RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week: the claims may be found in the official list:-

Tension Device for Sewing Machines.—Hitherto, in sewing machines, the operator has had no guide, whereby to determine what amount of tension the thread should have according to its number or size. The object of this invention is to supply this deficiency and provide for the adjustment of the tension with certainty, and to this end it consists in a novel combination of a perforated screw and a scale whereby the desired result is accomplished. Henry Bland, of London, England, is the inventor of the above, and further information may be obtained from Wm. Young, Foxboro', Mass.

Apparatus for Ventilating Rooms .- The object of this invention is the production of a current of air and the purification and cooling of such air in a room without any mechanical agency and without the necessity of admitting air from without. The apparatus consists of a box in which the air is first dried by passing through or over lime or other drying and disinfecting materials, and so caused to circulate up ward through an ascending conduit preparatory to being cooled by cooling materials, and so caused to pass down a descending conduit, from which it is delivered in a pure state. The improvement consists in the combination of the ascending pipe or cooling surface, and the chamber for containing the drying or disinfecting material. Azel S. Lyman, of No. 212 Second avenue, New York, is the inventor of this

Apparatus for pressing Straw Hats, &c.-This invention consists in the pressing of hats or bonnets by means of steam or other fluid at a suitable pressure acting upon a flexible diaphragm or cover applied to one side of the hat or bonnet while the other side is supported by a rigid block or form, by which means a great saving of time and labor is effected and the grain of the straw or other material of which the hat or bonnet is composed, is better preserved. It also consists in certain mechanical means of applying the above system of pressure to the above purpose. J. F. Mathias, of Paris, France, is the inventor of this hat-presser, and further information may be obtained of Messrs. C. Dord & Co. No. 51 Worth street. New York.

Hat-pressing Machine.—This invention relates to the employment of mechanical clamps for the purpose of holding the brim of the hat or the margin of the piece of felt or other fabric of which a hat is formed, and of drawing and stretching the same over the former or hat block preparatory to and during the operation of the die. Such clamps as heretofore constructed have consisted of a pair of rings or elliptic-shaped frames which have taken hold of the margin of the brim or piece all around, and these could not be used successfully in the manufacture of hats from sheets of felt and some other fabrics owing to their liability to tear the fabric, and are moreover inconvenient on account of their not being adjustable for hats of various sizes. With a view to obviate the above objection, the first part of the invention consists in the employment, in combination with the block or former and die of a hat-pressing machine, of a number of separate clamps to take hold of the felt or fabric at its corners or at suitable intervals, but not all around, thereby leaving the fabric free to be drawn inward or contract from certain points as it is stretched from other points. Other features of the invention consist in making such clamps adjustable and in certain arrangements and modes of adjusting and operating the clamps or stretching apparatus. The above invention of S. H. Lyon, of Brooklyn, N. Y., has been assigned to S. H. Lyon and R. T. Wilde, either of whom may be addressed at No. 251 Broadway, New York.

SPECIAL NOTICE.

Amasa Woolson, of Springfield, Vt., has petitioned for the extension of a patent granted to him May 28, 1850, for an improvement in machines for shearing cloth.

It is ordered that the said petition be heard at the Patent Office, Washington. on Monday, May 9, 1864. All persons interested are required to appear and show cause why said petition should not be granted.

Persons opposing the extension are required to file their testimony in writing, at least twenty days before the final hearing.



ISSUED FROM THE UNITED STATES PATENT-OFFICE

FOR THE WEEK ENDING JANUARY 19, 1863.

Reported Officially for the Scientific American

Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying size of model required and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the Scientific AMERICAN, New York.

68.—Flyer for Spinning Machines.—John H. Aldrich, Holyoke, Mass.:

Holyoke, Mass.:

I claim constructing the cam or stop and presser arm of slubber and speeder fivers in one piece, with the stop close to the under side of the lower ear of the fiver, and having a hole to receive the squared ends of the pin, thus preventing toogreat strain upon the pin, and admitting of greater nicety of adjustment, as herein described.

41,269.—Water-Closet Valve.—F. H. Bartholomew, New York City:

I claim combining with a pan water-closet, a supply valve, R. for admitting water into a pan, balancing dlaphragms, E. H. and a regulating chamber, Z. for controlling the motion of the valve, the whole being constructed and arranged substantially as shown in Fig. 1, of the accompanying drawings and for the purposes described.

41,270.—Horse Rake.—Lorenzo Beach, Montrose, Pa.:
I claim in combination with the upright lever, L, the horizontal lever, B, and spring bar, S, operating substantially in the manner described.

41,271.—Cheese Curd Cutter.—Horace A. Blakeman, Cuy-

ler, N. Y.:

I claim the frame, c, and knife, d, driven as represented, in complication with the box, e, in the frame, f, operated by the dog and ratchet, or their equivalents, when used as and for the purposes selected.

forth.
41,272.—Tension Device for Sewing Machines.—Henry Bland, Luton, Kingdom of Great Britain:
I claim the tension device composed of the screw, B, and scale, C, combined substantially as and for the purpose herein specified.

41,273.—Grain Dryer.—Caleb H. Booth, Dubuque, Iowa: I claim the combination of the conveyer, C E, with steam heated reservoir, A B, enclosing it, all constructed substantially as shown, and by means thereor with steam to bleach, to purify and to dry flour and meal, but no other substance.

flour and meal, but no other substance.

41,774.—Lantern Dinner Pail.—Clarissa Britain, St. Joseph, Mich.:
I claim, first, A lantern dinner pail constructed and operating substantially as and for the purposes described.
Second, The combination of the lamp chamber, C, flue, c', partition, c, and upper receptuale for pans, de, arranged within the pail, a, substantially as and for the purposes described.
Third, Constructing the cover of a dinner pail with a flue, h', in combination with a flue extending down to the chamber, C, substantially as and for the purposes described.
Fourth, The combination of the removable bottom pan, B, lamp chamber, C, and one or more heating chambers, de, substantially as and for the purposes herein described.

41.275.—Fiber from Flax. Hemn. &c.—Hugh Rurgess 41,275.- Fiber from Flax, Hemp, &c.-Hugh Burgess.

Rogers Ford, Pa.:

I claim a fiber suirable tor textile purposes, made from hemp, flax, not other fiber-yielding plants, by boiling them in an alkaline solution under pressure, substantially as described. 41,276.—Disintegrating or Cottonizing Flax, Hemp, &c.
—Hugh Burgess, Rogers Ford, Pa.:
I claim the mode of producing fibers for text le purposes from flax, hemp, and other fiber-yielding plants, by the action thereon of caustic alkaline solution at a suitable temperature, substantially as described.

41,277.—Lathes for turning Spherical Shapes.—Robert B. Carsley, New Bedford, Mass.:
I claim the combination of the two disks, D.E. rotating in opposite directions, and the annular cutter, J, substantially as and for the purpose herein specified.

ose herein specified.

[This invention consists in the combination of two disks rotating in opposite directions about the same axis and a circular or annular cutter arranged oetween the said disks. The ball is placed between the otion by the friction thereof, and the cutter reduce it to true spherical form.]

41,278.—Construction of Ships of War.—Henry Cardwell, Oatlands House, Shillingford, England. Patented in England April 10, 1863:

I claim, first, The corrugated armor-plated roof having the portholes in the corrugations, d.d., substantially as herein specified.

Second, The port shutters composed of a number of separate plates of iron or steel, e. arranged one above another and fitted to grooves in the edges of the armor-plates, to operate substantially as herein specified.

the employment of india-rubber or other elastic material in ion with the circumscribing lip of the vessel, substantially specified.

e chief object of this invention is so to construct ships of war that they shall possess ample facilities for the working of broadside guns, while at the same time effectual protection is afforded to the crew and also to the hull of the ship, access to the upper deck be oarders being provided against it.]

41.279.—Mode of Coloring Kid Gloves, &c.—Samuel C. Chase, Charlestown, Mass.:
I claim my improved process substantially as above set forth, for treating and coloring kid skins or kid gloves.

treating and coloring kie skins or kin gloves.

1,280.—Ruffle.—C. O. Crosby, New Haven, Conn.:

I claim as a new article of manufacture the within-described ruffle, when the binding is turned under as described, and the frill and binding secured together by two rows of stitching, substantially as specified, whether the edge of the frill under the binding is turned over or

41,281.—Breech-loading Fire-arm.—Frederick Curtis, Newton Lower Falls, Mass. Ante-dated Jan. 2,

1864: claim in combination with the trigger and the movable guard or

lever of the breech block, a trigger-locking mechanism, which by an upward movement of said lever toward the trigger plate and by other means or devices shall be unlocked from the trigger, and while the lever may be depressed or forced away from the trigger plate, and for the purpose of lowering the breech block, shall lock or bolt the trigger, and thereby prevent accidental discharge of the fire-arm.

I also claim the peculiar mechanism for operating the bolt, m, the same consisting of the arm or retractor, I, and the spring, w, for their mechanical equivalents, such being arranged with respect to the trigger bolt, m, and the guard lever, C, so as to opera te and be operated in manner and under circumstances substantially as specified.

-Artificial Leg.-Phylander Daniels, Le Roy,

41,282.—Artificial Leg.—Phylander Daniels, Le Roy, N. Y.:

I claim forming the socket, A, for the reception of the natural thigh, when amputation is above the knee, of sole leather or other thick leather of sutticent thickness to be self-supporting, and not requiring a skeleton frame, and so arranged that its dexibility will allow it to yield and adapt itself to the form of the natural member within, so as to secure ease to the wearer; said socket being used in combination with the block, B, or its equivalent, for lowing the knee joint, substantially as herein set forth.

Second, i also claim the knee-joint, composed of the thin plates, D, presting in the grooves, cc, and connected by the axis, i, substantially as herein described.

Third, In combination with the parts thus forming the knee-joint, the concentric slots, h, h, and bolt, i, arranged substantially as herein

In combination with the parts thus forming the knee-joint, entric slots, h h, and bolt, i, arranged substantially as herein

specified.
Fourth, I also claim the arrangement of the lateral hinges, s s, axis, r, and its socket, t, in combination with the foot, H, and inferior leg, C, substantially as and for the purpose herein set forth.

41,283.—Stone Gatherer.—Wm. H. De Groot, New York

41,283.—Stone Gatherer.—Wm. H. De Groot, New York City:
I claim, urst, The revolving cylinder driven by the main wheels of the machine, provided with pickers, c, and sieves, d, constructed and operating substantially as and for the purpose set forth.
Second, The construction of the revolving pickers, c, as described, in combination with the ring, l, and flange, m, for adjusting the parts simultaneously, as and for the purpose set furth.

Third, The arrangement of the receiving box, e, provided with the lifting back, i, and milving hooks, i, constructed and operating as and for the purpose set forth

84.—Manufacture of Coffins and other articles from Asphaltic Compositions.—Drake W. Denton, Ithaca,

N. Y.: laim, first, The use of the material or composition made as de-ed, in the manufacture of comms and burial cases and air-tight

comins.
Second, I claim the herein-described mode of making my materials recording and other useful articles from the several materials mentioned.

tioned.

Third, I claim the herein-described mode of molding coffins and other articles by means of plate or patterns, or molds made of sheet steel or other metal, that by its elasticity cleaves oil of the coffin or otherarticle made in the manner described, and the securing of a polished glossy finish to the coffin or other article, without hand polishing or in ising by means of polished elastic plates, as eleccribed.

1,285.—Building Flumes for Floating Logs.—John Du Bois, Williamsport, Pa.:

I claim, first, Providing for the passage of water under the flume, A, and into the flume, A, at the points where the flume crosses treams, substantially as and for the purpose described.

Second, I claim a log-loating flume constructed with an under and werflow channel and gate, arranged over a stream, substantially as and for the purpose set forth.

41,286.—Composition for Pasting Cops.—James Dunkar-ley & John Knight, Paterson, N. J.: We claim a composition produced by mixing the within-described ingredients together, substantially in the manner and about in the proportions herein specified.

The object of this invention is a composition for fastening the ends of cops, so that they will not loose their shape or become tangled when removed from the spindle.]

41,287.—Grubbing Machine.—J. H. Flanagan, Chicago, Ill., and Wm. Laning, Stoughton, Wis.:

We claim, first, The employment of the grooved plate, E, in combination with the clevis, F, and pin, c, for the purpose of adjusting the machine to stumps of different sizes, substantially as herein described and shown.

Second, The combination and arrangement of the circular fulcrum, A, the lever, B, clevis, F, and grooved plate, E, constructed and operating as and for the purposes herein shown and specified.

-Metallic Pontoon Wagon Boat.—Joseph Francis, New York City:
I claun comonnia and ubstantially

New York City:

I claim community and arranging pontoons formed of two parts, substantially as described, with the staples and bars, s, and windlass apparatus or its equivalent, for holding the balks, by which the pontoons are united and formed into a bridge, by which combination I form a light and portable pontoon bridge easily laid down and taken up with a small body of men and which can be transported with saiety and rapklity as herein fully made known.

41,284.—Centering Heavy Articles in Lathes.—John S. French, Boston, Mass.:
I claim, first, The hollow spherical journal for the furpose set

forth.

Second, Combining with the spherical journal a means for lateral
adjustment of the same with respect to the article to be turned or
bored, substantially as described, for the purpose of bringing the
center of the journal into the axial line of the said article, as specified

eatter of the journal into the axial line of the said article, as specified 41,290.—Hand Loom.—John G. Garretson, Salem, Iowa: I claim, first, In a loom operated by one treadle only the connecting the lay and treadle together by a link, in such a manner that the back and forward motion of the lay will impart to the treadle a positive up and down motion suited to the purpose of elevating and depressing the harness properly in making a shed, in the web for the shuttle to pass through in weaving.

I also claim the combined action of the roller and pendants as above described for the purpose of changing the shed, in such a manner as to produce either plain or twilled goods, and to be used either in hand or power looms.

in hand or power looms.

41,291.—Pump.—John G. Garretson, of Salem, Iowa:
I claim the joint formed by the parts f and g, with the links. ii, Fig. l, in the position shown in the drawings when acted on by the handle H (Fig. 1), and made to move the pipe, D, alternately from side to side of the pipe, C, and with the partition, c, forming a continuous tube for conducting the water from the bottom of the cylinder to the top of thewell, making a double-acting force pump without valve or cut-of.

41,292.—Button.—P. W. Gengembre, of Boston, Mass.:
I claim the combination of the tube or spring, D, with the button-body, A, and a locking catch or mechanism hade and applied to the button, substantially in manner and so as to operate as specified.

41.293.—Railroad Support.—B. F. Gossin, of Cincinnati.

Ohio:

I claim the shouldered jaws, D D, constructed with extensions, in combination with the plate, B, and keys, FF, support, F, and key, FF, all arranged and operating substantially as and for the purpose described.

-Molded Cloth and Paper Collar .- Solomon S, Gray, of Boston, Mass. Ante-dated Jan. 17, 1864.
I claim, as a new article of manufacture, a cloth and paper shirt collar "struck up" or pressed from a flat piece into any desirable ferm, substantially as described and for the objects specified.

41,295.—Suspender.—B. J. Greeley, of New York City: I claim braces formed by the connection, in the rear, of the scending and the ascending portions, substantially as herein sho and described.

41,296.—Screw Power.—Jacob Haege, of Shiloh, Ill.: I claim the employment or use, in a screw power, for elevating or fitting purposes, of journals, d, applied to nuts, C C C', in which screw rods D D' are ditted and work, in combination with the pivoted bar, B, and bearings, c, all arranged to operate substantially as and for the purpose set forth.

This invention consists in a novel arrangement and application of the screw and nut for elevating or lifting purposes, whereby the screw is allowed to adjustitself to its work and thereby avoid much friction hitherto attending the operation of the screw when applied to such

41,297.—Machine for manufacturing Flyer Guides.—D.

41,297.—Machine for manufacturing Flyer Guides.—D.
L. Hill, of Lowell, Mass.:
I claim the above-described machine or combination, consisting of
the feed rollers, (A B), (or machinery by which the wire is fed along or
delivered with an intermittant movement and held firmly while its
reduction is in the act of being effected), the cutter mandrel, M, and
its cutter head, n, and one or more cutters, o (or machinery for turning down or tenoning the wire, substantially as described), the shear,
R, and its plate (S) (or machinery for separating from the wire the
part to constitute the guide blank), and finally the cam, o, groove, p,
lever, n, and spring, F, or mechanism for producing the advance or
retreat of the mechanism or cutters, by which the tenoning of the
wire or blank is effected, the whole being to operate substantially in
the manner and forthe purpose as hereinbefore described.

41,298.—Pump.—Hiram Hosick, of Paris, Pa.: I claim having the end of the pump lever made in the form of a semi-circle, G, when combined with the cords, H H, and piston rod, E, in the manner herein shown and described.

[This invention relates to an ingenious mode of operating the piston of the pump, whereby a longer stroke of the piston is obtained than by the ordinary brake or lever, and a proportionably greater quantity of water elevated within a given time and with greater facility or a less expenditure of power.]

41,299.—Gas Engine.—Pierre Hugon, of Paris, France:
I claim the improved machinery for obtaining and applying motive,
power, hereinbefore described and illustrated in the accompanying

drawings.
41,300.—Coal Oil Lamp.—J. G. Hunt, Cincinnati, Ohio:
I claim the inner air passage, C. surrounding the flat wick tube, c. in
combination with an outer conical air conductor, A. G. extending from
the tame of the lamp downward around the bowl of the lamp as
specified, when these several parts are constructed, arranged and
operated as and for the purpose set forth.

operated as and for the purpose set forth.

41,301.—Concentrated Feed for Horses, &c.—George Jaques, of Summerville, and D. F. White and John Stowell, of Charlestown, Mass.:

First, We claim preparing a concentrated nutritive food for animals, in the manner substantially as set forth.

Second, We claim also, as a new manufacture, a package for feeding animals, composed of nutritive material such as herein described, compressed and inclosed in a water and air-tight covering, substantially as set forth and described.

tially as set forth and described.
41,302.—Lubricator.—A. J. Judge, of Baltimore, Md.
Ante-dated, Jan. 17, 1864:
First, I claim the comb nation of reservoi as described (Fig. 1),
with the air chamber and the inner tube, as shown in Fig. 3, in the
manner and for the purp ose herein specified.
Second, The application of an inner tube or pipe passing up through
the center of oll into the air chamber above, said tube to be open at
top and closed at the bottom, with a passage on the side, or through
a small pipe in the center for the oil to come down without entering
the air chamber, as fully shown at C, Figs. 2 and 3.

the air chamber, as fully shown at C. Figs. 2 and 3.

41,303.—Eyeleting Machine.—Jeremiah Keith, of New Bedford, Mass.:

I claim the arrangement of one or more directing ports or passages, in manner substantially as described, with the hopper and chute of the eyeleting machine.

I also claim a combination consisting of the following elements, viz. The eyelet pin; a mechanism for feeding the eyeiets to the pin; a mechanism which will perform the functions of holding the eyelet pin down while an eyelet is being fed upon the pin anvil, and subsequently operating to elevate the eyelet pin or effect its elevation through the eyelet as specified.

41,304.—Railroad Jack.—Michael Kelly, of Philadelphia,

Pa.:
I claim the within-described jack composed of the nut or plate, a the legs, b, plates, c, secured to the same, the screw, D, swivel, u, and jaws. P, when the said plates are arranged to rest on the ground between the cross-ties, one plate on each side of the rail, and when the whole is otherwise constructed as and for the purpose herein set forth.

whole is otherwise constructed as and for the purpose herein set forth.

41,305.—Boots and Shoes.—Oliver Lafrenier, of New York City. Ante-dated Jan. 17, 1864:

1 claim a boot or shoe, with a flanged heel plate, D, wooden heel, C, flanged sole plate, G, tip, H, protecting lugs, I I', tapering nails, J, plugs, e, and wooden soles, E, all combined in the manner and for the purpose herein shown and described.

And I also claim the employment or use, for the purpose of securing a wooden heel to boots and shoes, of the flanged plate, D, with tacks or screws passing through holes in the flange and into the circumference of the heel as specified.

Also the employment or use, for the purpose of fastening and protecting a wooden sole, E, of a tip, H, and legs, I I', secured to the inner sole of the boot or shoe, and provided with holes to admit of inserting tacks or screws into the edge of the wooden sole, as shown and described.

[This invantion of the second of the wooden sole, as shown and care the second of the second of the wooden sole, as shown and described.

[This invention relates to the means employed for the purp fastening wooden heels and wooden soles to boots and shoes,]

41,306.—Machine for Straightening Metal Bars, Rails, Tubes, &c.—Bernard Lauth, of Buchanan, Pa.: I claim the employment of a double set of rollers, the centers of one set being placed between the centers of the other set, substantially in the manner and for the purpose herein set forth.

41,307.—Roll for Rolling Metal.—Bernard Lauth, of Bu-

chanan, Penn.:
I claim the combination of the "three high rolls," A B C, of which one (B) shall be of less diameter than the other, substantially as and for the pur pose herein described and represented.

41,308.—Car Coupling.—J. T. Lowrey, of La Fayette, Ind.:

Ind.:

I claim, first, The combination of the pin, D, and the pivot rod, E, in their said arrangement in a railroad car bumper and for the purposes set forth in the foregoing specification, viz, the production of a self-adjusting coupling.

Second, Also the cuts, F and H, in the bumper and in combination with said pin and pivot Dd, whereby said plu obtains room to swing. Third, Also the groov e.G. in the interior of the bumper and in its combination with said pin and rod; which groove, by being narrower than the link chamber beneath it, beeps the link from rising unduly, and thus keeps it in its horizontal position.

Fourth, Also the rubber in said groove, G, as assisting the pin in recovering its perpendicular.

41,309.—Apparatus for Purifying and Cooling Air.—A. S.

Lyman, of New York city:

I claim the combination of the ascending conduit, D, and cooling su face, n, or its equivalent, with a chamber, B, containing drying or disinfecting material, substantially as and for the purpose herein specified.

Al,310.—Auto-propelling Horse and Vehicle.—P. W. Mackenzie, of Jersey City, N. J.:

I claim, first, The direct connection of a rigid auto-propelling horse or other seatfor a rider, in combination with a cranked shaft with two or more centers.

Second, The stirrups, b, or foot rest, arranged direct on the crank pin or shaft opposite the one on which the body rests, in combination with the cranked at and body.

Third, The direct connection and strangement, by means of the rods, g g, of the bit, c, with the steering wheel or wheels behind, in combination with the cranked axle and body.

41,311.—Pressing Hats.—J. F. Mathias, of Paris, France: I claim, first, The pressing of hats by steam or other fluid acting upon fexible diaphragms, in the manner substantially as herein shown and described.

Second, The combination of the block, C, block cover, D, fexible diaphragm, E, and lever, G, substantially as and for the purpose.

Second, The combination of the block, C, block cover, D, flexible diaphragm, E, and lever, G, substantially as and for the purpose specified.

41,312.—Paper Reel for Telegraph.—Henry McGann, of

A4,512.—Faper neer 101 relegiable—Field, absum, Cleveland, Ohio:

I claim the herein-described arrangement of the mutually-extanguable reets, D and F, in combination with the gears, J7, cord, I, pulley, I., and weight, B, these-veral parts being constructed, arranged and operating, as and for the purpose herein set forth. 41,313.—Hand Loom.—S. C. Mendenhall, of Richmond,

I claim the application to hand looms of shaft, E, with its supports, g S, crank, W, and Pinions, X, or their equivalents, when the same

are used in combination with shaft, $\mathbf{D}_{\!\!\!1}$ for the purpose of placing the operator in front of the loom.

41,314.—Cultivator and Seeder.—C. E. Miller, of Amelia, Ohio:

Ohio:
I claim, first, the provision of separate clod-crushing rollers, B B', paying their middle tiers of studs, D', adapted for removal when the implement is required for tilling young crops, as herein explained. Second, the device or attachment, H H' H', arranged and adapted is and for the several purposes set forth. Third, In the described combination I claim the pair of armed rollers, B B', provided with removable studs, D', clearing teeth, E, and ode cutter or rake, H, having removable blades, H, for the purposes of cultivation, as set forth.

Fourth, The described combination of clod-crushers, B, B', clearing and cutting teeth, E, and H' H'', and clevis, N O, the whole being arranged and adapted to operate either with or without a seed depositing apparatus, as set forth.

1,315.—Wugon Brake.—S. H. Miller and Edmund Grubb, Liberty, III.:
We claim the combination of the equalizer, d', and guide-bar, C, with the rear end of the sliding tongue, D, and with the break beams, F, and adjusting fulcrum bars, H, as and for the purpose herein hown and described.

[The object of this invention is to produce a brake for wheel vehicles which will operate automatically whenever the vehicle crowds upon the draught animals, and which will release the wheels as soon as a strain in a forward direction is exerted on the draught pole.]

41,316.—Boiler for Locomotives.—James Millholland, Reading, Pa.:
I claim the arrangement, substantially as described, of the fire-box with its grate depressed at one or both ends in respect to the frame, B, of a locomotive engine for the purpose specified.

1,317.—Plane.—Eli Odell, Winterset, Iowa:
I claim a plane with the adjustable face-plate, B, n combination with a concave throat, the whole constructed and operated substantially as described.

tially as described.

41,318.—Composition for Scouring Wool.—Anthony Peple, East Billerica, Mass.:

I claim, first, The employment or use of blubber or gurry, or the refuse of such oils containing an excess of organic matters mixed with alkalies and common salt, substantially in the manner and aboutin the proportion herein specified.

Second, The application of blubber or gurry in combination with alkalies, when the same are mixed together or added singly to the scouring liquor, as set forth.

Third, The employment or use of common salt in combination with blubber or gurry and alkalies, substantially in the manner and for the purpose described.

[This invention consists in the employment or use of blubber or

[This invention consists in the employment or use of blubber or gurry, being the refuse of cod livers or sediments of fish oils or of other oils containing an excess of organic matters either alone or mixed with alkalies and common salt for the purpose of scouring wool or other fibrous materials previous to spinning and weaving, or for scouring textile fabrics, particularly goods made wholly or par

41,319.—Feed-water Heater for Locomotives.—David Pollock, Lancaster, Pa. Ante-dated Jan. 17, 1864: I claim. first, One or more circulating chambers in combination with the tank and heaters, substantially as and for the purpose set

with the tank and neavers, substantially as another forth.

Second, I claim the tubular bars or grates, G G, in the furnace or fire-box in combination with one or more circulating chambers for heating the feed water, substantially as set forth.

Third, I claim one or more plpes, K K, attached to the fire-grate heater and extending above the grate as heroin described for the purpose set forth. Fourth, The valve, M, with the float, Q, attached, in combination with the circulating chamber, tank and heaters, substantially as and for the nurnose herein described.

or the purpose herein described.

Fifth, The pipe, V, with the stop, W, arranged as shown for the urpose appedied.

Fifth, The pipe, v, with the scop, w, alreaded Scotch Sixth, I claim combining with the heater, G G, in the fire-box, the safety valve, U, for the purpose herein set forth.

Seventh, The heater, H H, in the smoke box, constructed with the circular pipes, substantially as shown and described.

Eighth, I claim the reheating pipe, N N, constructed as and for the purpose specified.

Ninth, I claim the hose or pipes, F and L, in combination with the tank, heaters and ci culating chamber as and for the purpose declared.

sc ibed.

41,320.—Harness Breast Strap Slide.—M. W. Pond and L. W. Darling, Elyria, Ohio:

We claim the metallic shield having its curved diverging projections and being secured firmly to a suitable loop of leather, for the purpose of protecting the breast strap of harnesses from the change and cutting of the rings of the neck yoke, the whole being constructed and arranged in the manner substantially as set forth.

and arranged in the manner substantially as set forth.

41,321.—Broad-cast Seed-sower.—J. R. Rogers, Berlin,

41,321.—Broad-cast Seed-sower.—J. R. Rogers, Berlin, Wis.:

I claim the construction of the bottom of the percussion wheel, G. so as to close only the inner portion of the same around the shaft, and have narrow ledges, u.u. at the sides of the wings the remainder of the radial distance to the periphery of the wheel, substantially as and for the purpose hereth specified.

I also claim the construction, arrangement and combination of the sliding gate, D, spring, E, istch, L, and adjustable graduated catch, substantially in the manner and for the purposes herein specified.

41,322.—Churn.—D. K. Price, Ossian, N. Y.:

I claim the arrangement of the reciprocating dashers, D.D., made inclined for the purpose of throwing the cream forward through the partition, and provided with holes, h.h., in the rear, for throwing the cream backward when it is raised—the central perforaced wire partition, B, for thoroughly breaking the cream, and the adjustable cluws, H, H, for increasing the length of the stroke, without increasing the vibration of the lever, when the said parts are combined with the box, A, lever, I, and standard, K, substantially as herein set forth.

41,323.—Steam Boiler.—R. E. Rogers and James Black,

41.323.—Steam Boiler.—R. E. Rogers and James Black.

41,323.—Steam Boller.—K. E. Rogers and James Black, Philadelphia, Pa.:
We claim, first, The body, A, of the boller, having tubes, B and B', so arranged that they will maintain a continuous circulation of water between the upper and lower portion of the boiler, when the whole or very nearly the whole of the boiler is suspended within a casing contaming the fire chamber, and is exposed to the direct action of the products of combustion, as set forth.

Second, Two or more sets of tubes, B and B', arranged on and attached to the body, A, of the boiler as set forth for the purpose specified.

-Machine for Washing Wool .- C. G. Sargent,

All Carlo washing woull—C. C. Sargelle, Graniteville, Mass.:
I claim in combination with the bowl or tub, b, a lifting cylinder, composed of an inner and outer cylinder, or their equivalents, whose shafts or bearings are eccentric with each other, and arranged to operate substantially as herein represented.
I also claim the lifting cylinders, j k, in combination with the carrying radia; i l, substantially as and for the purpose described.
I also claim in combination with the squeezing rolls, m n, the fan, g, for taking, beating up, and throwing the washed wool to its place of deposit, substantially as described.

or deposit, supstantially as described.

41,325.—Breech-loading Ordnance,—William Schmoele,
Jr., Philadelphia, Pa.:
Iclaim having the receiver, C, arranged to oscillate in line with the barrel, A, in combination with the guide projections, k k, upon the interior of the receiver, and the projections on the breech pin, all operating in the manner herein shown and described.
I also claim the arrangement of the pins, I m n, with the stem, g, and rear face of the receiver, C, as herein shown and described and for the purposes specified.

ror the purposes specified.

41.326.—Horse Rake.—D. P. Sharp, Ithaca, N. Y.:
I claim the am-shaped laver, H, constructed as described and provided with the rod or handle, I, and the bent lever, G, connected by the cord or chain, e, the lever, G, having its lower arm, b, extending under the bar, c, of the teeth-elevating frame, E, and the lower end of the cam-shaped lever, H, connected by the cord or chain, I, with the teeth-elevressing frame, F, when said parts are used in combina-with the draught bar, K, and provided with the roller, L, or without it, and all arranged to operate in the manner substantially as and for the purpose herein set forth.

his invention relates to a new and useful improvement in that

class of horse rakes in which wire teeth are used. The invention consists in a novel way of connecting the draught attachment with the tooth frame, whereby the draught of the animal, by a simple manipulation on the part of the driver, is made subservient in elevating the teeth, so that the latter may discharge their load and keeping the teeth elevated a requisite period of time; and the draught of the animal also made to keep the teeth down while the latter are at

41,327.—Rotary Pump.—J. H. Shedd and William Edson, Boston, Mass.:

We claim the arrangement of two fans or buckets moving on the same center within a drum, each of which is alternately held in position as a diaphragm, while the other revolves, forcing out the fluid before it and receiving fluid behind it, substantially as berein described and for the purposes set forth.

41,328.—Churn.—W. Slaughter, Westerville, Ohio:
I claim, first, The concave spiral beaters, B and D, upon a revolving shaft, in combination with the spiral ribs, F, arranged and operated as and for the purpose set forth.

41,329.—Whiffle-tree Attachment.—Ephraim Soper, New

York City:

I claim as an improved article of manufacture a whifile-tree attachment composed of plates, C C' hook, F, extension edge, d*, and tube, a, made and applied as herein shown and described.

(This invention relates to a new and improved attachment for whipple-trees whereby the bolt, which connects the whipple-tree to the double-tree or to the cross-bar of a pair of shafts or thills is prodetected from the pull or strain to which it is commonly subjected under the draught of the animal, and the whifile-tree at the same time rendered capable of being turned nearly or entirely around and ap plied to or detached from the double-tree or thills with equally great facility as with the ordinary bolt attachment.]

41,330.—Faucet Measure and Indicator.—Vincent Squarza, San Francisco, Cal.:

squarza, san rrancisco, Cal.:
Iclaim the application to faucets of the gage tube, E, provided with a double scale to indicate both the quantity remaining in the vessel, as well as the quantity drawn therefrom, substantially in the manner herein described.
I also claim the measure, P, in combination with a three-way faucet, substantially in the manner and for the purpose herein described.
I also claim in combination with the measure, D, of a measuring faucet the regulator, F, for regulating the temperature of the liquid to be drawn, substantially in the manner herein described.

to be drawn, substantially in the manner herein described.
41,331.—Artificial Manure.—Eugene Von Nordhausen,
New York City:
I claim the production of artificial manure from the residuum of
coal oil or petroleum, substantially as described.
41,332.—Washing Machine.—Richard Washburn, Monsey, N. Y.:
I claim the double notched bridge tree, C, in combination with the
standard, B, hinged oscillating concave, E, and oscillating tub, A, all
constructed and operating in the manner and for the purposeset
forth.

constructed and operating in the manus and to forth.

Also hinging the concave, E, to the lover ends of the oscillating arms, D, as described, so that the same will readily accommodate itself to the surface beneath, and also be free to rise and fall.

washing machines in which an oscillating semicircular concave is washing maximum an oscinating semicircum used, which swings in a direction opposite to an oscillating semicircular tub, the clothes being exposed to the action of the outer surface of the concave and the inner surface of the tub.]

41,333.—Spinning Roller.—William Weild, Manchester, Great Britain. Patented in England, Sep. 20, 1859: I claim, first, The use in machines for preparing, spinning and doubling fibrous materials of rollers having their flutes arranged in a spiral farm and at an angle to the axis of the roller as hereinbefore described and illustrated by the accompanying arawings. Second, The system or mode of reversing the angle direction or curve of the flutes as hereinbefore explained and illustrated by the drawings and the use of rollers having the angle direction or curve of the flutes soreversed.

of the anters of the state of t

and for the purposes herein section and described.

41,335.—Lubricator.—D. M. Weston, Boston, Mass.:

I claim the centrifugal oiling apparatus composed of the cups, B and C, and the pipe. D. arranged with respect to the shaft. A, and its bearing, b, substantially in manner and so as to operate as described.

41,336.—Machine for Handling Hides.—J. S. Wheat, South Wheeling, West Virginia:
I claim the employment or use for the purpose of handling hides or skins of one or more paddles, C, secured to an arm, D, which is suspended from a spring bar, E, or its equivalent, and derives its motion from a crank-shaft, F, or its equivalent, substantially in the manner herein shown and described.

This invention consists in the employment or use for the purpose of handling skins and hides of one or more paddles suspended by an adjustable arm from a spring bar over a tank containing hides or skins and tanning liquor or lime bath, and connected to a crank shaft in such a manner that by the combined action of the spring shart in such a manner that by the combined action of the spring bar and crank shaft a reciprocating rotary motion is imparted to the paddle and thereby the liquorand hides or skins in the vat are caused to revolve over and over, and the hides or skins are thus handled with the least possible labor or exertion. For the purpose of hand-ling an extraordinary heavy pack of hides the paddle is armed with two or more hooks which act on the hides and cause them to revolve

41,337.—Machine for Cutting Books.—Jane Austin (ad ministratrix of the estate of F. J. Austin lately deceased), New York City:

I claim, first, The clliptical cam groove, l, in the under surface of the platform, F, in combination with the roller pin, J, and stops, k, all arranged and operating substantially as and for the purpose set forth.

forth. Second, The gage, e', in combination with the screw clamp, G, platform, F, adjustable carriage, H, and knife, E, constructed and operating substantially as and for the purpose described. (This invention relates to an improvement in that class of machines

which are used for the purpose of cutting the faces and ends of the books, and the object of the invention is to arrange the machine so that it willclamp two sets or layers of books simultaneously, and that the faces and the ends of both sets can be cut without unclamping either set, and furthermore, that it can be readily adjusted for books of different sizes.]

of different sizes.]
41,338.—Cooking Utensil.—Thomas Godfrey (assignor to himself and Charles, Joseph and Henry Tucker), New York City:
I claim uniting the detachable part, N, of a cooking utensil with a spoon, M, or with a fork or the like, as an equivalent therefor, by a joint which may be adjusted so as to be rigid or tofold or bend freely at plessure, substantially as herein shown and describe.
41,339.—Self-relieving Hook for Boat's Tackle.—H. G Guyon, Brooklyn, N. Y., assignor to James Edsall, Sing Sing, N. Y.:
I claim as an improved article of manufacture a self-relieving boat tackle device composed of a slotted hook, A, having cheeks, f. and fat link, B, provided with a tromby-werse pin, e, the several parts being constructed and operating in the manner herein shown and described.

This invention consists in a divided or slotted hook of peculiar con

struction to be attached to the boat, and a link of peculiar construc tion to be attached to the tackle, whereby the tackle is made to de tach itself when the boat in being lowered from a ve nes to a bearing on the water.]

41,340.—Barrel for Carbon Oils.—Barnard Hackett (assignor to Wm. G. Harden), Pittsburgh, Pa.:
I claim constructing barrels for holding carbon oil and other penetrating fluids, with a metallic body encased in wood, and head or endpleces composed of two or more layers of wood, gued together, or having a metallic liming between the layers of wood, constructed substantially as hereinbefore described.

Also making the heads or end-pieces of barrels of two or more layers of wood, set so that the grain of the wood in any one layershall cross the grain in the other, united with glue or other cement, substantially as hereinbefore described.

Also, making a corrugation or indentation around the metallic body of the barrel near each end, for the purpose of holding the heads in place, and making a close joint, substantially as hereinbefore decribed.

Also placing a metallic disk between two layers of wood forming

cribed.

Also placing a metallic disk between two layers of wood forming a barrel head and uniting them together with screws or rivets, substantially as and for the purpose hereinbefore described.

41,341.—Railroad Signal.—F. J. B. Hubert & F. C. A. Derocquigny, New York City:

1 claim, first, The pulley, D. provised with the ratchet, F. and chain, C. in combination with the signal disk, B, suspended on a horizontal axis or shaft, substantially as hereins hown and described, and all used in connection with the pay hereins hown and described, and all used in connection with the pay hereins hown and described, and all used or collar, M, and provided to shaft, J, and the lever J, connected to a reason the stantial with the shift, J, and the lever J, connected to a provided with the staff, J, in combination with the drop catch, N, arranged to operate as and for the purpose specified.

Third, The mlored glass, S, in the signal disk, B, in combination with the lamp or lantern in an aperture, b, in the upright, A, when specified.

[This invention relates to a new and invention of the purpose

[This invention relates to a new and improved signal for railroads for the purpose of preventing trains from coming into collision, and also to prevent them from passing on wrongly adjusted switches, and on drawbridges when the draws are open.]

on drawbridges when the draws are open.]

41,342.—Apparatus for Forming Hats and Bonnets.—S.

H. Lyon (assignor to himself and R. T. Wilde),
Brooklyn, N. Y.:

I claim, first, The employment, in a machine for pressing or forming hats, of separate clamps arranged to take hold of the fabric at the corners or at suitable intervals, substantially as and for the purpose herein described.

Second, Making such clamps adjustable to suit hats of varioussizes, substantially as berein described.

Third, The attachment of the upper portions, H, of the clamps to levers, I, carried by two rock-shafts, J, and operated by cam levers, K, the whole arranged in connection with the frame, D, and operating substantially as herein described.

Fourth, The arrangment of the bearings, e, of the rockshafts, J, upon the lower clamp plates, G, to serve as gages by which to adjust the upper clamping pieces, H, relatively to the said plates, G, substantially as herein described.

Fifth, Supporting the clamps upon two toothed rack-bars, E, or their equivalents, which are so jointed at their upper ends as to permit either end of the clamps to be raised or lowered at pleasure, substantially as and for the purpose herein described.

41,343.—Breech-loading Fire-arm.—E. M. Mix and H.

41,343.—Breech-loading Fire-arm.—E. M. Mix and H.

41,343.—Breech-loading Fire-arm.—E. M. Mix and H. B. Horton (assignors to themselves, John Gauntlett and John H. Selkreg), Ithaca, N. Y.:

We claim, first, The hammer, E. and trigger, F. constructed and applied in combination with each other and with the sliding breech-block, D. substantially as herein described, whereby the cocking of the hammer is effected by the agency of the trigger in the closing movement of the breech block, as herein set forth.

Second, the spring, v, and catch piece, r, or its equivalent, applied in combination with each other and with the extractor, II', to overate substantially as and for the purpose herein set forth.

(This invention consists, first, in certain improved means of cocking

[This invention consists, first, in certain improved means of cocking the hammer by the act of closing the breech after loading. It consuts, secondly, in an improvement in the shell extractor or device by which discharged metallic cartridge shells are withdrawn from the chamber of the gun and thrown away after such withdrawal.]

41,344.—Reversible Plumb and Square.—Milton V. Nobles, St. Anthony's Falls, Minn., assignor to himself and John C. Nobles:

I daim the arranging of two pendulums or weighted rods in the body of a square, indicating in opposite directions a plumb line, so that the instrument may be used with the arm of the square, up or down, as differing circumstances may require, and as set forth.

41,345.—Corn Planter.—Joseph Olmstead, Knoxville, Ill., assignor to himself and John H. Lewis:
First, I claim the combination and arrangement of the drive wheel, C.c. the shaft, E., provided with the pulley, e, the cone pulleys, f.g., and shaft, D., operating substantially as and for the purposes specified and described.
Second. I claim the combination.

and snart, B, operating substantiatly as and 10 the phiposes specimen and described.

Second, I claim the combination of the slide, L, spring valve, J, and lever, I, arranged and operating as herein shown and set forth. Third, I claim the combination of the shaft, D, arranged as, described, the cams, dd, the shaft, F, provided with the arm, h, the spring, s, and lever, I, operating as and for the purposes specified. Fourth, I claim the arrangement of the markers. N, and springs, O, with the axle, D, for the purpose described and shown.

Fifth, I claim the arrangement of the sliding bar, S, and nut, S', with the cone pulleys, f g, and belt, a, as and for the purposes specified.

46.—Feed Bag.—W. B. Wait, Greenwood, Mass., assignor to himself and Joseph A. Fairbanks, Melrose, Mass.:

Mass.:

I claim my improved nose-bag or horse-feeder, as made with the ventilating openings, b bb b, in its head cap and with a series of air induction holes or openings, cc c c, arranged in its sides or body, and below the head cap openings, as specified.

I also claim the improved nose-bag or horse-feeder, as made with the head cap, the dependent bag and the supporting annulus, D, so constructed or of such material or materials as to becapable of being folded as circumstances may require, and also, when unfolded, to possess sufficient rigidity to keep the cap properly distended for use on or about the head of a horse or other animal to which it may be applied.

pilea.

41,347.—Mold for Vulcanizing Rubber, &c.—Henry A.

Alden, Matteawan, N. Y., assignor to the New York
Rubber Company:

I cla m, first, The method of lining cast-iron molds with type metal
or other comparatively soft and fusible metal by the employment, in
combination with a pattern and cast-iron mold of a frame constructed to readily adjust and firmly hold the mold in place during the process of forming the lining, at the same time confine the fusible metal,
substantially as shown and described.

Second, The construction of the cast-iron mold, so as to allow of the
joining surfaces of the mold being cast of soft metal, substantially as
set for than d shown.

set iorthand shown.

41,348.—Drying Leather, Paper, &c.—Stephen M. Allen, Woburn, Mass., assignor to Edward Richmond:

I claim the drying of leather-board in heated chambers, so arranged that the hot air may pass up through the same, between and on both sides of the sheets which are held in or attached to frames or supports to set upon their edges at proper distances apart, substantially as herein described.

as neven ascribed.

41,349.—Magnesia Compound.—Christian G. Clemm,
Dresden, Germany, assignor to Charles Clemm, Philadelphia, Pa.:
I claim the practical introduction of these chemical processes in
the chemical industry in the above-described communication.

41,350.—Mode of Separating the Fibers of Flax, Hemp, &c.—R. T. Shaws, New York City:
I claim the process of treating vegetable fiber for its separation, by lakali and chlorine, substantially as specified.
I also claim moistening vegetable fiber with coal oil or its producte

previous to the operations of carding, spinning or otherwise manufacturing, for the purposes specified.

41,351.—Making and Coating Pipes, Joints, Bottles, Casks and other Vessels.—Benjamin Rhodes, Bow, Great Britain, assignor to James McGeary, Salem,

Great Britain, assignor to came account, Mass.:

I claim, first, The mode or method herein described of molding and forming elbows, bends and other hollow vessels, articles and things, by the combination of elastic fabrics with bitumen, bituminous compounds or mastic, as herein set forth.

Second, The mode or method of forming hollow vessels and other articles by means of elastic fabrics in combination with strips of part, canvas, or other materials and pitumen, bituminous compounds or mastic, for the purpose of combining the layers together and rendering them impervious to water.

Third, The cement used for coating tubes for conveying gas and for other purposes, made substantially of the materials and in the manner set forth.

er purposes, made substantially of the materials and in the man-set forth.

ourth, The machinery or apparatus herein described, for making g pipes or tubes.

Fourth, The machinery or apparatus use on decision, as long pipes or tubes.

Fifth, The use of sulphur or brimstone, in combination with any of the materials before named, for the purpose set forth. Sixth, The mode or method of constructing mandrels or cores for making tubes or pipes, as herein set forth and as illustrated by figures 22, 23 and 24.

Seventh, The application of wire netting, substantially as shown in figure 25, for the purpose of giving additional strength to the connections or joints of pipes and vessels.

41,352.—Retting and Disintegrating Flax, Hemp, &c.—R. T. Shaw, New York City
I claim the method herein specified, of separating vegetable fiber by boiling in water mixed with my said extract, for the purposes set forth.

RE-ISSUES.

RE-ISSUES.

Re-ISSUES.

Salem, Mass. Patented Sept. 27, 1859:

I claim distilling coal or other carbonaceous substances for the production of oils, gases, vapors, &c., by passing through the material to be acted upon, a current of superheated steam in one body, in a vertical plane, or nearly so, through an upright retort, that is, so that a body of superheated steam shall come in contact with every portion of the sald material, as set forth.

I also claim forming oleaginous vapors from coal or other substances yielding pyrogenous oils by passing through the material to be acted upon, air-combined with superheated steam, substantially in the manner and for the purposes set forth.

I also claim passing through the material to be acted upon, superheated steam in combination with steam direct from the boiler for the purpose of regulating the temperature, as set forth.

1.606.—Bottle-stopper Fastening.—H. W. Putnam. New

the purpose of regulating the temperature, as set forth.

1,606.—Bottle-stopper Fastening.—H. W. Putnam, New York City. Patented March 15, 1859:

I claim, first, Forming the fastener at the part that comes over the cork, of a piece of wire of a U-form, with the ends returned and connected to the bottle, in order that the pressure on the cork or stopper may cause the fastener to hold more securely, as specified.

Second, I claim a wire fastener, for a cork or stopper, in which the ends of the wire are bent nearly at right angles to form the joint or hinge on which the fastener is turned, substantially as specified.

Third, I claim forming the eyes for the reception of the fastener by means of wire bent as set forth.

Fourth, I claim a wire fastener for the stoppers of bottles, fitted so that it can be pressed aside from over the stopper, as set forth, incombination with a band or fastening attaching the sameto the neck of the bottle, as specified.

1,607.—Horse Collar and Hame.—Edward Whitney,
Albany, N. Y. Patented October 27, 1863:
I claim the metallic shield or plate, C, constructed substantially as
and for the purposes herein described and set forth.
I also claim the combination of the metallic shield or plate, C,
with the collar, A B, substantially as and for the purposes herein described and set forth.
I also claim the combination of the metallic shield or plate, C,
or any equivalent therefor, with the hame, D, in the manner substantially as and for the purposes herein described and set forth.
I also claim, as a whole, the combination of the metallic shield, or
its equivalent, the hame, D, and the collar, A B, in the manner and
for the purposes substantially as herein described and set forth.

1608—Construction of Steam and Sailing Versels for

or the purposes substantially as herein described and set forth.

608.—Construction of Steam and Sailing Vessels for Naval and Merchant Service.—Augustus Walker, of Buffalo, N. Y. Patented May 23, 1863:

I claim, first, Constructing a vessel with one or more longitudinal rehes or truss frames applied in vertical position to the center of the ull, for the purpose of strengthening it, substantially asset forth. Second, The combination of the central longitudinal truss framing rarch and acuble concave bottom, constructed substantially as heredescribed. escribed. hird, The doubly-arched prow or ram, D3, constructed and sup-ted as described.

ported as described.

Fourth, The ventilating tubes, I' I'', closable by the stanchions, J J, substantially as described.

Fifth, The casing, H, constructed with a circular arch, h, forsustaining theturret, G, substantially as specified.

Sixth In connection with a vessel of the above construction, I claim the sliding pilot houses, K K, elevated and sustained in any way substantially as described.

Seventh, The described position and means of working the anchors.

[An illustrated describtion of this invention will actually as according to the second of the substantially as described.

[An illustrated description of this invention will shortly appear in urcolumns.

DESIGNS.

1,884 to 1,886.—Three patents for Carpet Patterns.—E J. Ney, Lowell, Mass., assignor to the Lowell Man-ufacturing Company.

1,887.—Stair Rod.—David S. Plume, Newark, N. J.



In connection with the publication of the SCIENTIFIC AMERICAN, have act ed as Solicitors and Attorneys for procuring "Letters Patent nees inventions in the United States and in all foreign countries during the past seventeen years. Statistics show that nearly ONE-THIRD of all the applications made for patents in the United States are solicited through this office; while nearly THREE-FOURTHS of all the patents taken inforeigncountries are procured through the same source. It is almost needless to add that, after seventeen years' experience in pre paring specifications and drawings for the United States Patent Office rietors of the SCIENTIFIC AMERICAN are perfectly versant with the preparation of applications in the best manner, and the transaction of all business before the Patent Office; but they take pleasure in presenting the annexed testimonials from the thre last ex-Commissioners of Patents :-

MESSRS. MUNN & CO.:—I take pleasure in stating that, while I held the office of Commissioner of Patents, more tran one-fourth of All the business of the office came through your Hands. I have no doubt that the public confidence thus indicated has been fully deserved, as I have always observed, in all your intercourse with the office, a marked degree of promptness, skill, and fidelity to the interests of your employers. Yours very truly,

Judge Mason was succeeded by that eminent patriot and stat Hon. Joseph Holt, whose administration of the Patent Office

distinguished that, upon the death of Gov. Brown, he was appointed to the office of Postmaster-General of the United States. Soon after entering upon his new duties, in March, 1859, he addressed to us the following very gratifying letter:

MESSRS. MUNN&CO.:—It affords me much pleasure to bear testimony to the able and efficient manner in which you discharged your duties as Solicitors of Patents, while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and I doubt not justly deserved) the reputation of energy, marked ability, and uncompromising fidelity in performing your professional engagements.

Very respectfully, your obedient servant, ments.
Very respectfully, your obedient servant,
J. Holt.

Hon. Wm. D. Bishop, late Member of Congress from Connecticut, succeeded Mr. Holt as Commissioner of Patents. Upon resigning the office he wrote to us as follows:

Mrsgrss. Munn & Co. :—It gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of inventors before the Patent Office was transacted through your agency; and that I have ever found you faithful and devoted to the interests of your clients, as well as eminently qualified to perform the duties of Patent Attorneys with akill and accuracy.

Very respectfully, your obedient servant, Wn. D. Bishor.

THE EXAMINATION OF INVENTIONS.

Persons having conceived an idea which they think may be Persons having conceived an idea which they think may be patentable, are advised to make a sketch or model of their invention, and submit it to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corresponding with the facts, is promptly sent, free of charge. Address MUNN & CO., No. 37 Park Row, New York.

As an evidence of the confidence reposed in their Agency by inventors throughout the country, Messrs. MUNN & CO. would state thatthey have acted as agents for more than TWENTY THOUSAND inventors! In fact, the publishers of this paper have become identified with the whole brotherhood of inventors and patentees, at home and abroad. Thousands of inventors for whom they have taken out pat-nts have addressed to them most flattering testimonials for the ser-vices rendered them; and the wealth which has inured to the individ uals whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! Messrs. MUNN & CO. would state that they never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in their extensive offices, and that they are prepared to attend to patent business of all kinds in the quickest time and on the most liberal terms

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

The service which Messrs. MUNN & CO. 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 upon what knowledge they may acquire of a similar invention from the records in their Home Office. But for a fee of \$5, companied with a model, or drawing and description, they have a scial search made at the United States Patent Office, and a report setting forth the prospects of obtaining a patent, &c., made up and mailed to the inventor, with a pamphlet, giving instructions for further proceedings. These preliminary examinations are made through the Branch Office of Messrs. MUNN & CO., corner of F. and Seventh streets, Washington, by experienced and competent persons. Many thousands of such examinations have been made thro this office, and it is a very wise course for every inventor to pursu Address MUNN & CO., No. 37 Park Row, New York

HOW TO MAKE AN APPLICATION FOR A PATENT.

Every applicant for a patent must furnish a model of his invention 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 consists, for the ratest Office. These should be securely parket, the inventor's name marked on them, and sent, with the Government fees, by express. The express charge should be pre-paid. Small models from a distance can often be sent cheaper by mail. safest way to remit money is by a draft on New York, payable to the sarder of Messra MUNI & CO. Persons who live inremote 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 regis-tered by the postmaster. Address MUNN & CO., No. 37 Park Row,

Patents are nowgranted for SEVENTEEN years, and the Government fee required onfiling an application for a patent is \$15. Other changes in the fees are also made as follows:--

On filing each Caveat\$	1
On fil ng each application for a Patent, except for a design.\$	1
On issuing each original Patent	2
On appeal to Commissioner of Patents	2
On application for Re-issue	3
On application for extension of Patent\$	5
Ongranting the Extension	51
On filing a Dis claimer	1
On filing application for Design (three and a half years)\$	1
On filing application for Design (seven years)	1
On filing application for Design (fourteen years)	3

The Patent Laws, enacted by Congress on the 2d of March, 1861, are now in full force, and prove to be of great benefit to all parties who

are concerned in new inventions.

The law abolishes discrimination in fees required of foreigners, excepting natives of such countries as discriminate against citizens of the United States—thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners except the Canadians, to enjoy all the privileges of our patent system (except in cases of designs) on the above terms. Foreigners cannot secure their inventions by filing a caveat; to citizens only is this privilege accorded.

CAVEATS.

Persons desiring to file a caveat can have the papers prepared in the Shortest time by sending a sketch and description of the invention.

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Many valuable patents are annually expiring which might readily be extended, and if extended, might prove the source of wealth to their fortunate possessors. Messrs. MUNN & CO. are persuaded that very many patents are suffered to expire without any effort at extension, owing to want of proper information on the part of the patentees, their relatives or assigns, as to the law and the mode of procedure in order to obtain a renewed grant. Some of the most valuable grants now existing are extended potents. Patentees, or, if deceased, their heirs, may apply for the extension of patents, but should give ninety days' notice of their intention.

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