work in Waltham, Mass. Mr. Francis Cabot Lowell, for membrane, the sense of smell is brought into action, and the whom the city of Lowell, Mass, is named, returning from brain perceives the odor. The olfactory apparatus is then in-England in 1812, after a two years' visit, which he employed | dispensable to the impression of odors. For beings naturally largely in examining the improvements introduced in manu- or accidentally deprived of this organ there is no odor, just as factures, attempted the construction of a power loom. He no sounds exist for him deprived of the sense of hearing. employed Mr. Paul Moody, of Amesbury, Mass., an ingenious mechanic, to build the machine, and it was finished, pat- | imal tenuity that the bodies which disengage them all the ented, and in successful operation in 1815. Probably the time seem not to lose anything of their weight, or at least to efforts of Mr. William Gilmour, who, in 1814, came to this country from Glasgow, bringing patterns of the power loom, and who was employed by Judge Daniel Lyman, of Providence, RI., the associate of Mr. Lowell in the enterprise, contributed to the success of the Waltham loom. About the This same grain of musk, abandoned to itself for six months same time Gilmour built looms for several of the Rhode Island manufacturers. His loom cost only \$70, while the Wal- the room, and being weighed in an accurate scale, it had extham loom cost \$300.

From this time forth power looms became the rule, and hand looms the exception. New patents were being issued frequently, and new styles of the loom were being constructed. The mills which had been employed mainly in spinning yarn to be woven at home in the family, began to the odor of the thyme to 25 gallons of water. be used for the weaving of cloths, and the immense cotton manufacture of the country may be considered to have been fairly inaugurated.

ON THE CAUSES OF EXPLOSIONS WHICH OCCUR IN THE POURING OF LIQUID METALS INTO WATER.

Dangerous explosions have repeatedly occurred in pouring liquid metals into water. Mr. Kayser refers to a case in Upper Silesia, where in pouring several casting-ladles of melted pig iron into a pan filled with water, a frightful explosion took place, killing one man and wounding several others. Similar cases bave been observed at the Altenau Iron Works in the Upper Harz, when for the preparations of a bath liquid iron was poured into a Pattinson pan, and another occurred at the preparation of granulated iron in lead works of the same district. To this end the pig iron was conveyed from the furnace through a groove to a perforated and claycovered iron ladle, when it was left to drop in a small stream into a basin with water, which had the advantage of a stream of cold water continually passing through it. Explosions had n-ver occurred. One day, however, when experimenting with the thickish product, the holes of the ladle were choked. The iron naturally escaped in a strong body over the rim in the basin. In the beginning it did not show any suspicious effect but after some time, the contents of the basin, water, mud, and glowing iron, exploded among the numerous visitors, who rusbed speedily out of the foundery. Happily they escaped with a fright and some slight burns. Kayser refers the causes of these explosions to the following : If liquid metals are poured into water which is nearly boiling, a great quantity of steam is suddenly generated with a detonating effect, equal to that of gunpowder. The shock produced by the high expansive force of the steam is communicated by the medium of the water toward all sides, as it is, for instance, the case in the blasting of ice with petards. When the sides of the vessel do not possess enough resistance in such a case, they are of course shivered to atoms.

If the water bears an insignificant relation to the mass of the metal it is suddenly converted into steam of a much greater volume, a violent explosion ensuing, as metallurgists can attest sufficiently.

If the water is cool, it absorbs the heat contained in the liquid metal, and no explosion can possibly occur. In granulating metals, they are left to flow in a small stream in a vessel of water, which is constantly kept cool.

In the refining of copper, the plates are immersed vertically in the water, in order that the generated steam may escape in safety; if they should be placed horizontally, explosions would most certainly occur. The pouring of the cooling water upon the surface of the copper in the finery must also be done with particular care.

Perhaps it is well known that all throughout Germany at Andreas Eve (30th November), or at the last day of the year, lead is poured into water, and from the forms which it assumes, future events are foretold. When the water is cool, the lead will disappear with slight hisses, and it will be found afterward in different forms in the bottom of the vessel, but if warm, it may occur that the vessel is shattered with violence.

A Practical Guide for the Perfumer.

The above is the title of a new treatise on perfumery by Protessor H. Dussauce, chemist, author of several other practi- | Guinea, etc., it is impossible not to be struck, says Mr. Patercal works of high repute. The book contains a description of the substances used in per/umery, and the formulas of over al use in the manufacture of furniture. Some of the woods one thousand preparations, many of which have not hitherto are shown to be of large size, and are exceedingly beautiful been described. It will prove valuable not only to the manufacturing perfumer but to druggists and dealers. Beside bly with some of those at present in use. the information contained in the technical portions of the work, we find the following remarks upon the nature of perfumes, and their extreme tenuity which will be of interest to the general reader: "An odor, in general, is an invisible, imponderable emanation from fragrant substances. Odors cannot be propagated in the same manner as caloric and light; their movements are not submitted to the laws of reflection and refraction. They spread incessantly in the air, which is their vehicle, and follow the currents of the atmosphere. " The works of distinguished chemists and natural philosophers prove that an odor is produced by very small molecules which are disengaged from odoriferous bodies; these m lecules | labels giving the average size of which boards could be cut, float in the atmosphere, hanging on the different surfaces they meet, communicating to them their properties. When artist nor workman is aware of the resources which are at

"The odoviferous molecules or particles are of such infinitesmake insensible losses; and however numerous these particles may be, an exact calculation has shown that one grain of musk had in a radius of ninety feet disengaged, in one day 56,839,616 particles, without any diminution in its weight in a large garret, communicated its odor to all the objects in perienced no loss.

"A rose, in a few hours, can perfume 10,000 cubic feet of air, without losing in weight.

"A piece of sugaron which a single drop of oil of thyme is poured, and being ground with a little alcohol, communicates

"Haller kept for forty years papers pefumed with one grain of ambergris; after this time the odor was as strong as ever. Bordenave has evaluated a molecu'e of camphor sensible to the smell to 2,263 584,000th of a grain. Boyle has observed that one drachm of assatortida exposed to the open air had lost in six days the eighth part of one grain, from which Keill concludes that in one minute it had lost 1.69,120th of a grain, and, by another calculation, he demonstrates that each particle is 2-1,000,000,000,000,000 h of one cubic inch. In that calculation, he supposes the particles equally distant in a sphere the radius of which is 5 feet; but as they might be more compressed toward the centre, Keill began again his calculation, and found that in that case it was necessary to multiply by 21 the number of particles, 57,839,616, given above, which produce 1,214,631,936; and he tound that the volume of each particle is 38-1,000,000,000,000,00,000th.

"The prodigious tenuity of odoriferous molecules made Prof. Walker think that the sensation of odors was not due to the contact of these molecules with the olfactory membrane, but to a dynamic action of the odoriferous body on the smelling sense.

"Dr. Starch, of Edinburgh, has published a paper in which we find some very curious experiments on the emission and absorption of odors. According to his theory, the tissues of animal substances have more affinity for odors than vegetable tissues. The absorption of odors by outward tissues is subject to the same law that governs absorption of caloric, that is, black tissues absorb the most odor; and this absorbing power diminishes, as the color becomes lighter, in such a manner that white tissures are those which absorb odor the least.

" Odors impregnate all bodies in different degrees, and combine with nearly all the liquids. Gloves retain for a long time the perfume of ambergris; paper and cotton, that of musk. Oils and greases retain very well balsamic and volatile principles. Water, a d especially alcohol, dissolve perfectly the aromatic principles of flowers. It is on this knowledge that is founded the fabrication of waters, oils, essences, pastes, pomades. Thus the perfume of flowers, so light, so fugacious, is rendered stable by art and industry. At the moment the per'ume escapes from the flower, man seizes it, masters it, and uses it to increase the sum of his enjoyment.

"Odoriferous bodies may be so all the time or only at certain periods. Thus some exhale their perfume in the morning, others in the middle of the day, some in the evening, and many during the night. Different circumstances may also cause the intensity of the odors to vary, such as dampness, light, heat, etc ; the addition of another substance, also, develops the strength of an odor which, alone, was near ly insensible."

The work is published by Henry Carey Baird, 406 Walnut street Philadelphia, and will be sent to any address free of postage upon the receipt of three dollars.

Woods Used in Cabinet Making.

Mr. Thomas Paterson was one of the working men who visited the Paris Exhibition last year, and ably reported on what he saw there. His report is one of the twelve which compose the little work under the title of "Modern Industries," issued under the auspices of the Paris Excursion Committee. In looking through the magnificent collections of woods from Brazil, Canada, and New South Wal-s, and the smaller but not less interesting exhibits of Algiers, Natal, son, with the small number of these woods which are in actu in color and figure, and many of them would contrast admira-There was a contribution to the Exposition of specimens of timber, collected by the late Captain Fowke, in which several hundreds of different kinds of wood are arranged in a kind of revolving screen. Each specimen is labeled with its specific gravity, and the amount of weight necessary to break it. Each piece was of the same size-viz., two inches square, and has been actually broken by the weight marked on it, thus giving any one accustomed to work in wood a very good idea of the use it may be put to. Collections of this kind would be of the greatest use. They might be ac companied with a book composed of leaves of the woods, prepared and polished, to show their texture and color, with the average price, and the market, etc. At present neither the odoriferous molecules are in contact with the olfactory their disposal, and much more tricious ornament would be hundred, it should have been four hundred millions of feet.

avoided if this mine of decorative riches were fully explored. In the French colonies department there were some articles of furniture which have been made from the woods of Cayenne, cut by the convicts sent to that settlement.

That a wide and systematic acquaintance with the resources of any country is the first requisite to the development of its trade may be considered an obvious truism; yet in this country, eminently trading and manufacturing, and depending for its greatness upon the growth of its trade and manufactures, no means are taken to make the traders and workers acquainted with the materials which are being wasted in our vast colonies, but which, if known, would be sources of wealth which we can scarcely over-estimate. The staghorn sumac may be mentioned as an example of a very finely veined wood, which seems to be plentiful, and which, though it does not grow to any great size, would be useful in manufacture. The butternut, a kind of walnut wood, grows to a large size, and seems to be very cheap. The kauru (or New Zealand pine), also, a wood to veneer upon, would, I think, be of the greatest value; as well as the heron pine (which is sufficiently handsome to be used without any veneers), the red beech, and many others.

As a new application, or, rather, the extension of an old process in the treatment of wood, the chairs and settees in the Austrian department, made by bending long slips, may be instanced. Some of these chairs were exhibited in 1862. The manufacture has, however, greatly improved since that time. One chair in the Exposition (purchased by the Prince of Wales) was all that could be wished, both as regards strength and beauty. Though no one would wish to see this system of bending wood applied to all articles of furniture so exclusively as it is applied in the manufacture of these chairs, yet the capabi'ities of the process are well shown, and much might be learned from them. I noticed a method of producing a very good kind of decoration on polished wood by stamping with what is called by chasers a mutt tool, which produces a slighly roughened but regular surface, the pattern being left polished. I observed, also, in passing round the Historical Gallery, a mode of decoration which had an extremely good effect. This was an application of tortoiseshell The under surface or side applied to the piece of furgiture had been polished and gilded, the outside surface of the shell being then carefully smoothed and polished, the gold showing through the semi-transparent shell, and giving all its markings, while the shell protected the gilding, so that, though it had been made for more than twenty years. it was still beautiful and effective. It seems to me much to be regretted that some method cannot be devised which would place all such methods of decoration so completely before all our workmen and designers that they might have them, so to speak, at their finger-ends.-London Building News.

Kennedy Electric Clock.

An exhibition of this clock, to gentlemen of the press, was made on Wadnesday, at the rooms of the company in this city. The clock is impelled by the motion of the pendalum, and is of extremely simple construction. The pendulum ball contains a permanent magnet, which is alternately repelled by oblong helices placed on either side of it at a proper distance. The helices connect with a zinc and carbon earth ba tery, and the circuit is alternately broken by a commutator attached to the pendulum rod, which is of cosewood, baked, and saturated with paraffine. The clock will run without wirding, or any other attention, after the primary adjustments are made. It is said that its regularity and accuracy are superior to clocks of any other construction. We may, at some future time, give a more extended description of this invention.



WORK TO LINE .- We were once acquainted with a cabinetmaker, a true mechanic of the old school, who was noted for his great skill, and his success in business. It was his pride to feel that, when occasion demanded, he could asionish his workmen by the performance of work which would put their best efforts to the blush. We once asked this man, who was a thinker and a philosopher in his way, what he considered the secret of good workmanship in his special craft. His reply was-it is the secret of success in life-" First, carefully lay out your work, then work to the line."

THE bones of a gigantic race of Indians have been discovered near Marlboro Point, on the Potomac river. The discovery of a large number of beads, moccasins, etc., leave no doubt of the character of the remains. Further investigations are to be made. The condition of the remains indicate that they must be centuries old.

Two more beautiful frescoes have been found at Pompeii, supposed to be portraits of the master and mistress of the bouse in which they were discovered. The woman is represented as seated, and preparing to write. The frescoes have been sent to the museum at Naples.

HIPPOPHAGY has not met with success in Paris. The government was willing, the savans urged the people to eat and set the example, the storekeepers added horseflesh to their stock, but customers were lacking, and there are indications that the movement will be abandoned.

MISTAKES WILL HAPPEN.-An error crept into our Mining and Manufacturing Items, last week, in regard to the amount of lumber shipped from the Saginaw Valley. Instead of four

STARVATION IN THE RED RIVER COUNTRY - Accounts from the Red River region indicate that the ravages caused by the grasshoppers, render famine imminent. The St. Paul Press says: "Nothing but the most prompt and most energetic measures, prosecuted upon the largest scale, can avert from the people of Red River the most awful calamity of modern times" It adds "that the time for obtaining relief is extremely short, as within a few weeks the people may be walled in by five hundred miles of snow from any possible aid except what they may dribble through on dog trains."

ARTIFICIAL MAGNETIC OXIDE OF IRON .- M. Sidot has communicated to the Academy of Sciences a paper "On the Artificial Production of Magnetic Oxide of Iron." This he does by introducing a small platinum disk, filled with colcothar, into a porcelain tube, situated in a direction parallel to that of a dipping needle. After keeping the tube at a temperature a little below a white heat for about an hour, the colcothar will be found transformed into a gravish metallic oxide, the particles of which are strongly agglomerated together. This mass possesses the property of polar magnetism.

AMERICAN RIFLES FOR FOREIGN GOVERNMENTS - We hear that the Remingtons, of rifle notoriety, have built for the Swedish government 30.000 of their rifles and nearly completed an order for 40,000 for the Danish goverment. It is said. also, by our informant, that the Chassepot, not proving all that was expected, the French government are about to contract for a large number of the Remingtons adapted to the French rifles, the Remington breech being preferred.

THE following professors of Cornell University have been elected: Rhetoric and Oratory, H B. Sprague, principal of State Normal School of Connecticut; General and Agricultural geology, Prof. C. Fred-rick Hart, of Vassar College Botavy and Horticulture, Prof. A. N. Prentiss, of Michigan Agricultural College; Director of Shops, John L. Morris, of Ovid. The University opens October 7th.

THE following is one of the many good things from Dicken's pen : "The first external revelation of the dry rot in men is a tendency to lurk and lounge: to be at street corners without intelligable reason; to be going anywhere when met; to be about many places rather than any; to do nothing tangible but to have an intention of performing a number of tangible duties to-morrow or the day atter.'

THE Sicilian Railway Company not long since bought, iv Catania, for the purposes of its business, a house two stories high, formerly belonging to the Jesuits. The workmen, in demolishing the walls of the building, found a cavity, within which were three human skeletons, still having the decayed fragments of priests' cassocks clinging to them.

WE have seldom seen more sense compressed into less space, than is contained in the following sentence, by Josh Billings: "I am loadly in favor ov new things, but I am oppozed to enny man, even wun ov our colored associates, thinkin' he has diskovered a new truth jest behause he haz, for the fust time in his life, stumoled into an old one."

The codfish has been elevated to the dignity of oysters and strawberries, and is now canned for use. It is prepared by clearing it of skin and bone by desiccation. One Philadelphia concern puts up three tuns daily.

THE safe of the Adams Express Company, which was sunk with the steamer W. R. Carter in the Mississippi river about two vears ago, has been recovered. It contained \$230,000 in national currency, all of which has been regained without serious damage.

THE American Institute has decided to hold no Fair this year. The want of a suitable building is the reason.

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

FOR THE WEEK ENDING SEPTEMBER 22, 1868.

Reported Officially for the Scientific American.

PATENTS ARE GRANTED FOR SEVENTEEN YEARS, the following heing a schedule of tees: -

Puttsburg, Pa. Anted sted September 9, 1868. I claim the Theaded bolt or pin. D, plaue, C, and wedge or key, F, compared applied to the securing of a guard-ran, substantially as herein set

The same approach the second go a guard-fail, substantially as herein set forth. 89,272.—PENCIL SHEATH.—Samuel A yres Danville, Ky. I claim, let, The combination of the slotted functionable heller, A, spring, C, and friction roller, D, the perforated wings, E, and the adju-table protecting tube, G, having the perforated wings, E, and the adju-table and arranged as seen ibed, for the purpose sprende 2d, hn combination with the slotted tannel-shape tholder, A, roller, D, and protecting tube, G, the adjunction of the protecting tube, G, with the holder A, con struct ef austantially as herein shown and described, and for the purpose set forth.

82 273.—PRODUCTION OF GAS, AND ILLUMINATING STREET

82 273.—PRODUCTION OF GAS, AND ILLUMINATING STREET AND OTHERCARS.—Arthur Barbarin, New orleans, La.
I claim ist, The method of generatin: illuminating gas on railway or streat cars, or other conveyances, by the use, in such conveyances, of one or more reservoirs or tanks of compress-d air, operating in connection with a carburreting vessel and burners, for the c instinction of the carbureted air, substantially in the manner herein set forth.
2d, A burner for carbureted air, the slit or opening in which for the dis-charge of saird ar is formed substantially as shown and described.
82,274.—HORSE YOKE.—Thomas J. Barnes, Cam bridge, III. I claim, ist, Connecting the parts, A and B, of the yoke to the barnes, F, by means of the chos. G, constructed and attached to said hames, substantially as herein shown and described.
2, Forming holes or slows in the ends of the parts, A and B, of the yoke, to adapt them to the cling, G, substantially as herein suw and described.
3d, Bendung or curving the curved portions of the parts, A on B, down-ward as they leave the cling, G, substantially as herein shown and described.
3d, Bendung or curving the straight portion of the part, A or B, which is below the out nearing the straight portion of the part, A or B, which is below the out n, gat a sign of sub port, and at the point where the laws ste-forth.

orth. 5ty, Connecting the short chains, C, and equalizing bar, D, to the eyes of he parts, A and B, by means of hooks, substantially as herein shown and de-cribed, and for the purpose set forth. 6h. The single dratt chain, B, attached to the center of the equilizing bar,), when said chain is used between the horses, as and for the purpose speci-ied

82,275.-BURGLAR ALARM.-Henry P. Beardsley and Geo.

S2,375. — BURGLAR ALARM.— Henry P. Beardsley and Geo. Wilcox, Coruna. Mich. We claim, isr. The water cylinder, N, provided with the opening, O, and perforations P, in connection with the clock-work, C. 24, The cashing, R, provided with openings, S, when operating with the witer claimber, substantially as described, for the ourposes specified. 3d, The combination and arrangement of the bed plate, A, standard, B, cord or cords, V, loo, U, spring, F, and ca cti, F, with the clock work, t, water cylinder, N, and csi gs. R and K, all operating in the manner spec-ified, and for the purposes set orth, and K, all operating in the manner spec-ified, and for the purposes set orth.

82,276.-REGULATOR FOR STEAM ENGINE.-Julien Francois

82,376.—KEGULATOR FOR STEAM-ENGINE, —JUTCH FIGHCOIS Belleville, Paris, France. I claim the arrangement, in the orlinder, F. provided with steam admis-sion and discharging one lines, is described, of the spindle, C, and annular soria: disks, A. mounted upon the said spindle, and united or rivete ito-gether in the manner specified, and provided at the polors where their outer-ano inner edges are in contact with a pack rg, B, a's set form, 82,277.—SPARK ARKSPER FOR STEIM GENKRATOR.—Wal-

ter C. B nn (assignor to himself L. L. Baker, and R. Hamilton), San Fran cisco, Cal

clsco, cal I claim, ist, The stack or chimney, 4, with the curve, a, as shown, and the ware ressel, C, together with the supply and discharge pipes, b and d, the whole constructed and arranged substantially as herein described. 26, The secondary conn st. D, and the annular whiter trough, E, as ar-ranged, for more completely extinguishing the sparks, substantially as de-sorthed.

icribed. 3d, The conical vessel, C, and bonnet, D, movable in the slides, c c'e, for regulating the draft, the whole constructed and arranged substantially as

82,278. -MILLSTONE BALANCE.-Walter C Benu (*ssignor to himself, Livingston L. Baker, and Robert Hamilton . San Francisco.

cal. I claim the combination of the adjustable weights, D D, and their ways, C together with the operating sorews, E E, a d the elevating screws, v, b r a nequivalent device, when used for balancing millistones, the whole con-incice and arranged substantially as herein described. Destination the statement of the stat 82 279. -COMBINED PISTOL AND SWORD.-Charles E. Billings,

Spingteld, Mass. I chain, 1st, The construction of the lower guard of the sword hill, and the istol barrel in one and the same piece, and pivoting the same to the extreme forward endof the bandle, substantially as and for the purpose set outh

forth 21, The combination of the main lock spring, C, of the pitol with the shank of the knife, when the former is secured in a slot in the latter, as and for the purp *e d scribed. 3d, The arrangement with the knife handle and pistol hammer, of the trig-ger lever, D, extending the learth of the handle, and having a thumb tig-ger arise forward end, substantially as spown and described. 82,280. - CLOTHKS DKYER.-Josiah B. Blood, Lynn, Mass. Antedstee Senember 12 1888

Antedaten Seprember 12, 1887. — SOSIAL D. FROM, Lynn, Mass. Antedaten Seprember 12, 1887. — A BERGER, Sono Seprember 12, 1887. — A BERGER, Sono Seprember 12, 1887. — A BERGER, Sono Seprember 12, 1897. — A BERGER, Sono Seprember 14, 1897. — A BERGER, Sono Sepren

l claim the ombination of the swing seat, m, and upresh frame, i, with the unged frame, c, all as ranged and operating as and for the purposes set

82,233. — STEAM GENERATOR.—H. G. Brooks, New York

city. I claum, ist, The arrangement, in the fire-hox of a locomotive or other boller, of periorated fire brick walls, extending upward diverginally from the contracted grate surface to the walls of the fire box, substantially as set

the contracted grate surface to the walls of the une box, substantially as ever forth. 2d, The arrangement, in the upper partor month of the combustion cham-ber of the box of arched or hollow p effortate life bick, or "as a rogs of fire clav, communicating with air conduits in the manner described, so that the atmo pheric increactive through solic conduits may be highly heated within said bries, or cashings, and then discurged from the same into the commu-tion chamber at the point of contraction and concentration of the communi-tion chamber at the point of contraction and concentration of the communicating ble gasses evolved irrow the fuel on the fire biox. 3d, The combination, with the perforated fire brick, of a water supply pie, communicating with the obler, and browided with isseness of nozzles or sprayers, arrang d partly within the periorations in the fire brick, sub-stantially as set forth.

stantially as set forth. 82,284.—PROJECTILE.—Charles F. Brown, Wairen, R. I.

82.284. — PROJECTILE. — Charles F. Brown, Warren, R. I. Iclaim, 1st, The tube, B, and plunger, C, arranged within the hollow pro-jectule, A, the plun or serving t separate the powder in the shell from the fuse in the tube, while the shell sundisturbed in its motion as specified. 2d, The wire, b formed on the plunger, for the purpose of becoming headed by the ignited fuse, and for igniting the powder or other explosive matter in theshell, as on a sther latter strikes an obscule as so iclied. 3d, The tube, B, fitted into the bollog whell, A, and provided with spir-tures, e. with a perforated plung, dor its equivalent, and with a fuse, g, all arranged in combination with the plunger, C, which carries the wire, b, and all made and operating substantially as herein shown and described, for the purpose specified. 4th, The perforated exp, E, fitted over the rear end of the tube, B, substan-tially as herein shown and described. 5th, The combination of the shell, A tube, B, plunger, C, and wire, b, with the case, D cap, E, and a pertures, K, all ma ite, stranked, and operating sub-stantially as hered in substantially as herein shown and described. 6th, The rod, i, ne combination with futube, B, plunger, C, and wire, b, all made and operating substantially as herein shown and described. 82.282. — Re FARY STEAM ENGINE. — Arthur W. Browne, Foroklyn, N, Y, assigner to Chartes B, squire, New York city.

12,285.— KOTARY STEAM ENGINE. — ARTHUR W. DROWNE, Brocklyn, N. Y., assignor to Charles B. squire, New York city. I caim, ix, The arrangement of the abutaneat, E E', pressure chamber, C, undrhe cocks. D and D'. 2d, The bistons. G, when constructed as set for 'h. 3d, The cinstruction of the segment, H H', forming the chamber through which the piston passes while being acted upon by the steam, as herein set

.stol footh. \$15 4 h, The arrangement in the shell of the r-tary engine of the abutments. E \$20 E: pressure chamber, C, and segments, H H, substantially as set forth.

82,271.-CLAMP FOR RAILROAD RAIL.-William B. Atkinson, | \$3.293.-Post Hole Bor, R.-John Cothron (assignor to him-

self and D. J. Myyes) filtion of the solution of design of the influence self and D. J. Myyes) filtion of the solution of the

ra. I claim the door plate, B. rim or elevation, A, and the door, C. when con structed and arranged substantially as and for the purpose shown and de-scribel.

82.295. - WINDLASS. - Augustus Day, Detroit, Mich. Antedat-

33.39.7.— WINDLASS.—Adgustus Day, Detroit, Aled. Antechated Sept. 16,186. I cham.lst, the methon bands, G. in conjunction with the pawls, F, the rod hereof redescribed, at d the yll.der, B, when operating substantially as and for the p inpoles s t forth. 24. The degs, H, rod, I, and counterpoise, J, when arranged and operating substantially as herein described. 36, The combination and arrangement of the show mentioned parts with the trame, A, the cylinder, B, the sockets, C, the handles or levers, D, the statistical section of the show mentioned parts with the trame, A, the cylinder, B, the sockets, C, the handles or levers, D, the statistical section of the show mentioned parts with the trame, A, the cylinder, B, the sockets, C, the handles or levers, D, the statistical section of the software constructed and operating substantially as herein specified, set forth and d software. 82 296.

scattrally as nerein specine, set form and a sorthed. 82 293, — MACHINE FOR CONVERTING RECIPROCATING INTO ROTARY MOTION.—Jacob G. Deshler, Allentown, Ta. 1 claim the combination, in a man power machine, of the vibrating foot-board, A. the trunnions of which have recutilinear bearings, subtantially as described, with the pitman beams, B. pitman, D. and crark shate, b, all ar-ranged and combined substinitially as shown and described for the purpose set forth.

82 297 .-- LANTERN.-- Anthony M. Duburn, Chicago, Ill.

Let with its The abset metation of the bound of the basis of the basi

82.298.—B*E HIVE.—George Eason, Lyons N. Y. I claim, Ir, The box, A. provided with the porch, B. swinzi g side, E. comb formes, C. and ulvision board, D. all us and for the purpose set forth, 2d, The arxang-u-nt of the ven illating pissug-v, N. L. and h. the latter be-ing covered with a wire screen, as and for the purpose described. 82,299.—HAND SAW —James F., Emerson, Trenton, N. J. I claim a shouldered and headed scree wholt for hiddre a saw to its handle, so that solid screw bolt may be held from turning under the action of the nut, and constructed to operate as and for the purpose berein described and ference descrew bolt may be held from turning under the action of the nut, and constructed to operate as and for the purpose berein described and 109 200. 82,300 - CAR SPRING. - James W Evans, New York city.

Ic sim the spiral spring. A, the elastic tube, B, and the closed air chamber contining the column of air D, constructed and combined substantially as and for the purposes sp clifter.

CONCRETE BLOCK MAKING MACHINE.-Owen V. 82.301. \mathbb{B}^{α} ans (assignor to timself and James R yould-), Ripley, O.io. I claim, ist, the combination with the table, B of the disk Q, and slide, F, see lating toothed segment, M pin-on, P, and rack, Q, substantially as and in the purpose described.

 $2d_r$ the combination of the mechanism for operating the sliging pistons, D, with the mechanism for rotating the table, B, when the same are arranged to operate relatively to each other substantially as and for the purpose de-scribed. 82,302.-WHIP GOAD.-Frederick Flanders, Franklin, N. H.

I claim the whip stock, metallic tip, B, holiow screw, G, spur, c, and screw D, when combined and arranged as and for the purpose described. 82,303.— MACHINE FOR FELLING TREES. -M. R. Fory, New

York city. I claim the frame, B, carrying a series of permanent and a series of detach-ble augers, and constructed and adupted to the truck, Λ , as and for the I clatan un able augers

82,304. – BABY WALK R. – Frederick A. Geisler, Bristel, R. I. 52,501. — DABY WARAFR. — Frederick A. Gensler, DISSel, h. I. I claim the oscillating yoke, G. made in two parts, a b. the f rmer protect by the polit, d, to the curred arm, F. and provided with a socket, in which the shank of the arm, b, is adjusted by the set screw, c, as herein described, for the purpose specified. 82,303. BEDSTEAD FASTENING.—Chas. M. Gilbert, Philadel-phie B.

82,305. BEDSTEAD FASTENING.—Unas. M. GHUETL FINAL Computer And Antiperiod Anti

1. Some book of the purpose of th

82.309. - MANUFACTURE OF BROMINE FROM BITTERN.-Gus-

82,309. - MANUFACTURE OF BROMINE FROM BITTERN.-GUS-tar A. Hazemann. Natrone, Pa. I claim, 1st. The use, in t emiliatectar of bromine, of a sandstone trough or vessels, turnished with a bore, C, for the introduction of steam, so as to disperse with the insertion nuo be liquor of interallic ordes. 2d, The use, in the process of extracting bromine from bittern or mother water, of naked steam, introduced into the body of the liquor under treat-ment, for the purpose of its hear, to produce the desired effect. 82,310 — TRUNK CASTER.-J. W. C. Haskell and Joseph E. Haskell, Chicago, Ill. Antroated Sept. 11, 1888. We claim the plate. A a, provided with the hole, d, for the projection of a cast r ball, and made angular, so as to form a guard for the trunk concers, in combination with the plate, b c, and ball, e, substatially as specified. 82.311 — RaNGE.-John P. Hayes, Philadelphia, Pa. Ante-

casts r ball, and made asgular, so as to form a guard for the trunk corners, in combination with the place, b c, and ball, e, substantially as specified. 82:311 — RANGE, — John P. Hayes, Philadelphia, Pa. Ante-dated Sent, 8, 1868. I claim, 1st, The construction and arrangement of the tunnel, B, ib its rela-tion to the collader, A, as d the air hearing chamber, C, whereap the air for the construction and arrangement of the purposes described. 3d, The construction and arrangement neclation to each other of the tun-rel, B, the deschable sliding grate, B, and the a inflation of the purposes described. 4d, The construction and arrangement in relation to each other of the tun-nel, B, the deschable sliding grate, B, and the a instruction optiming, c^{oor}, m the plate, c', into the aso pit, D, substantially as and for the purposes de-scribed.

the plate, c', into the ample, D, substantiants as the series. Series. 3d, The construction and arrangement of the air heating flue, F, in relation to the cvil ider, A, the air heating chamber, C, the coll air spice, M, and the oven, G, substantially as a d for the purpose described. 82,312. - HENS' NEST. -B. F. Hayward, Nebruska City, Ne-

52,512. – HENS INEST. – D. F. Haywarw, Neoritska City, Ne-braska. I clum the nest box. C. pivoted bottom board, D. link, b. levers, E. and grating, d. all co structed and operating substantially as described, within a box, A. all as set for h. \$2,313. – FURNACE FOR WORKING IRON.– John Heatley,

82,313 — FURNACE FOR WORKING IRON.— John Heatley, Enna, Pa.
10 diain, is: an air chamber, g. under the bottom plate of a heating or pud-dling or soling turnace, provided with such communications as to receive airfrom without, heat it, and dise large stiluto the furnace, the space, or ash pit, substantially as and for the purposes hereinbefore set forth 2d. The use of two or mor dampers, h. so irranded relatively to the air chamber, g. and lower grate, c, as to admit heated air either abore or below such grate, c, or both above and below, substantially as and for the purpose above expressed.
3d. A pertivated plate or finely divided grate, c, at any desirable point below the fire grate, a, and above the bottom if the ash pit, arranged and used substantially as and for the purpose ber inbefore set of through the linear or walls of a heating, pudding, or beiling furnace, crossfue the distantially as and for the purposes described.
3d. A rec box, and for the purposes described.
3d. The box not cover in a the rap hole, n, of a furnace, constructed and operated substantially in the manner and for the purposes hereinbefore set forth.

82,314. – CENTRIFUGAL MACHINE. – S. S. Hepworth, Boston,

Mass. 1 claim, 1st, The suspension of the shaft, B, and curb, A, of a centrifugal tachine, from a sleever, a, or other equivalent device, substantially as shown nd creatible. A and for the purposes at forth. 2d, Supporting the sheeve, a, by the spherical surfaces, a' and 1', or surfaces phy commiting to a spherical surfaces. For the tun prese of supporting \mathfrak{me} per-ritting the vibration or gyration of the basketsbaft, B, of a centrifugal in a borne, all as set forth.

Of experience \$20 On application for Review \$20 On spatiation for Review \$30 On granting the Extension of Patent. \$50 On dimination for December of the entropy of the en	I claim the fixed jaw, A, having the grooves or recesses, c., on the socket, B. in combination with the loss jaw, D d d, and nut, C, substantially as and for the purpose described. 82,287.—SASH PUILEY.—John D. Browne, Cincinnati, Ohio. 1 claim the recessed lugs, a, of the face plate, A, in combination with the holding puss or rivets of the case plate, B, in the manner substantially as de- scribed, and for the purp sees to ret. 82,285 —HAY KACK—Stephen Brownell, Irving, N.Y. I claim the combination of the separate brd plates, A, with projecting plas, a, secured thereto, separate angular crosspices, B B, with projecting plas, a, secured thereto, separate angular crosspices, B B, with projecting plas, b, secured thereto, separate angular crosspices, B B, with projecting plas, b, secured thereto, separate angular crosspices, B B, with projecting plas, b, secured thereto, separate angular crosspices, B, with projecting plas, b, secured thereto, separate angular crosspices, B, with projecting plas, b, secured thereto, separate angular crosspices, B, with projecting plas, b, secured thereto, separate angular crosspices, B, with projecting plas, b, secured thereto, separate angular crosspices, B, with projecting plas, b, secured thereto, separate angular crosspices, B, with projecting plas, b, secured thereto, separate angular crosspices, B, with projecting plas, b, secured the clearly plaster, b, iow and oil each section, and the space, E, when co-structed and all arranged as specified. 82,290.—PRUNING AND HEDGE SHEARS—Lawrence Camp- iell, Marrigo, Mich. I claim the cutting blades, C and J, the latter provided with cutting book, S, when cens in ted as uses thed, and operating in combination with the bainles, B and E, and connecung arm. F, substantially as and for the purpose, s t forth. 82,291.—B& LT BUCKLE,—F. Clausen, San Francisco, Cal. I claim, in a b-th buckle, the beyled projecting fing, B, moon ination with the whole constructed and arranged substantially as and for the purpose to ecribed. 82,292.—Herse RAKE.—W	 6th, Making he surfaces, Cardin's splicit if, for the purpose of permuting the cyntrino of the basket hard, B ali such as so wan and described. Tth, Two or nore r. es, E. or the equivalent thereof, surfaces thereof. 7th, Two or nore r. es, E. or the equivalent thereof, surface and described. The maximum at the set of an arms, G, and curb. A, for the purpose of supporting the curb. A, and thereby enabling it to maintain its cone attractly with the staff, B, all as set forth. 8th, The guigeon, b, dikted using it to the cross bar, t, or other equivalent bottom oart of use surf, A, and thereby enabling it to maintain its cone attractly with the staff, B, all as set forth. 9th, The guigeon, b, dikted using it to the cross bar, t, or other equivalent bottom oart of use surf, A, and thereby enabling it to maintain its cone attract with a roller, r, and curb, J, or its equivalent, as and for the purpose set orth. 9th, the employment of an elastic roller, r, substar tially as shown and described, in combination with a roller, r, and curb, J, or its equivalent, all as and for the purpose set orth. 82 315.—PROCESS OF EXTRACTING PRECIOUS METALS FROM ORES, ETC. Geo ge P. B Hill, Virginia curb, Nevana. 1 claim th. ingree lents above chomested, in about the proportious herein specified for the purpose set forth. 82 316.—HAY RAKER AND LOADER.—William H. Hiteshew, Perrysburg, Ind. 1 claim the teeth, D, constructed with arms, d, and wheels, E, and operations and a structure specified for the purpose set forth.
	I claim the combination of the standard, H, lever, I, and perforated shoe,	I claim the teeth, D, constructed with arms. d', and wheels, E, and operat-

82.317. - ARRANGEMENT OF MECHANISM FOR OPERATING PURCHASHOLMENT OF PLECHANISM FOR UPERATING PURCHES.-Luther W. Holmes. Grand Ledge, Mich. I claim the construction and arrangement to frame or standard, A, with its uide pieces, D and E, sliding stirrup, C, with sliding pin, G, cam lever, L I, roller, I. and bed plate, in the manner as shown and described, and for the uppee set forth.

82 318

-STILL.-Nicholas Hotz, Green Point, N. Y.

236

82,318.—STILL.—Nicholas Hotz, Green Point, N. Y. I claim, 1st, The process, substantially as herein described, of effecting con-timous redistuilation within a still, through, it may be, the action of a single heater or generator, by causing the wapor rising from the one distillation to be condensed within the mash through a worm or worms, or their equiva-lents arranged therein, and afterward returned for distillation to be condensed within the mash through a worm or worms, or their equiva-lents arranged therein, and afterward returned for distillation to be condensed within the mash through a worm or worms, or their equiva-lents arranged therein, and afterward returned for distillation over again, thus separating the mash. 2d, The combination of the mash receiving chamber or vessel, A, with the mash vessels, D G, and H, and pipes, C F, and J, provided with suitaile pings or valves, for passing of the mash to each of the lower vessels in succession, substantially as specified. 3d, The combination, with any desired number of mash chambers or ves-sels, A D and G, and mash receiver or generator, H, of two or more distilling chambersor separators. N K, arranged to connect by pipes with worms or other condens ing devices, located in the mash vessels, A D and G, tor oper a-tion, effectually as described.

other contensing devices, located in the mash vessels, A D and G, tor opera-tion, essentially as described. 4th, The content of the distilling vessels or separators, N and K, by means of an overflow pipe or pipes, n and r, substantially as and for the pur-pose or purposes set forth. 5th, The combination, with the mash bolling vessel or generator, H, of the column, I, arranged to connect with a worm, or its equivalent, in an upper mash vessel, essentially as herein set forth. \$2,319.—VELOCIPEDE.—David Hunt, Jr., Worcester, Mass. I claim 1st, The combination of the sets, G, with the braces or standards, H H, and the crank or supporting shaft, A, substantially as and for the pur-poses set forth.

h = 1, such the crank of supporting shaft, A, substantially as and for the purposes set forth. 2d, The peculiarly constructed frame, D, in combination with the cap, E, axie, A, and chair, G, substantially as and for the purposes set forth. 3d, The combination of the standards, H H, and plece, P, having cars, a a, with the chair seat, G, and frame, D, substantially as and for the purposes set forth.

4th, A velocipede, the parts of which are constructed and combined toge-her, substantially as shown and described. 2,320. — WOOD PAVEMENT.— David Woodwell Hunt, San ther, substa 82,320. —

Francisco, Cal. I carm a pavement, the blocks of which are secured in position by means of cement run into horizontal grooves or recesses cut around each block, the blocks and grooves being formed and arranged substantially as ac-scribed.

scribed. 82,321.—OIL CUP.—Edwin Hurd, Virginia city, Nevada. I claim the arrangement of the frame, E, the hollow cylinder, a, pivoted within it, and having passares for the reception of oil, for the escape of air, and for the delivery of the oil through the pivots on which it turns, substan tially as described.

tially as des 82,322.—1 -HEATING APPARATUS. — J. Kienzi Jenness, Nor-

82,322.—HEATING AFFARATOS. — 5. Inclusion of the several chambers with Conn. I claim, 1st, The steam space or spaces, D, between the several chambers and dishes, BB, substantially as described, and for the purposes set forth. 2d, The vessel or table, A, chambers, C, and space, D, with induction and eduction pipes, pans, B, and covers, O, when combined and arranged substantially as described, and for the purposes set forth. 82,323.—NECK TIE.—Asa Johnson, Brooklyn, N. Y. Ante-dated Sept. 11, 1863. I daim a neck tie formed of wire cloth or gauze, substantially as described,

I claim an eck tie formed of wire cloth or gauze, substantially as described s a new article of manufacture.

I claim a neek tie formed of wire cloth or gauze, substantially as described, as a new article of manufacture. 82,324.—CAR BRAKE.—G. N. Jones, Oshkosh, Wis. I claim, 1st, The combination, with the friction pulleys, of the shaft, I, con-nected from car to car, as described, and siddes, L, connected to the silding pulleys by a cord and lever, for actuating them, substantially as and for the purpose described. 2d, The combination of the slides, L, actuating snaft, and means for allow-ing the slides to pass out of action, with the shafts, when the brakes are trought into action, substantially as and for the purposes described. 3d. The combination, with the slide, L, of the collar, P, lever a, et al., slide, U, and catches, C and G, substantially as and for the purpose described. C substantially as and for the purpose described. 22,825.—Fine ESCAPE.—J. L. Jurgens, New Orleans, La. I claim the carriage.Aprovided with the inclined ways, E E, substantially as and for the purpose described. 82,336.—HYDRANT.—Wm. Kearney, Union Township, N. J. I claim the arrange ment and operation, in the case. A, of the sliding disk valve. C, perforated at S, and the sliding wate plpe, J, as here in shown and described. 82,327.—STOVE.—J. H. Kevser New York city

described. 82,327.—STOVE.—J. H. Keyser, New York city. I claim, ist, The combination of sections, A and B, the latter constituting the fre chamber, and the former an illuminating and heat retaining top section for B, substantially as described. 20, The construction of section, A, with an internal downwardly-contracted wall, c, with inclined illuminating window, d, and with downwardly-contracted base portion, a, sud parts being adapted to fit upon a fre-pot section, B, sub-stantially as described. 82,328.—HEAD BLOCK.—W. A. L. Kirk, Hamilton, Ohio. Lobim the index roller. D constructed substantially as bering about an a

I claim the index roller, D, constructed substantially as herein shown and escribed, in combination with the head block, B C, of a saw mill, as and for descri

the purpose set forth. 82,329.—CAR-BRAKE ATTACHMENT.—J. Kirkley, Chicago, Ill.,

302,302.—ORAGE ATTACH ATTACHMENT.—O. INTRICY,ONICAGO, TIL, assignor to himself and Hugh Gray.
 I claim, ist, A guard box, F, adapted for inclosing the pawl and ratchet of a brake standard, substantially as described.
 2d, The combination of a treadle, E, pawl, H, and ratchet wheel, D, substantially as described.
 3d, Fitting the treadle, E, to the guard box, F, substantially as herein described.

.scrit 4th, A spring latch. g2, a pawl, H, ratchet wneel, D, a treadle, E, and means, substantially as described, for releasing the latch, g2, by the act of turning

said ratchet wheel. 82,330.—Skimmer for Sorghum Evaporator.—J. B. Lewis,

Lincoln, Ohio. I claim ist. The automatic skimmer lid, B, formed by attaching the per-orated metallic plate, bi, constructed as described, and having pipes. Dz in-erted in it to the wooden frame of said lid, substantially as and for the pur-

series in it to the woodstructure of the possest forth. 2d. The combination of the automatic skimmer lid, B, constructed as de-scribed, with an ordinary evaporating pan, A, substantially as and for the 82.331.—PISTON ROD PACKING.—Samuel Lockard, Lagrange

dians I claim the arrangement, within the chamber, K, of the conical split pack-ng_rings, e f, flanged follower, g, and spring, d, as herein shown and de-

-GOVEBNOR FOR STEAM ENGINE.-J.A. Lynch and

82,332.—GOVEBNOR FOR STEAM ENGINE.—J. A. LYNCH ANU R. K. Huntoon, Boston, Mass. Weelam the combination of the hydraulic governor and a mechanism, sub-stantially as explained, for effecting the closing of the main valve of the en-gine, in case of breakage of the driving belt of the governor, such mechan-ism consisting principally or in substance, not merely of the auxiliary arm, L', the catch, m. atd chain, N', but also of the glude or disengager, a, the spring, r, lever catch, s, and the arm, z, provided with the boll, c2, or such bolt and the sprinc, bJ, the whole being applied to the said arm. K1, the gov-ernor case, and the weight, W, substantially in manner and so as to operate as specified. Also, the combination of the hydraulic governor and the relay or reinforc-ring engine applied to the main valve, S, of the induction pipe of a steam en-glue, as set forth, with the described mechanism for effecting the closing of the said main valve in case of breakage of the driving belt of the gov-ernor.

82,333.—Coffin.—M. R. Margerum, Trenton, N. J. Ante-

82,333.—COFFIN.—M. R. Margerum, Trenton, N. J. Ante-to duted Sept. 9, 1868.
Iclaim the forming and constructing the side and rounded head of wooden cofins with two entire pieces of wood, and bending the same so as to form the cofin, substantially as above described and herein set torth.
82,334.—LAMP BURNER.—J. P. McGee, Trenton, Tenn. I claim the burner, Bhaving its lower end slitted to form a series of springs provided with a head, h, which is adapted to press in the springs when the burner is inserted in the cylinder, the springs of the same, thereby holding the burner in place, as berin shown and described.
82,335.—PINKING TOOL.—John L. McIntosh, Boston, Mass., assign to himself, James Blenklusop, and Wm. H. Vangha. Antedated Sept. 7, 1889.
I claim a machine or device for pinking leather.cloth, etc., consisting of a lever, strued at one end, with a tool and a 'qol-bearing socket, the latter so

82,3/5.—DINING TABLE.—E. R. DIOCOGUILI, SHU O. H. FU gel, St. Charles, Mo. We claim, 1st. The central board, A, when composed of the pieces, a a1 a2 a3, and the annular rim, B, when combosed of the pieces, b b1 d2 b3, when the said parts are united and arranged, substantially as herein shown an dde-scribed, and for the purpose set forth. 2d, The arrangement of the frame, D, and legs, d d1 d2 d3 d4 d5 d6, herein the same document of the frame, D, and legs, d d1 d2 d3 d4 d5 d6, herein Sept. 7, 1883. I claim a machine or device for pinking leather, cloth, etc., consisting of a lever, armed at one end with a tool and a tool-bearing socket, the latter so arranged as that the pinking tool may be changed at pleasure, in combina-tion with the revolving block, when the same is supported and made adjust-able by aspring beneath, all substantially as and for the purpose described. 82,336.—GATE.—A. W. Meek, Waterloo City, Ind. I claim the rack, K, pulleys d and e, and weight, 1, in combination with the gate, G, substantially as and for the purpose described. 82,337.—SIDE SADDLE TREE.—John C. Miller, Danville, Ky. I claim ist As a new stille of manufesture of a side sodd tree in , the disks, C E, in both operations serving to prevent the contents of the other functions of the other services of the servi shown and described. 82.376.—DREDGING MACHINE.—Albert Boschke.Boston.Mass. We claim, 1st, So hanging a rectangular or nearry 1 county in the manner or case that its axis of rotation shall be diagonal to itssides, in the manner and for the purpose substantially as set forth. 2d, The curred inclined rods and cross bar, in combination with the cap and churn, substantially as and for the purpose set forth. 3d, The hollow journal and valve in combination with the churn, arranged as and for the purpose substantially as series specified. 82,357.—AUTOMATIC BOILER FEEDER.—Edwin Sheppard, Philadelphia, Pa. I claim an automatic huller feeder consisting of a cylinder, B, with its float, D, cylinder, F, with its pistons, if, operated by the float, D, and cylinder G, and the cylinder, F, with the cylinder, F, communicating with the cylinder G, and the cylinder, B, with the cylinder, F, and the whole ceing arranged and applied to a steam boiler to regulate the flow of water to the same, sub-stantially as described. 82,358.—FIRE ESCAPE LADDER.—George Skinner, Brook-ing, N, Y. We claim, 1st, So hanging a rectangular or nearly rectangular churn box case that its axis of rotation shall be diagonal to itssides, in the manner I claim a dredging or excavating machine, in which are combined a float-ing hull, a, piow or scoop. a, and elevating buckets, all constructed and ar-ranged to operate substantially as set forth. 82,377.—ANGLER'S REEL.—Williard H. Bradley, New York 52,337.-SIDE SADDLE TREE.-John C. Miller, Danville, Ky. Telaim, 1st, As a new article of manufacture, of a side saddle tree. In which the front or pommel, c', is formed at the same time and of a similar material to the body of the tree, substantially as and for the purpose spec-ined. 23, The combined off horn and pommel, C. formed from wood with the grain lengthwise, by cutting, steaming, and bending, and attached, substan-tially in the manner described. 23,238.-Row Lock.-P. H. Mills, Green's Landing, Me. I claim the row lock, D. and roller, C, constructed and operating in com-bination with each other, substantially as herein shown and described, and for the purpose set fortu. city. I city a fish line real, composed of the two annular concaved disks, A A, as arranged on the shaft f, with the space, g, at their peripiterics, in combi-nation with the frame, C C, constructed and operating substantially as and for the purposes set forth. Also, in combination with the disks, A A, and conical journals of the shaft, t, the frame, C C, fixed to the foot plate, B, and provided with the variable connecting plece, d, for adjusting the bearings to the shaft, substantially as 82.378.—CLOTHES RACK.—B. K. Breneman, Newport, Pa. 1 claim the arms, C C, grooved on their lower side, and provided with braces, E E, hivoted therein, so that they may lie in the same, and connect-ed to the upright, A, substantially as and for the purposes herein set forth. 82,358.—FIRE ESCAPE LADDER.—George Skinner, Brook-lyn, N. 7. Iclaim, 1st, The peculiar arrangement and combination of the pivoted frame, K, caster weel, M, rope or cuain, O, and shaft, P, with each other and with the ladder, C, axle, B, and wheels, A, substantially as herein shown and described and to the purpose set forth. 2d, The combination of the frame, D, and leg, d2, with the ladder, C, axle, B, and wheels, A, substantially as herein shown and described and for the the purpose set forth. 82.339.—GRAIN STORER. — R. M. Mitchell, Fort Atkinson Wis. I claim, 1st, The arrangement of the bins, A, in a vertical column, said bins being connected by means of a tube, B, provided with receiving and dis-charging ordices, E F, respectively, substantially as described for the pur-pose specified. 2d, The tube, B, passing through the series of bins, A, and provided with receiving and discharging ordices, communicating with each bin, said ori-fices being provided with valves which are adapted to be operated by means of cords, U, or their equivalents, in the manner and for the purpose substan-tially as herein set forth. 82,379.—CONNECTING ROD.—Edward Brown, New York city. Antedated September 16, 1888. I claim the combination, with the double screw rod, C, of the two inclines, b and c, whether the said inclines be pisced on the washer, E, and the end of the connecting rod, A, or on the two washers, D and \mathcal{B} , substantially as herein described. The combination of the extension crossbar, Eand e' e', with the ladder xle, B, and wheels, A, substantially as herein shown and described, and the purpose set forth. C, axl 82,380.-SLED KNEE.-Benjamin F. Cady, Chittenango, N. Y. I claim a sleigh knee having rod, A, and shield, H, constructed, combined and arranged, substantially as described, as a new article of manufacture. 82,359.—CARBURETER.—Henry Slatter, Covington, Ky. 82,340.—Spring FOR WAGON SEAT.—John H. Nale and John I claim, 1st, The arrangement of the water tanks, A and B, principal and auxiliary receivers, C and D, pipes, F H, and R, and tauk, E, for the purpose set forth 82,381.-LIFTING JACK.-John Camp (assignor to himself W. Rogers, Decatur, Ill. We claim a spring seat for wagons, composed of reversible cross spring praces, supported by and in turn supporting the seat by a bridge place at r near their points of crossing, substantially as herein described and repreand Heary Marshall). Oncy, III. Camp (assigned to inimisely in the combination of the reversible lever, $B \ b$ b', the stand, A, and following pin, C, relatively arranged to operate in the manner described for the purpose specified. .. e tank, E, adapted to contain b oth water and gasoline, and provided e pipes, R H K, and M, and cocks, L L', as and for the purpose desigwith th nated.

82.341.-CLOTHES PRESS.-J. S. Nicholson, Anamosa, Iowa. A and B, uprights, 1 and 2, cross piece, 3, shelf, 4, the coverings, 5 and j, the arms, a b and c, the bars, e f and g, the rest, h, as and for the purpose

specified. 82,342.— VALVE GEAR FOR OSCILLATING ENGINE.—Charles H. Overton and D. B. Overton, Dover, N. J. We claim the arrangement of the boop, G. reciprocating plate, E. and guide plate, d. with reference to the trunnion, a, of an oscillating cylinder, substantially as shown and described.

-WAGON.-Alvah Pate and Edgar Wilber Pate, Nan-82.343.

82,343.—W AGON.—Alvah Pate and Edgar Wilber Pate, Nankin, Mich.
We claim the construction of a wagon or carriage, combining the springs, D, body, E, semi-circular frame, H, roller, I, hangrer, J. curcle, K, 'f dfu wheel', L, and king bolt, M. or their equivalents, with any suriable axles, B, and wheels, A, when arranged, connected, and operating substantially as and for the purposes herein set forth and shown.
82,344.—W AGON BRAKE.—David Philips, Cordova, Ill. I claim a brake, consisting or the shaft, D, having ruh blocks, attached, held in by the rods. F, and operated by the lever, C and H, connected by the rod, G, substantially as described.
82,344.—Hopser RAFF.—C. H. Poage Perry Mo.

rod, G, substantially as described. 82,345.—HORSE RAKE.—C. H. Poage, Perry, Mo. I claim the combination of the staples, e', and rings, e, with the rake, a b c d, and the flexible draft chains or cores or straps, g g, substantially in the manner and for the purpose described. 82,346.—MACHINE FOR CUTTING SCREW THREADS.—Denis Barbier Darth Greener

Poulot, Paris, France. claim, 1st, The arrangement herein described, of the perforated rotating d sliding jaws, D, plate, C, and hollow shaft, B, with mechanism for rota-ig the same.

ting ting the same. 2d, in combination with the above specified mechanism, the guide rods 1, and sliding die carriage, H, constructed and operating substantially as de-scribed.

and shuting die carriage, in, constructed also operating substantiation, as secribed. 3d, The arrangement, in the die carriage, of the cutting dies, k, and sliding blocks, l, in combination with the screws, gearing shaft, and hand wheel, for operating the same, so that said dies can be moved simultaneously, either to-ward or away from each other, as set torth. 4th, The inclined and projecting frough or receptacle, located beneath the cutting mechanism, and arraneed to receive the shavings or chips and lubri-cating only, and to conduct the latter to a separate receptacle, as herein shown and described.

82,347.—MACHINE FOR MOLDING CANDY.—E. K. Powers,

suown and described.
82,347.—MACHINE FOR MOLDING CANDY.—E. K. Powers, Grand Rapids, Mich.
I claim, 1st, The movable molds, B, constructed each of a bottom piece, a, and a verticel side strip, b, sharpeneu at its apper edge, in combination with the roller, G, and the mold's receptacle, A, all of which may be constructed of wood or any other material, and arranged substantially in the manner as and for the purpose set forth.
2d, The press, composed of the bars, K K', arranged and operated substan-tially asshown, in combination with the plunger or follower. L, box. M, the silee, N, and spring stop, O, all arranged for joint operation, substantially in the manner as and for the purpose specified.
82, 348.—KNITTING MACHINE.—J. W. Rist (assignor to him-self and Ira A. Hebbarc), Rochester, N. Y. Antedated September 9, 1868. I claim, f. The needle bed, composed of the division plates, d, and spcing purposes beef forth.
2d. The gib, G, in combination with the bed, A', and removable needle bed, as and for the purposes of forth.
3d, the arrangement of the locking spring, N, coustructed as described, attached rigidly to be lock place, F, and operating upon the V-shaped dam, M, on the reversing plate, H, substantially as and for the purposes set forth.
4th, The arrangement of the cam. Q, with the pivoted lever, R, and stud. g.

forth. Ath, The arrangement of the cam, Q, with the pivoted lever, R, and stud, g, of the wing cam, D, on that end of the lock, substantially in the manner and for the purposes heren shown and described. Sth, The arranged of the cam, O, upon the reversing slide, in connection with the stud, g, of the wing cam, the parts all operating substantially in the manner and for the purposes shown and described. 6th, The reactionary spring, I, in combination with the stud. g, and wing cam D, substantially a shown and described and for the purposes set forth

6th, The reactionary spring, 1, in combination with the stud. e, and wing cam, D, substantially as shown and described and for the purposes set forth. 7th, The combination with lock plate, P, of the needle adjuster, T, con-structed, arranged, and operating substantially in the manner and for the purposes set forth. 8th, the combination with the lock plate, P, of the cam and needle guides or a djuster; E, substantially in the manner and for the purposes set forth. 9th, in combination with the wing cams. D, and their stude, g, the cams, O and Q, and latch, R, or their equivalents, whereby said cams, D, are moved upwird simultaneously with the closing of the V-cam, C, for the purposes described.

up which immutateously with the closing of the veam, of the the puppers described. If the combination of the plates, p, and studs, g, with the set nut, B, index band, y, and scale, s', for the purposes set forth. If the loop, the pivoted lever index, y, arranged and operating substantially as and for the purposes shown and described. If the pivoted yran carrier, Y, in combination with the friction traveler q, and the rod, W, all constructed, arranged, and operating subshown and de-scribed.

Q, BL Serih 13th, The yarn carrier or guide, Y, slotted as shown and described and for

62,300.—LUBRICATOR.—G. Waters, One match, One. I claim a lubricator, constructed with a graduating screw or plug, in which is formed a gradually tapering slot or groove for regulating and con-trolling the discharge of oil, as described. 82,369.—Corn HUSKER.—Samuel Wesson, Worcester, Mass. I claim, ist, The hinged guard or separating plate, Z, in combination with the separating roll, X' and bars, V, substantially as and for the purposes stated. the purposes set forth. 82,349.—FEMALE STRINGE BED PAN.—Alvah Rittenhouse,

82,349.— FEMALE STRINGE DED TAR.— ALTON ANTONIA STRINGES, M. D. Philadelphia, Pa. I claim, 1st, The bed pan or vessel, J, capsular vulva, H, right angles uction tube, K, substantially as set forth. 24, The vaginal extension tabe, N. M. metallic valve tube, P, right angle suction tube, K, rabber build, K, vessel, J, capsular vulva, H, strainer, L, all combined and arranged substantially in the manner and for the purpose as hereinset forth and described, 82,350.— TRACK LAYING MACHINE FOR RAILROADS.—Wm. D. Robertson, San Francisco, Cal. Totalin, let, 'Intering guard or separating pitte, 2, in condition with the separating roll, X' and bars, V, substantially as and for the purposes stated. 2d, The combination, with the guard or binged separating plate, Z, of the adjusting screws, 12 12, and stards, 14 14, as and for the purposes set forth. 3d, The combination of the shield, 15, with separating roll, X, and bars, V, substantially as and for the purposes set forth. 4th, The combination, with two or more sets of husking rolls, of a hinged car covering plate, arranged as described, so as to retain the cars in proper contact with the rolls, and provided with one or more dividing places or par-titions, extending between each two con tiguous or adjoining sets of rolls, in the manner and for the Purposes shown and set forth. 5th, The combination, with the sch set of husking rolls, of an auxiliary adjustable roll, H, arranged, with relation to the extroir or lower roll, E, of each set, in the manner and for the purposes shown and specified. 7th, The combination, with two or more sets of busking rolls, and set forth. 7th, The combination, with two or more sets of busking rolls, and the show the auxiliary rolls, of the removable car covering plate and rulde, I M, the ear guide, K. and chutes or ways, L, for delivering the ears to the auxiliary rolls, the whole being arranged to operate substantially in the manner and for the purposes shown and set forth. 8th, The combination, with two or more sets of husking rolls, of a continu-ous earcover or shield, I, with its division piece or pieces, M, substantially as and for the purposes efforth. 82,370.—GAME.—William H. Wilsen, Providence, R. I. folaim a game, consisting of a combination of the pointer, D, and plate ard for the purpose set forth.

Robertson, San Francisco, Cal. I claim, 1st, As a new application to construction trains, for supplying power to carry forward from the rear car to the place of deposit, the rails and ties, the engines, a a, mounted on the central car, substantially as de-centrated on the central car, substantially as de-

power to carrying the ratio from the central car, substantially as described.
2d, The shaft, f, with the screw, g, actuating the trucks, b b, by the beveled gear, k'', or their equivalents, substantially as described.
3d, The pulley, an the rear truck axie of the engine, for driving the friction rollers which carry the test to the lacline trough beneath the boiler of the engine, substantially as described.
4th, The friction rollers, t and u, in combination with the channel or trough v, substantially as described.
5th. The pulley, and for the purpose specified.
5th. The pulleys, g, and the belts, w and w''', or equivalent devices, for actuating the cutters, substantially as described.
6th, Carrying the rails forward at each side of the boiler, and lowering them to the road be dy the davits, A A, substantially as described.
7th, The rollers, g, g, r r's s's''s''', the endless chains, p b', or equivalent devices, for actuating down and holding the ties while the cutters trum them, substantially as described.
82,351. - MITER BOX. - Clark Robinson, Fox Lake, Wis.
I claim the plates, B C D, in combination with the frames, J J, guides, H H, having racks, F F, standards, L O, and oution, G, the whole being constructed and arranged substantially as dorribed in specific and for the purpose here its specific and a for the purpose here its specific and arranged substantially as dorribed. structed and arranged substantially as and for the purpose herein specified. 82,352 — CARPET BAG.—Anthony J. Robrecht, Newark, N. J. I claim, 1st, The combination of one or more partitions with a traveling bag, valise, or trunk, produced by means of hooks and eyes, constructed to be employed in the manner and for the purpose specified. 2d. The combination of the metallic band, f, with the partition, e, and also the combination of said band with hooks or eyes, employed in the manner and for the purpose specified.

and for the purpose specifica. 82,353.—Mold For Casting Sleigh Shoes.—N. W. Russell,

82,371.—PUMP.—Samuel Woodruff and H. B. Beach, Hartford Goua.
We claim the arrangement of the series of valves, D and E, in relation to cylinder, B, annular chamber, a and chamber, F, substantially as described for the purpose specified.
82,372.—BEE HIVE.—Valentine Zimmerman, Morris, III.
Iclaim, 1st, The slatted partition, E, arranged to support the frames, F, and the front ends of the lower frames, G, a position by means of the pins, i, and house, k, en bitantially as shown and described.
24, 'the securing of the lower frames, G, a berein shown and described.
25, 'Jan Beecuring of the lower frames, G, in position by means of the pins, i, and house, k, en bitantially as shown and described.
36. The sides, C, applied to the box or case. In connection with the springs, D, in the manner substantially as and for the purpose set forth.
82,373.—CAR STOVE.—William A. Allen, Medina, N. Y.
Iclaim the combination of the above described double door, having plutes H and B, and screen, E, and provided with a lock, D, with the body of the stove and the flue, with the screen, F, therein, all being constructed and arranged tubstantially in the manner set forth.
32,374.—BUNG BORER.—John G. Baker and Henry Asbury, Philadelphna. Pa. Code Falls, lowa. I claim, 1st, The sand flask or cope, A, and metallic mold section, B, con-structed substantially as described, when used in combination with each other for the production of sidgh shoes, as set forth. 2d, The covering plates, J, in combination with the channeled metal sec-tion, B, and sand cope, A, substantially in the manner and for the purpose described.

described. 82,354.—Device for Holding Cut Nails while being

HEADED.-Denis Savery, Wheeling, W. Va. I claim the arrangement of the lever, C, tappet, a, spring, D, plate, b, pad, e cam, B, and shatt, A, in the manner and for the purpose specified. 82,355.—CORK PULLER.—Geo. W. Schermerhorn, East Lim-Philadelphia. Pa. We claim the combination of the tapering tubular stock, A, its boring edge, x, reaming edge, x', and tapering screw, b, the whole being construct-ed and arranged substantially as and for the purpose herein set forth. 82.375

Ington, Me. I claim the instrument for removing corks from bottles, consisting of the handle, A, having the stem, B, and spring loop. D, at right angles to each other, and provided respectively with the sliding disks, C and E, all con-structed and arranged to operate as described, whereby the cork is first publicd into the bottle by the stem, B, and afterward withdrawn by the loop, D, the disks, C E, in both operations serving to prevent the contents of the bottle from sentrating out as being and content.

3d, In combination with the subject matter of claims, 1 and 2, the auxiliary carbureting chamber, 0, or its equivalent. 82 360.—FOLDING TABLE.—William Smith, Cincinnati, Ohio. 1 claim the combination, substantially as described. of the table, A, hinged frames, a 8 C D E, legs, F, binged braces, G g d d'e' e', slides, W, under cut grooves, I 1, stops, J, and spring bolts or catches, K, or their mechanical curvelouis, for the object explained

grooves, 11, stops, J. and spring boils of catches, K. of their mechanical quivalcules, for the object explained. 32.351.—HORSE COLLAR.—J. A. Sutherland, Elmwood, Ill. I claim a horse collar, made of wood, when constructed substantially as hove described.

above described. 82,362.—QUARTZ MILL.—Samuel Swesey, Malta, Ohio. I claim, lat, Suspending the stone, C, above the bad is stone by means of the swiveled connections. k, and screws, h, in combination with the shaft, D, and stone, C, for thep uprose of adjusting the grinding face of the shaft, D, parallel to the grinding face of the bed stone, B, as herein shown and de-scribed for the purpose specified. 2d, The arrangement of the hopper, K, upon the yoke, E, whereby said hopper is revolved with the stone, C, as herein shown and described, for the purpose specified.

purpose specifica. 82,363.—BEEHIVE.—James Tallman, Clayton, Ill.

I claim, 1st, The arrangement and combination of a series of hives, pro-vided withinclined bottoms, and resting on inclined bars, a, within a frame, in such a manner that the several hives may be made to communicate with or cut off from each, as may be desired, substantially as shown and de-seribed

scribed. 2d, The house, composed of the frame, A, and box, C, the latter being pro-vided with doors, f, and with a lid or detachable top, F, when said house. viaed with doors, f, and with a hid or detachable top, F, when said house, thus constructed, is used in connection with a plurality of hives, B, adapted to the bouse of frame, in the manner substantially as and for the purpose set forth.

82,364. -Sweats for Hats.-George W. Thompson, Brook-

170, N. Y. I claim, as a new article of manufacture, a sweat band for hats formed of paper coated with 1 pan or other water proofcompound, and finished by em-bossing, substantially as described. 82,365.—REFRIGERATOR AND SIDEBOARD.—John A. Thomp-

son, Anburn, N. Y. I claim the construction of refrigerators and household preservatorie: of anglewood, skeleton frames, with their entire walls of trunk board, or its equivalent, filled with a concrete of plaster of Paris and granulated carbon, or other suitable material securing the same effects, all as specified and set

forth. 82,366.—SEWING-MACHINE.—Jeptha A. Wagner, N. Y. city. I claim, ist, The feeding device, J, turnished with points on each side of an open slot, and a point or points in range with said slots, the said feeding points being applied, arranged, and operating substantially as described. 2d, The complication of the bridge, u, plate, I, and feeding device. J t tl, the said bridge being slotted, and the feeding device being forked and fur-nished with central and side points, substantially as and for the purpose de-sortbed nished with central and suc points, successing, successing, successing, and served and showed and provided with a forked or V-shape at one end, and a bevel and shoulder at the other end, in combination with the recessed removable plate, I, substantially as shown, and so that by one serve the bridge is confined in position. 4th, The bridge, u, constructed as shown in figs.13 and 14, for the purpose described.

4to, the bridge, u, constructed as snown in ngs.1s and 14, for the purpose described. Sth. The combination of the looper, H, the feed lever, J, with its central and lateral feeding points, slotted bridge, triple slotted preser foot, and upper needle, the said parts being constructed and arranged as described, and operated by a cam pulley, constructed as described. 6th, Thecam pulleys, E F, constructed and arranged as described, needle, c. feed arm, J, bridge, u, and presser foot, V, all constructed and ar-ranged and operating as described. 7th, The arrangement of a front elastic support, a?, for the cloth plate, B, forw ard of and centrally between the two rear higging classic supports, a2 s, subtralially in the ma uner and for the purpose described. 8th, The rear clastic sleeve bear ugs, a2, fitted in the hinking studes, a1, in combination with the hollow bearing boxes, a7, formed in the cloth plate, B, in the manner described.

The manner described, with the levers, Ei F1. applied to it, as shown in 9th Thegimbaljoint, g, with the levers, Ei F1. applied to it, as shown in fg, 15, in combination with the feeding arm, J, looper guide, p, and the loop-er or lower needle, H, all constructed, arranged, and operating as described. 10th, The cloth plate, B, cast with a horizontal portion forward of the axis of the needle arm, C, and with a semicircular portion, B1, in rear of the ho-rizonial Doriton, and also with a bracket, B2, and hollow bearing boxes, a 7, all substantially in the manner shown and described, and for the purpose set forth

torta. 11th, The slotted cloth presser, \overline{V} , in combination with the elevated hridge, a, and feeding points working on both sides of said bridge, substantially as iecribed.

described. 82.367.—HAMES AND STRAP FASTENER.—John B. Water-

man, Summit, Mich. I claim the arrangement, in a hames fastener, constructed as herein de-scribed, of the latcu, D, having a forked end, E, and operating in combina-tion with the spring, C, and ratchet bar, F, all constructed and operating as herein described and shown.

I claim a game, coosisting of a combination of the pointer, D, and plate or disk, C, of which one is movable and the other stationary, the movable part being set w means of a ball propelled by the player, as set forth. 82,371.—PUMP.—Samuel Woodruff and H. B. Beach, Hart-

-DINING TABLE.—E. H. Bloebaum, and C. H. Na-

herein described and shown. 32,368.—LUBRICATOR.—G. Waters, Cincinnati, Ohio. I claim a lubricator, constructed with a conditionation of the state of

her 82.

October 7, 1868.

82,382.-HAY SPREADER.-Nathan Chapman, Milford, Mass. I claim, ist, Giving the raketeeth, when rakeing a forward and an upwar movement, and a backward and downward movement, in regular successio by means of the toothed where wheel, G. traversing bar, N, where seat. S, and by means of the toothed wiper wheel, G, traversing bar, A, wiper seat. S, and springs, L, constructed and arranged to operate substantially as described. 26, Giving the teeth, when tedding, a forward and upward movement, and a downward and a barkward movement in succession, by means of the toothed wiper wheel, G, traversing bar, N, and inclined plane and groove on the block, X, so ubstantially as (secribed. 3d, Hinging the inclined block, X, so that the rear end will rise and let the pin or riller pass under it as it moves backward, and catch on the top as it moves forward, substantially as described. 82,383.—MOP LIGAD.—C. B. Clark, and E. L. Ferguson, Buf-talo, N, Y.

82,383.—MOP FIEAD.—U. B. Clark, and E. L. Ferguson, Bultalo, N. Y. We claim the nut, C, provided with flanges, cc', or equivalent, in combina-tion with the collar portions, D formed with elongated openings, b, and ledges, i, substantially in the manner and for the purpose set forth. 82,384.—WAGON JACK.—W. Clifford, Mina, assignor to A. F. Jennings & Co., Dunkirk, and T. R. Coveney, Mina, N. Y. I claim the swinging bar, D, ply oted to standard, B, with its free end rest-ing on the disconnected lever, E, and guided by the straps, d, rigidly se-cured to the lever, so as to operate in the manner and for the purpose as de-scribed.

82,385.--EQUALIZER FOR VEHICLES. - J. J. Connelly, Chi-

82,383.—EQUALIZER FOR VERICIPAL cago, II. I claim a draft equalizer consisting of an evener or draft bar, A A, pulley, H I G J, and chaims, O O, the chain, O, passing over the pulleys, H G, and providing a draft attachment for the outside trace of the nigh horse, and the inside trace of the off horse, and the chain, N, passing over the pulleys, J J, and providing a draft attachment for the outside trace of the off horse and the inside trace of the nigh horse, substantially as and for the purpose speci-ted and shown.

– Washing Machine.—Michael Culler, Fredericks 82.386.

52,500.— WASHING HACHINE.—Intellact Outlet, Fredericas hurg, Ohio. I claim, in a washing macbine, suspended between the oblique standards, A A, and upon the roas, a a, the adjustable corrugated cylinder, G, hung up-on the frame, D, and secured to operate in the tub, or inserted above it, by the clamps i i, all as herein shown and described.

on the frame, by and security to wown and described. 82,387.—SEED SOWER AND HARROW COMBINED.—C. Curtis, Galesburg, III I claim the bopper, Bdrum, Ebox, F, and bar, H. constructed and arranged as described, and combined with the adjustable trane, L, and revolving har-rows, Z, substantially as set forth and for the purpose described. 82,388.—ARCHED BRIDGE.—Joseph Davenport, Massillon, Onto

82,388.—ARCHED BRIDGE.—JOSEPH Davenport, Reserver, Ohio.
I claim, 1st, The rods, N N, when used in combination with the arch, B, and posts, K K, substantially as and for the purpose specified.
2d, Supports, O, When used in combination with the arch, B, and rods, N N, substantially as and for the purpose specified.
3d, The lever post, K, when consurated of the side plates, K K, bolts or rivers, k, blocks, M M, and cross piece, Land used in combination with the chord bolt, J, with straps, I late arched thereto, and to the chords, A, the rods, N N, and the arch, B, substantially as and for the purpose herem specified.
82,389.—GLASS LIGHT.—W. A. Demuth, New York city.
1 claim a glass light, constructed of solid glass rods, arranged in the man-

I claim a glass light, constructed of solid glass rods, arranged in the man er described. 82,390.—COAL-MINING MACHINE.—G. E. Donisthorpe, Leeds,

52,590.—COAL-MINING MACHINE.—G. L. DOMISHOFPE, Leeds, Eng. Patented in England Dec. 5, 1865. I claim, 1st, The combination of the mining machine with a screw and nut to move it forward, and with a removable pillar to sustain the thrust of the screw, substantially as before setforth. 24. The combination of the mining machine with a steadying bar, sustained by removable pillars, connected and supported as described, to steady the machine when at work, and prevent it from getting of the rails, substantially abeline setforth.

82.391.—Coal-cutting Machine.—G. E. Donisthorpe, Leeds,

52.591.—COAL-CUTTING MACHINE.—G. E. Donisthorpe, Leeds, Edg. Patented in England April 21, 1866. I claim, 1st, The combination, substantially as set forth, of the rack on the rail, the geared pinlon, the worm, and the hand wheel, with the lifting screw, l, whereby the feeding devices on the carriage may be released from the rail. The combination, substantially as set forth, of the carriage, the feeding mechanism, the guiding mechanism, and the cutting mechanism, for the pur-base to forth.

pose set forth. 3d, The combination, substantially as set forth, of the carriage, the cylin-der, the cutter connected directly with the cylinder, and the mechanism for controlling the induction valve of the cylinder, whereby the valve is not wholly opened unless the cutter makes a tull stroke, and, consequently, the depth of one cut regulates the force applied on the next stroke of the cutters

cutters. 4th, The combined arrangement of apparatus herein described, for cutting grooves or holes into the floor or roof of a mine. 82,392.—SASH FASTENER.—J. E. Downs, Lowell, Mass. f cuim the combination and arrangement of the hinge, ef, and fastener, k, when arranged ior the purposes as described and fully set forth. 82,393.—COFFEE ROASTER. — J. E. Edmundson, Bartlett, Obto

Oblo. I claim the arrangement of the plate, A, walls, B B, fixed cylindrical case, C, having the door, B', rotating interior cylinder, D, having the opening, d, in its side, and crankshaft, E, substantially as described and shown and for the nurnose sneetiled. the purpose spectruea. 82,394.—Apparatus for Preserving Beer, Ale, etc.—R

82,394.—APPARATUS FOR PRESERVING BEER, ALE, ETC.—K. Eickemeyer, N. Y. I claim, ist, The process, substantially as herein described, of preserving beer or other perish tole iquids or substances, by the connection or combi-nation of the vessel containing the same with a carbonic acid gas generating apparatus or reservoir, in such a maner as that the connect so faid vessel, or vacant space of the latter, is or are kept constantly charged with said gas, in a regular and automatic manner, as rapidly as said contents absorb the gas or contents of the vesse, are drawn off, substantially as specified. 2 at The arrangement, in connection with the vessel containing the liquid or article requiring to be preserved, of an upper acid reservor, B, and lower gas generator, C, for supply, in a regular and automatic manner, of the gas to said vessel, and whereby the gas is forcibly expelled into the latter by the superlicembent weight or pressure of the column of liquid acid, essentially as herein set forth. 3 d, The arrangement of the said reservoir, B, gas generator, C, and washer,

as normalized and the solid reservoir, B, gas generator,C, and washer, B, in an applicatus for supplying, in an automatic manner, carbonic acid gas to the vessel, or its contents requiring to be preserved, substantially as shown and described.

and described. 82,395.—PADDLE WHEEL.—P. Emerson, Carondelet, Mo. I claim the paddles, E, when hinged to the outer rim of the wheel by means of journals, c, placed at their bottom edges, substantially as described and set for h. 82,396.—BRICK MACHINE.—J. A. Falconer and R. Graham

set roth.
82,396. — BRICK MACHINE. — J. A. Falconer and R. Graham, Jersey City, N.J., assignors to E.C. Bradford, J. H. Henick, and O. A. Clougi, New York city, assignors to J. H. Renick.
1 Chinu, ist, Thelinget book, J., in combination with the spring, sconnecting rod, M. and crank pin, k, of the crank, K, connected with the driving power of the machine, substantially as and for the purpose described.
24. In combination with the hinged hook, L, spring, s, connecting, rod, M. and crank pin, k, of the crank, K, the adjustable clamp, m, all constructed and arrarged substantially as and for the purpose described.
23, 97. — TAKE-UP FOR THREAD IN SEWING MACHINES. — J. Fanning, Brookiyn, N. Y., assignor to J. S. Andrews, New York city.
I claim the eye, h, upon the arm, b, in combination with the eye, i, near the end of the lever, e, that moves the needle-bar, soarranged as to draw upon an tightea the thread between the eye, h, and the guide, k, on the needle bar, as the needle besends, forth.
82,398. — FARM GATE. — Gilbert Gibbs, Fairview, Ind.
I claim, let, The obbque link, a, in connection with the central lever, E, when so arranged as to draw the boit, n.from the carch or socket, c, before opening the gaie, substantially as shown and specified.
2d, in combination with boit, n.lever, B, link, a, and central lever, E, the bars, S S, and hand leveres, D D, all arranged to operate substantially in the manner and for the purposes set for the cart, and hand here, so may and specified.
3d, Attaching a panel composed of the panel is so arranged, as desort the notches in the poet, G, the torward part of the gate may be raised, as described and shown.
82,399. — CONSING MACHINE. — Charles Gilpin and Laurence T. Diskinson, Cumberland Md.

-Rossing Maching.—Charles Gilpin and Laurence

62,593.— RUBSING INFORMATION OF A CONSTRUCT STRUCTURE AND A CONSTRUCT STRUCTURE AND A CONSTRUCTION OF A CONSTRUCTION the purpose specified. 26, The arrangement of the knife, K, with reference to the rollers, B1 B3, substantially as and for the purpose set forth.

roller, a, in c as described. 82,422.—CORN PLANTER.—John L. Leas (assignor to himself and Andrew B. Lerew), York Sulphur Springs, Fs. I claim, 1st. The slide, C, in combination with the sheaves, E F, and straps, H, J, and K, as and for the purpose described. 2d, The proted levers, M and L, in combination with the elastic connec-tions, I, as and/or the purpose described. 82,423.—CULTIVATOR.—M. F. Lowth and T. J. Howe, Owa-toons J. Man. as describe tantially 82,400.-Rossing MACHINE.-Charles Gilpin and Laurence T. Dickinson, Cumberland, Md. We claim, 1st, The arrangement of the reciprocating saw, M, with relation to the rollers, substantially as described. 2d, The combination of the saw, M, pitman, H, spring, P, lever, R, and cam u, on shaft, W, substantially as described, and for the purpose specified. 3. OL SHALL, W. SUDStantially as described, and for the purpose specified. 82,401.—MANUFACTURE OF SMALL BEER.—O. F. Green and James E. Clark, St. Lonis, Mo. We claim, 1st, The ingredients bereinbefore mentioned, or their substantial equivalents, when subjected to the processes substantially as described. 2d, The beverage formed from such ingredients, as a new article of manu-facture, substantially as set forth. 82,449.-COAL STOVE.-S. B. Stewart, Brush Valley, Pa. 82,423.—CULTIVATOR.—M. F. LOWIN and T. J. Howe, Owa-toona, Minn. We claim in combination with the mortised beam, A, and the tooth, B, having the shanks, b b', and pivoted on the bolt, c, a stirrup-shaped clamp, E, having an oblong or semi-circularopening, O, the side, o, of which, that bears against the shank, b', being straight, and said clamp being confined to thebeam, A, and tightened or loosened by means of a serve shaak, r, passing through a slot in the side of the beam, and a server unt, a, fitting upon it out-side of the beam, and screwing against the side of the beam, or against a washer, substantially as described. I claim the lower section, A, constructed as described, in combination with the metal plates or strips, d d, and upper section, C, all arranged substantially as and for the purpose set sorth. 82,450.-CARBENTERS' PLANE.-J. B. Tarr, Chicago, Ill. An-52,490.—CARRENTERS FLANE.—J. B. Tarr, Chicago, III. Antetated Sept. 16,1858. I claim.ist, The combination of the central clamping and tightening device with the adjustable supports, C b, the said device and the supports being applied to a plane stock, and in the relation to the plane iron thereof, substantially as and for the purpose herein described. 2d, Waking the two supports or abutments, C D, adjustable, substantially as and for the purpose herein described. 3d, do for the purpose herein described. 3d, Apping pressure to a plane iron between two supports, C D, through a device, E F, substantially in the manner and for the purpose herein described. 1bstantially as set forth. -GEAR CUTTING TOOL.—Jackson Harrington (assignor to himself and a C. Lippitt, New London, Conn. I claim the series of cutters, A A, in combination with the circular socket plate or holder, E, and confining plates, 6 G, arranged substantially as and for the purposes described and set forth. Also, the circular uog, I, circular recesses, J, and brace nut, M, when used in combination with the cutters, A A, and holder, E substantially as and for the purpose gest tort. washer, substantially as described. 32,424.—PLANE FOR CUTTING BLIND SLATS.—R. E. Lowe, Upper Alton, Ill. I claim, 1st, The arrangement of the shoe, C, slock, A A', screws, c c', cut-ier iron, D, and clamping hooks and nuts, F G, substantially as described, when the parts are constructed to operate in the manner set forth. 2d, The arrangement of the guards, I, with the knife, D, the track, C, and the gage, H, constructed and operating substantially as described. 20, 205 Duryung Hoop. Thiotetra Luces. Solar Measurements 1, 20, 205 Duryung Hoop. Thiotetra Luces. Solar Measurements 1, 20, 205 Duryung Hoop. Thiotetra Luces. 82,424 82,403.--05 65 SEC LOFG. -KNIFE FOR CUTTING GREEN CORN FROM THE COB.scribed. 4th Changing the pitch and tightening the plane iron by the same means. and at the same time, the means employed being constructed and operated 2d, The arrangement of the guards, 1 i, with the knife, D, the track, G, at the gage, H. constructed and operating substantially as described. 82,425.—DRIVING HOOP.—Timothy Lucey, Salem, Mass. 1 claim a driving hoop, having a construction substantially as described. Jackson Harrington (assignor to himself and A. C. Lippett), New Lonsubstantially as here in described. Substantially as here in described. Sub. The adjusting of the plane iron by means of the clamping device, com-posed of the serews, : D and E, nut, F, and plate, band applied in such man-ner that the bit is tightened, and the pitch changed at the same time and by the same means, when constructed to operate substantially in the manner de-scribed oon, conn. I claim the concave plate, C, with V shaped cutters, D D. and guide rib, E, in combination with the rectangular shaped shank, B, arranged substantially as and for the purposes described and set forth. 82,426.—CUPBOARD AND TABLE.—J. C. Mack, Bristol, Conn. l'claim the combination of the cupboard, A, shelves, F, and doors, D, with table, B, and legs, C, arranged substantially as and for the purpose 82,404.-MACHINE FOR SHEARING SHEEP.-Geo. Harsin and with table, B, and legs, C, arranged substantially as and for the purpose specified. 82,427.—HAY ELEVATOR.—Harvey McCown and Luther M. McCown, Enon Valley, Pa. We claim the jaws, I L in combination with the disk, K, and wedge, L, or C. T. Sanders, Kirkville, Iowa. We claim, 1st, In combination with the cutter, C, the belt, B, andcord, B', mnning over pulleys, and kept taught by weights, arranged to operate sub-stantially as and for the purpose set forth. 2d, The combination, in a sheep shearing machine, of a stationary blade, k, 82,427.-HAY ELEVATOR.-Harvey McCown and Luther M.

and oscillating blade, 1, constructed and arranged, in relation to one another, substantially as set forth. 3), The arrangement of the pulley, G, having a wrist pin, G1, slotted arm, H, oscillating cutter, I, and stationary knife, K, within the hollow case, C1, substantially as and for the purpose set forth. 82,405,—THILL, COUPLING.—Jas. Haverly and Chas. A. Tib-titude Parts I. and Stationary knife, K, within the state of the set of th

82,405.—THILL, COUPLING.—Jas. Haverly and Chas. A. Tibitts, la Porte, Ind.
We claim, ist. The construction of the clasp, A, with its box, B, attached thereto, substantially as hown and described.
24, The construction of the arm, E, and the arrangement therefor with reference to the box, B, substantially as set forth.
82,406.—CULTIVATOR.—Archibald T. Heffin, Monmouth, Ill.
I claim, ist. A two wheeled elevated draft frame, with a dratt pole, C, secured upon the cross beam, B', of said frame, A, swiveling double tree, C', applied to the draft pole, and connected to links, b in combination with levers, c, and scraper carrying beams, D b, allcombined, arranged, and operating substantially as described.
2d, The attaching hooks, J J, applied to links, b, which are connected to the double trees, C', and to levers, c, esid parts berng employed in a machine constructed and operating substantially as described.
82,407.—STOVE PIPE ELBOW.—C. Hoeller, Cincinnati, Ohio.

I claim the elbow for stove pipes, constructed as herein show

scribed. 82,408.—CLOTHES DRYER.—A. S. Hopson, Plainview, Minn. I claim the flanged plate, G, and slotted sliding plate, D, in combination with the rod, a, nut, e, arms, B B, and plate, A, all constructed as described, and operating substantially as and for the purposes herein set forth. 82,409.—MACHINE FOR MAKING HORSE SHOES.—Ozial A.

Howe, Jersey City, N. J. I claim, ist. The combination of the rotating pressure disk, G, the rotating ile, F, and the oscillating frame, B, substantially as and for the purpose speci-

fier, 2d, The cutting lip or corner, i, so arranged upon the pressure disk, G, and in relation with the shoulder, m, of the die, F, as to sever the shoe from the bar, substantially as and for the purpose specified. 31, The arrangement of the rotating presser cone, F^* , upon the oblique shaft, i, when combined with the presser disk, G, and the rotating die, F, carried upon the oscillating frame, H, substantially as and for the purpose encoded.

Carried upon the oscillating frame, r_{i} , substantially as and for the purpose specified. 4th, The arrangement of the guide notch, bl, and wheel, c, upon the frame, B and in relation with the rotating due, r_{i} carried thereby, and the presser disk, G, substantially as and for the purpose specified. 5th, The arrangement of the spring, J, with reference to the rotating die, r_{i} presser disk, G, and presser cone, F^{*}_{i} substantially as and for the purpose specified. 6th, The combination of the pusher rod, u, spring, v_{i} and inclined plane, u^{*} , with the shaft, C, and die, F_{i} substantially as and for the purpose specified.

82,410.—GEARING FOR HARVESTERS.—Moses G. Hubbard, Syracuse, N. Y. I claim, 1st, The combination of the two gear wheels, C and E, of unequal size, with the spur pinioa, F, and main gear wheel, G, substantially as de-

size, with the spur pinion, r, suu main gear whos, of termination of which acribed. 2d. The employment of two or more concentric gear wheels, all of which may be made to revolve in driving the cutters, or one or more of which may be held stationary, for varying the speed of the cutters, as described. 3d, Two or more gear wheels, of unequal size, arranged upon line shats, or ubon a divided axie, in combination with a shifting clutch, whereby the speed of the cutters may be varied, as described. 82,411.—GEARING FOR HARVESTER.— Moses G. Hubbard; geranne, N. Y.

82,411.—GEARING FOR HARVESTER. — MOSES G. HUDDARU; Syracuse, N. Y. I claim, lst, The combination of the driving gear wheels. E and F, of une qual size, statached permanently to the main crosssbaft, and gearing into the two corresponding losse gear wheels. A and B, with sliding Cutich, d, and the firmly attached gear wheels. The cross auxiliary shaft, C, and the straight particulation of the second state of the state of the second and operating specification in combination with the means for chang-ing, the true gear as described, in combination with the means for chang-ing the specification of the purpose specified. 82,412.—HARVESTER.—MOSES G. Hubbard, Syracuse, N. Y., assience to Hubbard Mower Compary.

sasfanct to Hubbard Mower Company. I claim, lat, Attaching the seat by the two pivoted springs arranged one in divance of the other, and in the same plane, for the purpose and substantial-

advance of the overl, and in vices in principle in the principle action of the seat plate, D, provided with the two sockets or recesses, arranged in line, as described, and adapted to receive and permit the adjustment of the seat springs, substantially as and for the purpose described. Sd, Mounting the driver's seat for a reaping machine upon springs so arranged as to preserve the horizontality of the seat, and at the same time to give t holh a forward and downward motion, for the purpose and substantially as the forward and downward motion, for the purpose and substantially as the forward and downward motion, for the purpose and substantially as the forward and downward motion, for the purpose and substantially as the forward and downward motion, for the purpose and substantially as the forward and downward motion and the purpose and substantially as the forward and downward motion and the purpose and substantially as the forward and downward motion and the purpose and substantially as the purpose and substantially as the purpose down as the purpose and substantially as the purpose down as the purpose down as the purpose and substantially as the purpose down as the purpose down as the purpose down as the purpose and substantially as the purpose down as the purpose and substantially as the purpose down as Table it both a forward and downward motion, for the purpose and substitution as set forth. 82,413.—HARVESTER.—Moses G. Hubbard, Syracuse, N. Y.

bainy as set forto.
82,413.—HARVESTER.—Moses G. Hubbard, Syracuse, N. Y., assignor to Hubbard Mower Company.
cleaim, ist, Connecting the cutting apparatus to the main frame, by the yielding elastic corner said the vertically siliding adjusting rod, arranged and operating as and for the purpose described.
2d, The set ser ew, V, in combination with the wear plate and hinged shoe, arranged substantially as and for the purpose described.
3d, The lifting arrangement, consisting of theratsing bandle, U, cam, B, and chain, C, combined and operating as end for the purpose described.
3d, The lifting arrangement, consisting of theratsing bandle, U, cam, B, and chain, C, combined and operating as end for the purpose described.
3d, The lifting apparatus in its elevated position, as set fortb..
82,414.—HARVESTER.—Moses G. Hubbard, Syracuse, N. Y., assignor to Hubbard Mower Company.
2d, The combination of the main frame with the pole extension plece attached and arranged as shown for the purpose described with extended strong.
2d, The combination of the main frame with the pole extension plece attached and arranged as shown for the purpose described with extended withower Company.
2d, The combination of the straight pitman, substantially as set forth.
2d, The reverse wear plate, H, provided with the expanded perforated ears, whereby the hight of the cutting apparatus can be adjusted without interfering with the action of the straight pitman, substantially as etforth.

forth forth. 2d, The independent or detachable sustaining rod, by means of which the driver in his seat on the machine is enabled to raise and sustain the cutting apparatus, substantially as described. 82,416.— MANUFACTURE OF PAINT.—Wm. C. Hurd, New

82,416.— MANUFACTURE OF LARGE. IT M. C. LEWS, York city. Ist, The combination of feldspar with oil and lead, zinc, or any other suitable material for paints and colors, substantially as set forth. 2d, in addition of dissolved lineed gum or saponaceous oil, mixed with lineed oil in the grinding, or mixing feldspar with any other suitable mate-rials for paints or colors, substantially as set forth. 82,417.—BOOTS.—John P. Jamison, New York city. I claim the arrangement of the longitudinal seam or seams, a, in the boot leg, so as to rise from the bollow of the stark: or thereabouts, or (when the latter is applied to the foot) in front of the ank to the counter, substantially as and for the purpose or purposes herein set forth.

latter is applied to the foot) in front of the ankle bone, the same also being curred, as fab, to admit of a forward extension of the counter, substantially as and for the purpose or purposes herein set forth. 82,418.—COMBINED LATCH AND LOCK.—Frederick L. John-son, Walling ford, Conn. • I claim, ist, i he tumbler, D, held by spring, E, having a lateral motion to enable one bolt to act upon both as a lock and latch, constructed substan-tially in the manner hereinset forth. 2d, The bolt, B, provided with projections, a a and b, in combination with the tumbler, D, provided with arms, C C, and acted on by the said tumbler, substantially as herein set forth. 3d, The catch, F, held by the escutcheon, and arranged to act upon and keep the tumbler forth.

keep the tumbler ifom sliding laterally, constructed in the manner substantially ashereln set forth.
\$2,419.—ROOFING CEMENT.—John L. Kidwell, Washington, D.C.
I claim, Ist. A water and fire-proof composition, for roofing, dooring, etc., prepared of hydraulic cement, tar, subjurt, and naphthaline, or its equivalents, substantially as described and set forth.
2d, The above cement composition, incorporated with powdered minerals or meralite ingredients, substantially as described and set forth.
\$2,420.—CARRIAGE BHACKLE.—George G. Larkin, West Amesbury Mass

Amesbury, Mass. I claim the disk, a, provided with radial sock ets, and carrying the pad, C, when formed with a screw threaded shank, e, adjustable in the front side of the clip, A, as herein described for the purpose specified. 82,481.—FIRE EXTINGUISHER.—W. H. Laubach, Philadel-

phia, Pa. I claim, 1st, The tube, C, in combination with the diaphragm, E, and valve, D, and venttube, a, operated and constructed substantially in de-

scribed. 2d, The diaphragm, E, and spiral spring, f, constructed and operated as de

 Cc_2 +10.— Γ Edd1NG MACHINE.—J. W. SOUIC, EOSION, MASS. 1 claim the arrangement of the peg cutting mechanism, so that but one peg is cut at the end of the peg wood, which peg, after being cut, is ted for-ward under the driver, substantially as described. Also, the combination of the ratchet driving-pawl, m, with a reciprocating slide, n, to which the pawl is jointed, and by means of which it is actuated, substantially as described. Also, in combination with the peg feed wheel, d, feed ratchet, l, and ratchet driving pawl, m, the ratchet-detaining pawl, s', substantially as shown and describet. Scribed. 3d, The cap, g, operating on the diaphragm, E, constructed and operated described. Also, in combination with the peg-wood teed wheel, d, the sprin, h, press-ure of which is adjusted by the screw, k, substantially as set forth. Also, in combination with the slide, n2. spring, d2, and lever, e2, the adjust-ing plate, h2, substantially as and for the purpose set forth. Also, in combination with the ratchet driving pawl. m, and the reciprocat-ing slide, n, to which the pawl is jointed, the cam, p, for driving the slide, n, through the lever, r, and connecting rod, s, substantially as shown and de-cented

its equivalent, when constructed and operated substantially as and for the purpose herein shown and described. 82,428.— EraNo.—Frazee B. McGregor (assignor to himself

237

and George A. Hoyt, Pontiac, Mich. Antedated September 14, 1868. I claim the arrangement of the couplers, D. D. horizontal bars, C. C. Jalaed one above the other, with the elbows, e. e. and levers, d. so that when the pedal raises the levers, the upper bar is railed against the couplers, parallel, and raises the coupler against the keys, coupling them together the entire length of the key board, right to left, or both, as beefin set forth. 82,429, — PRESERVING FRUIT.—David M. Mefford, Norwalk, Other conferent to humeford Storphor Boal

Iength of the key board, right or left, or both as herein set forth.
183, 429. — PRESERVING FRUIT. — David M. Mefford, Norwalk, Oito, assignor to bimselfa af Stephen Boalt.
I claim, ist, Preserving fruit by treating orcharging the same with subhurous assignor to bimselfa af Stephen Boalt.
2d, Charring raw fruit with sulphurous acid gas preparatory to its being heated, by means of air pumpsor bellows, substantially as set forth.
23,430. — CARVING MACHINE. — George Merrill, Newburyport, Mass, assignor to Samuel Blish. Piscataway, N. J.
1 claim, ist, The combination of the rable. D and P. connected by links or rods, n m, to the lever, h. substantially as described.
2d. The shaft, 1, mounted in the main frame, and provided with the rigid arms, a and b, carrying the adjustable rule, c, and the cutter, d, and arranged in relation to the tables. D and P, substantially as set forth.
23, The table, P, provided with the side pleces or frame, H, for supperling the table period decore the end of the rables. D and P, substantially as described.
23, The table, P, and permitting the laster to be moved thereon, as herein described.
24, 430. — GRAIN SEPARATOR. — Clark W. Mills and Lewis S. Chichester (assignors to themselves and George H. Nichols), Brooklyn N. Y. Antedated Sect. 14, 1888.
We claim the adjustable earth 1, that can be moved towards or away from the pain of delivery of the grain in combination with the adjustable blast regulator, k applied substantially as and for the purposes set forth.
25, 432. — GRAIN SCHENES of the substantially as and for owlys, n. Y. Antedated Sept. 10, 1868.
We claim the series of a trubes, b, open at their under side, in combination with the adjustable blast is fallsfrom said hopper, and through the series of air tubes, and ne contact with such grain, substantially as and for the purposes set forth.
26, 433. — CRAIN MERL. — Foster Nevergold and David Brose, Pittsbur

82,433,--ROLLING HILL.-- roses are specified and arranged Pittsburg, Pa. We claim. 1st, The shaft, J, crank, L. and pitman, M, in combination with the crank, N, movable collar, P, and shaft, O, all constructed and arranged as described, substantially as and for the purpose herein set forth. 2d, The combination of the table, V, arm, b, side pieces, X X, arms, T T shaft, O, legs, U, U, hinged leaf, Y, slotted arm, Z and the lever. d, all con structed and arranged as described, and operating substantially as here is set forth.

Structed and arranged as described, and perforated lever rest, in com-set forth. 3d, Thestay lever, r, swiveled pin, s s, and perforated lever rest, in com-bination with crablever, p, all constructed and arranged in the manner and for the purpose substantially as berein set forth. 4th, The upright shatt, m, and pluton, B', in combination with pinion, C', shaft, A', pinions, F' F', cor wheels, E' E', and regulator, G', all constructed, arranged, and operating substantially as berein set forth.

shaft, A', pinlons, F' F', cog wheels, E' E', and regulator, G', all constructed , arranged, and operating substantially as berein set forth. 82,434.—BOOR BELL.—W. H. Nichols, East Hampton, Conn. I claim the lever, H, pivoted to the plate, A, at one end, and provided with a slot at its other, through which one end of the hammer wire passes, said lever being provided with lngs, d and e, by means of which it is connected to the spring, E, and to the bell rod, N; the lug, d, to which the rod, N, B at-tached, heild centrally located upon the lever, to facilitate its operation, as and for the purpose specified. 82,435 — REFENSING, CAST, IRON, —H, S, Oshorn, Foston, Bo

tached, hell^{DE} centrally boards appendix and for the purpose specified. 82,435.—REFINING CAST IRON.—H. S. Osborn, Easton, Pa. I claim the self-generating steam rabble, or the rabble in which the steam is second by the heat surrounding the rabble, in the manner and for the purposes substantially as above described. MOVEMENT —Isaac E. Palmer, Hack-

purposes substantially as above described. 82,436.—MECHANICAL MOVEMENT.—Isaac E. Palmer, Hack-

ensack, N. J. Antedated Sept. 14, 1868. I claim the combination of the toothed wheel, A, with the ring, C, having if emails thread, a. is or around it, arranged relatively to each other for op-ration together substantially as shown and described. 1 claim the combination of the toothed wheel, A, with the ring, C. having a female thread, a. is or around it, arranged relatively to each other for op-eration together substantially as shown and described. 82,437.—RECIPROCATING STEAM ENGINE.—Francis S. Pease, Buffalo, N.Y. I claim, ist, The construction and arrangement of the frame, or covers, or cruinder heads of the two cylinders, the lowest section or surface form ing a cover to the eviloder, B, and the upper surface the cover of the evinder, A. 24, The combination of the lower cylinder head, H', with the section, b, whereby to gain access to the cylinder, B, as herein set forth. 3d, The arrangement of the stuffing point inside the cylinder head can be reached from the outside between the two heads. 4th, The combination of the two cylinder head, H', formedor connected together in the manner herein described, with sufficient space between them to give access to the boils of the stuffing box, S. 82,438.—FRUIT BOX.—JOHN M. Perkins (assignor to R. R. Perkins), Plainfield, N. J. I claim a box constructed of two strips, of veneer, in which the top bot-tom may be used as botom or top indiscriminates forth. 82,439.—WAGON BRAKE.—J. S. Pfrimmer, Lanesville, Ind.. I claim the arrangement upon the front section of a vehicle of the farked rod, a, oblique rols, c c, levers, D D, keepers, d d, and spring, e, all con-structed and operating as set forth.

stratted mid operating as set forth. 82,440.—FASTENING FOR BUTTONS.—Alfred Rix, San Fran-

cisco, Gal. I claim the beaded shank and open washer for securing the button to the loth or garment, constructed substantially in the manner and for the pur-loage set forth.

pose set forth. 82,441.—WASHSTAND AND SICK CHAIR.—Valentin Schreck, Philadelphi, Pa. I claim the described combination of a sick chair and portable washstand when the parts composing the former are permanently or otherwise at tached to a swinging door, C, and otherwise arranged as and for the purpose

82.442.—WINDOW SHADE FIXTURE.—Frederick A. Seborn, David R. Dunlap, and Joachim F. C. Geist, Zanesville, Ohio. We claim the arrangement of the cord, C, pulleys, B B, roll, A, fixed cord, S, and cord, F, substantially as snown and described. 32,443.—DRAFT EQUALIZER.—Seth Shadduck, Elk River

(32,44).— DAFT DOALDZER.—Seth Shadduck, Lik River township, Iowa. I claim the drait bar, F, provided with adjusting holes, c c c, etc., ring, K, stokstantily for the purpose described. 82,444.—SAFETY GUARD FOR LOCKS.—W. C. Sinclair, New York city. Antedated Sept. 18,1863. I claim the oscillating plate, p, having a projecting pin, i, in combination with the cam slot, j, on the latch, k, substantially as and for the purpose described.

82,445.—Mode of Hardening Gas-burner Tips Made from Co. 424).— MIDLE OF ITARIJENING GAS-BURNER TIPS MADE FROM SOAPSTONE, EC.—Heary J. Smith, Boston, assignor to Joseph C. Wight-man, Newton, Mass. I claim the bardening and rendering impervious to the action of acids and heat, of ras burners and gas-burner theor any part thereof, made from soap stone, tale, talcose rocks, or minerais, by heating them in a vessel containing carbon, substantially as above described.

82.445 — CHURN.—W. C. Smith, Yantic, Conn. I claim the groove, c, and recess, m,on the gear shaft, C, and the lip, E3, and arm, E2, on the locking pin, E, constructed and adapted for joint operation, relatively to each other and to the beater shaft, A, and to the gear wheel, D, as and for the purposes herein set forth.

as abu tot the purposes herein set forth. 82,447.—TUMBLING SHAFT FOR CONNECTING POWER WITH MACHINERY.—Daidel Shell (assignor to himself and J. H. Gano), Spring field, Ohio. I claim the combination of the collar, C, with its interior bearing, c, and the block end, b, of the rod shat, B, sliding in the groove, D, of the part, A, for retaining the shaft in position at any point in the line of its extension or contraction, as applied in a tumbling shaft, for transmission of power by a rotary or revolving motion, the whole constructed substantially as described, as and for the purpose specified.

82,448.—PEGGING MACHINE.—J. W. Soule, Boston, Mass.

82.443.

82.451.-HARROW.-J. J. Thomas, Union Springs, N. Y

238

82.451.—HARROW.—J. J. Thomas, Union Springs. N. Y.
1 claim a hand brash or spiked harrow.co.sruced of peees of prank, hinged together as escribed, and provided with numerons in clined the eth : (obtined backward attsurb an inclination as rocset off or supcover any stalks of weeds, straw, or other refuse matter, substantially as described.
82,452.—SPIKM M.CHANR.—L. Thomas, Allegheny City, as simor to A Kloman, Lawr neevile, Pa.
I claim, 1sr, 1n a mac inc for making spikes and bol's, asliding carriage, B, which carries the 'pike or bolt' bla. & for bolt's asliding carriage. G, con-ructete and operating substantially as add off the purpose hereinbefores t forth.
2°, The pair of swinging and pointing tools, a' in combination with a pair of guiding as the super back and operated substantially in the manner and for the purpose hereinbefores t forth.
3°, The carn I, ver, c. and double Darallel bars, 11, or their mecha-i-fail equivalents, all spike blank, substantially in the manner and for the purposes befores in a spike blank, substantially in the manner and for the purposes blank, substantially in the manner and for the purposes blank, substantially in the manner and for the purposes above efforth as pike blank, substantially as abuve described, so that it shall except at the completion of the stroke of the masher above backward of the discound of the purposes of the pressing dias, for the purposes bereinbefores the substantially as above described, so that it shall except at the completion of the stroke of the masher above described for early of the above blank, substantially as above described, so that it shall except at the completion of the stroke of the masher above described, so that it shall except at the completion of the stroke of the masher above described, so that it shall except at the completion of the stroke of the masher above described.

to the direction of the faces of the pressing dies, for the purposes hereinbe-fore specified. 5th, In a machine for making spikes, the arrangement of the came, d and e, operating in cam yokes, substantially as described; so that one cam, d, which actuates the cutting and pointing tools, a', shall act a little in advance of the other cam, e, which operates the slucing carriage, bun order that such tools, a', may be partially opened and closed in advance of the beginning of the motion of the carriage, sumicantially as above desrend. 6th, Tue combination, in a spike machine, of swinging pointing tools, a', pouring rolls H, pressing dies, b b', and header, G, substantially as and for the carriage shores above so for the sum of a sum of a start of the set for the set of the

82.453.- LAUSAGE STUFFER AND LARD PRESS.-Nathaniel S.

Underkuffer, Norritouville, Pa. I claim the combination of the v-ssels, H and J. constructed as specified, and con-vct-d, within the doversilled receives in the table, with the standard, C. lever, E, and toilower, F, all as her-in shown and specified. 82,454. — CaMENT.—George William Upham, Amherst, N. H. I claim, the within esserible rement, composed or the instrements, N. H. 1 claim, the within esserible rement, composed or the instrements herein nameo, and computed in or shout the proper dons set forth.

82,455.- SHAFT COUPLING.-James S. Upton, Battle Creek,

Mich. I claim the sockets, B B, provided with gudgeons, C C, and connected to the slotted rig, A, by means of the pins, a 4, secured in the slott, x x, by the leather keys, all as beren shown and described. 82,456.—JOINT FOR CARRIAGE TOP PROP.—Elbertson W.

Waite, New Hayen, Coan. I claum, 1st, A joint, formed by combining segmental grooves, near the ends of the parts to be naited, with a clicular rib upon the joint piece, sub stantially as specified. 2d, Theljoint pieces, e, with circular ribs, d, entering segmental grooves, c, in the b.rs, a b, in combination with the cylinder, i, and uolt or rivet, 1, sub-stanually as specified. 82,457 — **BEDSTRAD.**—William M. Ward, and Peter Bennage, Eureta 1.1

Eureka, 1.1 We claim a bedstead. having rods, C, hooks, D, swivels, E, screws, G, pin-oles, a, slats, d, strips, e, and blocks, b, all arranged and operating substan-

tially as described.

holes, a, late, d, stripe, e, and blocks, b, all arranged and operating substantially as described.
82,458.—LAMP.—Charles Webber, and Henry Reimann, West Meriden. Com.
W. claim the construction and array generit of the cup. B, recessed thm. ble, p. sup porting sizeve, c, open platform, E, air sieve, F, and cone, G, as a dfor the pu pose described.
82,459.—DOAP AND DETERGENT COMPOUND.—Henry W. Weedon, High Point, N. c.
1 claim the p. ricularly specified combination of ingredients, and the definite quantities of the same, as set fortio.
82,460.—STEAM GENERATOR.—S. Lloyd Wiegand (assignor to Walter J. Budd). Poilsdelphia, Pa. Antedated September 4, 18:8.
I claim, b. (The onlique of spiral deflectors or guides in double boiler the branchasticht or spiral deflectors or guides in double boiler the branchasticht or spiral mouths, as shown, for conducting a supply of flat the descending columns in a ouble tube boilers, as shown and decombind.

that to the descending contains in double table bounds, in since inter-or bed. 3d The deflecting caps or domes, or the equivalents thereof, substantially is hown and described. 4th, The conical solutages, C C, substantially as shown and described. 32,451.—ItoTARY EMBOSSING PRESS.—I. M. Wilbur, Cleve-bord Obto

82,461.

82,401.—ItOTARY LABOUSING I KEDS.—I. DI. WINGE, CICCU land, Obio. I claum, 1st, The combination of the rollers, B C, impression plates, D, and counter plates, D', operated by means of the lever, E, throng it ne medium of the c g wheels, 'sin C', i.e whole being constructed and arranged in the namer shown and described, as and for the purpose set forth. 20, The lever, E, with i's adjustable pawl, F, b' c mbination with the roll-

ers, BU, arranged to operate as and for the purpose usecribed. 82,462-1NK PAD FOR HAND STAMP.-1. M. Wilbur, Cleve-

82,462 — INK FAD FOR HAND STAMP.—1. M. Wilbur, Cleveland, Obio.
I claim the improved ink padsherein described, consisting of the blocks, A A', provind with the composition taying surface. C, in combination with the ink reservoir, H distituting rollers, G G, mounted on the carriages, D, the guide roads, B B, and haudles, K K, all constructed and arranged to operate substantially as and for the purpose set forth.
82,463.—MACHINE FOR FOI-MING STEREOTYPE PLATES.—I. M Wilbur, Cleveland, Ohio. Antedated September, 16, 1868.
I claim, st. the roller, t, having a miled or file cut orcumierential surface, for the purpose set forth.
24, the siding bed, E, having a head or upright, z, with its curved surface, and the adjusting sees crew, H, in complication with the roller, C, and a ron D, all constructed and operating as described, and for the purpose set forth.

82,464. - STEREOTYPERS' PUTTY. -1. M. Willbur, Cleve-

iand, Ohio. Anteda ea Sept. 17 1868. I chaim the composition bereinabove described, for the varposes specified 82,465. - HAND BRUSHING AND FOLISHING APPAKATUS. - W 11-

82,465.—HAND BRUBHING AND FOLISHING APPAKATUS.—W ll-lism H Wilken, New York city.
I claim, ist, So arranging the colled spring and the system of gearing with-in the cylline ficial body furmshed with axial handles, as to secure the rotary movement of such body, substantially as herein set i-th.
2d, i he arrangement of the friction orske with n the cyllindrical body fur-nished with axial handles, whereny the rotary movement of the same may bestopped, substantially as herein set ion th.
3d, The arrais gruenet of the frame, A, while reference to each other and the friction pinolu, m, dividing the cyllindrical body, B, subs antially as and for the purposespecified.
20 456.—HAND BHERT.—William Wilmington Tolodo, Obio

2d, Cutring a hole and simultaneously embossing the border in a picture frame, substantially as described. 74.497. -SCRULL SAW.-Dated February 18, 1868; reissue sist.-B J Cump, Marion, Onio. I claim 1st, S curing or clamping the lower end of the saw blade, B, to the slotted pin, F, by means of the sleev, s, and encode set screw, b, the tenon thereofficing inserted into a hole in the saw, so that the saw is clamped be-tween the shoulder of said set screw and side of the pin, F, substantially as berefinet: orth.

therefore the shoulder of said set screw and side of the pln, F, substantially as herein set orth.
21. The forked adjustable springs, H and 1, arranged as described. One above and one below the saw table, for the purpose of obviating the danger of hereaking the same time as they act as guides tor it, substantially as herein set forth.
3d. The up-and-own adjustable gaide bar. G. carrying the bear spring, H, constructed and arranged to operate with antially as berein set forth.
5d. The up-and-own adjustable gaide bar. G. carrying the bear spring, H, constructed and arranged to operate with antially as berein set forth.
5d. The up-and-own adjustable gaide bar. G. carrying the bear spring, H, constructed and arranged to operate with antially as berein set forth.
5d. 317. -- HARVESTER RAKE -- Daited October 9, 1866; reissue 3127. -- Joseob Dick, Jr. Ossawa county. Outario, and Eugene Glen, Rochester, N. Y. assignees, by meane assignments of Joseph Dick, Jr. We cleaun, lar, The Joint ball, g, working within the pulley or case. B, both constructed and operating, with reference to each other, substantially as shown and described, fr the purpose of communicating power to and in combination with an automatic take for harvesters.
3d, The employment of a continuously-rotating extensible or sliding tumb-ling stantially as described.
4th, The arrangement of the sections, G and G', up on the vertical sleeve, f, and the segmental pinlons. C and C' upon the vortical sleeve, f, and the estern pinlons, and constitute, collectively, an entire circle of gearing as shown and described.
4th, The arrangement of the detabable pulley, T, with the sleeve or ferrule same, substantially as described.
4th, The arrangement of the sections, G and G', up on the vertical sleeve, f, and the esgment pinlons, C and C' upon the vertical sleeve, f, and the esgment pinlons, C and C' upon the vertical sleeve, f, and the esgment pinlons, C and C' upon the vertical

6th, The arrangement of the elevating lever, L, ratchet, O', head Q, chain, U, and pu'ley, V, in combination with each other and brace of the shoe, as and for the purpose set forth.

and 1or the purpose set forth. 15,735.—Harvester.—Dated September 16, 1856, reissue 3.132.—Division F..-William Gag~, Buffalo, N.Y. and Andrew Wbireley, springteid Onio, essignee of William Gag, baving the shoe, M, the finger bar, N, and the narrow divider, O, or their equivalents, constructed and embined, substantially as herein described, so that this cutting appearaus will have one axis of motion between saidsnoe and the frame of the machine, to which said shoe is conn cted, upon which the outer end of said cutting ap-paraus may rise or fail within the limitatiowed it with the undustions of the ground over wilden it is drawn, wi hout affecting or being affected by the height of said axis or the vertical position of the cutter's driving wheel. The combination of the hereindescribed shoe. M, finger bar N and narrow

wneel. The combination of the hereindescribed shoe, M. finger bar, N, and narrow divider, O, or their equivalents, in the harvester's cutting appparatus, when one of these porrions of said divider, which supports the crop while being cut, is of lass width than the other, substantially as and for the purpose set or the set of the set of the substantially as and for the purpose set

one of these portions of said divider, which supports the crop while being cut, is of itss width than the other, substantially as and for the purpose set forth. The combination of the shoe, M, fluger bar, N, and narrow divider, O, or their equivalents, i. the harvester's cutting apparatus, with the conoling frame, F, or an equivalent thereof, to enable the axis at the inner end of this outting apparatus to be raised or lowered in respect to the main frame, sub-senually as and for the purpose described. The combination of the coupling frame, F, and the pivots, I I, or their equivalents, with the main frame of the harvestes, so as to have one portion or end of the hinge between these frames in front, and one in the rear of the excle of the cutter's driving wheel, substantially as, and to obtain the advan-tages de orthed. The combinations of the inward projections, I, and the plate, G, or their equivalents, with the shor, M, fluger bar, N, and the narrow divider, O, in the barvester's cuti. x apparatus, to limit the uownward vibrations of the outer end of this cutting apparatus, substantially as described. The combinations of the slots, m m, the bolt, n, the washers, o o, or due crew nurs, p p, or an equivalent arrangement of parks, with the shore, M, fliger bar, N and narrow divider, O, in the barvester's cutting apparatus, to hold up the inner rend of this cutting apparatus apparatus is as o separate the grass cut by the apparatus from that which is to remain uncut, substantially as described. The combination of the track clearer, T, or its equivalent, with the shoe, M, fliger bar, N, and narrow divider, O, in the barvester's cutting apparatus so as to separate the grass cut by the apparatus from that which is to remain uncut, substantially as described. The combination of the carrify gwheel, P, or its equivalent, with the shoe, M, fliger, Dar, N, and narrow divider, O, in the barvester's unting appara-tus, so as to carry the divider in one of the ways named, substantially as and for the purpose specified.

bly patentable, and will give him all the directions needful to protect his rights. Mesre, MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN, have been actively engaged in the business of obtaint, g patents for over twenty years—mearly a quarter of a century. Over filty Thousand inventors have bad beneit from our counsels. More than one third of all patents grated are obtained by this firm. Those who have usde inventoors and desire to consult with us are cor-dially invit d to do so. We shall be approve to see them in person, at our office or to advise them by letter. In all cases they may expect from us an honest opinion. For such consultations, opinion, and advice, we make no charge. A peu-and-luk sketch, and a description of the invention should be sent, together with stamps nor return postage. Write plainly, do not use peuch or pale ink; be orief. All business committed to our care, and all consultations, are kept by ms servet and strictly confidential. Address MUNN & CO .37 Park Kow, New York Preliminary Examination. In order to obtain a Preliminary Ex-

65,377.—MODE OF DRYING GLUE.—Dated June 4, 1867; re-issue 2,971, dated June 9, 1868; reissue3,129.—A.—George Guenther, Chica gr, II. go, 111. I claim, 1°t, Drying glue by wetting solid surfaces with the glue in a liquid

I claim, 1-t, Drving glue by wetting solid surfaces with the glue in a liquid state and allowing it to dry there on in thin fakes, as heren specified. 2d, Facilitating the drying of glue in this scales or flakes on solid surfaces by circulating with there with, as here on specified. 3d, In the production of scale glue on solid surfaces, the employment of articical heat within the solid surfaces, or in the sir, or both, as herein speci-fied. 4th, The more of drying glue in this scales, by revolving or rotating sur-faces, having t eir temperatures raised either by steem of hot air, substan-tially as described. 50, Drying alue on thin revolving disks, as and for the purpose here in set torth.

torth

65.377.--MACHINERY OR APPARATUS FOR DRYING GLUE

05.371.—MACHINERY OR APPARATUS FOR DRYING GLUE— Dated June 4, 1867; reissue 2,971, dated June 9, 1868; reissue 3,130.—B.— George Gnenther, Chicago, IL. I claim, ist, I'be perforated base or air distributer, E. arranged as repre-sented relatively to the drying surfaces. A, and to the current of airarificial-ly thrown thereon, nor the purposes herein set forth. 2d, The surfaces, A, are imm-resed in the Higuid glue and removed therefrom at will, substantially as and for the purposes herein set forth. 40, 571.

40,571.—ROTARY STEAM ENGINE. — D ted November 10 1865; reissue 3,131.—Metr politan Engine Corpsany (assignees, by meen assignments, of Adolph Millochau). New York city, We claim the pipes, 1, 1, n, and, o, and valves or cocks, k, k', m, and m', in combination with the ring, c, and pistons acting in the steam spaces, y and z substantially as specified.

54,434.— MANUFACTURE OF PAPER COLLARS, ETC.—Dated May1,1866; reusen 3,182.—George W. Ray, Springfield, Mass. I claim paper, emboss d and enam-led upon either one or both sides, whether before or after rise conversion into articles of wearing apparei, all substantially as herein described.

DESIGNS.

3,194.—Spoon Handle.—B. D. Deiderhase, New York city. 3,195.— PIRIT LEVEL — L L. Davis, Springfield, Mass. 3,198.—Lower Portion of a Gorei Skirt.—Thomas Do-

lan, Philadelphia, Pa. 197 to 3,199 - STOCKING FABRIC PATTERN.—Thomas Do-lan Pulladelphia, Pa. Three patents 3,200 and 3,201.—CARPET PATTERN.—Israel Foster, Phila-

delphia. Pa. Two patents. 3,2:2. – TABLE FORK. –J. W. Gardner Shelburne Falls, Mass.

3,212. – I ABLE FORK. – J. W. GATURET SREIDURE FAIS, Mass. 3 203 to 3,206. – STOVE. – William Hailes (assignor to John F. Rathbone & Co.), Albany, N Y. Four patents. 3,207. – TRADE MARK. – J. A. Hasenclever, New York city. 3,208. – TRADE MARK. – Joseph H Jessop, Cambridge, Mass.

3,209 and 3,210.--FLOOR CLOTH PATTERN.-Victor Meyer, Kearney, N. J., assignor to Edward C. Sampson, New York city. Two patents

3,211.—CLOCK CASE.—Solomon C. Spring (assignor to Welch, Spring & Co.), Bristol, Conn.

Inventions Patented in England by Americans. [Compiled from the "Journal of the Commissioners of Patents."]

PROVISIONAL PROTECTION FOR SIX MONTHS.

2,033.—CARTRIDGE FOR BREECH-LOADING FIRE-ARMS.—Wm. H. Crocker, Boston, Mass. June 24,1868.

2,421.—CLOSING CANS, BARRELS, ETC.—Ed Ward Jenkins, Ravenswood, N. Y. Aug. 1, 1868.

2,565 - ELLIPTIC SPRINGS FOR VEHICLES. - Joseph Palmer, Concord, N. H. Aug 17, 1868.

2,567.— APPARATUS FOR CLEANING GRAIN.—Simon Howes and Alphus Bab-cock, Silver Creek, N. Y. Aug. 17, 1868. 2.601.—RoTARY ENGINE.—Frederick Ortlieb, Greenpoint, N.Y., and Edward White, New York city. Aug. 20, 1868.

2,605.—APHARATUS FOR MANUFACTURING FLOUR.—Henr B. Sears, New Yorkcity. Aug.21, 1868.

2,621.-UNITING THE ENDS OF RAILWAY RAILS.-Daniel R. Pratt, Worces-ter, M 185. Aug. 22, 1868.

2.628 -- CAETRIDGE FOR REEECH LOADING FIRE ARMS.-Samuel Norris, Springfield, Mass. ug. 24, 1868.

beginning. If the partnes consulted are honorable men, the inventor may safely con-if the bis ideas to them: t bey will advise whether the improvement is proba-bly patentable, and will give him all the directions needful to protect bis

New medicines or medical compounds, and user ut mixtures of at aimus, are pagen able. When the invention consists of a medicine or compound, or a new article of maufacture, or a new composition, samples of the article must b fur-nished neatly put up. Also, send us afull statement of the ingredients, pro-portions, mode of n eparation, uses, and merits. **Reissure**, -A reise us granted to the original patentee, his heirs, or the assignces of the emire inferest, when by reason of an insufficient or defortive specification the original patent s invalid, provided the error has arisen from inadvertence, accident, or mistake, without any frauumient or deceptive inte uno.

ATENTS.



The First Inquiry that presents tiself to one who has made any improve-ment or discovery is: "Can J obtain a Pat-ent?" A positive answer can only be had by presenting a complex application for a application consists of a Mo-el, Draw-ing, Petition, Oath. and fin 1 Specification. "Arions official rules and formalines must be observed. The efforts of the in-entor to do al with business bimself are of great perplexity and delay, he is usually be genning.

friction pinion, m, dividing the cylindrical body, B, subs antially as and for	substantially as herein described.	assignees of the entire interest, when by reason of an insufficient or defective
the purposespecified.	18,872BORING MACHINEDated December 15, 1857; re-	specification the original patent is invalid, provided the error has arisen
82,466 – CAR WHEEL. – William Wilmington, Toledo, Ohio.	issue 3.133.—Arcalous Wyckoff, assignee, by mesne assignments, of La	from inadvertence, accident, or mistake, without any franculent or deceptive interion.
I claim the within described method of casting car wheels of two quali-	Fay ette Stevens, Elmira, N. Y.	A patentee may, at bis option, have in hisreissue a separate patent for each
tits of iron, that is to say, one of sai qualties of iron being poured into the portion of the mold designed to form the bub of the wheel, and the other	l claim.1st, The oblique tr versing rests, O O, in combination with the	disting part of the invention compre ended in his original application, by
being poured into that portion of the mold designed to form the rim of the	used in connection with the dog. Q and chain. P. for the purpose of adjust.	paying the required fee in each case, and complying with the other require-
wheel, the two currents of iron meeting within the moid, and there acting	ing the timber to the auger, and in Idiogit fir aly, substautially as a t forth	ments of the law, as in or ignal applications. Each division of a reissue constitutes the subject of a separate specifica-
upon and mingling with each other, substantially as set foith.	screws, it, and pinlous, ut, when arranger in relation to one abover, and used in connection with the dog, Q, and chain, P. for the purpose of adjust- ing the timber to the auger, and il idlight fit will, substantially as a s. t forth "o. The combination of the staft, K. worm, l, pinton, J, and rack, I', ar- ranged to oper as the travering head. Ex abstantially as set forth. 3d, An annular and return the ar formed on a convex and builden broker in the direction of the rotation and race formed on a convex and oblight in the	tion descriptive of the part or parts of the invention claimer in such divis-
Alse, as an improve i manufacture a car wheel produced of two qualities of molten iron, by the method herein set forth.	ranged to operate the travering bed, E, substantially as set forth.	ion; and the drawing may represent only such part or parts. Auress MUNN
82,467.—OIL GLOBE FOR STEAM CHEST.—Charles A. Wilson,	direction of its rotation, and are formed on a curved and oblique line, sub-	& CO., 37 Pa k Row, for full particulars.
Cincinati Obio.	stantially as set forth.	Interterences When each of two or more persons claime to be first in- ventor of the same thing, an "interterence" is declared between them, and a
I chaim the arrangement, as described, of the globe A bub C cock F		tial is had before the commissioner. Nor does the fact that one of the par-
I claim the arrangement, as described, of the globe, A, bub, C, cock, E, apprures, F G, recess, H, channel, I 1, passages, J J K 1, and channel, P, as	keep it from turning, for the purpose of furnishing a bearing for the head of	tive has already obtained a patent prevent such an interference; for although
ncrem at scribea.	the auger while in operation. 5th, The sharp annular spur. c, for the purpose of centering and guiding	the Commissioner has no power to cancel a patent already issued, he may. if
82,468.—Composition for Destroying Insects on Potato	the anger, and at the same time leaving a core of the material bored in the	he finds that another person was the prior inventor, give him also a patent, and thus place them on an equal foothis before the courts and the public.
PLANTSJames P. Wilson (assignor to himself and V. R. Dafoe), Elm-	center of the auger, in the manner specified.	CaveatsA Caveat gives a limited but immediate protection, and is par-
wood, ill.	80,456 NUTMEG GRATER Dated July 28, 1868; reissue	ticularly useful where the invention is not fully completed, or the model is
I claim a Dowder, prepared of the materials and in the manner specified, to be used for the destruction of potato sugs.	3,134J. L. Coles, and D. H. Coles, New York city.	not ready, or further time is wanted to rexperiment or study. Alt ra caveat
82,469.— WHIFFLE THEE HOOK. James Wood, Utica, N. Y.	We claim a box. A, contaiolog a revolving carrier, D. having a series of	has been filed, the Patent Office will not as us a patent for the same invintion to any other person, without giving notice to the Caveator, who is then al-
I claim the cap, B, with the hook, B', cast or attached to it both shaned	chambers with sprig followers, which press the articles to be grated	lowed three months time to file m an application for a patient. A Caveat, to
and constructed as herein shown. and secured to the whiffle tree in the man-	against the stationary graving surface, E, which is combined with a receiver,	be of any value, should contain a clear and concise description of the inven-
ner and for the purposes herein shown and described.	F, all as shown and described. Also, the combination with hecylindrical hox, A, of a series of carriers	tion, so far as it has been completed, illustrated by drawings when the ob-
82,470.—MAKING NUTS.—Oliver W. Yale, Hartford, Conn.	at unglue to a chother so as to lugge supplementury champers h substand	ject admits. In order to file a Caveat the inventor needs (ny to send us a letter containing a sector of the invention with a description in his own
I claim the arrangement of the came, c c', cam grooves, [F, and crank shaft, C, with the cross head, D, levers, U P S, and toggies, R R, in the man-	f tially as and for the purpose set furth.	letter containing a so etch of the invention, with a description in his own words. Address MUNN & CO., Si fark Row, New York.
shaft, C, with the cross head, D, levers, U P ., and loggies, R R, in the man-	Also, the slots or openings, g, in front of the tee b, t, of the grating sur- face, said slots being formed by actually cutting or leaving out a portion of	Additions can be made to Caveats at any time. A Caveat runs one year,
ner described. Also, the arrangement on the anvil, L, of the stationary die, K, slides, MO.	the metal, substantially as and for the purpose described.	and can be renewed on payment of \$10 a yearfor as long a period as desired
edge swages, 22, and stripper, U, in the manner described and for the pur-		Quick Application When from any reason parties are cosirous of applying for Patents or Caveats, in GREAT HASTE, without a moment's loss
DOSE SET TOTTA	25,253.—FAUCET.—Dated August 30, 1859; reissue 3,135.—	of time, they have only to write or telegraph us specially to that effect, and
Also, the combination of the punches and face swages with the edge swa-	Division BAlbert Fuller, New York civy.	of time, they have on ly to writeor telegraph us specially to that effect, and we will make special exertions for them. We can prepare and mail the
ges, the transferrer and the anvil block, all constructed, an anged and opera- ted substantially as described.	l claim, 1st, An elastic plug valve encased in the above described metallic shield, for the purposes set forth.	necessary papers at less than an bour's notice, if required.
82,471,—APPARATUS FOR EXTINGUISHING FIRE. — Geoige	2d, An elastic olug valve encased in a metallic soleld, as described, when	Foreign Patents. —American inventors should bear in mind that, as a general rule, any invention that is valuable to the patentee in this country is
Clark, Jr . Boston, Mass.	the shield is constructed to present a valve face which is transversely or lat-	worth equally as much in England and some other foreign countries. Five
1 claim be combination and arrangement of the water tank, C, the com-	erally exterior to the plug, in combination with a valve seat or seats to both the elastic and metallic faces of the valve, substantially as shown and de-	Patents-American, English, French, Belgian, and Prussian-will secure an
pariments, G and H, and the pumps, J and K, (the latter being disposed with.	scribed.	inventor exclusive monopoly to his discovery among ONE HUNDRED AND THIRTY MILLIONS of the most intelligent people in the world. The facilities
in the intermediate compartments, I, and both being connected with the air chamber), the pipes, a a and c d in addition to the ordinary feed and dis-	63,729.—HORSE RAKE.—Dated April 9, 1867; reissue 3,136.	of business as d steam communication are such that patents can be obtained
charge pipes of the pump	-James La F. King and Wm. W. Watson (assignees of Watson King).	abroad by our citiz ns almost as easily as at home. The majority of all pat-
82,472.—ARMY WAGON.—Alfred Sully, United States Army.	Springfield, ill.	enis taken out by Americans in foreign countries are obtained through the
I claim, 1st, The body, C, constructed as described, and provided with seats	I claim, 1s:, The extension of the crink arms, a, on each side of the rake i	SCIENTIFIC AMERICAN PATELYT AGENCY. A clicular containing further in- formation and a Synopsis of the Patent Laws of various countries will be
F F F and E, receptacie, L, and railing, M, all substantially as and for the	head below the axle, in the crank form, as applied to horse rakes, for the	furmished on application to Messrs. MUNN & Co.
purposes here in set forth. 20, in combination with the seats, F F F, the binged dash boards. G G G	purposes berein shown a noin the manner described. 20, Attaching the traces to the end of the crank or draft arms, a, which	For instructions concerning Foreign Patences, Reissues, Interferences,
and loot boards, HHH, substantially as and for the purposes herein set	are extended below the center of the wheels from each end of the rake head,	Hints on Seiling Patents, Rules and Proceedings at the Patent Office, the Pat-
lorth.	to make these the point of drait, in the manner hereiu described and for the	ent Laws, etc., see our instruction Book. Set free by mail on application. Those who receive more than One copy thereof will oblige by presenting
3d, In a wagon provided with suitable seats and foot boards. the employ-	$t pu \cdot po \cdot es$ set forth. 3d, The forming spring or brace on the batt end of the footh, said brace	them to theirir nds
ment or sectional tent pieces, 111, ubriantially as and for the purposes here- in setforth.	being formed with or without a loop, for the purpose set forth and in the	Address all communications to
4b, the combination of the body, C, seats, F F F and E railing, M, recep-	mauner described.	MUNN & CO., No. 37 Pa. k Row, New York city
tacle. L, dass boards, G G G, foot boards, H H H, and folding tent pieces, it	4th, At aching the tooth, H, to the rake head, a, by means of a straight or	Office in Washington, corner of F and 7th streets.
I, all as herein shown and described.	beveled mortise and key, for the purpose set forth and in the manner de-	
82, .73LUCK NUT AND 'I IGHTENERH. W. Olney, R. R. Logan and J. H. Fisher, Allegber y Ulty, Pa.	Kib Attaching the tooth U to the were head a by Darsing the loop are-	Patents are granted for Seventeen Years, the following being a scheaule of fees:
We claim the lock hut and trabener above described, consisting essential-	and around the head, for the purposes herein set forth and in themanuer de-	On filing esch Caveat\$10
IV of the CODED SDI IDS. A. bent and altached to the nut and the next Of the	scribed 6th, The thip ble or metal and, g, as a means of securing and completing	On filing each appacation for a Patent, except for a design\$10
the mather shown and operating in conjection with a screw, d. substatially	the brace or spring, formed by the conrection of the end of the tooth bent	On some to (bompoissioner of Patents 200
as described.	over with the main body of tooth, for the purposes herein set forth.	Ou applicati in for Reissue
REISSUES.	78,852.—ANCHOR—Dated June 9, 1868; reissue 3 137.—	schedule of rees; \$10 On filing each application for a Patent, except for a design\$10 \$10 On appleate or orginal Patent
46,699.—PICTURE CARD FRAME.—Dated March 7, 1865: re-	Frederick Wittram, San Francisco, Cal.	On this a Disclamer.
issue 3,125.—Garret P. Bergen, Brooklyn, assignee of R. W. Potter, New	I claim, 1st, Openings made engthwise in the shank of an anchor, through	On filing application for Design (three and a balf years)
I OFK CILY.	which arms or flukes move freely to either side, substantially as herein de- scribed.	On hing application for Design (seven years)
I claim, 1st, A cardframe for a picture. formed with an opening embossed	2d, The placing of two or more jointed arms or flukes at d fferent portions	b addition to which there are some small revenue-stamp taxes. Residents
ar ound its edges, substantial y as set forth.	of the shank's length, at or about at right anglesto each other.	of Canada and Nova Scotia pay \$500 on application,

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U. S PATENT OFFICE, } WasHINGTON, D. C. Sept. 7, 1868. 5 R. F. Brown, Dorchester, Mass., having petitioned for an extension of the patent gravided hum on the 12th day of Decemerer 1854. for an improvement in "Hanging Carriage Bodies." It is ordered thatsaid petition be heaid at this office on the 23d say of November next. Any person may oppose ibis extension. Objections, denositions, and other papers shou'd be filed in this office twenty days hefore the day of hearing. hearing. 18 8 ELISHA FOOTE, Commissioner of Patents.

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U. S. PATENT OFFICE, WASHINGTON. D. C. Sept. 10, 1865. ThomasSlaigt, of Newark, N. J. having p- thomed for an extension of the patent gr-nited hum for the 2d day of January, 1868, for an improvement in "Pudlocks" it is ordered that the said petitin be heard at this office on the 14th day of December next. Any person may oppose this extension. Objections, de-portiones, and object paters should be filed in this office two by days before the caw of bearing. 15 3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE. WABINGTON, D. C., Sept. 9, 1958, { Sylvanus Sawyer, of Fitchbury, Mass, having p titoided for an extension of the patent granted to him on the 24th day of June, 1851, for an improviment in "Machines y for Cutting Ratan," etc., (this application having been su-thorized by act of Congress, March 2, 1867). It is ordered that the said petition be beard at this office on the 24th day of December next. Any Derson may oppose this extension. Objections, de-positions, and other papers should be hied in this office twenty days before the day of hearing. 15 3 ELISHA FOOI'E, Commissioner of Patents,

U. S. PATENT OFFICE } Washington, D. C., Sept. 21, 1663, { Joseph S. Winsor, of Providence, R.L. having -e itioned for the extension of the patent granted hum on the 2d day of Junuary, 1855, for an improvement in "Mechanes for making Weavers Harness," it is ordered that said petrion be heard at tols office on the 14th day of December next Any person nav oppose this extension. Objections, depositions, and other papers should be aled in this office twenty laves before the day of hearing. 13 % S. H. HODGES, Acting Commissioner of Patents.

U. S. PATENT OFFICE. Washington, D. C., Sept. 23 1988, (Sylvanus Sawyer, of Fitch burg, Mass., having petricioned for the extension of a patent granted bim the doay of January, 1855, for an 'mprovement in ' Mach ne for Split-turg Raitans into Strips, 'ti's ordered that said petricon be beard at this office on. the 14th day of December next. Any person may oppose this extension. Objections.dep-ositions, and other papers, should be filed in this office tw. nty 'ace before the 'day of the athig. 15 S. S. H. HOJGES, Acting Commissioner of Patents.

U. S. PATENT OFFICE, WASHINGTON, D. C. SED. 11, 1868. Jarvis Case, ot Latayette Ina., having petitio-ed for an extension of the patent granned him on the 16th day of January, 1855, reissened on the 16th day. I November: 1858, and again reissated on the 17th day of April, 1866, for an imoi ovement in 'Seed Planners,' it is ordered that said petition be beard at this office on the 21st day of December next.

Any person may oppose this extension. Objections, de-positions, and other papers, should be filed in this office twenty days before the day of hearing. 143 ELISHA FOOTE, Commissioner of Patents.

U. S PATENT OFFICE.) WASHINGTON, D. C. Sept. 11, 1863.] George W. Hubh Bard and William E onant, of New Yorkcity, havil z petitioned for an extension of the patent granted them on the 9th day of January, 1855, and r. hsued on the 18th day offencember, 1866, for an innoroveneet i "Operating Shite Valves in Direct Action Engines," it is ordered that said petit in be heard at this office on the 21st day of December, next. Anv person may oppose this extension. Objections, de-positions, and other papers, should be filed 1 this office twenty days hefr re the day of hearing. 14 3 ELISHA FOOLE, Commissioner of Patents.

