#### Business and Personal Wants.

READ 'THIS COLUMN CAREFULLY .- You will READ 'THIS COLUMN CAREFULLI. — 104 w.m. find inquiries for certain classes of articles numbered in consecutive order. If you manufacture these goods write us at once and we will send you the name and address of the party desiring the information. In every case it is necessary to give the number of the inquiry. MUNN & CO.

Marine Iron Works. Chicago. Catalogue free. Inquiry No. 7893.—Wanted, an electric wood floor survacer.

"U.S." Metal Polish. Indianapolis. Samples free. Inquiry No. 7894.—For manufacturers of a de-ice for indicating steam engines known as the Schultz

Handle & Spoke Mchy. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.

Inquiry No. 7895.—Wanted, modern machinery for opening large slate quarries where from 10 feet to 20 feet of stripping is to be removed; material, dirt and slate to be carried 14 mile.

WANTED.-Partner for new invented current motor. Must furnish capital. Address Partner, Box 773, N. Y.

Inquiry No. 7896.—Wanted, channeling machinery, for use in sinte quarries; enameling evens, to enamel slate slabs; electric, hand, pertable drilling machines; also air drills.

I sell patents. To buy, or having one to sell, write Chas. A. Scott, 719 Mutual Life Building, Buffalo, N. Y. Inquiry No. 7897.—Wanted, makers of bottling machinery for sod, and mineral waters.

h The celebrated "Hornsby-Akroyd" Patent Safety ●11 Engine is built by the De La Vergne Machine Company.
Foot of East 138th Street, New York.

Inquiry No. 7598.—Wanted, makers of patent railroad spikes or similar devices for fastening rails to ties.

Fine Lithographed Letter Heads, Bill Heads, Enve lopes and Checks, gives standing. Stilwell, 709 Pine St.

Inquiry No. 7899.—Wanted, a flexible shaft fitted with sand paper disk or cutter, for cleaning hulls of row-boats and motor launches.

WANTED.-To arrange with manufacturer for introduction of new bicycle. References. R. M. F., 2303 Strand, Galveston, 'fex.

Inquiry No. 7900.—For manufacturers of pillow or feature ventilators.

FOR SALE.-Self-swinging gate, great improvement Sell or lease on royalty. Patented November 21, 1905. Claude Siebring, George, Iowa.

Inquiry No. 7901.—Wanted, the name and address of the manufacturers of "reaphooks."

Metal Novelty Works Co., manufacturers of all kinds of light Metal Goods, Dies and Metal Stampings our Specialty. 43-47 S. Canal Street, Chicago.

Inquiry No. 7902.—Wanted, manufacturers of Franklin metal.

Manufacturers of patent articles, dies, metal Stamping, screw machine work, hardware specialties, machinery tools, and wood fiber products. Quadris Manufacturing Company, 18 South Canal St., Chicago.

Inquiry No. 7903.—Wanted, a small press for extracting oil from nuts.

WANTED .- To secure a party to manufacture a patent Ratchet Drill. Address Drill, Box 773, New York.

Inquiry No. 7904.—Wanted, the name and address of the manufacturer of the white metal imished casting, which requires no filing or other finishing.

Bates & Peard furnace for bright annealing all nonferrous metals. Without oxidation. No picking or cleaning required. C. M. Dally, Agent, 29 Broadway,

Inquiry No. 7905.—For manufacturers of magnets suitable for water meters.

Inquiry No. 7906.—For manufacturers of small turbines, such as the Frencis or Gonval type.

Inquiry No. 7907.—For parties engaged in installing apphances for consuming oil for fuel under boilers.

Inquiry No. 7908.—Wanted, small wood grooved pulleys % inch diameter by 15 inch wide; also non-elasticfancy cord 18 or 14 inch diameter.

Inquiry No. 7909.—Wanted, makers of flour mill machinery.

Inquiry No. 7910.—Wanted, complete mints for copper and silver coins in different sizes.

Inquiry No. 7911.—Wanted, double shears to cut of to 14-inch boiler plates, with and without steam power, also one shear on one side and a punch on the other.

Inquiry No. 7912.—Wanted, cotton-spinning machinery for hand, foot and steam power.

#### NEW BOOKS, ETC.

FORTY YEARS AN ADVERTISING AGENT. 1865-1905. By George Presbury Row-ell. New York: Printers' Ink Publishing Company, 1906. 12mo,; pp. 517. Price, \$2.

Mr. George P. Rowell is the dean of advertising agents, and his work has left an indelible impress upon the great business of publicity. During a long and diversified life, Mr. Rowell has seen vast agencies grow up from a single desk in a tiny office. While the earlier agents handled hundreds, the great agents of to-day handle appropriations which sometimes amount a million ally. The whole history of the advertising field is admirably portrayed in the fifty-two chapters, or papers, which make up the con tents of this volume, which is illustrated with a number of interesting portraits and groups. The book will prove of great interest, those who are not especially interested in advertising proper. Some of the reminiscences are most interesting.

How to Mix Paints. By G. Godfrey, Chi cago: Press of the Western Painter, 1905. 12mo.; pp. 72. Price, 50 cents.

This is a practical treatise prepared for the needs of the practical painter. It is intended to aid the painter in mixing his colors when he desires to match a given shade. Chapter X on "Color Harmony" contains much that is helpful to the house painter and decorator.

DIAGNOSIS ON THE EYE. By Henry Edward Lane, M.D. Chicago: Cosmos Publishing Company, 1905. 8vo.; pp. Land Company, 1905. 8vo.; pp. Cophers locubator 60., Buffalo, Ch. lange, Scottan, New York, 156. Price \$2. 156. Price, \$2.



Star" Power Sprew Cutting Gross Lathes

FOR FINE, ACCURATE WORK Send for Catalogue B. SENECA FALLS MFG. CO. 695 Water Street, Seneca Falls, N. Y., U. S. A.

Engine and Foot Lathes MACHINE SHOP OUTFITS, TOOLS AND SUPPLIES. BEST MATERIALS. BEST WORKMANSHIP. CATALOGUE FREE SEBASTIAN LATHE CO., 120 Culvert St., Cincinnati, O.

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44-60 East 23d Street, New York, N. Y. Grand Prize, Highest Award, St. Louis, 1904.



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European Branch
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HINTS TO CORRESPONDENTS.

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 num r 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 wevendeavor to reply to all either by letter or in this department, each must take his turn. his turn.

Buyers wishing to purchase any article not adver-tised in our columns will be furnished with addresses of houses manufacturing or carrying the same.

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

Scientific American Supplements referred to may be had at the office. Price 10 cents each. Books referred to promptly supplied on receipt of

(9890) C. V. asks: In a dry room, more especially during the winter season on account of the drier atmosphere indoors, a person can electrify himself by shuffling in his shoes over the carpet. While doing this, if he hold his hand flat on a piece of paper placed against the wall, the paper will be found to adhere (or be attracted to) the wall, even for a few seconds after the hand has been removed from contact with it. This is, of course, an experiment, but what does actually take place, and how is the attraction of the paper to wall electrically explained? I understand the body gets charged positively (or overcharged) by the shuffling of feet on the carpet. Would then the paper, becoming positively electrified by contact with the hand, decompose by induction the neutral (electrical) state of the wall, and by attracting inductively the negative of the latter to itself, thus explain its adherence to the wall? Or does the paper only act here as a dielectric (or non-conductor between two attracting surfaces), thus explaining again the temporary adherence to the wall? Can you offer in a concise, yet detailed way, the real explanation for this adherence? A. The sticking of a piece of paper to a wall by an electrified hand pressing against it is due to electrical induction. The paper is a dielectric, the hand has a certain charge, perhaps positive on one side of the paper, and the other side of the paper becomes negative by induction and the surface of the wall is made positive, thus attracting the paper to itself.

(9891) A. W. B. asks: I write for a bit of information in regard to the Northern Lights. Have not seen them for years. They were always so bright in spring and fall, but as I say, have not seen them for years. I was inquiring of different ones around here, and they seem to know nothing about them, and so I was advised to write to you. A. We are not aware that there is any difference in the frequency of the Aurora from year to year, excepting as the sunspot period possibly may influence their numbers. If you will address an inquiry to the Weather Bureau, Washington, D. C., the observers there will doubtless be able to give you the figures on the subject, since records of the Aurora are usually kept as a part of the regular observations of the Bureau.

(9892) F. A. asks concerning a spring which broke while immersed in hydrochloric acid in order to clean it of rust. A. There is no probable connection between the action of the acid and the breaking of a spring, unless the spring has been in the acid for a very long time, in which case the acid would be de stroyed, and the liquid would be a solution of chloride of iron in water. This would rust the iron by forming oxide of iron. Hydrochloric acid has only a slow action upon iron, and loses its acid qualities by contact with iron. It is impossible to break a spring by simple contact with an acid. Why then did the spring break? If you will refer to Kent's "Engineer's Pocket Book," page 238, Relation of Elastic Limit to Endurance under Repeated Stresses, and on page 240, Resistance of Metals to Repeated Shocks, the true explanation will be found. A bar of metal will break by the repeated application of a stress much below the breaking strength of the metal. Thus a bar of steel which would hold 49 tons per square inch broke by the application of 28.6 tons per square inch without shock for 170,000 times. The same result follows repeated shocks to a metal. Thus the firing of a gun will finally burst the gun, although the gun easily withstood the pressure at first. The bending of a spring is a similar case to the repeated application and removal of a weight. By and by the spring breaks. The spring in your case had been used for fifteen years, under strain all the time. It is not necessary to suppose any occult power of an acid, which it does not possess, to see why the spring broke.

(9893) A. M. G. asks: Please state in Notes and Queries column the number of vibrations per second for each note of the octave in the natural key from middle C of an organ or piano, for the first octave both above and below the middle C, at the recognized standard pitch as used in this country. A. The International Standard Pitch is for A above middle C, 435 vibrations a second. This gives for that octave of a plane or organ by the method

of Equal Temperament, which is in universal use, C, 258.6; C sharp, 274.0; D, 290.3; D sharp, 307.5; E, 325.8; F, 345.2; F sharp, 365.8; G, 387.5; G sharp, 410.6; A, 435; A sharp, 460.9; B, 488.3; C, 517.3. For the octave below middle C. divide these numbers by 2. All octaves up and down are found by multiplying successively by 2 for upper octaves and dividing by 2 for lower octaves. Any octave has twice as many vibrations as the notes of the octave next below it had.

#### INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending February 13, 1906.

AND EACH BEARING THAT DATE

[See note at end of list about copies of these patents.]

Acid, alkamin esters of para-aminobenzoic, A. Einhorn .....

y	Adjustable wrench, G. McKerahan Advertising device, A. Dunhill Air brake apparatus, A. A. St. Clair Aluminium, granulating, W. Heskins Amusement apparatus, ©. Roberts Amusement device, P. M. Maloney Animal trap, J. C. Alsobrook Ash pan, L. C. Schotto Auger, post hole, F. G. Hertzig Automobile, H. Lemb Automobile locking device, A. Churchward Axle lubricator, C. H. Driver Bag holder, G. Stearns Baling press, D. Stanbro	812,440 812,191 812,697
,	: Aluminium, granulating, W. Heskins Amusement apparatus, C. Roberts Amusement device, P. M. Maloney	812,493 812,595 812,577
1	Animal trap, J. C. Alsobrook Ash pan, L. C. Schotto	812,472 812,370 812,744
8	Automobile, H. Lemp	812,744 812,573 812,726
1	Axle lubricator, C. H. Driver	812,744 812,573 812,726 812,552 812,307 812,696 812,332 812,784
ľ	Baing press, hay, D. S. Edenheld	812,332 812,784
,	Bearing, Lea & Degen Bearing, Lea & Degen Bearing, Lea & Degen Beating, Lea & Degen Beating, Lea & Degen Beating, W. K. McCardell Bening machine, automatic, L. H. Brinkman Bir Sea Thiting hin	812,295 812,290 812,756
1	Bedsteads, mosquito net frame attachment for, W. K. McCardell	812,284
7	man	812,258 812,547
7	Bin. See Tilting bin. Binder, C. L. Donohoe Binder for loose leaves of books, J. P. Boehner Biscuit wacking machine, A. Magnan	812,731
1	Boehner Biscuit Packing machine, A. Magnan Bit brace, J. Gessert	812,397 812,221 812,198 812,193
5		812,193 812,529 812,492
	Boiler, W. N. Rumely Boiler Supporting lug, C. S. Hooper. Bolt clipper and punch, J. L. Painter. Book and job chase, 6. Howard. Book back, loose leaf, Schultz & Gerding Boom for steam-shovels and the like, components W. Farris	812,225 812,425 812,602
l	Boom for steam-shovels and the like, composite, W. Ferris	812,264
	Boot and shoe, S. Wilde Bottle cap lifter, A. C. Booth	812,541 812,443 812,257
•	Bottle, non-refillable, Knollenberg & Frey Bottles by means of metal capsules, appa-	812,257 812,724 812,751
)	ratus for closing, E. Goltstein Bowling alley pin spetter, C. L. Bastian Bowling ball handle attachment, S. H., H.	812,648 812,253
•	Boom for steam-shovels and the like, composite, W. Ferris  Boring apparatus, deep, W. Wlodarczyk.  Boot and shoe, S. Wilde.  Bottle, non-refillable, C. E. Carroll.  Bottle, non-refillable, Knollenberg & Frey.  Bottles by means of metal capsules, apparatus for closing, E. Goltstein.  Bowling alley pin spetter, C. L. Bastian.  Bowling ball handle attachment, S. H., H.  O. & S. H. Law, Jr.  Box and target, combined, P. R. Warren.  Box fastener, H. Stotz  Brake, S. H. Libby  Bronzing machine, L. Haenlein  Broom handle, T. I. Swagerty.  Brush and comb, combined hair, A. McKenzie  Bruckle, lock, J. Shaw	812,214 812,536 812,308
	Brake, S. H. Libby Bronzing machine, L. Haenlein Broom handle, T. I. Swagerty	\$12,308 812,758 842,562 812,309
l	Brush and comb, combined hair, A. McKenzie Buckle, lock, J. Shaw	812,309 812,766 812,372
	Building block, J. A. Johnson Building block, W. D. Moore.	812,369 812,498 812,667 812,727 812,420
ì	Brush and comb. combined hair, A. McKenzie Buckle, lock, J. Shaw	812,420 812,439
	Can body machine, locked seam, J. H. Mc-Elroy Can opener, C. Cochran Can testing machine, C. B. McDonald. Canceling and postmarking machines, feed mechanism for stamp, F. Bjurstrom. Canceling and postmarking machines, inkapparatus for stamp, F. Bjurstrom.	812,285 812,406
	Can testing machine, C. B. McDonald Canceling and postmarking machines, feed mechanism for stamp, F. Bjurstrom	812,224 812,780
l	Canceling and postmarking machines, ink- apparatus fer stamp, F. Bjurstrom. Candle holder, L. M. Wilde. Car bodies, center stem guide for, B. S. Brown	812,255 812,248
:	_ Diowii	812,720 812,540
	Car couplings, operating mechanism for automatic, E. E. Turney	812,385 812,783
	Car door operating mechanism, A. Campbell. Car draft rigging mechanism, B. S. Brown Car, dump, S. Otis	812,783 812,721 812,359 812,571
,	Carburetter, hydrocarbon engine, W. Kouns Carburetter, hydrocarbon engine, W. Kouns	812,302 812,753 812,405
	Carriage body corner construction, J. P. Johnson	812,207 812 447
	Carriage, child's folding, W. H. Barker Carriage curtain fastener, L. J. Luckhaupt.	812,323 812,661 812,560
:	Cement block machines, core cutter for, J. W. Stuart	812,702
1	Cement block mosting machine, R. E. Feets Cement fence post molding machine, B. H. McMillan, et al	812,767
	Chair legs for rockers, machine for shaping, H. L. Staley	812,461
•	Car doer operating mechanism, A. Campbell. Car draft rigging mechanism, B. S. Brown. Car, dump, S. Otis Car fender, J. Landau, Jr. Gar replacer, J. M. Scuader Carburetter, hydrocarbon engine, W. Kouns Carpet stretcher, E. S. Carothers. Carriage body corner construction, J. P. Johnson Carriage, child's, M. & C. R. Piercy. Carriage, child's folding, W. H. Barker. Carriage cuttain fastener, L. J. Luckhaupt. Casing spear, trip, W. H. Kesselman. Cement block machines, core cutter for, J. W. Stuart Cement block molding machine, R. E. Teets Cement fence post molding machine, B. H. McMillan, et al. Cement kiln heat recuperator, C. Ellis. Chair legs for rockers, machine for shaping, H. L. Staley Chandelier, extension gas, Cotton & Moor. Cheese cutter, computing, Louiso & Hens- ley Churn, J. W. Dowden	\$12,280 \$12,190
١,	Churn, W. L. Pool	812,190 \$12,592 812,566
	Clamp, J. J. Stevens	812,459 812,699
	Clay bin emptying apparatus, C. W. Ray- mend	812,230
	Cheese cutter, computing Louiso & Hensley Churn, J. W. Dowden Churn W. L. Pool Churn cover, J. C. Hogue Churns, pumps, etc., motor for, J. H. Skinner Clamp, J. J. Stevens Clay bin emptying apparatus, C. W. Raymond Clay products, system and means for drying and burning, R. W. Lyle Clock and money box, coin controlled, H. Giller Closet bowl seat, Bryant & Allen	812,509 812,200
	Clothes line support, Miethke & Mach	812,480 812,583
	enson	812,723 812,694 812,268
. ,	enson Clutch, I. H. Spencer Coffee roasting machine, F. T. Holmes. Coin controlled apparatus, F. J. Dole. Coin sorting or separating apparatus, B. Cranner	Q19 991
	Coin contring or separating apparatus, B. Cranner Coins and the like, apparatus for delivering or counting, Weinreb & Rabinowitch. Coke drawing machine, D. A. Ramage. Collar for draft animals, F. Leinen. Combing and drawing machine. Crepy & Fremaux Commingting machine, Iveson & Wilson.	812,327 812,624 812,364
	Collar for draft animals, F. Leinen	812,364 812,430 812,241
į	Fremaux Comminuting machine, Iveson & Wilson.	812,550 812,749 812,322
	Fremanx Comminuting machine, Iveson & Wilson Compass, beam, T. N. Badger Concrete block forming machine, E. C. Gluffelter Concrete building block press, J. A. Fer-	812,322 812,336
	Concrete building block press, J. A. Fer- guson	812,416 812,223
	guson. Concrete pile, pillar, etc., G. L. Mouchel. Concrete wall mole, J. L. Richardson Contact system, surface, F. E. Case Conveyer, G. I. Ziems Conveyer, C. W. Levalley Conveyers, roller chain for, A. Johnson	812,365 812,725 812,319
	Conveyers, C. W. Levalley	812,757 812,655 812,564
i	Cooking utensil, J. F. Ferry, reissue	12,452 812,606

# No Automobile is Safe Without a Back Stop Many lives have been lost

Many lives have been lost by Backing Down Hill



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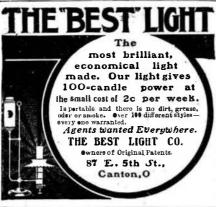
This device is controlled from the seat of the motor car. The position of the Toggle in respect to the band is such, that when the wheel rotates in a forward direction the Toggle will not arrest such movement in any manner; but, if the wheel attempts to move in a reverse direction the Toggle will prevent the movement thereof instantaneously.

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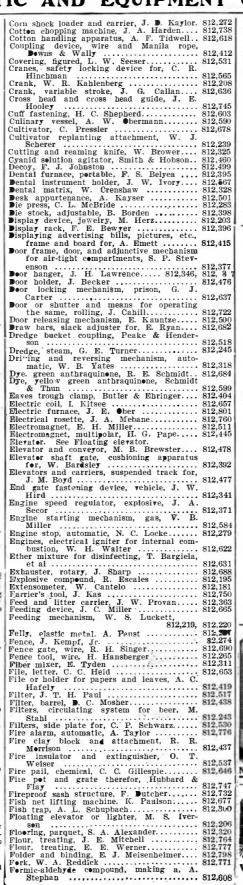
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	Furnace, T. Suzuki Furnace, W. R. Hampden Furnace draft controller, W. McClave Furnaces, preserving the inner walls of, F. C. W. Timm Gage reading device, G. P. Doern. Game, card, I. C. Paul. Garment, back protection, S. F. Swantees. Garment hook, W. H. Hippisley, reissue. Garments supporter, V. H. Rea Garments and the like, rotary hook support for, J. C. Smith	812,619 812,411 812,676 812,612 12,451 812,526
	Garments and the like, rotary hook support for, J. C. Smith	812,691 812,388 812,469
	Garments and the like, rotary hook support for, J. C. Smith.  Gas apparatus, acetylene, P. H. Widman. Gas burner, incandescent, E. R. Wilner  Gas burners, chimney for incandescent, L. Stoess.  Gas burning apparatus, Moreno & D'Antony Gas controlling device, W. T. Dønnelly  Gas engine, explosive, E. G. Shortt  Gas producing and consuming apparatus, power, C. Ellis  Gas purifier, L. P. Lowe	812,610 812,513 812,730 812,304
	Gas regulating device, Wirth & Bradley Gas retort discharging apparatus, Broad-	812,194 812,218 812,627
	Gas retort discharging apparatus, Broad- head & Gasis washer and scrubber, combined, L. P. Lowe Gear reversing H. A. Tuttle.	812,479 812,217 812,533
	Lowe Gear, reversing, H. A. Tuttle. Gearing for extractors, belt, J. T. Truitt. Gearing, transmission, E. Huber Glass, manufacture of silica, J. F. Bottem- ley, et al Gold saving apparatus.   H. Barley	812,703 812,345
	Glass, manufacture of silica, J. F. Bettem- ley, et al Goid saving apparatus, • H. Bagley Governor mechanism, H. T. Ballard Grath, J. A. Thornton Grain cleaning apparatus, H. C. Miller Gramophone, H. S. Mills Grinding mill, J. S. Woodcock Grinding mill, J. S. Woodcock Grinding mill, W. Halstead Gun firing mechanism, Meigs & Jakobsson, 812,431, Guns_recell brake for automatic, J. M.	812,399 812,474 812,630 812,617 812,799 812,512 812,250 812,737
	Gun firing mechanism, Meigs & Jakobsson, 812,431, Guns, recoil brake for automatic, J. M.	-812,432
	Hair pin, J. M. Hartley Hame fastener, J. Stege Hame fastener, G. G. Greene Hammock, swinging, M. N. Wertz. Hanger, See Deor hanger.	812,741 812,462 812,649 812,387
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	Heel and sole, resilient, H. E. Irwin	812,496 812,391 812,324 812,796 812,282
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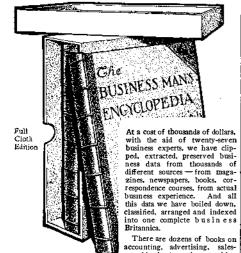


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Lubricator, Maloy & White Lubricator, E. H. Dobse Macaronis, machine for making flat, A. De Vito Mail box, D. W. Morrow Mary Mail box, D. W. Morrow Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Maniling tube sheet and wrapper, H. Del Mar Mary Manurel bars, device for operating, P. C. Patterson Match box, W. Alpert Masure, foot, C. Shiverick Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring electric resistances, apparatus for, S. Evershed Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Metal working machine, fluid pressure, C. Von Philp Meters, system of calibrating recording watt hirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Molding machine, Harris & Prior Molding machine, Harris & Prior Molding machine, Molding Molding Molding Molding machine, Harris & Prior Molding machine, Molding Molding machine, Molding Mold		Looms, give-way connection for box motions	010.40
Lubricator, Maloy & White Lubricator, E. H. Dobse Macaronis, machine for making flat, A. De Vito Mail box, D. W. Morrow Mary Mail box, D. W. Morrow Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Maniling tube sheet and wrapper, H. Del Mar Mary Manurel bars, device for operating, P. C. Patterson Match box, W. Alpert Masure, foot, C. Shiverick Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring electric resistances, apparatus for, S. Evershed Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Metal working machine, fluid pressure, C. Von Philp Meters, system of calibrating recording watt hirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Molding machine, Harris & Prior Molding machine, Harris & Prior Molding machine, Molding Molding Molding Molding machine, Harris & Prior Molding machine, Molding Molding machine, Molding Mold		Looms, shuttle clearing means for filling	812,40
Lubricator, Maloy & White Lubricator, E. H. Dobse Macaronis, machine for making flat, A. De Vito Mail box, D. W. Morrow Mary Mail box, D. W. Morrow Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Maniling tube sheet and wrapper, H. Del Mar Mary Manurel bars, device for operating, P. C. Patterson Match box, W. Alpert Masure, foot, C. Shiverick Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring electric resistances, apparatus for, S. Evershed Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Metal working machine, fluid pressure, C. Von Philp Meters, system of calibrating recording watt hirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Molding machine, Harris & Prior Molding machine, Harris & Prior Molding machine, Molding Molding Molding Molding machine, Harris & Prior Molding machine, Molding Molding machine, Molding Mold		replenishing, J. Northrop	812,51
Lubricator, Maloy & White Lubricator, E. H. Dobse Macaronis, machine for making flat, A. De Vito Mail box, D. W. Morrow Mary Mail box, D. W. Morrow Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Maniling tube sheet and wrapper, H. Del Mar Mary Manurel bars, device for operating, P. C. Patterson Match box, W. Alpert Masure, foot, C. Shiverick Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring electric resistances, apparatus for, S. Evershed Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Metal working machine, fluid pressure, C. Von Philp Meters, system of calibrating recording watt hirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Molding machine, Harris & Prior Molding machine, Harris & Prior Molding machine, Molding Molding Molding Molding machine, Harris & Prior Molding machine, Molding Molding machine, Molding Mold		Bronder and axie, G. A.	812,40
Lubricator, Maloy & White Lubricator, E. H. Dobse Macaronis, machine for making flat, A. De Vito Mail box, D. W. Morrow Mary Mail box, D. W. Morrow Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Maniling tube sheet and wrapper, H. Del Mar Mary Manurel bars, device for operating, P. C. Patterson Match box, W. Alpert Masure, foot, C. Shiverick Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring electric resistances, apparatus for, S. Evershed Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Metal working machine, fluid pressure, C. Von Philp Meters, system of calibrating recording watt hirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Molding machine, Harris & Prior Molding machine, Harris & Prior Molding machine, Molding Molding Molding Molding machine, Harris & Prior Molding machine, Molding Molding machine, Molding Mold		Lubrication pipe, J. Muhlrad	812,35
Lubricator, Maloy & White Lubricator, E. H. Dobse Macaronis, machine for making flat, A. De Vito Mail box, D. W. Morrow Mary Mail box, D. W. Morrow Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Mail box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Mary Manil box, E. T. Marsh Maniling tube sheet and wrapper, H. Del Mar Mary Manurel bars, device for operating, P. C. Patterson Match box, W. Alpert Masure, foot, C. Shiverick Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring and cutting off lengths of fabric, machine for, O'Bryan & Rudolph Masuring electric resistances, apparatus for, S. Evershed Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Mesicated tampon, E. M. Pond. 812,768 to 812,7 Merchandise hook, J. A. A. Rouleau Metal working machine, fluid pressure, C. Von Philp Meters, system of calibrating recording watt hirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, Pratt & Van Natta Mirror support, adjustable, T. G. Lovegrove. Molding machine, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Monument, F. G. Rantzau Motor controller, W. E. Houston Molding machine, Harris & Prior Molding machine, Harris & Prior Molding machine, Molding Molding Molding Molding machine, Harris & Prior Molding machine, Molding Molding machine, Molding Mold		Lubricator. See Axie lubricator. Lubricator. C. C. Dodge812.261.	812.33
Macaronis, machine for making nat, A. De Vito Mail bag catcher and deliverer, H. H. Akers 812,4 Mail box, D. W. Morrow. 812,5 Maili box, E. T. Marsh. 812,6 Mailing tube sheet and wrapper, H. Del Mar		Lubricator, O. O. Kittleson	812,42
Macaronis, machine for making nat, A. De Vito Mail bag catcher and deliverer, H. H. Akers 812,4 Mail box, D. W. Morrow. 812,5 Maili box, E. T. Marsh. 812,6 Mailing tube sheet and wrapper, H. Del Mar		Lubricator, Maloy & White	812,64
Maring the sale and wrapper, 12 812,1 Mandrel bars, device for operating, P. C. Patterson Street and wrapper, 13 812,2 Match box, W. Alpert Street St			
Maring the sale and wrapper, 12 812,1 Mandrel bars, device for operating, P. C. Patterson Street and wrapper, 13 812,2 Match box, W. Alpert Street St		Mail bag catcher and deliverer, H. H. Akers	812,47
Maring the sale and wrapper, 12 812,1 Mandrel bars, device for operating, P. C. Patterson Street and wrapper, 13 812,2 Match box, W. Alpert Street St		Mail box, D. W. Morrow.	812,51
Mar larel bars, device for operating, P. C. Patterson			012,00
Measuring and cutting off lengths of fabric, machine for, Bryan & Rudolph. 812,6 Measuring electric resistances, apparatus for, S. Evershed		Mar	812,18
Measuring and cutting off lengths of fabric, machine for, Bryan & Rudolph. 812,6 Measuring electric resistances, apparatus for, S. Evershed	ı	Patterson	812,22
Measuring and cutting off lengths of fabric, machine for, Bryan & Rudolph. 812,6 Measuring electric resistances, apparatus for, S. Evershed	Ì	Match box, W. Alpert	812,71
Metal working machine, fluid pressure, C. von Philp  worhilp  Meters, system of calibrating recording watt hour, D. P. Morrison  Morrison watt hour, D. P. Morrison  Miror support, adjustable, T. G. Lovegrove 812,6 Molding machine, Pratt & Van Natta 812,2 Monument, F. G. Rantzau 812,2 Monument, F. G. Rantzau 812,2 Motor controller, W. E. Houston 812,7 Net, horse fly, A. Hobt. 812,2 Nut, lock, J. Schmitt 812,2 Nut, lock, J. Schmitt 812,2 Nut lock, J. Schmitt 812,4 Nut lock, M. Mmalia 812,5 Nut tapping machine, Harris & Prior 812,4 Nut, wing, A. S. Reed 812,2 Obstetrical instrument, F. Ledgerwood 812,3 Olil cups, construction of, J. Powell 812,3 Operating table, J. Schoettl, et al. 812,2 Optical instrument, Swasey & Fecker 812,4 ordinance breech mechanism, Dawson & Buckham 812,6 ore concentrator, J. W. Pinder 812,5 Ore, reducing iron, G. M. Westman 812,2 Ore, retrating, E. W. Arnold 812,5 Paint remover, G. Michaelis 812,5 Paper box or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,8 Paper hox or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,5 Paint preservoir, R. T. Gillespie 812,5 Pen, reservoir, R. T. Gillespie 812,5 Pen, reservoir		Measuring and cutting off lengths of fabric,	812,30
Metal working machine, fluid pressure, C. von Philp  worhilp  Meters, system of calibrating recording watt hour, D. P. Morrison  Morrison watt hour, D. P. Morrison  Miror support, adjustable, T. G. Lovegrove 812,6 Molding machine, Pratt & Van Natta 812,2 Monument, F. G. Rantzau 812,2 Monument, F. G. Rantzau 812,2 Motor controller, W. E. Houston 812,7 Net, horse fly, A. Hobt. 812,2 Nut, lock, J. Schmitt 812,2 Nut, lock, J. Schmitt 812,2 Nut lock, J. Schmitt 812,4 Nut lock, M. Mmalia 812,5 Nut tapping machine, Harris & Prior 812,4 Nut, wing, A. S. Reed 812,2 Obstetrical instrument, F. Ledgerwood 812,3 Olil cups, construction of, J. Powell 812,3 Operating table, J. Schoettl, et al. 812,2 Optical instrument, Swasey & Fecker 812,4 ordinance breech mechanism, Dawson & Buckham 812,6 ore concentrator, J. W. Pinder 812,5 Ore, reducing iron, G. M. Westman 812,2 Ore, retrating, E. W. Arnold 812,5 Paint remover, G. Michaelis 812,5 Paper box or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,8 Paper hox or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,5 Paint preservoir, R. T. Gillespie 812,5 Pen, reservoir, R. T. Gillespie 812,5 Pen, reservoir		machine for, O'Bryan & Rudolph	812,67
Metal working machine, fluid pressure, C. von Philp  worhilp  Meters, system of calibrating recording watt hour, D. P. Morrison  Morrison watt hour, D. P. Morrison  Miror support, adjustable, T. G. Lovegrove 812,6 Molding machine, Pratt & Van Natta 812,2 Monument, F. G. Rantzau 812,2 Monument, F. G. Rantzau 812,2 Motor controller, W. E. Houston 812,7 Net, horse fly, A. Hobt. 812,2 Nut, lock, J. Schmitt 812,2 Nut, lock, J. Schmitt 812,2 Nut lock, J. Schmitt 812,4 Nut lock, M. Mmalia 812,5 Nut tapping machine, Harris & Prior 812,4 Nut, wing, A. S. Reed 812,2 Obstetrical instrument, F. Ledgerwood 812,3 Olil cups, construction of, J. Powell 812,3 Operating table, J. Schoettl, et al. 812,2 Optical instrument, Swasey & Fecker 812,4 ordinance breech mechanism, Dawson & Buckham 812,6 ore concentrator, J. W. Pinder 812,5 Ore, reducing iron, G. M. Westman 812,2 Ore, retrating, E. W. Arnold 812,5 Paint remover, G. Michaelis 812,5 Paper box or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,8 Paper hox or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,5 Paint preservoir, R. T. Gillespie 812,5 Pen, reservoir, R. T. Gillespie 812,5 Pen, reservoir	١	for, S. Evershed	812,19
Metal working machine, fluid pressure, C. von Philp  worhilp  Meters, system of calibrating recording watt hour, D. P. Morrison  Morrison watt hour, D. P. Morrison  Miror support, adjustable, T. G. Lovegrove 812,6 Molding machine, Pratt & Van Natta 812,2 Monument, F. G. Rantzau 812,2 Monument, F. G. Rantzau 812,2 Motor controller, W. E. Houston 812,7 Net, horse fly, A. Hobt. 812,2 Nut, lock, J. Schmitt 812,2 Nut, lock, J. Schmitt 812,2 Nut lock, J. Schmitt 812,4 Nut lock, M. Mmalia 812,5 Nut tapping machine, Harris & Prior 812,4 Nut, wing, A. S. Reed 812,2 Obstetrical instrument, F. Ledgerwood 812,3 Olil cups, construction of, J. Powell 812,3 Operating table, J. Schoettl, et al. 812,2 Optical instrument, Swasey & Fecker 812,4 ordinance breech mechanism, Dawson & Buckham 812,6 ore concentrator, J. W. Pinder 812,5 Ore, reducing iron, G. M. Westman 812,2 Ore, retrating, E. W. Arnold 812,5 Paint remover, G. Michaelis 812,5 Paper box or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,8 Paper hox or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,5 Paint preservoir, R. T. Gillespie 812,5 Pen, reservoir, R. T. Gillespie 812,5 Pen, reservoir	ł	Measuring instrument, V. Osborne	812,67
Metal working machine, fluid pressure, C. von Philp  worhilp  Meters, system of calibrating recording watt hour, D. P. Morrison  Morrison watt hour, D. P. Morrison  Miror support, adjustable, T. G. Lovegrove 812,6 Molding machine, Pratt & Van Natta 812,2 Monument, F. G. Rantzau 812,2 Monument, F. G. Rantzau 812,2 Motor controller, W. E. Houston 812,7 Net, horse fly, A. Hobt. 812,2 Nut, lock, J. Schmitt 812,2 Nut, lock, J. Schmitt 812,2 Nut lock, J. Schmitt 812,4 Nut lock, M. Mmalia 812,5 Nut tapping machine, Harris & Prior 812,4 Nut, wing, A. S. Reed 812,2 Obstetrical instrument, F. Ledgerwood 812,3 Olil cups, construction of, J. Powell 812,3 Operating table, J. Schoettl, et al. 812,2 Optical instrument, Swasey & Fecker 812,4 ordinance breech mechanism, Dawson & Buckham 812,6 ore concentrator, J. W. Pinder 812,5 Ore, reducing iron, G. M. Westman 812,2 Ore, retrating, E. W. Arnold 812,5 Paint remover, G. Michaelis 812,5 Paper box or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,8 Paper hox or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,5 Paint preservoir, R. T. Gillespie 812,5 Pen, reservoir, R. T. Gillespie 812,5 Pen, reservoir	İ	Merchandise hook, J. A. A. Rouleau	812,23
Metal working machine, fluid pressure, C. von Philp  worhilp  Meters, system of calibrating recording watt hour, D. P. Morrison  Morrison watt hour, D. P. Morrison  Miror support, adjustable, T. G. Lovegrove 812,6 Molding machine, Pratt & Van Natta 812,2 Monument, F. G. Rantzau 812,2 Monument, F. G. Rantzau 812,2 Motor controller, W. E. Houston 812,7 Net, horse fly, A. Hobt. 812,2 Nut, lock, J. Schmitt 812,2 Nut, lock, J. Schmitt 812,2 Nut lock, J. Schmitt 812,4 Nut lock, M. Mmalia 812,5 Nut tapping machine, Harris & Prior 812,4 Nut, wing, A. S. Reed 812,2 Obstetrical instrument, F. Ledgerwood 812,3 Olil cups, construction of, J. Powell 812,3 Operating table, J. Schoettl, et al. 812,2 Optical instrument, Swasey & Fecker 812,4 ordinance breech mechanism, Dawson & Buckham 812,6 ore concentrator, J. W. Pinder 812,5 Ore, reducing iron, G. M. Westman 812,2 Ore, retrating, E. W. Arnold 812,5 Paint remover, G. Michaelis 812,5 Paper box or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,8 Paper hox or carton, T. J. Landrum 812,7 Paper roll core, S. H. Smart 812,3 Pedestal table, T. C. Beach 812,5 Paint preservoir, R. T. Gillespie 812,5 Pen, reservoir, R. T. Gillespie 812,5 Pen, reservoir	i	Meridian transfer apparatus, G. C. McFar-	019 50
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.	ŀ	Metal coiling drum, W. R. Webster	812,70
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.	ı	Metal working machine, fluid pressure, C.	812 22
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.	ı	Meters, system of calibrating recording watt	012,22
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.	ı	hour, D. P. Morrison	812,43 812 66
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.	ļ	Molding machine, Pratt & Van Natta	812,29
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.	Ì	Motor controller W F Houston	812,29
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.	ł	Net, horse fly, A. Hobt	812,26
Nut lock, M. W. Koch Nut lock, R. G. Jahnke Nut lock, M. Omalia Nut tapping machine, Harris & Prior. Nut wing, A. S. Reed. Nut wing, A. S.		Nut, lock, H. H. Crawford	812,18
Buckham	ļ	Nut lock, J. W. Koch	812,42
Buckham	ı	Nut lock, R. G. Jahnke	812,49
Buckham	ı	Nut tapping machine, Harris & Prior	812,42
Buckham	ļ	Nut, wing, A. S. Reed	812,29
Buckham	i	Oil cups, construction of, J. Powell	812,36
Buckham	ł	Operating table, J. Schoettl, et al	812,246 812,46
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	l	Ordnance breech mechanism, Dawson &	
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	l	•re concentrator. J. W. Pinder	010 50
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	l	ere, reducing iron, G. M. Westman	812,24
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	l	•res. treating. E. W. Arnold	812,27
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	l	Overhead line, E. Giraud	812,56
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	Ì	Paper bag machine, F. E. Strasburg	812,373
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	ı	Paper box or carton, T. J. Landrum	812,21
Paper roll core, S. H. Smart.   \$12,3     Pedestal table, T. C. Beach.   \$12,3     Pen, reservoir, R. T. Gillespie.   \$72,8     Pen, reservoir, R. T. Gillespie.   \$12,6     Pen, reservoir, Pen, reserv	l	Paperhanger's handy device, Harris & Jar-	
Hower	ļ	man	812,740
Hower	l	Pedestal table, T. C. Beach	812,39
Hower	į	Pen, reservoir, R. T. Gillespie	
Hower	ì	Photographic papers, manufacturing, I.	
Hower	ļ	Hoffsummer	812,204
Hower	l	Piano action, Vogel & Snell	812,70
Hower	ļ	Piano bridge, F. Meyer	812,510
Hower	Ì	Piano tone modulating device, J. Sampere	812,23
Hower	l	Pile fabric, woven, A. G. Robertson Pin making machine, safety, W. D. Middle-	
Hower	l	brook	812,762
Hoover	l	Pipe coupling, automatic air, Settino &	
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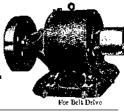
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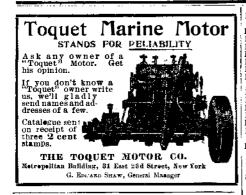
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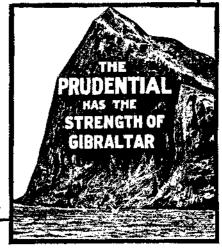
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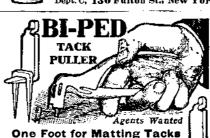
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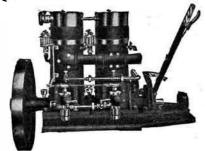


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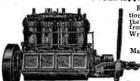


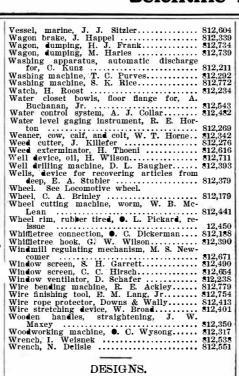
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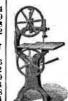
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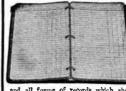


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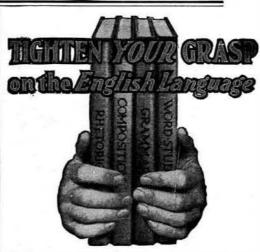
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