80,470.—Brick Machine.—R. M. Gano, and R. S. Miller,

Pittsburg, Pa. We claim the combination of the follower, D d, lever, I, connected to the ck shait, n and the levers, u and L, cannected by the roa, w, with the ver. H, and lngs, v, constructed and arranged to operate substantially as

and for the purpose set forth.

80,471.—LUBRICATING COMPOUND.—E. F. Gerdom, and C. W. Schindler, Albany, N.Y.
We claim a lubricating compound, made of the ingredients above specified, and mixed together in about the proportion and substantially in the manner set forth.

FRUIT-JAR.—Thomas Gibson, Rochester, N. Y.

I claim the cover, C, with its groove, b, and the detachable clamps. B, in combination with the flange, a, and packing-ring, c, all acting conjointly, as here in shown, and for the purpose described.

80,473.—HANGING EAVES TROUGHS—II. M. Gilbert, and F.

Elberson, Ada, Ohlo, we claim the combination of the fixed bracket. B, with the adjustable lamp, C, and brace, D, when arranged and operating substantially as de-

80,474.—Valve.—Adam Good, Jr., and Simon Strouse, Titusville, Pa.

We claim the valve, D., provided with inclined or stoping recesses, i., in combination with sleeve, E., seat. C. and chambers, A. A., all arranged to

80,475.—Boring and Drilling-Machine.—John Goodin,

SO,475.—BORING AND DRILLING-MACHINE.—John Goodin, Centralta, Ill.
I claim the arrangement of the corrugated cylinder, H, inclined toothed whee; K, rack-bar, E, cog-wheel, O, and movable frame, F', with the standard, B, all constructed to operate as set forth.
SO,476.—DAMPER.—William Hailes (assignor to J. F. Rathbone & Company), Alhany, N.Y.
I claim an inclined gnard, so applied to theorifices of a sliding draft apparatus, when located at or near the bottom of a fire-chamber of a stoye, as to prevent the escape of ashes, etc., therefrom, substantially as described.
SO,477.—HAND NALL-DRIVER FOR ROOFS AND SUGGS—Ed-

ne escape of ashes, etc., therefrom, substantially as described.

-HAND NAIL-DRIVER FOR BOOTS AND SHOES.—Ed-

win Hale, Boston, Mass.

I claim the arrangement of the tube, A, the feed-tube, B, and plunger, C e, and H, substantially as and for the purpose described.

30,378.—Machine for Making Bolts and Spikes.—John S. Hall Puttahner Pa.

I claim the arrangement of the tube, A. the feed-tube, B, and plunger, C, and H, substantially as and for the purpose described.

80,378.—MACHINE FOR MAKING BOLTS AND SPIKES.—John S. Hall, Pittsburg, Pa.

Iclaim, 1st, The combination of the heading ram and its lever with the griping dies, gage, and with the cam, O, so that the ram shall have attained great momentum before it reaches the bar, boll, or blank in the dies, and thus form the head, substantially as described,

2d. The unobstructed space under of pelow the dies and feeding point, so that when the griping ram rece.es, after heading or upsetting of the end of a long bar or bon, said bar or both may drop out of the dies, and thence be drawn out of the machine, substantially as described.

80, 479.—Hakyester.—James Harris, Jamesville, Wis.

I claim, 1st, The arrangement of the shaft, c, operated by the hand lever, M, and having thereon the crank, d, with the rod, e, crank, f, shaft, g, and caster wheel, L, substantially as and for the purpose described.

2d, The combination and arrangement of the shaft, g, with the part, i, and brake, r p, either with or without the clutch, h, whereby the vertical vibration caused by the tortion of the rod is prevented, substantially as described.

3d, The combination and arrangement of the rod, g, part, i, and arm, the last two forming the caster arm of the grain wheel, L, when the part, i, is attached directly to the rod, g, and is made the fulcrum upon which the caster arm turns, as well as the moving lever, by means of which the cutter bar is raised or lowered, substantially as described.

4th, The combination and arrangement of the lever, M, shaft, c, cranks, d and h', rods, b and e, crank, 'swaft e, clutch n, part, i, and brake, r p, substantially as described.

4th, The combination and arrangement of the lever, M, shaft, c, cranks, d and h', rods, b and e, crank, 'swaft e, clutch n, part, i, and brake, r p, substantially as described.

4th, The combination and arrangement of the lever, M, shaft, c, cranks, d and h'

stanuany as and for the purpose set forth.

80,480.—WATOM.—Andrew J. Harrison, Rock county, Wis., assixnor to himself, W. W. Dexter, William M. Underhill, and Alonzo K. Cutts, and said Uncerhill assignor to Samuel C. Burnhaus, Jr. Antedated January 28, 1868.

January 28, 1868.

I claim a bann or hoop, cut open or divided at one side, so that it may be sprung open and applica around or Partially around the works or mechaulsm of a warch, between me upper and lower plates, substantially as described, either with or without a covering of felt.

80,481.—Machine for Crozing and Howeling Barrels.

80,481.—MACHINE FOR CROZING AND HOWELING BARRELS. Edward Holmes and Britain Holmes, Buffalo, N. Y. We claim the combination of the cutter bead, H, supported to the swinging frame, I, with the rest, J, supported by theswinging frame, K, oscillaging to a coimmon axis with the cutter frame, when said frames, K and 1, are provided with a locking mechanism by which the cutter head may be held at a definite clista, oe from the rest, and thereby made to follow the curvature of the cask, substantially in the manner and for the purpose set forth.

80,482.—Miachine for Leveling the Staves in Barrels. Edward Holmes and Britain Holmes, Buffalo, N. Y.

We claim the combination and arrisogement of the head block, A, movable driver, B, and its operating series, D D 102, sour wheels, E is E, and orving piplon, F, or their equivalents, operating substantially as beroin described.

80,483.—Machine for Jointing Staves.—Edward Holmes and Britain Holmes, Buffalo, N. Y.

and Britain Holmes, Buffalo, N. Y.
We claim, ist The flexible hinged ribs k', in combination with the stationry ribs, k, constructed, arranged and operating forthepurpose and substanally as described.

ary ribs, k, constructed, arranged and operating set tailly as described.

2d. The eveners or feed arms, L, for the purpése substantially as set forth.

3d. The combination of the friction clutch, in, weighted lever, m, and pedal

0, arranged and operating in the manner substantially as described.

4th, The combination of the horizontal rack, T, pinion or segment, S', upon the rock shaft, S, and arm, R, arranged and operating for the purpose and substantially as described.

80,484.—Range.—Elihu Hosford, Chicago, Ill.

80,484.—RANGE.—Ellinu Hostord, Chicago, III.

I claim, 1st, The application of a current of cool air to the under side of the
grate, in the manner and for the purpose substantially as berein described.

2d. The oven, H. formed by enlarging the air space and providing suitable
doors, in combination with the cy inder, A, combustion chamber, C, columns
D, and hot air chamber, E, substantially as herein specified.

80,485.—Rubber Head for Pencil.—Samuel D. Hovey,

80,485.—RUBBER HEAD FOR Brooklyn, N. Y.

Brooklyn, N. Y.

I claim thepened and penhead or tip, composed of the pencil mark eraser, of and the pen mark eraser, e, combined, substantially as described.

80,486.—CAR COUPLING.—Henry R. Howe, Hartwick, N. Y. I claim the combination of the buffer, A. spring bars, O and K. bent bar. P. chain, R. tongue, N. block, E. pin, T., pring, G. link, J. pln, J. set screw, S. and lever, L., when constructed and arranged substantially as described, as and for the purpose specified.

Broadly Steam Engine.—Edwin W. Jackson,

- ROTARY STEAM ENGINE. - Edwin W. Jackson,

80,487.—ROTARY STEAM ENGINE.—Edwin W. Jackson, Brooklyn, N. Y. 1 claim fine combination of the steam chest, T. (Plate XVII), changeable steam ports (Plates XIII and XIV), main shaft plate, I, 1g. A, the shifting pistons perferated completely through (Plate I B), they having projections or shafts on their chest, to which the four rollers C C. (Plate Y.) are attached, one on each end. Tay end places, called governor's guides (Plate X I Manual X), which are placed one at each end of the pistons, thick be, described as the bar of separation (Plate X V), x, placed between the upper and lower steam ports, and back plate, O (Plate X III), to which the bar of reparation is attached, substantially as and for the purpose set fortb.
80.488.—Water Meter.—Gustav L. Jacger, New York City. I claim, 1st, The arrangement of mudcistern, b, and strainer, a, in the plug of the stop cock, D, snbs antially a sand for the purpose described.
2d, the rods, 1, and cranks, k, connecting diametrically opposite buckets of the wheel, B, which runs in the scroll, E, substantially as and for the purpose est fortb.

set fort...

80,489.—Wagon.—George W. Janvrin, Great Falls, N. H.

1 claim, 1st, A wagon, so constructed and arranged as that the body of the same may be raised and lowered at option, by means of screws attached to and forming part of the wagon, when the said screws are acted npon by attachment to the carrying wheels, substantially as described.

2d, In combination with wafons, the wheel bevels, with their corresponding bevel wheels, when constructed and arranged substantially as snown and described.

described.

3d. The device shown, of the shipper slides and their appended forks, in combination with the upper and lower bevel wheels, J and K, and the wneel bevels, in connection with the body of a wagon, when constructed substantialities are the substantialities.

tially as described.

4th, The shipper bar clutches shown, when arranged in combination with
the notched plates, the shipper slides, and the body of a wagon, substantially

the notened patter, the support shaded state that we wheels state the up-car arrangement of two or more cross bars, U Ux, and the pivoted bettoin, when constructed substantially as described.

80,490.—HAT.—Henry Kellogg, New Haven, Conn. Ante-

dated July 14, 1868.
I claim a hat formed from pulp, having incorporated within the material of the body or brim, during the formation thereof, a wire reed, or other stiffening frame or form, substantially as described.

-HEAD BLOCK FOR SAW MILL.—Dennis Lane, Mont-

peller, Vt.
1 claim, ist. The grooved block, P, and the yielding grooved block, P2. ar larged in line in the same head-block, and successively acted upon by each raiged in line in the same head-block, and successively acted upon by each of the ineline bars, N, ari anged parallel in the reciprocuting frame, G, where by the head block is made to advance or recede, as desired, all constructed and operating substantially as described.

2d, the sleeve, E, forming an eccentric bushing in the post W, for the pinion wheel, 12, by which the pinion wheel, 13, by which the pinion wheel, 13, by which the pinion wheel, 14, by which the pinion wheel, 15, by which the pinion which the pin

80,492.— PORTABLE AND ADJUSTABLE STILL-WATER DAM.—
S. Lewis (assignor to W. H. Cammeyer). Brooklyn, N. Y.
I clenta, 1st, The construction and arrangement of a Portable and adjustable dam, in sliding or telescopic sections, in the manner and for the purpose here-

in described. 2d. The combination of the self anchors, 3, with the dam, in the manner and for th

2d. The combination of the self-anchors, 3, with the dam, in the manner and for the purposes hereful described.

3d, The combination of the boats, supports, or floats, with the dam, as above described, and the arrangement of anchors to hold such boats in position, in the manner and for the purposes described.

4th, The combination and arrangement of windlasses, chains and boats with the dam, as above described, so that by the construction there is a series of drils may be operated within and inclosed by the dam, in the manner and for the purposes herein described.

80,493.—LAR COUPLING.—J. A. Manning, Ashtabula, Ohio, I claim the hooked tall, D, as constructed arranged, and operated in combination with buffer head, B, and link, C, for the purpose and in the manner as described.

as described.

80,494.—LAMP BURNER.—Jas. Minifie, Bultimore, Md.

I claim, let. The combination and arrangement of the two corrugated cones
CD, and tube, c, substantially as described.
2d. The corrugated cone, B, when provided with the above-described open-

ings along the summits of the ridges formed by the corrugations, substantially as and for the purpose herein set forth. 80,495. -- CARPET STRETCHER. -- William Minster, Washing

80,490.—CARPET STREAM.

ton, D. C.
I claim, 1st, The binged jaws, E. E. pressed apart by means of a spring, and bound regether by either a set screw or the headed bolt, F, and its nut. G. for the purpose of firm by holding the carper, substantially as bergin set forth.

2d, In a carpet stretcher, the jaws, E. E. constructed as described, and hinged to the box, B, which sides upon the ratchet bar, A, and operating as and for the purposes specified.

cinnat, Ohio.

I claim the back or screen for wash stands and analogous articles of furniture, provided with one or more shelves, c, substantially as herein described.

80,497.—PROPELLING APPARATURE Control of the co -Properling Apparatus.-Ernst Offhaus, New

ark, N. J.

I claim the annular cylinder, El, connected to the water ways, A and B', and receiving the pistons, d d', in combination with the levers, s and t, switch, r, and stops, acting in the manner and for the parposes specified.

80,498.—TAG FASTENING.—N. M. Phillips, New York city.

Antedated July 18, 1868
I claim the within-described hook, A B C, bend or loop, D, gnard, E, and shirting ring, H, counciled and arranged for joint operation relatively to the tag, O, and to the goods, M, substantially in the manner and for the purpose herein set forth. 80,499.—REFLECTOR.—Louis Portner, Chicago, Ill.

80,499.—REFLECTOR.—LOUIS POTINET, Chicago, III.
I claim the reflector A, construeted substantially as and in the manner
herein set torth and for the purpose specified.
80,500.—PARALLEL RULER.—D. J. Pratt, Albany, assignor to
himself and Oliver Airey, Brockport, and Oliver Airey assignor to M. P.
Cavart, Albany, N. Y.
I claim the construction of a parallel ruler by attaching to one of the limbs
of a T-square ruler a gage plate for regulating the distance between the lines
to be ruled, substantially in the manner set forth in the specification.
80,501.—WASHING MACHINE.—Phineas Prentiss, Chester,
Mass.

Mass.
I claim, in combination with the tub, with ribbed sides and dasher, with gearing, the adjustable socket, arranged so that the handle may be used with comparative depression or elevation, substantially as shown.

80,502.—CULTIVATOR.—Hiram Preston, Orfordville, Wis.
I claim, 1st, The adjustable V-shaped parts, C. in combination with the rocking shaft, B, when constructed and operated substantially as described and set forth.

2d, The lever, h, provided with the springs, i, and the arm, E, in conjunction with the parts, C, and ratchet, k, for the purpose of controlling the parts, C, substantially as described.

801,503.—UULTIVATOR TEETH.—William B. Ready, Sacramento, Cal.
I claim, 1st, The groove, c, in stock, a, as a seat for an adjustable point for a cultivator tooth.

a numer tooth.

21. The movable tongue, d, pierced with holes or slots, 1111, forming an adjustable point of a cuitivator tooth.

3d The combination of the grooved stock or support, a, with the adjustable tongue, d, for the purposes of a cuitivator tooth, substantially as above described. -DEEP-WELL TUBE.-A. Rhoades and J. Adams, Pon-80,504.-

80,504.—DEEP WELL IUDE.—IX. AND SERVING A female screw tiac, Mich.
We claim the arrangement of the removable rod, D, baving a female screw F, to connect to the screw upon the cleaner, E, at the low r portion of the slotted tube, B, all constructed to operate substantially as specified.

80,505.—RAILROAD-CAR HEATER, — John Rice, Blooming-

80,505.—RAILROAD-CAR IIE. ATERA, — COLL.

ton, Ind.
I claim the heating apparatus, AB, constructed and arranged as described,
that is, having the chamber, B, air tubes, D, in smoke tubes, F, chambers,
CCEE GG, and registers and discharge pipes, as shown, the whole being
attached to and combined with a railroad car, and eperating substantially in
the manner described, and for the purpose set torth.
80,506.—PROCESS FOR PURIFYING BUTTER.—L. S. Robbins,
New York city.

New York city.
I claim the within-described process for treating or purifying butter, substantially as herein described.
80,507.—CHURN.—A. A. Ross, Horicon, N. Y.

50,507.—CHURN.—1. At 10088, HOROM, N. 1.

I claim the churn dasher, E. when constructed as described, of wire and a tin ser-w, F. and provided with a ser-w in its upper end, in Coublination with the dash wheel, C. constructed and operating substantially as and for the purpose herein set forth.

purpose herein set forth.

80,508.—KEROSENE-LAMP BOILER.—W. F. Rossman, Hudson, N. Y.
I claim, 1st, The combination and arrangement of reservoir or kettle, A, tube, a, boiler, C, and aperture, d, when embloyed in connection with a kerosene or fluid lamp, so not antially as and for the purposes described.

2d, The combination and arrangement of burner, B, and chimney, e, with boiler, C, when the latter is connected with the reservoir or kettle, A, substantially in the manner and for the purposes set forth.

80,509.—STEAM UUT-OFF VALVE.—Robert Sanderson, Cleveland, Ohio.

80,309.—STEAM OUT-OFF YALVE.—ROUGH'S GARGESSIA, ORCYC-land, Ohio.
I claim, 1st. The arrangement of the ports or openings, D, and notches, a, in the manner as and for the purpose set forth.
2d, The pivoted lever, Land roller, H', as arranged in combination with the roller, H, and valve. D', in the manner set forth.
3d, The cum, G', as arranged in relation by the lever, I, as specified.
80,510.—Bit For Bridle.—Peter Schoonmaker, New Brit-

I claim, as a new article of manufacture, a japanned bridle or harness bit, aving its rings lined with metal, substantially as described for the purpose

80,511.—MACHINE FOR PRESSING AND GROOVING SEAMS IN TIN WARE.—John Schumacher and Henry Uplohn, Ann Arbor, Mich.
We claim the gare, H, used in combination with the arm, C, as and for the 80,512. -Tile Machine.—John Shellaberger, Shane's Cross-

80,512.—TILE MACHINE.—John Shellaberger, Shane's Crossing, Ohio.

I claim the relative arrangement of the shaft, B, sweeps, D D, pitman, F, lever, G, and plunger. H I, substantially as and for the purposes set forth.

80,513.—HORSE HAY FORK.—H. L. Sheperd, Osborn, O. I claim, ist, The combination of the side bar, A connecting bar, F, point, C, and lever, E, when constructed and operating as and for the purposes here in set forth.

2d, The combination of the lever, E, with hook, b. and lever, G. with lng, c, when constructed and operating as and for the purposes here in set forth.

80,514.—HEAD BLOCK FOR SAW MILLS.—S. R. Smith (assignor to P. P. Lane and J. T. Bodley), Cincinnati, Ohio.

I claim, 1st, The ratchet wheel, G, containing both external and annular teeth, the pawls, M M. and reciprocating bar, I, all constructed and operating substantially as and for the purpose described.

2d, The combination of the wheel, Q, worm wheel, m, and toothed segment P, to operate the dog, R, as herein described, for the purpose specified.

3d, The plates, O, when constructed and operating in themanner substantially as described.

80,515.—BORING TOOL.—A. Steinbok, New York city.

80,515.—Boring Tool.—A. Steinbok, New York city. I claim the adjustable frame, B, in combination with the anger,  $\hat{n}$ , gimlets  $\mathbf{E}$   $\mathbf{E}$ , and  $\mathbf{case}$ , provided with cutting edges, constructed and operating and stantially as described.

-Feed-water Heater.-Stephen Stucky, New Al-50,910.—FEED WALES.

bany, Ind.

I claim the drum, A, with pipe, G, perforated as described, partitions, D F

I claim the drum, A, with pipe, G, perforated as described, partitions, D F

II, forming chambers, C H E K, with the exterior pipes, as described, and
with the boil-rs, L L, all constructed and arranged substantially as and for
the purpose set forth,

II S The year Roston.

the purpose set forth, 80.517.—Submarine Exploring.—H. S. Thayer, Boston,

mass.
I claim the boat, A, provided with an opening, B, through its hull, and ver which opening is placed a darkened house, C, as and for the purpose 80,518.—Ventilating Boots and Shoes.—Edwin Thomas,

SU, 310.—VENTILATING BOUTS AND SHOES.—LGWIN I HOMAS, Philadelphis, Pa. I claim. 1st, Ventilating boots and shoes by grooving the inner soles with grooves that are narrow at the top and wide below, so as to allow the air to pass along the grooves, as herein described and for the purposes set for the purposes of a dove tail shape, and a porous cover, for the purposes as specified. 80.519.—Lamp.—Wm. Totheroh, Reading, Pa.

I claim, 1st. The norights, C. C., deflectors, D. D., ring, A, rings or bands, F. and G. and the arms, H, when combined and arranged as shown and described. 2d, The uprights, C C', deflectors, D D', ring, A , base, B, filling tube, E, wick tube, b, and the outwardly curving wing or guide, c, when combined and ar-

80,520.—Shiwing Machine for Buttonholes.—Kasimir Vo-

DO, OLO.—DRIVING MACHINE FOR DUTTONHOLES.—KASIMIT VO-gel (assignor to E. W. Lothrop) Chelses, Mass.
I claim, 1st, The Irregular-toothed cam or former, E, whether having an in-termittent, rotary, rocking, or reciprocating movement, substantially as and for the nurposes described.
2d, The several parts of the described mechanism, when constructed, com-plied and operating substantially in the manner and for the purposes de-scribed.

80,521.—Gang Plow.—Andrew Walker, Claremont, N. H. 1 claim, lst, A stationary frame, with adjustable plow beams underneath, livoted to the main frame at the rear end, and suspeoded by the rate oct, E. 2d, in combination, the gear wheel, C. gear circle, D., lever, F. and spring atch, b, in combination with the ratchet, E. for the purpose of adjusting the lepth of the furrow and locking or suspen diag the plows at any given point, the whole arranged, constructed, and combined, and used in combination with and for the purpose set forth.

80,522.—SEED SOWERAND HARROW.—Andrew Walker, Clare

OU. JOZZ. — SEED COWERAND HARROW.—Andrew Walker, Clarcmont, N. H.

I claim, l.t. The latchet lever, C. in combination with the harrow, G', the gear gage wheel, I, the lever, K., and circularratchet, o, with the spring step, a in lever, K.

2d. The valves, b b' attached to the seed box, B, and gage rod, c, in combination with the fluted roller, d, the whole combined, arranged, and used as and for the purpose set forth.

20. 502. 80,523.—Grain Rake.—R. Warnock and Chas. Abbey, 2d,

Ridgeyill, Ohio.

Ridgeyill, O

80,524.—STRAW CUTTER.—J. T. Watson and H. E. Robinson,

oscillating arm,  ${f D}$ , and spring,  ${f E}$ , substantially as arranged and described for the number set forth 80,525.—Stove for Railroad Car.—F. H. Whitman, Har-

rison, Mc. The plate, e, suspended on plates, b b', so as automatically to close the finnel aperture, substantially as herein set forth.

20, The self-closing grate or draft, substantially as and for the purposes berein set forth.

24. The self-closing grate or draft, substantially as and for the purposes heren set forth.

80,526 — APPARATUS FOR CLEANING SEWERS.—C. Williams, New York city.

I claim, 1st, The toggle arms, 1, braces, 1, and head, D.carrying the sheave g, combined and operating to hold the pulley, substantially as and for the purpose described.

24. The graide piece, m, on the dog, D, to facilitate the introduction of the repe to the sheave, g, substantially as set forth.

36. The folding scraper, c, fig.5, constructed and arranged for clearing pipe sewers, substantially as shown and described.

401, The authoratically folding leaves, e.c. arranged in the bucket, C, constructed as shown and for the purpose set forth.

3th, The adjustable bail, e, in combination with the fixed bail, f, of the bucket, C, substantially as and for the purpose specified.

6th, The bucket, C, made with perforted sides, as and for the purposes set forth.

7th, The detachable guide frames, E, arranged upon the man holes of a sew-er, in combination with the draft rope, Bx, substantially as and for the pur-

80,527.—CIGAR HOLDER.—Martin V. B. Young, New York city.

City.

City.

Claim, 1st, The wedge-shaped piercing tube, G, applied to a cigar holder, substantially as and for the purpose set forth.

2d, The combination, with the piercing tube, G, and tube, A, of the pointed stud or pin, F, substantially as set forth.

80,528.—SETTEE.—T. J. Close, Philadelphia, Pa.

I claim, ist, A frame of a settee with dovetail mortises and round or oval bosses, substantially in the manner and fir the purpose specified.

2), The combination of the slats, B, having holes or countersnike, with the bosses, c, s described, on the frame, A, and wedge-shaped keys, substantially in the manner and for the purposes set forth.

#### REISSUES.

66,773.—Paint.—Dated July 16, 1867; reissue 3,051,—D. R.

66,773.—PAINT.—Dated July 16, 1867; reissue 3,051.—D. R. Averill, Newburg, Ohio.

1 claim a paint, composed of the ingredients herein named, and prepared and compounded substantially in the manner specified.

Also, a liquid paint, when prepared and mixed for use, in any color, in its manufacture, and put up in packages for sale, and which may no preserved in such condition, substantially as and for the purpose described.

63,486.—SAW.—Dated April 2, 1867; reissue 3,052.—Henry Disston (assignee of Charles Disston), Philadelphia, Pa.

1 claim, 1st, A detachable saw tooth in which is combined a circular base adapted to a circular recess in the blade with a projection at the rear adapted to a shoulder on the blade, all as set forth or the purpose specified.

2d The lips, i, on the edge of the projection, d, of a saw tooth, or on the edge of a recess in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in the projection, d, of a saw tooth, or on the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in combination with a groove and recesses, m, in the projection or in the blade, in the projection of the pr

30,073.—STUMP EXTRACTOR.—Dated Oct. 14, 1802; reissue 3,454.—S. M. Longlev and E. J. Genet, New York, and S. B. Smith and A. C. Getty, Hudson, N. Y., assignees, by mesne assignments, of S. W. Ruggles, Fitchburg, Mass.

We claim, in the afore-described differential windiass, the combined use of power-multiplying tool thed wheels, wrapping-connected differential drums or pulleys, and a sheaver block or blocks, substantially in the manner and for the respective purposes terein se, forth.

15,882.—Harvester P. Jacob Oct. 14, 1856; reissue 3,055.—

15,822.—HARVESTER — L'ated Oct. 14, 1856; reissue 3,055.—
J. G. Perry, Kinsston, R. I., assignee by mesne assignments of C. W. Glover, Roxbury, Conn.
I claim, 1st, 80 constructing and operating the vibrating sickle-driving mechanism of a harvesting machine that such mechanism shall work through the driving wheel of the machine.
2d. The combination of the cogs, e, on the driving wheel, the pinion f, upright shaft, C, and wheel, g, with the pinion, it, of the shaft, D, arranged substantially as and for the burpose specified.
3d. The combination, with the driving wheel, of the guide box, B, bar. F, od, H, and lever, I, in such manner that the angle of presentation of the criters carried by the finger bar, E, may be adjusted, substantially as set forth.
37,535.—WATER ELEVATOR.—Dated Jan. 27, 1863; reissue 3,656.—Division A.—W. B. Wadswortt, Cleveland, Ohio.

3.056.—Division A.—W. B. Wadsworth, Cleveland, Ohio.
I claim, 1st, The toothed wheel, open and adapted to the chain, substantial-

I caim, ist, The tootned wheel, open and adapted to the chain, substantially as shown and described.

2.1. The said wheel, in combination with the chain c b b ffd d, substantially as shown and described.

3.4. The titter, g y, in combination with the flat chain, c b b ffd d, substantially as shown and described.

4th, The arrangement of the curved tilter, g y, and stops, h h, substantially as shown by and captibed.

as shown and described.

37,535.—WATER ELEVATOR.—Dated Jan. 27, 1863; reissue 3057.—Division B.—W. B. Wadsworth, Cleveland, Ohio. Ichim the chain, composed of links, as shown at c b b ffdd, the bent cross barc, running through to the outside of the hooks of the last link to b b, and then angling as shown at ff, to hooks d d, inside of bends, b b, substantially as shown and described.

14,622.—CULINARY BOILER.—Dated April 8, 1856; reissue 3,858. Edward Whiteley, Boston, Mass. I claim the trup, G, and cap, I, or its equivalent, as arranged and applied to the vessel, B, whereby the latter may be employed either as a holleror steamer

as set forth.

Also, in combination with the vessel, B, the interior vessel, H, perforate to admit the steam, when placed within the outer receptacle, B, and entirely surrounded or inclosed tuereby, substantially as and for the purpose set

70,768.—Horse Power.—Dated Nov. 12, 1867; reissuc 3,059. W.H. Wiley, Fredonia, N.Y. rigidly connected to the draftlevers, F, by I claim. 1st, The gear Lible, D, rigidly connected to the draftlevers, F, by the interposed epindles, E. or their equivalent, so as to form a gear frame for carrying the pinions and sour wheels, G.H., about the internal stationary course, and also a support for the draft levers upon the stationary central spindle, C', substantially as described.

2d. The pinion spindles, E, when secured to the fable, D, at varying distances from the center thereof, so that different sizes of pinions to gear with eog rinc C, and spur wheels to gear with pinion, I, may be used, as and for the purpose set forth.

#### DESIGNS.

3,130.—Vise.—Quimby S. Backus, Winchendon, Mass. 3,131.—Ivory Tablet.—Wm. C. Comstock, Essex, Conn.

3,132.—Knitted Fabric.—Thomas Dolan, Philadelphia, Pa.

3,133.—SHIRT COLLAR.—R. S. Jennings, New York city.

3,134.—SHIRT CUFF.—R. S. Jennings, New York city.

3,135.-Toy.-R. S. Jennings, New York city.

3,136.—TWINE HOLDER.—E. M. Judd and R. L. Smith, Walcottville, Conn., assignors to Twiner, Seymour & Judds.

3,137.—Stove.—W. N. Moore, Neenah, Wis.

3,138.—CLOCK CASE.—Nicholas Muller, New York city. 3,139.—Trade Mark.—J. M. Mumford, South Reading, Mass., assignor to himself and Auguste F. Mason

3,140.—Drawer Pull.—John E. Parker, Meriden, Conn. 3,141.—Bottle.—M. B. Powell and C. W. Stutenroth, Na-

3,142.—Embossed Paper, etc.—E. F. Price and E. A. Mur-

#### EXTENSION NOTICES.

a patent granted to him, the 24th day of October, 1854, for an improvement in looms, for seven years from the expiration of said patent, which takes place on the 24th day of October, 1868, it is ordered that the said netition be heard at the Patent Office on Monday, the 12th day of October next.

Stephen E. Booth, of Orange, Conn., administrator of the estate of Sheldon S. Hartshorn, deceased, having petitioned for the extension of a patent granted to the said Sheldon S. Hartshorn the 7th dayof November, 1854, and reissned the 26th day of May, 1868, for an improvement in buckles, for seven years from the expiration of said patent, which takes place on the 7th day of November, 1868, it is ordered that the said petition be heard at the Patent Office on Monday, the 26th day of October next.

John C. Schooley, of Cincinnati, Ohio having petitioned forthe extension of a patent granted to him the 14th, a v of March, 1855, for an improvement in process of curing meats, for seven years from the expirationof said patent, which takes place on the 14th day of March, 1869, it is ordered that the said petition be heard at the Patent Office on Monday the 28th day of Dcccmher next.

BarnetL. Solomon, of New York city, executor of the estate of Myer Phineas, deceased, having petitioned for the extension of a patent granted to the said Myer Phineas the 24th day of October, 1854, for an improvement in pen holders, for seven years from the expiration of said patent, which takes place on the 24th day of October, 1868, it is ordered that the said petition be heard Richmond, Ind.
We claim the combination of the box, B, the table, A, the knife, C, and the at the Patent Office on Monday, the 12th day of October next,

#### Advertisements.

The value of the Scientific American as an advertising medium cannot be over-estimated. Its circulation is ten times greater than that of any similar journal now published. It goes into all the States and Territories, and is read in all the principal libraries and reading rooms of the world. We invite the attention of those who wish to make their business known to the annexed rates. A business man wants something more than to see his advertisement in a printed newspaper. He wants circulation. If it is worth 25 cents per line to advertise in a paper of three thousand circulation, it is worth \$2.50 per line to advertise in one of thirty thousand.

RATES OF ADVERTISING.

Back Page.....\$1.00 a line 

Engravings may head advertisements at the same rats per line, by measurement, as the latter

FICALCOMANIE - \$1's worth or over,& instructious,mailed. W.Atkinson & Co.,1272 Bd'way.

A Day for all. Stencil tool, semples free. Address A. J. FULLAM, Springueld, Vt.

TVE 20 and Five 22-in. swing Engine Lathes of the Thomas pattern. Each machine is designed for an advertisement. THOMAS IRON WORKS, Worcester, Mass.

TYPERY BUSINESS MAN Should send 110c.forlatest novelty—Bradley's Monthly Vest Pocker demorar in to Milton Bradley & Co., Springfield, Mass. 72

ICKART'S Patent Hub Lathe is a success. Is in constant use by Am. Hub Co. Rights and Lathes for sale. Apply for credient, giving full particulars of its merits, to J. M. SCRIBNER, Middlehurgh, N. Y.

ANTED—To Exchange a Fine-Geared V Tothe, 6 It long and nearly new, for a small double acting Power Pre s. Address W.T. & J. MERSEREAU 62 Duage st., New York.

OR SALE-The Patent Right of a Removable Life Preserving Borth. Adonted for all vesses, that carry Berths. Address HALL & BUCKLE.

No. 101 and 103 Beekman st., New York.

Priest's Ready Solder.
The only Patent issued. All persons are cautioned against intringements. For sale everywhere. Agents wanted. Sole preprietors, W. W. BEAUCHAMP & CO. No. 19 Hancver st., Buston Mass.

Y (JUCAN SOLDER your own tin ware without a soldering from by buying one bottle of Wilson's Prepared Solder. Samples sent on receipt of 35 cents, with price list. Agoust wanted everywhere. Direct to Wilson & CO., 19 Lindall st., Boston. 1 1f-19.

TOR SALE—Rights to Manufacture, in territory not already occupied, the Eureka Mower. The great direct draft machine and best mower in the world. This machine stands without a rival wherever introduced For particinary apply to 1\* WILBER, STEVENS & CO., Poughkeepsie, N. Y.

PRICE LIST OF PRICE LIST OF
Files & Tools. Also, U.S.
Standard Steel Scales, Squares,
cic. Steel letters & Figures. Sent to any address.
GOODNOW & WIGHTMAN, 35 Cornhill, Boston, Mass.
7 cowti

PATENTS COMBINING ABSOLUTE Practicability, Usefulness, and Economy, introduced and sold on terms entirely satisfactory to all. Address

E. ITIF ANY & CO.,

References:—Hon. J. R. Amidon, Toledo, O.; Hon. E. P.

Tiffany, Southeridge, Mass.; Hon. T. Hall, 14 Wallst,

N. Y.; W. H. Kipp, Esq., Pres't Baltic Insurance Co., 166

Broadway, New York.

DIRECTIONS FOR MAKING THE very hest White Hard Soaparesent free with every

can of

GEORGE GANTZ & CO.'S

PURE WHITE ROCK POTASH.

One pould makes offeen pounds of Soap, and is easy and simply made at a cost of two cents a bound. If your stoickeeper is accommodating he will get it for you.

Onice No. 136 and 138 Cedar st., New York.

DATENTS OF PRACTICAL UTILITY and Real Merit negotiated on the most tavorable terms. Having first class agencies establishes throughout the country for the sale of Patent Rights, and every facility for transacting this business, we are prepared to put forward new micentions with dispution. We are also agents for the exclusive site of Calent Goods of real medit, consignations solicited. Sent models and address, with particulars.

WATKINS & FOOTE,

19 Contland st., New York,

Est. Unexceptionable references given if required.

BAILL & CO., Worcester, Mass., Manufacturers of the latest improved nateur Donnels', Woodworth's, and Gray & Wood's Planers, Sush Molding, Tenoning, Power and Foot Mortisling, Upright and Vertical Shaping and Boring Machines, Scroll Saus, Double Saw Bench, Re-Sawing, and a variety of other machines for working wood. Also, the best Patent Hub and Rahler Mortisnic Machines in the world. Send for cur Flustrated catalogue.

25 13\* tf

Manufactured by the

THOMAS MANUFACTURING CO.,

Thomaston. Conn.

Special attention to particular sizes and widths for Type Founders, Machinists, etc.

23 26\*

TORSTEAM ENGINES, BOILERS, SAW Mils, Cetton Gins, address the ALBERTSON AND DOULLASS MACHINE CO., New London, Com 1 ut

CTOURS, DIES, ABID SOREW PLATES, Heaton's and other Chueles JOHN ASHCROFTS, 50 John et., New York.

DORYABLY STEAM ENGINES, COMbiring the maximum of emiciency, durability, and
economy with the remainsom of weight and price. They
are thought and intervally known, ricer than 600 being
in use this warranted satisfactory of the sale. Descriptive cit claims sent on application. A litters
J. C. 110 ADLEY & CO. La vience, Mass.

1 tf 15 ti 280 and 285 Madicin street, Chicago, IL.

ENSSELAER Polytechnic Institute, Troy, N. Y.—Verythoroughinstruction in Civil, Mechanistic and Mining Engineering, Chemistry, and Natural Science. Graduates obtain most desirable positions. Reopens Sept. 9. For the Annual Register giving full infornation, address Prof. CHAMLES DROWNE, Director.





J. R. Hathaway's

METALLIC Burial Case, Patentel Feb. 18,
1868. It is finished up in an elegant and attractive
style, and is sir-tirht, and lighter than any other Metallic
Case; is cast in sections and dovetailed together, and has
a beautiful appearance, can be made cheaper than wood
cases of the same style. For rights or cases address

J. R. HATHAWAY, Westfield, N. Y.



#### Dye's Patent

Stump Extractor and Building Remover.

Pronounced by comp 'tent judges and Agricultural Fairs to be superior to any other machine ever known or exhibited for pulling stungs, trees, rocks, and buildings. For further particulars and circulars address 63\*

P. S. SCOVEL, Bordentown, N. J.

#### Steptoe's Foot Mortiser



We have been manufacturing this machine for the past 25 years, and have averaged sales during that time of ever 300 machines per year. Our market has been mainly in Westand Sonth; recently we have had orders from Bastern States, ITuis has induced us to furnish reliable parties with them. S. C. Hills, 12 Pi-tt st. New York; C. H. Smith, 135 North Third st., Philadelphia, Pa., and Mes 'rs. McNish & Butler, Pittsour gh, Pa., are all provided with machines, and will furnish them at our list prices freight and boxing deed. Cuts and prices of other tools can be had on application.

METABLE MCFARLAN & CO... Menufacturers of Woodworking Machinery and Machinists' Tools, Cincinnai, Ohio. 64

TALLOW LUBRICATORS, and a Gener al assortment of Brass Work, of superior quality alow prices, at Cincinnati Brass Works.

112\*

F. LUNKENHEIMER, Prop.

WOODWORTH PLANERS A SPE-CIALTY-From new patterns of the most ap-proved style and work manship. Wood-working Machine-ry generally. Nos. 24 and 26 Central, cerner Union street, Worcester, Mass. 3 13° WITHERBY RUGG & RICHARDSON.

### Sault's Patent

RICTIONLESS Locomotive Valves, ersity applied; requires no changes.

M. & T. SAULT COMPANY, New Baven, Conn

VIRCULAR SAW MILLS.

Woodworth Planers, etc., from latest improved diterns by S. HEALD & SONS, Barre, Mass. Price www. Send for circular.



DOCKET REPEATING
LIGHT.—A neat little self-lighting pocket instrument with Improved
Tape Matches, giving instantiva clear
beautiful flame by simply furning a
thumb piece, and cun be lighted flay
times in succession without filling. A
sample instrument tilled with the innammable rape, with circular and list
of prices, sent by mail on receipt of 65
cents. Address

EATING LIGHT CO. Springfeld Mass

6 tf REPEATING LIGHT Co., Springfield, Ma•s.

THAM AND WATER GAGES, STEAM Whistles, Gage Cocks, and Engineer's Supplies. JOHN ASHCROFT, 50 John st., New York,

CHINGLE & HEADING MACHINE Law's Patent. The simplest and best in use. Shingle Heading and Stave Jointers, Stave Cutters Equalizers, Heading Turners, Planers, etc. Address 2 7s ti

# KEY CHECKS And Key Rings. 6 2 And Key Rings. 42 Kneeland St., Boston, Mass.

TOUGHT Iron Pipe for Steam, Gas and with the state of the latest incovered patent Dan Icle and Woodworth Planing Machines, Matchines, Saw Mills, Saw Sheet and Roll Brass, Manufacturers of the latest improved Patent Dan Icle and Woodworth Planing Machines, Matchines, Saw Mills, Saw Sheet and Roll Brass, Salvay, Gut-off, and Rip Saw Machines, Spoke and Wood Turning Lathes, and various Brass and Corper Wire.

German Silver, etc.,

Manufacturers of the latest improved Patent Dan Icle and Circuiar Resawing Machines, Saw Mills, Saw Chines, Spoke and Wood Turning Lathes, and various of the kinds of Wood-worsing machinery. Catalogues and price 1sts sen. on application. Manufactory, Worcester, Mass. Warehouse, 107 Liberty st., New York.

MPROVED.—Tapley's Patent Self-Feeding
Hand, Foot, or Horse Fower Rip. Cross Cut. Scroft
Saw Machines Combined. Prices Reduced. Send for thlustrated circular. WM. H. H. A. Man't'r,
53° 214 Pearl st., New York. Postoffice Box 4245.

STONE'S RIVER UTILITY WORKS, of Murfreechore, Tenn., Manufacture large quantities of Red Cedar Wooden Ware—Churns, Tubs, Pais, Chests cic. A partner with capital, or practical experience, wanted to take the interest of a non-resident partner. Also, a practical man to run one or more lathes by cottract Address D. H. C. SPENCE, Sup't.

#### BACON'S IMPROVED $TRUNK\ ENGINE,$

For Stationary and Hoisting Purposes.

This Engine is New, Simple, and Compact and is Cheaper than anything in the market. It can be readily used for all purposes where tram power is needed. Send for Price and Descriptive Lists. Manufactured and for as let by Room to the compact of the No.450 West st., New Yorkeity.

NEW BOOKS FOR CARPENTERS. ARCHITECTURE IN DETAIL.

MODERN AMERICAN ARCHITECTURE.

THE PRACTICAL STAIR BUILDER.

Price for each, \$10. Sent free when paid for in advance or by express, C. D. Illustrated Catalogues tree.

A. J. BICKNELL & C. Publishers, 6 tf Troy, N. Y., and Springfield, Ill.

THE 21ST ANNUAL EXHIBITION

American Manufactures & the Mechanic Arts
Under the direction and Superintendence of the
MARYLAND INSTITUTE,

Will be of ened, in its spacious Hall, in Baltimore, on Tucsday evening, Oct. 13, 1868. For particulars, address the undersigned, or Joseph Gibson, Actuary.

W. HENRY JOHNSON, Ch. Com.



FIRE EXTINGUISHER stant use. Indorsed by the Go-yearnment, the entire Insurance Com-posities and all Chiefs of Fire Depart-ments. It has saved over 500 buildings in varir insparis of the country Every house should have it. Price \$45, No. 1; \$50 No. 2; \$55, No. 3. Send for circular, U. S. FIRE EXTINGUISHER Co., 8 Deystreet, New York, or

95 Water street, Boston, Mass.

TEAM-BOILER Leaking Stopped. No Humbug. Receipt \$2. A. Belchambers, Ripley, ©.

BOILER FELTING SAVES TWENTYJOHN ASHCROFT.
50 John st., New York.

\$325 A MONTH and expenses! 28 nev articles. H. B.SHAW, Alfred, Me. 1 11

CHOOL OF MINING AND PRACTI-A. cal Geology of Harvard University.—The course of instruction in the department of Mining and Practical Geology of Harvard University will be continued, on an enlarged scale, during the collegiate year 183-9. The ex-aminations for adults on will be held on Thursday and Friday, Sept. 17 and 18. For Intribut information, and for Friday, Sept. If and 18. For In ther information, and for Circular sapply to Prof.J.D. WHITNEY, Dean of Faculty 3 5 cow

#### Brick Machine.

AFLER'S NEW IRON CLAD has more AFLER'S NEW IRON CLAD has more advantages combined in one machine than any other ever invented. It makes common brick of very superior quality. By a slight change, press brick are made without repressing. With Lafler's Patent Mold, beautiful stack brick are mide. This machine was awarded first premium at the N. Y. State Fair, 1867, for making From Bricks. Examining Committee awarded special report, indorsing this machine. For descriptive circular address J.A. LAFLER & C.J.,

15 tfeow Albion, Orleans county, N. Y.



FOR BRASS LATHES and all Machinery connected with Brass Finishine and Fitting Line improved Lathes for making large valves etc. Address Easter Machine Worss, Execut, N. H. 21 cowif

OLDING CUTTERS Made to Order.— Send for circular to WM. H. BROWN, 44 Exchange st., Worcester. Mass.

WOOD-WORKING MACHINERY, The VV SUBSCRIBER is the New York Agent for al Maoutacturers, and sells at their prices. S. C. HILL Platt st.

# A BOOK THAT EVERYBODY SHOULD

WELLS' EVERY MAN HIS OWN LAW YER AND BUSINESS FORM BOOK,

omplete and Reliable Guide in allmatters of Law Jusiness Fransactions for EVERY STATE IN THE and Business fransactions for Event State in Linu U.NION.
THE ENTIKE LEADING PRESS OF THE COUNTRY unqualifiedly endorse the work. We make afew short

"THE ENTILE LEADING PRESS OF THE COUNTRY unqualifiedly endorse the work. We make afew short extracts from the press:

"As a legal adviser always at hand to instruct the reader how to proceed in suits and business transactions of every and elikinds; as a form book to enable the lease learned to draw up to "vis, morteages, agreements leases, orders, with sector, as a guide with regard to the laws of the various States concerning exemptions, liens, llimitation of actions, collection of debts, usury, and so on, this volume is certainly invaluable to men of business, and it is not surprising that a hundred thousand copies have so soon found their way into the lomes and country houses of the multitude. In addition, the work contoins a full digest of the action of the Government relative to reconstruction and the freedment, the General Bankrupt Law, the Patent Law, Peusion Law, the Homesead Laws. the Internal Revenue Laws, etc. The publisher has determined to make this work complete, and, to our thinking, he has succeeded. No business man or woman can with safety be without it.—New York Times.

"This work is one of the most valuable issues of the press of this country. It contains so much that every man in business should know, but which none have the time to acquire from voluminous works, that it is truly indispensable."—New York Dispatch.

"Buch "useful book can not be tool highly commended. A more comprehensive digest could not be desired."—New York Weekly Tribune.

"There should be a copy of it in every family."—New York Themes authority on all thesubjects of which it weeks."—

ork weekly.

"The most implicit confidence can be placed upon the ork as authority on all the subjects of which it treats."—

work as authority on all thesubjects of which it treats."—
Philadelphia Age.

"you can purchase in this book what may be worth
hundreds of dollars to you."—95t. Louis Dispatch,

"It contains just the kind of information every business
man stands most in need of."—Sunday Mercury.

"Everyman no matter what his business may be, should
have a copy."—Pittsburgh Dispatch.

"There is no better book of reference."—Phrenological
Lournal

"Thereisno better Dook of reference. — Analogous Journal, "The book is prepared to meet all the ordinary contingencies of business life, and it meets them clearly distinctly and well."—Round Table. "It contains a vastamount of justsuchmatter as every one ought to be arquainted with in the prosecution of all ordinary business."—N. T. Christian Advocate. "It is the best business guide ever published."—De Bow Journal, St. Louis. "Every one should have a copy."—N. Y. Eve. Post. "It is invaluable."—Cincinnati Enquirer. "Indispensable to every household."—Cincinnati Commercial. "The work worthy of the nopularity it has acquired

#### Philadelphia Advertisements.

FOR SALE.

The Patent Right to Manufacture Paper from the Hibiscus Plant. Address
4 4 SIUARI' & PETERSON, Philadelphia, Pa.

ROBERT MCCAL VEY, Manufacturer of Holsting Machines and Dumb Walters. 602 Cherry st., Philadelphia, Pa.

Woodworth Planers. Woodworking Machinery gonerally, Manufactured cor. Fifteenth and Penn Avenue, Phila. POWER & DAVIS. 4 13

Bridesburg Manf'g Co.,
Office No. 65 North Event Street,
PHILADELPHIA, PA.,
Manufacture all kinds of Cotton and Woolen Machinery
including their new interpretations. including their new Self-Acting Mules and Looms.

• of the most approved type. Plan-drawn and estimates frumshed for factories of any size. Shafting and not gearing made to order.

MITH'S IMPROVED WOODWORTH PLANER AND MATCHER, Sash and Door, Molding Mortising, and Tenoning Machines, Scroll Saws, Saw Mills, etc., at reduced prices. Address CHAS. H. SMITH 133 North 3d st., Philadelphia, Pa.

### Cedar Vats, Tanks, and Reservoirs,

For Brewers, Distillers, Dvers, Chemists, Manufacturers etc., Public and Private Buildings, etc., etc., GEO. J. BURKP hDT & CO., 113 Buttonwood, below Broad st., Philadelphia, Pa.

POWERLOOMS. Improved Drop Box Spooling Winding Beaming Dyeing and Stang Machines, Scil-Acting Wood Scouring Machines, Hydra Extractors Also, Shafteng, Pulleys, and Scil-Olling Adjustable Hangers, manned by THOS WOOD, 106 Wood St., Phil'a, Pal 17

## MERRICK & SONS, Southwark Foundery,

PHILADELPHIA, Pa.,

MANUFACTUR & Steam Hammers of Nasmyth and Davy styles.

Apparaus for Making Sugar from Beet Root & Cane Juice,&for Refineriesworking Sugar & Molasses Gas Machinery of every description.
Oscillating Engines having

SLIDE VALVES worked by ECCENTRIC.

Patterns on hand of sizes-8x10, 10x12, 14x14, 18x12. N. B.—Designers and constructors of the machinery for the

rorest City Sugar Refining Co., Portland, Me. C. Y. Morriss Sugar Refinery, Richmond, Va. Southwark Sugar Refinery, Philadelphia, Pa. Grocers'Sugar House (Molarses), do. 3 cow tf

A MERICAN TINNED
SHEET 1RON.
Coating uniform over the entiresh et. by an entirely new and patented process. All sizes and gages on hand and made to order.

H. W. BUTTER FORTH, 21eow 7' tf 29 and 31 Haydock st., Philidelphia, Pa.

DAGE'S GREAT WATER FLAME
Coal, Patented Lime Kunwill burn No. 1 fluishing
lime with any coal or wood, mixed or separat., in same
kilin, Rights for sale by C. D. PAGE, Rochester, N. Y.
24 20°

#### OIL!! OIL! OIL!!!

FIRST PREMIUM......PARIS, 1867

Grand Silver Medal and Diploma!

WURLD'S FAIR-London, 1862. TWO PRIZE MEDALS AWARDED

### PEASE'S IMPROVED OILS!

Engine. Signal, Lard, and Premium Petroleum is the Best Made for

Railroads, Steamers, and for Machinery and Burning.
F. S. P.S. ASE, Oil Mediacturer,
Nos. 61 and 63 Main street. Buffalo, N. Y.
N. B.—Reliable orders filled for any part of the world,

TECTOR.—Important for all large Comparations and Manniacturing concerns—canable of controlling with the utmost accuracy the motion of a wardinant of patrollinary as the same renche different stations of the best. Send for a Circules. P. O. Rox 1,057, Boston, Mass.

N. B.—This detector is covered by two U. S. patents arties using or selling these instruments without wingstire from the will be dealt, with secondar to law. 213\* if

FABER du FAUR, Engineer and Metallurgist, 39 Park Row, New York. Calculus on Motive Power, Strength of Structures, and other hanical problems. Machinery selected. 14 eow

# WANTED --- Agents.

WANTED --- Agents.

On the per Month, Everywhere, the GENUINE IMPROVED male and female, to introduce the GENUINE IMPROVED to make and female, to introduce the GENUINE IMPROVED to COMMON SENSE FAMILY SEWING MACHINE. The machine will stitch, hem, fell, tuck, quilt. cord, blid, brad, and em broider in a most superior meaner. Price only \$18. Full year-randed for 5 years will pay \$1.000 for any machine that willsew a stronger, nor rectain 14.0 or more closic seam than ours. It makes the Elastic Lock Stitch." Every second aften can be cut, and will the cloth cannot be prilled apart without tearing the pay agents from \$75 to \$200 per month and expenses, or a commission from which twice that amount or Boermade. Address SECOMB & Co., Pittsburgh, Pr., or Dormade. Address SECOMB & Co., Pittsburgh, Pr., or Dormade. Do not be imposed upon by other partice palming off worthless cast-iron machines, under the same hame or otherwise. Ours is the only genuine and really practical cheap machine manufactured.

CHARLES A. SEELY, CONSULTING and Analytical Chemist, No. 26 Pine street. New York. Assay's and Analyses of all kinds. Advice. Instruction. records, etc... on the nacival arts.

CAN I OBTAIN A PATENT?—For AC-John and instructions address MINN 8 FO, 50 AC-ow New York for TWENTY YEARS Attemers for necrosic and Folgeth Phenics. Orecars and Pileo's incly arenared. The Serentific American 4d is year 30. Paseut are nave once produced by if, & Co.

MESSILORS LES INVENTEURS-MESSITA-ORS LES TAVENTEURS—Avis important. Les invertieurs non tamiliers avoc la langue Abglaise, et qui préféreraier nous communiquer leurs inventions en Français neuvent nous addresser dans leur langue natale. Fivoyez nous un dessin et nue description concise tour not's exarge. Toutes communications serons reçus en confidence.

MUNN & CO., Scientific American Office No. 37 Park Row New York