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•.• Pamphlets giving full particulars of the mode of applying for patents, under the new law which went into force March 4, 1861, speci-fying size of model required, and much other information useful to inventors, maybe had gratis by addressing MUNN & C●., Publishers of the Scientrific Ambrican. New York.

-John Adt, of Waterbury, Conn., for an Improved 1.601

Lock: Iclaim the bolt, B, provided with the yoke, C, at its inner end, i combination with the spring, D, and the hub, E, having the button, m attached and fitted in the yoke, C, the above parts being placed in case, A, and all constructed and arranged as and for the purpose se forth case, forth

This invention relates to a small lock of simple construction, de signed for doors of buildings. The object of the inventor is to obtain a lock which may be readily inserted in the door, and without cutting away much of the latter, and one which may be constructed with but a little amount of metal and in a very econ mical manner.]

a little amount of metal and in a very economical manner.] 1,602.—P. Andrew, of Cincinnati, Ohio, for an Improve-ment in City Railways: I claim, first, The arrangement of a quadruple track 'upon a single row and the provided with cross-arms for suspending the cars there-from, asset forth. Second, I also claim the arrangement of the guide rails, E, to obviate the necessity of using flanges on the car wheels, in the manner and for the purpose set forth. Third, I claim, the arrangement and combination of levers, K and L, for holding the propelling rope firmly against the groove in wheel I Fourth, I claim operating a car or cars by a succession of endless ropes, so arranged that on leaving one endless rope the car detaches itself therefrom and attaches itself to that of the next succeeding reach in the manner and for the purpose set forth. There, I and bat, R, for attaching and detaching the carsfrom the pro-pling ropes.

pelling ropes. Sixth, I claim the arrangement and combination of wheel, S, and band, T, as described and for the purpose set forth.

1,603.-Nathan Barrett, of New York City, for an Improve-

1,003.—Nathan Barrett, of New 1 ork (http://or an improve-ment in Pumps-I claim the two pump cylinders, D D, attached to the ends of a walk-ing beam, B, counterpoised thereon, and having their piston rods, F/, connected by levers and gearing or segments, in such a manner that the pistons will be operated automatically by the oscillating of the beam, B, and all arranged to operate as and for the purpose set forth. [The object of this invention is to obtain a pump which, in its oper-tion will be and the arrows of material displayer the meister of

ation, will lift only the amount of water it discharges, the weight of the whole column of water which is lifted in the ordinary lift pumps being avoided. To this end two pump cylinders are employed which are connected to the ends of a walking beam and connect the piston rods by suitable gearing and levers, one cylinder being made to balance the other, and the whole so arranged that the desired end is obtained.]

the other, and the whole so arranged that the desired end is obtained.] 1,604.—L. A. Beardsley, of South Edmeston, N. Y., for an Improved Portable Crane: I claim the combination of the windlass, J, circular way, A, and arm or brace, G, constructed and operated substantially as shown, with each other and with the crane, D E, all in the manner and for the pur-pose shown and described. [This invention relates to a novel crane intended for the use of the armer as well as for the engineer. It is constructed so as to com-

armer as well as for the engineer. It is constructed so as to com bine with strength, lightness and portability, and be of a size adapted to the purpose it is intended to secure.]

1,605 .- David Bell, of Buffalo, N.Y., for an Improved

1,605.—David Bell, of Buffalo, N. Y., for an Improved Screw Propeller:
First, I claim the socket, F, formed on the back of the blade, substantially as and for the purpose set forth.
Second, I claim the wrought arms, D, connected to the hub in the process of casting in combination with the removable blade, substantially as described.
1,506.—B. C. Bibb and G. F. Needham, of Baltimore, and G. W. Dorsey, of Port Republic, Md., for an Improved Apparatus for Curing Tobacco:
I claim the combination and arrangement of a furnace, A, a hot air jacket, B, with or without evaporating pano its top, heating pipe, B, direct draft pipe, D, and hot air distributing pipe, H, for the purpose forth.
1607. G. G. Richon of Narwalk Conn. for an Improved

pose of drying tobaccoin a barn or other building, substantially as set forth.
1,607.—G. G. Bishop, of Norwalk, Conn., for an Improvement in Machinesfor Making Felt Cloth:
First, I claim the carrier combs, N X2 and parts attached thereto, or equivalents, in combination therewith, to constitute the said carrier combs, as a complete device for the purpose, substantially as set forth.
Second, I claim the use of the carrying screws, J and L, having attached thereto, or equivalents, substantially as set forth.
Second, I claim the use of the carrying screws, J and L, having attached thereto, or equivalents, substantially as set forth.
Third, I also claim the use of the triangular grooved cam. X, in combination with the carrier combs, S and N2, and parts attached thereto, or equivalents, substantially as set forth.
Third, I also claim the use of the triangular grooved cam. X, in combination with the weighted lever, Q, and failer combs, P and P, for the purpose set forth.
Jious, I, in combination with the weighted lever, Q, and failer combs, P and P, for the failer combs, as set forth.
Jious, —R.Blackwood, of Philadelnhia. Pa. for an Improved

-R.Blackwood, of Philadelphia, Pa., for an Improved 1.608.

1,608.—R.Blackwood, of Philadelphia, Pa., for an Improved Hydraulic Jack : I claim the construction and arrangement of the cylinder, D, and the valve seat part, D', together, in the manner described, and in adjustable combination with the disk, m, which forms the removable bottom of the orlinder, B, as specified, the said part, D', containing the valves, G H I, and the ways, o, all constructed and arranged together so as to be readily connected or disconnected, as specified, and to operate substantially in the manner described. I also claim m king the open recess, x, in the hand lever, F, so asto operate in comb nation with the pin, w, in the manner described, for the purpose of allowing greater facility in connecting or disconnecting the said parts, and also for the purpose of enabling ine operator either to avoid, or operate the stem, K', by means of the said lever, as described, as occasion may require.

-F. B. Blanchard, of Brooklyn, N. Y., for an Im 1,609.

1,610.--F. B. Blanchard, of New York City, for an Im-provement in the Application of Blowers to Furnaces of Locomotives: I claim, first, The combination of the movable bearing or bearings,b

of the fan shaft, the friction roller or rollers, G, and the lever or levers, H, the whole applied relatively to the driving or other wheels of the locomotive, and operating substantially as specified. Second, The regulating valve, f, applied and operating in the trunk of the blower, under the control of the engineer, substantially as spec-ient Se of the ifie?

(This invention relates to the driving of the blower by friction from the peripheries of the driving or other wheels of the locomotive to ef-fect combustion in a closed furnace, and consists in furnishing the blower shaft with friction pulleys or rollers, to work in contact with the peripheries of the said wheels, and the arrangement of the so fur

ed shaft in bearing movable toward and from the axis of said nisł wheels under the control of levers, for the purpose of bringing the blower into or out of operation at pleasure.]

blower into or out of operation at pleasure.
1,611.—Horace Boies, of Hamburgh, N. Y., for Improvement in Washing Machines:
First, I claim a series of rollers, C D, supported in two rectangular frames, E F, which rollers and frames constitute two movable rubbers, the one being supported upon the other, in combination with mechanism for transmitting the said rubbers, alternate and simultaneous movements in opposite directions, and in parallel planes for the purposes and substantially as described.
Second, I claim the arrangement of the bars, Q, including slots, r, and spring arms, S, including sheaves, S', with incline slot, u', spring U, and kever, T, so that the downward movement of the lever, T, will bring the spring arms into such position as to cause the sheaves to bear with a due amount of pressure upon the rubber frame, E, while the rubbers are in motion, and so that said spring arms will withdraw au tomatically from such position when the pressure is removed and allow the rubber to be turned up into a vertical position, for the purposes substantially as described.

2.--D. M. Boyd, of Indianapolis, Ind., for an Improved Tilting Device in Shingle Machines : 1.612

Thing Device in Shingle Alachines: I claim the horizontal adjustable plane, \mathbf{F} , with the lever, \mathbf{V} , together with the spring, \mathbf{X} , and the trigger, \mathbf{P} , with its appendages, the coil spring. S, and the soroll spring, \mathbf{Q} , when these parts or their equiva-lents are arranged substantially in the manner and for the purpose set forth ; the object and nature of the invention being to secure the tilt-ting of the block table of the shingle machine at the proor moment, and to avoid any change of the table during the time the shingle is be-

1,613.-Martin Colton, of Sardinia, N. Y., for an Improved

1,613.—Martin Cotton, or Cartanue, Spoke Shave: I claim the combination of the adjustable cam face, C, with the stock, A, and knife, B, arranged and operating for the purposes and substantially as set forth,

1,614.—John F. Cory, of New York City, for an Improved Bit Stock : BIL SLOCK: I claim the combination of the case, H, with the shank, G, and sock-t, C, by means of the universal joint, in the manner and for the pur-oses set forth.

poses set forth. 1,615.—Abner Cutler and N. Jenkins, of New York City, for an Improvement in Toy Pistols : We claim, first, So constructing a toy pistol that the projectile will be thrown by a direct blow of the hammer, substantially as described. Second, Casting the body, that is to say, the barrel and the stock, in two similarparts, each representing exteriority one half of the body, and each having interiorly a groove, which, when the two parts are brought together, forms the bore, and having also ap propriate recepta-cles for the mechanism, as set forth. Third, The spring piece, n, or its equivalent, for retaining the bullet, substantially as described.

1,616.—A. W. Dewey, of Boston, Mass., for an Improve-ment in Water Elevators : I claim my improved water elevator, having its separate parts, viz., its wheel, C, bent arms, a a, &c., chain, D, buckets, EE, &c., and the cams or trippers, H H, constructed and arranged in relation to each other, and so to operate together, substantially as shown and de-scribed.

1,617.—A. K. Eaton, of New York City, for an Improve-

1,617.—A. K. Eaton, of New York City, for an Improve-ment in the Process of Manufacturing Malleable Cast-Iron and Steel, and in the De-oxydizing of Iron Ores: I caim, first, The use of Carbonic Acid for the purpose of remov-ing carbon from cast iron in the production of maleable iron or steel, substantially as desoribed. Second, The use, in combination with the decarbonizing processes, of the carbonic oxyd generated by such processes in the reduction of iron ore, substantially as desoribed.

iron ore, substantially as described.
1,618.—H. N. Fryatt, of Belleville, N. J., for Improvement in Decolorizing Sirups:
1 claim the use of bone black or any other substance capable of de-colorizing fluids, assisted by centrifugal force, as in the ordinary cen-trifugal machme, as a mode of and for the purpose of decolorizing sac charme juices, sirups, or sugar solutions passed through it.

1,619.-Mathew Gill, of Battle Creek, Mich., for an Im-

1,619.—Mathew Gill, of Battle Creek, Mich., for an Im-provement in Life or Safety Shipe: I claim, first, The employment of the two Suls, A and B, when con-nected and secured together, as described, the timbers of the upper hull projecting down externally and internally over the upper edge of the lower hull, for the purpose of keeping the upper in proper position upon the lower, substantially as set forth. Second, The arrangement of the tods, a a a, the cross timbers, d d, and the braces, c c c c, in the manner and for the purpose set forth. Third, The employment of the levers, J J, rack bars, H H, as con-structed, when used in connection with the rods, a a, as and for the purpose described.

1,620,-J. W. Hardie, of New York City, for an Improve-ment in Needle Setter and Threader for Sewing Ma-

illefit in receite bower and threads the second sec

accures, substantially in the manner and for the purposes specified.
 1,621, --L. A. Hoffman, of Prussia, for an Improved Galvanic Metal Friction Brush:
 I claim as a new article of manufacture the described electro-galvanic metal friction brush, the same consisting of a stock containing a series of copper and zinc plates arranged alternately and having fell or other suitable absorbent interposed, as specified, in combination with the curved leather strap, studded with rows of puts of plated sliver wire, and the curved zinc plate at the back thereof, the whole being constructed and arranged substantially in the manner and for the purposes set forth.

1,622.—L. P. Jenks, of Boston, Mass., for an Improved Machine for Detaching the Short Fibers from Cotton

Seed : I claim detaching the short fibers not now removed by the cott from cotton seed by means of a machine constructed and used sul tially as described and set forth.

tially as described and set forth. 1,623.—Gilbert Jessup, of Chapinville, N.Y., for an Improvement in Seeding Machines: I claim the combination of a seeding wheel having a tooth face and channeled side with the casting, F G, or holding frame, with two seed entrances, for the purpose of sowing fine or coarse seed from the same hopper, substantially as described.

nopper, substantially as described.
 1,624.—Davoust Kern, of York, Pa., for an Improved Process for Preparing the Flanking of Leather for Soleing:

 I claim the prescribed manner or process of treating or preparing the flanking of all and every kind of leather used for solid boots, shoes, &c., also for belting, likewise for cards, whether machine, hand or otherwise, thereby rendering it useful, substantially in the manner specified, described and set forth.

specines, described and set forth. 1,625.—Charles Korn, of Meriden Conn., for an Improved Machine for Dressing Leather: I claim, first, The combination of the treadle, M, levers, L, and presser, K, the latter being constructed with guides, K', and em-ployed in connection with a knife or scraper frame, I, attached to an cultures beit, G, in the manner and for the purposes set forth. Second, The pivord spring clearer, S s T, constructed substantially as shown and described, and employed to clean the knife during its continuous motion, as explained.

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Third, The combination of the pivoted knee, n, wedge, \mathbf{R} , and slide, \mathbf{O} , for adjusting the bench, \mathbf{N} , as explained. 6.—Jacob Kuhn, of Centerville, Pa., for an Improve-ment in Machines for Hulling and Cleaning Clover 1.626.

ment in Machines for Hulling and Cleaning Clover Seed: First, I claim constructing the teeth, n n, of the cylinder, A, in the nanner or form set forth and described; thesa mobeling arranged there-on in relation to each other, in the manner specified. Becond, I claim constructing the inner side of the concave, B, with hor ldges, o, of teeth, and the groovers, p, between the said ridges, as set forth and described, and to the purpose of receiving and operal-ing n combination with a rotaing cylinder provided with the teeth, n n, constructed substantially as described. Third, I also claim making the hopper with the two distinct apart-ments, E E, as set forth, the apartment, E, being fitted with the ad-southers of the said apartment only into the screen carrier below, rolisis the apartment, C, communicates only with the huller, as and for the purposes specified. 1.627.—A. Lebkitcher, of Belleville, III., for an Improve-

1,627.-A. Lebkücher, of Belleville. Ill., for an Improvement in Lubricating Compound : I claim the lubricating compound derived from the use of rosin oil, muriatic acid, zinc, lime, olive oil, and water, in the manner herein set forth.

[This invention consists in a compound produced by mixing rosin oil (which has previously been refined by means of zinc dissolved in ether] (with pure slaked and powdered line as about the proportion hereinaf-ter described, together with a certain quantity of olive oil and soft water, which is added after the mixture of rosin oil and lime has been water, which is added after the initiate of rosin on and mile has been heated and allowed to settle, thereby producing a lubricator, which, while it will economize power and prevent wearing, will not become gummy and glutinous, but keep the journals and other parts to which it may be applied, cool and so as to be easily cleaned.]

1.628.

1,628.—Joel Lee, of Galesburg, Ill., for an Improvement in Water Elevators:
First, I claim the slotted lever, N, in combination with the brake, P for the purpose of uncultability the crank, as described.
Second, The combination and arrangement of the pawl, O, and brake P, as described and for the purpose set forth.
Third, The spring, R, in combination with the slotted lever, N, for the purpose of clutching the crank had maising the brake from the catch, thereby permiting it to fail into the ratchet as described.
Fourth, In combination with the foregoing enumerated devices a horizontal bail or hoop placed at or near the top of the bucket, k, for the purpose of preserving the equalibrium of the bucket and affording convenience in dipping small quantities of water therefrom, when de sired, as described.
1,629.—H. S. Lawis, Ching, C.

1.629.

1,629.—H. S. Lewis, Chicago, Ill., for an Improvement in Processes for Refining Lard : I claim the pan having a double bottom, inclining downwards from he sides towards the center, and with an arrangement of steam and vater.pipes, C D D, and cocks E F G H I I, as herein described.

the sides towards the center, and with an arrangement of steam and water-pipes, G D D, and cocks E F G H I I, as herein described.
1,630.—Isaac Lindsley, of Providence, R. I., for an Improvement in Looms for Weaving Hair Cloth:
I claim first, Confining and compressing the lengths of wet at one end, and reciprocating or otherwise changing the position of the compressed position with respect to the device used to select a single length therefrom, and present the end thereof to the how, nippers or other device, used to insert the length of hair or other material in the web, in the manner and for the purpose substantially as specified.
Second, I claim the thance, k, or its equivalent, in combination with the lance, k, or its equivalent, substantially as described for the purpose specified.
Third, I claim the mode of operation substantially as specified. Which a single length of the wort, or several lengths, are selected and separated from the compressed mass or portion of the selected and separated from the compressed mass or portion of the selected and separated from the compressed mass in selectified, by means of which a single length of the wert, or several lengths, are selected.
Fith, I claim the mode of operation substantially as specified, by means of which a single length of the wert is to select a length of the wert on separation substantially as specified, by means of which, in case the lance or equivalent evice fails, to select a length of the wert from the compressed mass, its efforts to do so are in consequence repeated several times during a single beat of the lay substantially as specified.
1,631.—Dennis G, Littlefield, of Albany, N. Y., for an Im-

substantially as specified. 1,631.—Dennis G. Littlefield, of Albany, N. Y., for an Im-proved Fire Pot for Coal Stoves : I claim in the construction of base-burning stoves as arranged and fitted substantially according to the specification in my Letters Patent of January 24, 1854, the combination of the supplying cylinder, M, with the rings, or framing, U R, constructed as described in this spe-arate bars of soap stone, fire clay, or analogous heat-resisting sub-stances.

-John McCormick, of Madison, Ind., for an Improved

Boiling Apparatus : laim an air-tight water-chamber containing water or its equivale chamber being hermetically sealed, thereby retaining its conten I claim an sau chamber being hermetocally scaled, thereby retaining its contents, thus constituting them a fixed permanent, unevaporating part of the apparatus; as set forth and for the purposes specified in the forecome specification.

1,633.—Samuel Metzler, of Naperville, Ill., for an Improved

,053.—Samuel Metzler, of Naperville, 111., for an improved Belt Coupling : I claim the combination with the ends of a pulley belt, C, of the two netal plates, A A, and the screw bolts, B B; the said parts being con tructed and applied in the manner and for the purpose described.

1,634.—George A. Mitchell, of Turner, Maine, for an Im-provement in Boot Heels: I claim the pad, E, united to the upper and soles by screws or rivets, for securing the heel portion of the boot or shoe firmly together, as described, and for receiving the heel, to be thereon secured for the purpose set forth.

purpose set forth. 1,635.—Porter Mitchell, of Greenfield, Mass., for an Im-proved Heating Apparatus: I claim the combination with and arrangement in relation to each and every pair of deflectors of a damper whereby direct communica-tion of the fire chamber with the exit flue may be established or not at pleasure.

pleasure. 1,636.—H. U. Morse and H. A. Morse, of Canton, Mass., for an Improvement in Tobacco Cutters: We claim an improved tobacco cutter, as constructed, with two curved racks, as two toothed sectors, b V, and the stationary and morable cams. H I', and rests, T I, arranged and combined with the lever, D, frame, B, and the knife carrier, C, and so as to operate sub-stantially as described.

1,637.—H. A. and L. B. Myers, of Elmore, Ohio, for an Im-provement in Grain Drills: We claim the conical shelf, v, with the up and down movement of the piston, as and for the purpose described.

1,638.—Mark S. Palmer, of New Bedford, Mass., for an Improved Machine for Filling and Folding Medical Powder Papers :

Indervoted Matchine for Filling and Folding Medical Powder Papers: I claim first, The feed roller, D, bed plate, E', spring pressure plate, D2, and knife, D3, in combination with the reciprocating fingers or puns, c2 c2, working in slots through the lower plate, E, all arranged with relation to the folding box and operating substantially as herein described. Second, The folding box, constructed with jointed folding sizes, F F', operating as de scribed, in combination with the reciprocating bot-tom plate, E2, and its ade bottem plates, e4c4, as set forth. Third, The pressing or creasing block, H, operating between suitable guides, λ , when said block is arranged in relation to the folding box, and operates as described, to crease the paper preparatory to the fold-ing operation; and in combination with creasing head, I claim the holding fingers, n, or their equivalents, operating substantially as and for the purposes et forth. Fourth, I claim, in connection with creasing head, H, the plunger, J; and, in combination with this plunger, I claim the holdow stern, or tube, I, tube, m, case, l, reciprocating measuring block, M, and hopper, Soribed, [This invention relates to certain novel improvements in machinery

for preparing strips of paper, filling them with certain quantities of der, and for folding the powder up in the papers in a proper manner and shape formedical purposes. The invention is intended more

especially for folding papers containing homeopathic powders, or for folding and filling papers with seidlitz powders, but by varying the size of the parts which receive the papers and fold them, the machine may be adapted for folding large or small papers of powder.]

1,639.—George Parr, of Buffalo, N. Y., for an Improved Camp Chest: I claim a camp chest constructed in two parts, A and, B having fold-ing legs, D, hinged thereto as shown at e, with springs, F, (or hooks) for holding the legs in a perpendicular position, for the purposes and substantially as described.

substantially as described. 1,640.—R. H. Peck and E. M. Gifford, of Wolcott, Vt., for Improved Tube and Pail Machine : We claim the arrangement of the mandrel, G, the swinging frame, H, carrying the knives, h and h, the claim, F L, and the rests, I and N substantially as and for the ourpose set forth.

N substantially as and for the ourpose set forth.
1,641.—C. H. Perkins, of Providence, R. I., for Improved Machine for Making Horse Shoes:
I claim, first, The combination and arrangement of alseparate ham-mer and creaser with a single helve, so that while one is at a state of rest and disconnected from the helve, the other shall be connected therewith and capable of being operated by it independently of the other, substantially as described.
Second, I claim the use of a separate hammer and creaser capable of acting independently of each other in combination with the in-struments for giving the first bend to the shoe blank, substantially as described.

Strüments for giving the first bend to the shoe blank, substantially as described. Third, I claim constructing the face of the hammer with a raised firm, as described, for the purpose of giving shape to the shoe and also for facilitating the escape of the scale as it is formed. Fourth, I claim the combination of the prongs, 26, and scraper, 27, or their equivalents, for the purpose of removing the shoe after it has been finished, applied and operated substantially as described. Fifth, I claim the mode of operation substantially as specified, by means of which the proj is removed from the hammer helveto permit the operations of plating and creasing the shoe to be performed, and at such times relatively to the revolution of the wild-cat as to prevent a half blow from the hammer, as set forth.

1,642.—T. W. Porter, of Bangor, Maine, for an Improve-ment in Ox-Yokes : I claim, first, The'pieces, A and B, in the construction of ox-yokes, when arranged substantially as described. Second, I claim forming the ends of yokes of two or more layers of wood, the grain or fiber of one or more layer or layers being placed transversely to that of the other or others substantially as described. Third, I claim forming that part of the yoke which bears upon the neck of the ox, by bending the wood so that the direction or enrvature of the grain or fiber shall conform to the curvature of said part of the yoke.

yoke. Fourth, I claim the how holder, or pin, when used in combination with the yoke substantially as described and for the purpose specified. 1,643.—J. A. Preston, of Boston, Mass., for an Improve-

ment in Bottle Stoppers : claim a bottle stopper made with its valve and valve stem entirely glass as set forth for the pnrpose specificd.

I claim a bottle stopper måde with its valve and valve stem entirely of glass as set forth for the parpose specificd.
 1,644.—George Race, of Norwich, N. Y., for an Improvement in Water Elevators :
 The rachet C, with barrel, 4, atachet placed loosely on the windlass shaft, a, in connection with the wheel, E, on the windlassshaft, a, and the spring, F, and eccentric and brake, G, g, on lever, H, all arranged substantially as and for the purpose set forth.
 I further claim the particular arrangement of the spring, F, substantially as show and described, whereby the spring, E, is made to perform the double function of a friction brake and spring, as set forth.
 [The obsert of this invention is to obtain a water-elevating device

[The object of this invention is to obtain a water-elevating device which will admit of being operated with greater facility than usual The invention relates to that class of water elevators in which a wind lass and bucket are employed, and consists in the employment or use of a ratchet placed level on the windlass shaft, in connection with a ed permanently to the windlass shaft, and encased within eel attach a barrel attached to the rachet, said wheel being acted upon by a spring and an eccentric and brake, whereby the bucket may be elevat

the rotation of a crank, and released at anytime so as to descend in the well as gradually as may be desired, and suddenly stopped at any desired point, the descent of the bucket being under the perfec control of the operator.]

1,645.-George M. Rhoades, of Hamilton, N. Y., for Im-

1,040.—Ueorge M. Knoades, of Hamilton, N. 1., for im-provement in Machines for Trimming Teasels : I claim, first, The employment of a revolving tube, c, provided with one or more teeth as described, and for the purposes set forth. Second, Surrounding tube, c, with an adjustable outer tube, I, sub-stantially in the manner and for the purposes set forth. Third, Retaining the outer tube, I, at any desired degree of elevation by means of check nuts, H, and springs, F, in combination with rods, g, substantially as represented and described.

1,646.—W. B. Rhoades, of South Dedham, Mass., for Im-proved Clothes Wringer: I claim the rolls B and C, with the sliding bearings, g, in combination with the levers, D, and springs, k, arranged and operating substantially as set forth.

1,647.-N. H. Richardson, of Fitchburg, Mass, for Improved

Ratan Machine : I claim, first, The rolls, K,in combination with the rolls, H, upon the opposite side of the scrapers, when the former, K, are of slightly smaller diameter than the latter, H, as set forth for the purpose ex-

plained. Jained Line of the sonnection the scrapers with the feed rolls in Second I claim so connections described, or their sub-statual equivalents, that they shall be simultaneously separated for the entrance of the ratan, as set forth for the purpose described.

the entrance of the ratan, as set for the purpose described. 1,648.—C. W. Saladee, of Pine Island, Texas, for an Im-provement in Steam Plows: I claim, first, The combination of the several parts shown and de-scribed, for the purpose of combining in one machine the facilities of plowing, sowing the seed, rolling and harrowing at one operation, as well as to perform either of these objects separate and apart from the others.

well as to perform either of these objects separate and apart from the others. Second, Iclaim the peculiar construction and arrangement of the plows, x, and colters, V_1 , Pi_2 , 1, in combination with the angle iron ring brace, u, im the mainer and for the purpose shown and described. Third, I claim the reduct of the purpose shown and described. Third, I claim the reduct of the purpose shown and described. Fourth, I claim the reduct of the purpose shown and described. Fourth, I claim the reduct of the purpose set forth. Fourth, I claim the reduct of a purpose set forth. Fourth, I claim the reduct of a purpose of regu-lating the advance of the machine in propertion to the cut made upon the ground at each revolution of the purpose of the aduance of the pose of throwing out of gear either one or both of the aduance, C , to facilitate the turning of the machine, as shown and described. 1 649.— Herman Schroder of New York City for an Im-

1,649.—Herman Schroder, of New York City, for an Improvement in Breech-loading Firearms: I claim, first, The movable breech pin, F, when operating as described to cock the lock and lock the barrel. Second, The movable breech pin, operating as described, in combination with the expansive annular charge chamber, f, as and for the purpose specified. Third, The shoulders, h, on the dog, G, as and for the purpose set forth.

fort

1,650.—Wm. F. Sheldon, of East Mendon, N. Y., for an Improvement in Melodeons: I claim, first, A movable keyboard, so combined with the reeds of a melodeon, or the equivalent parts of any other instrument, that, by the aid of a fixed scale, it may be set to play in different keys, substan-tially as specified.

tially as apcelled. The second pay in the second of the se

1,651.—M. A. Shepard, of Bridgeport, Ill., for an Improvement in Water Elevators: I claim an oscillating or swinging box, C, divided into two compartments, e.g. by a central partition, b, and said compartments subdivi-

ded into compartments, e e', by partitions, f f', the compartments, e e', communicating with each other by openings, g g', and all arranged to operate substantially as and for the purpose set forth.

[The object of this invention is to obtain a simple device for elevating ater and other substances, either by the oscillating of the device alone on suitable journals, or by the rocking of the support to which he device is attached. The invention is applicable to vessels of navigation, serving, while the vessel is in motion, as a self-acting means for elevating water from the hold.

for elevating water from the hold.]
1,652.—D. H. Shirley, of Boston, Mass., for an Improvement in Skates:
I claim, first, The arrangement of the screw box to the heel-locking screw, below the heel portion of the body of the skate, essentially as shown and described.
Second, Securing the skate at the heel by the button or head of the body of random sectors, and applied to gripe on or against the heel of the body of random set. Third, The combination of a heel-locking screw with a step or set-off in the body of the skate in front of the heel and fitted with prongs or spikes to grare with the front of the heel of the bot or shoe, substantially as specified.
Fourth, The combination of the heel-locking screw, spiked set-off or step to the body in front of the heel, and to e cap, all for operation to gether, essentially as set forth.
1653.—H. T. Stamard of Wayne Mich. for an Improve-

1,653.—H.T. Stanard, of Wayne, Mich., for an Improve-ment in Sash-holders: I claim the cam, H. lever, L, and elastic substance, F, all arranged and operating as specified,

and operating as specified, 1,654.—Leopold Thomas, of Allegheny, Pa., for an Im-provement in Valves: I claim attaching the piston rod of lifting pumps, by which the plun-ger is operated, to the upper valve itself, in such a manner as that the first part of the motion of the piston rod, either on its up or down stroke, shall be to open or close the valve, as the case may be, while the plunger itself is moved by the further stroke of the piston rod, sub-stantially in the manner described.

1,655.--J. A. Whitney, of Maryland, N. Y., for an Improve-ment in Brakes for Vehicles :

including the combination of levers, g and h h, their arms, pivotest together by loose pin, m, connected to the brake by operated by the mavements of the draft pole, D', substantis scribed and shown. ns, gl g2 j k, bar, E, and ntially as de-[This invention relates to an improvement in operating wagor

brakes, either by hand or by the movement communicated to them b the rise and fall of the draftpole.]

1,656.—W.F. Wickersham, of St. Louis, Mo., for an Im-proved Excavating Machine: I claim the arrangement and combination of the frame, C, the eleva-tors, H, the leader, F. the scraper, J, and the cart, M, the whole to be constructed jointly, substantially in the manner described for the pur-pose specified.

pose specified. 1,657.—M. D. Wilder, of Laporte, Ind., for an Improve-ment in Water Elevators for Cattle : I claim, first, The carriage, C, placed on a circular track, B, in con-nection with the annular apron, D, frame, J, fence, K, and pump formed of the reciprocating tube, Q, planger, R, and cylinder, S. the pump being operated from the carriage, C, and all arranged substan-tialy as and for the purpose set forth. Second, The arrangement, as shown, of the annular trough, L, straight trough, M, and stationary curved discharge pipe, V, whereby the water is discharged into the straight trough, M, the motion of the trough not interfering with the proper delivery of the water. Third, The arrangement of the shaft, E, crank pulley. F, connect-ing rod, P, collar, O, and rotating tube, H, substantially as shown, to serve as a means for communicating power from the carriage, C, to the pump.

Serve as a mean of the meloy wester, and the second water clavilly as and for the purpose specified.

[This invention relates to a new and improved water-elevating de vice, by which stock may raise their own water, and to which a l may be applied when necessary for raising water. The invention consists in the use of an annular apron placed on a carriage and circular track, in connection with a fence and pump, all arranged to effect the desired end.]

1,658.—J. D. Custer, of Norristown, Pa., assignor to Wm. McNiece, of Conshohocken, Pa., for an Improvement in Cutting Saw Teeth: I claim the combination of the plunger, G G, and its long screw and long nut, 4, with the toothing punches, J K, all substantially as de-scribed and shown, for toothing and setting saws.

1,659.—J. E. Earle, of Brooklyn, N. Y., assignor to him-self and Samuel Hathaway, of New York City, for an Improvement in Machines for Making Tape Trim-

mings: lam the folders, DEFG and H. or their equivalents, constructed operating in the manner and for the purpose substantially as spe-

, o, the combination described of folding instruments, **D E F G** and e pressers, **E'** and **F'**, and the continuously rotating spool-holder, II constructed and operating together in the manner and for the vec act for the Also, the combination describes of rowing more and any problem of the pressers, B' and F', and the continuously rotating spool-holder, H', all constructed and operating together in the manner and for the purpose set forth. Also, in combination with a folding instrument, operating substantially as described, the carrier, D', rotating therewith, for the purpose set forth. Also, in combination with a folding instrument, D, and carrier, D', a holder, C', operating in the manner and for the purpose set forth.

30.—D. R. Gamble (assignor to himself and J. M. Con nel), of Newark, Ohio, for an Improved Washing Ma 1,660.

chine: I claim the special arrangement of the roller or balls, a' b', with the svolving arms, in combination with the ribs or projections, g, upon he side and bottom of the tub and cover, when used and operating for he purpose set forth.

Peroviving arms, in combination what what use the side and bottom of the tub and cover, when used and operating for the purpose set forth.
1,661.—W. R. Kay and H. E. Kay, of Westerly, R. I., assignors to themselves and B. D. Kay, of Fall River, Mass., for an Improved Car Brake :
we claim, first, The brake wheel, D, drum, C, and axle, b, so empined and connected, by means of suitable gearing, substantially as described, that when the brake is applied to the brake wheel, D, the drum, C, is caused to turn in a direction opposite to that of the axle, and thereby to wind up the spring, L, or its equivalent, substantially as and for the purpose set torth. The avers, P and P', in combination with the pawls, N and N', and chain, H, or its equivalent, so arranged that the winding of the chain on the drum, C, in either direction bringsinto substantially as and for the purpose set forth.
Third, W e claim the multijoint edistrap, R Z, in combination with the substantially as and for the purpose set forth.
Fourth, We claim the evident or flexible strap, R, substantially as and for the purpose set forth.
1, levers, V and V, and link, v, the whole operating together substantially as and for the purpose set forth.
1, 662.—William Lape (assignor to himself and Fred'k R.

1,662.— William Lape (assignor to himself and Fred'k R. Stow), of Troy, N. Y., for an Improvement in Plows : I claim a plow having its landside, A. share, B. moldboard, C. and beam, D. all constructed and united together in the manner shown and 1.662 described

described.
1,663.—W. G. Mackay, of New York City, asssignor to P. P. Comen, of Bridgefield, Conn., for a Machine for Bronzing Wall Paper, &c.:
1 claim the arrangement of the trough, C, bronze distributor, E, whipping plate, H, and endiess apron, F, when arranged and operated in the manner described, and for the purpose specified. In combination with the same, I claim the whipping plates, K K, when arranged and operated in the manner described and for the pur-pose as set forth.

1,664.—J. W. Osborne, of Melbourne, England, assignor to S. T. Hooper, of Charlestown, Mass., for an Im-provement in Photography: I claim, first, The preparation and use, in making photolithographic

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transfers, of a paper prepared by applying, in conjunction with the sensitizing substances or preceding their applications, a coating of al-bumen to the surface of the paper, and coagulating the albumen so applied by heat, in the manner and for the purposes described; and, Second, I claim the use and application of gelatine in conjunction with albumen, for the formation of the coating of organic matter ap-plied to the surface of pholithographic transfer paper, which gelatine, by its swelling properties when acted upon by moisture, enables me to obtain the result described.

45

1,665.—G. W. Richardson (assignor to himself and Robert Glover), of Grayville, Ill., for an Improvement in Glover), o Harvesters

I claim the arrangement and combination of the bracket frame, G, raft pole, A, and driver's seat, S, with the gearing, D E O N, and haft, M, substantially as and for the purpose set for L. [The object of this invention is to obtain a simple and efficient ar-

rangement of parts to render the draft of the machine as light as possible, and, at the same time, admit of a very ready raising and lower ing of the cutting device.]

1,666.—G. H. Smith (assignor to S. O. Smith), of Roches-ter, N. Y., for an Improvement in Gas Regulators : I claim, first, The employment in portable gas regulators, of a long cylindrical valve, operating as described, and moved longitudinally by means of the back pressure of the gas upon an overcharged cushon of confined air, to the covering of which the valve is connected. Second, Attaching the valve to one leaf of a double diaphragm, or to for the purposes set forth.

1,667.

57.—Wm. F. Trowbridge (assignor to F. Bingham & Co.), of Feltonville, Mass., for an Improved Machine for Skiving Boot and Shoe Soles : claim the skiving machine consisting essentially of the revolving er head, F. and adjustable collar, K, arranged and operating sub-tiallyas described. stantiallya

RE-ISSUES.

RE-ISSUES. 98.—Wm. N. Whiteley, Jr., of Springfield, Ohio, for an Im-provement in Harvesters. Patented Nov. 25, 1856 : I claim, first, In combination with the main ground wheel frame of a harvesting machine, the sector plates, 1 °, provided with the adjust-able boxes, g ¢, or their equivalents, substantially as shown and de-scribed, for the purposesspecified. Second, In combination with the sector plate, f, a projecting lip for the shipper's fulurum pin, substantially such as shown and described, for the purposes specified. Third, Retaining the pinion on its shaft by means of the shipper, or its equivalent, by which said plinin is thrown in and out of connection with its clutch pin substantially as shown and described, for the pur-pose stated. Fourth, So connecting or combining the driver's seat of harvesting machines with the front end of the frame of the same, when used for reaping, that when the driver is on his seat his weight will either raise and hold up the rear end of the wheel frame to which the cutting ap-paratus is connected, or both the rear end of the frame and the center of the finger bar, for the purposes specified. DESIGNS.

DESIGNS.

-C. S. Chaffee (assignor to the Bay State Glass Com-pany), of East Cambridge, Mass., for a Design for Tumblers. 68.-

69.—H. W. Hayden, of Waterbury, Conn., for a Design for a Mat for Daguerreotype Cases.

James Hutchinson (assignor to J. E. Whipple), of Lansingburgh, N. Y., for a Design for an Oilcloth Pat-70.

–James McDuff (assignor to N. McGraw and W. A. Tay-lor), of Morrisania, N. Y., for a Design for Coffins.

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