FIRST NEW ENGLAND IRON WORKS.

The first works for smelting iron ore in this country were erected in 1619, on a branch of the James river, Va., but were General Court of Massachusetts granted to Abraham Shaw twenty one years of the sole privilege of making iron and one half the benefit of any "coles or yron stone which shall managing all iron mines they might discover, and granted bee found in any comon ground which is in the countrye's them all waste lands not appropriated, the use of all wood, disposing."

Discovery was early made at Saugus, or Lynn, of the Bog Iron ore, which is deposited in numerous peat bogs through out Eastern Massachusetts, and supplied the early jurnaces of that colony; considerable quantities of this were found in different places within a mile or two of Lynn, and the first the world except to enemies. attempt to manufacture iron in New England was made in that town. The great scarcity of iron ware and tools, and privileges, the first purchase of lands, consisting of twenty of iron for ship building and the erection of mills and dwelling houses; with a lessened intercourse between Great Britain and the Colonies, led Messrs. Thomas Dexter, Robert eral agent of the company. The precise date of the erection Bridges, and other enterprising persons, to form a plan for of the forge at Braistree we do not find stated, but it fol the introduction of the manufacture in the colony. With | lowed soon after the other. Mr. Winthrop, on 29th May, also this view, Mr. Bridges, in 1643, took to London some specimens of ore from the ponds of Saugus. In connection with John Winthrop, Jr., who had preceded him thither two years before, a company was formed, called the "Company of Un- effect it within three years. The works dertakers for the Iron Works." It consisted of the following Brainfree belonged to the same company. gentlemen of wealth and enterprise, viz.: Lionel Copley, Esq., of York, England, Nicholas Bond, Thomas Pury, John Becx, W. Beauchamp. Thomas Foley, William Greenhull, the difficulties experienced at the outset. "The land afford-Thomas Weld (minister), John Pococke, William Beck, William Hickocke. The sum of one thousand pounds was advanced for commencing the work, with which Mr. Winthrop, accompanied by a corps of workmen, returned to New England the same year. Preparations were immediately made for the manufacture of iron on a large scale, contemplating not only the smelting, but forging and refining of the metal. The General Court was applied to for encouragement and participation in the business. The design was approved of. but the state of the public treasury did not warrant the As- the steward had a very able eye, yet experience hath outsembly in taking stock in the company. Two or three private stript learning here, and the most quick sighted in the theory persons joined the enterprise, and the General Court granted them, March 7, 1643-4, nearly all their requests, including the exclusive privilege of making iron for twenty-one years. provided they made, after two years, sufficient iron for the may pick up their crumbs again if they be but made partakcountry's vse. They were allowed the use of any six places ers of the gain in putting off England commodities at N. E. not already granted, on condition that they set up within ten price; it will take off one third of the great price they gave years a furnace and forge in each place, "and not a bloomery for labor, and the price of their iron it is supposed another onely." The undertakers and their agents were exempted third is taken off; the abundance of wood had for little will from all public charges and taxation upon their stock, and surely take off the residue, besides land at easie rates, and themselves and workmen from trainings

A grant had been previously made in town meeting, 19th of 11th mo., 1643, to Mr. Winthrop and his partners, and to their assigns forever, of about 3,000 acres of the common land at Braintree, "for the encouragement of an iron work to be set up about Monotcot river." This grant was not surveyed, however, and was not laid out till January, 1648. It was long a subject of doubt whether the first forge was at Braintree or at Lynn. Lewis, the historian of the latter town, however, asserts positively that the first works were erected at Lynn, on the west bank of the Saugus, upon land purchased of Thomas Hudson, near a chain of small lakes abounding in ore. The village was called Hammersmith, after the native town in England of several of the principal workmen. Large heaps of scorize point out the site of one of the most important, though for various reasons not very successful, undertakings of early colonial times. Operations were continued with variable success for over one hundred years. Mr. Winthrop was ever a benefactor of his adopted country, and several of the workmen whom he introduced in how things stand here. He is one who hath been exercised connection with these works were not only of eminent service in laying the foundation of New Eogland enterprise and Endicott hath f und a copper mine in his own ground. Mr. skill, but left a posterity which has been identified with the manufacturing prosperity of different States to the present day.

In response to several additional propositions from the undertakers, the Court, on 13th November, 1644, granted them three years for perfecting the work and furnishing the country with all sorts of bar iron, provided inhabitants might become proprietors by paying within twelve months £100 each, and an allowance to the adventurers for £1.000 already disbursed, and that they, " with all expedition, prosecute said ages to neighboring property by overflow of the pond, and in works to good perfection, as well the finery and forge as the fnrnace, which is already set up, that so the country may be furnished with all sorts of barr iron for their use at £20 per

merchant of Boston. He was a large proprietor in the iron works, and was distinguished for enterprise and benevolence. embodying the previous grants and conditions, was made timber, etc., to convert into coals and earth stopes, clay, etc., for the use of the works, forges, mills, or houses built, or for making or molding any manner of guns, pots, and all other etc. They were allowed to export any surplus to any part of

On the 29th September, two days previous to this grant of other theaters had been so burnt." acres, for a forge at Braintree, was made from George Ruggles by Mr. Thomas Leader, who came from England as genreceived permission to make a plantation and lay out a site for iron works at Pequod (New London)-to which place he removed in 1646-provided he could find suitable persons to effect it within three years. The works both at Lynn and

Johnson, a contemporary, in allusion to the enterprise, speaks only of the latter place, and quaintly refers to some of ing very good iron stone, divers persons of good rank and quality in England were stirred up by the providential hand of the Lord to venture their estates upon an iron worke, which they began at Braintree, and profited the owners little, but rather wasted their stock, which caused some of them to sell away the remainder, the chief reason being the high price of labor, which ordinarily was as much more as in England, and in many things treble; the way of going on with such a work here was not suddainly to be discovered, although of things have been forced to pay pretty roundly to Lady Experience for filling their heads with a little of her active after-wit; much hope there is now (1651) that the owners common land free for their use." It was the desire of the rulers, he states, to protect the company from loss at any sacrifice. The court, however, in reply to a letter from the proprietors in 1646, acknowledge the importance of the manufacture to the country, both for domestic supply and for ex. portation, but as an axe at 12d. was none the cheaper to him who had not 12d. to buy it, "so if your ircn," they add, "may not be had heere without ready money, what advantage will that be to us if wee have no money to purchase it" The scarcity of specie is said to have been a principal difficulty in its management, and caused the business a few years after to pass into other hands. In August, 1648, Cov. Winthrop wrote from Boston to his son at Pequod, in relation to it: "The iron work goeth on with more hope. It yields now about seven tuns per week, but it is most out of that brown earth which lies under the bog mine. They tried another mine, and after 24 hours they had a sum of about 500, which, when they brake, they conceived to be a fifth part silver. There is a grave man of good fashion now come over to see in iron works." On 30th September he again wrote, "Mr. Leader hath tried it. The furnace runs 8 tuns per week, and their bar iron is as good as Spanish. The adventurers in England sent over Mr. Dawes to oversee Mr. Leader, etc., but he is far short of Mr. Leader. They could not agree, so he is returned to Teneriffe."

The iron works at Lynn involved heavy outlays on the part of the company, the majority of whom were too distant to exercise a proper supervision. They consequently yielded but little profit. They were several times assessed for dam-1671 the cam was cut away, after which they were conducted on a smaller scale. In the hands of the old company they were more than once attached for debt, and suits were fretun." A grant of three square miles of land was at the same quent against the proprietors. In 1677 they became the pro-

authorities to remove it, and the moment a spade was thrust into it it burst into fiames. I see that in the Times a corres-In October of the same year, a charter with ample privileges, pondent puts aside spontaneous combustion because scene painting is done with water color, which is not inflammable; destroyed by hostile Indians in 1622. Bishop's "History of out and delivered to the undertakers, under the public seal of but the danger, though sometimes existing even in the paint-American Manufactures," says, that in November, 1637, the the colony. It confirmed to the company the monopoly for ing rom, lies more particularly in the property room, where varnish and oil colors are largely used, and where scraps of oiled rag, tow, varnish, sawdust, and fiue, or fluff, are swept up, together with other matters. This only requires to be damped, as is not an uncommon practice, for the purpose of laying the dust, to induce eventually spontaneous combustion. My informant also pointed to the case of Astley's Thecast iron ware, and for converting wood into cbarcoal, etc., ater, which he stated was burnt down somewhat in this way, from the sweeping of the sawdust and stables; and from his experience, which is very great, he felt certain that many

Ventilation.

The great importance of ventilation in our sitting and sleeping rooms, in our schools and public halls, is not sufficiently appreciated. It was well set forth in a recent lecture by a Cleveland professor. It is startlng to learn the amount of carbonic acid emitted from the lungs of one person, or from a single gas burner; enough to poison the whole atmosphere of a good sized room in a very brief period of time. How many persons think that winter temperature demands the exclusion of fresh air to make their apartments warm and comfortable, when the fact that in the cold season we consume more oxygen, and consequently exhale a greater quantity of the poisonous carbonic acid gas, should lead to a directly opposite course. A bed room in winter requires more ventilation than in summer, and the non-observance of this fact will readily account for the awful diseases to which frail humanity is subject.

We wonder if many of our readers are aware of the poisonous exhalations incident to a congregation of their "fellow citizens," in ball rooms, churches, and lecture halls. If they have not full; considered the vast importance of thorough ventilation, let them take these undeniable facts home to their serious thoughts. A person in health has eighteen breathings per minute, and thirty-five hogsheads of air pass through the lungs in twenty-four hours. Of this, from three to five per cent, or about two and a half hogsheads, is exhaled as carbonic acid gas, and thus one person would render two or three hogsheads of air unfit for breathing again. Let every person anxious for the preservation of his health take care that the windows of the dormitories are dropped a little, even during the winter nights. There is far less danger of taking cold than there is of inhaling the noxious atmosphere, which saps the health, undermines the constitution, and embitters life with suffering and disease that might have been avoided. -Exchange.

OFFICIAL REPORT OF PATENTS AND **ULAIMS** Issued by the United States Patent Office,

FOR THE WEEK ENDING FEBRUARY 18, 1868.

Reported Officially for the Scientific American.

PATENTS ARE GRANTED FOR SEVENTEEN TEARS, the following being a schedule of feest

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74.476 -LUBRICATORS FOR AXLES, AND MODE OF ATTACHING

14.4 to — LTIBRICATORS FOR A XLES, AND MODE OF ATTACHING THEM TO AXLES.—Levi A dams A mherst, Mass. I claim, ist. The two haws, E E, fitted or secured to the axle, as shown, in combination with the collar, C, at the inner end of the arm, B, and the flange a_i at the inner end of the box, D, all bong constructed and arranged sub-stantially in the manner as and for the purples set forth, 2d, The packing, i, and the of cup. P, in combination with the jaws, E E, the collar, C, on the axle, and the flange, a, on the box, D, all arranged sub-stantially as and for the purpose specified. 3d, The button consisting of ustal blate. d, rod.e, pivoted in lug, f, and the cut, g, when used in combination with the jaws, E E, and all arranged substantially in the manner as and for the purpose set forth.

subjeatually in the manner as and for the purpose set forth. 74,477.—HIGH AND LOW WATER ALARM FOR STEAM GEN-BRATORS.—Thomas P. Akers, New York city. I claim, lat. The emoloyment of two weights, of greater specific gravity than water, inside of a boiler, said weights being arranged. So as to be sub-ject to the action of high and low water within the boiler, substantially as described. 24 A combined high and low water indicator which is controlled by weights of Freater specific gravity than water, applie 1 upon the unequal arms, of a lever which is ung within the boiler, insuch a manner that, while

Ject in the action of them. described. 29, A combined high and low water indicator which is out weights of greater specific gravity than water, applie 1 upon the unequal arms, of alever which is ung wikin the boiler, in such a manner that, while the weight upon the longer arm shall so far preponderate as to open a valve of certain points of either high or low water, such preponderance will be the weight upon the longer arm shall so far preponderate as to open a valve of certain points of either high or low water, such preponderance will be a contract of the water when at any intermediate point, substantially as

etc. On the 14th May following, the records state that, "whereas it is now found by sufficient proof that the iron worke is very successful (both in the richness of the ore and the goodness of the iron), and like to be of great benefit to the whole country, especially if the inhabitants here should be interested therein in some good proportion (one half at the least)" etc. They were invited to take stock in the business. Twelve to fifteen hundred pounds had then been expended, the furnace built, a good stock of mine, coal, and wood provided, and some tups of sow iron cast, and some preparations had heen made for the forge. About £1,500 were required to finish the forge, which was to be paid to Mr. Henry Webb, Theater, and he gave his decided opinion that the accident of Boston, subject to the direction of the undertakers. John Winthrop, Jr., Major Sedgwick, Mr. Henry Webb, and Mr. Joshua Hewes. Colonists were about this time publicly noti fied that they could join the enterprise if they wished. The partners above named were probably of the number who Salisbury, England, in 1638, and afterward became a wealthy a long period, and after many complaints he induced the as and for the purpose set forth.

time made them in each of the six places they might occupy, perty of Samuel Appleton, who sold them about ten years after to James Taylor, who, we believe, was the last proprietor. They were not finally abandoned until the lapse of over a century from their commencement.

Spontaneous Combustion in Theaters.

In No. 5, current volume, we published a few facts in regard to the circumstances under which spontaneous combustion may take place. A correspondent of the Pall Mall Gazette says :

"I was lately conversing with one of our most eminent scenic painters upon the late catastrophe at Her Majesty's proceeded from spontaneous combustion. He stated that large heaps of the debris and refuse of the painting and property rooms were often swept up together, and left to accumulate for years, and that he had often had reason to complain of this practice, and to point out the danger of it. He related

the weight upon the longer arm shalls of ar preponderate as to open a valve at certain points of either high or low water, such preponderance will be counteracted by the water wnea at any intermediate point, substantially as described. Set, The combination of the steam whistle, F, alarm valve, d, vibrating lever, G, and weights, J. J. of greater specific gravity than water, arrangou within a boller, substantially as and for the purpose described. Ath, The combination of the lide step, b, vibr cod, 0, with its valve, and the production, i, of the lever, G, substantially as and for the purpose de-scribed. 5t a, The combination or the slide step block, b, valve rod, D, and the ad-st and the production of the slide step block, b, valve rod, D, and the ad-

 $d_{\rm of}$. The combination of the slide step block, b, valve rod, D, and the adge device at the top of and rod, substantially as and for the purpose do

justing device at the top or and row, substantially as serified. 6th, The devices, L T R, or their equivalents, constructed substantially as described, in combination with the safety valve and the steam whistle, for the purpose set forth.

the purpose set form. 74,478. -- MUZZLE LOADING ORDNANCE.-Frederick W. Alex-

74,478.— MUZZLE LOADING URDNANCE.— H'TEHETICK W. Alex-anner. Balumore, Md. Antedated Feb. 6, 1863. I claim the apparatus termed a caliber diminisher, for the purpose of di-minishing the caliber of smooth ore or rifled guns aier they have been had d, thus neventing any windage of the ball, and capable of being with-drivm after firing, for a fresh load, and of reinsertion, etc., as heretofore de-scribed

74.479.-Spring Cup Toy.-Horace B. Ames, Great Barring-

ton, Ma s, assignor to John S, Stone, Monsatonic, Mass, urbat Darring-ton, Ma s, assignor to John S, Stone, Monsatonic, Mass, I claim the toy ball and elastic spring cup, formed asspecified, as a newar-ticle ot manufacture, 74,480,—SAFETY VALVE.—Horatio Anderson, Chicago, Ill.

• 1 claim, ist, The case, U H, arranged with holes, or x, lugs, B B, dome, L, flange, K, and stop, f, substantially as and for the purbose herein described. 2d, The holes, o, in combination with the plate. M, substantially as and for the purpose set forth. 3d, The combination of lever, t, pivot top, E F, and stop f, substantially as set forth.

74,481.-TINNERS' DIE.-P. W. Armstrong, Logan, Ohio. I claim, 1st, Adjustable annular dies, F and G, in combination with the fixed dies, D and E. of a finner's swaging machine, substantially as and ion the purpose herein set forth.

2d, A folding davics, H, in combination with the dies, F and G, and con-structed and operating substantially in the manner and for the purpose

-PESSARY.-Benjamin Atkinson, Davenport Iowa, 74,482.

and the status of the second status of the high leaves of the purpose herein sectors.
74,482.—PESSARY.—Benjamin Atkinson, Davenport. Iowa. I claim a pessary consisting or the higge leaves, g, arms, c, with the stem, e, attached to ite leaves, g, by the enbberstrip 1. and operated by the screw stem, b. all constructed and atraneed substantially as described.
74,483.—SEPARATOR SIEVE.—Joseph Barker (assignor to himself and Alonzo Kinyon), Amboy, III.
I cuaim a double sieve for separating seeds, of coarser and fine" netting, having the sides of the same so shaped as to incline the sieve to the shoe, in fanning mills, said sides heing pr vyded with the strips, a, or their equivalent, substantially as shown and described and for the purposes set forth.
74,484.—PADLOCK — Ashbel P. Barlow. Claremont, N. H.
I. Caim the method of applying the springs, d d d, in combination with the shiell or drum, it and key, i, in fere. 2, substantially as herein set forth.
74,485.—CHURN DASHER.—J. W. Barlon, Claremont, N. H.
I. Claim the arrangement, as a whole, of the jointed cross piece, B, stand ard, A, wave, c, co en and closed dasher winzs, E G, rods, D D, and lever, C, the keyera, parts being so combined as to form one connected working apparatus, as and for the purpose herein set forth.
74,486.—HFAD BLOCK FOR SAW MILLS.—Herrick Batchelder, 'Reading, Mass.
I claim securing the inner end of one of the dogs, D, to a movable block E, as ad for the purpose set forted. Also free werge, H, in combination with the block, E, and its dog, D, operatify substantially as and for the purpose as a to a the vest, a comparised of stats, c, e, at it boxes fitting over the double inclined bottom. A, and adapted to be removed separately, from op posite addies of the inclined hottom nuon the purpose, E. B, are adapted.
24,487.—CHURNE,—Danker M. Beard, Hillsboro, N. H.
I claim the open bottom of bottem, a source of said boxes, E, B, are adapted

74,489.-WOOD SCREW.-Jason A. Bidwell, East Boston, Mass. claim as a new and im roved article of manufacture, a wood screw hav-t its core tapering from its shank to its entering point, and provided with hread of uniform diameter, as herein described. 74,490. -- SCREW DRIVER AND BORING TOOL.-Jason A. Bid-

74,490. --SCREW DRIVER AND BORING TOOL. --Jason A. Bidwell. EastBoston, Mass.
Iclaim, Ist, The construction of a screw driver which is adapted for driving perforated head screws, with cutting edgesformed on a pyramidal point, in combination with scores or rooves, e, for conducting out of the hole the chips or dust, while in the act of boring, substantially as described.
2d, As new and improved articleof manufacture. a tool having a rectangular tapering point, c, a rectangular straight shank. a, and an adjustable countersink, b, said tool being adapted to serve the threefold purpose of a screw driver, a boring tool, and a countersink, as herein set forth.
74,491. --WAGON JACK. --Michael Biglin and Daniel W. Bennett, Wilkesharre, Pa.
We claim the entire form of the "wagon Jack," and more particularly the faced litting block or follower, marked D, and lever, C, as constructed and operating substanially as described.
74 492. --Stewing MacHINE --Thomas M. Bradley Chegnut

Lever, P_{M} . I claim, ist. The arrangement and combination of the upright lever. D_{A} with its curved arm, C. the plate. H, the needle bar, J, and the wheel, A, as herein described and for the purposes set. forth. 2d, Also the movable hammer, V_{A} , inclined lever, Z, and pivoted shuttle box, a, as combined and operated by the upright lever D, asherein described and for the purposes set forth.

74,493.—Skid for Elevating and Lowering Barrels, etc.

74,493.—SKID FOR ELEVATING AND LOWERING BARRELS, ETC. Carene Broslus, Hancock, Md.
1 claim the skid, slide, and stays, as described and set forth.
74,494.—FOLDING BEDSTEAD.—S. S. Burr, Decham, Mass.
1 claim the combination with the upright case or false cabinet, of a folding bedsread, hinzed to the rear of the same, and constructed as he ein de-scribed, so that when folded up its head hoard shall constitute the cap or confice of the cabinet, substantially in the manner shown, and set forth.
74,495.—CORKSCREW.—John Bussey (assign of to himself and John F Gunkal). Cincinnat, Ohio.

(4) 49. — CORRECCE w. — John Bussey (assignor to infinite in and Joon F. Gunkel), Cincinati, Ohio. I claim the arrangement of the lever, K. ca'ch, G. and spiral spirag, J. within the handle. B for the purpose of detailing and releasing the spiral shank. B, of the corkscrew, A, and enabling the said catch to be actuated by the thumb of the handle by which the instrument is worked, substantially as described and represented.

Shahk B, of the convectew, A, and endoining the said carbon of cavadates of the thum of the band by which the instrument is worked, substantially as described and represented.
74.496.—COMBINED CORN PLANTER, SOWER, REVOLVING HARDOW, AND WURTATON, W.P. Beder, Leavenworth, Kanssa, I claim, 1st, The revolving herrow, S. Lade edj istucle, so as to be contracted and expanded, substantially as herein shown and described and for the purpose set forth.
2d, The combination and air angement of the vertical shafts, F, slide bar, L, add, the vertical shaft, F, slide bar, M, with each other, substantially as herein shown and described and for the purpose set forth.
3d, The combination and air angement of the vertical shaft, F, slide bar, I, add, the vertical shaft, F, slide bar, M, with each other, substantially as herein shown and described and for the purpose set forth.
4th, The combination and air rangement of the slide or guide bars M, with each other, substantially as herein shown and described and for the purpose set forth.
4th, The combination and air rangement of the slide, S, lever, T, spring, X, connecting rod, U, and ben of for the ourboes set forth.
5th, The combination and air rangement of the slide, S, lever, T, spring, X, connecting rod, U, and ben of for the ourboes set forth.
5th, The combination and air sagement of the slide, S, lever, T, spring, X, connecting rod, U, and ben of for the vertices set forth.
5th, The combination and air sagement of the slide, S, lever, T, spring, X, connecting rod, U, and ben of for thever, Y, with each other and with the slotted end of the purpose set forth.
7the combination and air sagement of the slide, S, lever, T, spring, X, connecting rod, U, and ben of for thever, Y, and curved rack, I', with the slotted end of the purpose set forth.
7the combination and air stagement of the slide, S, lever, T, spring, X, connecting rod, U, and ben of forthe purpose set forth.
7th the combination and arenge

74.497.—SCROLI SAW.—E. J. Camp, Mar on, Ohio. I claim the up-and-down adjustable guide bar. G. carrying the bent spring, H. constructed and arranged to operate as herein set forth 74.498.—CHURN.—Daniel H. Carpenter, Hector, and H.ram L. Slaght, Lodi, N. Y. We claim, kt. The stationary frame, A. the swinging frame composed of the parts, C E J and D, arranged substantially as described, for the purpose set torth.

set forth, 2d, The fulcrum pin, i, slot, k, connecting rod, I, shaft, H, with the friction rolls, f, in combination with the swinging frame, the wholearranged and op-erating substantially as and forthe purpose described. 74,499.—CARRIAGE SPRING BRACE.—Joseph H. Chadwick, Wheaton, Ill.

Wheaton, ill. I claim the combination and arrangement of the spring, A, the sill, C, or is equivalent, the braces, c.d. and jointed arm, f, in the manner and for the supposes set forth an i shown.

18 etfair attent, inc an a t shown. 74,500.—PUMP.—Taylor Chamberlin and T. Elwood Garrett, Philadelphia, Pa. We claim, 1st, The hollow shaft and piston, CD, arranged and operating substantial y as shown and described. 2d, The combination of the hollow piston and shaft, CD, the discharge chamber, B, and the cylinder, A, substantialy as and for the purposes speci-ded

74,501.—Spike.—J. Henry Champlin, Essex, Conn.

I claim the spike, A, constructed with slots or notches, as a a, cut into the ady of the same at its several angles, substantially as described and as and r the purposes set forth.

WASHING MACHINE.-Alvin B. Clark and Charles

14,502. — WABHING INACHINE. — In the D. Clark and C. Davis, Richmond, Id.
We claim, ist, In combination with wash board, C, or other suitable surface, the roller, a, rotating and sliding at each alternate stroke, substantially as described and the purpose set forth.
2d, Also the combination of the recipro. sting Fods, d and d, hangers, b and b, springs, V and V, ratchets, e, and pawis. I, with roller, x, and board, C, all oper thing substantially as described and for the purpose set forth.
74,503. — WELL BORING APPARATUS. — N. C. Clark, Low Moor. Iowa.

5th, Au escape valve arranged in relation with the pump, D, and the tube' F, of the milk, r, substantially as and for the purpose specified. 6th, The universal Joint, h, arranged in combination with the milker, and the tube, F, thereof, substantially as and for the purpose specified. 74508 — CURTAIN FIXTURE.—J. M. Corns, Black Rock, N.Y. I claim the radially corrugated disk, g, in combination with the similary corrugated bearing, f, spinal spring, h, nut, i, and rolier, B, arranged and operaing substantially in the manner and for the purpose set forth. 74509.—CARD SAFE.—Charles S. Crane, celma, Ala. I claim the album or card case with an exterior as a picture frame having an interior receptable, the Joints, hing's, and envine ce-oncelled from ap-pearance by the moldings, sub-tantially as specified and shown.

74,510.—NEAT ARM FOR RAILROAD CHAIR.—William G. Creamer, Brooklyn, N.Y. I claim the construction of the pivot plate with its nipple, M, and screw. Q in connection with the carseat arm, the arm being either plain or recessed to receive the head of the screw or washer, all substantially as described and for the purposes set torth. he purposes set forth. -THREE-WHEELED FARM WAGON.-E. T. Crockett.

74.511.—'I'HREE-WHEELED FARM WAGON.—L. I. OLOGAGUA, Guilford, Mc.
Icla.m L.e linged draft plate, G. with side arms, J. hound, E. and coup-lbcs, C. when constructed, combined and operating with the third wheel, L, as her-the described and for the purposes set forth.
74.512.—LIFTING JACK —A. M. Culver, Bedford, Ohio. I claim the adjustable legs, B, lever, A, and rod, C, constructed, combined and arranged to operate in the manner as and for the purpose set torth.
74.513.—SYSTEM OF FLAMBEAU-LIKE LIGHTING APPARATUS, Description of the purpose of the purpose set torth.

74,513.—SYSTEM OF FLAMBEAU-LIKE LIGHTING APPARATUS, —Edmond Armand Louis D'Irgy, Paris, France. I claim, 1st, The comonation of the removable reservoir, a, base, d, ad cup, f, said reservoir ad-apted to be inverted for iseding the oil to the cup, as herein shown and de-cr bed. 2d, The pressure spiril ube, m for the purpose of preventing the oil linside from being spilt out when the flambeau is turned upside down. 3d, The wooden or equivalent washer, in combination with the reservoir, and socket, h, as herein d-scribed for the purpose specified. 4th, The combination of the partils, e, with the base, d, of the flambeau and the pin, c, substantially as described for the purpose specified. 74, 514 — Browerp, bor per 1 B, F. Davidge, N. V. city

74,514.-BLOWER HOLDER.-J. B. F. Davidge, N. Y. city. I claim an implement or apparatus composed of two sets of griping laws and suitable hand pieces, the whole constructed to operate substantially in the manner described for the purposes set forth. Also the shield, g. in combination with the plotted griping jaws and hand pieces, the whole arranged to operate as described for the purpose set forth.

74,515.-GRAIN DRILL.-Charles F. Davis, Auburn, N. Y.

- z_jour—CIAIA D'AIDL—CHAIRS F. D'AVIS, AUOUTI, N. Y. I claim, 1st, So attaching the shores or hores of a seed planter to the main frame as that by means of a lever, or its equivalent, sad shores may be sufficed from a straight to a zig-zag line, or vice versa, at pleasure substantially as described.

from a straight to a zig-case inc, or sets the set of shore probability of a straight to a zig-case inc, or yield every a straight to a zig-cag inc, or yield every a, these oconnecting of said shores by independent levers to the lifting bar as that they may be raised by the operator individually or as a whole, substantially as described. 3d, Hinging the shoe to both its drag bir and to i.s individual lever so that the shoe may be raised and lowered in either of its changed positions by a lever that 's permanently located, substantially as described. 74,516.—MODE OF SETTING ARTIFICIAL TEETH.—George Laws Derr Midinton Pa.

[74,516].—MODE OF SETTING ARTIFICIAL TEETH.—George Lewis Derr, Miffliotown, Pa.
I clain the mode herein described of securing teeth to a metallic plate by straps, B, and plas, c, counced oy usible metal run between and around them, substantially as described.
[74,517.—BAG CLASP.—Edmund L. Dickey, Chicago, Ill. I claim a metallic bag clasp for fastening bags, when constructed and operating substantially as and for the purpose specified.
[74,518.—COTTON SEED PLANTER.—Zina Doolittle and A. M. Crowder, Houson Factory, Ga. We claim, 1st, The adjustable rods, B B, in combination with the slots, a a, in the bottom of the hopper, A, substantially as and for the purpose specified.
[8] The oscillating rows, ee', in combination with the slots, B. B, and the slots, a s, all arranged substantially as and for the purpose set of the slots, a s, all arranged substantially as and for the purpose set of the slots, a set of the slots, a set of the slots, a s, all arranged substantially as and for the purpose set of the slots, a s, all arranged substantially as and for the purpose set of the slots, a set of the slots, a set of the slots, a s, all arranged substantially as and for the purpose set of the slots, a set of the slots, a starten between the slots, a s, all arranged substantially as and for the purpose set of the slots, a starten between t

¹⁰ and the social ating rows, e e', in combination with the adjustable rods, B
²⁰ The oscillating rows, e e', in combination with the adjustable rods, B
³¹ B, and the siots, a a, all arranged substantially as and for the purpose set forth.
³² G, Operating the oscillating rods, e e', rhrough the media of the arms, f, links, t', and lever, D, arranged substantially as herein shown and descrived.
³² A, 519. — COTTON CULITVATOR AND CHOPPER. — Zina Doolittle
³³ A. Crowder, Houston Factory, Ga.
³⁴ We claim, ist, Tbe catters, P, connected to vertical arbora, I, operated throng the media of the levers, JJ, link, L, lever arm, M, and pics, h, on the wheels, B, all constructed and arranged substantially as and for the purpose herein set forth.
³⁴ The scrapers, F F, and shares, G G, in combination with the cutters, P, end constructed and arranged to operate in the manner substantially as and for the purpose offield.
³⁵ A, The solute draft rod. E, and semicircular bar, D, arranged as shown for the purpose of the purpose set forth.
³⁴ The solide rod, Q, and lever, K, arranged and applied to the device, substantially as and for the purpose set forth.
³⁴ The solide rod, Q, and lever, K, arranged and applied to the device, substantially as and for the purpose set forth.
³⁴ The solide rod, Q, and lever, K, arranged and applied to the device, substantially as and for the purpose set forth.
³⁴ The solide rod C, and lever, K, arranged and applied to the device, substantially as and for the purpose set forth.

(x.020.-STUVEPIPE DRUM.-Lewis Dowe and Aruna C. Cohom. Sycamore, II. We claim 1st, Instread deflector the plyoted slats, B B' in combination with a cashig A, where said slats ary connected together and are combined the purpose set for the heat-deflecting drum the combination of the arm, C, the sping, a, and the segment, F, substantially as and for the pur-pose of section.

74 521 - SAW, --- James E. Emerson, Trenton, N. J.

I claim a planng rooth in which the cutting point, the recessed planing cutter and the gage or guide to prevent the cutters from ruuning much wood are ull formed in or on one and the same piece of steel, substantially

wood are all formed in or on one and the same piece of steel, substantially as and for the purpose described. 74,522.—SAW.—James E. Emerson, Trenton, N. J., and Wil liam S. Winsor, Jamestown, N. Y. We claim, in combination with a saw plate that is thinner at its edge than at its central portion, the removable and replaceable teath and planing cut-ters, substantially in the manuer and for the purpose described. 74.523.—SAW.—James E. Emerson, Trenton, N. J., and Wil-liam S. Winsor, Titusville, Pa. We claim, in combination with sawing teeth and planing cutters separately attached to and removable on the same saw plate, the support, guide, or gage on the claining cutters to prevent then from running into or taking too rank a hold of the wood, substantially as described. 74 594.—WINDLASS.—Porter Evarts, Madison, Conn.

74,524.-WINDLASS.-Porter Evarts, Madison, Conn.

I claim the adjustably-concetted bars, K, to the working lever, IJ, by means of loops, k', formed upon the upper eads of suid bars, K, and northes formed in the upper side of the working lever, IJ, substantially asherein shown and described and for the purpose set forth. 74.525.—Boot HEEL, John Fearn, Tompkinsville, N. Y.

Antidated February 12, 1868. I claim the cylindrical sorew, b, with or without points, applied from the inside of the heel, whereby the same can be screwed in or out from the in-side to compensate for the wear of the heel, substantially as herein shown and d scribed.

and d scribed. 74,526.—GRATE BAR.—Addison C. Fletcher, New York city I claim the alternating conical recessess, n. in combination with the round-ed points, e. substantially as shown and described for the purposes specified. 74,527.—SELF-F&EDING PIPE CUTTER.—Moses H. Freeman,

74527.- SELF-FAEDING FIPE OUTTER.-moses in recomm, Somerville, Mass. Iclaim the combination of the bar, A, and the knite, C, constructed and combined as described with mechanism for holding the pipe against and rol may to athe knite while the latter may be turned about the pipe, sub-stantially a sepecified. Also the combination of the har, A, the knife, C, the carriage, D, and the clamp or presers, E, and its adjusting screw, F, or the equivalent of such preserand screw, the whole being arranged and applied together substan-tially as set forth. Also the combination of the stationary stop, c, and the spring stop, d, with the bar, A, the knife, C, the carriage, D, the presser, E, and its screw, F, the whole being an specified. 74,528.-Spring MATTRESS.-August Gebhard, Indianapolis, Ind.

(4,505.—ANIMAL TETHER.—Martin Leonard and Stephen C. Leonard, Oberin, Olio. We claim 1st, An animal tether composed of the yoke A, and crossstrip C, and plcking points, e', and shield, D, and springs, and a', substantially as shown and described and for the purposes set forth. 2d, The pm, B, in combination with the key, d, and the spring, d', substan-tially as shown and described and for the purposes set forth. 3d, The cross strip, C, and points, e', in combination with the yoke, A, and for the purposes set forth.

Ind. I claim the combination of the hinged frame, A, and its springs with the interor sacking, E. supported by the rods, F. andstraps, C, to the side of the frame, as and for the purpose set forth. 74,529.—FARM GATE.—C. Eugene Goodwin, Portland, Mich. Leain the construction of a gate as herein described which the posts, B and C, the projecting cap, D, the pivot post, E, the horizontal bars, F, the stiles, and U, the areas I then noto this, K, the bolts. L, the rod or that M, and 2d, The huh, b, of the sliding valve, when constructed as described, so that oth asliding and an oscillating motion can be imparted to the valve, asset

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torth. 3d, Proyiding the case or shell, A, in which the silding valve, D, moves, with elastic abutments, FF, which are so arranged that the valve when striking against one of the automents will be brought into an inclined position, substantially as and ror the purpose herein snown and described. 4th, The shell ad case, , when provided with elastic abutments, FF, in combination with the silding covillation guive, D, and with the channel, B all made so that the lower eage of the valve does not come in contact with the bottom of the shell, and all operating substantially in the manner herein shown and described.

-CANOPY FOR TEN1' AND BED NETTING .- J. Burt

The bottom of the sinch addation provides substantially in the number of the shown and described.
74,355 — CANOPY FOR TENT AND BED NETTING.—J. Burt Holmes, Cincomati, Ohio.
I claim, ist, The canopy, A, in combination with stretchers, H, and stretcher support, E, when the same are constructed and operate substantially in the manner as and for the purpose herein set forth and described.
2d, The capy, C (2), pulley Doil, b, and nut and eye, D, when arranged substantially as specified and for the purpose set forth.
3d. The stretcher support, E, and stretchers, H, constructed as herein shown and specified and for the purpose set forth.
74,536.—FURNACE.—Marcus L. Horton, Worcester, Mass.
I claim the combination as well as the arrangement of the sir chambers, D C, and the grate made hollow and with hollow journals to open into such the there provide for the freplace, such pipes being arranged within such lining and made to communicate with eact, other and through the pipes and lining and be discharged into the fireplace, as specified.
Also the arrangement of the hollow grate and ishollow journals, the enterproof lining of the and with a fireplace, as specified.
Also the arrangement of the hollow grate and ishollow journals, the enterproof lining with the air chamber, C, partially surrounding the ash cham ber and grate and made with a perfortate top, as set jorth.
Also the arrangement of the hollow grate and ishollow journals, the enterproof line arrange with the enterplace, substantially aspecified.
74,537.—LAMP SHADE.— Willium H. Horton (assignor to himself and Nathan P. Brown), Cle see, Mass. Antedated December 27, 1867.
I claim the lampshade supporter and a gluster consisting of the firshace substantially aspecified.
74,538.—Hensee HAY FORK.—David J. Howenstine, Marshallar and and arrangement of the firshace substantially assessing.

74,538 — HORSE HAY FORK. - David J. Howenstine, Marsh-

all ville, Ohlo, essignor to himself and Patterson V. Wilkins. I claim the epiral thes, 1 and 2, attached to revolving shaft, A, in combi-nation with the spiral thes, 3 and 4, attached to the sleeve, B, in combination with latch E, and rope, F, when arranged and operating substantially as herein described.

herein described. 74,539.—HORSESHOE.—N. W. Hubbard New York city. I claim, 1st, The removable toe ca'ks, E for horseshoes, substinitially as shown and described, in combination with the toe plate, G, claim p screw, a, or its equivalent, allas and fir the purpose set forth. 2d, The heel calks for horseshoes substantially as shown and 'lescribed, in combination with the plates, as shown at B or C, and screws, b or d, all as and for the purpose set forth.

74,540.—CONSTRUCTION OF TAN VAT.—Joseph Huber, Buffa-

74,540.—CONSTRUCTION OF TAN VAT.—Joseph Huber, Bulla-lo, N. Y. I claim a tan vat constructed of strips of boardor plank laid up with coal tar and fel. packing between the strips and nailed together, in the manner and for the purpuse substantially as described. 74,541.—Saw.—Eugente Humphrey, Boston, Mass. I claim the fastening of a movable or insertable and self-adjuting saw tooth in its recess in the saw plate by means of a side operating in combina-tion with a recess extending into the plate and tooth, substantially as de-scribed, when said side or recess or both are cu away or varied in width, for the purpuse described. 74 542 – Lavye.—John Ingersoll Cleveland Ohio

for the purpose described. 74,542. – LAMP. – John Ingersoll, Cleveland, Ohio. I claim extending the tube, E, from the top of the lamp down into the hollow stem or shank, D, and so arranged in reaction to each other and the globe of the lamp as to form a passage for the off between the said tube and siank in filling and in burning, suctanually as set forth. 74,543. – PRESS FOR PACKING FRUIT, – Thomas J. Jones, Rochester Mich.

14,040 - I RESS FOR A ROMAN - LEVEL Rochester, Mich. I claim the combination and arrangement of the can-shaped projection, E, with lever, Frock shaft, D, ratchet wheel, G, pawl, H, powts, CC', floor, A, inclined playe, B, axie, I, and wheels, J J, when operating as and for the purpose herein set forth. 74,544.—NECK YOKE.—Thomas J. Jones, Rochester, Mich.,

assignor to humself and Lorenzo D. Gillett, I claim, 1st, The circle, k, and the bars, DD and F, when arranged sub-tantially as and for the purpose set forth. 2d, The hinge bolt, G, when constructed and operating substantially as de-

scribed. 8d, The combination of the above-named parts with the bar, A, the rings, BBH II and J J, the fuards, cC, all arranged and operating substantially as and for the purposes specified.

BBH II and J, the Ruards, C.C. att arranger and operating subsequency, as and for the purposes specified. 74,545 — PICKER FOR LOOMS.—Rufus Joslin, Pawtucket, R. I. I claim the combination of the picker staff, screw, C, and reversible picker, constructed and arranged substantially as and for the purposes specified, 74,546 — BUTTER WORKER.—Samuel Keen, East Bridgewater,

74.546—BUTTER WORKER.—Samuel Keen, Last Driugewater, Mass.
Claim, Ist, The paddle or butter worker, H K, when working in the manner su, statially as described and for the purpose setforth.
24. Committing the pieces, D'D', with the place, D D', by the elastic stripe, PP, subtantially as described and for the purpose set forth.
74.547.—CONSTRUCTION OF SEA WALL,—John Kelly, San Francisco, Cal.
Iclaim the strips of metal or lead, A C, when placed between the joints of blocks of masonry, sur stantially as and for the purpose herein specified.
74,548.—EXTENSION LADDER.—Hohn Kettus (assignor to D. M Sluss and D. M. Slusser), Louisylle, Ohio.
I claim the combination of the pawis, I i, p.wil axle, H, arm, M, and cord, N, when used in connection with the rathets, L L, inthe part, B, which have irrons, Q Q, inserted the ein and when the lador, A, has the slots, S, all arranged in the maner and orthe purpose specified.
74.549.—DITCHING MACHINE.—Jacob King (assignor to him-

74,549.-DITCHING MACHINE.-Jacob King (assignor to him-

iself, James Hamilton and B. Stokely), Indianapolis, ind. I claim. Ist. The combination of the side cutters, CC, with the way boards, SS, when the former are constructed with circular recesses to receive the correspondingly rounded forward extremitits of the way boards, so as to form a binge Joint, substantially as and for the purpose specified. The yoke, Y, arranged to slide upon the frame, A, and A apted to change its po itton in conformity with the adjustment of the cutter beam, N, as and for the purpose specified.

74.550.— HARVESTER OUTTER,— Thomas Knowles, Robert Knowles and Samuel Knowles, Jersey City, N. J. We claim the fixed knives, C, attached to the fager bar by means of the onnecting bar, c, and supporting olock:, b', substantially as shown and de-

74,551.-SETTEE, BED AND TABLE.-Charles F. Kramer, Mon-

14,001.—OFTIEE, BEDAND TABLE.—ORTHER F. Araller, Mon-dova, Wis. I claim the construction and arrangement of the settee, bed and table, when combined and adjusted by the pivored side levers. K K, and side catcies, G and L, as herein described and for the purpose set torth. 74,552 — HARVESTER.—Israel Lancaster, Baltimore, Md. I claim, ist, Placing the fulcrum of the reciprocating lever, H d, which is between the points at which the power and resistance are applied to the sad lever, nponone side of a vertical line drawn through the universe wheel cen-ter and the knife bar upon the other side. 2d, The fulcrum piat, g, constructed and operated as described, and for the purpose mentioned. 3d, The lever, H d, and friction rollers, c, acting in combination with the camifan re, b b.

cam nan re, o n. 4th, The combined spring and bearing, T, constructed and operating as de-scribed and for the purpose mentioned. 74,553.—ANIMAL TETHER.—Martin Leonard and Stephen C.

4th, The shield, D, in combination with the springs, a and a', and with the

the per for the

Moor, Iowa.	the revolving catch, N, when arranged and operating substantially as and	yoke, A, substantially as shown and described, and for the purposes set
I claim the combination of the hollow perforated stem, F, and a detacha-	for the purposes set forth.	
ble point, G, with the extensible rod or stem, J, anger, E, valves, H, and shell	74,530.—CABRIAGE FOR ADVERTISING.—William C. Harris	74,554.—SULKY PLOW.—Elias Levee, West Point, Ind.
or casing, I, all constructed and arranged to operate in the manner and for the purpose set forth.		I claim, ist. The combination of the sliding guard or guide bars, J and K,
	A. Robert Roseman, and Hubbil B. Hutchins, Philadelphia, Pa.	with the plow heam, A, and with the tongue, F, or trame of the sulky, sub-
74,504.—SCHOOL DESK AND SEAT.—Milton B. Cochran, Da-	We claim a large skeleton frame having lamps enclosed therein and being	stantially as herein shown and described and for the purposes set forth.
venport, lowa.	supported on wheels or runners so that it can be drawn or driven like a carriageor car through the streets of a town, and having also along semi-	2d, The combination of the adjustable bar, R, adjustable bent lever, S, and
I claim the continuous desk board, b. provided with the rail, g, and shelves		bar or handle, U, with each other, and with the plow beam, A, and support,
or pockets, f, in combination with chairs, a, and iron braces, e e'e", when	transparent advertising band or canvas curtain arranged around the outside of the said frame so that it can be moved by the driver as a panoramic cur-	T. attached to the tongue, F, or frame of the sulky, substantially as add for
constructed and arranged for use as herein described and for the purpose	tain, the whole being constructed, arranged and operated as hereind escribed	the purpose set forth.
,set forth,	and set forth for the purpose specified.	3d, The combination of the crank journal, g1, slotted support, g2, wheel, I,
74,505.—CHURN.—John T. Coe (assignor to himself and Ed-		and axle, substantially as described and for the purpose specified.
ward F. Coe), Chambersburg, Pa.	74.531BURIAL CASE -Jasper R. Hathaway, Westfield. N.Y.	74.555 — SAFETY ATTACHMENT FOR UMBRELLAS. John A.
I claim, 1st. A churn d sher consisting of two wings set at any desired angle	I claim as a new article of manufacture a burlal case formed of cast-metal	Lieb and E. W. Crane, Newark, N. J.
with each other, said wings heing made with sides inclined in opposite direc-	plates which are held logether by dove tail joints, substantially as and for	We claim, 1st, The notched rings, c, and jackets, f, in combination with the
tions, as and for the purpose set for th.	the purpose described	stops, e, and runner, B, of an umbrelia, substantially as and for the purposes
2d. The dashet. b, incombination with the band, c, hook, d', and staple, e,	74,532.—CAR COUPLING.—John C. Heaton, Fitchburgh, as	described.
substantially as described.	signor to himself and Nathaniel Earle, Henrietta, Mich.	2d, The scalloped edges and ridges, g, in combination with the jackets, f,
74,506.—MACHINE FOR CUTTING RAGE.—John Collins, Jr.,	I claim the combination of the arrow besded coupling bar, B, lifting plate,	rings, c, and runners, B, constructed and operating substantially as and for
Detroit Mich	C, and operating lever, D, with each other and with the bumper head, A,	the phrpose set forth.
I claim, 1st, The spring guard, I, feed roller, H, and cutter.E, combined	substantially as herein shown and described and for the purposes set	74,556 - CAST IRON SLEIGH RUNNER E, W. Lockwood and
and operating together substantially as described and for the purpose set	forth.	B. T. Frederick, Marshalltown, Iowa.
forth.	74,533.—HEMMER, MARKER, ETC., FOR SEWING MACHINE.—	We claim, ist, The U-shaped actal ic gnees, B, provided upon their upper
	W. D. Heyer, New Orleans, La. Antedated February 7, 1868.	curved sides with the slotted horizontal supports, c, the runners, D, having
21, The combination of the cutter. E, spring guard, I, and feed roller, H. whin the table, A, the driving wheel, B, shaft, C, pulley, D, and wheel, G, all	I claim, 1st. The hemmer, p, formed with a concentric groove and pro-	the shoulder, g, for the reception of the end of the rave, all cast in one
constructed and perating substantially as and for the purpose described.	vided with a roller placed obliquely for keeping the work in the groove,	
74,507Cow MILKING MACHINERYL.O.Colvin, N.Y. city.	and constructed substantially as specided.	2d, The metallic knees B. when made V-shaped in their transverse section,
14,40°	2d, The combination in a single machine of a sewing guide, hemming de-	and curved vertically to form a bracefor the runners. D, and supports, c.
l claim, 1st, So operating the "milber" that the same may have a vertical or	vice, tucking and creasing device, cording device, and quilting guide, con-	substantially as described for the purpose specified.
"but ing" movement, substantially as add for the put pose specified. 2d. The pulley, n. and cord, k, in combination with the tube, F. of the	tructed and operating substantially as specified.	
milker, and the bent lever, I. substantially as and for the purpose specified.		74,557.—BREACH LOADING ORDNANCE.—Lucius M, Lull and
3d, The bent lever, I, in combination with the pu hp, D, operating the	74,534,—CAR VENTILATOR.—M. T. HITCHCOCK, Springheid,	_James T.Starr, Walnut Grove, Ill. Antedated Feb 6, 1868.
milker substantially as and for the purpose specified.	Mass.	We clam the breech block or cylinder, B, constructed as berein described
4th The gates or stanchions, B, so constructed and operating as to secure		and used in combination with a cannon provided with lever, D, chain, C, and
the cow while being milked, and to admit of her passage between them when		bar, E, when constructed in the manner substantially as and for the pur-
liberated, substantially as set forth.	described	posés specified.
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74,558.-PORTABLE CHAMBER CLOSET.-William J. Lyman,

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74,558.—PORTABLE CHAMBER CLOSET.—William J. Lyman, East Hampton, Mass.
I claim a portable chamber closet, constructed with the spring platform and funnel, substantially as and for the purpose described.
74,559.—BRAKE FOR VEHICLES.—HORACE B. Marshall, Wal-doboro, Me., assignor to himseli and Samuel R. Bridgham, Hebron, Me. I claim a brake attachment for four wheeled vehicles, composed of the shaft, D. levers, B. brakes, and connecting root, g. and lever, F. substan-tially as shown and described and for the purposes set forth.
2d, The sliding main shaft, D. in combination with the bent levers, B, and brake blocks, a, and connecting root, E, and lever or crank, F, or its equiv-alent, substantially as shown and described and for the purposes set forth.
74,560.—TOOTH BRUSH.—T. S Maury, Washington, D. C. I claim a tooth brush in which the ends of the bristles of which the brush is composed are ground or smoothed and polished, substantially in the man-ner and for the purposes here in described.
74,561.—EDOR PLANE. — Charles D. McAuley (assignor to

 composed are ground or smoothed and polished, substantially in the manner and for the purposes herein described.
 74,561.— EDGE PLANE.— (charles D. McAuley (assignor to bimself and eo, W. Kaylor), Carthage, Onlo.
 I claim, list, The concave cutting black, of, the edge being beveled or sharpened on the outside, and having the returned face, b, slotted for the purpose of securing it in any desirable position to the stock, B, substantially in the manner herein shown.
 2d, The adjustable gage, D, provided with the slot, e, and guard, d', when secured to the stock, B, having theffuard, d, and groove, c, in combination with the adjustable gage, D, cutting black, C, and set scraps, e' and a, when the same are constructed and arranged in the manner and for the purpose herein described and set forth.
 74,562.— NEWSPAPER FILE Louis P McCartz, Son Front 74,562.—NEWSPAPER FILE.—Louis P. McCarty, San Fran-

Gioo, Cal. I claim a newspaper file, constructed Substantially as and for the purpose derein described.

berein described. 74,563.—LAMP.—S. T. McDougall, Brooklyn, N. Y. I claim, lst, So constructing a wick tube that either round or flat wick can be employed, substantially in the manuer as described. 2d. The construction and operation of a telescopic chimney, substantially as and for the purposes specified. 3d. Supending the button to deflect the flame within the chimney, for the purposesfully described.

purposesfully described. 74,564.—QUARTZ CRUSHER.—S.T. McDougall, Brooklyn, N.Y. I claim combining, constructing and operating the pounders and follow-ers, substantially as shown for the purposes indicated. 74,565.—HORSE^{*}HAY FORK.—Edwin McKenzie, Watertown,

N.Y. I claim the locking device constructed as described, consisting of the bent ever, L, givoted to the sleeve. C_{a} and provided with the projection, h, fitting hrough the strip, B, into the sliding rod, A, and held in place by the spring, X, its upper end, l, slotted for the passage of the rod, A', and side strips, ω_{a} is herein shown and described.

as herein shown and described.
74,566. — PAINT AND VARNISH BRUSH.—James McKittrick, Rrooklyn, N. Y. Antedated Fab. 5, 1858.
I clain the taperfug handle, A. of the paint brush, when made round at its lower end, and provided with two inclined pleeses, B. g. upon opposite sides, all constructed as described for the purpose specified.
74,567.—FANNING MILL.—Stewart McMillan, Fletcher, Ohio. I claim, 1st, The inclined shoe, E. having the screens suspended from the grows irane, A, by means of the pivoted bars, h, and oscillated longitudinally throm the crank, s, of the fan shatt, b, by means of the short pivoted bar, g, gross specified.
24, The construction and arrangement of the cross frame, A, hopper, C, oscillated in the pipose specified.

cross usr, e, and connecting roa, a, a.: constructed and described rob the purpose specified. 2d, The construction and arrangement of the crossframe, A, hopper, C, os-cillating pendent shoe, E, boxes. J J, drum, B, fan, D, pivoted lever, e, con-uecting roas, d, and crank, s, as herein described for the purpose "pecified. 74,568. — IMTLEMENT. — Ellis R. Meeker, Elizabeth, N. J. I claim, 1st, The perdent extension, D, of the claw, C, of the hammer, in connection with the sliding Jaw, H, all constructed and arranged substan-tally in the manner and for the purpose setforth. 2d, The detachable extension, E, with the Kuide rod, G, attached, and its upper end fitted in the pendent extension, D, inconnection with the sliding jaw, H, and the screw, I, all arranged substantially in the manner and for the purpose specified.

1 JUS. -- UORN SHELLER. -- John A. Merriman, Chicago, Ill. I claim, 1st, The shelling wheel, H, rrovided with one or more channels, d, having elastic or yielding bottoms, in combination with a shelling cone, K, arranged and operating substantially in the manner and for the purpose set forth. 2d, In combination with a correct. purpose specified. 74 569. -- CORN SHELLER.-- John A. Merriman, Chicago, Ill.

forth. 2d. In combination with a corn shelling wheel and cone, an annular cob re-ceiver, I, and cob conveyer, h, arranged and operating substantially in the manner and for the purposes described. 3d, In combination with the shelling devices and cob receiver, **s** above de-scribed, another corn receiver, L, and corn conveyer, 1, arranged so as to operate stibistantially at syncified. 4th. in combination with a shelling wheel, H, cob receiver, I, and corn re-ceiver, I, the arrangement of the fan wings, J, operating as and for the pur-poses shown and sectorth.

74,570.—PROCESS OF ROLLING HOES.—S. A. Millard, Clay

74,570.—FROEES OF ROBLING HOES.—O. I. Intrace, every ville, N. Y. I claim forming the head and blade portions of a hoe by rolling the stock out between rotary dies, in the manner substantially as described, that is to say, by rolling the stock alternately from near the center toward each edge, so as to "spread" the blank, and then alternately lengthwise in one direc-tion, to form the ears, and lengthwise in the other direction to draw or platt out he blade toward its edge. 74,571.—HAY PRESS.—Moses R. Molleur, Chicago, Ill. Under the acombination of the vertical hor A, provided with doors, B B.

l claim the combination of the vertical box, A, provided with doors, B B opening uwward, the movable bottom, C, follower, D, cords, K, rollers, R ratchets and pawls, H I, all arranged and operating as and for the purpos spe 2d

cfied. i In combination with a hay press having yielding sides, as described, the M and lever, P, arranged and operating substantially in the manner and the purposes set forth. 572.—MACHINE FOR CORRUGATING SHEET METAL.—Geo. rod, M,a for the p 74,572.

R. Moore, Lyons, Iowa. I claim, ist, The combination of the base plate, B, standard, A, arms, E Ind F, and arched braces, S constructed and arranged substantially as de

I claim, ist, i he combination of the base plate, B, standard, A, and a and F, and arched braces, S constructed and arranged substantially as de-scribed. 2d, The combination of the extension arm, G, with the arm, F, and hinged supports, C and D, constructed and arranged substantially as described. 36. The combination of the strength of the first of the combination of the rest. The combination of the strength of the strength of the strength of the combination of the rest. 36. The combination of the rods, M A, gave, L, latch hut, O, and screw ar-bor, P, constructed and arranged substantially as described. 74,573. — BoxES FOR STREET STOP COCKS. — Harvey A. Moore, E. Ot's Frink and Samuel C. Frink, Indianapolis, Ind. We claim a street stop cock hox for gas, water, or other purposes, provid-ed with the flanges, e and f, and the inclined flanges, h, substantially as described and for the purpose specified. 74,574. — COMBINED CANE MILL AND STEAM ENGINE. — John Moore, Madison, Ind.

74,574.—COMBINED CARE HILL AND CLEAR COLLAR MODEL AND CLEAR MODEL

forth, and lever, B., provided with aperture, b, when operating substantially as and for the purpose described. 74,576.—CARRIAGE JACK.—Adam Meyers, Van Wert, Ohio. I claim the combination of the adjustable spring catch or shoulder, E, with the long arm A. of the jack, substantially in the manner herein shown and described and for the purpose set forth. 74,577.—HARVESTER.—Wm. Neff, Centre Hall, Pa. I claim the arrangement of the rocker lever, i, on the shaft, f, and its con-nection to the main frame by a link, j, and to the lever, D, by a fixible con-nection, k, so that operating the lever, D, will raise and lower the imger-bar at both ends simultaneously, substantially as described. Also, in combination with a hinged drag bar, B, that canroll to and from the main risme, the gag bar, d, connected thereto by the curved pivot, e, as and for the real arms, working in the same circuit, but at different velocities, and independent of each other at different portions thereof, when driven through eccentrically.hung circular gears, substantially as described. 74,578.—DEVICE FOR CHANGING FEED.—R. L. Nelson, Mex.

through eccentrically hung circular gears, substantially as described. 74,578 — DEVICE FOR CHANGING FEED.—R. L. Nelson, Mex-

¹ico, N. T. I claim, ist, So arranging the gear wheels, a b, on two parallel shafts, B C, which are to be connected, for changing the feed of certain mechanism that the line drawn over the faces of the wheels on either shaft will be a curved line as set forth. N. 1

I claim, 1st, The combination of the segments, A, having Chambers, E, with the slotted stem, B, and heads, e, substantially as set forth. 2d, In combination with the above, the links, L, wedges, a, and key, D, sub-stantially as specified. 3d, In combination with the above, the screw, H, and springs, S, substan-tially as described.

36, 11 compliation with the above, the screw, H, and springs, S, substantially as described.
74,584.—SEWING MACHINE.—T. C. Page, Chicopee, Mass. Antedet Feb. 7, 1868.
I claim, 1s, A needle bar and needle, having a reciprocating rotary motion, in combination with a looping device, working beneath the bed plate of the macbine, substantially as described.
2d, The combination of the spiral slot, b, and straight slot, l, formed in the needle bar, e, substantially as efforth.
74,585.—MULE FOR SPINNING.—John Paley and Thos. Kawsthorne, Preston, G. B. Patented in Ergland, Nov. 23, 1864.
we claim the combination, with the driving band, b, of the fast and loose pallers, d, of the cam shat, the connected levers, e1, and the block, l, and weight, m, of lever, i, substantially as shown.
74,586.—MACHINEFOR CUTTING AND SEPARATING DYE WOODS. G. W. Pearson. Bilerica, and D. Coburn, Lowell, Mass.

74,586.-MACHINEFOR CUTTING AND SEPARATING DYE WOODS. G. W. Pearson. Bilerica, and D. Coburn. Lowell, Mass. We claim, 1st, The conducting spout, e', and aproas, a'a', or their equiva-lents, in combination with the cylinders, b b, for the purpose substantially as described. 2nd Tating explication of the elevator and reel bolt, r. in combination with the data transformed and for the purposes fully set forth. 3d, The combination and arrangement of the cylinders, b b, with the cut-ters, c, conducting spout, e', aprons, a'a', reel bolt, r. cam, a, block, v, and elevator, all for the purposes freinde and fully set forth. 74,587.-COMPOSITION FOR MANUFACTURING STONE, AND FOR other purposes.-A. Pelletier, Washington, D. C.

(4,367.—COMPOSITION FOR MANUFACTURING STONE, AND FOR other purposes.—A. Pelletier, Washington, D. C. I claim, ist, the compound consisting of vegetable fiber, mineral asbestos, emerypowder, soapstone, silicate of soda or (potassa), and litharge, substan-tially as described and set forth. 2d, The compound consisting of vegetable fiber, mineral asbestos, emery, soapstone, silicate of soda, orgo tash, litharge, when maufactured into stone (sand being used in addition), or when coated on wood, cloth, leather, brick, stone, metals, or other solid surfaces, and treated with chloride of zinc, stals of lead, and manganese, sulphate of lime, substantially as described and for the purpose set forth.

set forth. 3d, As a new article of manufacture, the composition, substantially as here in described and for the purposes set forth. 74,588.—HEAD BLOCK FOR SAW MILLS.—Benjamin P. Perry,

Richmond, Ind. I claim, 1st, Connecting the pawls, Pand P', with the sleeve, a, on the same side of the latter, by wich a simultaneous action of said pawls is pro-duced, resulting in the alternate operation on the ratchet, substantially as

duced, resulting in the alternate operation on the category, additional set forth. 2d, The collet, H, having the projection, h, in combination with the eccentrics, and n', for adjusting the teed, substantially as set for h. 74,589.—CARRIAGE STEP.—G. M. Flympton, New York city. I claim a step for carriages, etc., formed of the two plates, F and A, in com-bination with the india-rubber ribs, D, or their equivalents, when the plate, A is formed to receive such ribs, D, substantially as and for the purpose de-scribed. 74,590.—BRICK AND MORTAR ELEVATOR.—Anthony Pohl,

Detroit, Mich. La in the endes chain or belt carrying pivoted open frames, supporting he removable shouldered, boxes, f, for the purpose substantially as de-

74,591,—SHACKLE FOR PLATFORM SPRINGS OF WAGONS.—J

(4,991.—SHACKLE FOR PLATFORM SPRINGS OF WAGONS.—J. Price, New York city. I claima shackle for connecting the ends of the parts of platform springs, composed of the cross tubes, a b, and bolts, c c ee, all constructed and ap-piled substantially in the manner as and for the purpose here inspectified. 74592.—() x YOKE.—Homer Rawson (assignor to himself and O. H. Shaw), Jericho. VI. I claim the adjustable hinge, C, on the cap, A, and the movable or adjust-able staple, E, in the center of the yoke, B, all for the purpose as herein set forth. 74592.

74,593.-VALVE FOR STEAM ENGINE.-Joseph Reichmann,

(4,395.— VALVE FOR DIEAM ENGLASE. Couple International Couple flows, I caim, ist, the steam and exhaust ports, so arranged as to cause the mo-tion of the valve piston, or its equivalent, and to check and stops aid motion of said piston, or its equivalent, substantially as herein set forth. 2d. The stationary valve-plate, a constructed as deach bed. 3d. The combination of the valve, d, piston, f. cylinder, c, plate, h, and valve, i, constructed as described, and so arranged as to produce self-acting and self-checking motion, substantially as and in the manner herein set forth.

forth. 74,594 — BREECH-LOADING FIRE-ARM.—S. S. Rembert, Mem-

14,034. — DREECH-LOADING FIRE-ARM.—S. S. Reinbert, Meinphis, Tenn.
 I claim, Ist, The retractors, O, pivoted to the sides of the stock, and operated by the triggerg used, whereby, as the barrels are raised by pushing forward the triggerg used, whereby, as the barrels are raised by pushing forward the triggerg used, the upper ends of the retractors catch against the nipple, K, and withdraw the cartridge, as herein shown and described.
 24. The inpuble, K, when inserted in the cartridge case, J, with n's lower end resting upon the screw block, N, in the under side of said cartridge, as herein shown and described.
 74,595.—PEARL BARLEY MACHINE.—W. Rickard, Chicago, III. Loign in the Therein above, and the super s

I claim, ist, The cylinder, C constructed substantially as herein shown and described, in combination with the perforated casing, D, and seat, B, as and for the purpose set forth. 2d. Forming the long holes or slots in the casing, D, with their lips inclined to the size and a the last with a threat a barrait shown and described as

the right and to the left, substantially as here's shown and described, as the machine may work equally well whether run backward or for-

ward, 34, In combination with the cylinder, C. case, D. and shaft, B. as construct-ed, the fan chamber, G, and fan, H. as set forth, for the purpose specified. 74,596.—HITCHING POST CAP.—Richard N. Roberts, New

Britain conn. Iclaiman mproved article of manutacture, viz: a metallic hitching-post ap, in combination with a cam strap-holder, constructed and arranged sub-tantially as described.

stantially as described. 74,597.—STEAM GLOBE VALVE.—Louis C. Rodier, Spring-

field, Mass. I claim the metallic plug having one or more valveseats therein, and one or more valves attached thereto, in combination with the shell or case, A, of more valves attached thereto. In combination with the shell or case, A, of clobe valve, the aperture, B, being constructed therein so as to receive said ig, and the whole arranged substantially as herein described and set

74,616. — DIE FOR MAKING SQUARE-HEADED BOLTS. — William Shields, Philadelphia, Pa.
I claim the combination of the jaws, with flanges, A A, and the planger, B, constructed and arranged, and operating substantially as and for the purpose herein described.
74,617. — ANIMAI. TRAP. — James A. Sinclair, Woodsfield, O. I claim, 1st, The combination of the tramp wheel, J, shaft, L, cog wheel, M, and toothed bar, N, having a knife or spear, X, pivoted to its end, and spring. O, with each other, substantially as herein shown and described, and for the purpose set forth.
2d, The combination of the drop gate, K, bent lever, R, and spring, O, with each other substantially as herein shown and described, and for the purposes forth.
3d, The combination of the drop ster, S, substantially as herein shown and described, and for the purpose set forth. 74,598.—PLATE LIFTER.—G. O. Roe, Conantsville,Conn. Aneach other, substantially as herein shown and described, and to the partous set forth. 4th, The combination of the arm, W, with the bar, N, substantially as here-in shown and described, and for the purpose set forth. 5tb, The combination of the arms. A', and guide plates, Z, with the bar, N, and frame of the trap, substantially as herein shown and described. 6th, The combination of the nuclined guide, B', and spring, C', with the bar, N, and frame of the trap, substantially as herein shown and described. 7th (JIS.—BERHIVE.—W, Y, Singleton, Springfield, III. I claim, 1st, The absorbent bottom, C, and lid or top, D, constructed and applied to the hive, substantially in the manner as and for the purpose set forth. 2d, The sir chamber, B, with the air passage, E, attached, substantiallyas and for the purposespecified.

tedated Feb. 6, 1868. I claim the litter composed of the hooked arms, b, shank, a, and sliding look, c, the whole arrange l and operating substantially as and for the pur-lose specified. 74,599.—BOOTS AND SHOES.—Evan T. Rogers, San Francis-

74,399.—BOOTS AND SHOES.—Dvan 1. Rogers, San Francis-co, Cal. I claim making the ridges on the markers by casting them in one piece with the piete, substantially as described. 74,600.—HARVESTER.—Wm. Rose, Lake, III. I claim the combination of the cam wheel, J K. arm, P. rod, Q. block, L. arm, M. and arc, N. all constructed. arranged, and operating in the manner and for the purposes specified. 74,601.—PLIERS FOR BENDING SHEET METAL.—Maie'r Roths-child. Harrisburg. P.a.

(A)001.—1 DIARS FOR DIAR DIAR State Strength of the laws, A and B, and their combination with the handles and spring, as herein described and for the purpose set forth.
 (A)002.—SLEIGH BRAKE.—William D. Rowlstone, Butter-

nuts.N.Y. Iclaim the above named sleigh brake, arranged substantially as above de-scribed and for the purposes herein mentioned. 74,603.—COTTON AND HAY PRESS.—Wm. Russell (assignor to

(4,005.—COTTON AND HAY PRESS.—W m. Russell (assignor to himself and Geo. Winship), Atlanta, Ga. I claim, list, When used in a cotton and hay press, the combination of the stationary vertical screw rods, R R, with the movable nut, V, having the trunnions, v v, and the arms, H H, for the purpose of moving the follow block up and down, while allowing it to be turned aside from the top of the press box, all the parts referred to operating substantially in the manner and for the purposes specified. 2a, The bent arms, H H, attached to the follow block, and provided with earns, hh, which are supnosed by and provided with

purposes specified. a, The bent arms, H H, attached to the follow block, and provided with s, h, which are supported by and pivoted upon a nut or other device, rking up and down by the action of screw rods, R R, substantially as and

Centre, N. Y. I claim a medical compound, comprising the ingredients about in the pro-portions herein set forth. for the purpose set forth. 3d, The gear wheel, G, provided with the inner rim, oo, and fixed to the wooden beams, d., substantially as and for the purpose set forth. 4th, The combination of the screw rods, R. R, with a follow block fixed to piroted error easist turn back away from the ton of the prese bay when else 74,623.-HARNESS.-John J. Smokey, Natchez, Miss.

2d, In combination with the above, the employment of the ingredient, india-rubber, substantially in the manner and for the purpose set forth. 74,607.—PROCESS OF PRESERVING DEAD BODIES.—Charles A, Seely, and Charles J. Eames, New Yorkcity. We claim. 1st, The process for preserving dead hodies, substantially as de-scribed.

(MARCH 7, 1868.

scribed.
2d. The use of carbolic acid, and combinations of carbolic acid with other substances for the preservation and embalming of dead bodies.
74,608.—DISINFECTING COMPOUND.—Charles A. Seely, and Charles J. Eames, New York city.
We claim the disinfecting compound as above described.
74,609.—LATHEFOR TURNING IRON.—William Sellers, Phila-

Iclain

delphia, Pa. claim, 1st, Attaching the fixed or live head to the shear or bed, by bolts ing through and straiging upon the flanges on the cross girths in the bed escribed. pas as d

2d. Forming a bole in the side of the lathe beds, for the purpose of operative the bolts or other holding-down apparatus for the live heads, substan-The true context conternorming nown apparatus for the live heads, substan-thal, as described. Sd(Casting a web across the bottom of lathe beds, between the two girths, under the heal, for the purpose of stiffening the bed, when a hole is made in the side, and to form a secure tool receptacle in the same, substantially as described.

yue since, and to form a secure tool receptacle in the same, substantially as described.
4tb, Supporting the back journal of the spindle in a solid conical bearing when this bearing is held in position by an oft box, substantially as described.
5th, Receiving the end thrust of the spindle upon collars placed inside of an oil box, substantially as described, and in or solver and the spindle to pass through it, for the purpose specified.
6th, The block, N, substantially as described, and for the purpose specified.
7th, Placing the lead screw under cover, and in a bearing its whole length, substantially as described.
8th, Engaging or disengaging the saddle or slide rest with a feed screw, supported as described, by means of a segment of a nut moving horizontally. For the purpose specified.
9th, Operating the longitudinal and cross feed of the lathe by two clutches on the same shaft, in the manner substantially as and for the purpose specified.

on the same shaft, in the manner substantially as and for the purpose spe-cified. 10th, Engaging and disengaging both clutches by movements of the same handle in the same direction, substantially as described. 74,610. — SPITTOON FOR CARS. — J. H. Seymour, Hagers-town,Md. I claim, let, The combination of the conical shell, B, with the spittoon, C, and the bottom, A A, substantially as and for the purpose specified. 2d, The neck. a, made with its interior of conical form, and largest at its lower end, arranged at the bottom of the spittoon, C, and in relation with the valve b, substantially as and for the purpose specified. 74,611. — MANUFACTURE OF TIN-LINED LEAD PIPE.—William Anthony Shaw, New York city. Anticated February 6, 1888. I claim, let, The combination of the mandrel, C, with the ram, A, said man-dref being fieldly connected to said ram in a deep cavity, as shown and de-scribed, so as to give said mandrel to the ram by the interposition of a flexible ink, substanting the mandrel to the ram by the interposition of a flexible ink, side as described. 3d, in combination with the ram, A, the cup, B, for the purpose of facilitat-ing the connection between the mandrel and the ram, substantially as de-scribed. 74,612.—MANUFACTURE OF TIN-LINED LEAD PIPE. William

74,612.—MANUFACTURE OF TIN-LINED LEAD PIPE.—William

14,012.—MANUFACTURE OF IN-LINED LEAD I IFE.— WITHIN Anthony Shaw, New York City. Antedated February 6, 1868. I claim, 1st, Theformation of a metallic pipe, by forcing two or more of the ductile metals together, in the form of tubes, over a mandrel or core, out of two or more cylinders, and through, on, or in two or more ties, substan-tially as described. 2d, The use of two or more cylinders, two or more rams, and two or more desc or their senurgients when combined with a mandrel or core, empera-tion core, substan-tial core and the core of the core of two or more the core of two or more desc or their senurgients when combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core substan-tial core of two or more combined with a mandrel or core of two or more two or more the core of two or more combined with a mandrel or core of two or more two or more two or more combined with a mandrel or core of two or more core or two or more core or more core or two or more core or two or more core or core or core or more core or more core or more core or more core or core core or more core core or more core or more core or more core or core core or core or

2d, The use of two or more cylinders, two or more rams, and two or more dies, or their equivalents, when combined with a mandrel or core, substan-tially as described, for the purpose of making laminated pipe, whether said pipe be made of metal or other material. 34, The manufacture of a metallic pipe, consisting of three tubes of soft metal, such as a tube of lead pressed between two tubes of th. by 6-ming and lorcing them together, through three dies, out of three cylinders, over one core or mandrel, in the manner described. 4th, In combination with a pipe press, a set of drawing or stretching roll-ers, for the purpose of drawing or stretching the pipe on the mandrel or core, as it issues from the press, substantially as described. 5th, The manufacture of a continuous metal pipe, whether of lead or or composition, from metal disposed in two or more tubes, over a mandrel or core, and in such proportion that the rotating cylinders, by for cong it out of thes: me in the form of two or more tubes, over a mandrel or core, and in such proportion that the rotating cylinders, by the failure of the sume time, so as to avoid the defect in the pipe resul-ing from the failure of the successive charges to thoroughly weld, as in the ordinary press, substantially as described. 74,613.—MANUFACTURE OF TIN-LINED LEAD PIPE.—William Anthony Shaw, New York City. Antedated February 6, 1868.

74,613.—MANUFACTURE OF TIN-LINED LEAD PIPE.—William Anthony Shaw, New York city. Antedated Feirwary 6, 1868. I claim, 1st, Making the charge of metal in three distinct parts as described, and unling them either before or affect they are put in the cy linder. 2d, Making the central ingoit or charge of sin, in the form of a double frus-trum of a cone, or its equivalent, for the purpose of securing a uniform thickness of the in the lead tube or pipe. 3d, Making the intermediate lead or alloy ingot in the form of a frustrum of a cone, substantially as described. 4th, Making the cavitles, D, in the upper end of the charge, substantially as described, for the purpose specified. 74,614.—METHOD OF MAKING TAPERING TUBES.—William Anthony Shaw, New York city.

Anthony Shaw, New York city. I claim the manufacture of a pipe, funnel-shaped, slong its interior diam-ter, and of equal diameter externally, by pressing the material of which the ope is composed out of a retaining or linder, through a die, over a taper mandrel, substantially as described.

I claim a hammer, the head of which is made of two parts, A and C, con nected by the handle, M, and spring, k, when the several parts are construct ed and operate in relation to each other, substantially as shown and specified

74,616.—DIE FOR MAKING SQUARE-HEADED BOLTS.—William

and for the purposespecified. 74,619.—MODE OF BELTING TOBACCO.—Reuben T. Sitterley, Callaway county.Mo. I claim the construction and combination of the blades, as herein de-cribed.

seribed. 74,520.—HORSESHOE.—George W. Skinner, Rockford, Ill. I claim, ist, Constructing a borgeshoe with a bevelled projectingspur, a, at its front, and the toe calk with a corresponding recess, to receive the spur, a, and then securing the toe calk in place by means of the same, together with a screw, b, asshown and described. 2d, The detachable heel calks, fitted to a recess in the under side of the shoe, and held in place by means of the projection.E or E', and screw, a'.as shown and described. 2d (501)

Snown and Gesched. 74,621.—LATHE REST.—H. K. Smith, Norwich, Conn. Iclaim the nut. F. made in three parts, G H and I. arranged together with screws, L and E. for operation, substantiality as and for the purpose described. 74,622.—MEDICAL COMPOUND.—Joseph Smith, Schodack (ADMEDICAL COMPOUND.—Joseph Smith, Schodack)

74,615.—HAMMER.—Otis Shepard, Alton, Ill.

2d, Hinging the swinging frame, E, in Which the shifting gear, d, is held, s	vated above it, substantially as described.	substantially as and for the purpose described.
that the shifting gear will first come in gear with the driving shaft, and the		
with the shaft that is to be driven, as set forth. 3d, The sliding frame, D, in which the shaft, F, that carries the shifting ges	rods, R R, arms, H H. and follow block, B, all the parts being constructed and	74,624.—CALCULATING SCALE BEAMGeorge A. Smythe,
d, has its bearings, when connected, by means of jointed bars, e, with th	e 74 604 - Protovin (nutre Russing Vapoleon Sareny N V city	Reading, Pa. I claim the arrangement and combination of the slide, B, clasping around
rock shaft, G, substantially as and for the purpose herein shown and de	I claim, 1st, The bead block, d, constructed in the manner specified, in com-	the whole beam, marked and notched as represented in fig. 1 and fig. 2, to-
scribed. 4th, The arrangement and combination of the shafts, B C, carrying the gcs		gether with the scape of the slide, and the ounce line, marked sixteen on
wheels, a a, respectively, with the wheel, d, on the shaft, F, sliding trame, I	forth.	slide, showing the fractional parts of a pound and an outice on the beam, and the amount in money.
hinged frame, E, levers, c c, bars, e e, and rock shaft, G, all made and oper	20, The rest holder, g, or g', in combination with the head block, c, rod, b,	
ating substantially as herein shown and described.	column, a, and rest, is K, substantially as and for the purposes set forth, 3d, The extension cabinet front or panel, in combination with the table, p,	74,625.—BEER FAUCET.—J. Michael Stark, Buffalo, N. Y.
74,579.—CARRIAGE WHEEL.—T. Nevison, Jr., and J. Nevisor	, substantially as specified.	I claim the combined cylinder and valve. B C, provided with the feeding and discharging holes, R Q, the pinnger, F G, and ring, K, all constructed
Morgan, Ohio.	sta, 1 wo or more rests, supported from one column by means of the rest	and arranged to operate within the body of the faucet, substantially as de-
We claim the herein-described wheel, when the spokes of the same are con	bolder g, substantially as set forth. 5th, The curved arm, n', and movable table, n, in combination with the	scribed.
structed and secured to each other and the felly or rim, in the manner sul stantially as set forth.	column, a, and rod, b, as and for the purposes set forth.	74,626.—HARROW.—C. E. Steller, Chicago, Ill.
74,580.—SLIDE-BLOCK LAST.—P. A. Newhall, Lynn, Mass.	foth, Attaching the column, a, removably to a base, a', that is permanently	I claim, 1st, The combination of supports, J, and teeth, H, substantially as
I claim, in combination with a slide block, fitted by tongue and groove t	attached to the floor, in order that the rest may be a fixture when connected to such base, huiremovable to other bases, for the purposes set forth.	and for the purpose herein specified. 2d, The combination of teeth, H, collars, K, and caps, I, substantially as
slide upon the last, the square face or point, g, to abut against the shoulde		and for the purpers out forth
f, in the last, to be thereby protected from slipping back, substantially as se		3d, The round teeth, H, arranged to operate in enlarged holes, L, substan-
forth. 74 591 WAGON DOLD SUPPORT Don Carlos Newton De	Miss. I claim, 1st, The propeller, B, sliding rod, C, with its plug, D, and locking	tially as described. 4th, The rod, C, secured by staples, P P, in combination with joint, D, ar
74,581.—WAGON-POLE SUPPORT.—Don Carlos Newton, Ba	slide, 1, in combination with a faucet, substantially as and for the purpose	ranged substantially as and for the purposesset forth.
tavia, Ill. Iclaim, 1st, The combination of the steel spring, B, with the wooden le	set forth.	5th, The rods, E E, in combination with rod, C, and joint, D, arranged to
ver. C.	zu, the combination of the inter, G, tocking shue, I, and screw, u, ar-	orerateas and for the purpose described.
2d, The manner of attaching the wooden lever, C, to the draw bolt, E, b	ranged to operate essentially as specified. 30, The flexible, spiral, or twisted vanes, B B', arranged as described, in	74,627.—BEEHIVE.—H. A. Stidger, Carrollton, Ohio.
means of the chain, D. 74.582.—DEVICE TO PREVENT HOGS FROM ROOTING.—Ge	combination with the mechanism for operating the index or closing devices,	I claim, 1st. The combination of the ventilating openings. A E, with the
Nixon and Wm, L, Nixon, Sandyville, Ohio.	· substantially as specified.	sli ing bottom board, F, and hinged cover, h, substantially as and for the
We claim the within-described device, consisting of the plate, A, arms,	74,606.—Composition for Roofing.—Henry K. Schanck,	purposes set forth. 2d, The movable glass frame, D, in combination with the doors, b b, and
C, with holes, D D, and wire, B, the several parts being arranged and use	Chicago, Ill. Antedated December 27, 1867.	sliding bottom board. G. substantially as and for the purposes set forth.
substantially in the manner and for the purpose herein specified.	I claim, 1st, A composition for roofing and other analagous uses, composed	3d, The strip of cloth, g2, on the under side of the lower end of the bottom
74,583.—STEAM-ENGINE VALVE.—Wm. Ord, Brooklyn, Ohio	of coaltar, snlphur, plumbago, clay, and litharge, substantially as herein	board. G, in combination with the foot, g1, of the beehive, substantially as

74,628.—BUREAU BEDSTEAD.—Mirum Sulzbacher, New York

city. I claim a bureau bedstead containing three extension pieces, a b c, with rrooves, dowels, and transverse slats, a'b' c', said extension pieces, when pushed in being enclosed in a case, A, with folding and sliding doors, f, all as pu 74,629.—DENTAL INSTRUMENT.—S. C. Taylor, Toledo. Ohio.

12 claim, lst. In combination with the mallet and the trip motion, a perma-nent and a binged lever, so that the user may bold the instrument and oper-ate the mallet at the same time, and by one and the same hand, substantially as described. 20, in combination with a pivoted lever and to e piece, or "crotchet," a rod and hook for catching, drawing down and releasing said to e piece, substan-

and no ok for catching, due wing down a darbox of tally as described. Sd, in combination with the mallet and a spring, in a plugging instrument, the sliding dog, or catch, and the teeth, for the purpose of compressing, grad uating, or regulating the action of the spring upon the mallet without chang ing the extent of the motion of the lever, g, substantially as described. ,grad

74,630.-WATER HEATER FOR BATH TUBS, ETC.-William H. 4,6,60.— WATER MEATER FOR DATA FORS, 2.5. Thomas, Sacremento, Cal. I claim a steam coil besting furnace, submerged in water, and supplied rith air from the top, and provided with z rak. E, and deflector, h all con-tructed and arranged substantially as berein shown and described. 74,631.— CAR COUPLING.— Stillman Thorpe and Wesley

74,631.— CAR COUPLING. — SUITIMAL THOSPO and THE ADDITIONAL AND THOSPO AND THE ADDITIONAL AND THE ADDITI

74,634.—MACHINE FOR BUNDLING KINDLING WOOD.—Leon-

(4,634.—MACHINE FOR DURDLARG INTERACTION OF A STATE AND A STATE

Sd, The clearer, L, arranged in relation with the bundling tube, J, and op-erated from the cross heads, F'F", in the manner substantially as and for

. avoid from the cross beads, F'F'', in the manner substantially as and for the purposes set forth. "th, The combination of the cam, Q, levers, R T', slide, S, with pawl, T, at tached, and the counterpoise, U, all constructed and arranged to operate the feed wheel, substantially as set forth.

tached, and the counter poise, 0, an constructed and an angle a of the track field where b_{a} is a statistic track of the three cross heads, $F \in F^m$, arranged in connection with the hooks K K, and pins e, to operate and give the proper or desired movements to the bundling tube, plunger and clearer, substantially as shown and de control of the counter of the statistic control of the counter of t

74,635.—PEAT MACHINE.—Josiah Tisdale, South Dedham

Mass. I claim the arrangement, as well as the combination of the curved blades or shares with the screw propeller and its box, the whole being to operate together, substantially as bereinbefore explained. 74.636.—FRAME FOR SUPPORTING AND MOVING CLOTH TO BE

74.030.— FRAME FOR SOFFORMANG AND MOVING CLOIM TO BE CREASED.-A. W. Todd, Chicago, Ill. I claim the combination and arrangement of crank, O, ratchet wheel, P, pawi, R, end pieces, B B, bar, D. rollers, C and A, points, h, and feather edge, g. tor supporting and moving the material to be creased, as described. 74,637.— BOOT BLACKING APPARATUS.— John Vandecar, Brooklyn, N. Y., assignor to Thaddeus B. Beecher, New Haven, Conn. I claim connecting the foot rest of a boot blacking apparatus or device to its standard legs or supports, by a ball socket john, substantially as herein specified.

74,638.—PUMP.—Jas. Vaughn and John McGee, Galena, Ill. We claim the arrangement of the movable cylinders A, pivoted at B, in the yokes D, at each end of the horizontal rocking beam C and fitting over the pistons. G, immovably fixed in the framing at each end of the cylinders, all constructed as described, whereby the cylinders are operated by the rocking beam. C, and kept invertical line upon said pistons by the pins. B, in the yoke, D, as acrelin set forth for the purpose specified. 74,689.—TITL ALARM AND LOCK.—James J. Wagenhorst (as-signor to bimself, C. H. Zink and W. R. Weand), Philadelphia, Pa. I claim, 1st, The combination of the tumblers, D, and their projections, e, with herers, E, on each of which are cams, fand f', all substantially as speci-fied. 2d, The spring slide. L, its striker n and constructive bluck

ed. 2d, The spring slide, L, its striker, p, and adjustable block, q, in combina on with the ling, t, the sliding frame, G, its projection, s, and the recess, r, a the case, A, as: substantially as and for the purpose specified. Sd, The spring slide, L, and its striker, p, in combination with an alarm tion wi in the c

bell, M. 74,640.-WASHING MACHINE.-C.E. Wahlgren, Knoxville, Ill.

I claim, ist, The reservoir, B, in combination with the fluted ribs or rollers, Flot a washing board or machine, substantially as herein described. 2d, The wheels, H A, or their equivalent, in combination with the reser-voir, B, and fluted ribs or rollers, F, substantially as herein described.

voir, b, and nuedrios or rollers, t, substantially as herein described. 74,641.—COMPUTINE APPARATUS.—Thomas Walworth, New-ton Heath, GreatBritain. Antedated Feb.14.1868. I claims a plate, b, with an opening, c, and with graduations at its edges and at the edges of the opening, in combation with a graduated revolving disk, having ligures arranged in radial rows, and with a gointer secured to and turning with the disk, the whole being constructed, arranged and oper-ating substantially as described.

ating substantially as described. 74,642.— WAGON BRAKE.— Joseph Walton, Delevan, Wis. I claim, 1st, The brake, m, hung to box, A, by hooks, V, in combination with reach, B, substantially asset forth. 2d, The combination of guides, S, plate, H, pin, I, spring, J, and rollers nubstantially as described.

substantially as described. 74.643.—UORN SHELLER.—Joseph Warren, Lodi, Ohio.

74 643.—UORN SHELLER.—Joseph Warren, Lodi, Ohio. Telaim the hopper, D. vaconstructed with octagonal sides, D', spring, E, in combination with the case, A, for the purpose set iorth.
74,644.—SILK CLEANER.—Wm. G. Watson, Paterson, N.J. Telaim, ist, The horizontal frame, A, provided with a curved guideA, post D, flange b, and stard a, all constructed and arranged substantially as and for the purpose set forth.
24, in combination with the above the fixed knife, B, and adjustable knife. C, when said knives, B and C, are hor izontally arranged and reversibles, sub-stantially as and for the purpose set forth.
36, in combination with the frame, A, and knife, C, the adjusting screws, d., ubstantially as set forth.
36, in combination guides A, post D, stand a, and fance b, fixed knife B, adjustable knife C, and screws d c, all arranged as set forth.
74,645,—INNER SOLE.—R. A. Webster, Sandisfield, Mass. I claim as a, new article of manufacture, an input sole composed of two.

I claim as a new article of manufacture, an inner sole composed of two strips of wood, A C, secured together by means of the gutta percha strip, B heated and placed between them, as herein shown and described for the pur

GANG PUNCH.—Benj. G. Welch, Danville, Pa.

to be construction and arrangement of the dies, c^*c^* , or a gauge uncertain the construction and arrangement of the dies, c^*c^* , or a gauge uncertain sconnected or separated from each other by suitablespaces, e^*c^* , in the i d plate, c^* D, substantially as described and set forth, for the purposespec 74.647.—CULINARY BOILER.—Isaac H. West and Tertius L

(4,04).—ULLINARY BOILER.—Isaac fi. West and Tertus L. Camp.Evans, N. Y. We claim theem ployment, in a closed steaming chamber, of an air passage near the bottom of said chamber, for admitting air beneath the body of a doscribed, and loperating in the manner and for the purpose set forth. Alog in combination with the central steaming chamber, A. arranged as a boy in combination with the central steaming chamber, A. arranged as a boy described, the enclosed end receptacles, B B, operating in the manner a door described, the enclosed end receptacles, B C, and the manner a door described, the enclosed end receptacles, B C, and the manner a door described, the enclosed end receptacles, B C, and the manner a door described, the enclosed end receptacles, B C, and the manner a door described, the enclosed end receptacles, B C, and C, a

OIL BURNING APPARATUS.-A. J. White, Ballston

Spa, N. Y. I claim the combination of a wick tube, a, and pipe, b, with a movable res rvoir, c, attached to a hollow stem cock, the whole arranged so as to oper the substantially as set forth. 74,649.-CARRIAGE CURTAIN FASTENER.-E. P. Whitney

Stamford, Conn. I claim a fagtener for the aprons and curtains of carriages, composed of the parts, A and B, the former provided with the eyes, c c', and the latter with the head, d, and the offset, e, and both provided with loops, a, and otherwise the head.

2d. Constructing the dirt elevating wheel et a ditching machine in two sections. D D', and providing them with radial spades, G, whose bases, g, are dovetailed into the rims, E E', of the wheel, and the whole secured together by holts, e, substantially as herein described.
3d, Thesorew, N n, winch, O, nut, o, silrrups. P p p', and yokes, R R, arranged and operating as and for the pirpose specified.
4th. in combination with the elevating wheel, D D', constructed as described; the fixed and parallel cutters, C C', as and for the purpose specified.
5th, In combination with the elevating wheel, D D', constructed as described; the showel. S, for the object set forth.
6th, In combination with the elevating wheel, D D', endless band, H h, and drum, I, the showel, S and to be standard, J', groover, J, box, I, and wedge, K, arranged and operating substantially as and ior the object set ated.
7th, In combination with the frame. A, and vibratory platform, B, the perforated clevis, Y, pin, c, and plate, A', for the object stated.
74,654.—APPARATUS FOR VIGNETING PHOTOORAPHIC NEGATURS.—F. Wolf, Philadelphia, Pa.

TIVES. -F. Wolf, Philadelphia, Pa. Antedated Feb. 5, 1868. I claim the screen, C, rroyided with a suitable hole, the edge of which is mace of a suitable transparent or semi-transparent material, in combination with supporting arms, D, and with a photographic camera, A, substantially as and for she purpose set forth.

as and for the purpose set forth. 74,655.—VENTILATORS.—H. B. Worth, Chicago, Ill., assignor to himself, Wm. H. Chapin and A. L. Creamer. I claim, 1st, The combination of the Huverted cone, J, with the shart, B. and revolving fan cap, G, substantially as shown and described and for the purpose set forth. 2d, In combination with the above, the propelling fans I, mounted on rods H, attached to the revolving fan cap G, and hub g2, on shart B, substantially as and for the purpose set forth. 74,656.—SAFETY VALVES.—Jearum Atkins, Mokena, Ill. Lokim Let The construction of the asfet value lower (L or the purpose)

(4,656.—SAFETY VALVES.—Jearum Atkins, Mokena, III. I claim, Ist, The construction of the safety valve lever C, or its equivalent, with its outer portion curved, and its combination with the mortised spindle B, roller f, and spring catch h, substantially as specified.
2d, Incombination with a spring balance D, the rocking bar k, screw i, and nut m, as described and set forth.
3d, it a grangement of the lever C, bent to forman angle with the link S, standard P, and pins n, t and u, substantially as described.
4b. The combination of the rolling interum f, with the safety valve lever C, substantially as shown and described.

74,657.-HAND STAMP.-Joseph H. Berret, New York city.

1 Claim a stamp and cancelling device, constructed as described, consisting of the vertical achoor F, bearing the catters G, working through the tubular arbor H, and annular stamp C, whereby the knob H, and its collar upon the ubor C, operate the arbor B and Cras herein shown and described. -ANIMAL TRAP.-Wm. J. Biddle and Henry L. Bid-71.658.-

(1)050.—ANNAL FAF.—Will. 5. Bittle and Henry L. Bittle de, New Madison, Ohio. We claim the combination of the tilting platform D, with the pivoted bar g, aranged for holding the bait and latch e, fastened to the same, substan-tially as described and for the purpose set forth. 74,659.—BOILER FEEDER.—Edwin Brockway, Haverstraw, N V

N. T. I claim, 1st, The arrangement of the connecting devices, a, b and E, as shown and described. 2d, The guard K, as shown and described, on pipe H, to keep scum from entering the steam pipe. 74,660,--BED BOTTOM.--J. W. Brown, Hudson, Wis.

specified. 74,691.—HARNESS PAD.—John Hughes, Newark, N. J. I claim, ist, in combination with theiron frame, A, the socket for the nut, H, the surps, B B, and flexible piece, F, construct d as berein described and is the nurboas set forth.

74,660.--BED BOTTOM.--J. W. Brown, Hudson, Wis. Iclaim the construction of boxes B, of notched bars, a s, and a removable cover, b, in combination with separate removable plns, c, elastic suspension loops, g, and slats, C, all arranged substantially as described.
74,661.--CURTAIN FIXTURE.--WM. Brown, West Cambridge, Mass. Antedated Feb. 6, 1868.
Iclaim, 1st, The split roller, a, with or without a tongue and groove, for se-curing the upper end of the shade, substantially as described.
2d, The combination of the split roller, a, the nuts or disk, c c', and the brackets, B', arranged and operating substantially as described.
3d, The combination of the split roller, a, the shell, D, and the cornice, E, constructed, arranged, and operating substantially as described.
74,662.-ROTARY STEAM ENGINE.-H.T. Buff, Franklin, Ind. Iclaim, ist, The self-adjusting valves, V and V, with their grooves, ar-ranged substantially as berein set forth. 2d, The arrangement of the rotary head, valves, and springs, as berein set for the arcspressent of the rotary head, valves, as herein described.

Particle arrangements of the rotary head, valves, and springs, as nerein sectors.
2d. The arrangements of the steam and escape pipes, as herein described.
74,663.—SIRUP PITCHER.—Henry Bullard, Middletown, Conn. I claim the arrangement of the slide or cut off, a, upon the spout, B, independent of the cover, and in combination with a lever and spring, as a means of operating the said shde, substantially as herein set forth.
74,664.—FLY NET.—C. K. Burkholder, York Springs, Pa. I claim the ribs, constructed and perforated asshown, and laced, in the manner and for the purposes t forth.
74,665.—STAGING.—C. S. Burton, Seneca County, Ohio.
Later the combination of the grooved standards, A A, platform, K, and

I claim the combination of the grooved standards, A A, platform, K, bench, M, windlass and cords, H H, all constructed and operating as sp

74.666.—Device for Turning Down and Burying Stalks.

74,666.—DEVICE FOR TURNING DOWN AND BURYING STALKS, WEEDS, ETC.—Stephen Collins, Prescott, Wis. I claim the arms, C C' C" and E, and brace, D, attached to the plow beam substantially as and for the purpose set forth. 74,667.—WATER WHEEL.—B. D. Compton, Dowagiac, Mich. I claim, ist, The disk, A, having a series of trangular or V-shaped hinged buckets, D, and secured to a disk, Q, around a vertical shaft, B, by the braces d d, in the mann er substantially as and tor the purpose spechted. 24, In combination with the hinged buckets, D, and disk, A, heveled as de-scribed, the latch, f, constructed as specified, and used as and for the pur-ueses set forth.

24.668.—W

Bended, i.e. and f. r. constructions and provided with stirrup. S. and operating substantially asset forth.
Telsim, ist. The former, D. when provided with stirrup. S. and operating substantially asset forth and for the purpose described.
2d. The pivoted head block, G. arranged and operating substantially as set forth and for the purpose specified.
74,669.—HOSPITAL BED.—Hannah Conway, Dayton, Ohio. I claim the combination of the fixed canvas frame, B. and bed, E. operated y the axle, G. underneath frame, B. and the movable pillow C. with the axle G. and the permanent frame under the bed, E. all as herein set forth.
74,670.—LAMP.—E. E. Dailey, Wm. H. Johnson, and C. C. Du Bois, Brooklyn, E. D., N. Y.

preser, arranged substantially as described, for the purpose of producing the requisite tension of the shuttle thread as it is delivered, substantially as described. Sth, Mounting or holding the shuttle upon a stationary pedestal or its equivalent, as described, and controling the operation of the shuttle by means of a titing baror in ger, or its equivalent, arranged to operate there-with, substantially as and for the purpose specified. 6th, The interlacing book, in combination with the beveled-edged shuttle, constructed and operating as described, to catch and carry the loop of needle thread around said shuttle, substantially in the manner described. 7th, So combining the recess, c, in which the needle vibrates, and the bridge ring, and the interlacing book, and shuttle, constructed and arranged substantially as described, that the lower thread of the loop will be caught by the book and carried in a direct line beneath the shuttle, while the upper thread or said loop is carried against the beveled shuttle ordger, and over the shuttle, substantially in the manner and in the purpose specified. 8th, The econstruction and mode of banging and adjusting the needle-arm and the presser-arm, by means of the screw stud and screw sleeve, in combi-nation, substantially as described. Ceon A. Jones, New Y ork city. 9th, The mode of scentrig the needle, n, at the end of the needle-arm, by means of the screw bolt and washer, constructed substantially as described. 74,695.—TRAIN FOR LAMPS.—Geo. A. Jones, New Y ork city. 8d, The air tube, constructed from a single bread, flat top, solid cut screw, with a square-toothed wheel, arranged and operating substan-tially as east for the purpose set forth. 8d, The neutring substanties of the screw, substantially as a described. 8d, The air tube, constructed from a single piece of metal, substantially as and for the purpose storth. 8d, The neutring of the screw screw, d, attaching it: lower support of bridge, c', to the side plate of the mechanism, substantially as and for the purpose

Du Bois, Brooklyn, E.D., N. Y. We claim the cooling chamber, a, air supply chamber, b, formed by the perforated flange, e, ring, g, transparent cylinder, h, and locking cap, i, all urranged, constructed, and combined as described. 74,671.—INKSTAND.—Otis Dean (assignor to Robt.W.Young),

'Richmond, Va. I claim the rigid arm, D', attached to a dipper, C, which is connected to eiled by a rod, D. so as to operate in the manner and for the purpose set

74,672.—Spring for Hooped Skirt.—Thos. B. De Forest

74,072.—SPRING FOR HOOPED SKIRT.—In08. B. De FOrest and Thos. S. Gilbert, Birmingham, Conn. We claim a skirt loop formed by inclosing one or more wires within a cov-ering which not only envelops and protects the wire, but forms and edge, A, or connection, B, substantially as and for the purpose specified. 74,673.—HARROW.—Daniel L. Dickson, Durham, Ill. I claim the combination of the frame, with cylinder, J, with teeth, a a, and clearer, K, in front of said cylinder, the whole arranged and operating as specified. 74.673.

specified. 74.674.—BLACKING BRUSH.—J. H. Doughty, New York city.

I claim, 1st, The double hold fasts or bandles a b, provided with a platform e, which is held horizontallyaway from the handle, b, by a prolongation of the same, arranged substantially as described. 2d, The arrange ment of the d an ort, f, and scraper, h, on the platform, e, by means of the bolt, i, and nut, j, substantially as and for the purposes de-

scribed. 74,675.—Spring Bed Bottom.—Wm.I.Emens,Louisville,Ky. I claim the combination of the torked book, E, and the slat, F, the gum ring, D, the movable cross piece, A, and the parallel strips, B and C, when constructed, arranged, and operating in the manner set forth.

ring, D, the movable cross piece, A, and the paramet strips, D and C, when constructed, arranged, and operating in the manner set forth. 74,676. — H ARVESTER, — George Esterly, Whitewater, Wis. I claim, ist, The combination of long fingers or teeth, d, which are not ionized, with a criting apparatus consisting of a rolling finger beam, short fingers, and a tokic and which is adjustable bodily, so as to raise and lower the bight of cut, and also adjustable in such a manner that the front ends of both sets of fingers cen have their angle of presentation to the grain changed ad fixed to work at a five n bight, all substantially as described. 2d, The application to a hinged platform, E, of adropper, F, which latter is supported at its rear end so that it can be tilted backward at pleasure, sub-stantially as described. 3f, Connecting the beam, to the main draft frame, A, by means of flexible or hinged arms, m, or their equivalent, in combination with the draft chain, r, and forward truck, K, substantially as and for the purposes described.

I claim constructing long platform scales with a series of diagonal main or platform levers, when such levers are connected with a series of four or more secondary levers, which secondary levers rest nearly or quite on the same b orizon al plane with each other, substantially in the manner and for

74,681.—Apparatus for Hanging Animals in Slaughter.

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Tro.—Alteron Graves, Roscoe, III. I claim the application of the lever, C D E, the upright, B, the revolving apparatus represented by H H H H H, supports, I I I I I, and the revolv-ing cass, E b, in apparatus for handling animals in slanghtering. 74,682.—HATT AND VEGETABLE CUTTER.—Zebulon G. Green-loaf stath Ma

74,632,—BATT AND VEGETABLE OUTTER.—Debuton G. Groon-leaf, Bath Me. I claim the combination of the cutting blades provided with screw shanks, with the bollow cylindrical case, B, and centralshaft, D, arranged us and for the purposes herein described. 74,633.—EXERCISING APPARATUS.—Geo. W. S. Hall, Balti-

74,685.—EXERCISING APPARATUS.—Geo. W. S. Hall, Balth-more, Md. I claim the combined arrangement of the horizontal bar, E. adjustable suspension rope, F. and spring, H. as and for the purposes set forth. 74,684.—RAZOR STROP.—J. P. Hall, Wallingford, Conn. I claim the arrangement of the drawer, B. within the case, A. when the said case, A. is constructed for the reception of the strop, C. in a case within the principal case, A. substantially as herein set forth, as a new article of manu-fecture.

74,685.—HARVESTER.—B. G. H. Hathaway, Rock Stream, N.Y. l claim, 1st. The arrangement of the sliding clutch G, yoke, G1. lever, G2, bell crank, G3, stem, G4, spring, G5, and spherical case, D, substantially as described.

bell c² ank, G8, stem, G4, spring, G5, and spherical case, D, substantially as described.
2d, The combination a shoe so attached as to oscillate laterally, and a fn. ger bar so hinged thereto that the shoe remaining stationary, the inger bar faw be folded near the shoe remaining stationary in the inger bar of the sec in a horizontal plane, to stand parallel with the line of draft, substantially as described.
3d, The combination of the shoe, O, binged finger bar, N, spring, P, or its equivalent, and lever, Q, substantially as set forth, Bellair, Ohlo.
74,686.—EXTENSION COAL CHUTE.—Jacob Heatherington, Bellair, Ohlo.
74,687.—WIND WHEEL.—John Hidden, Lawrence, Kansas.
74,687.—WIND WHEEL. John Meels, G 6°, and chains, c and d, substantially as described.
74,688.—School DESK.—Geo, W, Hildreth, Lockport N, Y.

Substantially as described.
74,688.—Schoot Desk.—Geo. W. Hildreth, Lockport, N. Y. I claim the joint, o, in combination with the ordinary joint, s, for the par-pose of raising the central portion of the desk lid, to form abook rack of the desk top or lia, as berein specified and shown.
74,689.—CARRIAGE.—Edgar Hitt, Katonah, N. Y. I claim, ist, The clamp, C, provided with a socket, a, in combination with the spring bar, A, and body loop, substantially as and for the purpose set forth.

forth. 2d, The square head, d, at the end of the body loop, to fit into a corre-sponding socket in the clamp, C, substantially as and for the purpose de-

acribed, Sd, The projections or lips, c, on the inner surfaces of the clamp, to fit intonotches, d, on the the spring bar, A, substantially as and for the purpose set form. 74,690.—FENCE FOR COLLECTING RAIN WATER FOR STOCK.

Luther Howe, Alamo, Mich. I claim the rain collecting boards, A. and rain gutters, B, in connection and combination with a farm fence, for collecting and conveying rain water to artificial or natural reservoir, substantially as and for the purpose berein specified.

i, the strips, b B, and nexting piece, r, construct a as never a destroy and the purpose set forth. 2d, The braces, K K, or their equivalents, for the purpose specified. 3d, The braces, N, stitched to the bottom, C, before it is put to the frame, and the form, P, in the binding, and the mode of securing the bottom and

A, and the form, P, in the binding, and the mode of securing the obvious and form to the frame. 4th, The frame, A. with the slots, E E, and grooves for the strips, B B, and holes, V V, in the manner and for the purposesspecified. 74,692.—PICTURE KNOB.—E, D. 1 res, New Haven, Conn. I claim, ist, Forming and attaching knobs of glass or similar materal to screws of nails, substantially in the manner herein set forth. 2d. The combination of the threaden and I. B, and socket, C, when the said socket has for med thereon a knob or head of glass or similar material, and when the said glass or similar material is formed and attached thereon in the process herein set forth. 74.602.—MACHINE FOR CUTTING GLAZIERS' POINTS.—James

74,693.—MACHINE FOR CUTTING GLAZIERS' POINTS.—James

74,695.—MACHINE FOR CUTTING (LAZIERS' POINTS.—James M. Jay, Canton, Ohio. I claim, 1st, 'fhe arrangement and combination of the rotary cutters, M N M N. on the shafts, D and H, when operating in connection with each other through the geur wheels, r', G, for the purpose of cutting glaziers' points, or any brads or nails which may be cut from sheet metal, substantially in the manner herein specified. 2d, The arrangement and combination of the cam, I, feed lever, U, with pawl, V, ratchet wheel, r, catch, c, and feed rollers, r'O, whenused in com-bination with the rotary cutters, M N M N, substantially in the manner and for the purpose herein specified. 74,694.—SEWING MACHINE.—Geo. L. Jencks, Florence, Mass., assign to the Florence Sewing Machine Company.

74,694.—SEWING MACHINE.—Geo. L. Jencks, Florence, Mass., assignor to the FlorenceSewing Machine Company. Iclaim, ist, The manner of comoining and arranging both the interlacing book and shuttle, constructed as described, upon the concave side of the enved needle, so that the loop of the needle thread will be presented to the hook and shuttle from the curved side of the needle, and carried thence di-recely to the rear of the needle, and around the shuttle, substantially as shown and described.
24, Fo combining and arranging the said hook and shuttle, and the eye-pointed needle, as described, with the independent mechanism set forth for taking up the loop of the needle thread after it has been carried a round the shuttle, as described, that thessaidloop may be taken up and the stitch com-pleted at one and thesame cycle of operation of the machine, substantially as described.

as described. Sa. The take-up mechanism, substantially as described, in combination with the sewing mechanism, constructed and operating substantially as set

forth. 4th, The circular shuttle, constructed substantially as described, with a beveled edge, and incountination therewith a deliverynotch and a spring presser, #rranged substantially as described, for the purpose of producing the requisite tension of the shuttle thread as it is delivered, substantially as described.

of or light of the state parts of the purposes set forth. 5th, The construction of the jewel plates, having a concave conical jewe seat, and confined to the supporting plates by a single screw, substantially as and for the Purposes set forth. 6th, A mechanical movement for lamps, its several parts constructed and arranged and operating substantially as described. Figure 1 and 2 and

74,696.—PLATFORM SCALE.—Joel F. Keeler, Pittsburg, Pa.

Stamford, Conn.	is supported at its rear end so that it can be tilted backward at pleasure, sub-	same borizontal plane with each other, substantially in the manner and for
I claim a fastener for the aprons and curtains of carriages, composed of the	stantially as described.	the purposes described.
narts, A and B, the former provided with the eyes, C C', and the latter with	3d, Connecting the beam, to the main draft frame, A, by means of flexible	74,697.—PIPE TONGS.—Wm. Kenyon, Jr., Steubenville, Ohio,
the head, d, and the offset, e, and both provided with loops, a, and otherwise		
constructed and operated, substantially as herein specified.	r, and for ward in dok, K, substantially as and for the purposes described.	I claim the combination of the bifurcated movable jaw, d, with the eccen-
74,650.—GRAIN TRESHER.—A. S. Whittemore, Willimantic,	4th, The combination of a hinged, slatted dropper, F, with a platform, E,	tric cam head, a, at the end of the handle of a pipe wrench, constructed and
	whether the latter be hinged or inxed rigidly to the finger bar, such dropper	arranged substantially as herein before described.
Conn. I claim, 1st, The longitudinal wires, a, forming the bottom of a trame of a	being arranged substantially as described. 5th, The combination of the devices, ff', or their equivalents, for adjusting the grain end of the finger beam in the path of a vertical circle, with the de-	
threshing machine, when said wires are attached at each end to screws, a',	the grain end of the finger beam in the path of a vertical circle, with the de-	74,698.—FILTERING BURNING FLUID.—John D. Kirkpatrick.
whereby the tension of the wires may be regulated, substantially as de-	vice, d2, or its equivalent, for adjusting in like manner the inner or heel end	Urbana, Ohio,
scribed.	of the finger beam, substantially as described.	I claim, 1st, Filtering burningfluids consecutively through separate lay-
2d. In combination with the above, the shaft, B, bearing arms, e, and piv-	Cat This among comons of the helt tighten any new the higher of heaven T said i	ers of nulle and wood asnes, elm bark, charcoal, and sand each ingredient
oted flails, e'. the pulley, C, belt, e, and drive wheels, D d', all constructed,	6th, The arrangement of the belt tightener upon the hinged beam, J, said	Deing placed on fiannel, in the bottom of the filtering vessels substantially
arranged and operating as set forth.		as and for the purposes set forth.
3d, The threshing machine, constructed as described, and consisting of a	74,677.—SHAFT AND POLE COUPLING.—Perry Finley, Mem-	2d. The filtering apparatus, consisting of the bottom, A. frame, B, vessels,
frame, A, having wire bottom, a, screws, a', shaft, B, arms, e, flails, e'. pulley,	phis. Tenn.	a D C U, will periorated bottoms, a' D' C' d', and false bottom F and read-
C, drive wheels, D d', and belt, d, all arranged and operating as described.	[I Claim the coupling, L, with the groove, L, and staples, G G G, the souther i	voir, G, provided with stop-cock. E, substantially as and for the nurnoses
		described.
74,651COMBINED SEED SOWER AND FIELD HARROWDan-	fixed bolt, arranged substantially for the purpose herein set forth.	74,699.—POTATO DIGGER.—Gottlieb Koenig and Geo. Otto,
iel Wilher, Collins Centre, N. Y.	74,678.—CULTIVATOR.—John Frank, Webster City, Iowa.	Plymouth, Mich.
1claim, 1st, The slide, C, having notches or cavities, c1, c2, for the purpose	I claim. 1st. The adjustable blocks. C. constructed and operating substan-	We claim the combination of the traction wheels, A A, the gearwheels, B
and substantially as described.	tially as described.	B, the pinions, C C, the shaft, D, the crank axle, E, the revolving teeth, F F
2d. The combination with the slide, C. (1 the shaft, D, crank, dl, pitman,	2d, The cultivator as it stands, with its various parts and devices, combined,	FFF, the rack, G, the arms, H H, the roller, I, the seat, J, the lever, K, the
d2, bevel gearing, E F, and field roller, A, all arranged and operating in the	arranged, and operating substantially as and for the purposes herein speci-	catch, L, the spring, M, with a suitable frame, when arranged substantially
manner and for the purpose substantially as set forth.	haft faile f	as and for the nurnose described
Sd. The combination of the bevel pinion, F. placed loose upon the shaft, D,	74,679.—PLOW MOLD BOARD.—Richard Gaines and Melchi	
the featner, f', and pin, g, or its equivalent, all arranged and operating sub-	14,013.—I LOW MOLD DOARD.—Richard Games and Melchi	74.700.—PUNCHING APPARATUS.—Isaac Lamplugh, Peoria
stantially as and for the purpose described.		· 11].
74.652.—CORNSTALK CUTTERS PREPARATORY TO PLOWING.—	We claim, 1st, The metallic plow mold board, A, provided with V-shaped	I claim the improved punching apparatus, consisting of the several devices
John Wilde, Daniel Wild and John H. Wilde, Washington, Iowa.	groove along the edges, and studs or buttons, B B, on its concave surface, in	constructed, combined, and arranged in the manner and for the purposes
We claim, 1st, The arrangement of the mainframe with the cutter cylinder		herein set forth.
and tongue and the wheelframe, as herein recited.	tially as herein set forth and specified. 2d, The protuberances or knobs, C C, arranged as described, for the pur-	74,701.—MACHINE FOR GRINDING CUTTERS OF MOWING MA-
2d, Combining with the main frame and the wheel frame the treadle frame		ourses Fro Wr W London Ibil delable De seisers to busile
as and for the purpose herein setforth.	pose of securing the mold board to the plow, substantially as set forth, in combination with the above described mold board.	CHINES, ETC., Wm. H. Laubach, Philadelphia, Pa., assignor to himself and Geo. H. Mellen, Alexandria, Va.
74,653.—DITCHING MACHINE.—I. M. Williams, Blanchester,		I claim, 1st, The adjustable bed piece, B, constructed as described, and ap-
14,000-Difering Machine. 1. M. Williams, Dianonester,	74,680.—MEDICAL COMPOUND.—G. W. C. Gamble, Millers-	plied to a grinding machine as and for the purpose specified.
Unio. Unio. f to the provision in a disching machine of the endloss hand \mathbf{H} b	burg. Iowa.	2d, The bed piece, B, provided with slot, m, and screw, m', in combination
claim, 1st, The provision in a ditching machine of the endless band, H h,	l claim a cure for cancer composed of the ingredients set forth, when pre-	with the clamp.r, and screws, r' r', as and for the purpose set forth.
and drum, I, operating substantially as herein described, for emptying the elevating wheel of the excavated earth.	pared in the manner substantially as described.	Sd, The post, d, provided with the slot, k', and arm, d2, in combination
GIGASSING MECOLOL DIE OFOSIANOGOSI DI		

with the set screws, k and c, and the rotating shaft, b, substantially as de Ath, free grindstone, i, in combination with the rotating and sliding shaft. Ath, free grindstone, i, in combination with the clamp, r, post, d, 5th, the adjustable bed piece. B, in combination with the clamp, r, post, d, grindstone, i, and rotating and sliding shaft, b, as and for the purpose speci-fied.

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nea. 74702 - BUNG - James B. Lefferson, New York city.I claim the shaft, B, provided with cog teeth, e.e., in combination with the knives, D, provided with recesses, as described, said knives being arranged to operate between the bung, A, and case, a', as and for the purposes speci-fied.

74,703.-HAY AND COTTON PRESS.-C. Lent, Washington,

D. C. I claim the errangement of the press box, as constructed with the shaft. G, provided with follow block H, and cross head, J, nut, E, cross tie, \mathbf{D} , plate, a, and guide pieces. I i, the everal parts being connected and used substan-tially as and for the purpose set lorth. 74,704.—Combined Clock and Advertiser.—G. M. Levette,

74,704.—COMBINED CLOCK AND ADVERTISER.—G. M. Levette, Induanapolis, Ind
Ielaim, is, The disk, M, and pins, N, on the shaft of the escapement wheel of the time-keeping movement, for controlling and regulating the action of he advertising metalanism, substantially as and for the purpose set forth.
2d, The pawl, O, on any su table part of the advertising metanism, in com-binat on with the disk. M. and pins, N, as and for the purpose set forth.
3d, The rods, L, or their equivalents, attached to the advertising band, B, as and for the purpose set forth.
4th, The catch, K, and fixible arm, I, attached to the reciprocating rod, F, array ged and operating as and for the purpose set forth.
5th, The rods, L, in combination with spring-catch, P, and catch, K, arrang-ed and operating as and for the purpose set forth.
74,705.—BLACKING CASE AND CLOSET.—Jas. Macferran (as-signor to himself and Samuel Macferran), Philadelphia, Pa.
I claim ist, Thesectional inducing the 'cover of the box, substantially in the manufer above described, ind or the purpose set ford.
2d, The silde, D, when combined with the stationary part, B, of the cover of the box, substantially in the manufer above described, ind if or the purpose set ford.
2d, The silde, D, when combined with the stationary and folding parts, B and C, of the cover of the box, substantially as and for the purpose set forth.

20, 100 since, 27, and and C, of the cover of the box, substantially as and 10, 100 percent forth. 3d, The combination of the hinged part, A, containing the boot-blacking apparatus, with the lower part. A', composing the water closet, furnished with the periorat. d v, sub, F, and door, J, substantially as described and for the purpose set forth. 74,706, -LOW-WATER DETECTOR FOR STEAM GENERATOR. C B Massey. New York City, Composited with a s'eam boiler or other

(4, (10).—170 W - WAIFER DF HERE ALL STATES AND ALL STATES AND

and connected with and operating upon the coset, systematic, and forth for the purposes specified. 74,707.—SHOE.—D. S. McNamara, Troy, N. Y. Iclaima shoe provided with the elastic strips, d d and c, as herein specified and for the purpose set forth. 74,708.—SODA FOUNTAIN.—J. W. Milroy, J. Vaughn, and J. Tarder Gelvestin Ind.

74,708.—SODA FOUNTAIN.—J. W. Milroy, J. Vaughn, and J. Tarley. Galvestor, Ind. We claim the construction and arrangement of the fountain, A. lid, G. cyl-inder C, in combination with the pump cylinder. D, as arranged with the valve box, c and dict .rge tube, C, and valves, d (aubstantiality in the man-ner and for the purpose a. herein described and shown. 74,709.—BE& HTVE.—N. C. Mitchell, Caledonia, Ohio. I claim, 1st, Hinging the frames, K K. to the moth box, and over the screen. I, in such a manner that the off all will pass uito said box, and the frames may be drawn ont of the hive, subtantially as and for the purpose set forth. 2d, The moth-box, D, oon tructed in the manner cascribed with three open-ings, one for bass, and two for miliers, when used with the movable comb-frames and the h.ve, A, as and for the purpose set torth. 74.710.—CORN PLANTER.—Josephins Moore, Bushnell, Ill. I claim, 1st, The grangement of the shaft, D, with the seed hoppers, F F, cove s, G (, v Iv^o, N, discarge spout, O, and runcrs, P, constructed and operating in the manner shaft, M, wheel, L, collar, J, and bevel wheel, K, with clie shaft, D, as aud for the purpose set forth. 2d, The arrangement of the purpose set forth. 74,711.—CORN PLANTER.—William H. Moore, Blooming Grove, Ind.

Grove Ind. I claim, 1st The arrangement in a corn planter of theseed-dropping device consisting of the elements O o P Q q E 1 and N, substantially as and for the purpose set forth. 2d, The pivoted frame, H I ('I' I''' K K'K'' K, arranged to be raised from the ground by means of chain, Y, lever, I, and ratchet, 3, substantially as stated.

as stated. 74,712.—BREFCH-LOADING FIRE-ARM.—Wm. Morganstern, Philadelphia, Pa. assignor to E. Von Jeinsen, New York city. I claux, ist, The angular point, o, in the interior of the breech block, in combination with the hammer, d, substantially as desorbed. 2d, The spring block, q. in combination with the hammer, d, substantially

2d, The spring block, q. In combination with the hammer, d, substantially as described. 3d, The holow curves, m n, before and behind the angular point, o, sub-stantially as described. 4th, The booked arm, g, forming part of the sere, and operated by it, and 9r mbeing arran ed to work in a recess formed in the receiver, b, and by means of its book to engage the breech block on its rear side, substantially as described. 5th, Locking the breech block before firing by the combined action of the hammer and the projector, Q, and also working it after firing by the combined action of the hammer and the straight side of said block torward of the hol-lowed part, m, substantially as described. 74,713.—CLOTHESLINE CLAMP.—G. R. Nebinger, Lewisberry, Pa. assignor to binnee'f and Wm. A. Middleton.

74,713.—CLOTHESLINE CLAMP.—G. R. Nebinger, Lewisberry, Pa., assience to himself and Wm. A. Middleton. I clyim the olock, B. having a borizontal groove in the center, whereby two flanges are formed, which have each a verif al slot, x, on their inner sides, when used in combination with the wedgeshaped block.c, provided with trunnons, e.e., which work insalitiots, as and for the purvoses specified. 74,714.—SPINNING JACK.—Thos Netherwood and J. P. Bab-cock. Westerly, R.I. We claim, ist, The arangement of the shart, I, with pendant arm, f and curved cam, E.weight, F, rod, g, and epring rod, i, for operating the shipper board, G, in the manner substantially as specified. 24, The arrangement of the rots, did2, pin, d, and knee board, B, on the ear, A, in combination with the latch, a, and rod, D, in the manner and for the purposes set forth. 747115.—CLOTHES DRYER.—W. B. Noves. Dorchester N H

-CLOTHES DRYER.-W. B. Noyes, Dorchester, N. H. 74715.

74716.—CDUTHES DRYES.—W. D. NOVES, DOLOGSTO, N. H. H. I claim, ist, The wheel, A firnished with slot, c, and opening, e, in the maniper and for the purpose substantially as set forth. 2d, The wheel, A, in combination with whisel, g, when constructed and ar-ranged substantially as described. 3d, The wheels, A and g, and erms, ff, in combination with slide, m, the whole constructed and openating as described. 74,716.—GATE—Oliver Perry and Clark Perry, Ortonville, Mich.

Mich. We claim the combination of the gate, as constructed, stationary arms, C D and E. and co de, K L, all operating as set forth. 74,717.—APPARATUS FOR CONVEYING SCREW BLANKS.—E.

S. Perc. Hartford, Conn. I claim, 1st, Th. swinging arm, B, in combination with the gribing lever, , when the same are constructed, operated, and governed in the manner described 2d, The

C, which the same are constructed, operated, and governed in the manner described 24, The combination of the slide, I, the arm. B, and the spring, H, or its equivalent, when used in the manner and for the purpose herein specified. 3d, 1 he subject matter of the first claim, in combination with the freeding trough, A, su stantially as described. 4th, The combination of the feeding trough, A, the slide, I, and the convey-ing arms, B, substa tially as described. 5th. The combination of the feeding trough, A, the conveying arm, B, the gripping lever, C, and the pawi, E, substantially as described. 6th, I claim the combination of the feeding trough, the slide, I, the arm, B, the liver, C, and the pawi, E, substantially as described. 74/718 - with DOWEASH E described.

windowsash Fastener.—Isaac Pierson, Hart-

74,718 - WINDOWSASH FASTENDA. - Joano France, ford, Coun. I claim a window fastener consisting of one piece of metal, of such a form that one part enters the upper sash and scurres the sashes from being slipped past each other, and the other part turns over to one side and hocks into the lower sash, substantially as described, to prevent the first-mentioned part from being withdrawn.

from being withdrawn. 74,719.—GRAIN WRIGHING MACHINE.—Herly Pooley, Henry Poler, Jr., Themas Roberts and Louis Luc, Liverpool, England, We claim, Ist, The construction and use of twin Scales placed side by side, when operated by devices substantially in the manner and for the purpose hereinbefore escribed and set forth.

when operated by evides substantiating in the manufer and for the partous bereinbefore essentiated and set forth. 2d, The combination of the swiveling inclined spout into which the grain or other materil it for weighed fails from the sore or hopper and the statuo-

74,723.-TRUNK.-Edward Semple, Chicago, Ill. Icle-in the angle pieces, A, provided with the loops, a, in combination with the angle pieces, C, provided with the largs, b, when arra iged for operation inconnection with a trunk or similar article, substantially as de-

scribed 74 724.--Spacingand Boring Machine.--James M. Seymour

and described. 74.726.—CORN SHELLER.—E. F. Sherman, Chicopee, Mass.

And "Control of the purpose set forth.
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14.729.—PLOW — Stephen W. Standart, Bellevile, Ohio. I claim the arrangement of the land-side bar, D, movable mold board, E provided with metal koffe at is bottom, pars, F, bar, H, and roller, operated by the lever, I, the whole combined and used with the plow beam, in the manner and for the purioses set forth. 74,730.—MACHINE FOR GRINDING THE CUTTERS OF HARVEST-

maner and for the puriose set forth. 74.730.—MACHINE FOR GRINDING THE CUTTERS OF HARVEST-ING MACHINES.—William H. stevenson, Auburn, N. Y. I claum, 1st, Twe combination, subs annially as described, of the U-shaped frame, A, and the V-shaped bearlings, D b, with the grindstone mounted on the overhanging shaft, for the purposes set forth. 2d, The combination, substantially as described with the oscillating clamping bar of the adjustable supports, L 1, for the purpose set. forth. 4th, The combination, substantially as described with the oscillating clamping bar of the adjustable supports, L 1, for the purpose set. forth. 4th, The combination, substantially as described of a Fridstone mounted on one end of an overhanging shaft with a vertically, laterally and longi-tudinally adjustable swingfing clauping ber, for the purposes set forth. 5th, The combination, substantially as described, of the clauping bar, H, adjustable gamps, K, radius bars and set settews, I, for the purposes set forth. 74.731.—MACHINE FOR GRINDING THE CUTTERS OF HARVEST-ING MACHINES.—William H. Stevenson, Auburn, N. Y. I clain, 1st, The grindstone, constructed as described, of the orotation and having an annuar groove in that size next the parallel surface, for the pur-poses s.t torth. 20, The combination, substantially as described, of the bench, A, the over-hanging the exclusion substantially as described, of the bench, A, the over-hanging the combination, substantially as described, of the stone, the spindle, and the oscillating rack bar or claup frame, whereby I am enabled to grind the knikw with there points dow.. 74,732.—VIBRATING LEVER POWER.—Nicholas Tripp, Niag-are Reik N N

the knives with their points dow... 74,732.—VIBRATING LEVER POWER.—Nicholas Tripp, Niag-ars Falls, N. Y. I claim the duplicate sets of pendulum levers, C. G., weighted at a, the du-plicate fly place, I i, armed with bails, h, and connected by arms i, and boxes. 11, with the double crank shatt, K, the adjusting ball, s, and the double-acting levers, D. D., receiving motion by corse@ments, b c, and traus-mitting motion to the one crank shatt, F, the whole constructed and ar-ranged as described and operating in the manner and for the purpose her ein soft forth.

th. 3.—PRESERVING EGGS.—Aaron Van Camp, Washing-74.733.

13, 100.— CRESERVING DOGS.— Maton Van Camp, Washing-ion, D. C. I claim, 1st, The process berein described for preserving eggs. 2d, The use orchloride of calcium, or its equivalent, for the purpose of pre-serving eggs. 3d, Phosphoric acid as material for preserving eggs. 4th, the combination of the ingredients herein mentioned for preserving eggs.

ergs. 74,734.— LEATHER SPLITTING MACHINE.—Francis J. Vittum, Newburyport, Mass., assignor to W. N Elv. Stratford, Conn. I claim, 1sc, The long bet kinfe cutting either way, substantially as de-

bed. , The knile coiled on drums and operating either way, substantially as

24. The compound roller with spindle, spiral spring and sectional rings,
24. The compound roller with spindle, spiral spring and sectional rings, substantially as described.
4th, The compound roller, as described, in combination with a rubber roller, substantially as described.
5th, The compound roller, as described, in combination with a splitting knife, substantially as described.
6th, The cam or projection on the back of the knife, substantially as and for the purpose described.
7th, Arranging and operating the knife by means substantially as described.

74,735.—FEED WATER HEATER OF STEAM GENERATORS.—

Horatio N. WATER MEATER OF STEAM GENERATORS.— Horatio N. Waters (assign-rto himself and Newton Case). Harttord, Ct. I clsum, lat, The dev.cc, I.J. for the purpose of preventing the water in the reservour from being drawn down to the level of the orifice of the feed pipe, substantially as herein specified. 2 d, I claim the combination of the devices, A B C D E F G H I and J, for the purposes of a heat, rfor steam bollers, substantially as specified. 3 d, I claim the combination of the devices, C D E and F, substantially as herein described.

berein described. 74,736.—PAEPARING HEMP AND FLAX FIBER FOR THE MAN-UFACTURE OF DUSTERS, ETC.—Edmund G. Wayman (assignor to Robert V. Suodgrass). Louisville, Ky. I claim the preparation and application of hemp and flax fiber in the pro-duction of a duter, the p eparation and manufacture to take place as berein described.or any other substantisly the same, and which will produce the intended effect or the same results. BREECH-LOADING FIRE-ARM.—Josef Werndl, Steyer,

74,737.— BREECH-LOADING FIRE-ARM.—JOSEI W erndt, Steyer, Austria. I claim, ist, The oscillating cylindrical breech block provided with a re-cess or groove for admitting the cartridge into the chamber of the birrel and moved forward by an oblique or spiral shoulder on its base pin, when constructed and operating substantially as described. 2d, The combination of the barrel, a, the hollow cylinder, b, the locking cylinder, c, the fining pin f, the groove g, the specific lever, b p. the axis, k, with its squared end, the spring, s, and the sliding breach block, l, with its inclined subscribed, for the purpose of a breech loading fire-arm. 74,738.—PUMP FOR DEEP WELLS.—James T. Whipple, Chi-cago, ill

cago, ill carbon and road and the second and the se 74,739.—MORTISING MACHINE.—L. W. Wolfe, Jacksonville,

111. Iclaim the sliding saw frame, K. having arms, I I.as specified, whereby motion is communicated to the mortiser, N. tarough the connecting rod, P. and lever, O. all constructed and operating as specified. 74,740. — DEVICE FOR TEACHING COMMERCIAL TRANSAC

signor to bimsetf and James W. Slater), Richmond, ind. I claim, 1st, T.e. adjusta de segmental plates, A, for transferring the ink

I claim. lst, The combination of the platform of a hinged bar harvester with a rake mounted thereon, and ischarging the grain an tomasscally upon the ground, out it the way of the machine and hors so at hence troudd. 2d, The combination of a handromaticr isc, discharging upon the ground, with the platform of a hinged bar harvester, which is suspended from the main frame.

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main frame. 2d, The combination of an automaticrake, with the platform of a harvest-er, having an adjustable, su penden, hinged finger beam. 2,872.—HEAD BLOCK FOR SAW MILL.—Dennis Lane, Mont-

2,872.—HEAD BLOCK FOR SAW MILL.—Dennis Lane, Montpelier, Vt. Patented July 9,1861. I claim, ist, The emproyment or use of the ratchets, H IJ K having teeth at different distar espart, in connection with the adjustable dog. P. placed to the shift. F. I' ving puisons, G C, at 15 ends, which gearinto racks placed to the shift. F. I' ving puisons, G C, at 15, which gearinto racks 2d, The bar, C, provided with http rits, A2, dogs. I, on fix d puis s, k dogs, et and lever cams, f, when the parts are don tructed and arranged re-latively with each other, and operated in the manner and for the purposes sub taintaily as described. 2,873.—CONSTRUCTION OF BOATS.—Abram Van Order, Itha-ca, N. Y. Patented Sent 10, 1861.

sub taitiair as described.
2,873.—Construction of Boars.—Abram Van Order, Ithace, N. Y. Patented Sept. 10, 1861.
I claim, ist. The construction of the described layers of wood, placed one show the other. making the shell or sides and endsof the boat, the described method ofsplking or bottleg the said layers together, and the cross rod braching, conjuecting the bige timbers with the grun wale timbers, when arranged in relation to each other substantially as and for the purposes described.
2d, Constructing the sides and ends of boats wholly of horizontal layers of timbers, holted of splked one upon the other, substantially in themanuer and tor the purposes set forth.
3d, This construction of a blige or bottom frame, of solid timber, in whole or in part, about the bottom of a boat, when the floor timbers are attached thereant, as described, and for the purposes sected.
4th, The door timbers, doverailed to the blige timbers, on heir liner side and top, and held in place. By the blige trame, as set torth.
6th, Construct, the the days and forthe purposes of horizontal timbers, which are sides and ends of boats of layers of horizontal timbers, when are attached and security aradiat accidents, as set forth.
8th, Construct, the the sides and ends of boats of layers of horizontal timbers, between and construction of the purposes.
8th, Construct, the the dides and ends of boats of layers of horizontal timbers, between and construction of black or splked one upon the other, and upon the blige trame, and upon the solution splked one upon the other.

DESIGNS. 2,935.—HAT RACK.—H. P. CORART, BOSTON, MASS. 2,936.—FRUIT JAR.—Thomas Houghton, Philadelphia, Pa. 2,937.—INKSTAND, SPONGE COP, AND PEN RACK.—Thomas S. Hudson, East Cambridge. Mass. 2,938.—FLOOR OIL CLOTH PATTERN.—Albert E. Powers, Lapencharge.

Lansingburg, N. Y., assignor to D Powers & Sons. 2,939.--FLOOM CLOTH PATTERN.--Albert E. Powers (assign-or to D. Powers & Sons), Lansingburg, N. Y.

PENDING APPLICATIONS FOR REISSUES.

Application has been made to the Commessioner of Patents for the Reissue of the following Patents, with new clams as subjoined. Parties who desire to oppose the grant of any of these reissues should immediately address MUNN & Co., 37 Park Row, N. 1.

70,806.—SILENT BOL'T FEDER.—Jaceb Cornwell (assignor to himselt, D. B. Merrill and Win. H. McCourtie), Kalamazoo, Micb Dated Nov. 12,1867. Application for relessure c. ived and filed I'eb. 4,1868.
134. Iclaum, in combination with the hoop, H. or its equivalent, for holding the flour, the reviving platform, to, operating substantially as and for the pup sees of sweeping the flour into the seport, I, substantially as described.
24. I claum tor subset of the combination with the hoop, H, and revolving platform, M, with the strip or float, f, or its equivalent, for momental and the seport, I, substantially as described.
34. I claum tor subset, S, in combination with the hoop, H, and revolving platform, m, when constructed and operating substantially as herein described.

43,376.—SUGAR Mold.—Theodore A. Havemeyer, J. Law-43,576.—SUGAR MOLD.—Theodore A. Havemeyer, J. Lawrence Elder and Charles K. Loosey, New York city, assignees of Carl Krouk, Vienna, Austria. Dated June 28,1864. Application for relasue received and tiled Feb. 6, 18 8
I claim the process substantially as he ein described for making vessels and other articles which process consists in saturating with linseed, or equivalent of the scalar of the state of paper, or equivalent substantially as described.
And I also claim coaring articles which have been made as herein described and which have been s turated with oil with a pasts of red lead and o.l and then varishing the same, substat tilly as described.
69,151.—JUG TOP.—Homer Wright, Henry H. Collins and Be Jamin c. Collins, Pittsburgh, PA, assignees of Homir Wright, aforesal, Datel 1962, 21868.
184. Joint Berle, 24, 1867. Application for relasure received and fled Jan.28, 1868.

an.28, 1868. , I clain the flarge, S, when made as and for the purpose shown. The binge and Kash combined in one piece, as specified. The lid when made to cover entirely the top rum of the body, as set here.

forth. 4th, Theoppining, H, ia the lid when used in combination with the binge and knob picce, as described. 5th, The convex bulge, P, or its equivalent, when used for the purpose in -dicated.

6th, Hingingthe id so as to rotate from the inside of the body, as de-

70,523.—Apparatus for Raising and Secusing the Legs OF HORSES TO SHOE THEM.-J. P. Champion, Pin lps, N. Y. Dated Nov. 5, 1867. Applicat on for reissue receved and file jul. 29, 1863. Iclaim the lever apparatus for raising and securing horses' legs employed n connection with a suitable frame, arrange. I and applied substantially as leven shown and described.

herein shown and described. 10,038.—MACHINE FOR GRINDING PLOW CASTINGS.—Joshua

Gibbs, Canton, Ohio, Datid Ost. 4, 1833. Extention Soft 27, 1837. Ap-plication (for relisence received and filed Jan. 23, 1833. Ist, I claim a frame or cirriage winch is co pable of a lateral, longitu inoi indicating addust est in Combination with a grindstone or polishing Wheet for grinding and polishing plane and trengular surfaces, substantially

ability of the stand o

IT NOTE.-The above claims for Reissue are now pending before the Pau ent Office and w linot be offic ally passed upon until the exp. rat on o/ 30

cation.

days from the date of fling he application All persons who desre to oppose the grant of any of these clams should make immediate appli-

Inventions Patented in England by Americans.

[Compiled from the"Journalofthe Commissioners Of Patents."] FROVISIONAL PROTECTION FOR SIX MONTHS. 2.-FIRE AND BURGLAR PROOF SAFE.-Benj. Sherwood and Daniel Fitzger ald, New York city. J.m. 1, 1868.

31.—CONVERTING POWER AND SPEED, AND MULTIPLYING AND TRANSMIT-TING MOTION,—Wm. F. Goodwin, East New York, N. Y. Jan. 4, 1868. 59.-COMBINING WROUGHT AND CAST IRON. ETC.-Wm, M. Arnold, New York city. Jan. 7, 1868.

18.-CHURN.-Milton A. Hamilton, Detroit, Mich. Jan. 2, 1868.

MUNN & CO.. Solicitors of Patents, Si Park Row, N.Y.

20, 10° commenced to be welden by the state of the state	
of other material in the weinher and the store in a provide the store in	1868.
scales, substantially as shown and described.	James
tally in the manufactor field pupped in the and in the type rollers, substantially as set forth.	Joseph
ath, ing shart, which dir is an is obtained cardies of the end of the sphere is origin. F2, substantially as set forth.	k city
described and set forth. work of dis ribution on the rollers goes on continuously, the roller, I, shall, Jan. 8, 1868.	•
the means of olsributing the continuous flow of grain or other material to be mainter in the means of olsributing the continuous flow of grain or other material to be the means of olsributing the continuous flow of grain or other material to be the means of olsributing the continuous flow of grain or other material to be the means of olsributing the continuous flow of grain or other material to be the means of olsributing the continuous flow of grain or other material to be the means of olsributing the continuous flow of grain or other material to be the means of olsributing the continuous flow of grain or other material to be the material to be the means of olsributing the continuous flow of grain or other material to be the material to be the context of the material to be the material to be the context of the material to be the material to be the material to be the context of the material to be the material to be the context of the material to be	worth, 8, 1868.
6th. The construction and use of the double-action tumbing hammer for BFISSIES 9.6APPARATUSFOR SEWING BOOKS FOR BINDINGHenry G. Thon	npson,
the peculiar locking apparatus connect the there will had the full hold and also 2,839.—MANUFACTURE OF METALLIC SQUARE.—Samuel Dar-	nry G
the scales, as hereinbefore described and set forth. Lasily, the strangement and combination of the several parts forming I claim, 1st, A hardened edges rongue, united by soldering to a beam, con- 123SPIRIT LEVELH. G. Julian, New York city. Jan. 14, 1868.	
to gether the double self acting and self registering apparatus for weighing a continuous flow of grain or other material, all as hereinbefore described and set torth.	leorge
74,720 -PENE. L. Pratt, Boston, Mass. 3d, The mode or process described of hardening the edges of the tongue by 151FRUIT BASKETWelcome Hitchcock, New York city. Jan. 16,	1868.
for us in commination with a performation of cost of the cost described of bardening the edges of the tongue Ian 17 186	Mass.
described. described. 169 - TREATING WOOD VENEER AND FORMING THEREFROM SHEET. 00000 MACTINE TO A CONTRACT OF THE STATEMENT	S AND
Ohio. Diff. How Harbert Bow Harbert Bow Harbert Bow Harbert, Buffalo, N. Y. Jan. 17, 1868.	
I claim the gage beam, E, constructed substantially as described in com- bination with the beams, A and a, guide bar, G, shovels or plows. C C, or i claim. 1st, The hopper, A A, fitted with a sloping bottom, and with a bag- bination with the beams, A and a, guide bar, G, shovels or plows. C C, or i claim. 1st, The hopper, A A, fitted with a sloping bottom, and with a bag- bination with the beams, A and a, guide bar, G, shovels or plows. C C, or i claim. 1st, The hopper, A A, fitted with a sloping bottom, and with a bag- bination with the beams, A and a, guide bar, G, shovels or plows. C C, or i claim. 1st, The hopper, A A, fitted with a sloping bottom, and with a bag- bination with the beams, A and a bag- bination with the beams, A and a bag- bination with the beams of the side or play of the bag- bination based control of the side or play of the bag- bination based control of the side or based bonner to the side	, Stur-
any of them. and coity, D, substantially as and for the purposes set forth. regulate the flow of grain, substantially as described. [137LINKSOR COUPLINGS FOR HARNESSES, ETCGeo, S. Fisher, Bu	uffalo,
I claim the cap, E, hinged at a point, a above the center of the bearing 0.001 in combination with a weighing scale, substantially as described.	ME AS
and the said cap provided with a nose, g, so as to spring down over the 2,01 HARLE OUT HARVESIER And W. J. HOHMAL, 1 Hid FUEL TO FURNADESOF STEAMSHIPS, ALSO HALLSTING SERFE WITH W Point, f, and sectre the trundin of the software bearing, substantially as i delphile, A., as given by means assignments, of issat Van Dorsa. Put John H, Smith, Alleghen Y (LY, and Elberdiet, Bourthware	ATER.
jet forth. jented Sept. 32, 1837. Jan. 20, 1963.	