.

Firth, The roller, C, when placed in the adjustable plate, B', and stached to the vertically-adjustable plate, D', as and for the purpose set forth.

35,726.—R. P. Wilson, of New York City, for Improved Clothes Wringer:

The combination of the rollers, C C', pulleys, E E F F, and endless india rubber belts, G G, arranged and applied to an upright framing, substantially as and for the purpose set forth.

(This invention relates to an, improvement in that class of clothes wringing machines in which pressure rollers are employed to effec the result. It consists in a novel application of springs to the rollers for the purpose of obtaining the necessary pressure, the springs being endless india-rubber belts fitted on loose pulleys placed on the journals of the rollers, whereby the desired pressure is obtained and the rollers allowed to rotate with the least possible degree of friction, the belts, when stretchedor distended to a certain extent, being permitted to move under the action of the rollers.)

to move under the action of the rollers.]

35,727.—A. I. Ambler (assignor to himself, R. N. Ambler and Warrick Martin), of Milwaukee, Wis., for Improvement in Railroad Car Brakes:

I claim, first, The rotating rod or shaft, C, in connection with one or more cams, D, either placed on the rod or shaft, or so connected therewith as to be turned by it and actuate the brakes, as described. Second, Operating or turning the rod or shaft, C, from the locomotive by means of a steam cylinder, J, having its piston rod, K, provided with a rack, L, which gears into a pinion, M, on the shaft, N, connected with the rod or shaft, C, substantially as set forth. Third, The shafts, P, S, fitted one within the other and connected, one, P, to the rod or shaft, C, and the other, N, directly to the brake and for the purpose specified. Fourth, The draw heads or couplings formed of the crossbars, f, each provided with a pin, g, and a hole, h, substantially as set forth. [This invention consists in the employment of a rotary rod or shaft placed underneath each car and provided with cams so arranged as to actuate the brakes. The invention also consists in a novel and im-

actuate the brakes. The invention also consists in a novel and improved way of applying steam power to the brakes as well as to ar improved arrangement for operating them by hand, and also to an im proved mode of connecting or coupling the cam rods or shafts.]

35,728.—I. S. Barber (assignor to himself and L. N. Fuller), of New York City, for Improvement in Cigar

35,728.—I. S. Barber (assignor to ler), of New York City, for Improvement in Cigar Machines:

I claim, first, The combination of the concave rollers, A and A', and the roller, L, whether of wood or metal, with the endless belt, M, and desk, O, when combined and used for the purpose of manufacturing cigars, in the manner described.

Second, Also, in combination with the foregoing first claim, the loose sleeve, D, header, J, circular knife, H, and circular die, I, the same being constructed and acting together to perfect the operation of the manufacture of cigars, as and in the manner described.

ne manufacture of cigars, as and in the manner described.

35,729.—H. V. Butler, of New York City, and J. C. Hoadley, of Lawrence, Mass., assignor to said H. V. Butler, for Improvement in Device for Changing Speed in Machinery:

We claim the combination of the collar, E, its attached pinion, F, and the pulleys, T M, with the shaft, D, pulley, P, clutch, K, gears, G I J, and belt shipper, Q, in the manner and for the purpose shown and described.

[The object of this invention is to obtain a device by which the speed of machinery may be chained at will and very expeditiously, withou any cessation of movement. The invention will be found a great 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, machinery for manufacturing paper, printing calico, &c.1

ry for manufacturing paper, printing calico, &c.]

35,730.—Z. E. Coffin, of Newton Center, Mass., assignor to himself and W. P. Hunt, of Boston, Mass., for Improved Capstan:

1.c.aim the arrangement of the bollow shaft, G, within the capstan barrel and upon the fixed spindle, B, said hollow shaft being arranged to carry the gears, Q, above, and the pawls, G, uhon as expander mat the bottom, and so as to freely turn upon the fixed spindle for the simple motion, but becoming stationary when the gears are brought into action by reversing the motion of the lever head, substantially as and for the purposes set forth

35,731.—Samuel French, of Boston, Mass., assignor to himself and Sidney Allen, of Newton, Mass., for Improvement in Safety Pockets:

I claim the combination of the fiexible arm and bolt actuator, or their equivalent or equivalents, with the pocket and its fastening apparatus, the whole being substantially as specified.

paratus, the whole being substantially as specified.

35,732.—W. Froehlich, of Harburg, Kingdom 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 compartmentsof tri-lateral form, by means of a partition of zigzag form, stitched or otherwise secured alternately at about equal distances part, 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 mattres (I in suvention consists in dividing the cover or case of the mattres into compartments of tri-lateral form running transversely across the cover or case, whereby several advantages are obtained over mattress es of ordinary construction.

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:
J. claim, first, Suspending the Wick tube, C, by means of the jour-

nals, II, or their equivalents and operating substantially as and for purposes described. econd, I claim the opening, B, with its door, D, for the purposes oribed and set forth.

35,734.—John Gault, of Boston, Mass., assignor to himself and W. V. Barkalow, of New York City, for Improvement in Chain Shot:

I claim an elongated chain shot divided transversely, when the two portions are united by dovetails, or their equivalents, substantially as described.

described.

35,735.—Josee Johnson, of New York City, assignor to himself and John Ward, Jr., of Brooklyn, N. Y., for Improved Ironing Table:

I claim the construction and use of an ironing table, with a tapering top, A, and with a central frame, B b, open at one end, as shown by M, to allow the slipping on of skirts and the like, supported laterally by folding legs, F F, which are capable of being folded into a line with the said frame, so as to form a novel table possessing the advantages set forth.

35,736.—Nelson Kidder (assignor to B. F. Linville), of Moscow, Iowa, for Improvement in Ditching Ma-

chine:
I claim the combination of the share, E, and adjustable evengs, II, adjustable supporting wheel, H h, and rollers, O structed and operating substantially as and for the purposes s

35,737.—La Fayette Louis (assignor to G. A. Prince and Thomas Stephenson), of Buffalo, N. Y., for Improvement in Melodeons:

I claim the construction of a device which I name the "basso tenuto," and the use and combination thereof vith a melodeon, organ or planoforte, for the purposes and substantially as described.

planoforte, for the purposes and substantially 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 City, for Paper Folding Machine:

I claim, first, The combination of pressure rollers for holding the paper upon and in working contact with propelling rollers, with such prepelling rollers and folding rollers, the latterfolding and presenting paper which is then moved by the former, the combination being substantially such as specified.

Second, I claim propelling rollers and pressure rollers acting in combination, as described, in combination with wires or rods to support sheets of paper, the combination being substantially such as specified.

Third, I claim in combination with a pair of folding rollers, a pressure roller applied substantially as described, to compress paper against one of the folding rollers, the combination acting substantially as set forth.

orth. Fourth, Incombination with folding mechanism mounted upon fibrating frame or vibrating arms, a claim a delivering board contructed, arranged and operating substantially m the manner desired.

vibrating frame or vibrating arms, claim a delivering board constructed, arranged and operating substantially in the manner described, arranged and operating substantially in the manner described, a table or support for folded paper, and other surfaces parallel or nearly so to the compressing surface, which latter gradually move away from the compression as folded sheets are introduced, the whole being constructed and acting substantially as specified and in combination with a proper apparatus for folding paper.

Sixth, I claim, in combination with a delivering board a compresser acting substantially as described.

Seventh, I claim, in combination with proper blades or knives for creasing paper and introducing it between folding rollers, folding rollers altitude parallel to their axes operating upon the paper and in commercian with the blades, substantially as set forth.

Eighth, I claim to their axes operating upon the paper and in convertion with the blades, substantially as set forth.

Ninth, I claim the general arrangement, substantially such as described, when such rollers are mounted upon and carried by a counterpoised vibrating frame.

Ninth, I claim the general arrangement, substantially as described, in sofar as the same consists of a stationary table on which the paper to be folded is laid, and a vibrating frame and of sets or series of folding rollers, mounted in that frame, under substantially such as arrangement of folding rollers and delivered from the frame on the opposite side thereof by the last pair of folding rollers and side livered from the frame on the opposite side thereof by the last pair of folding rollers.

Tenth, In combination with apparatus for folding paper, I claim a stop motion or disconnecting apparatus constructed and operating substantially as a specified.

Eleventh, I claim, in combination with folding rollers, a side guide.

motion or disconnecting apparatus constructed and operating sub-tially as described. Eventh, I claim, in combination with folding rollers, a side guide he edge of a sheet arranged and acting substantially as specified,

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

5,739.—Lewis Patric (assignor to himself and Hen Reed), of Victor, N. Y., for Improvement in Grs Separators:

I claim the arrangement, in grain separators, as and for the purp pecified, of the spout, p, and scraper, c, in combination with an lined series of cylindrical concentric revolving screens, having a crab la stpassing through them longitudinally in the opposite dir ion from which the grain is fed.

35,740.—G. B. Phillips (assignor to John R. Crockett), of Newark, N. Y., for Improvement in Wrenches:
I claim the jam or holding nut, arranged substantially as described, for the purpose set forth.
I also claim the socket, L. in the head, A, in combination with the removable sockets of various sizes for screwdriver or other tools used in the sockets of various sizes for screwdriver or other tools used

in it.

35,741.—Cornelius Van Derzee (assignor to himself and W. S. Valentine), of Albany, N. Y., for Improvement in Bung Cutters:

I claim the combination and arrangement described of the following apparatus, forming a tool or machine for cutting out from suitable material bungs of any desired size, viz., mandrel A, fitted fer rapid revolution, with its bar, B, the adjustable sliding blocks, C, fitted as guides to the cutter bars, the cutter bars, E, with their cutters and their guide bars, K and L, sliding cylinder, G, with its groove for the guide bars, the whole as set forth.

742.—James Webster (assignor to J. H. Porter and Robert Porter), of Birmingham, England, for Improvement in Manufacture of Oxygen Gas. Patented in England, Oct. 19, 1861: claim the obtaining the oxygen nitrogenous compounds, and the cof the salt employed in the manner stated.

RE-ISSUE.

1,319.—W. W. Shaw, of Troy, N. Y., assignor through Mesne Assignments, to L. L. Tower, of Cambridge, Mass., for Rubber Head for Lead Pencils, &c. Patented April 5, 1859:

I claim the combination of a lead pencil and an elastic rubber ferrule or head, made so as to encompass the cylindrical surface of the pencil or a tenon therefrom, substantially in manner as specified.

I also claim, as a new manufacture, an elastic erasive pencil head made substantially as described.

# Books and Publications Received.

AMERICAN JOWRNAL OF OPHTHALMOLOGY. Published by Balliere Brothers, 440 Broadway, New York City.

This is the title of a new monthly journal, devoted to the specialty of eye diseases and information relating to the eye. It is edited by Julius Homberger, M. D. Price \$2 per annum. Diseases of the eye are very numerous. An ably-conducted periodical like this should obtain a large circulation.

THE ATLANTIC MONTHLY. Published by Messrs. Ticknor & Fields, Boston.

We have received the July number of the Atlantic Monthly. It is an

excellent number. In "The Poet to His Readers" we think we discover the peculiar rhythm of Whittier; " & roude's Henry the Eighth" is ably reviewed, and the "Literary Notices" are admirably written, From Agassiz's article we give some extracts on another page.