RECENTLY PATENTED INVENTIONS.

Engineering.

BALANCED SLIDE VALVE.-George S. Vaughn, Oil City, Pa. To thoroughly balance the slide valve and reduce the friction incident to back pressure and other causes to a minimum this inventor has devised an improvement consisting of an apertured plate having a hub sliding in the steam chest cover, and on which slides the top face of the slide valve, having an inlet borewhich is at all times in register with the aperture in the plate. The improved plant is of simple and durable construc-

PRESSURE REDUCING VALVE.—Thomas P. Ford, Brooklyn, N. Y, This is an automatically working valve which may be conveniently set to the desired reduction of the initial pressure, a reducing valve chamber being connected with the steam inlet, a main valve controlling the passage from the inlet to the outlet, and there being a permanent connection between the re ducing chamber and the outlet to permit the steam pass ing to the outlet to press on the main valve. The valve may be readily examined and repaired on simply unscrewing a bushing.

SMOKE CONSUMER.—William C. Welsh, Allegheny, Pa. According to this invention funnels are arranged in the smoke box at about the level of the bottom of the boiler, pipes on opposite sides of the boiler communicating with the funnels and passing through the fire space, while other pipes embedded in the walls of the fire box discharge into the side pipes, there being also an inlet and steam pipes arranged to create blast through the side pipes. The improvement is designed to not only perfectly consume the smoke, but also to effect a substantial saving in fuel and better steaming efficiency.

BILGE WATER DISCHARGE.-Nicholas Power, New York City. This invention provides a siphon apparatus designed to be automatic in its action, so contructed that the valves will be opened to their full extent almost instantly when the water has reached a predetermined level in the bilge well, a steam supply pipe being connected with one end of a differential valve of the apparatus and an ejector connected with its oppo When the water reaches a fixed lowest mark the valves of the device are instantly closed.

Mechanical.

SCREW CUTTING MACHINE. - Hio P. Eilers, Cleveland, Ohio. This is a triple machine, espe cially designed for manufacturing purposes, in which a single operator can readily handle the work for the three carriages, while the machine can be run at a speed which will insure a long life to the parts and dies and also pro duce perfect work in large quantities. The clutch ring heretofore employed in machines of this kind is dispensed with, and the connection between the yoke, toggle and diehead is very simple, reducing the wear of the machine at this point to a minimum.

NUT LOCK.—Jefferson D. Tynes, Fort Smith, Ark. This device consists of an open washer, one of the ends having a spur at its end and hugging the bolt, while the other end is formed with a straight portion and an arm extending upward past the first end. The device is more particularly designed for use on rail joints, but is applicable also for other purposes.

TEASELING MACHINE, - Ernst Gessner, Aue, Saxony, Germany. In machines for raising the nap on cloth, this inventor provides teaseling rollers of different diameters on one drum, united with one another to run at the same axial speed, giving different surface speeds, while the teeth of the smaller rollers point in opposite directions to the teeth of the larger rollers. The greater the difference in diameter between the large and ti.e small rollers, the greater is the teaseling effect on the cloth, and for raising light goods it is preferred to revolve the teaseling rollers not only by the action of the cloth, but also by belts, cords or gearings.

SOLDERING IRON.—Rudolph C. Becker, Springfield, Ohio. This iron has a central hollow space with a small valve-closed passage extending to the top or point of the iron. The handle of the iron is tubular and the stem of the valve extends up it to the wooden hand piece, a spring being coiled on the stem to hold the valve to its seat, from which it may be raised by a thumb piece. The soldering liquid is held in the chamber or cavity of the head, the valve being raised to permit it to flow out, as it is liquefied by the heating of the iron in

Agricultural.

STAWBERRY PLANTER.-Louis B. Schell, San Antonio, Fla. The frame of this planter is supported by a forward planting wheel on which are three trip pins and two rear covering wheels, a plow being centrally located. A centrally pivoted arm has springcontrolled jaws to receive the plant, an extension of the arm engaging the trip device, by which the plant is taken from a holder on the rear of the frame and automatically deposited in the furrow made to receive it, immediately in advance of the covering wheels. The distance between the plants may be regulated by setting the trip pins as desired, and the planter may be used for planting seedlings or slips of any description.

HAY PRESS -- Charles A. Anderson. Cale. Indian Ter. This invention provides a rapidly working press, of strong and simple mechanism, in which the bale being formed may be tied by passing needles and wires through recesses in the plunger, forming wire bands which are twisted around the bale. A light draught horse power is also provided for the press, and a quick return of the plunger is obtained. A pivoted tucking plate above the mouth of the receiving chamber materially assists the feeding of the press.

Miscellaneous,

RADIANT HEAT BATH.—John H. Kellogg, Battle Creek, Mich. This invention provides an apparatus for use as a substitute for Turkish and Russian lower temperature and more powerfully promote the ac-

tion of the skin and the elimination of carbonic acid. It consists of a cabinet whose walls are provided with mirrors reflecting light toward the center, there being incandescent electric lamps on the walls, while a sliding table carries the Derson into and out of the cham. ber. A good circulation of fresh air is maintained while the treatment is in progress.

PREPARING FLAKED CEREALS.—The same inventor has patented a process for making an improved food product, and the product itself, which is made of wheat, barley or oats, the outer husks being removed, and corn or other grains. The grain is first soaked at a temperature which prevents fermentation, then heated to cook the starch, dried, rolled between cold rollers, and the flakes baked until thoroughly dry and crisp, forming perfectly cooked food, ready to be eaten without further preparation. It will keep indefinitely, being perfectly sterilized, and is especially well adapted for sick and convalescent people.

STAGE APPARATUS.—Carl E. Nilsson, New York City. To produce an aerial ballet this inventor has devised a simple apparatus to be arranged above the stage to support the dancers and give to them the appearance of floating in the air, moving up and down and laterally. It comprises movable guide pulleys on opposite sides of a main pulley and simultaneously movable toward and from it, there being also a supporting frame with slides connected by cable, a cable mechanism for turning the pulley and suspending wires connected with the pulley and extending over the slides. The apparatus is strong and simple and not likely to get out of order.

DESULPHURIZING BLAST FURNACE SLAG.—Alexander D. Elbers, Hoboken, N. J. Slag or cinder of iron ore smelting or blast furnaces, while in ladles, is desulphurized, according to this process, in such manner that it retains sufficient fluidity to be cast into moulds, or to be granulated in water after its treatment is finished. The slag is treated with easily fusible substances that wil unite with the principal impurities to form a scum, calcined sodium sulphate and fused sodium sulphate being preferably employed. The desulphurized slag may be cast into ornamental building materials or used in its granulated state for mortars, cements, etc.

HOT WATER HEATER. - John E. Wallace, Altoona, Pa. This heater has upper and lower reservoirs connected by a series of spiral pipes which surround the main combustion chamber, in which the gases and products of combustion are held for a maximum of time, and in the lower reservoir is a central space which constitutes the fire pot. The body of the heater consists of two casings, between which is an air space in which air is heated before it enters the fire, and an improved grate is provided by which the bed of fire may be shaken in a rotary direction and reciprocally.

WATER TANK VALVE.-Thomas V. Coony. Albuquerque, New Mexico. This is a valve of strong and simple construction, controlled by a float, arranged to prevent leakage and he perfectly noiseless when opening and closing. The chamber in the upper part of the valve casing is enlarged, and in operation the pressure on the upper surface of the valve exceeds that on its lower surface, quickly forcing the valve to its seat, where it is not affected by any fluttering of the water causing the float to bob.

FENCE POST.—Calvin Kutzner, Cairo, Ohio. This is a metal post made of two connected uprights of angle iron, set in a central recess of a base of burnt clay, surrounded by a fil ing of cement and blocks, there being a metal cap on top of the base. Notches and hooks are arranged in the uprights, with movable keys by means of which fence wires may be conveniently at tached to the posts

PLASTERING COMPOUND. — James E. Summers, Richmond, Va. Two patents have been granted this inventor for improvements in plastering compounds, one of the compounds producing a gray finish and a rough but attractive surface particularly desirable for churches and offices. It is made of crushed slag, plaster of Paris, lime, and other ingredients, in certain proportions, and is prepared in a specified manner. In the other compound hydraulic cement and vegetable fiber are also employed, the material being mixed in the room being plastered, and the compound being adapted for use on wood, wire, or metal laths, or on brick or stone, hardening in about two hours

PHOTOGRAPHIC DARK ROOM.—John P. Brockway, Denver, Col. This invention consists of a chamber having removable sides provided with sleeves for the arms of the operator, so that he can pass his hands and arms into the chamber to manipulate the plates, films, etc., while the rest of his body is on the outside. A simple portable dark room is thus formed to facilitate the development of plates or the filling of plate and film

BED SPRING. - James M. Crutcher, Atlanta, Ga. According to this invention, elastic rings are arranged in rows, and cross rods extending between adjacent rows of rings, and connected at their ends the frame, are connected with the rings by oppositely extending V-shaped portions. A very strong but elastic network is thus obtained, the rings assuming different shapes according to the weight or strength of the pull upon them, and assuming their original form when the tension is removed.

CUFF BUTTON.—Anton Brunka, New York City. This invention relates to link buttons, and provides a construction of the link which permits of more readily connecting and placing the buttons, rendering them also more easy of removal. One of the buttons is made with a novel socket or tube receiving a bar projecting from the other button, and in the use of the button the bar is put through one hole of a cuff and the socket through the other, the parts being then guided into engagement with each other and so held by a spring

SHIRT WAIST. - Alfred Wolf, New York City. This invention provides a device for attachment to ladies' shirt waists and similar garments for supporting the waistband of the skirt at the rear, reinforcing also the gathers and preventing the waist from working baths, being designed to induce perspiration at a much up beyond the waistband. Secured to the shirt waist over the gathers is a tab or flap in which are eyelets

adapted to receive hooks on opposite sides of a placket of a shirt, tapes at the ends of the tab passing around the vaist of the wearer to be tied in front.

GARMENT SUPPORTER .- Richard M. Skinner, Flemingsburg, Ky. This device consists of a safety pin adapted to engage the waistband of a pair of drawers, while extending up from the shank of the pin is a hook adapted to engage the waistband of the trousers, a loop on the front portion of the hook straddling a button on the trousers

BOTTLE STOPPER. -- Henry Leidel, New York City. A "safety" stopper, to prevent the refilling of bottles once emptied, has been devised by this inventor, the invention consisting of a valve chamber at the neck of the bottle, with valve seat and inclosed valve arranged to open outward, to permit the contents of the bottle to be removed, while the valve engages its seat when the bottle is in vertical position, thus preventing liquid from being forced into the bottle from the outside. The device is simple and inexpensive, and when applied is difficult of removal without breakage,

Poison Distributer.—George A. Brown, Hardman, Oregon. This is a device more especially designed for dropping poisoned grain for killing squirrels, and comprises a hollow, canelike rod, on which is a box containing the poisoned gram, a valve sliding in the rod on downward pressure by the operator to discharge the poisoned grain upon the ground, at the desired locations.

DISPLAY BOX. — Leopold Sonn, New York City. This is a box especially adapted for the packing and display of neckwear, the construction being such that each necktie may be mounted on an independent support removably secured in the box, thus not only displaying the neckwear to the best advantage, but preventing the soiling of the ties by handling, as in removing a tie from the box its support is to be drawn out with it. A purchased tie and its support may also be wrapped up together, preventing the rumpling of the tie in the hands or pocket of a purchaser

HYGIENIC CHAMBER. - Amador T. Blanco, Havana, Cuba. This inventor provides a chamber for the isolation of a sick person, the air to be constantly renewed and brought to any desired temperature and humidity, and moistened or mixed with antiseptic or aromatic substances. On the top of the chamber is a series of devices through which the air is passed, including a blower, a purifier, a heater, a saturator, and a condenser, and there are gasometers for supplying oxygen to the air if desired, the invention also covering various other novel features.

ADJUSTABLE REST FOR BICYCLES.-Franz Kampf, New York City. At each side of the rear wheel an attaching plate is secured to the frame and carries a pivoted and braced rest arm, which may be swung to contact with the ground or raised therefrom and folded at each side of the wheel, by actuating shifting levers near the handle bar. The device is designed to steady the bicycle to facilitate the learning of the beginner, enables women to mount readily, may be used as a brake, and also to hold the wheel in upright position when at rest

BODY SHIELD.—Edward Hunt, Denver, Col. To protect from the wind the throat, breast, face and ears of a bicyclerider or boatman, this inventor has devised a V-shaped shield comprised of two parts of stiff material, held to slide one upon the other, and foldable, to be used in connection with a V-shaped face shield, provided with windows and ear muffs. The shields are attached to the person by straps, and may be readily buckled to a

AIR GUN.-John C. Raymond, New York City. This is a toy gun more especially designed to throw snow or other loose material by means of compressed air, at the same time making a noise by exploding a fulminate. The stock of the gun has an air reser voir in which is a spring pressed piston, the barrel of the gun communicating with the reservoir by a valved port, while a port also leads to the barrel through the stock there being likewise a plunger in the barrel and a spring between the plunger and the inner end of the barrel

OYSTER DREDGER. - Norbert Boudeaux, Houna, La. This is a device adapted for at tachment to the gunwale of an oyster boat, the dredger support extending outward and permitting the operator to stand on it and move it readily either toward the how or the stern of the boat. The dredger may be operated by one man, the tongs being quickly raised and lowered and carried inboard and dumped.

PORTABLE ELEVATOR. - Micheal Mc Carthy and John H. Wehmhoff, Dalton City, Ill. This is an improvement in elevators, having transporting wheels and a platform on which loaded wagons may be driven and then hoisted at one end to dumptheir load into a box that slides vertically, and may be tilted to discharge its contents, as into a granary or other receptacle The elevator has a wheeled axle pivoted at each end and may be readily hauled from place to place.

Designs.

COVERED DISH.—Robert L. Johnson, Hanley, England. The handle of the cover of this dish is of scroll pattern and twisted design, and is practically surrounded by scroll figures, while the body of the dish at its sides is divided into panels by scroll figures ap proaching the shape of a cornucopia, the base of the body being of scalloped decorative contour.

Jug.-Arthur S. Higgins, New York City. This jug is decorated on its surface to represent the capped and cloaked figure of George Washington, the cloak being thrown open to represent a portion of the person, the figure also holding a sword in one

FAN.-Lina Barkley, Monroe, La. This is a circular fan, the outer edge of which is made up of a series of overlapped circular members, giving a scalloped edge effect, the central portion having radial divisions, outside of which are represented leaves, buds, and blossoms.

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(6843) H. P. asks: 1. What are the comparative values of (a) soft gray cast iron, (b) malleable cast iron, (c) common wrought iron, (d) Norway iron nnealed, for use in field magnets and in armatures? A. Soft gray iron is probably best for field magnets of dvnamos. The softest wrought iron is best for field magets of motors. The cores of armatures should be made of the softest iron. 2. Can you give the approximate ratio of resistance which should be maintained between the windings on the field and armature of small motors for battery currents, series winding? A. For series winding give the field magnet windings two-thirds the resistance of the armature windings. 3. How would it be for shunt winding? A. For shunt winding the product of armature and field resistance should equal the square of the external resistance. 4. Has either system of winding any marked advantages over the other? If so, please state them. A. Shunt winding is advantageous for cases where the external current varies, but neither is perfect, and no absolute preference can be expressed. Is not the drum armature more universally used than the ring, and what are the chief merits of each? A. The merit of the drum armature is that it is easily wound; the passing of the wire through the central opening of the ring armature makes the winding operation slow and awkward. 6. Has a motor, when running, more or less resistance than is represented by the size and length of wire used? If so, can you say, roughly, in what proportion? A. The ohmic resistance is nearly the same when running or at rest. Counter electromotive force is developed when running, which operates exactly like an ohmic resistance, and which rapidly increases with the speed. This prevents a motor from running too fast, and enables it to absorb more energy when going slov.. The armature of a motor is far more liable to burn out wher, going slow than when going at high speed. 7. Mr. G. M. Hopkins, in describing the winding of the induction coil in his invaluable book," Experimental Science," says wind in a lathe "set as for cutting a very fine thread," and wind "as close as possible without touching." Can you state the number of convolutions actually used in the coil referred to ? No. 36 B. & S. wire is 0.005 or $\frac{1}{200}$ of an inch indiameter. Theoretically, 196 convolutions to the inch would not touch. My lathe will cut 154 to

the inch. Would this be fine enough? A. The diame-

ter of the wire fixes the fineness. No. 36 wire has a diameter of 5 mils, or 200 to the inch. Allowing fo space, this would give a setting of 100 to 150 "threads to the inch." Your other queries are so indefinitely put that they cannot be answered definitely. A coil once punc-tured is practically irreparable, except by rewinding. The current which can be used on a coil depends on the size of the primary wire. Counter E.M.F. helps to prevent too strong a current passing. You can allow, as just said, 150 turns of No. 36 wire to the inch. A foot square of tinfoi gives two square feet of surface. A coil made by an amateur giving a 2 inch spark shows good practice. Experience is very requisite in making large coils.

(6844) L. J. H. asks: 1. To what resistance should field magnets be wound to be in proportion to armature, or what resistance should armature bave, to be in proportion to field? A. See answer to preceding query. 2. How much resistance in ohms has an armature wound with 1,500 feet of No. 26 wire? A. The resistance of that wire is about 61 ohms; on an armature it is one quarter this amount, because it is wound in paralel. When the armature is rotating, counter E.M.F. is generated, which produces an effect equivalent to resistance in its action on the current.

(6845) O. R. says: Can you inform me through SCIENTIFIC AMERICAN (in your Notes and Queries) in what manner I can stamp a name on to olished and crocused steel, by using rubber stamp? What acids I am to use. A. For etching brands and marks on polished steel surfaces, such as saws, knife blades, and tools, where there are many pieces to be done alike, procure a rubber stamp with the required design made so that the letters and figure that are to be bitten by the acid shall be depressed in the stamp. Have a plain horder around the design, large enough to allow a little bor der of common putty to be laid around the edge of the stamped design to receive the acid. For ink, use resin, lard oil, turpeutine and lampblack. To 1/4 pound of resin put 1 teaspoonful lard oil; melt, and stir in a tablespoonful of lampblack; thoroughlymix, and addenough turpentine to make it of the consistency of printer's ink Use this on the stamp in the same manner as when stamping with ink. When the plate is stamped, place a little border of common putty around and on the edge of the stamped ground. Then pour within the border enough acid mixture to cover the figure, and let it stand a few moments, according to the depth required, then pour the acid off. Rinse the surface with clean water; take off the putty border, and clean off the ink with the turpentine. Use care not to spill the acid over the polished part of the article. For the acid, use 1 part nitric acid, 1 part hydrochloric acid, to 10 parts water by measure. If the effervescence seems too active, add more water.

(6846) J. C. W. says: We have as great an evil here in the Johnson grass as the Russian thistle in the Northwest. I saw a notice published not long since that one of the great trunk railroads was trying to destroy the weeds and grass along its track with electricity. Was this a success? If so, about what current was used and how often applied? It seems that if the smallest sprangle of root of the Johnson grass be left in the ground, it will grow and multiply faster than microbes. As yet all our efforts to destroy it seem but cultivation. If electricity will kill it in any practical method of application, about what current would be necessary? About what would the dynamo to give such a current weigh, and about what would it cost? How many revolutions per minute would be required to give such current? A. Answer by the Assistant Botanist United States Department of Agriculture: Johnson grass is propagated largely by its perennial roots, and the chief difficulty in eradicating it is in killing those roots. The roots are killed by direct exposure to frost or to the drying effect of the sun; therefore repeated plowing during the summer drought orduring open winters will effect their destruction. This method can best be applied to sandy soils. Close grazing by sheep will weaken the Johnson grass, so that it can the more easily be destroyed by cultivation. Heavy seeding with cow peas will also choke it out to a considerable extent. Small patches may be economically destroyed by the application of carbolic acid. If the Johnson grass has become well established over a considerable area of heavy clay land, and makes sufficient growth to produce good hay crops, the most economical method is to use the land as a permanent meadow, cutting one or two crops of grass each year, and top dressing and harrowing about once in two years. [We doubt the possibility of getting satisfactory results by the application of electricity.-ED.1

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,	Carving machine, G. W. Hodges	558,951
n. k:	pocket case. Glove case. Show case. Cush and parcel carrier, L. G. Bostedo	569,095
r i-	Castings, process of and apparatus for manufac- turing steel. F. W. Hawkins.	558.947
y	Carding machine stop mechanism, Bradbury & McDermott. Cart. spreading, R. Stone Carring machine, G. W. Hodges Case. See Bookease. Buffle packing case. Card pocket case. Glove case. Show case. Cast and parcel carrier, L. G. Bostedo Caster, Johnson & Adcock. Castings, process of and apparatus for manufacturing steel, F. W. Hawkins. Centrifugal machine, A. Heberer. Chair. See Invalid chair. Check and shade holder, J. B. Newman (reissue).	559,059
d	Checks advice and safety attachment for hank	
t	M. Feintuch. Chloro-t beoph ylim and preparing tt, E. Fischer. Ctrouit breaker, M.J. Griffith. Clamp. See Beam clamp. Floor and ceiling	559,347 559,280
n e :	Clamp. See Beam clamp. Floor and ceiling clamp.	
-	Clipping machine. J. A. Milliken	558,973 569,070 559,057
i d		
t	Clutch E W Carloton	58,935 559,261 559,240
e	Clutch, friction, A. C. Rice	559,240 559,064 559,272
۱.	Cocks, etc., fastening and stop for gas, J. A.	999,10#
t	Coffee, tea, etc., apparatus for obtaining infusions of K. Mezger	559,173 559,339
,		559,263 559,072
	Commode, W. H. Stoltz	559,279 559,109 559,983
1	Coin cases, manufacture of, R. L. Chope. Collar, horse, H. Clarke. Collar point turning machine, A. E. Grant. Commode, W. H. Stoltz. Communat or, current straightening, C. Pollak. Compass, draughting, J. W. Kaiser. Cooker, steam, J. W. Lee, Jr. Cooker, steam, J. W. Lee, Jr. Cotton elevating system, pneumatic, I. T. Washburne.	559,177 559,028 559,137
1 1	Cooker, steam, J. W. Lee, Jr	
e t	Couch, R. V. Wicks	559,237 559,242
-	Coupling. See Car coupling. Cream or milk apparatus for pasteurizing and cooling, C. B. Petersen. Crown for bridgework, detachable porcelain, W.	558,980
-	Crown for bridgework, detachable porcelain, W. I., Mason	569,185
ì	Cultivator, wheel, W. Sobey	558,995 559,103
- e ;	Curtain roll bracket adjustable, R. T. Green Cycle, elevated track, W. H. Martin	558,945 559,208 569,330
е	Detachable holder, A. W. Bothschild	559,310 558,961
1	Door check, liquid, G. W. Wright. Dough moistening macbine, J. W. Ruger.	559,156 558,987
8 ⁱ	Crusher. See Coal crusher. Cuttivator, wheel. W. Sobey. Cuttain fixture, W. H. Krkman. Cuttain foll bracket, and usashid, R. T. Green. Cycle, elevated track, W. H. Martin. Peak top, adjustable, F. W. Hill. Detachable holder, A. W. Rothschild. Dish cleaner, T. E. Jones. Door cheek, liquid, G. W. Wright. Dough moistening machine, J. W. Ruger. Dough twisting machine, N. E. Drake. Draught equalizer, C. P. Hout sna. Drawbar attachment, A. D. Stentiford. Drawing Instrument, L. Picard. Dredging machine, W. T. Urle. Drier, See Clothes drier, Grain drier. Drill. See Bench drill. Grain drill. Rock and coal drill. Wheat drill.	559,323 559,286
t t	Drawing instrument, L. Picard	559.041 559,154
d	Drier, See Clothes drier. Grain drier. Drill. See Bench drill. Grain drill. Rock and	
8	coal drill. Wheat drill. Dye and making it, azin, R. Reyher	559,063 559,162
_	Electric hoiler, F. W. Schiudler-Jenny Electric connection, J. W. Marsh	559,223 558,971
-	Electric indicator system, automatic, G. E. Painter	559,038 559,143
1	Electric light shade, H. Stenz	559,149
e -	Electrical distribution, multiple series system of, F. B. Badt. Electricity carrying cables, connector for, D. E.	558,924
) } 8	Elevator shafts, device for operating vertically sliding doors of Liddell & Dashields Jr	559,168 559,180
r I,	Engine. See Blowing engine. Gas eugine. Trac-	221,600
8	tion engine. Exercising apparatus, G. C. Edwards Everlasses M. Bergaio.	559,270 559 390
-	Fare register, Boyd & Glerding	559,321 559,206
,	Fastening device, H. C. Warren. Feed trough, G. T. Winters	559,012 559,114
,	tion engine Exercising apparatus, G. C. Edwards. Eyeglasses, M. Bergsjo. Fare register, Boyd & Glerding. Fastener, string, C. C. Pine. Fastening device, H. C. Warren. Feed trough, G. T. Winters. Feed water regulator for steam boilers, automatic, D. & F. D. Almy. Fence stay, wire, L. L. I. Woolsey. Ferce, wire, J. E. Jones.	559,157 559,248
	Fence, wire, J. E. Jones. Fence wire stay, A. J. Sloan. Fender. See Car fender.	559,157 559,248 558,960 559,226
	Kiber, machine for preparing vegetable. T. Villa-	\$
	mor. Filter, J. A. Bowden	559,009 559,096

r,	558,938 559,193	Grain, etc., s Griddle, F. O Hair pins, m
	559.075 559,944	Grain, etc., s Griddle, F. O. Hair pins, m. Hame, adjus Hammer. C. Hammer. pn Harrow and Harvester, g Hay press, M Hap rope trij Heater. See Heating app Heel and toe Memp and toe Incubator. J
::	559,021 558,967 558,952	Harrow and Harvester, g Hay press, M
	559,161 559,145 559,123 559,311	Heater. See Heating appr Heel and toe
g	559,311 559,115 559,002	Hemp and fla Incubator, J. Indicator,
	558,923 559,079	cator. St Injector, C. V Iuseam trim
τ,	559 ,195 ·	Hemp and fit incubator. J. Indicator. S. Cator. S. Injector, C. V. Iuseam trimm for, A. C. Invalid chair ririgator, ho Jack. See V. Jack post, C. Kuitting ma. Lamp burner Lamp, electricans hange.
5.	558,966 559,294	Jack post, C. Kuitting mad Ladder appar
	559,094 559,273	Lamp burner Lamp, electr Lamp banger
e	558,950 559,027	Lamp banger Lamp mast a Lamp or lant
	559,077 559,116	Lamp burner Lamp, electr Lamp banger Lamp banger Lamp mass, a Lamp or lant Lamp socket Lamps, mach or safety, Lasting appa Latch gate, Latch, gate, Lavatory, W. Level, E. P. Liquid indice Laquid separa
	559,077 559,115 559,246 558,344 558,222 559,027 559,223 559,025 559,23	Latch and locatch, gate, Latch, gate,
j.	559,121 559,222	Lavatory, W Level, E.P. V Liquid indica
	559,322 559,005	Lock control
	559,322 559,005 559,235 558,245 559,269 558,982 559,084	Log loader at Loom beddle Loom
	559,084 559,091 559,029	Loom Sbuttle Mail bag cate Mandolin, N.
:	559,331 559,022	Sadlier Measure, tail
 &	559,341 559,135 569,285	Medical ther
	559,160 559,150 558,951	Milliampere Mop, H. A. V.
di 	E E O O O E	Motor. See Music box, W Music leaf ho
· · · · · · · · · · · · · · · · · · ·	559,334 558,947	Musical instr
	11,535	Napkin holde Needle, C. W Nickel from pure, D. H
g	559,099 559,347 559,280	Ching device
	:	Ore concentrorgan action packing, pist Pad. See Ca Pan. See Fr Pan and rolle Paper bag. L. Paper bag. A. Paper cutting Pen, fountain Photographs Piano attach Picture baug
···	558,973 569,070 559,057 550,264	Pan and rolle Paper bag, L Paper bag ma
,. 	58,935 559,261 559,240 559,064	Paper box, A Paper cutting Pen, fountain
	559,064 559,272 559,164	Piano attach Picture baug Pigment sub
8	559,173	Picture baug Pigment sub same, whi Pin. See Bel Pin, S. Water Piucushion.
	559,339 559,263 559,072 559,279 559,109	Nies
	559,279 559,109 559,983 559,177 550,028	Pipes, device Plaiting mac Planter, stalk
	559,028 559,137	Plants, mean ted, G. W
	559,237 559,242	l'ipres, device Platting mac Planter, stalk and cotto. Plants, mean ted, G. W Plow, Symm. Plowing by e Positive mas H. Weise Post. See Ja Power. See Pressure gag Pressure reg
1	558,980	Post. See Ja Power. See Press. See H
••	558,995 559,103 558,945	Pressure gag Pressure reg Printing and Macdonal
	559,103 558,945 569,296 569,330 559,310	Printing pres
	559,310 558,961 559,156 558,987	Propulsion, c
	558,987 559,323 559,286 559,228 559,041	Railway cond Railway cros Railway, elec
	559,228 559,041 559,154	Purse and po Railway cond Railway cond Railway, elec Railway, ove: Railway swit Railway tie a A. C. Fras Ranges and d
d 2,	559.063	Ranges and d
	559,063 559,163 559,223 558,971	for determ Refrigerating Register. Se Regulator. S Rivet, W. R. Road roller, 1
	559,038 559,143 559,149	Road roller, 1 Rock and coa Roller. See ! Roof making
٠,	558,924	Rubber shoe, Rubbers or o ing, N. D. Ruling machi J. McAda
y -	559,168 559,180	Ruling machi J. McAda Saddle, riding
	559,180 559,122	J. McAda Saddle, riding Safe, L. L. T Sa e wall, L. Safety gate, Sash lock, J. Saw, C. T. Re Saw swage, T Scale, autom issue)
	559,270 559,320 559,321 559,206 559,012	Saw, C. T. Re Saw swage, T
	559,012 559,114	Bearing abitme
	559,157 559,248 558,960 559,226	Scale, spring Scrubbing in Seal, car, H. I Seal lock, T. Seed delinter
 ı-	ţ	water sep Separator an
	559,009 559,096 559,249	Sewing mach Ammerm Sewing mach Sewing on sh
		Shade attach Sharpener, d
	559,204 558,959 559,081 559,167 559,052 559,266 559,266	Sharpener, k Shears. See Sheet metal
	559,266 569,324 559,184 558,940	sin
:- ::	559,194 558,172	Shoulder bra Shoe case, W Sieve cleani Shaner Sign board, I
to	558,977	Signaling and
r	558,974 559,287 559,201	Snap, barnes Snow or ice r Soap lyes, ele son
e.	558,919	Soldering ma
n	569,011	Sole cutting Speed indicat Spike or bolt

lave case Vees & Konney		
luing or pasting sheets of paper, machine for,	559,068	Spray Sprin
H. Inman overnor, automatic, R. M. Macdonaldovernor, electric, <u>K</u> . B. Miller	558,965 559,181 559,187	Sprin Stabl Stack
H. Inman overnor, automatic, R. M. Macdonald overnor, electric, K. B. Miller overnor, engme, W. Deunis overnor, pressure, J. St. Mary rading and ditching machine, C. J. Corey et al. rading and ditching machine, P. J. Creedon ratin cleaning and socuring machine (1. 8. lack.	550,054 558,999 559 165	Stan Stan Stan
		Stam Steam Steam
son rain drier, W. W. Sanders rain drier, W. W. Kirkpatrick et al rain, etc., shock cover for, H. Walker. riddle, F. O. McCleary lair pins, magnetizing box for, C. A. Hussey amee, adjustable, R. G. Armstrong. ammer, C. M. Bly denburgh	559,332 558,988 559,336 559,010	Steam
rain, etc., snock cover for, H. Walker	559,010 559,037 559,176	Sterl Sterl
ame, adjustable, R. G. Armstrong	550 251	Stop
arrow and pulverizer, combined. W. McCune arvester, grain binding, P. Hanson	559,191 558,946 559,303 558,938	Stove
arrow and pulverizer, combined. W. McCune arvester, grain binding. P. Hanson ay press, Miller & Johnson ap rope trip. L. A. Staman eater. See Water beater. eating apparatus, W. H. Page eel and toe protector, electric. J. A. Blair emp and flax cleaner, A. Angell. neubator, J. T. Butts dicator. See Electric indicator. Liquid indi- cetor. See Electric indicator. Liquid indi-	558,998	Stove
eating apparatus, W. H. Page leel and toe protector, electric. J. A. Blair emp and flax cleaner, A. Angell	559,307 559,254 558.921	Struc
ncubator, J. T. Butts. dicator. See Elect ric indicator, Liquid indi- cator. Speed indicator, njector, C. W. Umboltz	569,260	Suppl Suspe Swin
iseam trimming and beating out welts, machine	559,067 559,314	Swite
for, A. C. Spöncer. avalid chair, D. S. Carrick rigator, hot water, J. A. Noble. ack. See Vehicle jack.	559,119 558,979	Table Teler
ick post, C. V. Card	559,262 559,327	Teler Teler Teler
adder apparatus fire, N. Z. Reom. amp burner, F. T. Williams amp, electric, Hacking & Brand. amp banger, arc, L. A. Scovil	559,327 558,986 559,069 559,283	Thist
amp banger, arc, L. A. Scovil amp banger, safety arc, E. P. Snowden	REG DOUG	Tire, Tire, Tire,
amp banger, safety arc, E. P. Snowden	558,078 569,232	Tires Tires
amps, machine forcleaning wire gauze cylinders of safety, G. Grossmann Bsting apparatus, L. Goddu	559,171 559,130	Tool, Tore
satery, G. Goddu. sting apparatus, L. Goddu. atch and lock, combined. Bedell & Blackburn atch, gate, F. W. Lechner. atch, gate, J. T. Lewis avatory, W. Scott. yel, E. P. West quid indicator, automatic, F. A. Morse quid separator contrifugal E. G. N. Salening.	559,130 558,925 559,295 559,296	Toy,
avatory, W. Scott.	559,147 559,090 559,061	Tract
ock. See Bicycle lock. Sash lock. Seal lock.		Trans Troils Trous Truck
oce controlling mechanism. R. A. Palmer ocomotive track sanding device, H. Tirmain	559,308 559,007	Truck Tube Type
eg loader and turner, steam, P. McNerney oom beddle motion, R. B. Goodyear oom sbuttle, self threading, P. J. O'Conneil all bag catcher and crane, S. S. Andrews	559,192 559,278 559,306 559,317 559,301	Туре
ail bag catcher and crane, S. S. Andrews. andolin, N. Merrill	559,317 559,301	Typer
	559 919	Umbr Umbr Umbr Umbr
easuring apparatus, liquid, Bruce & Whitehead echanical movement, H. A. W. Wood	559,257 558,016 559,205	Valve
edical thermometer, E. Pinchettiill. See Pan and roller mill. illiampere meter, C. M. Hollopeter	009,134	Valve Valve
illiampere meter, C. M. Hollopeter., op, H. A. Wolff. of World Wolff. of World	559,092 559,093	Vapor Vapor Vehic
usic lox, W. F. Main. usic leaf holder and turner, W. H. Spence usical instrument, N. Merrill. usical instruments, pneumatic action for, H. C. Reichard.	559,183 558,997 559,302	Vebic Vebic Vebic
usical instruments, pneumatic action for, H. C. Reichardt	550 005	Veloc Veloc
apkin bolder and ring, combined, H. C. O. Huss eedle, C. W. Stimson lokel C. W. Stimson lokel M. T. C. M. Stimson ling device, wagged, J. P. Hicks, reconcertistics I. W. Nagmith	559,108	Veloc Veloc Vise,
pure, D. H. Browne	559,329 558,978	Wago Wago Watc
rgan action, reed.A. L. Whiteacking, piston rod, S. Hughesad. See Calendar nad	550,0114 569,080	Wate Wate Wate Wave
an. See Frying pan. an androller mill, N. Fossati	559,170	Wa ve Weig
aper bag, Lorenz & Holliss aper bag machi ne, W. Liddeilaper box, A. O. Carman	559,138 558,969 569,050	Weigi
aper cutting machine, H. I. Koegelen, fountain, J. W. Laughlinbotographs in colors. producing, M. Anderson,.	559,179 559,034 ñ50,651	Whee Whee Whee
iano attachment, J. W. Stevens	559,227 559,015	Whee Whiff Winc Wind
same, white, S. Ganelin	558,942	117:-3
	550 018	Wind
ncushion. Huebel & Manzer pes. adjustable external joint for escape, F. R.	559,018 559,032	Wind Wind Wind
pure, D. H. Browne. lling device, wagon, J. P. Hicks. re concentrator, J. W. Nesmith rean action, reed, A. L. White. scking, piston rod, S. Hughes. ad. See Calendar pad. an. See Frying pan an and roller mill, N. Fossati. aper bag, Lorenz & Houlss. aper bag machine, W. Liddell. aper box, A. O. Carman. aper cutting machine, H. I. Koegel. en, fountain, J. W. Laughlin. botographs in colors, producing, M. Anderson. lano attachment, J. W. Stevens. cture bauger, E. Wilmont. gment sabstitute for white lead and making same, white, S. Ganelin. in. See Belt pin. in. See Belt pin. in. See Belt pin. in. Se Waterman. in. See Agiustable external joint for escape, F. R. Nies. pcs, device for thawing Irozen, S. D. Silver. atting machine, W. A. Lorenz.	559,018 559,032 559,305 558,992 559,139	Wind
aiting machine, W. A. Lorenz	559,139	Wind Wind Wire Wire Wring
aiting machine, W. A. Lorenz	559,139	Wind Wind Wire Wire Wring Yoke
atting machine, W. A. Lorenz, arter, stalk curter and roller, convertible corn and cotton (C. S. Mauldin	559,139 559,300 559,200 559,229 559,256 559,155	Wind Wind Wire Wire Wring Yoke
atting machine, W. A. Lorenz, arter, stalk curter and roller, convertible corn and cotton (C. S. Mauldin	559,139 559,300 559,200 559,229 559,256 559,155	Wind Wind Wire Wire Wring Yoke Belt of Box, of Brake Carpe Carpe
atting machine, W. A. Lorenz. anter, stalk cutter and roller, convertible corn and cotton, C. S. Mauldin. ants, means for supporting and bandling pot- ted, G. W. Parmley. low, Symmank & Matthilez. lowing by electricity, F. Brutschke. ositive masses of accumulators, bardening, C. H. Weise. ost. See Jack post. wer. See Hay Press. Printing press. ressure gage signaling apparatus, T. M. Gordon. ressure regulator, J. Schneible.	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,221	Wind Wind Wire Wire Wring Yoke Belt of Box, of Brake Carpe Carpe
atting machine, W. A. Lorenz. anter, stalk cutter and roller, convertible corn and cotton, C. S. Mauldin. ants, means for supporting and bandling pot- ted, G. W. Parmley. low, Symmank & Matthilez. lowing by electricity, F. Brutschke. ositive masses of accumulators, bardening, C. H. Weise. ost. See Jack post. wer. See Hay Press. Printing press. ressure gage signaling apparatus, T. M. Gordon. ressure regulator, J. Schneible.	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,221	Wind Wind Wire Wire Wring Yoke Belt of Box, of Brake Carpe Carpe Casse Faste Game Grave
atting machine, W. A. Lorenz. anter, stalk cutter and roller, convertible corn and cotton, C. S. Mauldin. ants, means for supporting and bandling pot- ted, G. W. Parmley. low, Symmank & Matthilez. lowing by electricity, F. Brutschke. ositive masses of accumulators, bardening, C. H. Weise. ost. See Jack post. wer. See Hay Press. Printing press. ressure gage signaling apparatus, T. M. Gordon. ressure regulator, J. Schneible.	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,221	Wind Wind Wire Wire Wring Yoke Belt of Box, of Brake Carpe Ca Ca Carpe Ca Carpe Ca Carpe Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca
arter, stak cutter and roller, convertible corn and cotton (C. S. Mauldin	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,231 559,231 559,231 559,231 559,231 559,365 559,000 559,036 559	Wind Wind Wire Wire Wring Yoke Belt of Box, (Brake Carpe Caske Faste Game Grave Lamp Pedal Pump Rack, Sad ir Sign.
arter, stak cutter and roller, convertible corn and cotton (C. S. Mauldin	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,231 559,231 559,231 559,231 559,231 559,365 559,000 559,036 559	Wind Wind Wire Wire Wring Yoke Belt of Bottle Box, of Brake Carpe Carpe Carpe Caske Game Grave Lamp Pedal Pump Rack, Sad ir
artic machine, W. A. Lorenz, article machine, W. A. Lorenz, article that cutter and roller, convertible corn article to the corn and solido. C. S. Mauldin, and solido. C. H. Weise. Jett's Passes of accumulators, hardening, C. M. Gordon. Jesses of the passes of accumulators, T. M. Gordon. Jesses of the passes of the control	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,131 559,131 559,131 559,131 559,131 559,231 559,335 559,335 559,335 559,335 559,238 559,238 559,288	Wind Wind Wire Wire Wire Wring Yoke Belt of Bottle Bot, of Brake Carpe Signa
artic machine, W. A. Lorenz, article machine, W. A. Lorenz, article that cutter and roller, convertible corn article to the corn and solido. C. S. Mauldin, and solido. C. H. Weise. Jett's Passes of accumulators, hardening, C. M. Gordon. Jesses of the passes of accumulators, T. M. Gordon. Jesses of the passes of the control	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,131 559,131 559,131 559,131 559,131 559,231 559,335 559,335 559,335 559,335 559,238 559,238 559,288	Wind Wind Wind Wind Wire Wire Wrin, Yoke Bottl Cape Carpe Carpe Carpe Carpe Carpe Same Grave Wind Wind Antis Spoon
artic machine, W. A. Lorenz, article machine, W. A. Lorenz, article that cutter and roller, convertible corn article to the corn and solido. C. S. Mauldin, and solido. C. H. Weise. Jett's Passes of accumulators, hardening, C. M. Gordon. Jesses of the passes of accumulators, T. M. Gordon. Jesses of the passes of the control	559,139 559,300 559,200 559,229 559,256 559,155 559,131 559,131 559,131 559,131 559,131 559,131 559,231 559,335 559,335 559,335 559,335 559,238 559,238 559,288	Wind Wind Wind Wind Wind Wire Wire Wrin, Yoke Belt c Bottl Box, (Box) Box (Carpe Caske Carpe Caske Carpe Rack, Sad ir Sign. Spoor Wind Antis Bicyc Canne Can
anter, stalk cutter and roller, convertible corn and cotton (. 9. Mauldin. and cotton (. 9. Maul	559,139 559,300 559,200 559,229 559,256 559,256 559,155 559,155 559,183 559,281 559,086 559,086 558,271 11,534 558,086 558,086 558,271 11,534 559,10 559,208 559,208 559,258 559,268 559,268 559,268	Wind Wind Wind Wind Wind Wind Wire Wire Wire Strong Wind Antis Sicro Canne
anter, stalk cutter and roller, convertible corn and cotton (. 9. Mauldin. and cotton (. 9. Maul	559,139 559,300 559,200 559,229 559,256 559,256 559,155 559,155 559,183 559,281 559,086 559,086 558,271 11,534 558,086 558,086 558,271 11,534 559,10 559,208 559,208 559,258 559,268 559,268 559,268	Wind Wind Wind Wind Wind Wind Wire Wire Wrin, Yoke Belt c Bottl Box, (Box, (B
anter, stalk cutter and roller, convertible corn and cotton (. 9. Mauldin. and cotton (. 9. Maul	559,139 559,300 559,200 559,229 559,256 559,256 559,155 559,155 559,183 559,281 559,086 559,086 558,271 11,534 558,086 558,086 558,271 11,534 559,10 559,208 559,208 559,258 559,268 559,268 559,268	Wind Wind Wind Wind Wind Wind Wind Wire Wire Wire South State Carpe Caske Carpe Caske Carpe Caske Carpe Kaske Carpe Kaske Carpe Kaske Carpe Game Game Game Game Game Game Game Cannon Octon Mind Mind Kaske Kad In K
anter, stalk cutter and roller, convertible corn and cotton (. 9. Mauldin. and cotton (. 9. Maul	559,139 559,300 559,200 559,229 559,256 559,256 559,155 559,155 559,183 559,281 559,086 559,086 558,271 11,534 558,086 558,086 558,271 11,534 559,10 559,208 559,208 559,258 559,268 559,268 559,268	Wind Wind Wind Wind Wind Wind Wind Wind
anter, stalk cutter and roller, convertible corn and cotton (. 9. Mauldin. and cotton (. 9. Maul	559,139 559,300 559,200 559,229 559,256 559,256 559,155 559,155 559,183 559,281 559,086 559,086 558,271 11,534 558,086 558,086 558,271 11,534 559,10 559,208 559,208 559,258 559,268 559,268 559,268	Wind Wind Wind Wind Wind Wind Wind Wire Wire Bett of Bottle Box, (Box, (
anter, stalk cutter and roller, convertible corn and cotton (. 9. Mauldin. and cotton (. 9. Maul	559,139 559,300 559,200 559,229 559,256 559,256 559,155 559,155 559,183 559,281 559,086 559,086 558,271 11,534 558,086 558,086 558,271 11,534 559,10 559,208 559,208 559,258 559,268 559,268 559,268	Wind Wind Wind Wind Wind Wind Wind Wind
arter, stalk cutter and roller, convertible corn and cotton C. S. Mauldin. by S. Mauldin. and cotton C. S. Mauldin. cover S. S. Mauldin. by S. Mauldin. by S. Mauldin. cover S. B.	559,139 559,300 559,200 559,226 559,256 559,155 559,155 559,182 559,182 559,182 559,182 559,190 558,026 559,000 558,026 559,000 558,026 559,267 559,267 559,267 559,267 559,267 559,267 559,267 559,267 559,267	Wind Wind Wind Wind Wind Wind Wind Wind
arter, stalk cutter and roller, convertible corn and cotton C. S. Mauldin. by S. Mauldin. and cotton C. S. Mauldin. cover S. S. Mauldin. by S. Mauldin. by S. Mauldin. cover S. B.	559,139 559,300 559,200 559,226 559,256 559,155 559,155 559,182 559,182 559,182 559,182 559,190 558,026 559,000 558,026 559,000 558,026 559,267 559,267 559,267 559,267 559,267 559,267 559,267 559,267 559,267	Wind Wind Wind Wind Wind Wind Wind Wire Wire Wrin, Yoke Belt c Bottle Box, (Box, (B
arter, stak cutter and roller, convertible corn and cotton, C. S. Mauldin. and convertible corn convertible corn cover cover cover cover. See G. W. Parnley. B. Brutschke. B. Bed Jack post. B. Welse. B. Bed Jack post. B. Bed Jack	559,139 559,300 559,200 559,226 559,256 559,155 559,155 559,182 559,182 559,182 559,182 559,190 558,026 559,000 558,026 559,000 558,026 559,267 559,267 559,267 559,267 559,267 559,267 559,267 559,267 559,267	Wind Wind Wind Wind Wind Wind Wind Wind
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artier, stalk curter and roller, convertible corn and cotton, C. S. Mauldin. better control of the cotton of the	559,139 559,300 559,200 559,226 559,226 559,256 559,155 559,155 559,155 559,155 559,267	Wind Wind Wind Wind Wind Wind Wind Wind
artier, stalk curter and roller, convertible corn and cotton, C. S. Mauldin. better control of the cotton of the	559,139 559,300 559,200 559,226 559,226 559,256 559,155 559,155 559,155 559,155 559,267	Wind Wind Wind Wind Wind Wind Wind Wire Wrin, Yoke Belt of Bottle Box, (Box,
and cotton C. S. Mauldin, and cotton C. S. Mauldin, and cotton C. S. Mauldin, and solido C. M. Weise. Owing by electricity E. Brutschke. Owing S. See Mave C. C. H. Weise. Ower. See Wave power. Cess. See Hay Press. Printing press. Cessure gage signaling apparatus, T. M. Gordon. Centrining and relistering device, ticket, R. M. Macdonald. Cinting press inking apparatus, R. Mie ble. Copulsion, canal boat, W. Eimer, Jr. Cumin gishears, Effinger & Metzger (reissue). These and pocketbook frame, A. Goertz. Callway conduit, electric, J. H. Munson. Allway to consing, H. Hartwell. Allway consing, H. Hartwell. Allway electric, R. M. Hunter. Allway switch, A. M. Dreisbach allway tie and rail fastening therefor, metallic, A. C. Fraser. anges and distances, method of and apparatus for determining, O. A. Bell. efrigerating apparatus, I. A. Dodge. egister. See Fare register. See Fare register. See Fare register. See Fare register. Oler. See Road roller. Oof making app liance, G. H. Honing. Under See Road roller. Oof making app liance, G. H. Ewihart. The M. Grover. J. McAdams. de wall, L. L. Treman ale wall, L. L. Treman tety gate, W. E. Batcbelder. School, J. J. Paulkner. See Parato	559,135 559,230 559,230 559,230 559,235 559,235 559,235 559,155 559,185 559,185 559,185 559,185 559,036 559,036 559,036 559,036 559,036 559,037 559,037 559,268 559,276 559,288 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388 559,388	Windwindwindwindwindwindwindwindwindwindw
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Transit, surveyor's, C. L. Berger. Trolley, electric car, J. L. Foster.	559,117 559,275
Truck, car. F. H. Kindl	559,295
Typewriting machine, W. J. Barron	559,071 559,12
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