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35,205.—W. T. Abell, of Vernon, Iowa, for Improvement in Machinery for Spinning Wool:
Iclaim, forst, The arrangement within the spindle, D. of a spinning frame, of a spool, b, applied relatively to and operating in combination with a pair of rolls, G ⁶, substantially as and for the purpose specified.
Second, Giving motion to the so-applied spool, b, by means of a grant, g, totating loosely upon the spindle, substantially as specified.
Third, The employment, in combination with the spindle containing fields or vertically-moving guide rail, C, applied operating together substantially as and for the purpose set forth.

35,206.—H. K. Averill, of Decorah, Iowa, for a Photo-graphic Plate Holder: I claim the plate holder composed of a solid frame provided with points, b b, and edges, a a, substantially as and for the purpose speci-bed.

This invention consists in so constructing the plate holder, for sup-porting the sensitized glass, or other plate, in the camera, as to present a series of fine points or edges for the support of the plate, the object being to prevent the collection of the sensitizing solution on the plate at the lower edge thereof, and to protect the plate or picture from stains by contact with the drippings from the plate, or other foreign

matter that might be present on the plate holder.] 35,207.-H. A. Barnes, of Milwaukie, Wis., for Improve-

ment in Shackles for Railroad Cars: I claim the employn ent of a handle, e, with a common shackle, c in combination with the drawheads, a, substantially in the manner and for the purpose as described.

35,208.-J. J. Barrett, of Georgetown, D. C., for Improved Refrigerator I claim the arrangement of the movable crib, C, and its case, C', in combination with the dripping plate, E, and receiving box, F, substan-tially as described.

combination with the dripping plate, E, and receiving bex, F, substantially as described.
35,209.—J. C. Birdsell, of West Henrietta, N. Y., for Improvement in Thrashing Clover and Hulling and Cleaning the Seed:
In combination with the hulling cylinder, I claim the vibrating or traversing table, L, under the bolts or screens, for conveying the bolts, seed and chaff separated from the straw to the hulling cylinder, substantially as described.
I claim the sport or trough T, between the screens and tailing trongh for the purpose specified.
I claim the spiral conveyor, W', in combination with the hulling cylinder, role for other traversing the bolts or screens, for conversion and tailing trongh, for the purpose specified.
I claim the spiral conveyor, W', in combination with the hulling cylinder, for distributing the tailings from the elevator, uniformly to the feed rollers and hulling cylinder, I claim the screens and the bolts or screens, fi H'', on swinging arms and springs, when the bars or arms, I I, are hung in the center so as to move the screen specified.
I claim the specified substantially as described.
I claim the borts or screen, for the same crank and link. In combination with the hulling cylinder, I claim the feeding to the screen street in the screen street in the screen street is a stop step directions by the same crank and link.
In combination with the hulling cylinder, I claim the feeding to the same crank and link.
Specified are or more rakes, N', in combination with the comb or combination with the bishop, of Washington, D. C., for Improved

35,210. — Martin Bishop, of Washington, D. C., for Improved Combination of Fuel Box and Washing Apparatus with Settees:
 I claim, as a new article of manufacture, a combined settee, fuel re-pository and washstand, constructed and arranged as drawn and de-described.

35,211.-J. H. Bloodgood, of New York City, for Improve-

•1 d and e, for the purpose specified.
35,212.—Claude Brison, of Chalons, sur Saone, France, for Improvement in Furnaces for Retorts, Stills, &c.: I claim providing ovens, kilus or fornaces in which retorts are or may be made use of for various manufacturing or other purposes, with vertical retorts, each having a suitable lift and a movable bottom or obturator, the latter jointed to a lever for allowing to open suitat pleasure the lower opening of the retort, substantially as described and for the purposes specified.

-S. H. Brown, of Troy, N. Y., for Improved' Hy-

I claim, first, The valve, a, in combination with the sliding valve, D, when constructed and arranged so as to operate, substantially as de-

when to its future and an argent so as to operate, substantially as de-scribed. Second, The sliding valve, D, with its adjuncts, K E, and i, whereby it and the valve, a, may be operated without the use of stufling boxes, substantially as described. Third, The grooves in the face of the sliding valve, D, whereby the waste water in the discharge pipe is allowed to pass off, for the purpose and substantially as above set forth. Fourth, The inclined planes, n and o, in combination with the double armet lever, M, as and for the purposes described.

armegi lever, M, as and for the purposes described. 35,214.—Charles Campbell, of Yellow Head, Th., for Im-proved Machine for Breaking Broom Corn: I claim, first, The revolving beaters, H, and stationary bars or break from, I, placed on a mounted frame, A, and arranged uo perate as and for the purpose shown and described. Second, The combination of the revolving beaters, H, bars or break irou, I, and guard or shield, K, all arranged or placed on a mounted frame, A, for joint operation as and for the purpose set forth. [This invention relates to a new and improved machine for break-ng broom corn preparatory to the harvesting thereof, and and is de-signed to supersede the manual operating of pending the stalks or

signed to supersede the manual operation of bending the stalks or stems of the standing broom corn, to facilitate its drying.]

35,215.—W. J. Cantelo, of Philadelphia, Pa., for Improvement in the Application of the Hibiscus Moscheutos to the Manufacture of Paper and Other Purposes:
I claim the application of the fibers of the American plant known as the "Hibiscus Moscheutos," or "Hibiscus Paustris," to the manufacture of paper, cordage, textile fabrics, &c., as set forth. Moscheutos

16.—John Carton, of Utica, N. Y., for Improvement in Heaters : 35,216.

Heaters : I claim the fire pot, composed of the sections, B and C, construe and operating substantially as described.

35,217.-C. C. Coleman, of Worcester, Mass., for Improve-ment in Breech-Loading Firearms: I claum the breech, C, swinging on a pin, b, at the bottom of its front end, and having attached to the bottom of its rear end by

a pin, c, a trigger guard lever, D, constructed with a bolt, d, tolock into the frame, A, and secure the breech in a closed condition, the whole operating substantially as specified. [This invention consists in a novel, very simple and effective mode of pplying, operating and securing a movable breech.]

applying, operating and securing a movable orecoil.
35,218.—Cicero Comstock, of Milwaukie, Wis., for Improvement in Rotary Plows:
I claim, first, Hanging the spade or fork shafts inside of the periphery of the wheel, as set forth.
Second, Connecting the tooth or spade to the shaft forward of the shaft security.

Second, Connecting the term of india rubber between the bex or cap of Third, The introduction of india rubber between the bex or cap of the tooth, and the shait to give elasticity and protection to the tooth and shaft, as described. Fourth, The hinge sections of the cams for allowing of the folding the forks or spades. up of the forks or spades. Fifth, Hanging the spades or forks' shaft to the wheels or arms by the handles, as described.

he handles, as described. Sixth, I claim providing that part of the cam which receives the ressure of the spade or forks' shaft with the spring or elastic bearing.

Sixin, I chain previous pressure of the space of forks' shaft with the spring or elasue operating. 35,219,—A. B. Cooley, of Philadelphia, Pa., for Improve-ment in Adjustable and Reversible Propellers : I claim the blades, H and H', arms, G and G', links, E and E', the sliding ring, F, and ring, J, when the whole of the above parts are ar-ranged on the bellow hub or casing, D, for joint action, as set forth, and when the said ring, J, is operated by the links, M and M', and lever, N, or ther equivalents, as specified.

35,220.—John Danner, of Canton, Ohio, for Improved Washing Machine : I clam the combination of the improved problem of the improved rubber, M, with the slatted revolving cylinder, substantially as set forth. 35,221.-J. T. Davy, of Troy, N. Y., for Improvement in

Stoves Stoves: I can a first, The particular arrangement of the deflecting plate, I, is conjurated with the scale σ , A, even is chamber, F, and radiat-up flue, C, in constant scale with the draft pipe, D, as and for the

1 count, first, The particular arrangement of the deflecting plate, 1, it count after with the max1 or X, a positive; chamber, F, and radiative; Thes, C, the cather of the max1 or X, a positive; chamber, F, and for the purposes shown and specified. Second, The arrangement of the movable performed plate, O, across the gas passage, K, between the ceal pet A, and revering chamber, F, in combination with the lateral gas passage, j, below the chamber, F, and the radiating flue, c, communicating with the exit pipe. D, as and for the purpose described. Third, The arrangement of the series of small apertures, t, or their equivalent, in the outer side of the chamber, F, communicating with the expansion chamber, F, lateral gas passage, j, and raniating flue, C, communicating with the draft pipe of the stove, as and for the purpose set forth. 35,222.—L. P. Dodge, of Newburgh, N. Y., for Improvement in Pumps: I claim, first, The arrangement of the valves, M N, in the valve of chambers, KL, in the base of the air vessel, H, and arranging the genus, f, g, near the joint between the parts, so that there is but a single joint of small area connecting the passage, F, G, with the air chamber, et all as set forth and for the ourpose specified.

so that both may be fullshed at one operation, as set forth.
35,223.—J. K. Dugdale, of Richmond, Ind., for Improvement in Cultivators:
1 claim the arrangement and combination of the adjusting apparatus composed of the perforated plate, G, pin and spring, I, rod, F, with purposes set forth.
1 also claim the combination of the device, or guides, D', with the frames, B and C, as and for the purpose set forth.
35,224.—A. S. Fisher, of Millville, N. Y., for Improvement in Weather Strips:

I claim the arrangement of the horizontal spring, f, and the arms, h i, with the bar, E, strip, F, and jambs, B B', as and for the purpose shown and described.

This invention consists in an arrangement by which the shutting • the door is made to impart endwise movement to a spring bar, which, in turn, presses an india-rubber strip down hard upon the door sill, and effectually closes the space between it and the door; the whole contrivance being arranged within the thickness of the door.]

35,225 .-- Paul Flechet, of Paris, France, for Improvement

Second, The adjustable dark attached to the onest rule, 1, 55 and slide, g. Third, Connecting the form, j, with the chest rule, k, arm rule, l, and shoulder rule, m, substantially in the manner set forth and de-

scribed. 35,227.—J. S. Fowler, of Peoria, Ill., for Improvement in Corn Shellers: I claim, first. The teethed cylinder, C, in combination with the joint-ed and yledding slotted or grated concuve, E, screen or screens, G, with a shake metion given it as described, and the endless discharging annun, K, all arranged for joint operation as and for the purpose set

orth. Second, The combination of the screws or spiral conveyers, T. Y, vith the cylinder, C, concave, E, screen or screens, G, fan, N, and und discharging apron, K, and feeding apron, A', all arranged as and or the purpose set forth.

[This invention relates to a new and improved machine for shelling contrast invention relates to a new and implement machine to she ming corn and separating the corn from the cobs, and consists in the em-ployment or use of an elastic or yielding concave screen, in connecprovided with a screen or screens, and also in connection with spiral or screw conveyers. tion with a rotary shelling cylinder, a discharging apron and a shoe screw conveyers.]

35,228.—Edward Frost, of Georgetown, D. C., for Im-provement in Car Trucks: I claim, first, The constructing the axle baxes within the jaws of the slide pedestails, C, or any arrangement of the axle ends, equiva-lent thereto, so as to permit a limited play, transverse of the axle, to the axle ends, in combination with the use of fixed wheels of conical tread, D. ad, D. econd, The arrangement of placing the pedestals, E E, and journal es, F F, at the centers of the axles, for the purpose of propelling rolling parts by traction applied at or near their centers of gravity. the rolling parts by traction applied at or near their centers of gravity. 35,229.—J. C. and A. P. Garretson, of Jackson, Iowa, for

30,229.--0. C. and A. P. Garretson, of Jackson, lowa, for Improvement in Looms: We claim, first, The oblong bex, combined with its mevable bottem, the hold the shedders, and in which they operate, constructed substan-tially as described for the purposes set forth. Second, Ve also claim the shedders, attached to their harness frames, combined with the shedders, attached to their harness frames, combined with the shedders attached to their harness frames, combined with the shedders attached to their harness frames, combined with the shedders attached to their harness frames, combined with the shedders attached to the sheding the she being constructed and operating substantially as de-soribed and set forth.

 William (ibson, of Fort Wayne, Ind., for Improve ment in Fences:
 I claim, first, The space, a, formed between the ends of the rails, B B', and between the uprights, A A', in the manner and for the purpose shown and described.
 Second, The employment of gibs, b, and kevs a travel tween the ends of the analysis. snown and described. ond, The employment of gibs, b, and keys, c, in combination the unrights, A $A' A^* A'^*$, and passing through the spaces. a, be-n the ends of the longitudinal rails, as and for the purpose set

Thread and the arrangement of the notches, e and g, in the braces, D, in combination with the notches, f, in the lower edges of the upper rails, and with the upper edges of the lower rails, all constructed and oper-ating as and for the purpose specified.

231.—Charles Goodyear, Jr., of New York City, for Improvement in the Manufacture of Casters from Vul-canizable Compounds:

pound of vulcanized india rubber, or other vulcanizable material, subtantially described. Second, The manufactu'e of wheels or rollers of vulcanized india ubber, or other vulcanizable material, by forming and vulcanizing the ame in molds, substantially as described. Se

same in moids, substantially as described.
35,232.—J. W. Griffiths, of Philadelphia, Pa., for Improvement in Navigable Vessels:
The construction of navigable vessels with a drop or downward extension of the bilge below a straight base line, at the mid-ship cross sections, substantially as shown and described, so as to compensate for the less of bueyancy consequent upon the rotundity of the bilge, all as set forth.

an as set roth. 35,233.—Benjamin Harnish (Miller), of Pequea, Pa., for Improvement in Water Wheels : I claim the composite casing, F G H, with its open cylinder, E, in combination with and closely adapted to the buckets, N, with their outer flage or square terminus, M, and parabolic, spiral chutes, \P , and the position and attachment of the check plates, P, between them, all combined and arranged substantially in the manner and for the purpose specified.

purpose specified.
35,234.— D. M. Harris and S. S. Burnet, of Salem, Mass., for Improved Clothes Wringer:
We claim the combination and arrangement in a clothes wringer of the surap, e, attached to the ends of the shart of roll, e', working in the slotted boxes of o', the rod, h, the thumb nut, i, rubber spring, j, and clutch g, operating tegether in the manner described for the pur-pose specified.
35,235. Simon Heiter of Philadelphia Pa for Improve-

35,235.—Simon Heiter, of Philadelphia, Pa., for Improve-

ment in Tents ; of I inductional and contracting ribs, like an um-I claim a tent having expanding and contracting ribs, like an um-brella frame, to which are permanently attached the canvas top and sides, the whole being constructed and operating substantially in the manner set forth.

manner set førth.
35,236.—William Hopper, of Onion Grove, Iowa, for Improvement in Wind Wheels:
I claim the arrangement of the longitudinally-sliding rotary rod, G, and rotary ropes, p. connecting with the sails, F, in the manner described, in combination with the crosshead, H, pivoted stirrup, J, ropes or chains, c', and windboard, K, all constructed and operating substantially as and for the purpose set forth.

[This invention consists in the arrangement of a longitudinallysliding rotary rod, connecting with a crosshead, to which motion is imparted, either by hand or by the action of a wind board, and by an indicated with the set of the se parting to the rod a longitudinally-sliding motion the sails are either drawn in or drawn out, as the case may be, and that by combining the wind board with said rod the speed of the wind wheel is regulated by the force of the wind.]

35,237.—S. B. Hunt, of New York City, for Improved Au-tomatic Boiler Feeder: I clam automatically supplying a steam beller with a regular proper supply of feedwater, by the combination of the tank, B, sham pipe, D, and feed pipe, F, arranged and operating as set forth.

D, and feed pipe, F, arranged and operating as set forth. 35,233.—Alfred Ingalls, of Independence, Iowa, for Im-proved Evaporator for Saccharine Juices : I claim, first, The arrangement of three pans, A B C, placed at dif-ferent levels on the fornace, D, in combination with the dampers, F G H, and fire doers, d e, constructed and operating as and for the pur-pose shown and described. Second, The arrangement of the skimming device, I, in combination with seats, m m m'n', on the edges of the pans, A B C, constructed and operating substantially as and for the purpose set forth. [This invention consists in the arrangement of three pans, placed at different levels on the same furnace, in combination with three damp-

different levels on the same furnace, in combination with three damp ers and two fire doors, in such a manner that the heat under each of is and two no two, in such a matter that the next under each ψ is the pans can be regulated at pleasure, and that each pan can be emptied whenever it is desired, without interrupting the operation of the others. It consists, also, in the arrangement of a movable skimming device, fitting on the edges of the first two pans, in combination with seats or recesses cut into said edges, in such a manner that the scum, as it rises on the surface of the juice, can be swept off in an easy and expeditious manner.]

35,239.—T. T. Jacobs, of Mount Carroll, Ill., for Improved Mode of Securing Chimneys to Lamps: I claim the combination of the two clasps, A. A. each having two prejecting lips or catches, c. with the spring. D. constructed, opera-ted and applied, substantially as and for the purpose specified.

35,240.—David Keyser, of Philadelphia, Pa., for Improved Boot-Blacking Stand: I claim, as a new manufacture, the box, A, drawer, D, lid, B, and block, E, when combined and arranged as set forth, for the purpose specified.

specified.
35,241.—William Johnston, of Cincinnati, Ohio, for Improvement in Breech-loading Firearm:
I claim, first, The axle, C, constructed of a conical or tapering form, when used, in the manner and for the purpose described.
Second, The causing of the cook, G, to recoll at each discharge, by the use of a spring, i, and a stop, c, or their equivalents, substantially in the manner and for the purpose described.
Third, In breech-loading gruns, se arranged as to be leaded by the chamber, which is to receive the cartridge, in the form of the frustum of a carching form the cone at the lower rear end of the chamber, when that chamber is so arranged that access maybe readily had therete, for the purpose of removing with the thumb and finger the shell of a metallic cartridge after each discharge, substantially in the manner and for the purpose of specified.

35,242.—Isaac Knapp, of Medina, N. Y., for Improvement in Stop Dams for Canals: I claim the structure described, and the mode or manner of using the same, as explained.

the same, as explained.
35,243.—Henry Knight, of Jersey City, N. J., for Improvement in Molds for Cement Pipes:
I claim the combination of the divided core, D D', slots, i, guide pins, h, and perforated platform, B, substantially in the manner described

puns, n n, and perterated platform, \mathbf{S} , substantially in the manner described. Second, The construction of the base plate, $\mathbf{E} E'$, in such a manner that it constitutes when in use the collar of the core bar and also the bottom of the mode, and also the shoulder of the spice when the mold and pipe are being litted over the core, substantially as described. Third, The construction of a vertical mold, divided lengitudinally in two parts, in combination with the base plate, so arranged that it shall support and hold the inclosed pipe are being raised over the core bar, substantially as described. 35,244, -Alexander M'Nair, of Newark N. J., for Im-

35,241.—Alexander M'Nair, of Newark, N. J., for Improvement in Running Gear of Cars for Street Rail-Ways:

ways: I claim the combination with the axle, H, and floor frame, C, of the prejected-picoted truck, I, flanged wheels, K K, axle, L, standard, e, and adjusting screw rod, C, in the manner and for the purpose shown a id described.

[The object of this invention is to obtain a street railway car to run off the track when it becomes desirable to do so, in case of any ob-struction, or under other circumstances. In carrying out the inven-tion the track is constructed with two flat-surfaced grooved rails, and the main wheels of the car constructed without flanges, and the front pan of the said wheels arranged in a truck attached to the car by a king bolt. The invention consists in so attaching to the same truck a pan of guide wheels, having central flanges to fit the grooves of the track, that they can be raised up from the track independently of the truck, by means of a screw, or its equivalent, under the control of the driver.]



-B. Mellinger, S. Mellinger, Jr., and J. Mellinger, Mount Pleasant, Pa., for Improvement in Horse 35.245.

of Mount Pleasant, Pa., for Improvement in Horse Rakes: We claim attaching the thills, C' C', to the axle and rake head. A, by joints, cc, at the back part of the axle and rake head, in combina-tion with the whiftletree. I, attached to a segment clevis, L, on the axle and rake head, A, by means of a stay rod, K, and rod, J, all ar-ranged and operating as and for the purpose specified. [The object of this invention is to obtain a horse rake, in which the -

weight of the driver in his seat, in connection with the pull or draught movement of the horse, is made to pull the rake in a proper working position, and also made to assist in elevating the same when the rake has its load discharged from it, the weight of the driver or operator keeping the rake in an elevated state.]

35.246.—Suspended.

35,247.—Richard Montgomery, of New York City, for Improvement in Apparatus for Using Submarine

Improvement in Apparatus for Using Submarin Guns: I claim a cylinder or tube-extensible telescopically or by analogou eans, to be kept free from water by means of a pung or analogo vice, as conducting pipe for the transmission of shot or shell under ater.

35,248.—William Murdock, of Jersey City, N. J., for Im-provement in Molds for Castings: First, I claim the screw, C', in combination with the movable sec-tioner half mold, C, and the pins and holes, G, as and for the purpose

specifie Second, I claim the arrangement of the elevated or raised edges, e, around the form of casting, b, and gate, a, upon the metallic moids, as and for the purpose set forth.

e, around the torm of casting, o, and gate, a, upon the inclusion theory is and for the purpose set forth.
35,249.—L. E. Osborn, of New Haven, Conn., for Machine for Folding Paper:
1 claim the empleyment er use of a fly, B, provided with a bar or feeder, H, operated automatically through the medium of the trange.
and for the purpose set forth.
Second, The automatically adjustable tapes, n n, when used in connection with the shelf correct on verying tapes, m, and operated substantially as and for the purpose set forth.
Second, The automatically adjustable tapes, n n, when used in connection with the shelf correct on verying tapes, m, and operated substantially as and for the purpose set forth.
Stock - William Seybold, of M'Keesport, Pa., for Improvement in Miners' Lamps:
I claim constructing lamps for burning tallow or other non-fluid taty substances, with a work tube of copper or other sufficient converging tapes, m, and operated substantially as and for the purpose set forth.
Stock - William Seybold, of M'Keesport, Pa., for Improvement in Miners' Lamps:
I claim constructing lamps for burning tallow or other non-fluid taty substances, with a work tube of copper or other sufficient converging tapes, m, and operated substantially as the callow or for the purpose set forth.
Stock - William Seybold, of M'Keesport, Pa., for Improved Means for Manufacturing Baskets :
I claim, fort, Constructing baskets over a block or former, in the manner and substantially as slown and described.
Stock - W. K. Osborn, of Chester, N. J., for Improved Means for Manufacturing ender the and for the purpose set forband, C, and grooves or gage marks, a ', combined or used in connection with the former, as and for the purpose set forband, C, and grooves or gage marks, a ', combined or used in connection with the former, as and for the purpose set forband, C, and grooves or gage marks, a ', combined or used in connection with

empuyed in the machine. 35,250.—W. K. Osborn, of Chester, N. J., for Improve-ment in Straw Carriers and Grain Separators: I claim the separate rake heads, L, when provided with straight and curved teeth, as described, and when combined with crank shafts, so arranged as to impart to them an alternate up-and-down motion, sub-stantially as and for the purpose specified. I also claim, in continuation with the abave, the shaker, D, when ar-ranged for joint action with the rakes, in the manner substantially as set [oth].

iged for joint action with the tance, forth. also claim the curved teeth, f', when made adjustable, in the man-r and for the purpose described.

35,251.—Alphonse Oudry, of Paris, France, for Improve-ment in Bridges :

ment in Bridges: I claim, first, The employment of duble parabolic cables or chains, as described and shown. Second, The employment of two series of reds set obliquely to the plane of the platform, substantially as described and shown. Third, The employment of rigid tie places to vercome the effect of a horizontal force actume laterally upon the four double chains or systems of suspension which would otherwise tend to deform, dis-tort or alter therefrom, together with the means described to replace such tie pieces in the middle of a bridge or viduct, so as not to impede the circulation, all as described and illustrated. 35 252. — Aaron Dalmon of Bocchmert Y, Y, A.

35,252.—Aaron Palmer, of Brockport, N. Y., for Improve-ment in Sewing Machines: I claim the combination of the crimping wheels, L and M, with the adjustable needle holder, z, and transverse shaft, U, substantially as described, and for the purposes set forth.

uescrineu, anu ier the purpeses set forth.
35,253.—Almarin B. Paul, of Silver City, Nevada Territory, for Improved Amalgamator and Ore Mill:
I claim a rotating muller for amalgamating pans, formed of a series of euryed liat arms, B B B', previded with slots, a, and having curved groves, a*, in their under surfacesor face sides; said arms being attached to an annular hub, A, which also has radial arms, C, connected to it provided with plins, f f', and adjustable upright copper plates, D, substantially as described.

The object of this invention is to obtain a simple and efficient de vice for pulverizing the pulp of gold and silver bearing quartz, and Separation put entry methods and show the second strength of the second tion with an ordinary amalgamating pan or vessel into which the pulp for words is placed, the invention operating as a pulverizer or multi-and also as an amalgamator, and performing the work in a very thou ough and expeditious manner.]

35,254.--Samuel Peberdy, of Philadelphia, Pa., for Im-provement in Knitting-Machine Needles: I claim combining with a barbea kultung needle the shield or guard, h, constructed in the manner described, or any equivalent to the same, so as to guide and retain the thread, in the manner specified.

So as to guide and return the thread, in the manner specified.
35,255.—N. C. Perry, of Chester, Con., for Improvement in Machine for Binding Wire:
I claim, first, The use of the eccentric post, H, in the manner and for the purpose set forth and described.
Second, I claim the guide, I, and the clamp, B, in combination with the eccentric post, H, operated in the manner set forth and described. 35,256 .- John Pfaff, of Philadelphia, Pa., for Improve-

ment in Tail Pieces for Violins : I claim combining the tongne, y, with the tall piece of a violin, tantially as and for the purpose set forth.

Standary as and/or the parpice set forth. 35,257.—C. B. Porter, of Ann Arbor, Mich., for Improve-ment in Apparatus for Inhaling Chloroform : I claim the combination and arrangement of the reservoir, air cham-ber, air regulater, screen, valve, tube and monthpice, substantially us described and for the purpose specified. 35,258.-A. M. Putnam, of Antrim, N. H., for Improve-

30,208, -A. M. 1 utitain, or mean, -a and -a and

35,259.—Andrew Rawlston, of West Middletown, Pa., for Improvement in Combined Rack and Trough for Feed-

Ing Stock : I claim, first, Se combining a rack and trough that the superiorum-bent pressure of the rack shall hold coarse fodder in place in the trough, in the manner and for the purpose substantially as set forth. Second, I claim a removable projector, I, adapted to be used upon the rack and trough, or separate therefrom, in the manner and for the purpose substantially as set forth. Third, I claim, in combination with the rack, H, having partitions, h h', the removable weather protector, L, substantially in the manner and for the purpose set forth. 35,260.—Elisha Base of Man

and for the purpose set form. 35,260.—Elisha Rees, of Manassas Station, Va., for Im-proved Blacksmith's Tongs: I claim the employment of the handles, A B, the jaws, C D, the bar, E, screw, F, and standard, G, arranged and used together in the mani-ber and for the purpose set forth and described.

the spades, as shown, to enter the ground, pulverize the soil and clear themselves, as described. Second, I claim the yielding spade carriers, operating as set forth, For the purpose specified. Third, I claim, in combination with a power-spading machine, the prote structure is the bearing wheels and operating as set forth.

as set forth. Fourth, I claim the combination of a mechanical-spading machine, with a harrow, when the harrow follows the machine, and is operated by cranks, in the manner substantially as set forth and for the pur-pose specified.

pose specified. 35,262.—J. A. Rhodes, of Providence, R. I., for Improve-ment in Yarns for Warps: I claim the use of steam impinging yarns, cloths and other fibrous matter, while immersed in size, paste or other fluid, with which said yarn, cloth, &c., is to be sized or dressed, substantially as described, for the purpose specified. I also claim the use of steam, impinging the surface of the roller, g, or other device used for immersing or applying the size, paste or other fuid with which the yarn, cloth or other fibrous matters is to be sized or dressed, substantially as described, for the purpose specified.

or dressed, substantially as described, for the purpose specified.
35,263.—E. S. Ritchie, of Brookline, Mass., for Improvement in Mowing Machines:
I claim the arrangement of a revolving knife, consisting of an endless band of spring steel, its driving pulley, a series of teeth, and a continuous or endless carrier of rframe, substantially in manner and so as to operate as specified.
I also claim the arrangement of the grinding wheel, relatively to the endless band knife.
I also claim arranging the band-knife carrier and driving pulley, relatively to the axie and the wheels thereof, and applying the carrier to the axie by means of arms or equivalent devices, so that the carrier may be tilted or moved relatively to the wheels and axie, as specified.
I also claim the combination of the driving wheel, the train of gears and the knife carrier arranged and applied together, as set forth.
35,264.—William Seybold, of M'Keesport, Pa., for Im-

with the former, as and for the purpose specified. 35,266.—Emerson Smith, of New Haven Mills, Vt., for Im-provement in Shingle Machines : I claim the particular manner of operating or adjusting the jaws, j. to wit, by means of the pins, e, attached to arms, d, on the shafts, E, and fitted in oblique slots, f, in the upright plates, g, of the slides, h, to which the jaws, j, are secured. [This invention relates to a shingle machine of that class in which a

I not investion relates to a single machine of that class in which a circular saw is employed for cutting the shingles from the bolt. The object of the invention is to obtain a machine which may be manipurated by two persons, in such a manner as to insure the work being racial yet of performed and in a perfect manner, the great issby the im-perfectshinglesproduced by the automatic shingle machines being avoided and a much simpler device obtained.]

35,267.-O. C. Smith, of Salem, Mass., for Improvement

53,207.-0. to. Smith, of Salem, Mass., for improvement in Piston Packing: I claim the combination with the head, A. cap, C. and packing rings, G. G. of the arc-formed expanding pieces, F F F, the cone, H, and spring, I, the whole arranged, applied and operating substantially as specified. This invention consists in the employment for pressing out the pack

Ing rings, of a series of arc-formed expanding pieces fitted to the interior of the rings, a hollow cone fitted to the hub of the piston and to the interior of the arc-formed expanding pieces, and a spring coiled reand the hub between the cone and the cap or follower of the piston, the whole combined and operating to produce an outward pressure against the interior of the rings, for the purpose of holding them in contact with the cylinder and compensate for wear.]

35,266.—C. A. Strong, of Brooklyn, N.Y., for Improve-ment in Mode of Building and Coating Earth Fences: I claim the described mode of building earth fences by means of a modil and coating them, substantially in the manner set forth.

35,269.

35,269.—George Tainter, of Watertown, Mass., for Im-provement in Ventilating Dampers: I claim the combination of the conical damper, C, and band or ven-ilating register, B, connected together and applied to the fue or pipe or joint operation, substantially as and for the purpose specified. [This invention consists in the employment of a hinged conical damper and ventilating register constructed as d applied to the flue or

pipe of a stove or furnace, in such a manner that the damper will be pipe of a sive of runace, in such a manner that the damper will be opened and closed or adjusted simultaneously with the adjustment of the register and a superior ventilating attachment attained. 35.270.

John Taylor, of Magnolia, Ill., for Improvement in Rakes for Harvesters

in Rakesfor Harvesters: I claim the rake frame previded with slotted arms. II', and the cross bar, K. in combination with the crank shaft, G, and cams, LL', as and for the purposes set forth. I also claim the rake, J, privided with slotted arms, II', and the cross bar, K. and hinged to the arms, c', which are attached to the cross bar, K. H, in combination with the crank, G, and cams, LL', when the several parts are arranged for operation in connection with each other and with the concave platform, A, in the manner and for the purpose specified.

35.271

he purpose specinea. 5,271. –J. B. Wheeler, of Boston, Mass., for Improvement in Stirring, Conveying and Cooling Grain : I claim, first, In combination with a perforated bottom through chich air is driven by a fan, a reciprocating carriage, which carries series of conveyers and revolving stirrers that move and turn over he grain as it is being advanced over said perforated bottom, substan-faily as decented

a series of conveyers and revolving surfars that have and tain over the grain as it is being advanced over said perforated bottom, substan-tially as described. I also claim, in combination with a reciprocating carriage, the con-veyer, G, which has in addition to its forward and backward move-ment, a triang and failing movement, substantially in the manuer and for the purpose set forth. I also claim, in commocion with a reciprocating carriage, a section of conveyers composed of blades, m, that are moved laterally by the cause, j and k, in the manner and for the purpose set forth. I also claim, in commetion with a reciprocating carriage, the hinged conveyer and stirrer, x, that acts while the carriage goes forward and swings up out of the grain when the carriage moves backward, for the purpose substantially as set forth.

35,272 .- E. J. White, of Locke, N. Y., for Improvement

35,272.—E. J. White, Of LOCKE, A. I., for improvement in Plows: I claim the plows, M & when attached tovertical sliding standards, L R, which bassleosely through the mounted frame or platform, A, and are connected to adjusting levers, K S, in combination with the vertically adjustable colters, P T, and gage wheel, X, all arranged for joint operation, as and for the purpose set forth.

[This invention relates to an improvement in gang plows. The object of the invention is to obtain a simple and efficient device which may be readily manipulated and adapted to plowing at various depths be capable of being mounted on wheels, and all so arranged as to in sure an easy draught and admit of any number of plans being used a the will of the driver or operator.]

35,261.—S. G. Reynolds, of Bristol, R. I., for Improvement in Power-Spacing Machines:
 claim the combination of the series of cranks, m. ss. in a curved space, carriers, 0, for the purpose of giving the required motion to find.
 claim a wat composed of two combined substantially as specified.

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35,275.—Robert Chadwick and Norman Allen (assignors to said Robert Chadwick), of Hartord, Conn., for Improvement in Machine for Casting Bullets: We claim the combination of a rotating mold frame, E F, a series of molds, G G, a system of levers, H II, and a can or caus, the whole applied and arranged to operate substantially as specified.

35,276.—A. L. Fleury, of Philadelphia, and Charles Adams, of Pittsburgh, Pa., assignors to W. J. Cheyney, of Phil-delphia, Pa., for Improvement in the Manufacture of Iron and Steel:

Iron and Steel: We claim, first, Directing a jet of steam into or toward a pipe or pas-sage which forms a communication between the chimney or stack of a puddling furnace, couple, hast or other turnace, and the fire place or bary durited the bit of the products of combustion, and the whole promelled along the said passage toward the furnace, for the purpose passive along the said passage toward the furnace, for the purpose passive along the said passage toward the furnace.

specified. Second, Introducing through the hollow bridge of n puddling fur-ace, hydro-carbon alone, or hydro-carbon mixed with nitrogenous substances, or deoxidizing vapor, for the purpose specified. n

substances, or dexidizing 'apor, for the purpose specified. a
35,277.—C. W. Isbell, of New York ("ty, assignor to himself and E. S. Ely, of Providence, R. I., for Improvement in Explosive Projectiles :

I claim, 6rst, The attachment of the hammer of the percussion appratutes to the rear portion or breech of the projectile, substantially as and for the purpose specified.
Second, Se constructing and applying the device for attaching and holding back the hammer within the projectile that it is caused to liberate the hammer by the driving forward of the rear portion of the charging the projectile from the gam, substantially as specified.

35,278.

rging the projective from the gun, substantially as specified.
278.—J. M. Martin (assignor to himself, Myers, Uhl & Co.), of Cleveland, Ohio, for Improvement in Construction of Monuments:
claim the plate, H, clutches, O P, nut, T, bolt, U, springs, M N, lheads, K K', these several parts being arranged in relation to h other and operating in the manner and for the purpose set forth.

35,279.—Thomas Shaw, of Philadelphia, Pa., assignor to himself and P. S. Justice, for Improved Means of Con-necting Metallic Armor Plates for Marine or other Batteries: tantially as described.

substantially as described.
35,280.—Alonzo Streeter, of Adrian, Mich., assignor to himself, Thomas Farrar and Amzi Chase, of Wellsville, Mich., for Improvementin Corn Planters :
I claim, first, The combination and arrangement of hoppers. D, and wheels, B, as described, for the purpose described and set forth.
Second, I claim the combination of the post, K, lever. G, shaft, H, connection, J, spiral springs, 4, connection, O. shocs, Q, and cutters, R, for the purposes described.
Third, I claim the combination of the levers, 5, with the elbow levers, 2, for the purposes described.
Fourth, I claim the crank, U, wiudlass, T, rope, V, and sheaves, W, in combination with slide, P, and guides, S, for the purposes elsorible and described.
South, I claim the crank, G, and guides, S, for the purposes set forth and described.
South, I claim the crank, U, windlass, T, rope, V, and sheaves, W, in combination with slide, P, and guides, S, for the purposes set forth and described.

35,281.

35,281.—John Thomas, of Indianapolis, Ind., assignor to himself and J. M. Lord, of Marion Co., Ind., for Im-provement in Rolls for Rolling Piles of Railroad Iron: I claim the relis, G and H, constructed and arranged as and for the purposes set forth.

.- L. B. Waterman (assignor to himself and James Bangs), of Chicago, Ill., for Improvement in Cul-35,282.

tivators: I claim the arrangement of the adjustable sea, D, in combination with the doubletree, G, draft rods, K K, and graduating bar, I, when operated and attached to the frame work for the uses and purposes described, as substantialy set forth.

35,283.—S. R. Wing, of Sandwich, Mass., assignor to L. M. Wing, of West Falmouth, Mass., for Improved Rollers for Wringing Machines :

I claim one or more reliers made of or covered with cork, for the purpose specified, substantially as described. I also claim the self-adjusting traversing guides for pressing in the edges of the cloth or clothes as they pass in between the rollers, as de-scribed.

seribed.
35,284.—W. H. Elliott, of Plattsburgh, N. Y., for Improvement in Breech-loading Firearms:
I claim so constructing and arrarging the sliding breech and hammer, in relation to each other, that when the former is thrown back, the hammer will cease to act upon it to throw it forward, but will hold it from moving by a downward pressure, while the cartridge is being placed in the loading chamber, as set forth.
Second, The employment of a toggie joint for moving the sliding breech when that part of said joint which forwards not in which forward, but will hold in from moving the family of the sliding breech, and when the other part of said joint is puvoted to the sliding breech, and when the other part of said joint is proved to a fixed point upon the arm, substantially as set forth.

forth. Third, the employment of the bin, s, in combination with a trigger, which is attached to and swings back and forth upon the guard lever, and with a side lock sere, as specified. Fourth, The arrangement and operation of the sliding breech and clutch, by which they approach each other and catch the head of the carridge between them before driving it into the barrel chamber, as specified.

pecified.
35,285.—W. H. Elliott, of Plattsburgh, N. Y., for Improve-ment in Operating a Submarine Battery connected with a Boat or other Vessel:
I claim, first, the employment of a magazine which is controlled as overned by an arm attached to a vessel by means of provide and anged below the surface of the water, as and for the property feet.

cond, The employment of a float, h, to even instead with get arm magazine which are attached to the vesses by tagets sof joints, as

and migratule which are associated to the set forth. Third, The employment of a radder, t, in combination with an arm attached to a vessel by uccaus of joints, as and for the purpose speed

attaction of a vessel by norms of particle states which attach it to the Fourth, Arranging thearm, c, with the joints which attach it to the vessel, in such relation to the bulk that the magazine upon its extrem-ity may be dragged through the water at the side of the vessel, when moving from place to place, as shown. Fifth, The arrangement and combination of the array e_{ij} dry, f, and extension, e, when employed in connection with a gravitie, as get fourth

extension, e, when employed in conversion forth. Sixth, The employment of the hollow vertical shaft, n, in con bina-tion with an arm, e, and poles, v, as and for the purpose specified,

RE-ISSUES.

RE-ISSUES. 1,306.—Gail Borden, Jr., of Amenia, N. Y., for Improve-ment in Concentrating and Preserving Sweet Milk. Patented Aug. 19, 1856: I claim, first, Concentrating sweet milk by evaporation in vacuo, substantially in the meaner and for the purpose set forth. Second, In the process of concentrating sweet milk in vacuo, I also claim the preparatory sealding of the milk by heating it to a tempera-ture of from 150° te 200° Fah., substantially in the manner and for the purpose described.

and et form los to 200 Fail, substantially in the mainler and the the purpose described.
1,307.—Daniel Holmes, of Chelsea, Mass., assignee of Joseph Harris, Jr., and Daniel Holmes, of Roxbury, Mass., for Improved Carpet Beating Machine. Patented Feb. 23, 1858 :
I olaim, first, The use of the revolving endless flexiblebeaters, a a g g, or their equivalents, when used and operated substantially as described for the purposes specified.
Second, The combination of a set of vibrating flexible whips, or their equivalents, whin used or provide the revolving endless whips, substantially as described for the purposes of the combination of a set of vibrating flexible whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantial was described for the purpose of the revolving and the second described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, substantially as described for the purpose of the revolving endless whips, and the revolving endless whips, substantially as described for the purpose of the revolving endless.

1.308.—Lewis Herning, of Montgemery Ce., Pa., assignee of J. Y. Humphrey, ef Philadelphia, Pa., fer Mica Chimneys fer Lamps. Patented July 17, 1860 : I ckin the construction and use of amp chimneys made mainly of mica, when the upper end is contracted and made smaller than the lower or middle particular the transformation of the purpose described. I also claim binding the mica chimney of a hamp with rings of metal, substantially in the manner and for the purpose described.

1,309.-H. D. Snow, of Rochester, N. Y., for Improve-ment in Governor Valves. Patented Oct. 11, 1859: I chain constructing steam governors substantially as set forth, so as that the downward movement of the balls, when they drop below the point affording a full opening to the valve shall tend to close it.

EXTENSION. 5,585.—-Edward Spain, of Philadelphia, Pa., for Improve-ment in Churns. Patented May 16, 1848 : I claim the giving the dasher the form represented and described, which, while it imparts a compound reciprocating and rotating motion to the cash, as it is operated upon, thereby also enables a large-sized dasher to be passed whole through a compuratively small-sized square aperture in the side of the barrel, as set forth.

DESTENS.
1,576.—Henry A. Fowler, of Afton, N. Y., for Design for Hames Fastening.
1,577.—David Foyer, of Dover, N. H., assignor to Abraham Folsom & Son, of Boston, Mass., for Design for a Floor Cloth Pattern.

1,578 and 1,579.—F. S. Otis, of Brooklyn, N. Y., for two Designs for a Clock Case Front. 1,580.—J. R. Wennett, of New York City, for design for a

Speen.

1,581,--C. J. Woolson, of Cleveland, Ohio, for Design for a Gook Stove.

PATENTS FOR SEVENTEEN YEARS.



The new Patent Laws enacted by Congress on the 2d f March, 1861, are now in full force, and proveto be of great benefit to all parties who are concerned in new inventions.

The duration of patents granted under the new act is prolonged to SEVENTEEN years, and the government fee required on filing an appli cation for a patent is reduced from \$:30 down to \$15. Other changes n the fees are also made as follows :-

On filing each Caveat	.\$10
On filing each application for a Patent, except for a design	
On issuing each original Patent.	.\$20
On appeal to Commissioner of Patents	
In application for Re-issue	.\$30
On application for Extension of Patent	
On granting the Extension	
On filing Disclaimer	\$10
On filing application for Design, three and a half years	.\$10
On filing application for Design, seven years	.\$15
On filing application for Design, fourteen years	.\$30

The law abolishes discrimination in fees required of foreigners, ex cepting reference to such countries as discriminate against citizens of the United States-thus allowing English, French, Belgian, Austrian Russian, Spanish, and all other foreigners except the Canadians, to enjoy all the privileges of our patent system (except in cases of designs)

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The advice we render gratuitously upon examining an invention does not extend to a search at the Patent Office, to see if a like invention has been presented there, but is an opinion based npon what knowledge we may acquire of a similar invention from the records in our Home But for a fee of \$5, accompanied with a model or drawing and description, we have a special search made at the United States Paten Office, and a report setting forth the prospects of obtaining a Patent Once, and up and mailed to the Inventor, with a pamphlet, giving in-structions for further proceedings. These preliminary examinations are made throughour Branch Office, corner of F and Seventh-streets Washington, by experienced and competent persons. More than 5,000 such examinations have been made through this office during the pastificate years. Address MUNN & CO., No. 37 Park-row, N. Y.

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If susceptible of one; or if the invention is a chemical production, he must furnish samples of the ingredients of which his composition consists, for the Patent Office. These should be securely packed, the

inventor's name marked on them, and sent, with the government fees by express. The express charge should be prepaid. Small models from by express. The express charge should be preparit. Sinch models from a distance can often be sent cheaper by mail. The safest way to remit money is by draft on New York, payable to the order of Munn & Co^{*} Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents; but, if not convenient to do so, there is but little risk in sending bank bills by mail, having the letter registered by the postmaster. Address MUNN & Co No. 37 Park-row. New York.

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Circulars of information concerning the proper course to be pursued in obtaining Patents in foreign countriesthroughour Agency, the reeuroments of different Patent Offices, dc., may be had gratis upon ap-plication at our principe office, No. 37 Park-row, New York, or either of our Branch Offices.

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We are prepared to undertake the investigation and prosecution of re jected cases, on reasonable terms. The close proximity of our Wash ington Agency to the Patent Office affords us rare opportunities for the examination and comparison of references, models, drawings, docu-ments, .tc. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left de pendent upon the final result.

history of the case, inclosing the official letters, &c.

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It would require many columns to detail all the ways in which the Inventor or Patentee may be served at our offices. We cordially invite all who have anything to do with Patent property or inventions to call at our extensive offices, No. 37 Park-row, New York, where any questions regarding the rights of Patentees, will be cheerfully answered.

Communications and remittances by mail, and models by express (prepaid), should be addressed to MUNN & CO., No. 37 Park-row, New York.



C. H. S., of N. H.-The best description of the manufacture of woolen goods that we are acquainted with is that in Ure's Dictionary of Arts and Sciences. It is said that a new edition of the work is about being published.

H. O. N., of N. Y .- Parachutes are made in the form of umbrellas with a hole at the apex to prevent them from oscillating. Experienced aeronauts generally avoid the use of parachutes ; accidents so frequently result from their use. The rapidity of the descent will depend on several circumstances, but principally on the size of the parachute in relation to the weight of its burden

H. A. J., of Me .- Plaster of Paris after being calcined and ground, requires only to be wet with water in order to cause it to harden.

L. C. C., of Mass.-Our aeronauts make their balloons of cotton cloth, and generally cover them with a cement, the composi-tion of which they keep secret. We know of nothing better than linseed oil. Hydrogen gas will make its way in time through any substance, even wrought iron plates.

E. G. S., of N. B .- Overman's work on the manufacture of iron was published by Henry C. Baurd of Philadelphia in 1850. Urc's Dictionary of Arts and Sciences contains an elaborate treatise on the subject.

Q. A. S., of Pa.-For information in relation to the improvement on Mr. Parkes's plan of vulcanizing, yon can address John A. Greene, '37 Milk street, Boston. Alcohol boils at a tempe-rature of 173°, and water at 212°, so you are in greater danger of explosion with alcohol than with water at a given temperature

T. S. C., of N. Y .-- To transmit 15 horse power with a belt running 25 feet per second, your belt should be 11/2 or 12inches wide. It will take 45,000 pounds of water per minute to give 15-horse power with 11 feet fall. The very best turbines have yielded 87 per cent of the whole power of the water; this would re-quire about 52,000 lbs. per minute for your purpose. Very few wheels, however, yield more than 70 per cen# and with one of this class you would need about 64,000 lbs, per minute. A cubic foot o water weighs 62^{12}_{2} lbs

R. U., of Mich .-- There are a great many rooting composi tions. Some patented, and some kept secret. The essential ingre-dients in most of them are coal tar and asphaltum.

J. W., of Ohio.-A gallon of water weighs 8 pounds, 3,000 pounds per minute gives one horse power for every foot fall, and a good overshot wheel will yield about 70 per cent of the power. Hence it will take 2,107 gallons per minute to give you 5 horse power from a 14-foot overshot wheel.

C. W. B., of Ill.-India rubber may be dissolved in spirits of turpentine or in benzole. You can form it upon a mold by dip-ping the mold into the solution repeatedly as caudles are dipped; allowing the rubber to harden between the immersions. If you use wooden mold rub the surface with pumice stone before using it. H. C. F., of N. Y .- If you wish to submit plans of an iron-plated battery to the inspector of the government, address Hon. Gideon Welles, Secretary of the Navy, Washington P. H. S., of N. J.-We have a good opiniou of Well's

Natural Philosophy, and for a new beginner we think it equal to any other. It is issued by Iveson & Phinney of this city. R. N., of Pa.—Professor Gillespie's work on Surveying

and Mahan's Civil Engineering are good works. You can obtain them at Appleton's in this city

- N. P. A., of N. Y .--- If your model now in the Patent Office shows the invention you desire to claim you can surren der your original patent and ask for a re-issue. If what you now claim was new when you first applied for the patent you are emifled to the re-issue.
- G. A. B., of Prince Edward Island .- You will find rules for making a chime of bells in almost every encyclopedia, but it re mires a thoroughly practical person to tame a chime, just as it requires a practical person to time a piano forte. It cannot be done by theory.
- J. H. C., of Mass .-- Canadian balsam dissolved in rectified oil of turpentine is the best clear varnish for maps, drawings, &c. The balaxin should be placed in the turpentine and set aside in a moderately warm place, and agitated occasionally for about seven days. A varnishmade with pale mastic dissolved in alcohol is used to fix pencil drawings.

W. G. R., of Del .- Every patented article must bear the date of the issue. You were not obliged to put the date on the articles you have sold and delivered previous to the issue, but all that are subsequently sold should have a label attached stating the date of the patent. Or in your case it would be better to stamp it into

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B. F. H., of N. H.; J. H. R., of III.; B. A. M., of Coun.; J. R. A., of
Pa.; A. G., of N. Y.; H. C. F., of VL.; N. F. S., of III.; T. S₂ of O.;
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