ENGINEERING INVENTIONS.

A flood gate has been patented by Mr. James M. Metcalf, of Enfield, Ill. The gates are made to stand sufficiently above the bed of the stream to allow the ordinary flow of water, and in connection therewith are braces, check cords, or chains, strong posts, and a supporting frame, to allow of the gates being swung

A vehicle propelled by compressed air has been patented by Mr. Daniel S. Troy, of Montgomery, The axle or axles and reach are made hollow and connected to serve as a reservoir for compressed air, as is also the body of the vehicle, the reservoirs being adapted to be charged at a station, whence the vehicle may be sent out as a self-contained motor.

A hydraulic elevator has been patented by Mr. Oliver P. Rice, of New York city. This invention has for its object, by special construction and combinations, to facilitate the operation and increase the efficiency of hydraulic elevators, it being easy to regulate the speed of travel of the cage by opening or closing a valve, while the elevator may be stopped at any ing worn. desired point by cutting off the supply or discharge

A spark arrester has been patented by Mr. William C. Beal, of Fernandina, Fla. There is a hollow truncated cone which concentrates the current of sparks at the center of a hollow cone above, in which they are deflected to the side of the stack and given a whirling motion; there is also a guard in the upper part of the stack for preventing the escape of sparks that may turn upward from the place where they are deflected.

MECHANICAL INVENTIONS.

A polishing wheel has been patented by Mr. Henry Bintz, of New York city. It is made with a block cast with hub, spokes, and rim in one piece, knots, such wheels being cheaply made and more durable than ordinary polishing wheels.

A double gauge has been patented by Mr. John Hellriegel, of Marine, Ill The invention relates the circumscribed lines of the pentagon. to ganges used by cabinet makers, carpenters, etc., for making working lines parallel to the edges of the work. its object being to enable the mechanic to gauge two lines at different distances from the edge of the work by two strokes of one gauge.

AGRICULTURAL INVENTIONS.

A rotary sulky harrow has been patented by Mr. William H. Southward, of Mendon, Ohio. By Mr. William J. Mullen, of New York city. The inventor are of the mineral control of the inventor are of the mineral control of the inventor and of the mineral control of the inventor o ily thrown out and into gear, and the teeth of the harrow may be held out of the ground, all to promote convenience and thoroughness in harrowing

A grain drill has been patented by Mr. Abram L. Reese, of Chase, Kansas. This invention relates to improvements on former patents issued to the ers, and a crank with power mechanism, for beating in same inventor, and covers certain details of construct he cotton on the follower preparatory to closing the tion whereby, as the machine is drawn along a row of plants, the grain will be drilled into the soil upon both sides of the row, and without doing any injury to the

MISCELLANEOUS INVENTIONS.

A window sash has been patented by Mr. Louis L. Arnold, of Chicago, Ill. The object of this invention is to provide a sash which can be easily removed from the window frame for washing, painting, etc., for which purpose a novel combination of parts is provided.

A calendar has been patented by Mr. Henry S. Stevens, of Keene, N. H. It is adjustable for any year for a long term of years, the adjustments are easily understood and can be quickly made, and the device has a wider range of use than the ordinary adjustable

A fence post has been patented by Mr. Ely N. Obert, of Cuba, N. Y. It is hollow, open at top and bottom, with its sides inclined inwardly toward the top, and with apertures to receive the rails, the post and rails being held in place by stones placed in the

A portable fence has been patented by Mr. William Cockayne, of Geetingsville, Ind. This invention relates to improvements in this style of fences, for effecting convenience, economy, and increased durability, and covers a peculiar construction and arrangement of parts,

A headed slug nail has been patented by Mr. John Hyslop, Jr., of Abington, Mass. The nail has a rectangular wedge shaped point and a rectangular head, the end parts connected with the body by taper. John A. Topliff, Edward S. Cross, William S. Cox, ed webs, so the heads will not crack the leather, and and John A. McCollum, of Elyria, Ohio. With two the nail will hold the leather firmly.

A folding table has been patented by Mr. William E. Eldred, of Brooklyn, N. Y. The object of this invention is to provide a new and improved button for folding tables, for the purpose of holding the legs firmly in place when the table is set up, and it consists in the special construction and arrangement therefor.

A necktie fastener has been patented by Mr. Weisel Beale, of Shawneetown, Mo. A slotted plate is adapted to be secured to the pasteboard back orframe of the tie, in combination with a locking lever and spring, so the tie is securely held, or may be easily removed by throwing back the locking lever.

A steam heater has been patented by Mr. William C. Bronson, of Saratoga Springs, N. Y. The water is contained in small tubes and chambers, directw among and against which the heat and products of another handle with a curved wire at one end, and secombustion circulate, making a heater that is cheap, cured to the first handle by loops, so a person taking easy to handle, and that will rapidly generate steam.

A portable fruit drier has been patented by Mr. Joseph N. Parker, of Vineland, N. J. The shell fall into the bag without injury. of the drier is made of zinc, tin, or other suitable material, and is designed to be placed over an ordinary

omy in the operation.

A hay carrier has been patented by Mr. Abner J. Burbank, of Harvard, Ill. It consists of a duplicate contrivance of catch hooks for holding up the hav fork by the head of the shaft of the hay fork pulley to better advantage than a single catch will, with an im-proved arrangement of the locking and tripping levers and the catch and trip blocks.

Mesers. Charles S. Fowler, of Brooklyn, N. Y., and Lucius A. Rockwell, of New York city. The object of this invention is to promote convenience in adjusting cracker machines, which is effected by a special combination and a novel construction and arrangement of

An improved shirt has been patented by Mr. Jacob Cohen, of New York city. This an open front shirt in which the center piece or outer fly may be readily secured in the center of the front, and the under fly made to form a complete lap with the outer fly, to prevent gaping of the parts while the shirt is be-

A horse collar has been patented by Mr. adjustable, and has metallic attachments forming flanges for the hames, with means for spreading and contracting the collar at the bottom, with special devices for easily effecting a perfect fit of the collar to the horse.

A fountain pen has been patented by Messrs, Charles H. Court, of Jersey City, N. J., and for immediate use, the feed of ink being regulated exactly in accordance with the demand, neither too rapid nor too elow.

A design for a piano case has been patented by Mr. Anton Gunther, of Torento, Ontario, Canaand with holes in the rim provided with wire drawn da. It is an upright piano case of an irregular pentagonal figure, when viewed from the front, with one of its two longer sides horizontal and the other nearly so, and its keyboard cover included within the limits of

> A toy has been patented by Mr. James E. headed pegs held in a board, withdrawing them therefrom.

A shade roller hanger has been patented by this invention one of the wheels may be turned slower tion covers the combination, with a disk or plate with than the other, as in turning around, without affecting a screw on its upper surface and lugs on its lower surthe revolution of the axle, the gear wheels can be read- face, of a hanger pivoted between the jaws, with a socket at its free end for receiving the end pin, where by the roller can be hung easily and rapidly.

A tramping attachment for baling presses has been patented by Mr. Gedeon P. Thompson, of Crowley's Station, Texas. The invention covers tramppress, and thus enable bales of full size to be made in a smaller case.

A millstone dressing machine has been patented by Mr. John Miller, of Milton, Oregon. It is a rotary self-feeding apparatus, in which diamonds are used as the cutters, and dispensing with proof and penstaff and other devices heretofore used for the purpose, while dressing burr or other millstones perfectly true with much saving of labor.

A vehicle wheel has been patented by Mr. Jacob Dietrich, of Brushland, N.Y. This invention covers a novel construction in making up the felly portion of the wheel, which is metal, and in the manner of securing the spokes, so that lightness is combined with strength, without impairing the elasticity, and the tire is prevented from working off the wheel.

A portable table for transferring flour from barrels into bags has been patented by Mr. William Cochrane, of Brooklyn, N.Y. It is an elevator table, of a size adapted to have a barrel placed upon its side upon it, and with side and end fenders leading to a spout or hopper for conducting the flour from the barrel and table into the bag held under the spout or hop-

A combined firing and bell ringing burglar alarm has been patented by Mr. Charles L. Morehouse, of Brooklyn, N. Y. It is formed of a cap or cartridge firing device and a bell operated by a clock work mechanism, the device and bell being so arranged that both are released at one time, and it is so constructed that it may be easily attached to a door or window

A furnace has been patented by Messrs. stoves or furnaces and a chimney is $\ a \ \ \text{single}$ flue with separate openings counecting with each of said stoves above and below their fire grates, and with the chimney and its dampers, all to more completely utilize the fuel, and prevent the escape of smoke and foul gas.

A snow plow has been patented by Mr. John Q. Day, of Red Cliff, Col. This invention relates to snow plows with a wheel and annular groove in each side, for forcing the snow out laterally, slides or gates being arranged to close the grooves behind the snow, to hold it thereon until carried to the upper side, there being also a flaring arrangement of the outside rim of the wheel to facilitate the discharge of the snow.

A fruit picker has been patented by Mr. John S. Spraker, of Kokomo, Ind. In combination with a pole or handle, and a hoop and bag thereon, is the picker by the handles, and standing in a convenient position, can break the stem of the fruit and allow itto

An oil press plate has been patented by Mr. Clark Woodman, of Omaha, Neb. This invention discooking stove or range, to facilitate the drying of | penses with the hair or mat-faced plates heretofore | Gear Cutting. Graut, 66 Beverly St., Boston.

fruits, vegetables, etc., and promote convenience and used, and the metal plates are made to constitute and comprise the mats, being of proper form to prevent the meal from squeezing out, with provision for the escape of the expressed oil, and space is economized in the

A heating and ventilating device for buildings has been patented by Amanda M. Hicks, of Clinton, and Alonzo Dishman, of Paducah, Ky. The invention covers novel combinations of fresh air supply A cracker machine has been patented by pipes with the chimney or flue of a building, also with a stove grate or are place in a lower floor, with drums in the upper rooms of a building, whereby better results are obtained than by previous methods.

A fire escape has been patented by Messrs. John Larson and August W. Hagstrom, of Stockholm. Wis. A specially contrived basket or chair is made to descend by a rope running over a series of pulleys, acting partially as brakes, but the speed of which may be regulated by a cam lever, the whole being easily operated and not liable to get out of order, and so made that it can be packed in a traveling bag.

A hand and foot power device has been patented by Mr. Owen E. Jones, of Wymore, Neb. This is a novel construction, promoting economy in the ap-Herman T. Detert, of Farihault, Minn. The collar is plication of power, as by its use a man is enabled to drive two or more machines in the time in which he would drive one without it; the convenience of the operator is also promoted, and power may thus be readily applied to washing machines, pumps, saws, churns,

A press for packing bran, sawdust, etc. has been patented by Mr. Arthur L. Battson, of Morris Albert J. Kletzker, of New York city. The pen is burg, Ontario, Canada. This invention covers an imcheaply made and durable, and is always in condition provement on a former patent issued to the same inventor, and consists in the combination, with the press casing and the ends of the hoop bar, of spring catches, so the sack cover plate, when forced down by the follower, will be caught and held as the follower is again

A burglar alarm for safes has been patented by Mr. William Y. Cruikshank, of Danville, Pa. A roughened strip or plate is connected with a device to be operated by compressed air, said device, etc., being combined with clamps for holding matches and the fuses of explosive cartridges, so that, if the safe is blown open, the compressed air causes the matches and A. McAllister, of Albany, N. Y. It is a hollow ball of cartridges to ignite, and make an explosion. In a furtwo sections hinged together, and held by a spring or ther patent of the same inventor, the spring hammer of elastic band, and having an aperture opposite the hinge; a trigger lever, revolved by a shaft, and worked by the ball has an elastic cord, and is thrown against compressed air, is made, when the safe is violently opened, to explode a cartridge and thus give an alarm.

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No attention will be paid to communications unless gines, Shafting, etc. Bought, sold, and exchanged. A. accompanied with the full name and address of the G. Brooks, 261 N. 3d St., Philadelphia.

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a reasonable time should repeat them. If not then published, they may conclude that, for good reasons, the Persons desiring special information which is purely

Springs. Listfree. T.F. Welch, 11 Hawkins St., Boston. of a personal character, and not of general interest, 60 Lathes, new and second-hand, 12" and 14" swing, should remit from \$1 to \$5, according to the subject plain and screw cutting. J. Birkenhead. Mausfield, Mass. as we cannot be expected to spend time and labor to

Any numbers of the Scientific American Supplies MENT referred to in these columns may be had at the

Correspondents sending samples of minerals, etc., for examination, should be careful to distinctly mark or label their specimens so as to avoid error in their identi-

(1) F. A. W. says: 1 I have a small terres-For Freight and Passenger Elevators send to L. S. trial telescope, which has only two lenses; the eye lens is double concave, but the object glass I am "How to Keep Boilers Clean." Book sent free by not certain about, as it is spun into its cell. The telescope has a small field, but splendid definition. Could a practical one that is, one for say to urist purposes, be made on this principle? If so, kindly give diameters, foci, and distance apart, and kind of lens required. A. Your telescope is of the Galilean form, and the type that of the ordinary opera glasses. When well made, it gives a very clear definition with exact image and small field, also small amplification; on this latter account it is not used for instruments of power. You can make a very good field glass with a plano-convex glass of fifteen inch focus, 11/2 inch diameter, plane side next the eye, and a plano-concave glass of from 3 tof inch focus three-fourths inch diameter placed at its own focal distance within the focus of the object glass, concave side next the eye; the shorter focus eye leas giving the greater power. The power with a 3 inch

(2) W. E. L. asks: 1. Is there any machinery in successful operation for manufacturing lumber, fur-Electrical Alarms, Bells, Batteries. See Workshop niture, etc., from sawdust? A. Sawdust and shellac pressed in moulds have been used for ornaments for furniture and fancy articles, and there is a so-called

have until very lately been the largest sizes.

- (3) S. H. B. asks for information upon the subject of slate pencil manufacturing from soapstonethe machinery used and the process employed. A. Soapstone pencils are mostly made in New Hampshire near the quarries. The soapstone is sawed in blocks the length of the pencil, then into slabs of the proper thickness, then run through a set of thick saws that cut half way through the slab and round one side, when the slab is turned over and run through on the other side. Or in better machines there are two sets of saws, above and below, so that the slabs are pushed through, one following another, and are delivered finished except pointing. The pointing is done with a machine or a quick running grindstone.
- (4) H. B. says: The question how to mix and use the composition for enameling iron, etc. was satisfactorily answered. 1. Can I use a stove oven to that the second story can be used for roller skating, and dry the composition in, if so, at what degree of heat, not make a noise in the lower or ground floor story. A. must the oven be before putting the article to be dried in? A. Any oven will do to dry in. Hot enough to evaporate water. 2. Is it really necessary that the glazing should be used, or cannot the glazing be used glazing makes the finish, and assists to vitrify the first the matched floor stuff to the strips. There are a vacoat. The glazing alone would show the color of the the compositions given in above paper be used on sheet iron or tin, as well as iron? A. You can enamel sheet iron by taking off the scale with muriatic acid 1 part, water 4 parts. When the scale is loosened, wash in water and dry quickly in an oven; you cannot enamel
- (5) P. J. B. and H. S. L.—Gold having the red color of 14 carat gold may be deposited by the battery in the following manner: Prepare a solution of copper cyanide by adding potassium cyanide to a solution of copper sulphate until the precipitate at first thrown down is redissolved. Add to this a solution of gold cyanide (prepared by dissolving 1 ounce of fine gold in 28 pennyweights nitric acid and 2 ounces hyliquid applied same as any hair wash. An ordinary drochloricacid and adding one quart hot water, and treating this solution with 5 ounces potassium cyanide in 1 quart water) in sufficient quantity to give on trial the desired color of gold deposit. When using this solution, the positive electrode plate should be of gold of the same color as that desired to be deposited. For 10 carat gold the process is similar.
- (0) J. I. asks (1) how to take the rust off. a bicycle, the rust having been on over a year. I have tried oil and sand, also oil and emery paper. A. to dry very thoroughly before using it. Rub with kerosene oil or spirits of turpentine. 2. Also, is there any solution to make steel shine just as if it was nickel plated? A. Nothing except polishing. 3. Also of a solution, when you dip nickel or silver pieces into it, it will gold plate them, without a battery. A. Wash thoroughly a quarter of an ounce of gold chloride; then add it to a solution of 2 ounces potassium cyanide in one pint of distilled water; shake well, and let stand until the chloride is dissolved. Add 1 pound prepared Spanish whiting, expose to the air till dry, and then put away in a tight vessel for use. When applied, it is mixed into a paste with water, and rubbed on the surface of the article with a piece of chamois skin or line glycerine ink can be made to be used for rubber cotton flannel. The surface of the article should be thoroughly cleansed before the plating powder is ap-
- (7) W. S. N. writes: I am reclaiming solder, and would like to know of a good method of cleaning it from impurities, such as wood ashes? Also if you can tell me whether it would pay to manufacture solder on a small scale? A. We hardly think the practice of reclaiming solder a paying occupation. Something is done in the way of separating the scrap tin from iron on refuse tin cans. The meta's are separated by means of electrolysis, and the tin converted into the sulphide, in which it is commercially known as mosaic gold. The kind of a furnace would you recommend to use? Could the iron be used for small castings? A. The iron would be burnt in melting it, and therefore would be upsatisfactory for castings. 3. Are there any practical books on these subjects that would be useful to me? A. Spons' Workshop R ceipts would probably contain information on the subjects you are presumably in-
- (8) E. C. writes that a liquor of meal and water, that has been fermented, soon turns sour, and he says: " I wish to arrest the further formation of acid at a certain stage of sourness, and keep it at this same sourness" A. We would recommend you to use salicylic acid. This agent is used twice in the process of preserving beer; first sufficient is added to act on the lactic quantity sufficient to arrest the alcoholic fermentation before it degenerates into the acetic stage. The two doses together do not amount to more than 0.05 grain
- (9) C. J. T. asks · What are the best means to adopt to press flowers, leaves, and fern fronds, so that the flowers will retain their colors and the fern What is the best substance fronds their greenness. to use for making them adhere to cardboard, etc? And how are flowers preserved? A. For this information see page 2536 of Scientific American Supplement, No. 159. Ordinary mucilage will cause them to adhere to cardboard. Flowers may be preserved by dipping themintomelted paraffin, withdrawing them quickly. The liquid should be only just hot enough to maintain its fluidity, and the flowers should be dipped one at a time, held by the stalks, and moved about for an instant to get rid of air bubbles.

burned in an oven. This is as near making lumber out of sawdust as we have yet come. 2. A New England wax tend to injure it. The simplest plan is to slice the ent has but upon the right remedy (kerosene), which of sawdust as we have yet come. 2. A New England wax into thin flakes, and lay it on sacking or coarse may easily be rendered innocuous to the plant by form paper recently told of a Western mill that was running | cloth stretched on frames resting on posts to raise them the largest circular saw in the world, 60 feet diameter, from the ground. The wax should be turned over fre700 revolutions, and 12 inches feed. What are the true figures? A. The big saw you speak of was reported as there be not dew and rain sufficient to moisten. If it 6 feet in diameter, and we believe a few such are in use be found after exposing it for some time that it is in Wisconsin and Minnesota, although 60 and 66 inches still yellow inside, it will be best to melt it again, and flake and expose it again. Sometimes the wax is bleached by passing melted wax and steam through long p pes so as to expose the wax as much as possible to the action of the steam, thence into a pan heated by a steam bath, where it is stirred thoroughly with water and then allowed to settle. The repetition of this process several times before sun bleaching facilitate- the process. 2. What is the most economical way to make wx? Should dirty comb ever be used? A. Thebeeswax is obtained by mediag the combs, after expression of the honey, in boiling water, on which it soon floats; it is then left to cool, remelted without water, and run into moulds of various sizes and forms. By removing any dirty comb it naturally follows that the process will be a more rapid one and the result more satisfac-

- (11) E. M. asks how to deaden a floor so To deaden a floor partially, perhaps enough for roller skating, cover the old floor with asphalt felt, such as is used for roofing, or thick straw board, or three thicknesses of paper carpet lining. Lay a new floor upon without putting on the other composition? A. The this by laying wall strips upon the paper and nailing riety of ways more expensive and better, such as a iron. Itmight answer your purpose. 3. Can either of double ceiling below, a double or independent floor over and clear of the old floor, plaster deafening under the old floor, etc.
 - (12) E. L. F. asks for further particulars about how to make hair dye from green walnut shells. A. The article is the expressed juice of the bark or shell of green walnuts. To preserve this juice a little rectified spirit is commonly added with a few bruised cloves, and the whole digested together with occasional agitation for a week or fortnight, when the clear portion is decanted, and if necessary filtered. The dye will stain the scalp or any other textile substance it may come in contact with. To apply it, the liquid applied same as any hair wash. An ordinary washing of the hair with the liquid ought to suffice, but in some instances several repetitions are necessary. As to the frequency of the application, this can only be de termined by watching the results.
 - (13) A. E. C. asks how to make an enameled flesh color on raw hides, as used in making artificial limbs. A. We would advise to first coat the raw hide with a thin cost of rase madder and then apply a very | Air, apparatus for preparing oxygenated, A. heavy coat of best wearing body varnish, and allow it
 - (14) F. H. asks the chemical composition of the bleaching powder used in paper mills, and the mode of manufacture for commercial uses. A. Bleaching powder is the result obtained by bringing chlorine gas in contact with slaked lime. In England it is largely obtained in connection with the soda ash prepared from salt or sodium chloride. Its chemical composition is variously given by the different chemists; it is generally considered to be a mixture of hypochlorite of lime and calcium chloride with water.
 - (15) F. E. W. asks how a good black anistamps? Or in other words, how can he color glycerine black? A. A very good black stamping ink consists of 16 parts of boiled linseed oil varnish, 6 parts of the finest lamp black, and 2 to 5 parts of iron perchloride. This diluted with one-eighth the quantity of boiled oil varnish is used with stamps. Perhaps the following will be more in accordance with your request, nigro sine black 1 part, glyceriue 4 parts, and sufficient water to make the ink of proper consistency.
- (16) C. A. B. writes: I have been trying for some time to get a steam radiator bronzing that will not tarnish or burn off after it has been on a week, as most of the articles used now do. What is the best manufacture of solder can be done cheaper by large | liquid to mix the bronze with to produce that result? factories. 2. Can I remelt light sheet iron, and what A. Use a dry bronze powder, and then cover with a coat of transparent colorless varnish. This will be found more satisfactory than any mixture
 - (17) E. L. F. asks how enamel is applied on metal, such as used on jewelry, and whether different colors require different treatment? A. Enamels are a species of vitreous varnish, colored by means of metallic oxides and applied in thin stratum to brightly polished metallic surfaces, on which it is fused by the flame of a blowpipe or by the heat of a small furnace.
 - (18) X. Y. Z. asks if coal oil attracts lightning. A. No.
- (19) W. A.: A "saturated solution," fermentation but not on that of yeast, and the secondin hold. Another good and very old plan for preserving eggs is as follows: To each pail of water add two pints of fresh slaked lime and one pint of common salt; mix well, fill your barrel half full with this fluid, but your eggs down in it any time after June, and they will keep for many months.
- (20) J. O. N. of Newark, N. J., says: Inclosed please find specimen of insect found on potato vines Can you tell me what they are? Also what will kill or banish them? I find them worse than potato bugs, for Paris green will soon rid me of them; but these things I can find nothing to kill, except I also kill the vine. I have tried Paris green, whale oil soap, tobacco juice, and kerosene oil; all failed except kerosene, which killed or banished the insect, but also killed the vine. A. The insect referred to arrived in a very dilapidated condition, but the remains seemed to indicate that it was the common Anasa tristis, comindicate that it was the common Anasa tristis. commonly found on squashes and cucumbers, but occasion. Canoe, hawmock, E. H. Brown. 299,951 Furnace, L. P. French. 299,974 (10) I. R. P. asks how to bleach beeswax ally feeding upon the potato. As it has no jaws, but Capsule for bottles, etc., C. Cheswright 300,209 Furnace grate bar, J. Cairns. 300,209 without the use of revolving cylinders?

 A. The pumps up sap through a beak, it is evident that arseni. | Car brake, automatic, G. H. Poor. 300,122 | Furnaces, feeding air to, S. Smith 300,150

terra cotta lumber made of sawdust and clay, then sun is the best agent. Chemicals for bleaching bees- cal poisons will have no effect upon it. Our correspond ing an emulsion with milk or soap and then diluting with water. The subject of kerosene emulsions has already been treated at length in our columns by Professor Riley, and it will be unnecessary to repeat the

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; ;	cal poisons will have no effect upon it. Our correspondent has but upon the right remedy (kerosene), which	Car brake, automatic, Poor & Schiller	300,123
į	may easily be rendered innocuous to the plant by form-	et al	
۱.	ing an emulsion with milk or soap and then diluting with water. The subject of kerosene emulsions has	Car conpling, F. S. Dimon	300 312
i	already been treated at length in our columns by Pro-	Car coupling, T. Geritt	
	fessor Riley, and it will be unnecessary to repeat the formulæ.	Car coupling, W. Parsons	
	(21) H. G. asks how to make good tallow	Car coupling, H. M. Sturgis	300,030
	candles. A. We presume that the inquiry has refe-	Car coupling, J. Ward	
, .	ence to candles made with moulds rather than the dip variety. The ingredients are about one-third heef and	Car door lock, S. C. Norton Car door, railway freight, B. Eyster	300,325
	two-thirds mutton suct. We would recommend the	Car stall, stock, W. Holden	300,259
٠,	use of 1 pound of alum with each 5 pounds of tallow. Dissolve the alum in water, then put in the tallow, and	Car step, J. H. Carver Car wheel, G. P. King	
	stir until both are melled together, then run in moulds.	Carbonizing liquids, agitator device for, R. F.	
	This part of the operation is conducted as follows: The	Scannell	
1	wicks are secured in the center of each mould by passing over the sticks, one of which is laid over the top of	Carpet fastener, W. M. Shopbell	
i	the mould (corresponding to the bottom of the candle),	Carrier. See Cash and parcel carrier. Hay car-	0UU.201
1	and the other against the bottom points of the moulds. The end of the twisted wick is fastened to the stick on	rier. Cart, road, I. Dolsen	300 231
	the top of the mould, and is drawn by a piece of hooked	Case. See Check book case.	
	wire through each mould in succession, leaving a	Cash and parcel carrier, B. A. Osgood Cash railway switch, J. C. Coram	300. 27 9 300.223
ļ	loop outside the bottom points of the mould; the loops are secured there by the bottom sick passing	Castings, machine for making cores for, J. G.	
	through them; the wicks are to be drawn tight, and the	Morrison Cauterizing apparatus, electrical, E. T. Starr	
•	last end tied to the upper stick. The melted tallow is then poured into the moulds and allowed to stand	Chain bar, pencil, and toothpick, combined, D. F.	
'	about 6 hours in a cool place, after which the bottom	Chain, ornamental. F. Fontneau	
	stick must be taken out of the loops and the candles	Chains, locked fastening for watch, H. T. Salisbury	900 195
	withdrawn from the moulds. The tallow should not be heated much more than is necessary to melt it.	Chair. See Convertible chair.	900,100
i	MINERALS, ETC.—Specimens have been re-	Chair seattrachine, W. F. Lamson	
	ceived from the following correspondents, and	Chimney cowl, J. W. Jackman et al	300,079
	examined, with the results stated:	Chuck, C. W. Crary	
	J. G.—The specimen is selenite, a variety of gypsum	Chuck for watchmakers' lathes, C. Thomas	
Ì	or calcium sulphate. Its principal uses are for agricul-	Cigar wrappers, machine for cutting, H. Grun- hagen	
	taral purposes, and also as plaster of Paris in internal house decorations. Its price ranges from \$12.50 per	Circuit closer, multiple, W. F. M. McCarty	
	ton up to \$3.50 per barrel in San Francisco.	Clasp. See Album clasp. Necktie and collar	
		clasp. Clasp. I. V. Ford	300.060
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ļ	•	Combustion, device for promoting, W. M. Jack-	300,229
İ	AND EACH BEARING THAT DATE.	Son	300,080 300,228
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İ	Annunciator and circuit, electric, T. N. Vail 300,168 Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly	300 ,267 29 9,963
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	Annunciators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300,053 Awing attaching device, H. Butterworth. 300.304 Axle nut, W. Fahy. 299,969 Axle, wagon, H. H. E. Bery. 300.197 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300,244 Balling press tramping attachment, G. P. Thompson. 300.163 Ball joint, universal, A. W. Von Schmidt. 300,332 Bark mill grinding wheel, L. B. Clark. 300 045 Barrel making macbine, Beasley & Hugentobler. 300,193 Baths, apparatus for administering medicated, M. Goldberg. 300,246 Bearings, manufacture of anti-friction, J. Smalley. 300,255 Bell and annunclator, electric, D. Rousseau. 300,253 Bell and annunclator, electric, D. Rousseau. 300,334 Bell, electric, E. W. Hazazer. 300,256 Belt fastener, W. Smith. 300.026	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain will. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravjer. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery, E. Sturzenegger	300,267 229,963 300,185 300,185 300,318 300,318 300,255 300,333 300,255 300,333 300,938 300,938 300,179 300,100 300,164 300,068 300,258 300,160 300,160 300,082
	Annunciators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300,503 Awing attaching device, H. Butterworth. 300.304 Axie nut, W. Fahy. 299,969 Axie, wagon, H. H. E. Bery. 304.137 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300,244 Balling press tramping attachment, G. P. Thompson. 300,163 Ball joint, universal, A. W. Von Schmidt. 300,332 Bark mill grinding wheel, L. B. Clark. 300,3332 Bark mill grinding wheel, L. B. Clark. 300,043 Barrel making macbine, Beasley & Hugentobler. 300,193 Baths, apparatus for administering medicated, M. Goldberg. 300,246 Bearings, manufacture of anti-friction, J. Smalley. 300,255 Bell and annunclator, electric, D. Rousseau. 300,134 Bell, electric, E. W. Hazazer. 300,253 Belt fastener, W. Smith. 300.026 Bench, See Work bench. Bending machine, W. W. Stokes. 300,159 Bill and poster holder, W. H. Lighty. 300,274 Bird cage, J. W. Gregory. 301,249	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain will. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction en-	300,267 229,963 300,185 300,185 300,318 300,318 300,255 300,333 300,255 300,333 300,938 300,938 300,179 300,100 300,164 300,068 300,258 300,160 300,160 300,082
	Annuciators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300,053 Awning attaching device, H. Butterworth. 300.304 Axle nut, W. Fahy. 299,963 Axle, wagon, H. H. E. Bery. 300.137 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300,244 Baling press tramping attachment, G. P. Thompson. 300.163 Ball joint, universal, A. W. Von Schmidt. 300,332 Bark mill grinding wheel, L. B. Clark. 300 045 Barrel making machine, Beasley & Hugentobler. 30B 301 Baths, apparatus for administering medicated, M. Goldberg. 300,246 Bearings, manufacture of anti-friction, J. Smalley. 300,255 Bell and annunclator, electric, D. Rousseau. 300,254 Bell and annunclator, electric, D. Rousseau. 300,254 Bell, electric, E. W. Hazazer. 300,255 Bell and annunclator, electric, D. Rousseau. 300,256 Bench, See Work bench. 300,026 Bench, See Work bench. 300,261 Bill and poster holder, W. H. Lighty. 300,274 Bird cage, J. W. Gregory. 300,317 Blast furnaces, hoisting tower for, P. L. Weimer. 300,175	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery, E. Sturzenegger Endgaterod for vehicles, J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator.	300,267 2289,965 400,305,145 300,145 300,318 300,169 300,334 300,255 299,945 300,333 300,938 300,179 300,210 300 154 300,668 300,258 300,160 300,082 300,086
	Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan.	300,267 2289,963 (CU,305,185 300,181 300,318 300,169 300,333 300,255 299,945 300,333 300,938 300,179 300,210 300 154 300,068 300,258 300,160 300,082 300,086
	Annunciators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300.304 Awning attaching device, H. Butterworth. 300.304 Axle nut, W. Fahy. 299,969 Axle, wagon, H. H. E. Bery. 300.137 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300,244 Balling Press tramping attachment, G. P. Thompson. 300.163 Ball joint, universal, A. W. Von Schmidt. 300,332 Bark mill grinding wheel, L. B. Clark. 300 048 Barrel making machine, Beasley & Hugentobler. 300,332 Baths, apparatus for administering medicated, M. Goldberg. 300,246 Bearings, manufacture of anti-friction, J. Smalley. 300,025 Bell and annunclator, electric, D. Rousseau. 300,134 Bell, electric, E. W. Hazazer. 300,253 Belt fastener, W. Smith 300.026 Bench, See Work bench. Bending machine, W. W. Stokes. 300.250 Bill and poster holder, W. H. Lighty. 300.274 Bird cage, J. W. Gregory. 300,247 Blind slat tenoning machine, S. C. Ellis. 300.317 Blind slat tenoning machine, S. C. Ellis. 300.314 Blowers, driving mechanism for fan, J. R. Rowlands. 300.283	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door lock, electric, C. Wuest Double gauge, J. Vandeburgh. Doredge, J. A. Ball. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound. W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz.	300,267 229,267 2300,185 300,185 300,318 300,318 300,325 300,333
	Annunciators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300,503 Awing attaching device, H. Butterworth. 300.304 Axie nut, W. Fahy. 299,969 Axie, wagon, H. H. E. Bery. 304.137 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300,244 Balling press tramping attachment, G. P. Thompson. 300.163 Ball joint, universal, A. W. Von Schmidt. 300,332 Bark mill grinding wheel, L. B. Clark. 300 043 Barrel making machine, Beasley & Hugentobler. 300,193 Baths, apparatus for administering medicated, M. Goldberg. 300,246 Bearings, manufacture of anti-friction, J. Smalley. 300,025 Bell and annunclator, electric, D. Rousseau. 300,253 Belt fastener, W. Smith 300.026 Bench, See Work bench. Bending machine, W. W. Stokes. 300.259 Bird cage, J. W. Gregory. 300,274 Bird cage, J. W. Gregory. 300,274 Bird cage, J. W. Gregory. 300,274 Blind slat tenoning machine, S. C. Ellis. 300.314 Blowers, driving mechanism for fan, J. R. Row-	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain will. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz.	300,267 2289,963 (503,305,185 300,181 300,318 300,318 300,325 300,333
	Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Star. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound. W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, H. F. Magie. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne.	300,267 229.267 2300,185 300,318 300,318 300,318 300,325 300,333 300,250 300,260 300,260 300,270 300,276 300,276 300,276
	Annuciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door lock, electric, C. Wuest. Double gauge, J. Pellriegel. Dredging machine, A. W. Von Schmidt. Drier. See Vruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magle Fence, iron, M. Hegbom.	300,267 2289,963 (503,305,185 300,181 300,318 300,318 300,325 300,333
	Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drelging machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fence, picket, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne.	300,267 229,963 230,183 300,318 300,318 300,353 300,255 239,945 300,333 300,938 300,938 300,179 300,210 300,154 300,068 300,258 300,086 300,086 300,086 300,281 300,086
	Annunciators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300.053 Awing attaching device, H. Butterworth. 300.304 Axle nut, W. Fahy. 299.969 Axle, wagon, H. H. E. Bery. 300.197 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300.244 Balling press tramping attachment, G. P. Thompson. 300.163 Ball joint, universal, A. W. Von Schmidt. 300.332 Bark mill grinding wheel, L. B. Clark. 300.3332 Bark mill grinding wheel, L. B. Clark. 300.938 Baths, apparatus for administering medicated, M. Goldberg. 300.246 Bearings, manufacture of anti-friction, J. Smalley. 300.255 Bell and annunclator, electric, D. Rousseau. 300,253 Belt fastener, W. Smith 300.026 Bending machine, W. W. Stokes. 300.256 Bicycle brake lock, G. S. & C. S. Hull. 300.281 Bill and poster holder, W. H. Lighty. 300.274 Bird cage, J. W. Gregory. 300.314 Blowers, driving mechanism for fan, J. R. Rowlands. 300.328 Boot and shoe sole shaping machine, M. V. Bresnahan. 300.203 Boot or shoe. L. F. Norman. 300.001 Boot or shoe. Le F. Norman. 300.001 Boot or shoe. Le F. Norman. 300.001 Boot or shoe. Le F. Norman. 300.001 Boot or shoe. Le F. Norman. 300.001 Boot or shoe heels, machine for compressing. J. H. Parker. 300.250	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence, Form woolen fabrics, apparatus for separating vegetable, J. H. Riley.	300,267 229,963 230,183 300,318 300,318 300,318 300,255 239,945 300,333 300,938 300,938 300,179 300,210 300,154 300,068 300,258 300,086 300,281 300,086 300,281 300,071 300,276 239,930 300,276 2399,930 300,94 300,094 300,094 300,094 300,094 300,091 300,115 300,010
	Annuclators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300,053 Awning attaching device, H. Butterworth. 300.304 Axle nut, W. Fahy. 299,963 Axle, wagon, H. H. E. Bery. 300.137 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300,244 Baling press tramping attachment, G. P. Thompson. 300.163 Ball joint, universal, A. W. Von Schmidt. 300,332 Bark mill grinding wheel, L. B. Clark. 300,043 Barrel making macbine, Beasley & Hugentobler. 300,193 Baths, apparatus for administering medicated, M. Goldberg. 300,246 Bearings, manufacture of anti-friction, J. Smalley. 300,255 Bell and annunclator, electric, D. Rousseau. 300,134 Bell, electric, E. W. Hazazer. 300,255 Bell and annunclator, electric, D. Rousseau. 300,134 Bell, electric, E. W. Hazazer. 300,256 Bench, See Work bench. 300,264 Bench, See Work bench. 300,264 Bill and poster holder, W. H. Lighty. 300,274 Bird cage, J. W. Gregory. 300,274 Bird cage, J. W. Gregory. 300,274 Bird cage, J. W. Gregory. 300,317 Blast furnaces, hoisting tower for, P. L. Weimer 300,175 Blind slat tenoning machine, S. C. Ellis. 300,317 Blind slat tenoning machine, S. C. Ellis. 300,314 Blowers, driving mechanism for fan, J. R. Rowlands. 300,283 Boot and shoe sole shaping machine, M. V. Bresnahan. 300,293 Boot or shoe heels, machine for compressing, J.	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest Double gauge, J. Hellriegel. Dreage, J. A. Ball. Dreaging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence post, E. N. Obert. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. Riley.	300,267 229,963 230,183 300,318 300,318 300,318 300,255 239,945 300,333 300,938 300,938 300,179 300,210 300,154 300,068 300,258 300,086 300,281 300,086 300,281 300,071 300,276 239,930 300,276 2399,930 300,94 300,094 300,094 300,094 300,094 300,091 300,115 300,010
	Annunciators, derived circuit for clearing-out, C. E. Scrioner. 300.144 Anti-friction composition, J. Smalley. 390.023 Anti-friction roller, C. Nau. 300.110 Auger, earth boring, C. De Mézerville. 300,053 Awling attaching device, H. Butterworth. 300.304 Axle nut, W. Fahy. 299,969 Axle, wagon, H. H. E. Bery. 300.137 Bale band bender, nail extractor, etc., combined, R. Gambrell. 300,244 Baling press tramping attachment, G. P. Thompson. 300,163 Ball joint, universal, A. W. Von Schmidt. 300,332 Bark mill grinding wheel, L. B. Clark. 300 043 Barrel making machine, Beasley & Hugentobler. 300,193 Baths, apparatus for administering medicated, M. Goldberg. 300,246 Bearings, manufacture of anti-friction, J. Smalley. 300,255 Bell and annunclator, electric, D. Rousseau. 300,134 Bell, electric, E. W. Hazazer. 300,253 Bell fastener, W. Smith. 300,266 Bill and poster holder, W. H. Lighty. 300,274 Bird cage, J. W. Gregory. 300,274 Bird slat tenoning machine, S. C. Ellis. 300,315 Blowers, driving mechanism for fan, J. R. Rowlands. 300,283 Boat detaching apparatus, A. D. Post. 300,283 Boot and shoe sole shaping machine, M. V. Bresnahan. 300,003 Boot or shoe L. F. Norman. 300,003 Boot or shoe L. F. Norman. 300,003 Boot tree, J. W. D. Fifield. 299,971 H. Parker. 300,250	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain will. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravjer. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence post, E. N. Obert. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Fifth wheel, H. H. E. Bery. File blanks, machine for forming the teeth upon, W. T. Nicholson.	300,267 2299,963 (503,305,185 300,181 300,318 300,318 300,325 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,210 300,154 300,068 300,258 300,066 300,082 300,086 300,281 300,071 300,276 299,930 300,271 300,115 300,071 300,115 300,010 300,116
	Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound. W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, Brotable, W. Cokayne. Fence, picket, A. G. Lyne. Fence, picket, A. G. Lyne. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. E. Bery. File blanks, machine for forming the teeth upon.	\$00,287 239,963 \$10,395 \$20,395 \$300,185 \$000,169 \$300,333 \$300,333 \$300,333 \$300,333 \$300,333 \$300,333 \$300,210 \$300,154 \$300,068 \$300,256 \$300,068 \$300,256 \$300,068 \$300,256 \$300,068 \$300,256 \$300,068 \$300,256 \$300,066 \$300,256 \$300,066 \$300,256 \$300,066 \$300,256 \$300,066 \$300,256 \$300,066 \$300,256 \$300,066 \$300,256 \$300,066 \$300,256 \$300,066 \$300,256 \$300,071 \$300,07
	Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravjer. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence Post, E. N. Obert. Filbe blanks, machine for forming the teeth upon, W. T. Nicholson. Fire alarm, automatic, H. N. Fenner. Fire escape, O. F. Bavis	300,267 2289,963 300,181 300,183 300,183 300,183 300,183 300,255 2399,945 300,333 300,255 2300,333 300,256 300,179 300,115 300,068 300,258 300,086 300,258 300,086 300,258 300,106 300,082 300,086 300,281 300,071 300,276 300,071 300,276 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,096 300,116 300,016 300,196 300,196 300,196 300,196 300,196 300,196
	Annuciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drelging machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Star. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator. See Sturzenegger Endgaterodfor vehicles. J. Jensen Endgate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound. W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence, portable, J. H. Riley. Fifth wheel, H. H. E. Bery. Fire blanks, machine for forming the teeth upon, W. T. Nicholson Fire alarm, automatic, H. N. Fenner. Fire escape, J. A. Crandall Fire escape, Larson & Hagstrom.	300,287 239,365 300,318 300,318 300,318 300,318 300,318 300,318 300,325 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,333 300,343 300,068 300,281 300,071 300,276 300,308 300,094 309,931 300,115 300,010 300,116 300,116 300,116 300,116 300,116 300,116 300,116 300,116 300,116 300,116 300,116 300,000 300,30
	Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravjer. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence Post, E. N. Obert. Filbe Inaks, machine for forming the teeth upon, W. T. Nicholson. Fire alarm, automatic, H. N. Fenner. Fire escape, U. E. Bavis Fire escape, U. F. Bavis Fire escape, U. F. Bavis Fire escape, H. Greene. Fire escape, W. Lawrence.	300,267 2289,963 300,181 300,183 300,183 300,183 300,169 300,333 300,255 239,945 300,333 300,255 2300,333 300,210 300 154 300,068 300,258 300,160 300,082 300,086 300,281 300,071 300,276 2390,930 300,276 2390,930 300,196 300,115 300,116 300,016
	Annuciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest Double gauge, J. Hellriegel. Dreage, J. A. Ball. Dreaging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drelging machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fence, pichet, A. G. Lyne. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence, portable, J. H. Riley. Fifth wheel, H. H. E. Bery. File blanks, machine for forming the teeth upon, W. T. Nicholson. Fire escape, U. F. Bavis Fire escape, U. Lawrence. Fire escape, U. Lawrence. Fire escape, U. Lawrence. Fire escape, U. Lawrence. Fire escape, W. Lawrence. Fire escape, W. Lawrence. Fire escape, W. Lawrence. Fire escape, W. Lawrence. Fire escape, R. E. Nelson, Sr. Fire extinguishing compound, N. G. Bartlett.	300,267 229,963 300,181 300,183 300,169 300,169 300,333 300,255 239,945 300,333 300,210 300,179 300,210 300,154 300,068 300,258 300,160 300,082 300,086 300,281 300,276 239,950 300,276 300,196 300,196 300,196 300,196 300,196 300,196 300,196 300,196 300,114 239,970 300,196 300,114 239,967 300,281 300,090 300,196 300,114 309,970 300,196 300,114 309,970 300,281 300,090 300,196 300,114 309,970 300,281 300,090 300,196 300,114
	Annuciators, derived circuit for clearing-out, C.E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door tock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound. W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, H. H. E. Bery. File blanks, machine for forming the teeth upon, W. T. Nicholson. Fire alarm, automatic, H. N. Fenner. Fire escape, U. Lawrence Fire escape, H. Greene. Fire escape, R. E. Nelson, Sr. Fire extinguishing compound, N. G. Bartlett. Fire programs and fender bars, stud for, F. G. Fire place frames and fender bars, stud for, F. G. Fire place frames and fender bars, stud for, F. G. Fire place frames and fender bars, stud for, F. G. Fire extinguishing compound, N. G. Bartlett.	300,267 289,963 300,181 300,183 300,185 300,185 300,185 300,185 300,169 300,255 299,945 300,233 300,233 300,236 300,256 300,068 300,258 300,160 300,082 300,086 300,281 300,071 300,276 300,071 300,276 300,093 300,093 300,093 300,093 300,093 300,093 300,093 300,093 300,093 300,093 300,093
	Annuciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, A. W. Von Schmidt. Drier, See Eruit drier. Drieging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, underground conduit for, A. Campbell. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fence, picket, A. G. Lyne. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence post, E. N. Obert. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Fifth wheel, H. H. E. Bery. Fife blanks, machine for forming the teeth upon, W. T. Nicholson Fire escape, J. A. Crandall Fire escape, O. F. Bavis Fire escape, U. Lawrence Fire escape, U. Lawrence Fire escape, U. Lawrence Fire escape, R. E. Nelson, sr Fire escape, R. E. Nelson, sr Fire extinguishing compound, N. G. Bartlett Fire post ships, apparatus for extinguishing, W.	\$00,267 229,263 \$00,318 \$00,169 \$00,318 \$000,169 \$000,334 \$000,333
	Anunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain will. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator, M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence post, E. N. Obert. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Fifth wheel, H. H. E. Bery. Fifth wheel, H. H. E. Bery. Fifte blanks, machine for forming the teeth upon, W. T. Nicholson. Fire escape, J. A. Crandall. Fire escape, J. A. Crandall. Fire escape, U. Lawrence Fire escape, U. Lawrence Fire escape, R. E. Nelson, Sr. Fire extinguishing compound, N. G. Bartlett. Fireplace frames and fender bars, stud for, F. G. Janusch.	300,267 289,963 300,181 300,183 300,185 300,185 300,185 300,185 300,185 300,185 300,255 299,945 300,255 300,333 300,333 300,333 300,333 300,333 300,255 300,100 300,154 300,068 300,258 300,160 300,086 300,281 300,086 300,281 300,096 300,096 300,096 300,097 300,210 300,115 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010 300,010
	Annuciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. Byron Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus for vacuum, H. T. Yaryan. Distillation, apparatus, A. W. Von Schmidt. Drier, See Eruit drier. Drieging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, underground conduit for, A. Campbell. Electric conductors, underground conduit for, A. Campbell. Electric conductors, underground conduit for, A. Campbell. Electricity, apparatus for distributing, A. I. Gravier. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magle. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence, portable. W. Cokayne. Fence Post, E. N. Obert. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Fifth wheel, H. H. E. Bery. Fifte blanks, machine for forming the teeth upon, W. T. Nicholson. Fire escape, J. A. Crandall Fire escape, U. F. Bavis. Fire escape, U. Lawrence Fire escape, U. Lawrence Fire escape, R. E. Nelson, Sr. Fire escape, U. Lawrence Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, G. F. Selson, Sr. Fire escape, J. M. Metcalf. 3 Fireson ships, apparatus for extinguishing, W. H. Thompson.	\$00,267 289,963 \$00,318 \$00,169 \$00,318 \$00,169 \$00,333 \$00,353 \$00,355 \$300,333 \$00,255 \$300,333 \$00,256 \$300,333 \$00,256 \$300,256 \$300,066 \$300,068 \$300,258 \$300,160 \$300,082 \$300,086 \$300,281 \$300,071 \$300,276 \$300,086 \$300,276 \$300,096 \$300,0
	Annunciators, derived circuit for clearing-out, C.E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator. M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence Post, E. N. Obert. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Fifth wheel, H. H. E. Bery. File blanks, machine for forming the teeth upon, W. T. Nicholson. Fire alarm, automatic, H. N. Fenner. Fire escape, U. Lawrence. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escap	300,267 229,963 300,181 300,183 300,183 300,184 300,255 230,945 300,333 300,255 300,333 300,256 300,256 300,266 300,266 300,266 300,27
	Anunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. Byron Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine, B. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest Bouble gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Brilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator, See Lumber elevator. Elevator, See Lumber elevator. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound, W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, H. F. Magie. Fence, picket, A. G. Lyne. Fence, pottable. W. Cokayne. Fence post, E. N. Obert. Fiber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Fifth wheel, H. H. E. Bery. Fifth wheel, H. H. E. Bery. Fire escape, J. A. Crandall. Fire escape, J. A. Crandall. Fire escape, H. Greene. Fire escape, H. Greene. Fire escape, H. Greene. Fire escape, R. E. Nelson, Sr. Fire extinguishing compound, N. G. Bartlett. Fire place frames and fender bars, stud for, F. G. Janusch. Fires on ships, apparatus for extinguishing, W. H. Thompson. Flanzing machine, M. R. Moore. Flood gate, J. M. Metcaif Flour from barrels into bags, portable table for transferring, W. Cochrane. Folding table, W. E. Eldred.	300,256 290,367 290,367 300,115 300,318 300,318 300,318 300,316 300,316 300,316 300,333 300,333 300,333 300,333 300,938 300,179 300,100 300,100 300,068 300,210 300,068 300,268 300,068 300,068 300,068 300,106 300,071 300,071 300,071 300,106 300
	Annunciators, derived circuit for clearing-out, C. E. Scrioner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest. Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drilling machines, index gauge for, A. B. Bean. Electric conductors, manufacture of, J. J. Williamson. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Starr. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator. M. W. Hoben. Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen. End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound. W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fencemaking machine, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, J. H. Riley. Filber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Filber from woolen fabrics, apparatus for separating vegetable, J. H. Riley. Filber escape, H. Greene. Fire escape, H. Greene. Fire escape, R. E. Nelson, Sr. Fire escape, H. Greene. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire escape, R. E. Nelson, Sr. Fire on ships, apparatus for extinguishing w. H. Thompson	300,267 229,963 300,181 300,183 300,185 300,185 300,185 300,185 300,186 300,255 299,945 300,255 300,333 300,256 300,268 300,268 300,281 300,068 300,281 300,071 300,276 300,086 300,281 300,091 300,116 300,196 300,308 309,21 300,196 300,196 300,196 300,308 309,21 300,196 300,308 309,21 300,196 300,308 309,21 300,196 300,308 309,21 300,196 300,308 309,21 300,196 300,308 309,21 300,196 300,308 309,3
	Annuciators, derived circuit for clearing-out, C. E. Scrinner	Cut-off and governor, combined, J. Kelly. Cut-off governor. H. Cook. Cutter head, U. D. Byron. Distillation, apparatus for vacuum, H. T. Yaryan. Ditching machine. D. Hershberger. Door check, O. P. Vandeburgh. Door lock, electric, C. Wuest Double gauge, J. Hellriegel. Dredge, J. A. Ball. Dredging machine, A. W. Von Schmidt. Drier. See Fruit drier. Drill. See Grain drill. Mining drill. Drelging machines, index gauge for, A. B. Bean. Electric conductors, underground conduit for, A. Campbell. Electric conductors, underground conduit for, A. Campbell. Electric motor and dynamo electric machine, E. T. Star. Electricity, apparatus for distributing, A. I. Gravier. Elevator. See Lumber elevator. Elevator. See Lumber elevator. Elevator, M. W. Hoben Embroidery. E. Sturzenegger Endgaterod for vehicles. J. Jensen End gate, wagon, D. B. Keagy. Engine. See Carding engine. Gas engine. Portable engine. Steam engine. Traction engine. Evaporator. See Fruit evaporator. Explosive compound. W. R. Quinan. Feathers, machine for scraping the quills of ostrich and other, J. Hawlowetz. Fence, iron, M. Hegbom. Fence, picket, A. G. Lyne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence, portable, W. Cokayne. Fence, portable, J. H. Riley. Fifth wheel, H. H. E. Bery. Fire escape, J. A. Crandall. Fire escape, J. A. Crandall. Fire escape, Larson & Hagstrom. Fire escape, H. Greene. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, Larson & Hagstrom. Fire escape, M. E. Nelson, Sr. Fire escape, M. E. Nelson, Sr. Fire escape, M. E. Nelson, Sr. Fire escape, M. E. Nelson, Sr. Fire escape, M. R. Moore. Filer from barrels into bags, portable table for transferring, W. Cochrane. Folding table, W. E. Eldred Fruit drier, portable, J. N. Parker. See Tout.	300,267 289,967 300,114 300,318 300,318 300,318 300,318 300,318 300,319 300,319 300,319 300,310 300,31