#### Business and Personal.

The charge for Insertion under this head is One Dollar a line for each insertion; about eight words to a line. Advertisements must be received at publication office as early as Thursday morning to appearin next issue.

The right to manufacture the balanced reciprocating counterweight engine, illustrated on page 338, is for sale Perfectly balanced, and needs no flywheel nor foundation. They are entirely free from vibrations. For further particulars apply to Chas. Louque, patentee, 31 Caronde let St., New Orleans, La.

John Kennedy & Co. build high and low pressure steamships and launches with the latest improved Louque's patented balanced reciprocating engine, free from vibration. High speed guaranteed. Photographs of the Leader 46/ length by 8' 6" heam, sent on receipt Address John Kennedy & Co., 31 Carondelet St., New Orleans, La.

Walrus Leather, Emery, Glue, and Manufacturers Supplies generally. Greene, Tweed & Co., 83 Chambers St., New York.

Wanted-Patented novelties to manufacture on royalty, or would purchase patent outright. Househo articles, in general use preferred. Address, with full particulars, Hardware, Plantsville, Conn.

Montaigne speaks of "reposing upon the pillow of a doubt." Better repose upon the certainty that Dr. Pierce's "Favorite Prescription" will cure all chronic female diseases with their attendant pains and weak

DEAR SIR-Your "Favorite Prescription" has worked wonders in my case. It gave immediate relief. MRS. M. GLEASON, Nunica, Ottawa Co., Mich.

Complete-Practical Machinist, embracing lathe work vise work, drills and drilling, taps and dies, hardening and tempering, the making and use of tools, tool grinding, marking out work, etc. By Joshua Rose. Illustrated by 356 engravings. Thirteenth edition, thoroughly revised and in great part rewritten. In one volume, 12mo. 439 pages. \$2.50. For sale by Munn & Co., 361 Broadway, New York.

Blake's Improved Belt Studs are the best fastening tor Leather or Rubber Belts. Greene, Tweed & Co.,

Apparatus for replacing broken pump chains without disturbing the pump or cistern cover. Individual, city, and State rights for sale by J. B. Brown, patentee. Hanni-

The Railroad Gazette, handsomely illustrated, published weekly, at 73 Broadway, New York. Specimen copies free. Send for catalogue of railroad books.

Concrete patents for sale. E. L. Ransome, S. F., Cal. tain by melting old type.

Wanted-Competent draughtsmen, experienced in perience. Address G. S. L., P. O. box 773, New York.

Small Metal Goods of every description made to order. Die work, etc. E. C. Ivins, 528 N. 10th St., Phila., Pa.

Machinist Foreman wanted who can handle fifty men to advantage and increase their production by latest improved ways of doing work. Address P., care of Wilkinson & Co., 352 Atlantic Ave., Boston, Mass.

Friction Clutches from \$2.25 on. J. C. Blevney, New

Haswell's Engineer's Pocket-Book. By Charles H. Haswell, Civil, Marine, and Mechanical Engineer. Giving Tables, Rules, and Formulas pertaining to Mechanics, Mathematics, and Physics, Architecture, Masonry, Steam Vessels, Mills. Limes, Mortars, Cements, etc. 900 ages, leather, pocket-book form, \$4.00. For sale by Munn & Co., 361 Broadway, New York.

Woodworking Machinery of all kinds. The Bentel & Margedant Co., 116 Fourth St., Hamilton, O.

A Catechism on the Locomotive. By M. N. Forney. With 19 plates, 227 engravings, and 600 pages. \$2.50. Sent on receipt of the price by Munn & Co., 361 Broadway,

Guild & Garrison's Steam Pump Works, Brooklyn, N. Y. Pumps for liquids, air, and gases. New catalogue

The Knowles Steam Pump Works, 44 Washington St., Boston, and 93 Liberty St., New York, have just issued a new catalogue, in which are many new and improved forms of Pumping Machinery of the single and duplex, steam and power type. This catalogue will be mailed free of charge on application.

Presses & Dies. Ferracute Mach. Co., Bridgeton, N. J. Nickel Plating.-Sole manufacturers cast nickel anodes, pure nickel salts, polishing compositions, etc. \$100 "Little Wonder." A perfect Electro Frating Machine. Sole manufacturers of the new Dip Lacquer Kristaline.

Complete outsit for plating, etc. Hanson, Van Winkle & Co., Newark, N. J., and 92 and 94 Liberty St., New York. Iron Planer, Lathe, Drill, and other machine tools of modern design. New Haven Mfg. Co., New Haven, Conn.

Supplement Catalogue.—Persons in pursuit of information of any special engineering, mechanical, or scien inition of any special engineering, mechanical or solen-tific subject, can have catalogue of contents of the Sci-ENTIFIC AMERICAN SUPPLEMENT sent to them free.

The SUPPLEMENT contains lengthy articles embracing the whole range of engineering, mechanics, and physical science. Address Munn & Co., Publishers, New York. Planing and Matching Machines. All kinds Wood Working Machinery. C. B. Rogers & Co., Norwich, Conn. Iron and Steel Wire, Wire Rope, Wire Rope Tram-

ways. Trenton Iron Company, Trenton, N. J. Iron. Steel, and Copper Drop Forgings of every de-

scription. Billings & Spencer Co., Hartford, Conn. Rubber Belting, all sizes, 7716 per cent regular list All kinds of Rubber Goods at low prices. John W Buckley, 156 South Street, New York.

We are sole manufacturers of the Fibrous Asbestos Removable Pipe and Boiler Coverings. We make pure ashestos goods of all kinds. The Chalmers-Spence Co. 419 East 8th Street, New York.

Wrinkles and Recipes. Compiled from the SCIENTI-FIC AMERICAN. A collection of practical suggestions, processes, and directions, for the Mechanic, Engineer, Farmer, and Housekeeper. With a Color Tempering Scale, and numerous wood engravings. Revised by Prof. Thurston and Vander Weyde, and Engineers Buel and Rose. 12mo, cloth, \$2.00. For sale by Munn & Co., 361 Broadway, New York.

Expanders. R. Dudgeon, 24 Columbia St., New York.

Curtis Pressure Regulator and Steam Trap. See p. 142. Send for free Catalogue of Books of Amus Speakers. Dialogues, Card Games, Fortune Tellers. Dream Books, Debates. Letter Writers, Etiquette, etc Dick & Fitzgerald, 18 Ann St., New York.

60,000 Emerson's 1886 B Book of superior saws, with Supplement, sent free to all Sawyers and Lumbermen. Address Emerson, Smith & Co., Limited, Beaver Falls

Hoisting Engines, Friction Clutch Pulleys, Cut-off Couplings. D. Frisbie & Co., 112 Liberty St., New York.

"How to Keep Boilers Clean." Send your address for free 88 page book. Jas. C. Hotchkiss, 93 John St., N. Y

Pays well on Small Investment .- Stereopticons, Magic Lanterns, and Views illustrating every subject for public exhibitions. Lanterns for colleges, Sunday schools, and home amusements. 136 page illustrated catalogue free McAllister, Manufacturing Optician, 49 Nassau St., N. Y.

Astronomical Telescopes, from 6" to largest size. Obervatory Domes, all sizes. Warner & Swasey, Cleve

Split Pulleys at low prices, and of same strength and appearance as Whole Pulleys. Yocom & Son's Shafting Works, Drinker St., Philadelphia, Pa.



HINTS TO CORRESPONDENTS.

price.

Minerals sent for examination should be distinctly marked or labeled.

(1) C. D. asks: What metal or comound of metals can I use to make small castings as in a common coal fire. A. Use type metal, which you can procure at a stereotype or type foundry, or can ob-

(2) W. E. S. asks: Is there any kind of blast furnace and steel works construction. State ex- a liquid that can be obtained at a drug store that will not evaporate, and which has no sediment, or very little, and will not freeze above 5 or 10 degrees below zero? A. We recommend you to try glycerine, or it is possible that kerosene or coal oil might answer the purpose. The temperature you give is so extremely low that all ordinary liquids will congeal at it. A mixture of glycerine and water might answer your purpose

> (3) W. B. asks how to make sodium amalgam. When heated, the explosions are so violent that some is lost. Also how to make zinc amalgam; cold it will not amalgamate, and hot it explodes. A The formation of an amalgam of sodium is apt to be accompanied by much violence, unless the mercurv is in large excess. Make a strong amalgam in small quantities by heating in a covered vessel, and mix with more mercury. Zinc and mercury will amalgamate without the least difficulty if a little dilute sulphuric acid is added. It needs little or no heat.

> (4) J. W. K. asks what size an electromagnet would need to be to lift or attract a weight of 10 pounds through a space of 1/4 inch, and how nany Leclanche cells? A. There is no rule for calculating the precise size for given strength of an electro-magnet. Leclanche cells are not good, except for intermittent work. Your magnet should be ten or twelve inches long, with % inch cores, and 5 to 10 Leclanche cells would work it. 2. What effect will mercur have on lead if the lead be immersed in it, or vice ve. s. i. e., with the mercury be affected? A. The lead and mercury will amalgamate, and the mercury will be injured for ordinary us

> (5) Waco asks: 1. Can you tell me of combination of minerals or chemicals that on coming in contact with extreme cold would produce the proper junction of a thermo-electric battery were cooled, an electric current will be generated. which current can be made to produce heat. 2. Would an engine using oil for fuel, and requiring only 30 lb. steam to give it the power of the ordinary locomotive 'at its best," be of any market value? A. We cannot pronounce upon the value of such an engine without further and fuller details. It is all a question of economy of fuel.

> types, the commutator consists of as many segments as there are wires leading from the armature. Will a commutator consisting of 2 or 4 segments answer just as well, provided opposite ends of the armature wiresare connected to opposite egments of commutator or will there be a diminution in strength of the current? A. Any reduction of commutator leaves will impair the working of the machine, or may even stop it. The wire in the armature must form a full and complete circuit. 2. Have you working plans for a larger machine than the Siemens in SUPPLEMENT No. 161? A. We have not, but expect soon to publish a description

> (7) F. M. Casks: How many pounds of wire is required to make a spark coil to light one gas light? Also how many and what kind of batteries it would be best to use? A. Two or three pounds of No. 16 wire with two Leclanche cells should suffice.

(8) E. M. L. asks for directions for man-Chucks—over 100 different kinds and sizes in stock. Ufacturing a liquid shoe dressing. A. Take of shellac Specialsmadeto order. Cushman Chuck Co., Hartford, Ct. one-haff pound, alcohol three quarts. Dissolve, and Steam Hammers, Improved Hydraulic Jacks, and Tube add of camphor one and a half ounces, lampblack two

(9) T. P. E. writes: If in fitting a crank INDEX OF INVENTIONS and shaft or any other work, you get a loose fit, where you should have it to drive, and you heat the shaft to a low red, and allow it to cool, repeating the opera tion until the shaft is permanently large enough to make a driving fit, will the quality of the iron be injured thereby? A. The heating and cooling of the end of a shaft many times for the purpose of enlargement to receive a driven-on crank causes considerable change in its molecular structure, and is not considered safe where severe work is required from the crank. For ordinary use or for small shafts, there is no objection, except that it is bad practice.

(10) W. M. R.—For computing the safe working pressure for cylindrical shells of boilers: Divide the assumed tensile strength of the iron or steel of the boiler plate by 4 for safety, and this quotient again by one-half the diameter of the boiler shell or cylinder in inches. Then multiply the last quotient by the thickness of the plate in decimals of an inch, and again this product by 0.60 for single rivet seams, or 0.72 for double rivet seams. For example, assuming 50,000 pounds as the ultimate tensile strength of your iron, and a 50 inch boiler, the figures will be for 🔏 inch iron, single riveted seams:

4)50,000 25)12,500 500 .25 125.00 •60 75.00

Names and Address must accompany all letters, or no attention will be paid thereto. This is for our information, and not for publication.

References to former articles or answers should give date of paper and page or number of question.

Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all, either by letter or in this department, cach must take his turn.

Special Written Information on matters of personal rather than general interest cannot be expected without remuneration.

Scientific American Supplements referred to may be bad at the office. Price 10 cents each.

Books referred to promptly supplied on receipt of price.

Area of stay.

12,500 Area of stay..... Area between stays 25 sq. ft.) 7500.0

Thickness of plate..... Lb. per sq. in. safe working press.  $9\overline{3.00}$ hard (or nearly as hard) as brass. Said metal must melt The crown sheet stays are more complex, as also the head sheet stays, in this class of boiler. They would require the inspection of a practical engineer in boiler work to make a safer computation. We refer you for further rules and illustrations for strength of boiler work, to Courtney's "Boiler Maker's Ready Reckoner," which we can furnish for \$3.60.

> (11) L. S. B. asks a receipt for making a good fire brick for ordinary stoves, one that can be mixed the same as mortar and put in place to set. A. A good lining for stoves may be made by pulverizing the old brick, or any fire brick, and mixing with a little fresh clay, just enough to make it plastic, with which line the fire plates. Dry out the water before making coal fire. The coal fire will bake and make a solid fire brick lining of your plastic back.

> (12) G. F. writes: I have an iron tank in which I wish to keep water for drinking and cooking purposes. What can I do to keep its inner surface from rusting that will not affect the taste of the water? A. Paint the inside; of the tank with Prince's metallic paint and boiled linseed oil 2 coats. Allow first coat to dry thoroughly before putting the second on.

> (13) W. E. S. asks how to regild gas fixtures that have been soiled by fly specks. A. The cleaning of the lacquer from gas fixtures and redipping and lacquering is an art that requires much care and experience, too much for the occasional work of a plumber. If you wish to make a trial, we can recommend Spons' "Workshop Receipts," which describes the process of cleaning, dipping and lacquering gas fixtures, price \$2.00. There is a cheap way of varnishing and bronzing with bronze dust as practiced by the painters, the material for which you may obtain through the paint trade. It is possible that washing with warm soap and water will improve them.

(14) Morrisiana says: Will you kindly inform me how I can make the cellar of my house gty? The floor is concreted and there are windows back and front. Still it is damp, and everything in it heat? Can such a thing be done? A. Theoretically if gets mouldy. A. The most thorough way to secure a dry cellar is to plaster the exterior of the cellar walls with the best Portland cement. But this in your case, the wall being already built, would be inconvenient. The next best plau is carefully to point up the joints of the wall upon the inside, with Portland cement made of one part cement and two parts sand. Scratch out the old mortar between the joints and substitute cement. Then you may plaster the walls a quarter of an inch thick with same. Use thorough ventilation. Suc-(6) W. F. H. asks: 1. In an electro dy-cess will depend upon the care and thoroughness with amo machine of the Gramme and Weston and other which the job is done.

(15) G. A. asks a receipt for preparing milk to keep a long time. A. Add bicarbonate of soda in the proportion of about six grains to a quart of milk. and then place in sealed bottles.

(16) D. R. D. asks a recipe for making prepared kindling wood, such as is sold in the grocery stores all through the large cities. A. Dip the wood in melted resin. The following composition is sometimes used: 60 parts melted resin and 40 parts tar, in which the wood is dipped for a moment. Or, take a quart of tar and three pounds of resin, melt them, then cool, mix as much sawdust with a little charcoal added as can be worked in. Spread out on a board, and when cold break up into lumps the size of a hickory nut. and you will have enough kindling to last a good

(17) J. H. asks how to remove the paper pasted on the inside of the cover of an old book. There is a book plate under it and the cover is calf over board. Inside paper is old ribbed linen strongly pasted on. A. The only way in which the paper can 

For which Letters Patent of the United States were Granted,

November 9, 1886,

#### AND EACH BEARING THAT DATE.

r		anta 1
,	See note at end of list about copies of these pat	ents.j
	Abacus, Bolton & Tillmeyer	352 218
9	Acetine blue colors, production of, C. Schraube	352,561
	Aerial vessel, M. S. Cole	352,298
ı	Anchor for anchoring vessels, F. D. Montague	
t	Animals, blanket for, W. B. Logan	
r	Anvil, farrier's, C. H. Perkins	352,261
7	Auger, post hole. Devitt & Sise	352.305
i '	Automatic danger signal, E. E. Phillips	
2 3 i	Awning, A. Ferrel	
5   C	Axle box, car, H. A. Wendell	
	Axle, car, D. C. James	352,411
	Baking and roasting pan, J. B. Leach Bag catcher, mail, Mack & Ward	352,136
	Bag cord case and lock, combined mail, O. B.	
	Young	352,502
	Band attachment. waist, L. Friedenrich	
	Band cutter and feeder, W. A. Brady	
	Basket cover, fruit, N. A. Hadden	
	Battery, galvanic, J. W. Hoffman	352,324
٠¦	Battery, galvanic. W. R. Patterson	352,486
;	Beams, machine for severing the flanges from I. W. H. Graham	
í	Bearing, step, G. F. Eisenhardt	
ւ	Bed bottom, adjustable folding spring, J. L.	
r	Meeks	
-	Bell and alarm, electric, A. Lungen	
-	Belting, canvas, M. Gandy	352,460
r	Bench. See Wash bench.	
۱ :	Bib or apron. W. B. Logan	
۱.	Bicycles, lantern hanger for, T. B. Jeffery	352,191
	Blanket fastening, W. B. Pritchard,	352.487
	Blotting pad, S. Wales	352,170
	Board. See Game board. Ironing board.  Boat. See Turnedo boat	
1	Bobbins and spools, controlling the unwinding or	
	thread twine and cord from J. Good	
9	Boiler. See Locomotive boiler. Range boiler. Steam boiler.	
	Boiler cleaner, Faries & Wilcox	352,235
ľ	Bolt. See Expansible bolt. Locking bolt.	
r	Bolting reels, brushing mechanism for, J. W.	050 000
,	Crosby	
İ	Boot or shoe form, J. W. Rogers	352,158
	Boot or shoe stretcher, W. Jones	352,134
•	Boot, rubber, J. L. Tyler, Jr	
1	Bosom pads, making, T. P. Taylor Bottle wrapper, Hine & Reed	
;	Bottles, machine for wiring the corked necks of,	
,	W. C. Van Vliet	352,168
- 1	Bottling machines, attachment for, F. B.	
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5	Thatcher	
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5	Thatcher	352,165
• :	Thatcher.  Box. See Axle box. Cigar box. Bracket. See Scaffolding bracket, Brake. See Car brake. Vehicle brake. Brake adjuster, automatic. J. R. Burns.	352,165 352,444
	Thatcher  Box. See Axle box. Cigar box.  Bracket. See Scanfolding bracket.  Brake. See Car brake. Vehicle brake.  Brake adjuster, automatic, J. B. Burns  Brick kiln, J. R. Kemp  Bridges, self-acting safety gate for swing, H.	352,166 352,444 352,194
: : :	Thatcher.  Box. See Axlebox. Cigar box.  Bracket. See Scaffolding bracket,  Brake. See Car brake, Vehicle brake,  Brake adjuster, automatic, J. B. Burns	352,165 352,444 352,194 352,251
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	Thatcher.  Box. See Axle box. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, M. D. Shipman	352,144 352,194 352,291 352,256 352,277 352,427 352,427 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249
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5	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller.  Cable grip, Gamule. Can See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, J. W. Harrelland. Car coupling, J. W. Harrelland.	352,144 352,194 352,251 352,256 352,277 352,427 352,427 352,249 352,249 352,249 352,256 352,266 352,103 352,453 352,453 352,255 352
	Thatcher.  Box. See Axlebox. Cigar box.  Bracket. See Scaffolding bracket.  Brake. See Car brake. Vehicle brake.  Brake adjuster, automatic, J. B. Burns.  Brick kiln, J. R. Kemp.  Bridges, self-acting safety gate for swing, H.  Marcheter.  Bridle and bridle bit, W. H. Sanborn.  Bustle, Rice & Landaker  Buttons, Beek & Holland.  Buttons, Beek & Holland.  Buttons, instrument for attaching, W. H. Wood.  Cabinet, J. Longenecker.  Cable grip, G. Muller.  Cable grip, Samuel & Angerer.  Calculator, G. H. Harris.  Can. See Coffee or tea can.  Cannon, revolving pneumatic. W. A. Bartlett.  Cap, I. H. Dinner.  Car brake, J. S. Connelly.  Car coupling, G. S. Gildersleeve.  Car coupling, M. M. Pittman.  Car coupling, M. M. Pittman.  Car coupling, M. M. Requa.  Car coupling, Inker, F. W. Parsons.	352,144 352,194 352,291 352,506 352,277 352,427 352,249 352,214 352,249 352,249 352,249 352,356 352,110 352,453 352,110 352,453 352,126 352,239 352,239 352,348 352,249
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, Samuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock for, C. tt. white.	352,144 352,194 352,251 352,257 352,277 352,277 352,277 352,214 362,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,245 352,246 352,108
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Button, M. D. Shipman. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, Samuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic. W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, J. W. Harrelleve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock for, C. tt. white. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder.	352,144 352,194 352,194 352,251 352,256 352,277 352,427 352,242 352,214 352,214 352,214 352,249 352,214 352,249 352,364 352,363 352,363 352,403 352,203 352
	Thatcher.  Box. See Axle box. Cigar box.  Bracket. See Scaffolding bracket.  Brake. See Car brake. Vehicle brake.  Brake adjuster, automatic, J. B. Burns.  Brick kiln, J. R. Kemp.  Bridges, self-acting safety gate for swing, H.  Marcheter.  Bridle and bridle bit, W. H. Sanborn  Buckle, S. N. Stevens.  Bustle, Rice & Landaker  Buttons, Beek & Holland.  Button, M. D. Shipman.  Buttons, instrument for attaching, W. H. Wood.  Cabinet, J. Longenecker.  Cable grip, G. Muller.  Cable grip, Samuel & Angerer.  Calculator, G. H. Harris.  Can. See Coffee or tea can.  Cannon, revolving pneumatic. W. A. Bartlett.  Cap, I. H. Dinner.  Car coupling, J. W. Harrellere.  Car coupling, J. W. Harrellere.  Car coupling, M. M. Pittman.  Car coupling, M. M. Pittman.  Car coupling, M. M. Pittman.  Car coupling, M. M. Requa.  Car coupling link, F. W. Parsons.  Car doors, laten lock for, C. tt. white.  Car, dumping, J. H. R. Talley.  Car seat, reversible, J. M. Sauder.  Car starter, G. B. Halnes.  352,126,	352,144 352,194 352,251 352,250 352,277 352,427 352,249 352,249 352,249 352,249 352,349
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Bustle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, Samuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock lor, C. H. While. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car caretter G. B. Haines.  352,128, Carret task tool. M. S. Lantz.	352,144 352,144 352,194 352,251 352,251 352,267 352,427 352,427 352,291 352,249 352,256 352,268 352,268 352,268 352,268 352,268 352,268 352,268
	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket, Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter.  Bridle and bridle bit, W. H. Sanborn. Bustle, Rice & Landaker Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, G. Muller. Cable grip, Bamuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic. W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Pittman. Car domy, laton lock for, C. t. white. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Carse. See Plano case. Ribbon case.	352,144 352,194 352,291 352,506 352,277 352,427 352,293 352,214 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,256 352,366 352,103 352,453 352,265 352,239 352,249 352,256 352,239 352,248 352,268 352,268 352,268 352,268 352,268 352,268 352,268 352,268 352,488
	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, G. Muller. Cable grip, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Carpet tack tool, M. S. Lantz. Carriage, wheeled, A. Dickinson. Casee. See Plano case. Ribbon case. Caster, Terrill & Simonson.	\$52,144 \$52,194 \$52,291 \$52,256 \$52,277 \$52,427 \$52,427 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,248 \$52,248 \$52,248 \$52,256 \$52,268
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, G. Muller. Can See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock lor, C. H. while. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines.  352,128, Carpet tack tool. M. S. Lantz. Carriage, wheeled, A. Dickinson. Casting compound ingots, mould for, A. J. Lustig	352,144 352,144 352,194 352,251 352,551 352,257 352,427 352,427 352,249 352,249 352,249 352,249 352,249 352,249 352,255 352,303 352,103 352,453 352,103 352,453 352,255 352
	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter.  Bridle and bridle bit, W. H. Sanborn. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller.  Cable grip, G. Muller.  Cable grip, Gamuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Carpet tack tool, M. S. Lantz. Carriage, wheeled, A. Dickinson. Caster, Terrill & Simonson. Casting compound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps.	352,144 352,144 352,194 352,251 352,551 352,257 352,427 352,427 352,249 352,249 352,249 352,249 352,249 352,249 352,255 352,303 352,103 352,453 352,103 352,453 352,255 352
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller.  Cable grip, Gamuller. Can See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock lor, C. H. while. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines.  Carpet tack tool. M. S. Lantz. Carriage, wheeled, A. Dickinson. Casting compound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps. Cattle from goring, device for preventing, J. M. Markham.	352,144 352,144 352,194 352,251 352,251 352,257 352,427 352,427 352,291 352,249 352,249 352,249 352,249 352,249 352,255 352,303 352,103 352,453 352,103 352,453 352,255 352
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, Instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, Samuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic. W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car doors, laten lock lor, U. H. while. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Carse. See Piano case. Ribbon case. Casting compound inpots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps. Cattle from goring, device for preventing, J. M. Markham. Cattle pricker belt, J. M. Markham.	352,144 352,194 352,291 352,256 352,277 352,427 352,427 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,248 352,110 352,458 352,266 352,408 352,278 352,288 352,288 352,247 352,248 352,247 352,248 352,247 352,248 352,247 352,248 352,368
	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket, Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter.  Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker Buttons, Beek & Holland. Button, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker  Cable grip, G. Muller. Cable grip, G. Muller. Cable grip, Bamuel & Angerer. Calculator, G. H. Harris.  Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car can, laten lock for, C. t. white. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Carstarter, G. B. Haines.  Case. See Plano case. Ribbon case. Caster, Terrill & Simonson. Casting compound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps. Cattle from goring, device for preventing, J. M. Markham. Cattle pricker belt, J. M. Markham. Centering tool, J. N. Waite.	352,144 352,194 352,291 352,256 352,277 352,427 352,427 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,248 352,110 352,458 352,266 352,408 352,278 352,288 352,288 352,247 352,248 352,247 352,248 352,247 352,248 352,247 352,248 352,368
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, Samuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic. W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock lor, U. H. while. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Carse, See Piano case. Ribbon case. Casting compound inpots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps. Cattle from goring, device for preventing, J. M. Markham. Cattle pricker belt, J. M. Markham. Centeering tool, J. N. Waite. Chair. See Barber's chair. Cheese knife, J. Buchholz.	352,166  352,444 352,194 352,291 352,256 352,277 352,291 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,256 352,368 352,110 352,458 352,110 352,458 352,127 352,268 352,127 352,247 352,247 352,247 352,247 352,247
	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter.  Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker Buttons, Beek & Holland. Button, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker  Cable grip, G. Muller.  Cable grip, G. Muller.  Calculator, G. H. Harris.  Can. See Coffee or tea can. Cannon, revolving pneumatic. W. A. Bartlett.  Cap. I. H. Dinner.  Car coupling. G. S. Gildersleeve.  Car coupling. M. M. Pittman.  Car coupling. M. M. Pittman.  Car coupling. M. M. Pittman.  Car domy, laton lock for, C. t. white.  Car, dumping, J. H. R. Talley.  Car seat, reversible, J. M. Sauder.  Carstarter, G. B. Haines.  Caster, Terrill & Simonson.  Castle grompound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps.  Cattle from goring, device for preventing, J. M.  Markham  Cattle pricker belt, J. M. Markham  Centering tool, J. N. Waite.  Chair. See Barber's chair.  Cheese knife, J. Buchhols.  Chute, coal distributing, C. M. O'Donovan.	\$52,166 \$52,444 \$52,194 \$52,251 \$52,551 \$52,251 \$52,251 \$52,253 \$52,214 \$52,249 \$52,249 \$52,249 \$52,249 \$52,256 \$52,214 \$52,256 \$52
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, G. Muller. Can See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, J. W. Harreller. Car doors, laten lock lor, C. H. while. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Carsel, A. Brakeled, A. Dickinson. Case. See Plano case. Ribbon case. Caster, Terrill & Simonson Casting compound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps Cattle from goring, device for preventing, J. M. Markham. Cattle pricker belt, J. M. Markham. Center, D. E. Powers	352,144 352,144 352,194 352,251 352,257 352,277 352,277 352,291 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,256 352,103 352,256 352,266 352,103 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,266 352,268 352,366 352
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller.  Cable grip, Gamuller. Can See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock lor, C. H. white. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines.  Carsiage, wheeled, A. Dickinson. Case. See Plano case. Ribbon case. Caster, Terrill & Simonson Casting compound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps Cattle from goring, device for preventing, J. M. Markham. Cattle pricker belt, J. M. Markham. Centering tool, J. N. Waite. Chair. See Barber's chair. Cheese knife, J. Buchholz. Chute, coal distributing, C. M. O'Donovan. Cigar box, D. E. Powers.	\$52,166 \$52,444 \$52,194 \$52,251 \$52,251 \$52,257 \$52,277 \$52,277 \$52,277 \$52,291 \$52,249 \$52,249 \$52,249 \$52,249 \$52,249 \$52,255 \$52,256 \$52,256 \$52,256 \$52,103 \$52,458 \$52,256 \$52
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, Samuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett; Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car seat, reversible, J. M. Sauder. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Carset, G. B. Haines. Carlage, wheeled, A. Dickinson. Case. See Piano case. Ribbon case. Casting compound inpots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps. Cattle from goring, device for preventing, J. M. Markham Cattle pricker belt, J. M. Markham Centering tool, J. N. Waite. Chair. See Barber's chair. Cheese knife, J. Buchholz. Chute, coal distributing, C. M. O'Donovan. Cigar box, D. E. Powers.	352,444 352,194 352,194 352,251 352,256 352,277 352,427 352,241 352,249 352,244 352,249 352,244 352,248
	Thatcher.  Box. See Azlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Bustle, Rice & Landaker. Buttons, Beek & Holland. Buttons, Beek & Holland. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, Samuel & Angerer. Calculator, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car coupling, M. M. Requa. Car doors, laten lock for, C. tt. white. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Carset, See Piano case. Ribbon case. Caster, Terrill & Simonson. Case. See Piano case. Ribbon case. Casting compound inpots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps. Cattle from goring, device for preventing, J. M. Markham Cattle pricker belt, J. M. Markham Centering tool, J. N. Waite. Chair. See Barber's chair. Cheese knife, J. Buchholz. Chute, coal distributing, C. M. O'Donovan. Cigar box, D. E. Powers. Clann. See Elera dam.	352,444 352,194 352,194 352,251 352,256 352,277 352,427 352,241 352,249 352,244 352,249 352,244 352,248
	Thatcher  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter  Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens Bustle, Rice & Landaker Buttons, Beek & Holland Buttons, Beek & Holland Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker Cable grip, G. Muller Cable grip, G. Muller Calle grip, G. Muller Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett Cap, I. H. Dinner Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve Car coupling, M. M. Pittman Car coupling, M. M. Pittman Car coupling, M. M. Requa Car coupling, M. M. Requa Car coupling, M. M. Requa Car cat harke, J. S. Connelly Car seat, reversible, J. M. Sauder Car starter, G. B. Halnes	352,166  352,444 352,194  352,251 352,256 352,277 352,291 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,249 352,468 352,108
	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter. Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens. Bustle, Rice & Landaker. Buttons, Beek & Holland. Button, M. D. Shipman. Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker. Cable grip, G. Muller. Cable grip, G. Muller. Cable grip, G. H. Harris. Can. See Coffee or tea can. Cannon, revolving pneumatic. W. A. Bartlett. Cap, I. H. Dinner. Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve. Car coupling, M. M. Pittman. Car coupling, M. M. Pittman. Car doors, laten lock lor, C. H. White. Car, dumping, J. H. R. Talley. Car seat, reversible, J. M. Sauder. Car starter, G. B. Haines. Caster, Terrill & Simonson. Casting compound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps. Cattle from goring, device for preventing, J. M. Markham. Cattle pricker belt, J. M. Markham. Centering tool, J. N. Waite. Chair. See Barber's chair. Cheese knife, J. Buchholz. Clamp. See Floor clamp. Clean See Floor clamp. Clean See Floor clamp. Clean See Floor clamp. Cleaner. See Boiler cleaner. Clust L. Econsteid.	352,166  352,444 352,194 352,251 352,251 352,277 352,277 352,277 352,277 352,273 352,249 352,249 352,249 352,366 352,103 352,453 352,255 352,256 352,266 352,403 352,410 352,453 352,256 352,268 352,247 352,364 352,477 352,365 352,476 352,477 352,365 352,477 352,365 352,477 352,37 352,364 352,417 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344 352,344
	Thatcher  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter  Bridle and bridle bit, W. H. Sanborn. Buckle, S. N. Stevens Bustle, Rice & Landaker Buttons, Beek & Holland Buttons, Beek & Holland Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker Cable grip, G. Muller Cable grip, G. Muller Calle grip, G. Muller Can. See Coffee or tea can. Cannon, revolving pneumatic, W. A. Bartlett Cap, I. H. Dinner Car brake, J. S. Connelly. Car coupling, G. S. Gildersleeve Car coupling, M. M. Pittman Car coupling, M. M. Pittman Car coupling, M. M. Requa Car coupling, M. M. Requa Car coupling, M. M. Requa Car cat harke, J. S. Connelly Car seat, reversible, J. M. Sauder Car starter, G. B. Halnes	\$52,166  \$52,444 \$52,194  \$52,291 \$52,256 \$52,277 \$52,297 \$52,291 \$52,249 \$52,214 \$52,249 \$52,214 \$52,249 \$52,249 \$52,256 \$52,356 \$52,103 \$52,456 \$52,406 \$52,406 \$52,407 \$52,235 \$52,256 \$52,256 \$52,256 \$52,256 \$52,256 \$52,256 \$52,256 \$52,256 \$52,256 \$52,256 \$52,268 \$52,477 \$52,357 \$52,267 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477 \$52,357 \$52,477
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	Thatcher  Box. See Axlebox. Cigar box.  Bracket. See Scaffolding bracket.  Brake. See Car brake. Vehicle brake.  Brake adjuster, automatic, J. B. Burns  Brick kiln, J. R. Kemp  Bridges, self-acting safety gate for swing, H. Marcheter  Bridle and bridle bit, W. H. Sanborn  Bustle, Rice & Landaker  Buttons, Beek & Holland  Buttons, Beek & Holland  Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker  Cable grip, G. Muller  Cable grip, G. Muller  Calculator, G. H. Harris  Can. See Coffee or tea can.  Cannon, revolving pneumatic, W. A. Bartlett  Cap, I. H. Dinner  Car coupling, G. S. Gildersleeve  Car coupling, J. W. Harrelland  Car coupling, M. M. Pittman  Car coupling, M. M. Requa  Car coupling, M. M. Requa  Car coupling, M. R. Talley  Car seat, reversible, J. M. Sauder  Carriage, wheeled, A. Dickinson  Caster, Terrill & Simonson  Caster, Terrill & Simonson  Caster, Terrill & Simonson  Caster, See Barber's chair.  Cheir, See Barber's chair.  Cheese knife, J. Buchholz  Chair. See Barber's chair.  Cheese knife, J. Buchholz  Clamp. See Floor clamp.  Cleaner. See Boiler cleaner Gun cleaner.  Clock, L. Feuerstein  Clock, secondary electric, J. F. Hedge, Jr  Clock, L. Feuerstein  Clock striking mechanism, G. W. Burgess  Clock striking mechanism, G. W. Burgess  Closet. See Dry closet.	\$52,144 \$52,144 \$52,194 \$52,251 \$52,251 \$52,277 \$52,427 \$52,427 \$52,249 \$52,214 \$52,249 \$52,249 \$52,256 \$52,368 \$52,103 \$52,453 \$52,255 \$52,256 \$52,256 \$52,403 \$52,503 \$52,503 \$52,503 \$52,105 \$52,105
	Thatcher.  Box. See Axlebox. Cigar box. Bracket. See Scaffolding bracket. Brake. See Car brake. Vehicle brake. Brake. See Car brake. Vehicle brake. Brake adjuster, automatic, J. B. Burns. Brick kiln, J. R. Kemp. Bridges, self-acting safety gate for swing, H. Marcheter.  Bridle and bridle bit, W. H. Sanborn. Bustle, Rice & Landaker Buttons, Beek & Holland. Button, M. D. Shipman.  362,270, Buttons, instrument for attaching, W. H. Wood. Cabinet, J. Longenecker  Cable grip, G. Muller.  Cable grip, G. Muller.  Cable grip, Samuel & Angerer. Calculator, G. H. Harris.  Can. See Coffee or tea can. Cannon, revolving pneumatic. W. A. Bartlett. Cap. I. H. Dinner.  Car coupling, G. S. Gildersleeve.  Car coupling, G. S. Gildersleeve.  Car coupling, M. M. Pittman.  Car coupling, M. M. Pittman.  Car coupling, M. M. Requa.  Car coupling, M. R. Talley.  Car seat, reversible, J. M. Sauder.  Car starter, G. B. Haines.  Carpet tack tool, M. S. Lantz.  Carriage, wheeled, A. Dickinson.  Case. See Piano case. Ribbon case. Caster, Terrill & Simonson.  Casting compound ingots, mould for, A. J. Lustig Casting machine, stereotype, J. E. Caps.  Cattle from goring, device for preventing, J. M.  Markham  Cattle pricker belt, J. M. Markham  Centering tool, J. N. Waite.  Chair. See Barber's chair.  Cheese knife, J. Buchholz.  Chute, coal distributing, C. M. O'Donovan.  Cigar bunching machines, feeding device for, S.  A. Shepard.  Clock, secondary electric, J. F. Hedge, Jr.   \$52,166  \$52,444 \$52,194 \$52,291 \$52,256 \$52,277 \$52,427 \$52,427 \$52,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,249 \$32,246 \$32,236 \$32,236 \$32,266 \$32,236 \$32,266 \$32,2	

Condiment holder, individual, G. Dowkontt...... 352,400

Cutter. See Band cut'ter. Meat cutter. Vegeta- ble and root cutter. Washer or gasket cutter.		Loom for cross weaving, Oldham & Dixon Loom shuttle box operating mechanism, Lorey &	
Dental plugger, C. Forester		Braun  Looms for weaving double pile fabrics, lay or going part of power, J. F. & G. Priestley	
Dish basin, D. Lombert		Looms, stop motion for, Meyer & Kohler	352.340
Doll supporter, A. Staples	552.161	Match machine, B. T. Steber	352,162
Doors, etc., pneumatic check for. J. B. Edson	352,233	Medicine, manufacturing a confection to contain, G. C. Huttemeyer	
Drill. See Ratchet drill.  Drill and planter, combined, W. H. Halfaker 3		Metal plates of precious metals, manufacturing compound, A. J. Lustig	
Dry closet, I. D. Smead	352,157	Metal rolling dies, making, G. F. Simonds  Metal, soldering tubes of plated, A. J. Lustig	352,36
Drying brick, earthenware, etc., kiln for, J. R. Kemp.	!	Metals, prepartion for cleaning and polishing, H. A. Arndt	
Egg poacher and egg frier, W. H. Silver	52,272	Metallic shank machine, C. T. Stetson	
Electric wires and instruments, protector for, Mingle & Brown		Moulding, J. & L. Schram.  Monument, A. H. Miller.	
Electric wires or cables, composition for the manufacture of blocks for containing, J. W.		Mordanting, B. Finkelstein	
Butler 3 Electro magnetic and magneto electric machine,	52,445	Music leaf turner, W. H. Fesler	
R. Eickemeyer 3 Elevator. See Water elevator.	352,234	Necktle fastener, B. J. Higgins	
Engine. See Road engine. Steam engine. Engine reversing gear, Rutherford & Moore 3	3 <b>52,49</b> 8 .	Numbering device, H. Lee	
Engines, operating the valves of hydraulic pumping, J. Moore		Oil, etc., upon fibrous substances, apparatus for distributing, Benn & Firth	352,390
Expansible bolt, II.F. Courtney	;	Orange sizer and bin, J. S. McKenzie	352,421
Eyeglass frame, J. H. Gilbert	:	Organ pedal, adjustable, J. T. Rowe	352.267
Fabrics, machine for pressing, G. W. Miller 3	<b>52,25</b> 3 ;		
Faucet, beer, C. B. Locke	352,454	Painting and whitewashing machine, C. P. Lan-	
Fence, barbed, J. L. Riter         3           Fence binder, wire, W. C. Gohlson         3	352,406	Pan. See Baking and roasting pan.	352,332
Fence machine, J. H. Beaver	352,505	Paper bags, apparatus for making satchel bottom, J. N. Chadsey	
Fence making machine, B. A. Welds	352.339	Paper box machine, W S. Davis	352,351
Fence, wire, J. H. Dougherty	1	Paper making, dandy roll for use in, C. Smith Pencil sharpener, E. B. Dunn	352,476
Fertilizer distributer, J. J. Snyder, Jr	5`,347	Permutation padlock, N. Speicher	352,373
Fire escape, L. J. Gott. 38	3 <b>52,4</b> 63 ]	Pianos, music rack for, J. F. Conover	352,300
Fire escape, S. 1. Trask	352,192	Picker. See Cotton picker.	
Flexible material forming articles of, Kleinert	ŀ	Pipe joints, cement for, C. W. Collins	352,449
Floor clamp, C. F. Dearth 3: Flour sifter safe, S. E. Norton 3:	52,120	Planing machine, W. H. Doane	352,307
Flower beds, garden paths, etc., movable artificial	1	Planter, combined corn and cotton, J. G. Davis Planter, corn, J. Locher	352,303
	352,247	Planter, corn and seed, C. C. Henderson	352,186
Forging plant, W. Hainsworth 3: Forgings, die for making rolled, G. F. Simonds 3:	52.314	Plow, gang, F. F. Landis	
Frame. See Eyeglass frame. Fumigator, J. Watson		J. Sawyer	
Furnace. See Locomotive furnace. Steam boiler furnace.		Poke, animal, A. W. Bishop	352,175
Furnace grate, W. Haslam		Portfolio, C. Scherer	352,358
Gauge. See Level, plumb, and angle gauge. Game board, I. A. Bush	52,116	Press. See Printing press. Pressure regulator and cut-off, Westinghouse, Jr.,	
Garment supporter, Jensen & Johnson	<b>52,3</b> 93	& Moore Printers' forms, lock-up for, W. Lloyd	
Gas engine speeder, C. E. Skinner	52,473	Printing machines, sheet delivery apparatus for, G. P. Fenner	352,402
Gas regulator, volumetric, M. G. Wilder		Printing oil cloths, etc., machine for, F. O. Getchell	
of, J. W. Birch	1	Printing press, M. Gally	352,125
Gate, I. Lantz	1	Propelling wheel, M. S. Cole	
Generator. See Steam generator. Gloves and other articles, fastening for. S. W.	02,101   	Rail braces, manufacture of, C. Alkins	352,286
Shorey 33 Grading machine, road, R. Long 33		J. Van Depoele	
Grain binders, tension device for, G. W. B. Smith 33 Grain cradle. W. B. Smith 33	52,429	Railway, electric, E. E. Ries	352,265
Grate, J. Christie	52,223	Railway signal, D. C. James	
Gun cleaner, H. W. Gary	<b>52.4</b> 05	Range boiler, J. Tucker	
Hame attachment, F. A. Thompson	52,432 52,219	Regulator. See Gas regulator. Pressure regulater.	-
Harrow, M. C. Theisen	-0.00	Revolver, H. Goodman	352,185
21ATTOW, A. M. WOTG 35	52,284		302,000
Harrow and pulverizer, Brewer & Corsbie 3	52,440	Road engine, W. Applegarth	352.3
Harrow and pulverizer, Brewer & Corsbie	52,440 52,210 52,244	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gil- christ	352,3 352,220 352,311
Harrow and pulverizer, Brewer & Corsbie	52,440 52,210 52,244 52,206 52,205	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gilchrist  Roll, dandy, J. R. Ogden  Roller swaging die, G. F. Simonds.	352,3 352,220 352,311 352,484 352 366
Harrow and pulverizer, Brewer & Corsbie       8         Harrow, disk, G. R. Thompson       3         Harrow, sulky, J. P. Hoffman       3         Hasp lock, J. H. Speed       8         Hay rake, horse, A. E. Roberts       3         Head rest. adjustable, W. H. Robertson       3         Heater. See Water heater.	52,440 52,210 52,244 52,206 52,205	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock. machine for raising phosphate, D. J. Gilchrist  Roll, dandy, J. R. Ogden  Roller swaging die, G. F. Simonds.  Roofing retainer, Owen & Lichtenberger.  Rowlock, E. J. Kerns	352,3 352,220 352,311 352,484 352,366 352,424 352,329
Harrow and pulverizer, Brewer & Corebie       38         Harrow, disk, G. R. Thompson       38         Harrow, sulky, J. P. Hoffman       38         Hasp lock, J. H. Speed       38         Hay rake, horse, A. E. Roberts       36         Head rest. adjustable, W. H. Robertson       36         Heater. See Water heater.       36         Holder. See Individual condiment holder. Shaft holder.	52,440 52,210 52,244 52,206 52,205	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gil- christ	352,3 352,220 352,311 352,484 352,366 352,424 352,329 352,465 352,415
Harrow and pulverizer, Brewer & Corshie	52,440 52,210 52,244 52,205 52,205 52,354	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gilchrist  Roll, dandy, J. R. Ogden  Roller swaging die, G. F. Simonds  Roofing retainer, Owen & Lichtenberger  Rowlock, E. J. Kerns  Salt or condiment, compound table, J. M. Hughes  Sash balance, Lang & Talbot  Sash fastener, R. M. Hutchinson  Sash fastener. F. I. Rosentreter	352,3 352,220 352,311 352,484 352,366 352,424 352,329 352,465 352,415 352,189 352,355
Harrow and pulverizer, Brewer & Corshie. 38  Harrow, di.ek, G. R. Thompson. 38  Harrow, sulky, J. P. Hoffman. 38  Hasp lock, J. H. Speed. 38  Hay rake, horse, A. E. Roberts. 38  Head rest. adjustable, W. H. Robertson. 38  Heater. See Water heater.  Holder. See Undividual condiment holder. Shaft holder.  Hook. See Whiffletree hook.  Hook, W. Webster. 38  Hoop shaving machine, W. A. Stone. 38  Hopper, feed, C. I. Butterfield. 38	52,440 52,210 52,244 52,206 52,205 52,354 52,354 52,381 52,496 52,446	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gilchrist  Roll, dandy, J. R. Ogden  Roller swaging die, G. F. Simonds  Roofing retainer, Owen & Lichtenberger  Rowlock, E. J. Kerns.  Salt or condiment, compound table, J. M. Hughes  Sash balance, Lang & Talbot  Sash fastener, R. M. Hutchinson.  Sash fastener, F. L. Rosentreter  Saw fling implement. P. A. Potter  Saw, fire wood drag, B. F. Shinn	352,3 352,220 352,311 352,484 352,366 352,424 352,329 352,465 352,415 352,189 352,355 352,352 352,352
Harrow and pulverizer, Brewer & Corshie. 38  Harrow, diek, G. R. Thompson. 38  Harrow, sulky, J. P. Hoffman. 38  Hasp lock, J. H. Speed. 38  Hay rake, horse, A. E. Roberts. 38  Head rest. adjustable, W. H. Robertson. 38  Heater. See Water heater. 38  Holder. See Individual condiment holder. Shaft holder. 49  Hook. See Whiffletree hook. 38  Hook, W. Webster. 38  Hoop shaving machine, W. A. Stone. 38  Hopper, feed, C. L. Butterfield. 38  Horses, device for stopping, C. C. Harris. 38  Hydrant, Bardo & Ford. 38	52,440 52,210 52,244 52,205 52,205 52,354 52,354 52,446 52,446 52,446 52,446 52,288	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell Rock, machine for raising phosphate, D. J. Gil- christ.  Roll, dandy, J. R. Ogden. Roller swaging die, G. F. Simonds.  Roofing retainer, Owen & Lichtenberger. Rowlock, E. J. Kerns.  Salt or condiment, compound table, J. M. Hughes Sash balance, Lang & Talbot.  Sash fastener, R. M. Hutchinson.  Sash fastener, F. I. Rosentreter.  Saw fling implement. P. A. Potter.  Saw fling device, J. B. Sylvester.  Scaffolding bracket, S. Martin.	352,3 352,220 352,311 352,484 352,366 352,424 352,369 352,465 352,415 352,189 352,355 352,252 352,269 352,207 352,420
Harrow and pulverizer, Brewer & Corshie.  Starrow, diek, G. R. Thompson.  Harrow, sulky, J. P. Hoffman.  Hasp lock, J. H. Speed.  Hay rake, horse, A. E. Roberts.  Head rest. adjustable, W. H. Robertson.  Stead rest. adjustable, W. H. Robertson.  Heater. See Water heater.  Holder. See Individual condiment holder. Shaft holder.  Hook. See Whiffletree hook.  Hook, W. Webster.  Hoop shaving machine, W. A. Stone.  Hopper, feed, C. L. Butterfield.  Horses, device for stopping, C. C. Harris.  Hydraulic motor, A. B. Crowell.  Hydraulic motor, A. B. Crowell.  Inking pad, B. B. Hill.  Insulator, electric, H. D. Winton.  324,355, 38	52,440 52,210 52,244 52,205 52,205 52,354 52,354 52,496 52,496 52,446 52,446 52,249 52,233 52,233	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gil- christ	352,3 352,220 352,311 352,484 352,366 352,424 352,329 352,465 352,415 352,189 352,252 352,269 352,269 352,207 352,207 352,420 352,107 852,345
Harrow and pulverizer, Brewer & Corshie.  Starrow, di.ek, G. R. Thompson.  Harrow, sulky, J. P. Hoffman.  Hasp lock, J. H. Speed.  Hay rake, horse, A. E. Roberts.  Head rest. adjustable, W. H. Robertson.  Header. See Water heater.  Holder. See Undividual condiment holder. Shaft holder.  Hook. See Whiffletree hook.  Hook, W. Webster.  Hoop shaving machine, W. A. Stone.  Hopper, feed, C. I. Butterfield.  Morses, device for stopping, C. C. Harris.  Hydrant, Bardo & Ford.  Hydraulic motor, A. B. Crowell.  Starton Sta	52,440 52,210 52,220 52,205 52,354 52,354 52,354 52,496 52,446 52,249 52,288 52,229 52,333 52,333 52,333 52,337 52,333	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gilchrist  Roll, dandy, J. R. Ogden  Roller swaging die, G. F. Simonds  Roofing retainer, Owen & Lichtenberger  Rowlock, E. J. Kerns  Salt or condiment, compound table, J. M. Hughes  Sash balance, Lang & Talbot  Sash fastener, R. M. Hutchinson  Sash fastener, F. L. Rosentreter  Saw filing implement, P. A. Potter  Saw, fire wood drag, B. F. Shinn  Saw setting device, J. B. Sylvester  Scaffolding bracket, S. Martin  Scraper, corn and cotton, W. H. Adams	352,3 352,220 352,311 352,484 352,484 352,426 352,415 352,189 352,355 352,352 352,269 352,269 352,207 352,207 352,107 852,345
Harrow and pulverizer, Brewer & Corsbie 88  Harrow, disk, G. R. Thompson 38  Harrow, sulky, J. P. Hoffman 38  Hasp lock, J. H. Speed 38  Hay rake, horse, A. E. Roberts 38  Head rest. adjustable, W. H. Robertson 38  Heater. See Water heater.  Holder. See Individual condiment holder. Shaft holder.  Hook. See Whiffletree hook.  Hook, W. Webster 38  Hopper, feed, C. I. Butterfield 38  Horses, device for stopping, C. C. Harris 38  Hydrant, Bardo & Ford 38  Hydraulic motor, A. B. Crowell 38  Insulator, electric, H. D. Winton 352426, 38  Ironing board, J. M. Dairow 38  Ironing board, J. M. Dairow 38  Jars, cover for, A. W. Brightwell 38  Jars, cover for, A. W. Brightwell 38  Journal and bearing, C. H. Fisher 38	52,440 52,210 52,220 52,205 52,354 52,354 52,446 52,446 52,446 52,248 52,229 52,323 52,323 52,437 52,328 52,323 52,329 52,329 52,329 52,329 52,329	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell Rock, machine for raising phosphate, D. J. Gil- christ	352,3 352,220 352,311 352,484 352,366 352,424 352,329 352,465 352,189 352,355 352,352 352,269 352,269 352,269 352,107 852,345 352,133 352,362 352,362
Harrow and pulverizer, Brewer & Corshie 88 Harrow, disk, G. R. Thompson 38 Harrow, sulky, J. P. Hoffman 38 Hay lock, J. H. Speed 38 Hay rake, horse, A. E. Roberts 38 Head rest. adjustable, W. H. Robertson 36 Heater. See Water heater. Holder. See Individual condiment holder. Shaft holder. Hook. See Whiffletree hook. Hook, W. Webster 40 Hoop shaving machine, W. A. Stone 38 Hopper, feed, C. I. Butterfield 38 Horses, device for stopping, C. C. Harris 38 Hydrant, Bardo & Ford 38 Hydrant, Bardo & Ford 38 Inking pad, B. B. Hill 38 Insulator, electric, H. D. Winton 352,436, 38 Ironing board, J. Mathias 38 Jars, cover for, A. W. Brightwell 38 Jars, cover for, A. W. Brightwell 38 Ley. See Watch pendant key. Kiln. See Brick kilb.	52,440 52,210 52,220 52,205 52,354 52,354 52,446 52,446 52,446 52,248 52,229 52,323 52,323 52,437 52,328 52,323 52,329 52,329 52,329 52,329 52,329	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell Rock, machine for raising phosphate, D. J. Gil- christ.  Roll, dandy, J. R. Ogden. Roller swaging die, G. F. Simonds.  Roofing retainer, Owen & Lichtenberger. Rowlock, E. J. Kerns.  Salt or condiment, compound table, J. M. Hughes Sash balance, Lang & Talbot. Sash fastener, R. M. Hutchinson. Sash fastener, F. I. Rosentreter. Saw fling implement. P. A. Potter. Saw fire wood drag, B. F. Shinn.  Saw setting device, J. B. Sylvester. Scaffolding bracket, S. Martin. Scraper, corn and cotton, W. H. Adams. Scraper, road, J. M. Orput.  Scraper, attachment for road, C. G. Jones. Screw, jack, O. Seely. Sent. See Car seat. Seed and fertilizer distributer, E. T. Camp. Selecting device, J. E. Munson. Sewing machines, feed mechanism for, De Beaumont & Snellenburg.	352,220 352,220 352,311 352,484 352,363 352,424 352,292 352,415 352,415 352,415 352,217 352,293 352,252 352,252 352,253 352,263 352,352 352,352 352,352 352,352 352,353
Harrow and pulverizer, Brewer & Corshie. 38 Harrow, di.ek, G. R. Thompson. 38 Harrow, sulky, J. P. Hoffman. 38 Hasp lock, J. H. Speed. 38 Hay rake, horse, A. E. Roberts. 38 Head rest. adjustable, W. H. Robertson. 38 Heater. See Water heater. Holder. See Undividual condiment holder. Shaft holder. Hook. See Whiffletree hook. Hook, W. Webster. 38 Hoop shaving machine, W. A. Stone. 38 Hopper, feed, C. L. Butterfield. 38 Hopper, feed, C. L. Butterfield. 38 Hydrant, Bardo & Ford. 38 Hydraulic motor, A. B. Crowell. 38 Inking pad, B. B. Hill. 38 Insulator, electric, H. D. Winton. 352,435, 38 Ironing board, J. Matthias. 38 Jars, cover for, A. W. Brightwell. 38 Journal and bearing, C. H. Sisher. 38 Key. See Watch pendant key. Kiln. See Brick kiln. Knife. See Cheese knife.	52.40 52.205 52.205 52.205 52.205 52.354 52.205 52.354 52.496 52.496 52.496 52.496 52.496 52.496 52.298 52.298 52.296 52.297 52.354	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell Rock, machine for raising phosphate, D. J. Gilchrist  Roll, dandy, J. R. Ogden Roller swaging die, G. F. Simonds Roofing retainer, Owen & Lichtenberger Rowlock, E. J. Kerns.  Salt or condiment, compound table, J. M. Hughes Sash balance, Lang & Talbot  Sash fastener, R. M. Hutchinson Sash fastener, F. I. Rosentreter Saw filing implement. P. A. Potter Saw, fire wood drag, B. F. Shinn Saw setting device, J. B. Sylvester Scaffolding bracket, S. Martin Scraper, corn and cotton, W. H. Adams Scraper, road, J. M. Orput Scrapers, attachment for road, C. G. Jones Screw, jack, O. Seely Sent. See Car seat. Seed and fertilizer distributer, E. T. Camp Selecting device, J. E. Munson Sewing machines, feed mechanism for, De Beaumont & Snellenburg  Shaft holder, G. J. Spenneberg  Shearing table, sheep, C. B. & J. B. Phelps	352,220 352,220 352,311 352,484 352,368 352,484 352,368 352,485 352,485 352,489 352,489 352,489 352,489 352,352 352,352 352,352 352,352 352,352 352,480 352,480 352,4143 352,481
Harrow and pulverizer, Brewer & Corsbie. St. Harrow die, G. R. Thompson. 38  Harrow, sulky, J. P. Hoffman. 38  Hay rake, horse, A. E. Roberts. 38  Hay rake, horse, A. E. Roberts. 38  Head rest. adjustable, W. H. Robertson. 36  Heater. See Water heater. 38  Holder. See Individual condiment holder. Shaft holder. 39  Hook. See Whiffletree hook. 39  Hoop shaving machine, W. A. Stone. 38  Hopper, feed, C. L. Butterfield. 38  Hopper, feed, C. L. Butterfield. 38  Hydrant, Bardo & Ford. 39  Hydraulic motor, A. B. Crowell. 38  Insulator, electric, H. D. Winton. 352,436, 38  Ironing board, J. Mathias. 39  Jars, cover for, A. W. Brightwell. 38  Lydran and bearing, C. H. Sher. 38  Key. See Watch pendant key. 38  Key. See Watch pendant key. 39  Kinn. See Brick kiln. 39  Knife. See Cheese knife. 31  Knife. See Cheese knife. 31  Knife. See Cheese knife. 32  Lace and embroidery stand, M. C. Cohen. 35  Lace and embroidery stand, M. C. Cohen. 35	52.40 52.200 52.205 52.305 52.354 52.354 52.354 52.365 52.466 52.486 52.288 52.288 52.283 52.283 52.283 52.283 52.283 52.303 52.303 52.303 52.303	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell Rock, machine for raising phosphate, D. J. Gilchrist.  Roll, dandy, J. R. Ogden.  Roller swaging die, G. F. Simonds.  Roofing retainer, Owen & Lichtenberger. Rowlock, E. J. Kerns.  Salt or condiment, compound table, J. M. Hughes Sash balance, Lang & Talbot.  Sash fastener, R. M. Hutchinson.  Sash fastener, F. I. Rosentreter.  Saw fling implement. P. A. Potter.  Saw fire wood drag, B. F. Shinn.  Saw setting device, J. B. Sylvester.  Scaffolding bracket, S. Martin.  Scraper, corn and cotton, W. H. Adams.  Scraper, road, J. M. Orput.  Scraper, attachment for road, C. G. Jones.  Screw, jack, O. Seely.  Sent. See Car seat.  Seed and fertilizer distributer, E. T. Camp.  Selecting device, J. E. Munson.  Sewing machines, feed mechanism for, De Beaumont & Snellenburg.  Shaft holder, G. J. Spenneberg.  Shearing table, sheep, C. B. & J. B. Phelps.  Shearing table, sheep, C. B. & J. B. Phelps.	352,2311 352,230 352,311 352,484 352,484 352,482 352,485 352,485 352,415 352,415 352,415 352,189 352,269 352,207 352,400 352,107 352,130 352,217 352,143 352,231 352,243 352,243 352,243 352,243 352,243 352,243 352,243 352,243 352,243 352,243 352,243 352,243
Harrow and pulverizer, Brewer & Corshie. St. Harrow, di.ek, G. R. Thompson. 33  Harrow, sulky, J. P. Hoffman. 33  Hasp lock, J. H. Speed. 33  Hay rake, horse, A. E. Roberts. 33  Head rest. adjustable, W. H. Robertson. 35  Head rest. adjustable, W. H. Robertson. 35  Heater. See Water heater.  Holder. See Undividual condiment holder. Shaft holder.  Hook. See Whiffletree hook.  Hook, W. Webster. 35  Hoop shaving machine, W. A. Stone. 35  Hopper, feed, C. L. Butterfield. 35  Hydrant, Bardo & Ford. 35  Hydrant, Bardo & Ford. 35  Hydraulic motor, A. B. Crowell. 35  Inking pad, B. B. Hill. 35  Insulator, electric, H. D. Winton. 352,436, 31  Ironing board, J. M. Darrow. 35  Ironing board, J. Matthias. 35  Jars, cover for, A. W. Brightwell. 35  Journal and bearing, C. H. Tisher. 35  Key. See Watch pendant key.  Kilin. See Brick kiln.  Knife. See Cheese knife.  Knitting machines, needle cylinder for circular, Davidson & Clay. 35  Lamp and chandelier, candle, S. Clarke. 35  Lamp and chandelier, candle, S. Clarke. 35	52.40 52.205 52.205 52.205 52.354 52.354 52.354 52.354 52.381 52.381 52.381 52.381 52.383 52.383 52.487 52.283 52.383	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gilchrist  Roll, dandy, J. R. Ogden  Roller swaging die, G. F. Simonds  Roofing retainer, Owen & Lichtenberger  Rowlock, E. J. Kerns  Salt or condiment, compound table, J. M. Hughes  Sash balance, Lang & Talbot  Sash fastener, R. M. Hutchinson  Sash fastener, F. I. Rosentreter  Saw fling implement. P. A. Potter  Saw, fire wood drag, B. F. Shinn  Saw setting device, J. B. Sylvester  Scaffolding bracket, S. Martin  Scraper, corn and cotton, W. H. Adams  Scraper, road, J. M. Orput  Scraper, ack, O. Seely  Sent. See Car seat.  Seed and fertilizer distributer, E. T. Camp  Selecting device, J. E. Munson  Sewing machines, feed mechanism for, De Beaumont & Snellenburg  Shaft holder, G. J. Spenneberg  Shearing table, sheep, C. B. & J. B. Phelps  Shears, die for making, I. Harris  Shirt and lacing, combined, A. Hepner  Shovel. See Wooden shovel.	352,230 352,311 352,484 352,368 363,2,424 352,368 352,415 352,189 352,355 352,289 352,299 352,207 352,307 352,317 352,121 352,127 352,27 352,27 352,27 352,27 352,27 352,27 352,27 352,27 352,27 352,27 352,27 352,27 352,27
Harrow and pulverizer, Brewer & Corsbie.  ### Corsbie.  ### Corsbie.  ### Harrow, di.ek, G. R. Thompson.  ### Harrow, sulky, J. P. Hoffman.  ### Hasp lock, J. H. Speed.  ### Hasp lock, J. H. Robertson.  ### Hasp lock, J. H. Robertson.  ### Hosp learner heater.  ### Holder. See Water heater.  ### Holder. See Undividual condiment holder. Shaft holder.  ### Holder. See Water heater.  ### Hook, W. Webster.  ### Hook, W. Webster.  ### Hoop shaving machine, W. A. Stone.  ### Hoop shaving machine, J. C. C. Harris.  ### Harrow Hoop shaving machine, J. Mathias.  ### Hoop shaving machine, J. Mathias.  ### Jarrow Hoop shaving machine, J. Mathias.  ### Jarrow Hoop shaving machine, J. Mathias.  ### Journal and bearing, C. H. Sister.  ### See Watch pendant key.  ### Kilin. See Brick kiln.  ### Kilin. See Brick kiln.  Knife. See Cheese knife.  Knitting machines, needle cylinder for circular,  Davidson & Clay.  ### Jarrow.   52.40	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gil- christ	552,230 352,220 352,311 352,481 352,484 352,323 352,366 352,424 352,189 352,415 352,189 352,269 352,273 352,136 352,352 352,352 352,352 352,352 352,137 352,141 352,141 352,143 352,132 352,137 352,134 352,1352 352,137 352,1352 352,137 352,1352 352,137 352,237 352,137 352,237 352,237 352,237 352,237 352,237 352,237	
Harrow and pulverizer, Brewer & Corshie	52.40 52.20 52.20 52.20 52.20 52.35 52.35 52.35 52.35 52.35 52.49 52.44 52.28 52.44 52.28 52.23 52.23 52.23 52.23 52.23 52.33 52.47 52.28 52.23 52.33 52.47 52.28 52.23 52.33 52.47 52.28 52.23 52.33 52.33 52.33 52.47 52.28 52.28 52.28 52.33 52.35 52	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gil- christ.  Roll, dandy, J. R. Ogden.  Roller swaging die, G. F. Simonds.  Roofing retainer, Owen & Lichtenberger.  Rowlock, E. J. Kerns.  Rowlock, E. J. Kerns.  Salt or condiment, compound table, J. M. Hughes  Sash balance, Lang & Talbot.  Sash fastener, R. M. Hutchinson.  Sash fastener, F. I. Rosentreter.  Saw fling implement. P. A. Potter.  Saw fling implement. P. A. Potter.  Saw fling device, J. B. Sylvester.  Scaffolding bracket, S. Martin.  Scraper, corn and cotton, W. H. Adams.  Scraper, road, J. M. Orput.  Scrapers, attachment for road, C. G. Jones.  Screw, jack, O. Seely.  Seed and fertilizer distributer, E. T. Camp.  Selecting device, J. E. Munson.  Sewing machines, feed mechanism for, De Beaumont & Snellenburg.  Shears, die for making, I. Harris.  Shirt and lacing, combined, A. Hepner.  Shovel. See Wooden shovel.  Shovel, H. C. Cole.  Shuter fastener and shutter bower, combined,  Barnes & Cunningham.  Signal. See Automatic danger signal. Railway	552,230 352,220 352,311 352,481 352,484 352,323 352,366 352,424 352,189 352,415 352,189 352,269 352,273 352,136 352,352 352,352 352,352 352,352 352,137 352,141 352,141 352,143 352,132 352,137 352,134 352,1352 352,137 352,1352 352,137 352,1352 352,137 352,237 352,137 352,237 352,237 352,237 352,237 352,237 352,237
Harrow and pulverizer, Brewer & Corsbie	52.40	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gilchrist	352,231 352,220 352,311 352,434 352,434 352,323 352,323 352,213 352,213 352,210 352,217 352,131 352,132 352,217 352,131 352,131 352,132 352,131 352,131 352,131 352,131 352,131 352,131 352,131 352,131 352,131 352,131
Harrow and pulverizer, Brewer & Corsbie	52.40	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gil- christ	552,230 352,321 352,434 352,434 352,434 352,434 352,435 352,436 352,435 352,235 352,235 352,235 352,235 352,235 352,137 352,143 352,231 352,241 352,241 352,241 352,241 352,241 352,241 352,242 352,439
Harrow and pulverizer, Brewer & Corshie	52.40	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gil- christ.  Roll, dandy, J. R. Ogden.  Roller swaging die, G. F. Simonds.  Roofing retainer, Owen & Lichtenberger.  Rowlock, E. J. Kerns.  Salt or condiment, compound table, J. M. Hughes  Sash balance, Lang & Talbot.  Sash fastener, R. M. Hutchinson.  Sash fastener, F. R. Rosentreter.  Saw fling implement. P. A. Potter.  Saw fling implement. P. A. Potter.  Saw fling od drag, B. F. Shinn.  Saraser, corn and cotton, W. H. Adams.  Scraper, corn and cotton, W. H. Adams.  Scraper, road, J. M. Orput.  Scrapers, attachment for road, C. G. Jones.  Serew, jack, O. Seely.  Seed and fertilizer distributer, E. T. Camp.  Selecting device, J. E. Munson.  Sewing machines, feed mechanism for, De Beaumont & Snellenburg.  Shaft holder, G. J. Spenneberg.  Shearing table, sheep, C. B. & J. B. Phelps  Shears, die for making, I. Harris.  Shirt and lacing, combined, A. Hepner.  Shovel. See Wooden shovel.  Shovel, H. C. Cole.  Shutter fastener and shutter bower, combined,  Barnes & Cunningham.  Signal. See Automatic danger signal. Railway signal.  Slets, etc., machine for making muffling strips  for, C. Nelson.  Sleigh and car iage, combined, W. H. Crane.  Spark arrester, W. T. Reed.	552,230 552,230 552,311 552,323 552,323 552,325 552,325 552,325 552,325 552,325 552,325 552,325 552,325 552,325 552,325 552,325 552,327 552,143 552,143 552,143 552,143 552,143 552,143 552,143 552,143 552,143 552,143
Harrow and pulverizer, Brewer & Corsbie.  83 Harrow, di.ek, G. R. Thompson.  33 Harrow, sulky, J. P. Hoffman.  34 Hasp lock, J. H. Speed.  35 Hay rake, horse, A. E. Roberts.  36 Heater. See Water heater.  Holder. See Undividual condiment holder. Shaft holder.  Hook. See Undividual condiment holder. Shaft holder.  Hook. See Whiffletree hook.  Hook, W. Webster.  Hoop shaving machine, W. A. Stone.  35 Hopper, feed, C. L. Butterfield.  36 Horses, device for stopping, C. C. Harris.  37 Hydraulic motor, A. B. Crowell.  38 Hydrant, Bardo & Ford.  39 Hydraulic motor, A. B. Crowell.  30 Inking pad, B. B. Hill.  Insulator, electric, H. D. Winton.  352,436, 33 Ironing board, I. M. Darrow.  31 Journal and boaring, C. H. Tisher.  32 Key. See Watch pendant key.  Kilin. See Brick kiln.  Knife. See Cheese knife.  Knitting machines, needle cylinder for circular,  Davidson & Clay.  1. Jacca and embroidery stand, M. C. Cohen.  35 1. Lamp, E. J. McKown.  28 1. Lamp, car, M. Hicks.  1. Leather, uniting pieces of, P. J. Fitzgerald.  36 1. Level, plumb, and anglegauge, W. R. St. Clair.  37 1. Level, plumb, and anglegauge, W. R. St. Clair.  38 1. Level plumb, and anglegauge, W. R. St. Clair.  38 1. Level plumb, and anglegauge, W. R. St. Clair.  39 1. Level plumb, and anglegauge, W. R. St. Clair.  31 1. Level plumb, and anglegauge, W. R. St. Clair.  31 1. Level plumb, and anglegauge, W. R. St. Clair.  32 1. Level plumb, and anglegauge, W. R. St. Clair.  31 1. Level plumb, and anglegauge, W. R. St. Clair.  32 1. Level plumb, and anglegauge, W. R. St. Clair.  35 1. Level plumb, and anglegauge, W. R. St. Clair.  36 1. Level plumb, and anglegauge, W. R. St. Clair.  37 1. Level plumb, and anglegauge, W. R. St. Clair.  38 1. Level plumb, and anglegauge, W. R. St. Clair.  39 21 21 21 21 21 21 21 21 21 21 21 21 21	52.40	Road engine, W. Applegarth.  Road engines, axle joint for, H. Bushnell  Rock, machine for raising phosphate, D. J. Gilchrist	\$52,230 \$52,220 \$52,311 \$52,494 \$52,322 \$52,405 \$52,415 \$52,415 \$52,415 \$52,222 \$52,407 \$52,352 \$52,277 \$52,145 \$52,124 \$52,242 \$52,247 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,243 \$52,244 \$52,244 \$52,244 \$52,244 \$52,244 \$52,244 \$52,244 \$52,243 \$52,244

3	Steam boiler furnace, A. R. Jones		
	Steam boilers, electric safety attachment for, R. Reichling	352,203	_
	Steam boilers, etc., tube sheet for, H. Warden	352,308	F
	Steam engine, G. E. Rider	352,150	, es
,	Steam generator, Hayes & Bonnell Steam generators, heating water in, F. G.	352,319	w
,	Wheeler	352,283	an tis
ļ	Steam muffler, R. Solano	352.273	re
	Steam trap, J. H. Banks	352.387	in
	Steering ships, apparatus for, J. A. Tilden		=
,	Stoves, cooking attachment for heating, M. Rug-		1
•	gles		١.
	Street sweeper, E. G. Rock		•
	Stump extractor, F. R. Smith Supporter. See Corset and skir supporter. Door		,
,	supporter. Garment supporter.		í
	Surface condenser, H. Warden	<b>352,37</b> 8	I
)	Suspenders, F. M. Piper	<b>352,</b> 348	1
	Swing, O. L. Sprague	852,450	
'	Table. See Shearing table.		_
)	Table leg fastening, H. A. Kaufhold		I
	Table slide fastening, T. G. Bugbee		an di:
)	Tag attaching device, M. L. Howell		us
	Mower	352,254	M
	Mower	352,144	re
	Telegraph sounder, C. D. Haskins	352,317	in
)	Telegraph system, printing, J. C. Wilson	352,435	
•	Telephone transmitter, W. H. Collins		١
	Thermostat, G. 17. Bulen		U
	Thill coupling, J. A. Kranz	352,469	pr
	Thrashing machine, G. I. Pittman		
	Three-throw switch, E. J. Remillon Tile making machine, drain, R. J. Carson		_
	Timber, preserving, H. Aitken		A be
	Timepieces, electric alarm for, F. Glasgow	352,407	T
	Tire, J. G. Hess.		tio str
	Tire upsetter, N. D. Stanley		Îr
	Tongue support. W. L. Landon	352.197	He
j	Toy, J. Fallows	352,401	fic sin
	Traction angines, pinion wheel for, E. Samuel Traction wheel, R. R. Moore		do
J		352,153	9T
	Trap. See Ant trap. Steam trap. Trousers or overalls, W. Cohlman	352 907	To
1	Tubes, roller for forming tapered, E. Wiesner		(1)
	Type writing machine, C. Spiro		9
Į	Valve gear, automatic, F. A. Gardner		
	Vegetable and root cutter, I. P. Cribb Vehicle brake, C. A. Burr		C
ł	Vehicle brake, C. A. Burr		
	Velocipede, T. Zanger		bu ria
1	Velocipedes, luggage carrier for, J. A. Lamplugh.		in
	Veneering machine, A. C. Johnson	352,131	<b>C</b> O
,		000 100	CIT
,	Vessels, centerboard for, A. L. Shears		ed Pr
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1 1 1 1 1 1 1 1 1	Vessels, centerboard for, A. L. Shears	352,275 352,322	ed Pr
1	Vessels, centerboard for, A. L. Shears	352,275 352,322 352,201	Pr ne
	Vessels, centerboard for, A. L. Shears	352,275 352,322 352,201 352,384	Pr ne
	Vessels, centerboard for, A. L. Shears	352,275 352,322 852,201 352,384 352,346	ed Pr
	Vessels, centerboard for, A. L. Shears	352,275 352,322 852,201 352,384 352,346 352,386	Pr
	Vessels, centerboard for, A. L. Shears	352,275 352,322 852,201 352,384 352,386 352,386	ed Pre
	Vessels, centerboard for, A. L. Shears	352,275 352,322 852,201 352,384 352,386 352,386	ed Pre
	Vessels, centerboard for, A. L. Shears	352,275 352,322 852,201 352,384 352,346 352,386 352,138 352,138	ed Pre
	Vessels, centerboard for, A. L. Shears.  Vessels, device for closing openings in the hulls of, J. Speirs.  Vise heads, manufacture of, J. C. Herman.  Wagon end gate, J. A. Reed.  Wagon seat lock, D. D. Whitney.  Wagon train, self-propelling, J. B. Osborne.  Warming apparatus, portable, A. E. Bailey.  Warping machine, compression roller for wire, O. S. Lee.  Wash bench, folding, Sly & Wood.  Washer. See Dish washer.  Washer or gasket cutter, J. Leuenberger.  Washing machine, P. Bulger.	352,275 352,322 352,201 352,384 352,346 352,386 352,188 352,138 352,169 352,129 352,143	ed Pres
	Vessels, centerboard for, A. L. Shears.  Vessels, device for closing openings in the hulls of, J. Speirs.  Vise heads, manufacture of, J. C. Herman.  Wagon end gate, J. A. Reed.  Wagon seat lock, D. D. Whitney.  Wagon train, self-propelling, J. B. Osborne.  Warming apparatus, portable, A. E. Bailey.  Warping machine, compression roller for wire, O. S. Lee  Wash bench, folding, Sly & Wood  Washer. See Dish washer.  Washer or gasket cutter, J. Leuenberger.  Washing machine, P. Bulger  Washing machine, P. Bulger	352,275 352,322 352,201 352,384 352,386 352,386 352,389 352,188 352,189 352,129 352,413 352,257	ed President
	Vessels, centerboard for, A. L. Shears  Vessels. device for closing oper:ings in the hulls of, J. Speirs  Vise heads, manufacture of, J. C. Herman  Wagon end gate, J. A. Reed  Wazon seat lock, D. D. Whitney  Wagon train, self-propelling, J. B. Osborne  Warming apparatus, portable, A. E. Bailey  Warping machine, compression roller for wire, O. S. Lee  Wash bench, folding, Sly & Wood  Washer. See Dish washer  Washer or gasket cutter, J. Leuenberger  Washing machine, P. Bulger  Watch pendant key, D. Nettekoven  Watch, stop, A. O. Jennings	352,275 352,322 352,201 352,384 352,366 352,369 352,138 352,139 352,143 352,257 352,443 352,257 352,236	edrie   E. B. F.
	Vessels, centerboard for, A. L. Shears Vessels, device for closing openings in the hulls of, J. Speirs Vise heads, manufacture of, J. C. Herman Wagon end gate, J. A. Reed. Wagon seat lock, D. D. Whitney Wagon train, self-propelling, J. B. Osborne Warming apparatus, portable, A. E. Bailey Warping machine, compression roller for wire, O. S. Lee Wash bench, folding, Sly & Wood Washer. See Dish washer. Washer or gasket cutter, J. Leuenberger Washing machine, P. Bulger Watch pendant key, D. Nettekoven Watch, stop, A. O. Jennings. Watches, safety attachment for, D. Nettekoven Watcr conductor, rain, W. D. Bates	352,275 352,322 352,201 352,384 352,386 352,386 352,188 352,369 352,129 352,413 352,257 352,257 352,256 352,256 352,256	edrae   E. B. B. F. F. E. B. B. F. F. F. B. B. F. F. F. F. F. B. B. F.
	Vessels, centerboard for, A. L. Shears	352,275 352,322 352,201 352,346 352,346 352,386 352,188 352,188 352,129 352,413 352,257 352,257 352,256 352,256 352,258 352,258	edrae   E. B. B. F. F. E. B. B. F. F. F. B. B. F. F. F. F. F. B. B. F.
	Vessels, centerboard for, A. L. Shears	352,275 352,322 352,322 352,326 352,386 352,386 352,188 352,198 352,198 352,413 352,257 852,257 852,256 352,256 352,256 352,256 352,256 352,256 352,256 352,256	E Bright C
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	Vessels, centerboard for, A. L. Shears.  Vessels device for closing openings in the hulls of, J. Speirs.  Vise heads, manufacture of, J. C. Herman.  Wagon end gate, J. A. Reed.  Wagon seat lock, D. D. Whitney.  Wagon train, self-propelling, J. B. Osborne.  Warming apparatus, portable, A. E. Bailey.  Warping machine, compression roller for wire, O. S. Lee.  Wash bench, folding, Sly & Wood.  Washer. See Dish washer.  Washer or gasket cutter, J. Leuenberger.  Washing machine, P. Bulger.  Watch pendant key, D. Nettekoven.  Watch, stop, A. O. Jennings.  Watches, safety attachment for, D. Nettekoven.  Water conductor, rain, W. D. Bates.  Water distribution, system of, G. B. Bassett.  Water heater, feed, G. Green.  Water heater, feed, A. F. Ward.  Water heater, feed, H. Warden.	352,275 352,322 352,201 352,364 352,366 352,369 352,129 352,129 352,129 352,256 352,256 352,256 352,256 352,266 352,266 352,266 352,266 352,266 352,369 352,379	Property of E. British E. W. D. Dyde
	Vessels, centerboard for, A. L. Shears.  Vessels device for closing openings in the hulls of, J. Speirs.  Vise heads, manufacture of, J. C. Herman.  Wagon end gate, J. A. Reed.  Wagon seat lock, D. D. Whitney.  Wagon train, self-propelling, J. B. Osborne.  Warming apparatus, portable, A. E. Balley.  Warping machine, compression roller for wire, O. S. Lee.  Wash bench, folding, Sly & Wood.  Washer. See Dish washer.  Washer or gasket cutter, J. Leuenberger.  Washing machine, P. Bulger.  Watch pendant key, D. Nettekoven.  Watch, stop, A. O. Jennings.  Watches, safety attachment for, D. Nettekoven.  Water conductor, rain, W. D. Bates.  Water distribution, system of, G. B. Bassett.  Water heater, feed, G. Green.  Water heater, feed, A. F. Ward.  Water heater, feed, H. Warden.  Weaner, calf, J. M. Markham.	352,275 352,322 352,201 352,364 352,366 352,369 352,129 352,129 352,129 352,256 352,256 352,256 352,256 352,266 352,266 352,266 352,266 352,266 352,369 352,379	Pre Ew Dydan
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	Vessels, centerboard for, A. L. Shears.  Vessels device for closing openings in the hulls of, J. Speirs.  Vise heads, manufacture of, J. C. Herman.  Wagon end gate, J. A. Reed.  Wagon seat lock, D. D. Whitney.  Wagon train, self-propelling, J. B. Osborne.  Warming apparatus, portable, A. E. Bailey.  Warping machine, compression roller for wire, O. S. Lee.  Wash bench, folding, Sly & Wood.  Washer. See Dish washer.  Washer or gasket cutter, J. Leuenberger.  Washing machine, P. Bulger.  Watch pendant key, D. Nettekoven.  Watch, stop, A. O. Jennings.  Watches, safety attachment for, D. Nettekoven.  Water conductor, rain, W. D. Bates.  Water distribution, system of, G. B. Bassett.  Water heater, feed, G. Green.  Water heater, feed, A. F. Ward.  Water heater, feed, H. Warden.  Water heater, feed, H. Warden.  Wahel. See Propelling wheel. Traction wheel.  Vehicle wheel.  Whiffletree hook, A. A. Brackbill.  Whip rack, L. D. Jones.  Widmill, F. A. Baker.	352,275 352,322 352,201 352,384 352,366 352,369 352,129 352,2129 352,256 352,256 352,256 352,256 352,256 352,256 352,256 352,256 352,364 352,377 352,379 352,379 352,379 352,379 352,379 352,379 352,379 352,379 352,379	D by de an recosth
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