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FOR THE WEEK ENDING AUGUST 8, 1865. Reported Officially for the Scientific American

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49,209.—Manufacture of Paper.—J. W. Allen, Marion, Mass.:
I claim the described new article of manufacture.
49,210.—Pencil-sharpener.—H. P. Andrews, Clevelands

Ohio:
I claim, First, A pequil sharpener, made with two hinged jaws
I claim, First, A pequil sharpener, made with two hinged jaws
B B, and a sheath, C, substantially as and for the purpose set forth
Second, The groove, b, and tongues, a a', in com ination with the
sheath and jaws, applied and operating substantially as and for the
purpose described.

This invention consists of a pencil-sharpener, composed of two converging jaws, which are hinged to each other and to a sheath, and provided with projecting tongues, which drop into a groove of the sheath in such a manner that when the two are turned up together they are held closed by the grooves in the sheath, and in this case they are precisely like a pencil-sharpener of the ordinary construc-tion, but if they are turned out each jaw can be readily cleaned and sharpened, or the jaw be removed and replaced by another when ever it should be desirable, without throwing away the whole instru

49.211.-Inkstand. John Axtman, East Cambridge

Mass:

I claim the combination of the stationary or interior perforated cap, b, or its equivalent, the perforated gate, d. and the rotary or superior perforated cap, a. arranged and applied together, substantially in manner and so as to operate as specified.

I also claim the construction of the rotary cap, concavo-convex, in manner and to act as a spring, as described, with respect to the gate. I also claim the construction of the two caps, a b, when having the gate arranged externel them, with the concavo-convex head, n, arranged in the manner and for the purposes specified.

49,212.—Submerged Force Pump.—A. Balding, Flora. Ill.:

Ill.:
I claim the combination of the upper and lower chambers, provided respectively with the ball valve and openings, and the hollow piston rod and chambered piston, the latter also provided with ball valves and openings, the whole arranged and constructed as described and represented.

[This invention relates to that class of pumps known as double-action. It has a hollow piston-rod, and a valve-chamber within the riston. The wiston rule passes thereup, the context of the wares.

piston. The piston rod passes through the center of the upper

49,213 .- Book Cover .- George F. Barden, South Adams

Mass.: I claim a book cover, made substantially as herein describe (The object of this invention is the production of an outside cast

ing or covering, for the covers and backs of books, so made and folded as to be readily and easily inserted or placed thereon when desired, which coverings are made of different sizes, to conform to the varying dimensions of books, ?

49,214.—File-cutting Machine.--James K. Barker, Law

49,214.—File-cutting Machine.—James K. Barker, Law-rence, Mass.:
First, I claim the springs, R, and the rods, U, to bear upon the springs, R, for the purpose herein set forth.
Second, I claim the frame, Fig. 7, which is attached to the bed, A, of the machine, and independent of the earriage, B, in combination with the chiest-holders, O rollers, Q, the springs, R, and the means of operating the springs and chiest-holder.
Third, I claim the springs, II, and the cam wheels, arranged as described, to regulate the force of the springs, II, for the purpose herein set forth.

herein set forth.

Fourth, I claim the described improved machine for cutting a secres of files at the same time, in the same machine, by a corresponding series of hamners and chisels, consisting essentially of the combination of the elements above claimed, and operating substantially as herein set forth and described.

49,215. ...Process for Rendering Barrels Impervious to Petroleum, Etc....fullus Baur, Brooklyn, N. Y. Autodated July 24, 1865:
I claim the within-described process of producing an oil-tight lining for barrels, etc., by first treating the wood with alum or its equivalent, and afterward with soluble glass, substantially as and for the purpose set forth.

49,216 .- Snow Plow. - Abner L. Bausman, Minneapolis,

Minn:

I claim. First. A snow plow for railroads, constructed with double walls to admit of a steam or hot-air chamber between its exterior surfaces, to the purpose of keeping said surfaces in a heated state to prevent the snow adhering thereto, substantially as set forth. Second, five employment or use of rotary shovels and brushes placed at the rear of the plow and over the two lines of rails, and arranged to operate in the manner substantially as and for the purpose set forth.

Third. The combination of the double-walled plow and rotary

pose set forth.

Third, The combination of the double-walled plow and rotary shovels and bruehes, all arranged to operate substantially as an 1 for the purpose specified

49,217...-Water Elevator.—Jacob II. Best, Schenectady, N. Y.:

N. Y.:

I claim the application to the usual barrel and axle used for hoist
ing and lowering the bucket of a well or any weight, of a wheel, E,
operating as a ratchet and riction or brake wheel, in combinations
with the winch, W. its brake piece, b, and its pawl, R. also the pawl,
P; the whole arranged substan fally as described and for the purposes set forth in the within specification.

49,218 .- Preparing Peat for Fuel .- Albert Betteley, Boston, Mass.: I claim the employment of a tank in the preparation of peat for nel, substantially as described.

49.219.—Nailed Boot or Shoe.—Lyman R. Blake, Boston, Mass.:

I claim a shoe in which the vamp and sole are united by nails having an inclination with respect to each other, substantially as set forth.

49,220.—Artificial Cork.—Louis Bock and Albert F. Wheeler, Sheboygan, Wis.:

We claim a compound of caoutchouc or india rubber and waddy dust or fiber, in the proportions hereinbefore set forth, or in any other proportions producing the same results, substantially in the manner and for the purposes herein set forth

49,221.—Hygrometer.—Reinhold Bocklen and Wm. Stachlen, Brooklyn, N. Y.:
We claim, First. The employment of the spring, A, made of ratan or any other kind of wood, and artificially coiled and prepared, operating in the manner and for the purpose herein shown and described.

operating in the manner and for the purpose herein shown and described.

Scond, The combination of the spring, A, made of ratan, with the hand, B, or its equivalent, for indicating moistness contained in the air surrounding it.

Third, The peculiar treatment and construction of the spring, A, in hardening, preparing and preserving the same, for the purpose and in the manner herein shown and described.

49,222.—Attaching Horn Handles to Knives, Etc.—Miles Bradley, Westport, Conn.:

I claim by means of a die, molding or compressing the horn into the desired form while on the tang and countershking the heads of the rivets and washers at one and the same operation, substantially a set forth.—E. W. Brottell Nowerle, N. J.

the rivets and washers at one and the same operation, substantially as set forth 49,223.—Lock.—E. W. Brottell, Newark, N. J.: First, I claim the vibrating knife. I, partaking of the motion of the holt, B, out compelled to turn around a center, i, substantially in the manuer and for the purpose herein set forth. Second, I claim inclosing the tumblers, M, within two separately constructed casings, E and G, arranged to operate substantially as and for the purpose herein set forth.

Third, I claim the arrangement of the open tumbler, M, in the turning part, E, and adapted to operate relatively to the swivelling or vibrating knife, Is 185, substantially in the mancer and for the purposes herein set forth.

Purposes neven see form.

49.224.—Blacking Box.—J. S. Brooks, Rochester, N. Y.:

I claim th, combination of the form of the box with the holder,
B, the same forming a new article of manufacture, when constructed as shown, and for the purposes specified.

structure as snown, and for the purposes specified.

49,225.—Bread and Meat Cutter.—Wm. Budd and J. L. Husband, Philadelphia, Pa.:

We claim the combination and application of the rod, C. frame, D, and knife, A, figure 2, as herembefore substantially set forth, and for the purpose described.

49,226.—Feathering Paddle Wheel.—James Burson, Yates City, III.:
I claim, First, A plurality of cam guides for feathering the buckets, as herein specified.
Second, In combination with the aforesaid cam guides, I further claim the guide roots, D.D, attached to opposite sides of the buckets in the manner described.

in the manner described.

49,227,—Construction of Railway Train and Car—Sanuvil R. Calthorp, Roxbury, Mass.:

I claim giving to the exterior surface of a railway train a form tapering from the center of the train toward either end, or tapering the eighne or car at the front or rear of the train, substanually as described, for the purpose of diminishing the atmospheric resistance.

daily as described, for the purpose of diminishing the atmoshieric resistance.

Talso claim constructing the engine and its truck with a projection in front, in its several parts, of the shape substantially as set forth, and encasing its body both above and below, substantially as set forth, and remaining its cab, so that its projection and main casing, while protecting its own surface from the direct resistance of the wind, may, together with its rounded cab, form a single prove to the whole of the train, in the manner and for the purpose herein lescribed.

described.

I also claim placing a false bottom, substantially as described, under each carriage of the train for the purpose of protecting the trucks and other projecting surfaces under the carriages from the adverse action of the wind.

I also claim inclosing the whole space between any two contiguous carriages of the train flush with the sides, top and bottom aforesand, which is extended under the platform, in combination with the projecting root aircardy in use, and a dexible hood or hoods, substantially as set forth.

49,228.—Shingle Machine,—George Challoner Omro, Wis.:

First, I claim the means employed for operating or tilting the bcd, I, to wit, the sliding baz, I., provided with inclined projections, q o, the lever, Ni, attached to II. and the lever, N. attached to wheel, C, all arranged substantially as set forth.
Second, The projection, t, at the inner side of the rim, b, of the wheel, C, in connection with the cranks, h j, springs, f, and rollers, k, all arranged substantially as shown for operating the jaws, F. Third, The sliding bar, K. provided with arms, p p, pivoted to pendants, o o, of the plate, n, which supports the bcd, I, for the purpose of raising and lowering said bed, as set forth. Fourth, The platform, O, in combination with the tilting bed. I, and the devices for releasing the jaw or dog from the bolt, substantially as described.

This invention relates to a new and improved machine for sawing

shingles, and of that class in which a series of holts are placed upon a horizontal rotating wheel, and acted upon by a horizontal circular saw placed underneath the wheel.

saw piaced underneath the wheel. [49,229.—Washing Machine.—John Champlin, East Middlebury, Vt.:

First, I claim the beaters or battle boards, C.C., arranged in the box of a washing machine, so as to operate substantially in the manner specified.

Second, The combination of the trough, A., box, B., and battle battle boards, C.C., substantially as shown and described.

[This invention consists in the employment or use, in a suitable revelving box, burrel or other recentage for electron while being

revelving box, barrel, or other receptacle for clothes while being washed, of two or more beaters or battle boards, so arranged that they will act upon the clothes as the box is revolved, and thus the effectually and quickly cleanse or extract the dirt from the

49,230.—Apparatus for Filtering Petroleum.—Robert A. Chesebrough, New York City:
I claim the application of heat to a filter for hydro carbon or other oils by means of a triple cylinder or steam worm coiled inside or outside of the filter, as herein set forth.

49,231.—Mode of Constructing the Heads, Necks and Connections of Gas Retorts.—John Chilcott, Brooklyn, N. Y. Antedated July 24, 1865:

I claim making the neck and head and the connection for the main of a gas or other retort, or either of them with double walls having a space between the inner and outer walls filled with placter of Paris, or other poor conducting material, substantially as and for the purpose herein specified.

49,232 -Amalgamator.-Thomas J. Chubb, Brooklyn.

49,232 —Amalgamator.—Thermas w. Draws, N. Y.:

First, I claim subjecting the orce of precious metals in a disintegrated state to the action of revolving or oscillating plates, which are coated with mercury when such plates are arranged within chambers that are formed in such manner that the ore is subjected to both sides of the plates and cursed to flow over a tath of increary in a continuous str and, substantially as described.

Second, The arrangement of the fixed partitions, D. on each side of the movable disks, C, in such manner as to form a continuous passage through the cylinder, A, for the flow of the ore, substantially as described.

Third, The use of steam, in combination with a series of disks, C, moving in a bath of mercury, for the purpose of bringing the atoms in closer counter with the surfaces of said disks, substantially as described.

in closer contact with the surfaces of some disast, successfully scribed.

Fourth, Subjective the ores of precious metals in a disintegrated state to the action of revolving or oscillating plates which are covered with mercury, when such plates are arranged in such manuaer that the ore is subjected to both sides thereof, and caused to flow past or ever the same and over a mercury bath, the plates disping into said both for the purpose of removing the precious metals collected thereon and depositing them in the bath, the plates themselves becoming cleaned and freshly coated with mercury of the both thereby, substantially as described.

49,233.-Steering Apparatus. - George Coffin, Boston, 49,233.—Secting Apparatus.—George Count, Doston, Mass.:

I claim the arrangement of the two sets of toggle-jointed levers

attached to the runder post, and operated by the steering wheel substantially as hereinbefore described.

\*\*uostanually as hereinbefore described.\*\*
49,234.—Artificial Limb.—Jesse Coombs, Greenfield, Mass.:
I claim making artificial limbs of strips of metalor other material, were spirally and riveted, or arranged spirally and riveted, substantially as described.
I also claim the spring, W., secared at the ankle joint, with one arm working in the leg and the other in the foot, substantially as described.

described
I also caim an air or water cushion, for the sole or under the sole
of the foot, inside of the boot or shoe, to enable the wearer to walk
without, or with far less, jar to his system when he steps than he
could do without the cushion.
I also claim making two or more cylindric air or water cushions,
or cushions of other materials, with a vacuum or suction space be
tween them around the stump of the natural limb, substantially as
described, to hold the artificial limb on to the natural limb.

Distaling Mecking A. W. Cox. Publish and or

described, to not the archical man on to the natural mino.

I claim, First, 'the combination of trough, M, shovel. T, elevator, R.S., pullers, L.L., constituting the apparatus for digging and carrying back the excavated maters.

Second, The described digging and levating apparatus, hinged to the rear upperpart of the frame, and having its forward or digging end both suspended and vertically adjusted by the racked coulters, gearing to piniens, O, under control of the attendant.

Third, The slotted bearings, n, in the racked coulters, for the purpose specified.

pose specified.
Fourth, The combination of the devices, F G H I, for suddenly changing the course of the slovel, in the manner set forth.

49.236.—Locomotive Boiler.—Samuel Crawford, New

19,236.—LOCOMOLIVE BOHER.—Samuel Crawford, New York City:
Lelaim the plan of making the bottoms of the water legs or holoon would got the furnaces of steam bollers, of the character decribed, a removable but steam-tight frame, by the employment of the devices, substantially as described, and for the reasons and purposes explained.

49,237.—Pruning Metallic Cartridges.—Silas Crispin,
New York City:
I claim the cartridge, constructed as described; that is to say, with
the fulminate placed within a projecting annular recess or rim,
which is formed at a point between the ends of the cartridge case,
substantially as described.

49,238.—Process of Preserving the Roots of Hop Vines
by Charring the Stems.—Schuyler Cummings, Middlefield, N. Y:
I claim the process and mode of treating hop vines, substantially
as above described, for the purpose of preventing them from bleedting after being cut in harvesting the crop.

(The object of this invention is to close the porces of that part of

[The object of this invention is to close the pores of that part of the vine which is connected with the root, and thereby pro com bleeding, and so preserve the root from exhaustion and prema ture decay when the vine is cut down in the work of harvesting a

crop of hops.]
49,239.—Ditching Machine.—Wm. H. Dalbey, Clarks-

bury, Ind.:

I claim the team, A, having the mounted yoke, B, applied to it, as shown, in connection with the cutters, G ii ii, box, K, and inclined clevator, L, all arranged to operate in the manner substantially as and for the purpose herein set forth.

I further claim the toothed drum, M, armed with teeth, e, and connected to the roller, c', of the elevator, L, by gearing, f, for the purpose of driving the clevator, as set forth.

!This invention relates to a new and improved machine for cutting

drains and ditches, and it consists in the employment or use of cut ters, and an elevator, arranged with a beam mounted on wheels whereby the work may be done very expeditiously and in a perfect

nanner.]
49.240.—Apparatus for Dressing Silk Thread, Etc.—John Day, Brooklyn, N. Y.:
1 claim the combination of a gumming apparatus, with a drying and finishing box, constructed and arranged substantially as and for the purposes set forth.
1 also claim, in combination with the above, the hot air blast for drying the threads, as specified.

49,241.—Steam Boiler Furnace. -T. B. Dexter, Lynn,

Mass.:
I claim the arrangement of the devices for driving the blower, g, consisting of the team pipe, c, wheel, e, and shaft, f, operating substantially as set forth.
Also, The combination of devices, by which the blast can be changed from a bot to a cold, substantially as set forth.

19,242.—Manufacture of Capsules.—Dundas Dick, New

York City:

York City:

I claim, in combination with the central coue or plug, a, the detachable encasing or surrounding side mold pieces, arranged together, substantially as and for the purpose described. This invention relates to the molds in which capsules are molded.

and consists in a novel construction and arrangement of them, whereby the capsules can be molded with great rapidity and nicety.] whereby the capsules can be molded with great rapidity and nicety.]
49,243.—Car Brake,—S. R. Dimmock, Syracuse, N. Y.:
felaim the arrangement of the pinions, L and H, inside of the oscliating frame, E, the stop, n, on the side of the pinion, I, the drum,
r, inclesing the spring, k, the two forms of spring lateh. M and my,
with their attachment, as above described, the double crank in its
several parts, and with its attachments, as above described, and the
plate, I, all constructed and operating as and for the purpose herein
shown and described.
49,244.—Lamp Stand and Clothes Dryer Combined.—
John Donaldson, Rockford, Ill.:

1 claim, First, The combination of a lamp stand with a drying
frame, arranged and operating substantially as described, for the
purpose set forth.

Second, The combination of the slotted stem, carrying the drying
arms with the screws on the bedestal or stem, substantially as described, for the purpose set forth.

scribed, for the purpose set forth.

49,245.—Steak Mangler.—J. P. Dorman, Galesburg, Ill.: I claim the construction of the east-iron longitudinal riangular, shape, tooth-plate, and the application of it, substantially in the manner and for the purpose herein set forth.

49,246.—Table Knife.—J. Olden Ely, Philadelphia, Pa.: I claim, First, The meral bolster, II, cast tr and arranged to embrace the handle and blade of a knife, substantially as and for the purpose herein set forth.

Second, The projection, i, or a dovetailed or equivalent form on the end of the handle, when arranged for the retention of the bol ster, X, as set forth.

Third, The bolster, X, the dovetailed projection, and shoulders, y, of the handle, and the notches, e, of the blade, the whole being arranged as and for the purpose herein set forth.

arranged as and for the purpose acreen set form.

49,217.—Manufacture of Pyroligneous Acid.—A. H. Emery, New York City:

I claim the use of steam or superheated steam in the distillation of wood in the manufacture of byroligneous acid, etc., in those cases in which the amount of steam used is greatly decreased or discontinued during the whole of or a large portion of the time in which the wood is being charred.

49,248. Manufacture of Pitch. A. H. Emery, New York

I claim the art of making pitch from pine wood by one distillation

49,249.—Manufacture of Turpentine, Etc.—A. H. Emery New York City:
I claim distilling wood under more than a measure pressure without the application of storad or superficated steam.

19,250. Corn Plauter, — J. W. Fawkes, Decatur, III.: I claim the pivoted bars, D. D., and springs, E. E., or their equivalents, in connection with the reciprocating side. B. provided with the cells, a a, emistantially as and for the purpose set forth.

[This invention relates to a new and useful improvement in the corn-diopping device, and has for its object the dropping of the corn without breaking a, and the consequent even distribution of

49,251.—Wire Heddles for Loom Harness.—Milton Finkle, New York City:
First, Making weavers' weddles of a single strand of wire, substantially as and for the purpose above described.
Second, I also claim forming the eyes of wire heddles with smooth surfaces by bending the strand, substantially as above described.
Third, I also claim soldering the eyes of wire heddles, for the purpose of keeping them compact and firm, substantially as above described.

-Clamp for Straps.-John J. G. Fisher, Foxboro

Mass.:
I claim the holding plate, D, operated by the screw, b, or equivaint mechanical device, in combination with the box or frame, B,
perating substantially as set forth.

49.253.—Artificial Leg.—James A. Foster, West Stock

49.253.—Artificial Leg.—James A. Foster, West Stockholm, N. Y.:
I claim thelever, P. of the toc.piece, I. in combination with the stop, q, of the foot, and the spring cord, k, substantially as and for the purpose herein specified.
In combination with the cord, k, I also claim the adjusting arm, M, and lever, H, so arranged and operating that the tension of said cord may be modified by mei ely moving the arm outward or downward, substantially as herein set forth.
I also claim the combination and arrangement of the lever, H, spring, m, and nut, n, with the bolt, G, and boxes, i 1, in such a manner as to tighten the knee joint and to obviate its rigidity, as herein specified.

ein specified. also claim the arrangement of the ankle joint, consisting of the h. D. provided with the central beuring, if the bolts, b b, and the hing eye, E, constructed as described, the whole being used in abmation with the foot, C, and ankle, B, substantially as speci-

also claim holding the cord, k, in place, to prevent friction and ar in its action, by means of the loop, w, arranged and operating

wear in its action, by means of the loop, w, arranged and operating as herein set forth.

I also claim the inclined stop, s, in the heel of the foot, in combination with the bearing, e, of the ankle, substantially as herem set forth.

49,254.—Electric Gas Lighters.—Edward J. Frost and George A. Lawrence, Springfield, Mass. Antedated July 24, 1865:
We claim the combination of an electric magnet with a valve, D, or its equivalent, when applied to the pipe of a gas burner and operated by means of the axial bar, G, as set forth.

Second The valve, D, as de-crib-d, when used in combination with the axial bar, G, or its equivalent, substantially as described.

49,255.—Machine for Removing Scale from Steam Boiler
Flues.—P. Eldredge Garvin, Philadelphia, Pa.
Antedated March 30, 1865:
I claim the arrangement of the screw, D, the cutter, E, the base
rlate. F, with the conical-shaped collar, c, and the groove, d, the dog,
H, and the thumb screw, K. constructer and perated for the purpose and in the manner s herein described.

pose and in the manner is herein described.

49,256.—Fruit Jar.—William T. Gillinder and Edwin Bennett, Philadelphia, Pa.:

We claim the formation of the groove in the cover, with shoulders supporting the elastic pad, and with a central depression into which the pad is forced by the upper edge of the jar on the downward pressure on the cover by the screw cap, substantially as described. 49,257.—Gas Fitter's Hook Blank. Elliott P. Gleason

NewYork City:
I claim the hook Bank, or its equivalent, having a contour, set stantially as described, as a new article of manufacture.

stantially as described, as a new article of manufacture.

49,253.—Composition for Exterminating Grasshoppers.
—Samuel Green. Denver, Colorado Territory:
f claim the combination and mixture and preparation of the above enumerated ingredients in the aforesaid manner for the purposes above set forth, and the exclusive right to prepare the same for use and sale in those sections of the United States where grasshoppers are so numerous as to completely destroy growing crops.

-Grease Cup. --Gebhard Hagenmeyer, Big River,

Cal.:
I claim the arrangement of the valves, B B', the stems, C C, the seats, c c', bulb, A, cup, D, and vent-hole valve, 'i, in the manner and for the purpose substantially as herein shown and described.

49,260.—Cane Stripper.—Joel A. Hall, Memphis, Tenn.:
First, I claim stripping the blades from cane by means of two pair
of curved yielding knives, arranged in such manner that the second
pair of knives will complete the work left unnulshed by the first
pair, substantially as described.
Second, Providing the knite blades or strippers with auxiliary cutters, 1, substantially as described.
Third, The combination of guide rollers with cane strippers, substantially as described.

49,261.—Buckle.—William Smith Hall, Quincy, Mass.: I claim the improved clamp buckle as mane with a tongue having books so applied that the strain of the strap upon them clamps the edge of the tongue down upon the strap, substantially as set forth.

edge of the tongue down upon the strap upon them clamps the edge of the tongue down upon the strap, substantially as set forth.

49,262.—Sewing Machine.—Thomas J. Halligan, New York City. Antedated Feb. 8, 1865:

I clam, First, waxing the thread on its way to the needle by pussing the thread through a wax cup, which is provided with an elastic bottom, t, and also with means for keeping the wax in the cup in a fund state, substantially as described.

Second, The clastic bottom, t, and the guide tube, tl, which is attached to the wall of the wax cup, IP, applied together in the construction of a sewin machine, substantially as described. Third, The combination of the take-up, B, needle bar, 42, waxing contrivance, IP, and shatt, B, substantially in the manner described for the quirpose of re-waxing the thread, as set forth. Fourth, The manner shown of arranging the wibrating take-up arm, B, in connection with the shaft, B, and operating this arm by means of this shaft, B, which is arrunged at right angles to the line of feed and which also operates the needle bar, substantially as described.

Fitth, Holding the work down upon the table during the unward.

described.

Fith, Holding the work down upon the table during the upward movement of the needle bar by means of a pressure foot, c', which rises at the proper time to allow the work to be fed under the needle, and which is located to one side of the needle and of the pressure pad, and is operated by the divices as described. Sixth, the hinged server vod, r', and adjusting nut, S, applied to the open locked end of the pressure lever, r', substantially as described.

scribed.
Seventh, So applying the awl, m, to the needle bar, A2, that this awl can be adjusted and set nearer to or farther from the needle m, according to the length of stitch required, substantially as described.

Seventh. So applying the awl, m, to the needle bar, A2, that this awl can be adjusted and set nearce to or farther from the needle, m, according to the length of statch required, substantially as described.

Eighth, The use of the vibrating and longitudinally adjustable lever, D, in commination with the shaft. C, and pawl, e', for giving motion to the reed wheel, E, substantially as described.

Ninth, The combination of levers, D' E' and B, for adjusting the pawl, e', substantially as described.

Tenth, The use of two or more ratchet wheels having teeth of different lengths in comb nation with a feed wheel, E, and adjustable spring clamp, G, substantially as described.

Eleventh. In the combination of a skeleton or open shuttle carrying frame, the combination of the stirrups, h h, bars ii, rear abuthent, and springs, it these parts being formed and arranged in the manner and forche pair ose described.

Twelth. The use of two or more transverse bars, 12 t2, within a space, t, of a shuttle, for the purpose of creating tension upon the ower thread of a sewing inachine, combined with the depression, 12 for allowing the thread to traverse laterally back and forth the full length of the bobbin, and preventing the thread from over-rating, as herein described and set forth.

Thirteenti, A device for smoothing the wax thread on its way to the needle, consisting of a metallic clamp, pp', constructed and operating as described and encircling a rubber block, p2, through which the thread passes.

Fourth, A needle for using wax thread which is formed with a groove, 2, extending above and below the eve, on one side, and a groove, 2, extending above and below the eve, on one side, and a groove, 2, extending above and below the eve, on one side, and a groove 2, extending above and below the eve, on one side, and a groove 3 cancendro only above the eve on the opposite side, and with its e, e inclined as far a practicable in a direction approaching the axis of the needle, and otherwise constructed substantially as and for the pur

sections cast or formed of one or more pieces, ommitting wholly or in part the tie rods or bolts and the joints described in specification of patent granted to me from the United States Patent Office, Oct.

ath. 1839
I also claim the manner of making the crossconnections at one or more corners, or other points of the slibs for water and steam by the use of intermediate castings, having spherical or curved surfaces at the joints, in the mode and or the object set forth, or in any other manner, substantially the same, for accomplishing the like numbers.

purpose.

I further claim the manner of combining the thin web with the spheros, as desc. hed, for the purpose of making a tight wall or casing for bothers, in the settling of which it is desired wholly or in part to dispense with brick work.

49,264.—Mode of Making and Venting Cores for Casting.—Joseph Harrison, Jr., Philadelphia, Pa.: I claim the mode of making, using and venting cores or molds for cast ags as above described, for the purpose of strengtheming them when made of weak, moists and or similar material, and for the better venting the same by availing of a vacuum as above described, when the moiten metal is ponred into the mold.

49,265.—Corn Planter.—A. A. Hazard, New York City:
I claim the oscillating and distributing roller, b, in combination
with the furrow opener, B, track clearing wings, a, spring, g, lever,
e, trigger, f, handles, D D, and adjustable covering roller, E, all constructed and operating in the manner and for the purpose herein
shown and described.

[This invention relates to an improvement in that class of corr lanters in which the seed is distributed by the action of a roller with one or more seed-cells, to which an oscillating motion is im plow or by the action of a pin or cam projecting from the covering roller, said seed-distributing roller being subjected to the action of a spring which carries it back to its original position after each dis

49,266.—Forging Cannon.—Alonzo Hitchcock, New York City. Antedated July 30, 1865:
I claim making a cannon or other large forging by welding it in the furnace by the apparatus and in the method substantially as described.

49,267.—Slide Valve for Steam Engines.—Samuel F. Hodge, Detroit, Mich.:

I claum the combination and arrangement of the follower, C, packing, b, stuffing box, B, adjustable gland, E, and valve, D, substantially as described.

49,268.—Tobacco Pipe.--Christian Hoffman, Philadel-

phia, Pa.:
I claim the combination and arrangement of the bowl, A, the drip pipe, C, the drip chamber, B, the tube, D. the drip chamber, E, and the neck, G, substantially as herein shown and described.

49.269.-Horse Rake.-Franklin Holden, Clyde, Ill.: First, I claim the suspending of the rake head, G, to the frame A, of the machine, by means of swinding rods, D, connected by chains, H, to the axle, A, substantially as and for the purpose set

forth.

Second, The pawl, O, connected with the rod, P, in connection with the bar, N, in the rake head and handle, K, all arranged substantially as and for the purpose specified.

Third, The combination of the handle, K, pawls, M O, bar, N, and suspended rake, all arranged with a mounted frame, to operate substantially as and for the purpose set forth.

This invention relates to a new and improved horse rake, of that class which are provided with a revolving straight-toothed rake, an it consists in a novel construction and arrangement of parts, where by the device may be manipulated with the greatest facility, and the rake adjusted to operate at a greater or less distance above ground, as the nature of the work to be performed may require.]

49,270.—Stair Rod.—H. M. Hoover, New York City:
I claim the rubber stair rod, constructed substantially as herei described, as a new article of manufacture.
This invention consists in making stair rods for holding dow carpets, wholly or partly of indiagrapher or gutta-percha.

49,271.—Tension Mechanism for Looms for Weaving Goods, with Elastic Strands.—Liveras Hull, Charlestown, Mass.

I claim the improved elastic strand tension apparatus, substansially as described, the same consisting of two or more wheels. A B C, and a friction band, e, and weight, f, or the equivalent thereof, arranged and applied together, and to the strand, substantially as specified.

49,272.—Facing Mold.—Joseph and Abraham Hursh, Philadelphia, Pa.
First, I claim the use of ochre, in its powdered state, for facing green sand molds, substantially as described.
Second, The u e of ochre as a wash for facing cores and dry sand molds, substantially as above set forth.

49,273.—Apparatus for Separating Ochre from Sand.—
Joseph and Abraham Hursh, Philadelphia, Pa.:
First, I claim separating ochre from the sand which contains it in its natural state, by means of a current of air, in such a manner that the sand falls while the ochre is borne forward into a separate place

the sand falls while the ochre is borne forward into a separate place of deposit.

Second, The combination of the fan, C, with the chamber, G, and road, A, the whole being constructed and arranged in relation to each other, substantially as described and for the purpose specified. Third, Burning the ochre, or subjecting it to a great heat, for the purpose of completing its adaptability for facing molds for castings, substantially as described.

substantially as described.

49.274.—Lantern.—James Ives, Mount Carmel, Conn.:
First, I claim a chimney or cone base, fitted to the reflector base or globe frame of a lantern, so as to move with said frame, • maintain its position with relation thereto, when either the frame or the lamp is adjusted so as to expose the wick tube or top of the lamp, substantially as described.

Second, The devices herein described for connecting the chimney or cone base to the reflector or globe frame of a lantern, in such a manner that the base may at will be disconnected from the said frame, substantially as set forth.

49.275.—Last.—Pickmore Jackson Sangus Mass.

49.275 .-- Last .-- Pickmore Jackson, Saugus, Mass.

First. The spring fastener, C. applied to the base and back of a last block, and operating in combination with the mortice, substantially as set forth and for the purpose described. Second, The sring, G, and eye or staple, F, or their equivalents in combination with the spring, C, substantially as and for the pur

49,276.—Ditching Machine. -Samuel F. Jones, St. Paul

im the drag bars, d d', with adjustable colters, W W', an o o', when arranged as shown and described, for the purpos

braces, o o', when arranged as shown and described, for the purpose set forth. Second, I claim the self-adjusting scoop, I, apron, F' and weighter lever, m, when arranged substantially as shown and described, for

lever, in, when arranged substantially as snown and describes, for the purpose set forth. Third, I claim the method of hausing the upper ends of the sides of the trough, M, on the projected crits of the boxes, a" a", whereby a uniform length of the currying band is obtained independent of the position of the lower end of the rough. Fourth, In combination with the collars, W W', scoop, I, apron, F, projected boyes, a", a". I claim the spoots, n m, chains, i? and r r', carrying band, D, scraper, Z, and conveying spout, E, whe is arranged as shown and described for the purpose set forth.

49,277.—Boring Tool.—Miles Joy, West Greenfield. Pa. 20,211.—DOFING 1001.—Miles Joy, West Greenfield, Pa. I chim, A, jar for a well-boring apparatus, composed of a pipe, A having a slot, d, in ft, extending nearly its whole lenth, a bing P, we cured in its lower chid, and a thimble, C, on i's upper end, containing a plug. D, having a square hole made it it for a rod, E, to wort through which rod, E, is provided with a lead, F, at its lower end said pipe. A, inclosing the rod, E, with its head, F, and protecting it from injury, substantially as herein described.

49,278.—Cooking Stove.—Wm. B. Kimball, Peterboro N. H.:

First, I claim, in cooking and bending stoves the bottom plate, H. onstructed and operation substantially its described, so that it may

become at pleasure part of the bottom of an oven, or the fire back of a sup; lementary fire-place.

Second, a last claim sliding the partitions, N.N., of the lower flue space, as the contrast or extend the flues, Q.P.Q. substantially as and for the contrast of the bottom; lake, and for the partition of the contrast of the bottom; lake, and the projections, e.d. of the theoretical, substantially as shown.

Fourth, I also claim the partitions, substantially as shown.

Fourth, I also claim the partitions, substantially as shown.

Fourth, I also claim the partitions, substantially as from the purpose of making a flue when that space is formed into a fire-place, substantially as described.

(The object of this invention is to produce a cooking stove which is capable of being changed into an open fire-place, or Franklin stove, r into a stove with a closed fire-place. This end is effected by con verting the front part of the oven into an open fire-place, a portion of the oven-bottom becoming the back of the fire-place, and the flue division plates being the dogs of the fire place.

49,279.—Sewing Machine.—Wm. A. L. Kirk, Hamilton,

9,213.—Seewing and the condition of the crank, B, pitman, I claim the arrangement herein described of the crank, B, pitman, at cross-head, D, with a sawor saw-bar connected to the pitman at point intermediate between the said crank and cross-head, for the urpose specified.

49,280.—Machine for Cleaning and Finishing Silk and other Thread.—Tobias Kolm, Hartford, Conn.:

I claim the combination of the reciprocating series of rollers, d, reciprocating guiding bar, p, and the rotary shaft, N, upon which the spools are mounted when the said parts are constructed and arranged tooperate in the manner and for the objects specified.

49,281.—Rock Drill.—O. B. Latham, Seneca Falls, N. Y.: Yelaim constructing the reamer with cutting angles, both above ard below, making them reversible and adjustable in the body of the drill, substantially as specified.

ard below, making them reversible and adjustable in the body of the drill, substantially as specified.

49.282.—Lock.—Lewis Lillie, Troy, N. Y.:
First, I claim the employment of the grippers, i i, operated by means of the springs, ih, in combination with the combination wheel, F, and with the set wheel, L, the whole being constructed and arranged in the manner and for the purposes substantially as herein described and set forth.

Second, I claim the anti-micrometer or vertical latch. H, actuated by means of the spring, y, and by the triangular post or pin, t, in combination with the lifting slide, C, each being constructed and arranged in the manner substantially as and for the purposes herein-described and set forth.

Third, I claim the employment of the triangular post or pin, t, in combination, with the sexangular slot, Y, in the anti-micrometralatch, H, in the manner and for the purposes substantially as herein described and set forth,
Fourth, I claim the employment of the lock-bolt stors, R and N, in combination with the lifter slide, C, and with the lock bolt, B and K, in combination with the lifter slide, C, and with the lock bolt, B, and with the lifting piece, E, securely fastened to the inner end of the central shaft, G, in combination with the lock bolt, B, and with the lifting piece, E, securely fastened to the cross piece, E, of the lifting slide, C, in themanner, and for the purposes substantially as herein described and set forth.

Sixth, I claim the combination of the confice barrel, D, with the central shaft, G, and with the combination of the confice barrel, D, with the central shaft, G, and with the combination of the confice barrel, D, with the central shaft, G, and with the combination of the confice barrel, D, with the central shaft, G, and with the combination of the confice barrel, D, with the central shaft, G, and with the combination of the confice barrel, D, with the central shaft, G, and with the combination of the confice barrel, D, with the central shaft, G, and with the combinatio

49.283.—Scaffold.—Horace Littlefield, Lewis, Iowa:
First, I claim the end supports, A B a b, in combination with the
particular of the combination of the second combination o

Second The long, C. in combination with the end supports, A B account of the long, C. in combination with the end supports, A B and the supports of the long, C. in combination with the platform D and end supports or brackets, A b, substantially as herein specified.

[The object of this invention is to provide a portable scaffold, which may be quickly put together, readily adjusted for use to the side of a building or structure, and capable of having its highter and long to the strength of raised or lowered, as occasion may require, and it consists in constructing the end supports of the platform in the form of a triangle. one side of which rests against the building or structure, and in porting the same on legs or props, which are forced into the ground.

49,284 .- Cut-off Valve Gear .- K. H. Loomis, Baltimore,

49,284.—Cut-off Valve Gear.—K. H. Loomis, Baltimore, Md.:

First, The plate, G. sliding in the lever, F, attached to the valve spindle, and jointed to and operated by the governor rod V, and sliding rod. II, or its equivalent, all substantially as and for the purpose specified.

Second, The rod, H, with its adjustable lags, k. k. connected to the blate, G, and operated by the vibrating lever, W, or its equivalent, substantially as and for the purpose set forth.

49.285.—Whiffletree.—T. R. Markillie, Winchester, Ill.: First, I claim the levers, C and F, combined with each other, and with braces, D and E, constructed and operated substantially as and for the purposes specified.

Second, In combination with devices for working three butters abreast, the braces, G. constructed and operated as and for the purposes specified, substantially as described.

49.286.—Gate.—John M. May, Janesville, Wis.:

poses specined, substantially as described.

49,286.—Gate.—John M. May, Janesville, Wis.:
I claim friction rollers, J. or its equivalent, in combination with grooved rod, N, used in constructing a gate, and wheels, E and F, used in operating a gate, and for analogous purposes, when the whole are arranged and operated substantially as described.

49,287.—Tool for Fastening Tubes in Boilers.—Robert McConnel, Jacksonville, Ill.:

merconnect, satisfacting, file.

I claim a tool for fastening boiler tubes, composed of Annudrol, with a series of inclined grooves, in combination with a double set of dies, de, and nut, h, to be used in connection with the expanding dies, e, substantially as and for the purpose set forth.

[This invention relates to a tool composed of a mandrel, provided with a series of inclined grooves, which form guides for a double set of dies—one set for expanding and the other for flanging—in combination with a follower nut, to be used particularly with the flanging dies, in such a manner that by the combined action of the man and the expanding dies the expansion bead at the inner edge of the tubesheet is formed, and, at the same time, the cuter end of the tube is spread over the outer edge of the tube sheet, thus keeping the tube firmly in its place, and by the rubesquent action of the flanging dies, the outside flange of the tube is pressed up firmly against the tube speet, and a tight joint is effected, with little loss. pressed up firmly time and without the use of a hammer, the mandril being fed up and turned by the action of the ordinary ratchet brace.]

49,288.-Washing Roller.-H. L. Moservey, Boston,

Mass.:

I claim a hand-washing roller, consisting of one or more revolving rames, B, carrying a series of rolls, C, in combination with a handle, operating substantially as described.

49,289.—Vehicle.—O. E. Miles, Aurora, Ill. Antedated

Aug. 7, 1865:

I claim the spring. D. in combination with the truss. A, short axles, b. and wheels, B, fixed on the latter, all arranged rejetive to each other, and to the other parts, E, etc., of the violetic, substantially in the manner and for the purpose herein set forth.

40,200. Lantern.—J. H. Multimore, Milwarkee, Wis.: First, I claim the disk or ring, D. provided with the lugs, e.in continuation with the projections, o, of the base, B, arranged and or exacting as and for the purpose set forth. Second, I claim the land, E, provided with the mclines, I, in combination with the rod, n, as and for the purpose set forth. Third, I claim securing the lamp by means of the bar or strip, f, and arms, g, when arranged to operate as described.

49,291.—Scrubbing Knuckle Shield.—C. A. Moore, Westbrook, Conn.: Leann the above-described article or shield as my invention as and for the purpose specified.

49,292.—Car Coupling.—M. C. Morse, Boston, Mass.:
First, I claim the growed and pivoted cheeks. J. J., in combination with the yielding clamps, J. J., substantially as set forth and for the purpose described.
Second, The arm, G, projecting in front of the bunter, A. in combination with the lever, E, and shackling pin, D, substantially as and for the purpose described.
Third, The link or dog, F, in combination with the arm, G, and lever, E, for the purpose of holding up the latter, substantially as described.

49,293.—Oscillating Steam Engine.—David Nation and T. B. Hall, St. Louis, Mo.:

We claim the combination and arrangement of the segmental boxes. B C, oscillating pistons, E E D. piston rod, G, steam chests, d d', valves, e', pitman. n, and eccentric wrist pins, e o, as and for the purposes herein specified.

[This invention relates to certain improvements in that class of engines known as oscillating piston engines. The cylinder is comand of two segmental boxes, which are bolted together by means posed of two segmental poxes, which are separated one from of flanges, and the inner spaces of which are separated one from or langes, and the limits spaces of which are experience one from the other by a central boss, which is firmly kered to the oscillating piston rod, and from which extend the pistons, in combination with suitable steam supply and exhaust ports, in such a manner that by the action of the steam on said pistons an oscillating motion is im-parted to the shaft, which, by suitable connections, are converted into a continuous rotary motion of the fly-wheel shaft,]

49,394.—Machine for Bending Metal Rods.—G. J. Neveil,
Philadelphia, Pa.:
Feiam the lever. D. with its slot c, the anvil, C, and pin, b, combined with the levers. E F I and the cam. H, or their quivalents, so that a bar of metal may be bent to a shape corresponding with that of the end of the lever, substantially as specified.

of the end of the lever, substantially as specified.

49,295.—Packing for Tubes of Boilers or Condensers.

Jacob Newkirk, Factoryville, N. Y.:

I claim the combination of a conically-recessed holding, and conical-shaped acking ring fitting therein, both rings being he and tightened up against the head and the tube by se ew bolts I holding and packing tubes to the heads of steam boilers of conderers, substantially in the manner and for the purpose described.

49,296.—Door Bolt.—J. E. Parker, West Meriden, Conn. I claim the combination of the bolt, a, spring, f, and dog, g, sub stantially in the mauner and for the purposes set forth.

49,297.—Lock.—Jacob Post, Newark, N. J.:
Iclaim the combination with the notched latch bolt, c, of a lock
of the spring bar or plate, g, and arranged together with regard to
each other, and operating substantially as herein described and for
the purpose specified.

49,298.—Lock.—Jacob Post, Newark, N. J.:

1 claim the combination in locks of the turning cylinder, h, with its series of tumblers, n n n, outer casting or tube, d, and bridges, S, arranged together and operating substantially in the manner described.

[The above inventions relate to a novel mode of hanging the latch bolt, and also to a peculiar arrangement of tumblers in the turning cylinder of a lock the object being to produce a simple, cheap and

49,299 .- Machine for Slicing Cork .- John Power, Bos

ton, Mass.:

I claim the yielding adjustable plug, E, in combination with the gaze. D, constructed and operating substantially as and for the purpose described.

-Torpedo Boat.—G. M. Ramsey, New York City: Iclaim the inclination of the roof, A, of a torpedo boat, as the purposes specified.
d, The hole, e, constructed and situated substantially as ded,

First, I claim the internal and for the purpose specified.
Second, The hole, e, constructed and situated substantially as described.
Third, The ratch, n, in combination with the pawl, P, bar, m, and boom, O, substantially as and for the purpose described.
Fourth, The springs, s, in combination with the bar, m, substantially as described.
Fifth The bars, r, in combination with the bar, m, as and for the purpose specified.
Sixth, The tube, b, running longitudinally through the torpedo, substantially as and for the purpose specified.
Seventh, The division, c, separating the magazine of the torpedo from the lock, a, substantially as and for the purpose specified.
Eighth, The cock, d, in combination with the powder tube, c, substantially as and for the purpose specified.
Ninth, The rod, f, also in combination with the pc, and guttapercha, and tube, is substantially as and for the purpose specified.
Tenth, The pun, h, in combination with the lock, d, and rod tube, s, substantially as and for the purpose specified.
Eleventh, The hand hole through which the each, d, and rod tube, cock, d, substantially as and for the purpose specified.
Eleventh, The hand hole through which the each supplied to the cock, d, substantially as and for the purpose specified.

49.301.—Air Pump.—Franklin Ransom, Buffalo, N. Y.:

49,301.—Air Pump.—Franklin Ransom, Buffalo, N. Y.. First, I claim combining te elevated chamber, C, having the valve, d, as sbown, with the pump cylinder, B, by means of a hollow bed plate, A, through which a constantly open communication between the said chamber and cylinder is maintained, substantially as herein spec. fed.

herein specified.
Second The arrangement of the chamber C, condensing chamber D, and valves, d c, substantially as and for the purpose herein specified.

9,302.—Seeding Machine.—E. D. and O. B. Reynolds,
North Bridgewater, Mass.:
We claim a seed sower having a reciprocating seed box, operating
the manner and for the purpose substantially as set forth.

9,303.—Corn Sheller.—J. W. Ricker and T. S. Lewis, Chelsea, Mass.:
We claim theloosely-hung conductor, with its projection arranged botam intellection for insuring the proper presentation of e ear without clogging or obstructins the operation of the driving these

wheels.

Also, Combining with the teeth of the disk wheel for feeding out the cub the stationary guard teeth, operating in the manner and for the purpose set forth.

Also, The corrugated spring for keeping the cob up to the disk without bearing upon its whole length, substantially as described.

Also, I he weighted ever or arm, g, in combination with the spout or conductor, c, and its projection, d.

or consuctor, c, and its profession, u.

49,304.—Cartridge Box.—Wm. Rossiter Newark, N. J. I claim the broad flat loop,d, consisting of a single pi ce or leather or other material, attached by its corners to the back of the cartridge box, a, and employed 10 coaline both the belt. f, and shoulder straps, g g, which are passed between the said flat loop and the back of the box, all as herein specified.

[This invention relates to a novel mode of securing the shoulder and belt straps to cartridge boxes, whereby the many disadvantage and defects of the old method are obviated.]

49,305.—Shirt Stud.—Robert B. Ruggles, Hartford

Conn.: Stuu.—Robert B. Ruggles, Hartford,
Conn.:
I claim the button, a, having an unequally-perforated and slitted
stud b, in combination with the button, a', having an unequal-sized
shank, c, working together substantially as and for the purpose desoribed.

49,306.—Method of Making Wrist Pins.—E. P. Russell.

Manlius, N. S.:

1 claim an anti-friction crank or wrist pin, substantially as depribed when constructed with a chilled metal surface or journa arrounding a core of softer m-tal which projects from one end or aid journal, he two metals being united mechanically in the cast ag of the former around the latter, substantially as and for the purposes set forth.

49.307.—Pocketbook.—Louis Saarbach, Philadelphia

I a.:

I claim the plate, B, attached to a pocketbook of portemonnaie s as taily as described.

1819 308.—Sliding Doors of Railway Cars.—Albert G. Saf-ford, Boston, Mass.: I claim the improved rail, as made with the notches, a b c, for

reception of the wheels of the door, and to hold the door either open

or closed.

I also claim the application of each of the wheels to the door in such a manner that while the door may be raised in its frame, and with respect to the rail, the wheels may rest in contact with the top surface of the rail.

I claim the combination and arrangement of the relieving friction spring or springs, k, with the door, and to operate therewith and with the door case, substantially in the manner described.

49,309.—Buckle.—Cyrus W. Saladee, Putnam, Ohio: I claim, Frst, Fastening buckles to harness, etc.. by means of rivets, a. and plate, A, the plate, A, being the back bar of the buckle flattened out, and provided with a metallic loop, B. Second, The combination of the metallic loop, B., plate, A, and rivets, a, for the purpose of securing loops to harness, etc.

49,310.—Apparatus for Liquoring Sugar in Centrifugal Machines.—Frank Seiberlich, Charlestown, Mass.: I claim the combination of the jet tubes, A, the gate, C, and the conduit, B, applied together substantially as and for the purpose specified.

specified.

I also claim the combination of the lifter, D, the jet tube, A, the gate. C, and the conduit B, the whole being arranged and so as to operate together subs antially in the manner as described.

49,311.—Hedge Trimmer.—A. Selover, Brooklyn, Ohio: I ciaim the adjustable clamps, A. B. adjusting screws. H. in combination with the adjustable standards, C. D., substantially as and for the purpose set forth.

49,312. —Tightening Pulleys by Friction.—Franklin Skinner, New Haven, Conn.:

I claim the combination of the adjustable collar and its appendages, Fig. 3, with the conical slide, Fig. 5, and pulleys, C.C. when they are constructed substantially as herein described, and are fitted for use, either double or single, on a proper arbor or shaft, as herein set forth.

49,313.—Fence.—Samuel Stanbro, Northville, Mich.: I claim the stakes, H H, driven in the earth, bent over the sill. E, and secured at the r outer or upper ends to the lower part of the fence, substantially in the manner as and for the purpose herein set forth.

This invention relates to a new and improved manner of attaching or securing the fence to the earth, whereby the fence is securely held in position and at the same time rendered capable of being readily taken up or removed, and also readily secured in the position designed for it.]

49,314.—Bee Separator.—Jesse H. Starr, Middlebush, N. Y.:

I claim the ree separator consisting of a box divided into two compartments, which are made to communicate with each other by means of taper pipes, the lower compartment being provided with holes or apertures to admit of the exit of the bees, and all arrønged substantially as and for the purpose specified.

-Photographic Camera.-John Stock, New York

49,315.—Photographic Camera.—John Stock, New York City:
I claim the arrangement of the front of thecamera box, B, so that the same turns upon a horizontal axis passing through the center of the aperture, and also upon a vertical axis passing through the same center the bellows yielding to the motion without affecting their operation.

operation.

I also claim the tubular flange or ring, S, to which the lens tube is
affixed, in combination with the tubular ring, T, acting as a universal joint, in the manner and for the purpose substantially as set
forth. -Elastic Mousing for Hooks.-Edward E. Stone,

U. 5. N.: I claim a mousing of india-rubber or analagous non-corrosive ma-erial to be applied to hooks, substantially as described.

[This invention relates to a new and improved snap hook, and it has for its object the obviating of the difficulty attending the corro of the spring hitherto attached to this class of hooks, a co gency which precludes their use for marine purposes.]

49,317.—Machine for Cutting Tobacco.—Wiley J. Stratton, St. Louis, Mo., and H. G. Tidemann, New York City:

York City:

We claim the combination and arrangement of parts substantially as described and consisting of the rotating cutting wheel moving at right angles to the teed, the feeding arrangement consisting of the shat, cam. pawl, ratcher, feed screw and follower, the atter depressed by a single screw shatt, C passing through the bridge nut, a, under the rotation of the wheel, D.

49,318.—Blowing off Steam.—Peter Taltavull, Washing-

ton, D. C.:

First, I claim the steam pipe, C, leading from the boiler, the water-inducting pipe, A and the water-discharging pipe, B, combined and arranged so as to receive and discbarge a powerful current of water through the side, M, of the vessel, substantially in the manner and for the purpose herein set forth.

Second, I claim the combination of the concentrically arranged and adjustable pieces, E FG and H, operating in the manner substantially as described and for the purpose set forth.

Third, I claim the combination of the pupes, A B and C, with the adjustable pieces E F G and H, adapted to control the discharge of fluid, substantially as and for the purpose herein set forth.

49,319.—Bark Mill.—M. Spencer Thomas, Painted Posts

N. Y.

I claim the statiorary hopper, A. provided with a circular rim, b, having a rough surface below, and with arms c. having a rough surface below, and with arms c. having a rough surface disk, E, and breaker, D, all constructed and operating as and for the purpose set forth.

[This invention consists in a stationary hopper provided with a

im and arms made rough at their lower surface, and with teeth projecting upwards from the upper surface of said arms, in combi nation with a revolving rough surface disk below and a toothed re revolving breaker and toothed stationary arms the bark thrown into the hopper is crushed, and by the combined action of the rough surface disk and the corresponding rough surface rim and arms of the stationary hopper the crushed bark is reduced to the desired fineness in a simple and effective way, the whole being so constructed that it is simple in its construction, not liable to get out of repair, and operated with comparatively little power.]

49,320.—Stave Machine.—John S. Thompson, Glen Falls, N. Y.:

I claim the combination of the endless chains, G G, guides, H H, circular saws, T. cuter heads, U, cutters, V W, plates, X, and yielding plates, Y, all constructed, arranged and operating as and for the purposes described.

This invention relates to a new and improved machine for hampering and crozing staves and also for sawing them of a uni form length, the several operations above-named being performed simultaneously or at the same time, and the work performed in a perfect manner by a very simple mechanism.]

49,321.—Milk Stand.—Addison R. Titus, Warren, Pa.: I'claim the construction and arrangement of the frame, A B C, revolving shaft, D. brackets, G. flames, H. and cone, K, substantially as described, and for the purposes set forth.

49,322.—Desulphurizing and Disintegrating Ores.—
George Vining, Boston, Mass.:
I claim the revolving cylinder, A, in combination with balls, G G', etc., or their evnivalents, tubes, E and D, cock, M, and seals, H H' H'. etc., constructed in the manner and for the purpose above described.

49,323.—Clock Escapement.—M. Weaver and J. M. Sandifer, Somerset. Ky.:
We claim, First. The exterior figure, composed of the parts, A A dd, with the adjustable pallets, b b. secured by the set screws, c, as set forth forming a part of the pendulum.

Second, The combination of the said parts with the escapement theel, B, in the manner and for the purpose described. Third, The adjustable pallets, b, arranged and operating as de-

scribed.
Fourth, The movable plate, C, operated by the set screw, f, for the purpose of setting and keeping the pendulum exactly on beat, as set forth.

as set forth.

49,324.—Horse Shoe.—A. Weitman, West Union, Iowa:
I claim the securing of the shoe to the hoof by means of one or more detachable or removable fianges, D. provided with lips, d, and constructed and applied in such a manner as to draw the shoe towards the hoof and cause it to fit snugly thereto under the action of the screw, e, and inclined surface of the parts, c and b, in combination with one or more fixed or permanent fianges, B, provided with lips, a, substantially as described,
I further claim the Projections, 2 2, in connection with the detachabe and permanent flanges, substantially as and for the purpose specified.

(This invention selections)

(This invention relates to a new and improved manner of attaching the shoe to the hoof of the animal, whereby the shoe will be firmly secured to the hoof, readily applied to and detached therefrom, and some elasticity allowed the shoe in order to render the latter comfortable to the animal, by relieving the hoof from jars and

49,325.-Fire-place Heater.-H. H. Welch, Athens,

Ohio:
I claim the fire-place heater, A. constructed as herein shown and describe; that is to say, with the projections, D. E. recesses, E. and pipes, B. C., for the purpose explained.

The object of this invention is to save a large amount of the heat that is now lost when fuel is burnt in fire-places, and it consists in the cons ruction and application of a heater, to be placed in a fireplace, next to and partly ensconced within the fire back thereof, which heater is to be constantly supplied with fresh air, which air, after being heated, is discharged through suitable conveying pipes, and registered to any part of a house.]

49,326.—Explosive Shell for Ordnance.—Samuel Wells.

New York City. Antedated June 28, 1865: I claim the fuse hole, formed in the tapering portion of the shel, in combination with the projection, K, on the latter.

49,327.—Tool for Scaling Boiler Tubes.—John Werner,
Jr., Prairie du Lac, Wis. Antedated July 26, 1865:
I claim the comb nation of the cutting tool, c.c. screw, A. rut, B.,
guide plate, C. and plug, D. all arranged to operate substantially as
and for the purpose herein set forth
I further claim the slotting of the plate, C, and the connecting of
the nut, B, so that it may slide or be adjusted laterally, and having
the plate, C, provided with a plug, D, substantially as and for the
purpose specified.

(This invention relates to a new and useful implement or too! for cutting out and removing the incrustation in the tubes of tubular poilers; and it consists in the employment or use of an auger, arranged with a screw and nut, and also with a guide plate, whereby the desired work may be performed expeditiously and in a perfect nanner.]

49,328.—Evaporating and Distilling Apparatus.—W. P. Wheeler, Louisville, Ky.:

I claim the vacuum pipe, C, or equivalent, with its lower end up turned, or otherwise sealed from the entrance of the atmosphere, applied in combination win the condenser, B, and evaporator or still, A, substantially as and for the purpose set forth.

49,329.—Method of Removing Incrustation from Gas Retorts.—A. J. White, New York City: Iclaim the removing of the incrustation from the interior of gas retorts, by forcing a current of air through them by means of a pump, fan, or other equivalent device, substantially as shown and described

described 49,330.—Grain Shovel.—E. P. Williams, Buffalo, N. Y. Antedated Aug. 4, 1865:

I claim a grain shovel, having a skeleton runner frame A. and pendent flaps or shovel blades, F, with an elastic compressible top or covering, E, for the purposes and substantially as described.]

49,331.—Manufacture of Iron.—J. D. Williams, Allegheny City, Pa. Antedated July 9, 1865:
I claim the use of the ingredients herein named, when used in the manufacture of iron, said ingredients being used "abstantially in the manner herein described and for the purpose set forth.

the manner herein described and for the purpose set forth.

49,332.—Steam-warming Apparatus.—C. A. Wilson, Cincinnati, Ohio:
I claim the separate return pipe, E. provided with the closable discharge passage, Ff, and with the automatic valve-guarded return passage, Gg, which empties into the boiler, the whole being combined and operating substantially as set forth.

49,333.—Coal Stove.—Gurdon G. Wolfe, Troy, N. Y.:
I claim, First, The employment of the said self-feeding resorvoir or chamber, E. surrout-dee by the air heating champer, D, with cold air supply tube, C, arranged and combined with a base-burning coal stove, in the manner substantially as and for the purpose herein described and set fotth.

strove, in the manner substantially as and for the partition of the manner substantially as and for the partition of the manner substantially as herein described and set forth

Third, I also claim the manner substantially as herein described and set forth

Third, I also claim the combination of the damper, H, with the openings or dampers, • O, in the coal supply resorvoir or chamber, and said air-heating annular chamber D, in the manner substantially as and for the purpose herein described and set forth.

Destable Steam Engine.—William Wright, New

49,334.—Portable Steam Engine.—William Wright, New York City:
I claim the arrangement of portable steam engines, with reference to the manner herein described of attaching the engine proper to the beiler

49,335.—Sirup Stand for Soda Fountains.—C. M. Berry

and Charles C. Sheldrake (assignors to themselves and J. Bready), Philadelphia, Pa.: eclain constructing mineral water sirup stands of cast iron, and mehing the interior and exterior surfaces of the same, to protect in from the action of the acid contained in the sirups.

them from the action of the acid contained in the sirups.

49,336.—Boring Tool.—Wessel Brodhead (assignor to C. L. Edmonds), Rondout, N. Y.:

I claim the boring tool herein described, consisting of a fine feeding screw, B, and arm. C, sliding in the head of the said feeding screw, and having permanently attached to it the shank, d, of a cutter D, formed with a chisel point. e. a curved neck for the ejection of chips, and two fleam shaped blades, f, all the parts being constructed and arranged to operate as and for the purposes specified.

49,337.—Connecting Gages, Calipers and Rules.—Nelson H. Bundy (assignor to Nahum M. Dow), Boston,

Mass.:
I claim the mode of connecting the several instruments, viz, the alipers, wire gage and foot rule, as hereinabove set forth.

49,338.—Fastening Keys in Locks.—Joseph H. Desalusse (assignor to Alfred B. Justice), Philadelphia,

Pa.: laim the use of a revolving escutcheon, in combination with a 49,339.—Military Insignia Woven in Cloth.—A. M. Dor-

man (assignor to himself and Samuel Yewdall),
Philadelphia, Pa.:
I claim military insignia woven in the cloth, and excised thererom preparatory to attachment to the apparel, all substantially as
erein shown and described.

49,340.- Oyster Dredge.—Edward Fairbanks (assignor to himself and Levi Bowen), Baltimore, Md.:

I claim the combination and arrangement of a reel with a revolving standard and crane avm, when so arranged as to compose a

eral hydro-carbon oils, for the generation of steam and the production of heat generally, as hereinbefore described, or any mere modification thereof.

REISSUES.

winder for oyster dredges, substantially in the manner and for the purpose described.

purpose described.

49,341.—Spoke Machine.—Junius Foster (assignor to himself and John Slocum), Long Branch, N. J.:

I claim the arrangement of the culter, G. attached to the reciprocating block. C, the adjustable gage bar, H. and slotted plates, I I' JJ, all constructed as and for the purposes herein specified.

J. J., all constructed as and for the purposes herein specified.

49,342.—Device for Raising Sunken Vessels.—George W. Fuller, Chelsea, Mass., assignor to himself and Peter E. Falcon, Cohassett, Mass.:

I claim the mode substantially as above described of overcoming the adhesion of a submerged vessel to the mud or ground on which she may be deposited.

49,343.—Plumber's Hook Blank.—Benjamin F. Gladding, Providence, R. I., assignor to Elliott P. Gleason, New York City:

I claim a new article of manufacture of my invention, the plumber's hook blank, with a disposition of its maerial, substantially as described.

19,344.—Stove Grate.—James Glass (assignor to Cox, Church & Co.), Troy, N. Y.:
I claim the removable end pieces, D D, in combination with the grate, B, shaft, C, and bed place, A, operating as, and for the purposes set forth.

49,345.—Churn.—Horace L. Hervey (assignor to himself and John Hart), Philadelphia, Pa.:

I claim the combination and arrangement of the two cylinders, A and piston, D E, with the periorated plates, F, at the bottom of the cylinders, for the purpose of simultaneously forcing the cream up through one plate, F, by exhaustion, and down through the other plate, F, by pressure, substantially as described.

through one plate, F, by exhaustion, and down through the other plate, F, by pressure, substantially as described.

49,348.—Gas Engine.—Pierre Hugon (assignor to Emil Just), Paris, France.

I claim First, the method herein described or igniting in gas engines, the ga-gous detonating compound, in the manner and for the purpose hereinbefore set forth, that is to say, b. the employment, in combination with one or more side valves constructed for operation, substantially as shown and described, of one or more lighting an inflammatory origniting burners, whereby the use of electricity as the medium to unite the said compound may be dispensed with. Second, In gas engines, that is to say, in engines in which the motive power is a gaseous compound, to beginted within the cylinder, or in any vessel communicating therewith, I claim the employment and combination with the Said, a gaseous compound or water, or other vaporizing iquid, substantially in the manner and for the purposes hereinbefore set forth.

Third, I claim the arrangement substantially as herein described, of the sinder valves for the distribution of the ulconating mixture and of the ignition thereof at given intervals or time, in combination with ligning and igniting burners, as set forth.

Fourth, I claim the arrangement and combination of parts forthe mjection of wat r around and into the cylinder, substantially as herein described and for the purpose set forth.

Fifth, I claim the general arrangement and combination of gas eggine, substantially as hereinbefore described and shown in the amenced drawings.

49,347.—Paper Collar.—S. B. Hutchinson, Nashua, N. H., assignor to himself, G. W. kay and V. N. Taylor, Springfield, Mass.:
I claim a paper collar, part of the surface of which is enamelled, as herein described.

as herein described.

49,348.—Car Coupling.—Sylvanus D. Locke (assignor to G. G. Campbell), Janesville, Wis.:

I claim, First, A car coupler, when constructed and arranged substantially as and for the purpose set forth.

Second, The combination and arrangement of the deg, g, and swing tuble, g, substantially as and for the purpose set forth.

Third, The combination and arrangement of the case, m, and spring, k, substantially as and for the purpose set forth.

49,349.—Welt Machine.—B. U. Lyon (assignor to him-self, Grant Judd, E. P. Whitney and J. P. Reed), Stamford, Conn.: I claim the combination of the guides, G G', with the two pressure rollers, B P; all arranged to operate in the manner and for the pur-pose herein described.

pose herein described.

49,350.—Snap Hook.—Clark Marsh, Bridgeport, Conn., assignor to Hotchkiss Sons, New York city:

First, I claim in snap hooks the employment of the spring, E, in combination with a bearing, d, at some distance from the elip or root of the spring, adapted to brace the spring stiffly against the strain thereon in one direction, while allowing the elasticity of the entire spring to be made available is the proper yielding action, substantially as herein set forth.

I claim in snap hooks the passing t e spring, E, through the body, so that a pertion shall serve in the iront and another portion serve at the back, and contribute its elasticity to operate the portion in the iront, substantially as and for the purposes herein set forth.

49,351.—Lee Pitcher.—Frederick C. Meyer (assignor to

49,351.—Ice Pitcher.—Frederick C. Meyer (assignor to Ernestine Meyer), Philadelphia, Pa.:
I claim the valve, C, adapted to the spout and operated by the weight, D, through the lever, F, or its equivalent, all substantially as and for the purpose he ein set forth.

49,352.—Oil Cup.—Robert Poole (assignor to himself and German H. Hunt), Baltimore, Md.:

I claim an oil cup in which the lid oc cover is united to the bowl by a ninge, section and screw ring, substantially in the manner and for the purpose herein described.

153.—Felted Fabric.—Enoch Waite (assignor to Elliott Felting Mills), Franklin City, Mass.: Jaim the compound fabric made of felt cloth and hair com-d or arranged substantialy in the manner as described.

bined or arranged substantialy in the manner as described.

49,354.—Horse Hoe Cultivator.—Albion Webb (assignor to himself and D. M. Dunham), Bangor, Me.:

I claim, First, The manner in which the plates, E E, are secured to the cross bars, B B, of the machine, to wit, the oblong grooves, a, in said bars, R B, with notches, e, at their under surfaces, take covered rods, F, and eye bolfs, v, all arranged in the manner substantially as and for the purposes specified.

Second, The securing of the blades, H, to the plates, E, by means of a single bolt, a, in connection with the ribs, b, and grooves, c, substantially as shown and described.

(This invention relates to certain improvements in borse hose on

This invention relates to certain improvements in horse hoes or cultivators of that class which are provided with oblique hoes or shares. The object of the invention is to render the hoes or shares of the machine capable of being adjusted with greater facility than hitherto, and also to render it stiffer and firmer, and to perform or work in a better manner.]

49,355.—Cabinet Organ.—George Woods, Cambridge. Mass., assignor to Mason & Hamlin. Boston, Mass.: I claim the application to or within the aperture of the safety valve of cabinet organs or other wind instruments, or other apr turesfor the passage of air, of a perforated or porous diaphragm, whether of fibrous or other material, substantially as and for the purpose above described.

49,356.—Crimping Wire Cloth.—William Zerns (assignor to himself, J. R. Deighm and Jasper Snell, Potts-

ville, Pa.:

I claim the crimping of wire cloth, by placing the same, after being woven, between toothed plates, and subjecting it to pressure, substantially as set forth.

[Wire cloth of the coarse kind requires to have the wires crimped or bent, in order to bring the same as near as possible to a plane surface, and retain the wires in position. Hitherto the wires have been crimped before the weaving process, but, by this improvement they are crimped after they are woven, by means of toothel plates.

49,357.—Apparatus for Burning Hydro-carbons.—Wm. Lim and Arthur Barff, Glasgow, North Britain: We claim the general arrangement and construction of apparatus for the utilization of the gases produced by the vaporisation of min-

REISSUES,

2,047.—Harvester.—Rufus Dytton, New York City. Patented March 19, 1861. Reissued Sept. 13, 1864:

I claim, First, In machines having a hinged or flexible finger bar, raising such finger bar by means of a lever supported or pivoted at one end on the shoe or heel of the finger bar, and turning freely toward the finger bar, but rigid with it when turned in an opposite direction, by causing such lever, when the heel of the finner bar is raised, to be rought in contact with the pole or the frame of the machine, or a projection therefrom, so as to press or force down such lever, and thereby raise the outer end of the finger bar, substantially as set forth.

arrection, by causing such lever, when the heel of the finger bar is raised, to be brought in contact with the pole or the frame of the machine, or a projection therefrom, so as to press or force down such lever, and thereby raise the outer end of the finger bar, substantially as set forth.

Second, in two-wheeled machines having a hinged finger bar and having the driver's seat controlled by the pole, instead of by the frame of the machine, and not using or employing a castor wheel to support the drooping end of the frame and the inner end of the finger bar, raising the inner end of the finger bar, raising the inner end of the finger bar, raising the inner end of the finger bar by means of a lever and cord or chain, or its equivalent, acting upon the pole or some part connected therewith as a fulcrum, when the outer end of such finger bar is raised by means of a lever supported or pivoted at one end on the shoe or heel of the finger bar, and turning freely toward the finger bar, but rigid with it when turned in an opposite direction, and operated as first set forth in the first claim.

Third. In two wheeled machines having a hinged finger bar and a loose pole, and having the driver's seat controlled by the pole instead of by the frame of the machine, so arranging, with reterence to the frame of the machine, the finger bar and the mechanism for raising it and the shoe that when the finger bar and shoe are rai ed by such mechanism their weight will be so thrown upon the two driving wheels that the use of a center wheel to support the drooping end of the frame of the machine, had having the fiver not cont.olled by the pole of the machine, hanging the cutting apparatus, but either end thereof, independently of the other end, can freely rise above or fall below the plane or surface on which the driver not cont.olled by the pole of the machine, hanging the cutting apparatus, but either end thereof, independently of the other end, can freely rise above or fall below the pole of the finger bar, by which the driver, whe

2,048.—Apparatus for Rendering Lard, Tallow, Etc.—C. E. Gray, New York City. Patented January 31, 1965.

I 1865:

I claim. First, Making a close water jacket, in combination with the tank and a part of it, and arranging said water jacket so made a part of said tank, in direct communication with the furnace so that the water jacket shall intervene between the fire and the tank, and act as a means of conducting and distributing the heat from the fire to and around the substance contained in the tank.

Second, Using the steam generated in a close tank from the constitutional water in the latfor the purpose of aiding and controlling the escape of the noxious gases and vapors, either to a superheater, for consumption in the furnace, or to a deodorizer, for the purpose of condensing them, in the manner substantially as described for the purpose specified

2,049.—Apparatus for Rendering Oils and Fats.—C. E. Gray, New York City. Patented Aug. 18, 1863:

I claim, First, In connection with the digester, the use of a second stam-tight vessel, for receiving melted fat or other fluid material that may have been cooked under steam pressure, and for cooling down and purifying the same until it is in a proper condition for exposure to the atmosphere, substantially as described.

Second, The placing of a glass tube in the draw-off pipe from the digester or similar apparatus for the treatment of material under steam pressure, for the purpose specified, substantially as before described.

ribed.

Third, In combination with the digester or receiver, the use of the Sated delivery pipe, V. supported near the surface of the fluid laty the floats, as by W.W. for the purpose of drawing off the superatant contents of the receiver or tank automatically.

Adam contents of the receiver of tank automatically.
2,050.— Roof for Railroad Car.—A. P. Winslow, Cleveland, Ohio. Patented Aug. 9, 1859:
I claim, First, The plates D. caps. F. and grooved rafters, B. when urranged substantially as herein set forth, forthe purpose described. Second, I claim forming an air chamber, G, between the sheeting or root, A, and plates, D. when arranged as herein described, for giving free circulation of air to cool the car, and, at the same time, allow the water, dust, etc., to pass off at the end of said plates.

## DESIGNS.

2,159.—Bust of Abraham Lincoln.—George J. Haller. Buffalo, N. Y.

2,160.—Trade Mark,—George Hosmer (assignor to him-self and J. R. Winch), Boston, Mass.

2,161.—Bust of Abraham Lincoln.—Thomas D. Jones. Cincinnati, Ohio.

2,162...Spoon Handle.-Randolph Wendt, New York City.

# MATENTS

FOR SEVENTEEN YEARS.

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the SCIENTIFIC AMERICAN, have tors and Attorneys for procuring "Letters Patent" for me in the United States and in all foreign countries during the past seventeen years, Statistics show that nearly ONE-HALF of all applications made for patents in the United States are solicited ough this office; while nearly THREE-FOURTHS of all the patents taken in fcreign countries are procured through the same source. It is almostneedless to addthat, after eighteen years' experience in pr is almost necessary and unawing a configuration and unawings for the United States Patent Office the proprietors of the SCIENTIFIC AMERICAN are perfectly conversant 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 ex-Com nissioners of Patents.

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[See Judge Holt's letter on another page.]

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Yery respectfully, your obedient servant,

WM. D Bishop.

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Every applicant for a patent must furnish a model of his invention 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 pre-pad. Small models from a distance can often be sent cheaper by mail. The safest way to remit money is by a draft on New York, payable to the order of Messrs. MUNN & 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 out littler is in sending bank bills by mall, having the letter regis tered by the postmaster. Address MUNN & CO., No. 37 Park Row,

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the fees are also made as tollows.

On filing each Caveat.

On filing each application for a Patent, except for a design. \$15
On issuing each original Patent.

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On application for Re-issue.

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On application for Re-issue.

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\$30
On filing a Disclaimer.

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On filing application for Design (three and a half years).

\$10
On filing application for Design (fourteen years).

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Secure of the patents are annually expiring which might rear

Many valuable patents are annually expiring which might readily e extended, and if extended, might prove the source of wealth to leir fortunate possessors. Messrs. MUNN & CO. are persuaded that very many patents are suffered to expire without any effort of extension, owing to want of proper information on the part of the paten-ees, 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 grants now existing are exember powers. Fatentees, or, it deceased their heirs, may apply for the extension of patents, but should given interty days' notice of their intention.

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