would not follow the ways laid out for it. It is not true that the earth curves from a level ten feet in any one mile, as you calculate it to The curvature is 8 inches for one mile and 32 inches for two miles. It is true, however, that the surface of the earth is 13 miles nearer the center of the earth at the poles than it is at the equator.

### NEW BOOKS, ETC.

LLOYD'S REGISTER OF AMERICAN YACHTS A List of the Yachts, Yacht Clubs, and Yachtsmen of the United States, the Dominion of Canada, and the West Indies. New York: Lloyd's Register of Shipping, 17 Battery Place. 1908. 8vo.; pp. 454. Price, \$7.50.

The sixth annual volume of Lloyd's Register of American Yachts for 1908 is now ready for delivery to subscribers. The book, which shows a material increase in size over last year, has been thoroughly revised in all particulars; specially in those relating to the engines of the rapidly-growing fleet of cruis ing launches. There is listed a total of 3,670 yachts, both sail and power, owned in the United States, Canada, and the West Indies, with a total of some 3,500 yacht owners. The color plates give 2,013 private signals of American yachtsmen and the burgees of 365 yacht clubs. One of the most interesting fea tures of the book, as showing the growth of American yachting, is the list of yacht clubs The first American Yacht List, published in 1874 by the late Neils Olsen, listed a total of 32 yacht clubs, and the greatest number listed prior to the establishment of Lloyd's Register of American Yachts was about 170. Lloyd's club list has grown steadily since 1903 until it has now reached a total of 386 clubs distributed in all parts of the United States and British North America. Not a few of these clubs have been established during the past winter. This great increase is made up in three ways: first, of yacht clubs established in new localities; second, of new clubs estab lished to meet the recent growth of the spor in localities where many clubs already exist and the third class of clubs, a large one dis tributed in all parts of the country, is made up of the so-called "power boat," "motor boat," and "launch" clubs. As many of these clubs are located on narrow inland waters where sailing is out of the question, they appeal to an entirely new class, from which in the future the ranks of American yachtsmen will be largely recruited.

THE CHILDREN'S BOOK OF STARS. By G. E. Mitton. New York: Macmillan & Co., 1908. Small square demy 8vo.; 16 full-page illustrations and 12 diagrams. Price, \$2.

The book which lies before us is a sincere attempt to place before children in the simplest possible form the elementary facts of astronomy. In the main the author has suc ceeded admirably, although it must be confessed that technical phraseology has not been so thoroughly eliminated as it might have been, largely because of the very nature o the subject. A good chapter on the use of the spectroscope tells with remarkable simplicity What Stars Are Made Of," and shows that it is possible to present plainly the main facts of one of the most difficult branches o modern astronomy. On page 169 appears an error in describing the spectra of the sun and Sirius, the star Arcturus being incorrectly given instead of Sirius. The general arrangement of the book is that usually adopted in works on astronomy. It proceeds in the order of the earth, moon, planets, sun, comets, meteors, constellations, stars, and nebulæ.

PRACTICAL PERSPECTIVE. By Frank Richards and Fred H. Colvin. Third edi-New York: The Norman Henley Publishing Company, 1908. 12mo.; cloth; 56 pages; 62 illustrations. Price, 50 cents.

Mr. Richards explains the principles isometric perspective and shows several of its applications to machine work. The other treatise is on the use of isometric paper, written by Mr. Colvin. The scheme of this important little book is to show how to make all kinds of mechanical drawings by the isoall kinds of mechanical diameters. Cametric method and adding practical examples Ca of various classes of work.

THE REFRIGERATING ENGINEER'S POCKET Ce MANUAL. An Indispensable Companion for Every Engineer and Student Interested in Mechanical Refrigeration. By Oswald Gueth, M.E., Mem. Am. Soc. Refr. Engrs. New York, 1908. 12mo.; cloth; illustrated; 156 pages. Price, \$1.50.

The practical experience of the author as an engineer has enabled him to give a digest of rules and data of every branch of mechanical refrigeration. In this work he has made use of the opinions held by the leading experts. The field covered comprises Principles and Properties; Refrigerating Machinery; Applications for Mechanical Refrigeration; Operation of Compression Plant; and the Steam Plant. The subdivisions of these parts take the inquirer into a very clear arrangement of subjects which are thoroughly illustrated with diagrams of apparatus, plans, systems, machines, engines, plants, etc., and these are supplied with extensive tables of scales, dimensions, trials, tests, measures, powers, and capacities.

### INDEX OF INVENTIONS

### For which Letters Patent of the

United States were Issued

for the Week Ending August 4, 1908.

AND EACH BEARING THAT DATE

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

y		
,	Abrasive finishing machine, D. S. Oakley. Acid, manufacturing barbituric, O. Wolfes. Adding machine stand caster, A. Hendricks Advertising device, R. Streich. Advertising device, H. A. Goebler. Air, apparatus for treating and heating, G. E. Hesse Air compressor or vacuum pump, E. Gaucher Air liquefying apparatus, J. F. Place. Air, treating and heating, G. E. Hesse. Air, treating and heating, G. E. Hesse. Amalgams or alloys, producing, C. F. Carrier, Jr. Amusement apparatus, E. E. Quaintance. Animal trap, W. C. Hooker. Animal trap, W. C. Hooker.	894 851
_	Acid, manufacturing barbituric, O. Wolfes.	894,99
r	Adding machine stand caster, A. Hendricks Advertising device. R. Streich	894,948 894,988
y   h	Advertising device, H. A. Goebler	895,08
t	E. Hesse	894.831
	Air compressor or vacuum pump, E. Gaucher	895,084
e !	Air, treating and heating, G. E. Hesse	894,83
1- j	Amalgams or alloys, producing, C. F. Car-	805 150
0 ¦	Amusement apparatus, E. E. Quaintance	894,98
e	Animal trap, U. F. Lund	894,962 895.017
	Armature bands, apparatus for applying, R. E. Manley	905 99
e   f	Automatic filter press, E. H. Alvord	894,990
5	Automatic player, G. W. Paulson	894,899 895 209
i-	Awning fastening, separable, J. R. Sullivan	895,12
f	Awnings, means for operating roller, N. Roe Axle box lid. car. H. I. McMahan	895,20 894,89
s.	Armature bands, apparatus for applying, R. E. Manley Automatic filter press, E. H. Alvord. Automatic player, G. W. Paulson Automobile water radiator, C. F. Schell. Awning fastening, separable, J. R. Sullivan Awnings, means for operating roller, N. Roe Axle box lid, car, H. I. McMahan Baler division block, hay, H. N. & W. C. Ellis	895,337
n	Ellis	895,083
ιl	Baling press, C. Clark	894,870 894,93
r	Ellis Baling press, C. Clark Baling press, H. C. Betts Bank calendar holder, savings, Shepard &	
s	Bank, portable savings, Shepard & Mann	895,11 895,11
). 3	Bar hook clamping device, F. Schraudner Battery. See Dry battery.	895,04
s,	Beams, etc., tensioning device, warp, A.	
s,	Brunelle Bearing for vehicle wheels, ball, L. Burg	895,00 894,94
f	Bed bottom, C. Vallone, reissue	12,84
e	Be destad, sofa, H. C. Aiken	895,264 894,80
р	Bell mechanism, door, Pool & Elliott	894,90
đ	Belt, safety, L. L. Hull	895,02
)-	Beams, etc., tensioning device, warp, A. Brunelle Bearing for vehicle wheels, ball, L. Burg. Bed bottom, C. Vallone, reissue. Bed seat, convertible, Harris & Elfert. Bed seat, convertible, Harris & Elfert. Bell mechanism, door, Pool & Elliott. Belt clamp, W. H. Gibert Belt, safety, L. L. Hull Billiard and pool table, combined, R. Schneider	895.11
't	Blind, window, D. I. Andrews	895,13
;	Boiler furnace, J. S. Roake	894,85
le	Billiard and pool table, combined, R. Schneider	895.18
,,	Bolster, H. Aiken	895,32
S	Book, pocket check, F. C. Rhodes	894.88
e	Boot or shoe, Morris & Mulconroy	895,14 895,28
0 1-	Bottle closure, Hapgood & Rowlands Bottle filing apparatus, revolving, A. A.	895,06 895,26
e i	Bottle filling apparatus, revolving, A. A.	000,20
	Bottle sealing machine, A. L. Weissenthan-	890,19
C.	ner	894,86 895,26 895,36
٠.,	Box lifter, S. W. Gunnison	895,36
6	ner nermachine, beer, Hehr & Weber Box lifter, S. W. Gunnison Bracelet, bangle, ring, etc., P. Doppenschmitt Brake actuating lever mechanism, R. H.	895,07
ì-	Brake actuating lever mechanism, R. H.	894 93
	Bowman Brake beam, C. F. Huntoon. Brake block, Frood & Holmes. Brake rigging, W. G. Price Brush, E. Miltner. Brush bolder, J. B. Schultz Brush belf feeding shaving, Hansell & Lewis	895,26
e	Brake rigging, W. G. Price	894,85
1-   of	Brush holder I B Schultz	894,96
g_	Brush, self feeding shaving, Hansell & Lewis	895,01
1-	Bucket, automatic, S. E. Atherton	894,83 895, <b>2</b> 2
n	Buckle, H. W. Zinn	894,87 895 39
e	Buckle, suspender, J. J. Buchanan	895,06
f	Buckle, trace, N. P. Nystrom Buffing machine, A. Bates	894,97 894,80
e	Brake rigging, W. G. Price Brush, E. Miltner Brush holder, J. B. Schultz Brush, self feeding shaving, Hansell & Lewis Brush, shaving, W. Jay Bucket, automatic, S. E. Atherton. Buckle, H. W. Zinn Buckle, R. O'Neill, Jr. Buckle, suspender, J. J. Buchanan Buckle, trace, N. P. Nystrom Buffing machine, A. Bates Buggy box, J. C. Roth Building, rotary, T. F. Gaynor. Button, J. Niederer Cabinet, H. Abrahamson Cabinet, H. Abrahamson Cabinet, J. H. D. Everett Cabinet and pastry board, combined spice, W. Flanders Cable grip, W. J. Selleck Cable hanger, J. D. E. Duncan Cake mixer, A. Tomilisson.	895,30
y it	Button, J. Niederer	895,29
n	Cabinet, J. H. D. Everett	894,87 895,00
ıf	Cabinet and pastry board, combined spice,	894 29
n	Cable grip, W. J. Selleck	895,04
d	W. Flanders Cable grip, W. J. Selleck Cable hanger, J. D. E. Duncan Cake mixer, A. Tomlinson	895,17 895,31
y	Cake turner, S. S. Eccleston	895,35
e- n	Cabe miker, A. Tomlinson. Cake miker, A. Tomlinson. Cake turner, S. S. Eccleston Cane mill, A. F. Delbert Car, B. F. Brumagl·lm Car body and truck, detachable, G. W. Lettinger	895,24
n er	Car body and truck, detachable, G. W. Lettinger	895,27
-	Car hady center bearing I. I Barg	805 14

	Car, B. F. Brumaghim	895,24
ı	Car brake systems, connector for railway, Kelly & Royer  Car cleaning apparatus, H. M. Turner, 894 919	905 97
	Con had senten beening T. T. Donn	890,21
	Car body center bearing, L. J. Berg	890,14
	Car brake systems, connector for railway,	
	Kelly & Royer	895,27
	Car cleaning apparatus, H. M. Turner,	
	894,919,	001,02
	Car controlling apparatus, A. W. Reiling Car coupling, automatic, A. Churcher, Jr	895,10
	Car coupling, automatic, A. Churcher, Jr	894,81
	Car door, grain, O. Nelson	895,03
	Car for electric motor vehicles, trolley,	
		894,93
	Car friction drive mechanism, motor, C. C.	
	Keyser	894,95
	Car, gondola, G. I. King	895,27
	Car, gondola, G. I. King Car loader, W. E. Hunt Car, mine, A. S. Gustafson Car seat, E. G. Budd Carbureting apparatus, H. Keitel Card or ticket holder, J. Black	895,08
	Car, mine, A. S. Gustafson	895,17
	Car seat. E. G. Budd	894,81
	Carbureting apparatus, H. Keitel	895,27
	Card or ticket holder, J. Black	895,33
	Cartridge cases and similar articles, manu-	,
	Cartridge cases and similar articles, manufacture of, S. O. Cowper-Coles.  Carving machine, W. F. Mangels  Cash register or like machine printing mech-	895,16
	Carving machine. W. F. Mangels	895,38
	Cash register or like machine printing mech-	000,00
ı	anism, A. J. Postans	894,98
	Casting apparatus S C Franklin	894.82
	Casting apparatus, S. G. Franklin Casting chilled rolls, mold for, R. H. West,	001,02
i	894 925	894,92
ı	Coment medium compound C H Land	895.09
	Cement medium compound, C. H. Land Cement treating apparatus, O. Gerlach Certificate, validation, J. H. McCameron	894,82
	Cortificate validation I H McCameron	904 90
١	Channeling tool, J. C. Mercer Check delivering, registering, and alarm device, J. W. Jones Chuck, drill, P. Lonergan Churn dasher, T. S. Gill Cigar case, J. Langfeld	205 22
	Chook delivering registering and alarm de-	000,00
	rice I W Iones	905 10
	Chuck drill D Longroon	205 20
	Churn decher T S Cill	205 20
	Cigar asso T Langfold	204 20
	Cinen common C. C. Simplem	004.05
	Cigar crimper, C. G. Singley	894,85
	Circuit breaker, automatic magnetic, w. M.	004.01
	Scott	894,91
	Clothes benging alia A Schoping	894,90
	Clothes hanging clip, A. Schoning Clothes rack, J. B. Baum	005.00
	Clutch A Domestald	895,32
	Clutch, A. Bornefeld	895,15
	Clutch, one-way, F. A. Warren, Jr	894,99
	Coal unloading and distributing apparatus,	005 00
	G. M. Bennett	895,06
	Coaster, amusement, P. Gourdon	895,25
	Coaster brake and speed gearing, W. S.	005.00
	Gabelman	895,08
	Coffee urn, A. E. White	894,86
	Coaster, awusement, P. Gourdon	895,34
	Color book, combination, J. M. Bacon	895,22
	Comb, J. L. Combis	894,81
	Commutator, W. T. Hensley	894.95
	Comb, J. L. Combis Commutator, W. T. Hensley Concrete block press, E. S. Redmond Concrete construction member, reinforced,	895,19
	Concrete construction member, reinforced,	•
	R. Anderson	894,99
	R. Anderson	894,81

	Amenican	
 	Copper, electrodeposition of, S. O. Cowper-	
>	Copper from ores, recovering, W. B. Potter	895,16 894,90
	Corset, A. J. Lecoutre, reissue	12,83
	ing, W. C. Jaegle	895,40 894,91
	Cotton chopper, L. D. Gresham	895,25 894,91
-	Crate, egg, J. Wels Crate, portable pie, C. J. Herrmann	895,01
	Copper, electrodeposition of, S. O. Cowper-Goles Copper from ores, recovering, W. B. Potter Corset, A. J. Lecourte, reissue Cotter pins, device for applying and removing, W. C. Jaegle Cotton chopper, A. W. Smith Cotton chopper, L. D. Gresham Cover fastening means, G. P. Smith. Crate, egg, J. Weis Crate, portable pie, C. J. Herrmann Cream separator, W. L. Dillman Cream separator liner, centratugai, D. R. Green	895.01
į	Crematory, F. P. Smith	894,91 894,84
	Cultivator, G. W. Spragins	895,12 895,21
E	Green Separator liner, centratugat, D. R. Green F. P. Smith Crucibles, etc., treating, W. R. Mitchell. Cultivator, G. W. Spragins Cultivator, C. F. Vermillion Cultivator, W. A. Dromgold Cultivator and harrow, revolving, H. P. Bruans Cultivator attachment J. E. Wright	895,35
.]	Cultivator and harrow, revolving, H. P. Bruass Cultivator attachment, J. E. Wright Cultivator, wheeled, W. S. Graham Current generator, induction, M. Fischer. Current meter, alternating, E. Morck. Curtain, berth, Brown & McPherson Cushion, E. G. Budd Cuspidor support, N. V. & L. Mango Cut-out for indicating means, automatic, A. B. Herrick Cutter blade hclder, inserted, Whittemore & Morgal	894,93 895,13 895,25
-	Current generator, induction, M. Fischer	894,94 895,10
1	Curtain, berth, Brown & McPherson Cushion, E. G. Budd	894,81
19 18	Cuspidor support, N. V. & L. Mango Cut-out for indicating means, automatic, A.	894,81 895,28
35	B. Herrick	894,88
		895,21 894,88
30	Cutter head for suction dredges, B. A. Anderson Delivery apparatus for dry goods, J. Kunz. Dental face bow, J. H. Prothero. Directory, building, F. Fleming Directory, building, F. Fleming Directory, telephone, A. Wilt Dish drainer, M. E. Brockman Dishifecting apparatus, V. A. Williams. Dispensing and measuring apparatus, C. & P. Decosta Display easel, J. E. Twitchell Door hanger, J. H. Burkholder Door lock, combination, D. E. Lombard. Door stop, J. P. Sevigny. Drill and socket therefor, H. Derrer Drill driving gearing, upright, A. E. Newton	895,13
59 34	Dental face bow, J. H. Prothero  Directory, building, F. Fleming	894,98 895,35
2 7	Directory, telephone, A. Wilt	895,32 894,93
34	Disinfecting apparatus, V. A. Williams Dispensing and measuring apparatus, C. &	895,22
96   99   95	Display easel, J. E. Twitchell	895,34
22 10	Door lock, combination, D. E. Lombard	895,38
96 37	Drill and socket therefor, H. Derrer Drill driving gearing, unright, A. E. New-	895,24
	ton	895,10 894,86
76 34	Drill driving gearing, upright, A. E. Newton Dry battery, Wheeler & Wilhelm Drying, baking, and roasting apparatus, P. C. Donner Dust collector, S. W. Keys. Dust collector, A. C. Bartlett Duster, feather, A. C. Ishayl Dye and making same, friable vegetable, F. J. Maywald Dyeing machine, J. Hussong Dynamite or other explosive heater, B. F. Kelly Electric circuit load equalizer, J. S. Peck. Electric circuits, method of and apparatus for controlling. O. Rothenstein	895,07
17 16	Dust collector, S. W. Keys Dust collector, A. C. Bartlett	894,89 895,23 894,83
17	Dyster, feather, A. C. Ishayi	894,96
)1	Dyeing machine, J. Hussong	895,02
10 10	Kelly	895,02 894,97
54 )5	Electric circuits, method of and apparatus for controlling, O. Rothenstein	895,04
)1 31	for controlling, O. Rothenstein Electric machine, dynamo, W. T. Hensley. Electrode for the evolution of ozone from oxygen or atmospheric air, J. R. Craig, Jr.	894,95 895,34
21 10	oxygen or atmospheric air, J. R. Craig,	804 8
39 52	Electrolysis to scouring and squeezing ma- chines, application of J. M. J. Bardot.	895.14
56	Jr.  Electrolysis to scouring and squeezing ma- chines, application of, J. M. J. Baddot. Electromechanical movement, G. H. Davis. Elevator safety device, J. W. Beach Energy recovering, transforming, and con- serving mechanism L. Dion	895,24 895,14
82 23	Energy recovering, transforming, and con- serving mechanism, L. Dion	895,00
00 81 40	serving mechanism, L. Dion	895,22
84 66	Engine starting device, explosion, H. C. Bailey	895,32 894,98
61	Ensilage cutter, Ponsar & Bauercamper Envelop, quick opening, W. D. Smith Equalizer, A. V. & D. M. Baker Eraser cleaning apparatus, blackboard, H.	895,05 894,99
91	Eraser cleaning apparatus, blackboard, H. G. Berkeley	895.23
64 66	Eraser cleaning apparatus, blackboard, H. G. Berkeley Erasing instrument, I. Lucas Excavating apparatus, L. Bree Expansion block, L. Caputo	895,09 895,23
36 70		895,18 895,09
78 36	Explosion engine, T. J. E. Moidon.  Explosion engine, multiple cylinder two- cycle, Winton & Anderson  Explosive, C. Girard  Eyeglass hook, S. J. Clulee  Fabric pasting machine, W. J. O'Donnell.  Fan, steam, R. L. Darter  Fence, iron, F. A. Peter	895,2 895,2
69 46	Eyeglass hook, S. J. Clulee	895,07 894,97
53 68	Fan, steam, R. L. Darter	894,94 895,29
09 14	rence machine, wire, G. E. Mirneid	894,9 894,9 895,0
34 26 70	File, bookkeeping, C. E. Leer	895,0
91 68	Files, device for lifting documents, etc., off, A. Heydemann Filter, A. E. Chapman Filter cleaning system. H. W. Blaisdell Filter oil, J. H. A. Gardiner Filter, sand, J. M. K. Pennink Finger ring marking machine, H. Henrich Fire starter, G. H. Fisher Firearm with drop down barrel, F. Stendebach Fishing rod. Hostetter & Worst.	895,20 895,0
75 07	Filter cleaning system. H. W. Blaisdell Filter oil, J. H. A. Gardiner	894,8° 895,08
04 76	Filter, sand, J. M. K. Pennink Finger ring marking machine, H. Henrich	895,08 895,28 895,18 894,83
93 71 07	Fire starter, G. H. Fisher Firearm with drop down barrel, F. Stende-	894,8
23	Fishing rod, Hostetter & Worst	895,0 895,3 894,8
48 71	Flour oxidizing apparatus, W. L. Jones Flower pot. M. W. Uban	895,40 894,8
15 52	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown	894,8
05 40	Fruit hoy E B Weston	895 2
78 48	Furnace attachment, R. G. Speer	895,0
48 74	Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren.	895.3
20	Furniture, Faust & Brolin, reissue Furniture buffer, J. A. Vogel	12,8 895,2
09 14	Gaff hook, folding, J. M. Thomson Game board, J. H. Trant	895,1 895,1
36 31	Garbage incinerator, W. H. Van Doren	895,1 895,1 895,2
58	Gas engine, C. Burgess, Jr	895,2 894,8 894,8
75	Gas purifier, E. Theisen	895,3
89 79 11 73	Gas valve, safety, Yockey & McLeod Gate, G. W. & C. E. Goss Gate, J. W. Matthews	895,1 895,3 895,2
73 33	Gear connection, resilient, N. W. Storer	895,2 894,9
64	Gearing, A. E. Newton	895,1 895,2 895,2
83 82	Gate, G. W. & C. E. Goss	895,2
24	Hughes & Ely	895,0 895,3
26 94	Goggles, automobile, P. C. M. Montbarbon. Golf club, F. W. Brewster	894,9 894,8
25 95 87	Grader, road, E. Lee	
87 83	Graphite separator, W. M. Fuller	895,2 894,8 895,1
81 99	Grading machine, road, P. J. Jewett	84, 895,3
92 58	Harness, E. B. Guerin	
	Harrow, C. Washington	895,2 895,1
os.		
29 52 91	Heat regulator, G. L. Hopping	894,9 895,3 895,1
91 64	Heel, boot and shoe, J. W. Walker	895,1 894,9
56	Hitching and releasing mechanism for ani- mals combined G. Schrenfer.	895.3

JNS 1e	Coles	205 163 I	Nau	205 020
ıe	Copper from ores, recovering, W. B. Potter	894,902	Jar cover, fruit, S. J. Vasaly	895,317 895,000
	Cotter pins, device for applying and removing, W. C. Jaegle	895,404	Labeling machine, Knapp & Blackstone Lamp, high power, T. J. Litle, Jr	894,891 895,032
	Cotton chopper, A. W. Smith	894,911 895,259	Jar cover, fruit, S. J. Vasaly.  Jar cover, fruit, S. J. Vasaly.  Journal box, A. H. Lewis  Labeling machine, Knapp & Blackstone.  Lamp, high power, T. J. Lite, Jr.  Land roller, A. Beier  Lantern, F. K. Wright	895,230 895,133
ļ	Cream separator liner, centratugai, D. R.	894,913 894,924	Lathes, change speed gearing for engine, A. E. Newton Lawn edge trimmer, J. G. Himmelsbach Leather splitting, machine, F. J. Nash Leather working machine, I. G. Levin	895,106
-	Cream separator, W. L. Dillman	895,076	Leather working machine, F. J. Nash	895,181 894,850
	Green	895,010 894,912	Letter clip, C. A. Locke	895,379 895,087
1	Green Crematory, F. P. Smith Crucibles, etc., treating, W. R. Mitchell Cultivator, G. W. Spragins Cultivator, C. F. Vermillion Cultivator, W. A. Dromgold Cultivator and harrow, revolving, H. P. Bruass	894,845 895,120	Letter clip, C. A. Locke Letter opening machine, Heilbron & Walker Level and plumb rule, W. W. Stettler. Leveling device, C. A. Benson Leveling rod, W. H. Jones Lifter. See Box lifter.	895,311 894,933
ATE	Cultivator, C. F. Vermillion	895,214 895,351	Leveling rod, W. H. Jones Lifter. See Box lifter.	894,955
		894,939	Lifting and lowering apparatus, J. V. Vick-sell Liquid fuel burner, J. A. Willis	
atents.]	Cultivator attachment, J. E. Wright Cultivator, wheeled, W. S. Graham	895,134 895,257	Liquid separator, centrifugal, E. W. Rich-	684,886
894,851	Current generator, induction, M. Fischer Current meter, alternating, E. Morck Curtain berth Brown & McPherson	895.100 I	mond Lock, C. E. C. Edey Locomotive, L. J. Monahan Loom brake mechanism, F. H. Thompson	895,174 895,407
894,994 894,949	Curtain, berth, Brown & McPherson Cushion, E. G. Budd	894,812 895,281	Loom brake mechanism, F. H. Thompson Loom picker stick connection, L. F. Gillespie	895,058 895,252
894,988 895,085	Cut-out for indicating means, automatic, A.	I	Magnetic inductor, M. Fischer	895,396 894,945
894,831	B. Herrick Cutter blade hclder, inserted, Whittemore & Morgal Cutter head, C. Johnson 894,888,	895,219	Magnets, controlling system for lifting, R. I. Wright	895,135
895,084 895,192 894,830	Cutter head for suction dredges, B. A. An-	i	Mail catching and delivering device, M. D.  Cummings	895,004
895,159	derson  Delivery apparatus for dry goods, J. Kunz.  Dental face bow, J. H. Prothero	895,377 894 983	Mail catching and delivering device, R. R. Roth	895,203
894,984 894,962	Directory, building, F. Fleming  Directory, telephone, A. Wilt	895,357 895,320	Manure spreader, A. A. Fokken	895,272 895,358
895,017	Directory, building, F. Fleming Directory, telephone, A. Wilt Dish drainer, M. E. Brockman Disinfecting apparatus, V. A. Williams.	894,938 895,221	Match box. G. F. Kolb	894,848 894,837
894,996	Dispensing and measuring apparatus, C. & P. Decosta Display easel, J. E. Twitchell Door hanger, J. H. Burkholder Door lock, combination, D. E. Lombard	895,346	Mathematical instrument, A. Baur	895,330
894,899 895,205 895,122	Display easel, J. E. Twitchell Door hanger, J. H. Burkholder	895,211 895,156	releasing mechanism for use in justifying, B. F. Bellows	
895,20 <b>0</b> 894,896	Door stop, J. P. Sevigny	895,115 895,244	Meat tenderer S Armstrong	895,276 894 872
895,337	Drill driving gearing, upright, A. E. New-	895.105	Mechanical movement, W. Sullivan Mechanical movement, H. M. Russell, Jr Medicinal washes to the nasal cavity, ap-	894,861 895,305
895,081 894,876	ton		Medicinal washes to the nasal cavity, apparatus for applying, E. S. Antisdale	895,141
894,934	C Donner	895.077	Metal plates, pipes, etc blowpipe for cutting, Jottrand & Lulli	
895,117 895,116	Dust collector, S. W. Keys	895,228 894,833	Milking apparatus, W. Sinclair	895,208
895,047			Milling and drilling machine work support, W. B. Knight Miner's drill, J. Bleser Mixing or separating machine, F. Ecaubert	894,808 805 173
895,001 894,940	J. Maywald Dyeing machine, J. Hussong Dynamite or other explosive heater, B. F. Kelly	895,028	Moisture absorber, D. F. Morgan   Molding machine, F. W. Hall	894,973 895,011
12,840 895,264	Electric circuit load equalizer, J. S. Peck. Electric circuits, method of and apparatus	894,979	Mop wringer, W. H. Wetmore	894,865 895,400
894,805   894,901	for controlling, O. Rothenstein Electric machine, dynamo, W. T. Hensley	895,044 894,950	Motor for washing machines, etc., R. Rain-	
895,361 895,021	Electric switch, J. T. Cooper Electrode for the evolution of ozone from	895,345	alter Mouse trap, W. C. Hooker	895.018
895,110	Electrode for the evolution of ozone from oxygen or atmospheric air, J. R. Craig, Jr.	894,818	Mower, lawn, J. H. Holland	894.826
895,139 894,852 894,856	Electrolysis to scouring and squeezing ma- chines, application of, J. M. J. Bardot. Electromechanical movement. G. H. Davis.	895,144 895,242	Music rack, J. P. Sesseman	000,010
895,182	Electromechanical movement, G. H. Davis Elevator safety device, J. W. Beach Energy recovering, transforming, and con-	895,146	Thurwanger, reissue	12,839
895,323 895,300	Engine revolutions, means for indicating and	895,006	Musical instrument key, stringed, J. T.	
894,881 895,140 895,284	recording marine, E. Amodeo-Salvator. Engine starting device, explosion, H. C.	895,224	Musical instrument, pneumatic mechanical.	
895,284 895,066 895,261	Bailey  Ensilage cutter, Ponsar & Bauercamper Envelop, quick opening, W. D. Smith	895,328 894,981	G. P. Brand	895,235 895,189
895,191	Equalizer, A. V. & D. M. Baker Eraser cleaning apparatus, blackboard, H.	894,999	board, R. H. McHardy	007,011
894,864	G. Berkelev	895.232	Necktie securing device, D. Zaiden	895,322
205 266	Erasing instrument, I. Lucas	895,236 895,158	ing, Turner & Vanderkleed Nut lock, L. P. Schramm Nut lock, W. Brown Nut, locking, A. V. Bryce894,874, 894,875,	895,316 895,207
895,078	Expansion block, L. Caputo Explosion engine, T. J. E. Moldon. Explosion engine, multiple cylinder two- cycle, Winton & Anderson Explosive, C. Clierd	895,099	Nut lock, W. Brown Nut, locking, A. V. Bryce. 894,874, 894,875,	895,335 895,336
894,936 895,269			Ore concentrator. E. Deister	899,108
894,946 894,853	Eyeglass hook, S. J. Clulee	894,976 894,941	895,167, 895,169, Ore corcentrator feeding device, E. Deister. Ore, treating, J. H. Reid	295 196
894.968	Fan, steam, R. L. Darter           Fence, iron, F. A. Peter           Fence machine, wire, G. E. Mirfield	895,297 894,971	Ores, minerals, etc., apparatus for the concentration of, J. C. Greenway.  Oven, baker's, J. Middleby Oxygen generator, A. Beltzer Package tie, W. A. Hayes Dacket wing death	895,363
895,014 894,834	Fence machine, wire, G. E. Mirfield Fence tie, C. E. Birch	894,935 895,031	Oven, baker's, J. Middleby	894,967 895,331
895,226	File for prints, dust proof, C. Potter Files, device for lifting documents, etc., off, A. Heydemann	895.039		
895,068 894,975	Rilter, A. E. Chanman	895.072	Packing, G. R. Noble	895,038
894,807 895,304	Filter cleaning system. H. W. Blaisdell Filter oil, J. H. A. Gardiner Filter, sand, J. M. K. Pennink	895,083 895,296	Packing, red, O. J. Garlock	895,356 895,324
895,176 895,293	Finger ring marking machine, H. Henrich Fire starter, G. H. Fisher	895,180 894,822	Paper machine suction roll, W. H. Mills- paugh	•
894,871 895,007	Firearm with drop down barrel, F. Stende-			895,283
000,000	l bach	000,001	Paper making machine reel, E. J. Pope Paraffining receptable device, E. C. Copper	895,283 895,298 895,340
894,823	l bach	895,372 894,842	Paper making machine reel, E. J. Pope Paraffining receptacle device, E. C. Copper Paste or cake of deflocculated material, pre- paring, E. G. Acheson	895,283 895,298 895,340
894,823 895,048 895,171	bach Fishing rod, Hostetter & Worst Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones Flower pot, M. W. Uban.	895,372 894,842 895,405 894,862	Paste or cake of deflocculated material, pre- paring, E. G. Acheson	895,283 895,298 895,340 895,063 895,019
894,823 895,048 895,171 895,315 895,352 895,005	bach Fishing rod, Hostetter & Worst Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown	895,372 894,842 895,405 894,862 894,857	Paste or cake of deflocculated material, pre- paring, E. G. Acheson	895,283 895,298 895,340 895,063 895,019 895,188 895,374
894,823 895,048 895,171 895,315 895,352 895,005 895,240	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubat. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Fruit box, E. B. Weston Furnace. See Boller furnace.	895,372 894,842 895,405 894,862 894,857 895,239 895,218	Paste or cake of deflocculated material, pre- paring, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Phötographer's background carrier, H. Tom- linson	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918
894,823 895,048 895,171 895,315 895,352 895,005 895,240 895,278 895,148	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system. B. L. Worthen	895,372 894,842 895,405 894,862 894,857 895,239 895,218 895,054 894,869	Paste or cake of deflocculated material, preparing, E. G. Acheson  Pencil holder and sharpener, combined, E. E. Hopkins  Pencil sharpener, lead, A. W. Mueller  Perforating slips for telegraphic signaling, etc., means for, M. Kotyra  Photographer's background carrier, H. Tomlinson  Photographic appliance, F. C. Bradburn et al.	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918
894,823 895,048 895,171 895,315 895,352 895,005 895,240 895,278 895,148	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown. Frutt box, E. B. Weston Furnace. See Boiler furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken	895,372 894,842 895,405 894,862 894,857 895,239 895,218 895,054 895,054 895,051 895,051	Paste or cake of deflocculated material, preparing, E. G. Acheson	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045
894,823 895,048 895,171 895,315 895,352 895,005 895,240 895,278 895,148	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Fruit box, E. B. Weston Furnace. See Boiler furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue.	895,372 894,842 895,405 894,862 894,857 895,239 895,218 895,054 894,869 895,051 895,388 12,837	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire	895,283 895,298 895,304 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034
894,823 895,048 895,171 895,315 895,352 895,005 895,240 895,278 895,148	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Fruit box, E. B. Weston Furnace. See Boiler furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue.	895,372 894,842 895,405 894,862 894,857 895,239 895,218 895,054 894,869 895,051 895,388 12,837	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034
894,823 895,048 895,171 895,315 895,352 895,005 895,240 895,278 895,148	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Fruit box, E. B. Weston Furnace. See Boiler furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue.	895,372 894,842 895,405 894,862 894,857 895,239 895,218 895,054 894,869 895,051 895,388 12,837	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Percorating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al Photographic printing apparatus attachment, H. H. McIntire Photographic Photographic printing apparatus attachment, H. daylight loading and unloading of, R. R. Allen Planos, pneumatic valve action for player, I. Wesser	895,283 895,284 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034
894,823 895,048 895,171 895,352 895,035 895,045 895,240 895,274 895,109 894,814 895,036 894,931 894,938 894,938	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Furlt box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furnater roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Gas board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas groducer, M. E. Crowell Gas producer, M. E. Crowell Gas producer, M. E. Crowell	895,372 894,842 894,862 894,862 894,857 895,239 895,218 895,051 895,128 895,126 895,126 895,128 895,126 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographic spound carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Platographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen J. Wieser Picture Picture Picture Plaster, corn and bunion, P. S. Bauer Plaster, compositions from fixeus metarisks	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034 895,220 894,817 895,143 895,143
894,823 895,048 895,171 895,315 895,352 895,036 895,240 895,278 895,148 895,148 895,103 894,931 894,931 894,931 894,958 894,958 894,958 894,958 895,089	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Furlt box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furnater roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Gas board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas groducer, M. E. Crowell Gas producer, M. E. Crowell Gas producer, M. E. Crowell	895,372 894,842 894,862 894,862 894,857 895,239 895,218 895,051 895,128 895,126 895,126 895,128 895,126 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographic spound carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Platographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen J. Wieser Picture Picture Picture Plaster, corn and bunion, P. S. Bauer Plaster, compositions from fixeus metarisks	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034 895,220 894,817 895,143 895,143
894,823 895,048 895,171 895,315 895,352 895,252 895,240 895,278 895,148 895,149 894,920 894,931 894,931 894,931 894,931 894,931 894,931 895,275 895,089 895,179 894,811 895,275	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flourer pot, M. W. Uban. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston. Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case. P. Fray	894,842 895,405 894,862 894,857 895,239 895,218 895,054 894,869 895,061 895,054 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,136 895,136 895,136 895,286	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographic spound carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Platographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen J. Wieser Picture Picture Picture Plaster, corn and bunion, P. S. Bauer Plaster, compositions from fixeus metarisks	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034 895,220 894,817 895,143 895,143
894,823 895,048 895,171 895,315 895,352 895,252 895,240 895,278 895,178 895,179 894,814 895,275 894,931 894,931 894,938 895,275 895,179 894,811 895,275 895,179 894,817 895,333	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear connection, resilient, N. W. Storer.	895,372 894,842 894,862 894,857 895,239 895,218 895,051 895,061 895,064 895,063 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,136 895,136 895,136 895,136 895,247 895,136	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic penting apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, Messer & Deen Plow, Messer & Deen Plow, weeder, and grubber, surface, Stookey	895,283 895,288 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,325 895,325 895,225 895,234 895,325 895,143 895,143 895,143 895,143 895,143 895,143
894,823 895,048 895,171 895,315 895,352 895,252 895,240 895,278 895,148 895,149 894,920 894,931 894,931 894,931 894,931 894,931 894,931 895,275 895,089 895,179 894,811 895,275	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear connection, resilient, N. W. Storer.	895,372 894,842 894,862 894,857 895,239 895,218 895,051 895,061 895,064 895,063 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,128 895,136 895,136 895,136 895,136 895,247 895,136	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire He daylight loading and unloading of, R. R. Allen Planos, pneumatic valve action for player, J. Weser Picture .anger, J. N. Copeland Plastic compositions from fibrous materials, manufacture of, N. Reif Plastic compositions from fibrous materials, manufacture of, N. Reif Plate lifter, A. C. & C. L. Miller Plow, Messer & Deen Plow, weeder, and grubber, surface, Stookey & Tanner	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034 895,034 895,325 895,220 894,817 895,145 895,145 895,145 895,334 894,921 894,921 894,921
894,823 895,048 895,171 895,315 895,352 895,352 895,240 895,278 895,274 895,109 895,109 894,814 894,814 894,931 894,931 894,931 894,931 895,273 895,333 895,184 895,333	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Uban. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Fruit box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace root, F. Milliken Furniture, Faust & Brolin, reissue. Furniture, Faust & Brolin, reissue. Furniture, buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage inciperator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, W. L. Morrow Gas generator, acetylene, A. W. Hanger. Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, J. W. Matthews Gear cane, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Seofalos, Glass tank furnace, Schies & Wyant. Globe, geographical, H. Harger.	\$90,372 \$94,872 \$94,802 \$94,857 \$95,218 \$95,218 \$95,218 \$95,051 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,127 \$95,126 \$95,127 \$95,127 \$95,127 \$95,127 \$95,128 \$95,129 \$95	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic penting apparatus attachment, H. H. McIntire Photographic pensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser J. Wieser Plature Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, Messer & Deen Plow, Weeder, and grubber, surface, Stookey & Tanner Powder dividing and capsule filling appara-	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,045 895,325 895,220 894,817 895,143 895,143 895,143 895,143 895,144 895,144 894,844 894,844 894,966 894,914 895,165 895,375
894,823 895,048 895,315 895,315 895,352 895,240 895,278 895,148 895,148 894,920 894,931 894,931 894,931 894,938 895,275 895,089 894,811 895,275 895,383 895,383 895,384 894,924	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flourer pot, M. W. Ubbat. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl box, E. B. Weston. Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear canse, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton. Gearing, compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Goggles, automobile, P. C. M. Montbarbon.	\$90,372 \$94,872 \$94,862 \$94,857 \$95,218 \$95,218 \$95,218 \$95,051 \$95,051 \$95,051 \$95,126 \$95,126 \$95,128 \$95,126 \$95,126 \$95,128 \$95,126 \$95,126 \$95,128 \$95,12	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph. Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plaster, corn and bunion, P. S. Bauer Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, Messer & Deen Plow, Taylor L. G. Taylor L. G. Taylor L. G. Taylor L. G. Taylor Power transmitting means, E. J. Fountains Plower transmitting means, E. J. Fountains	895,283 895,298 895,340 895,063 895,019 895,188 895,374 894,918 895,334 895,034 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,145
894,823 895,048 895,315 895,315 895,352 895,240 895,278 895,274 895,148 895,148 894,920 894,931 894,931 894,958 895,275 895,089 894,814 895,333 895,164 895,333 895,164 895,383 894,824 894,824 894,825	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Furnace, See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace coff, W. Sleicher Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Gashage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. E. Crowell Gas purdier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Goggles, automobile, P. C. M. Montbarbon.	\$90,372 \$94,872 \$94,862 \$94,857 \$95,218 \$95,218 \$95,218 \$95,054 \$94,857 \$95,054 \$95,054 \$95,054 \$95,129 \$95,126 \$95,129 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,12	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire He daylight loading and unloading of, R. R. Allen Planos, pneumatic valve action for player, J. Wieser J. Wieser Picture .anger, J. N. Copeland Plastic compositions from fibrous materials, manufacture of, N. Reif Plastic compositions from fibrous materials, manufacture of, N. Reif Plate lifter, A. C. & C. L. Miller Plow, Messer & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting means, E. J. Fountaine Power transmitting meclanism, A. E. New-	895,283 895,288 895,340 895,063 895,019 895,188 895,374 894,918 895,034 895,034 895,325 895,220 894,817 895,145 895,145 895,145 895,165 895,165 895,165 894,917 895,082 894,917 895,082
894,823 895,048 895,171 895,315 895,352 895,352 895,240 895,278 895,109 895,109 894,814 894,920 895,109 894,814 895,036 894,814 895,036 895,275 895,275 895,333 895,333 895,333 895,383 894,824 894,824 894,824 894,929	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Furnace, See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace coff, W. Sleicher Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Gashage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. E. Crowell Gas purdier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Goggles, automobile, P. C. M. Montbarbon.	\$90,372 \$94,872 \$94,862 \$94,857 \$95,218 \$95,218 \$95,218 \$95,054 \$94,857 \$95,054 \$95,054 \$95,054 \$95,129 \$95,126 \$95,129 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,12	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic appliance, F. C. Bradburn et al. Photographic printing apparatus attachment, H. H. McIntire Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Planos, pneumatic valve action for player, J. Wieser J. Wieser J. Wieser Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Poultry feeding and capsule filling apparatus, L. G. Taylor Power transmitting means, E. J. Fountaine Power transmitting means, E. J. Fountaine Power transmitting means, E. J. Fountaine Printing apparatus, stencil, D. Gestetner. Printing machine, A. McPherson	895,283 895,288 895,340 895,063 895,019 895,188 895,374 894,918 894,937 895,045 895,034 895,325 895,220 894,817 895,145
894,823 895,048 895,315 895,315 895,315 895,240 895,278 895,148 895,149 894,920 894,931 894,931 894,931 894,931 894,931 895,333 895,164 895,333 895,383 894,824 894,825 895,387	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flourer pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston. Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace coof, W. Sleicher. Furnace roof, F. Milliken Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, W. L. Morrow Gas engine, W. L. Morrow Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear canse, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton	\$90,372 \$94,872 \$94,862 \$94,857 \$95,239 \$95,218 \$95,218 \$95,054 \$95,054 \$95,054 \$95,126 \$95	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting means, E. J. Fountaine Power transmitting means, E. J. Fountaine Power transmitting means, E. J. Fountaine Printing apparatus, stencil, D. Gestetner. Printing machine, A. McPherson Printing machine, A. McPherson Printing machine, esseving tage.	895,283 895,288 895,340 895,063 895,019 895,188 895,374 894,918 895,045 895,045 895,045 895,045 895,220 894,817 895,145 895,145 895,145 895,145 895,165 894,914 894,914 895,082 894,917 895,082 895,000 894,827 895,102 895,102 895,102 895,102 895,102 895,290
894,823 895,048 895,315 895,315 895,352 895,240 895,278 895,148 895,148 895,149 894,920 894,931 894,958 895,275 895,089 894,811 895,273 895,333 895,164 895,333 894,824 895,383 894,825 894,825 894,825 894,825 894,825 895,383	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. Weston Furlace see Boller furnace governing mechanism, constant, F. H. Brown Furnace. See Boller furnace. Furnace circulatory system, B. L. Worthen Furnace croof, W. Selecher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, W. L. Morrow Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear case, P. Fray Gearing, A. E. Newton Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Glass tank furnace, Schies & Wyant. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Elly Go-cart runner, J. B. Simmons Goggles, automobile, P. C. M. Montbarbon. Goff club, F. W. Brewster. Grading machine, road, P. J. Jewett Graln meter, J. S. Blakely Graphite separator, W. M. Fuller Granding machine, road, P. J. Jewett Granding machine, road, P. J. Jewett Hammock, berth, W. E. MoPherson. Handle fastener, M. F. Mohr	\$90,372 \$94,872 \$94,802 \$94,857 \$95,218 \$95,218 \$95,218 \$95,054 \$94,857 \$95,054 \$95,054 \$95,054 \$95,129 \$95,126 \$95,129 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,12	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Platons, pneumatic valve action for player, J. Wieser J. Wieser Picture .anger, J. N. Copeland Pipastic compositions from fibrous materials, manufacture of, N. Reif Plastic compositions from fibrous materials, manufacture of, N. Reif Plate lifter, A. C. & C. L. Miller Plow, Messer & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting means, E. J. Fountaine Power transmitting meclanism, A. E. New-ton Printing machine, A. McPherson Printing machine, and Reight Printing ribbons, renewing process for, J. R. Gallagher	895,283 895,284 895,340 895,340 895,019 895,188 895,374 894,918 895,045 895,045 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,185 895,375 894,917 895,082 895,290 894,917 895,082 895,290 894,917 895,290 895,290
894,823 895,048 895,315 895,315 895,352 895,278 895,274 895,148 895,148 894,920 894,931 894,931 894,938 895,275 895,089 894,811 895,273 895,383 894,928 894,824 895,383 894,825 894,825 894,825 894,825 895,383 895,383	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl tox, E. B. Weston Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace croof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Goggles, automobile, P. C. M. Montbarbon. Goff club, F. W. Brewster. Graden meter, J. S. Blakely Granim meter, J. S. Blakely Granim meter, J. S. Blakely Granim separator, W. M. Fuller Grand and projectile therefor, J. H. Brown Hanmock, berth, W. E. MoPherson. Handle fastener, M. F. Mohr Harness L. B. Guerin Harness L. G. Weithington	\$90,372 \$94,872 \$95,405 \$94,857 \$95,239 \$95,218 \$95,054 \$94,857 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,129 \$95,126 \$95,136 \$95,13	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographic spining, etc., means for, M. Kotyra Photographic appliance, F. C. Bradburn et al. Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire H. H. McIntire Photographic printing apparatus attachment, etc. al. Pianos, pneumatic valve action for player, J. Wieser J. Wieser Picture Pianos, pneumatic valve action for player, J. Wieser Plaster, corn and bunion, P. S. Bauer Plaster compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, Messer & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting means, E. J. Fountaine per Printing machine, A. McPherson Printing machine, tereet, D. Landau Printing machine, street, D. Landau Printing ribbons, renewing process for, J. R. Gallagher Potractor and parallel ruler, combined, C. J. H. Grant	895,283 895,288 895,340 895,063 895,019 895,188 895,374 894,918 895,045 895,045 895,045 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,185 894,917 895,185 895,325 894,917 895,185 895,325 894,917 895,185 895,258
894,823 895,048 895,315 895,315 895,352 895,274 895,274 895,274 895,109 894,813 895,274 895,036 894,931 894,958 895,275 895,039 894,813 895,333 895,164 895,333 895,164 895,383 894,825 895,94	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flourer pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl tox, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace coof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear canse, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogfles, automobile, P. C. M. Montbarbon. Goff club, F. W. Brewster. Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakely Graphite separator, W. M. Fuller Gun and projectile therefor, J. H. Brown Hanmock, berth, W. E. McPherson. Hanness loop, A. W. Kreuter Harrow, C. Washington Harvester reel, G. F. Beal	\$90,372 \$94,872 \$94,862 \$94,857 \$95,239 \$95,218 \$95,054 \$94,865 \$95,054 \$95,054 \$95,054 \$95,054 \$95,054 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,136 \$95,247 \$95,136 \$95,266 \$95,271 \$94,803 \$95,157 \$95,389 \$95,376 \$95,376 \$95,376 \$95,376 \$95,376	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic appliance, F. C. Bradburn et al. Photographic printing apparatus attachment, H. H. McIntire Photographic pensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Piantic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, weeder, and grubber, surface, Stookey & Tanner Plow, weeder, and grubber, surface, Stookey & Tanner Power transmitting means, E. J. Fountaine Power transmitting means, E. J.	895,283 895,340 895,340 895,340 895,340 895,188 895,374 894,918 895,045 895,045 895,045 895,14
894,823 895,048 895,171 895,315 895,322 895,005 895,240 895,278 895,109 895,109 894,814 894,920 895,109 894,814 894,931 894,931 895,036 895,275 895,333 895,036 895,183 895,833 895,833 895,834 894,824 894,824 894,824 894,825 895,383 895,38	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Furnace. See Boiler furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Eurgess, Jr. Gas generator, acctylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, J. W. Matthews Gear case, P. Fray Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Goggles, automobile, P. C. M. Montbarbon. Golf club, F. W. Brewster. Grading machine, road, P. J. Jewett Grand machine, road, P. J. Jewett Harrow, C. Washington Harness, B. B. Guerin Harness, B. B. Guerin Harness, C. L. Honning Heat revulator G. L. Honning	\$90,312 \$94,812 \$94,82 \$94,862 \$94,857 \$95,239 \$95,218 \$95,051 \$895,051 \$895,051 \$895,126 \$895,126 \$895,126 \$895,126 \$895,126 \$95,126	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic appliance, F. C. Bradburn et al. Photographic printing apparatus attachment, H. H. McIntire Photographic pensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser J. Wieser J. Wieser Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, Weeser & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Poutry feeding device, W. M. & R. M. Cox Poultry roost, C. W. Kriedler Power transmitting means, E. J. Fountaine Printing machine, A. McPherson Printing machine, Merherson Printing machine, Street, D. Landau Printing system, two-phase, G. C. McFarlunce Purgle T. Scrutchin	895,283 895,288 895,340 895,063 895,019 895,188 895,374 894,918 895,045 895,045 895,045 895,220 894,817 895,145
894,823 895,048 895,171 895,315 895,322 895,005 895,240 895,278 895,109 895,109 894,814 894,920 895,109 894,814 894,931 894,931 895,036 895,275 895,333 895,036 895,183 895,833 895,833 895,834 894,824 894,824 894,824 894,825 895,383 895,38	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown Furnace. See Boiler furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Eurgess, Jr. Gas generator, acctylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, J. W. Matthews Gear case, P. Fray Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Goggles, automobile, P. C. M. Montbarbon. Golf club, F. W. Brewster. Grading machine, road, P. J. Jewett Grand machine, road, P. J. Jewett Harrow, C. Washington Harness, B. B. Guerin Harness, B. B. Guerin Harness, C. L. Honning Heat revulator G. L. Honning	\$90,312 \$94,812 \$94,82 \$94,862 \$94,857 \$95,239 \$95,218 \$95,051 \$895,051 \$895,051 \$895,126 \$895,126 \$895,126 \$895,126 \$895,126 \$95,126	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting mechanism, A. E. New- Printing apparatus, stencil, D. Gestetner Printing machine, A. McPherson Printing machine, A. McPherson Printing machine, street, D. Landau Printing ribbons, renewing process for, J. R. Gallagher Protzie, T. Scrutchin	895,283 895,340 895,340 895,019 895,188 895,374 894,918 895,045 895,045 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,250 894,917 895,082 895,290 894,917 895,082 895,290 894,918 895,290 894,918 895,290 895,29
894,823 895,048 895,315 895,315 895,315 895,278 895,274 895,109 894,813 894,931 894,931 894,931 894,931 894,931 895,275 895,179 894,811 895,275 895,179 894,811 895,275 895,179 894,811 895,275 895,183 895,183 895,184 895,333 895,184 895,385 894,825 894,824 894,825 894,82	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl tox, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace coof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear canse, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogfles, automobile, P. C. M. Montbarbon. Golf club, F. W. Brewster. Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakely Graphite separator, W. M. Fuller Gun and projectile therefor, J. H. Brown Hanmock, berth, W. E. McPherson. Hanness loop, A. W. Kreuter Harrow, C. Washington Harvester reel, G. F. Beal Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heat controlling device, W. M. Fulton	\$90,372 \$94,872 \$95,405 \$94,857 \$95,239 \$95,218 \$95,054 \$95,054 \$94,857 \$95,126 \$95,054 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,13	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting mechanism, A. E. New- Printing apparatus, stencil, D. Gestetner Printing machine, A. McPherson Printing machine, A. McPherson Printing machine, street, D. Landau Printing ribbons, renewing process for, J. R. Gallagher Protzie, T. Scrutchin	895,283 895,340 895,340 895,019 895,188 895,374 894,918 895,045 895,045 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,250 894,917 895,082 895,290 894,917 895,082 895,290 894,918 895,290 894,918 895,290 895,29
894,823 895,048 895,315 895,315 895,315 895,278 895,274 895,109 894,813 894,931 894,931 894,931 894,931 894,931 895,275 895,179 894,811 895,275 895,179 894,811 895,275 895,179 894,811 895,275 895,183 895,183 895,184 895,333 895,184 895,385 894,825 894,824 894,825 894,82	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl tox, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace coof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear canse, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogfles, automobile, P. C. M. Montbarbon. Golf club, F. W. Brewster. Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakely Graphite separator, W. M. Fuller Gun and projectile therefor, J. H. Brown Hanmock, berth, W. E. McPherson. Hanness loop, A. W. Kreuter Harrow, C. Washington Harvester reel, G. F. Beal Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heat controlling device, W. M. Fulton	\$90,372 \$94,872 \$95,405 \$94,857 \$95,239 \$95,218 \$95,054 \$95,054 \$94,857 \$95,126 \$95,054 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,126 \$95,13	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting mechanism, A. E. New- Printing apparatus, stencil, D. Gestetner Printing machine, A. McPherson Printing machine, A. McPherson Printing machine, street, D. Landau Printing ribbons, renewing process for, J. R. Gallagher Protzie, T. Scrutchin	895,283 895,340 895,340 895,340 895,188 895,374 894,918 895,045 895,045 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,145 895,145 895,145 895,250 894,917 895,082 895,290 894,917 895,082 895,290 894,918 895,290 894,918 895,290 895,29
894,823 895,048 895,171 895,315 895,252 895,278 895,274 895,109 894,920 895,109 894,814 895,275 894,931 894,931 894,938 895,179 894,811 895,275 895,179 894,811 895,275 895,183 895,184 895,333 895,184 895,381 895,184 895,381 895,885 894,825 894,825 894,826 894,827 894,828 895,381	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Furl box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace coof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear canse, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, Compensating, D. E. Ross. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogfles, automobile, P. C. M. Montbarbon. Golf club, F. W. Brewster. Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakely Graphite separator, W. M. Fuller Gun and projectile therefor, J. H. Brown Hanmock, berth, W. E. McPherson. Handle fastener, M. F. Mohr Harness, E. B. Guerin Harness loop, A. W. Kreuter Harnow, C. Washington Harvester reel, G. F. Beal Harting and releasing mechanism for ani- mer Hughes, Schipping can, H. N. Backus Hitching and releasing mechanism for ani- mals, combined, G. Schrepfer. Hofst, traveling, Strobel & Hogrebe.	\$90,372 \$94,872 \$95,405 \$94,857 \$95,239 \$95,218 \$95,054 \$95,054 \$94,857 \$95,126 \$95,054 \$95,126 \$95,136 \$95,13	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph Photographic printing apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, weeder, and grubber, surface, Stookey & Tanner Poultry feeding device, W. M. & R. M. Cox Powder dividing and capsule filling apparatus, L. G. Taylor Power transmitting mechanism, A. E. New- Printing apparatus, stencil, D. Gestetner Printing machine, A. McPherson Printing machine, A. McPherson Printing machine, street, D. Landau Printing ribbons, renewing tape, E. Eig- ner Poutler, Scrutchin Puzzle, C. B. Roseuberger Rail bond, A. B. Herrick Rail joint, D. Scanlan Rail joint, O. Scanlan	895,283 895,340 895,340 895,340 895,318 895,318 895,318 895,374 894,918 895,325 895,32
894,823 895,048 895,171 895,315 895,252 895,274 895,274 895,109 894,814 895,275 894,931 894,931 894,958 895,275 895,179 894,814 895,273 895,179 894,814 895,273 895,183 895,273 895,183 895,183 895,183 895,183 895,183 895,184 895,184 895,185 894,910 894,910 894,910 894,910 894,910 894,910 895,014 895,01	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace cof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, A. E. Newton Gogles, automobile, P. C. M. Montbarbon. Golfo club, F. W. Brewster Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogles, automobile, P. C. M. Montbarbon. Goff club, F. W. Brewster Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakley Graphite separator, W. M. Fuller Gran mad stock rack, combined, W. C. Skinner Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness hoot and shoe, J. W. Walker Hart controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heating system attachment, E. H. Gold Hughe, Shipping can, H. N. Backus Hitching and releasing mechanism for ani- mals, combined, G. Schrepfer Holst, traveling, Strobel & Hogrebe Hoop, J. G. Marsh Horse relagasing annessture C. C. Biob	\$90,372 \$94,872 \$94,862 \$94,857 \$95,239 \$95,218 \$95,054 \$94,857 \$95,239 \$95,054 \$94,857 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,136 \$95,136 \$95,136 \$95,136 \$95,266 \$95,266 \$95,266 \$95,266 \$95,277 \$95,137 \$95,136 \$95,277 \$95,137 \$95	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic printing apparatus attachment, H. H. McIntire Photographic pensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Relf Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, Wesser & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Plow, Wesser & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Power transmitting means, E. J. Fountaine Power transmitting me	895,283 895,340 895,340 895,340 895,193 895,344 894,937 895,043 895,344 894,937 895,143 895,345 895,34
894,823 895,048 895,171 895,315 895,240 895,278 895,274 894,920 895,109 894,814 894,931 894,931 894,931 894,931 894,931 894,933 894,835 894,833 894,833 894,833 894,833 894,833 894,833 894,835 894,833 895,343 895	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace cof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, A. E. Newton Gogles, automobile, P. C. M. Montbarbon. Golfo club, F. W. Brewster Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogles, automobile, P. C. M. Montbarbon. Goff club, F. W. Brewster Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakley Graphite separator, W. M. Fuller Gran mad stock rack, combined, W. C. Skinner Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness hoot and shoe, J. W. Walker Hart controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heating system attachment, E. H. Gold Hughe, Shipping can, H. N. Backus Hitching and releasing mechanism for ani- mals, combined, G. Schrepfer Holst, traveling, Strobel & Hogrebe Hoop, J. G. Marsh Horse relagasing annessture C. C. Biob	\$90,372 \$94,872 \$94,862 \$94,857 \$95,239 \$95,218 \$95,054 \$94,857 \$95,239 \$95,054 \$94,857 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,136 \$95,136 \$95,136 \$95,136 \$95,266 \$95,266 \$95,266 \$95,266 \$95,277 \$95,137 \$95,136 \$95,277 \$95,137 \$95	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic printing apparatus attachment, H. H. McIntire Photographic pensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Relf Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, Wesser & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Plow, Wesser & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Power transmitting means, E. J. Fountaine Power transmitting me	895,283 895,340 895,340 895,340 895,193 895,344 894,937 895,043 895,344 894,937 895,143 895,345 895,34
894,823 895,048 895,171 895,315 895,240 895,278 895,274 894,920 895,109 894,814 895,036 894,931 894,931 894,931 894,931 894,931 894,931 894,931 895,273 895,333 895,333 895,333 895,333 895,333 895,333 895,333 895,333 894,825 894,825 894,825 894,825 894,825 894,825 894,825 894,826 894,827 894,828 894,828 894,829 894,829 894,829 895,387 895	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace cof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, A. E. Newton Gogles, automobile, P. C. M. Montbarbon. Golfo club, F. W. Brewster Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogles, automobile, P. C. M. Montbarbon. Goff club, F. W. Brewster Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakley Graphite separator, W. M. Fuller Gran mad stock rack, combined, W. C. Skinner Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness hoot and shoe, J. W. Walker Hart controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heating system attachment, E. H. Gold Hughe, Shipping can, H. N. Backus Hitching and releasing mechanism for ani- mals, combined, G. Schrepfer Holst, traveling, Strobel & Hogrebe Hoop, J. G. Marsh Horse relagasing annessture C. C. Biob	\$90,372 \$94,872 \$94,862 \$94,857 \$95,239 \$95,218 \$95,054 \$94,857 \$95,239 \$95,054 \$94,857 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,126 \$95,129 \$95,136 \$95,136 \$95,136 \$95,136 \$95,266 \$95,266 \$95,266 \$95,266 \$95,277 \$95,137 \$95,136 \$95,277 \$95,137 \$95	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic printing apparatus attachment, H. H. McIntire Photographic pensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser Picture Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Relf Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, Wesser & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Plow, Wesser & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Power transmitting means, E. J. Fountaine Power transmitting me	895,283 895,340 895,340 895,340 895,193 895,344 894,937 895,043 895,344 894,937 895,143 895,345 895,34
894,823 895,048 895,141 895,152 895,252 895,268 895,274 895,109 894,814 895,109 894,814 895,109 894,814 895,275 894,931 894,958 895,179 895,183 895,183 894,824 894,824 894,824 894,825 894,824 894,825 894,828 894,828 894,829 895,183 895,183 895,183 895,184 895,284 895,285 895,387 895,387 895,183 895,387 895,183 895,387 895,487 895	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flourer pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston Furnace. See Boiler furnace. Furnace attachment, R. G. Speers. Furnace circulatory system, B. L. Worthen Furnace roof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, W. L. Morrow Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, compensating, D. E. Ross. Glass tank furnace, Schies & Wyant. Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Goggles, automobile, P. C. M. Montbarbon. Golf club, F. W. Brewster Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakely Graphite separator, W. M. Fuller Gun and projectile therefor, J. H. Brown Hanmock, berth, W. E. McPherson. Hanness loop, A. W. Kreuter Harnow, C. Washington Harvester reel, G. F. Beal Harses system attachment, E. H. Gold. Heel, boot and shoe, J. W. Walker. Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping Heating system attachment, E. H. Gold. Heel, boot and shoe, J. W. Walker. Heat controlling device, W. M. Fulton Heat regulator, G. L. Hopping, Heating system attachment, E. H. Gold. Heel, boot and shoe, J. W. Walker. Helle, boot and shoe, J. W. Walker. Holst, traveling, Strobel & Hogrebe Hoop, J. G. Marsh Horse releasing apparatus, C. C. Rich Horsesboe, H. A. Har	\$90,372 \$94,872 \$95,405 \$94,857 \$95,239 \$95,218 \$95,054 \$95,054 \$95,054 \$95,054 \$95,054 \$95,054 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,136 \$95,13	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph. Photographic penitting apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser J. Wieser Picture Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, Messer & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Power transmitting means, E. J. Fountaine Power transmitting means, E. J. Fountaine Power transmitting mechanism, A. E. Newton ton Printing apparatus, stencil, D. Gestetner. Printing machine, A. McPherson Printing machine, street, D. Landau Printing ibbons, renewing process for, J. R. Gallagher Potractor and parallel ruler, combined, C. J. H. Grant Pulp classifier, A. G. Kirby Pump plston, air, T. R. Green Pumping system, two-phase, G. C. McFarlan land Scrutching street, D. Landau Puzzle, T. Scrutchin Puzzle, C. B. Rosenberger Rail bond, A. B. Herrick El chair, H. P. Ellerbeck Rail joint, O. Scanlan Rail joint, O. Scanlan Rail joint, D. Scanlan Railway signal, electric, McMaugh & Welch Railway	895,283 895,283 895,340 895,063 895,019 895,188 895,374 894,918 895,325 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,188 895,250 894,917 895,188 895,280 894,914 895,185 895,280 895,102 895,290 894,817 895,185 895,280 895,197 895,185 895,280 895,197 895,185 895,280 895,197 895,185 895,280 895,198 895,280 895,290
894,823 895,048 895,141 895,152 895,252 895,268 895,274 895,109 894,814 895,109 894,814 895,109 894,814 895,275 894,931 894,958 895,179 895,183 895,183 894,824 894,824 894,824 894,825 894,824 894,825 894,828 894,828 894,829 895,183 895,183 895,183 895,184 895,284 895,285 895,387 895,387 895,183 895,387 895,183 895,387 895,487 895	bach Fishing rod, Hostetter & Worst. Flexible coupling, R. L. Lowry Flour oxidizing apparatus, W. L. Jones. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flower pot, M. W. Ubai. Flue cleaner, L. C. Rogers. Fluid pressure automatic governing mechanism, constant, F. H. Brown. Fruit box, E. B. Weston Furnace. See Boller furnace. Furnace attachment, R. G. Speer. Furnace circulatory system, B. L. Worthen Furnace cof, W. Sleicher Furnace roof, F. Milliken Furniture, Faust & Brolin, reissue. Furniture buffer, J. A. Vogel. Gaff hook, folding, J. M. Thomson. Game board, J. H. Trant Garbage incinerator, W. H. Van Doren. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas engine, C. Burgess, Jr. Gas generator, acetylene, A. W. Hanger. Gas producer, M. E. Crowell Gas purifier, E. Theisen Gas valve, safety, Yockey & McLeod. Gate, G. W. & C. E. Goss. Gate, J. W. Matthews Gear case, P. Fray Gear connection, resilient, N. W. Storer. Gearing, A. E. Newton Gearing, A. E. Newton Gogles, automobile, P. C. M. Montbarbon. Golfo club, F. W. Brewster Globe, geographical, H. Harger. Globe operating mechanism, geographical, Hughes & Ely Go-cart runner, J. B. Simmons Gogles, automobile, P. C. M. Montbarbon. Goff club, F. W. Brewster Grader, road, E. Lee Grading machine, road, P. J. Jewett Gran meter, J. S. Blakley Graphite separator, W. M. Fuller Gran mad stock rack, combined, W. C. Skinner Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness loop, A. W. Kreuter Harness hoot and shoe, J. W. Walker Hart controlling device, W. M. Fulton Heat regulator, G. L. Hopping. Heating system attachment, E. H. Gold Hughe, Shipping can, H. N. Backus Hitching and releasing mechanism for ani- mals, combined, G. Schrepfer Holst, traveling, Strobel & Hogrebe Hoop, J. G. Marsh Horse relagasing annessture C. C. Biob	\$90,372 \$94,872 \$95,405 \$94,857 \$95,239 \$95,218 \$95,054 \$95,054 \$95,054 \$95,054 \$95,054 \$95,054 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,128 \$95,136 \$95,13	Paste or cake of deflocculated material, preparing, E. G. Acheson Pencil holder and sharpener, combined, E. E. Hopkins Pencil sharpener, lead, A. W. Mueller. Perforating slips for telegraphic signaling, etc., means for, M. Kotyra. Photographer's background carrier, H. Tomlinson Photographic appliance, F. C. Bradburn et al. Photographic appliance, F. C. Bradburn et al. Photographic objective, P. Rudolph. Photographic penitting apparatus attachment, H. H. McIntire Photographic sensitized plates, means for the daylight loading and unloading of, R. R. Allen Pianos, pneumatic valve action for player, J. Wieser J. Wieser Picture Langer, J. N. Copeland Pipe clamp, O. S. Augensen Plastic compositions from fibrous materials, manufacture of, N. Reif Plate handler, R. Brooks Plate lifter, A. C. & C. L. Miller Plow, A. L. Van Valkenburgh Plow, Messer & Deen Plow, weeder, and grubber, surface, Stookey & Tanner Power transmitting means, E. J. Fountaine Power transmitting means, E. J. Fountaine Power transmitting mechanism, A. E. Newton ton Printing apparatus, stencil, D. Gestetner. Printing machine, A. McPherson Printing machine, street, D. Landau Printing ibbons, renewing process for, J. R. Gallagher Potractor and parallel ruler, combined, C. J. H. Grant Pulp classifier, A. G. Kirby Pump plston, air, T. R. Green Pumping system, two-phase, G. C. McFarlan land Scrutching street, D. Landau Puzzle, T. Scrutchin Puzzle, C. B. Rosenberger Rail bond, A. B. Herrick El chair, H. P. Ellerbeck Rail joint, O. Scanlan Rail joint, O. Scanlan Rail joint, D. Scanlan Railway signal, electric, McMaugh & Welch Railway	895,283 895,283 895,340 895,063 895,019 895,188 895,374 894,918 895,325 895,325 895,220 894,817 895,145 895,145 895,145 895,145 895,188 895,250 894,917 895,188 895,280 894,914 895,185 895,280 895,102 895,290 894,817 895,185 895,280 895,197 895,185 895,280 895,197 895,185 895,280 895,197 895,185 895,280 895,198 895,280 895,290

894,992

# **Classified Advertisements**

Advertising in this column is 75 cents a line. No less than four nor more than ten lines accepted. Count seven words to the line. All orders must be accompanied by a remittance. Further information sent on

request.
READ THIS COLUMN CAREFLLLY.—You will 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. There is no charge for this service. In every case it is necessary to give the number of the inquiry. Where manufacturers do not respond promptly the inquiry may be repeated.

MUNN & CO.

MUNN & CO.

### BUSINESS OPPORTUNITIES.

SHOE STRING MANUFACTURERS send sample of goods with prices of ten inch white, pure linen, hollow shoe strings tipped. in 100 gross lots. As smooth a twist of thread as possible to be used in the manufacture. Address W. A. Steinemann, 1615 Milchigan Avenue, Los Angeles, Cal.

Inquiry No. 8607.—Wanted to buy an electric incubator.

A CORPORATION of highest standing having large well equipped factory and seling organization and ample capital, desires to manufacture and market mechanical inventions of unquestioned merit. Correspondence solicited. Address K. A., Box 773, N. Y. City. Inquiry No. 8611.—Wanted to buy springs for light power purposes.

WEBB'S "HINGE JOINT" BELT HOOKS.—No tool required. Are beaten into belt with a hammer. Send \$1.00 for 500 hooks. Makes 6 feet in width of belt. Webb Hinge Belt Hook Co. Boonton, New Jersey. Inquiry No. 8628.—Wanted to buy paying block machines for use with partly fluid substances.

### PATENTS FOR SALE.

FOR SALE.—A sash lock and ventilator, recently patented, will sell cheap for cash. Address J. S. Packer, Box 322, Salt Lake, Utah.

Inquiry No. 8649.—Wanted to buy non-inflamma ble celluloid.

FOR SALE.—Patent 822.066. Combination tool. Hammer staple puller, wire cutter and screw driver. Just the thing for the farmer. Outright or on royalty. Investigate this. B. Morkert, \$13 Monroe St., Des Moines, lowa. Inquiry No. 8650 .- Wanted to buy file cutting machinery.

FOR SALE.—Patent No. 887.747. Match-delivering pucket-safe. A simple and useful novelty. For full information address E. J. Anderson, 20 Catharine Street, Worcester, Mass.

Inquiry No. 8652. -Wanted address of manufacturers of drop forged wrenches.

WANTED CASH OFFER for U. S. American rights of Ramsay's patent ruler. No. 719.257, 1903. Celluloid etc. Combines spacing dial, footrule, set square, pencicase. Cable direct. August, Christchurch, New Zealand Inquiry No. 8654.—Wanted addresses of case-hardeners in New York.

A WIRE EYE FASTENER for ladies' sarments that will prevent the sharp point of hook from wearing and tearing the garment. Address Joseph Bischof, & Faneuil Hall Square, Boston, Mass.

Inquiry No. 8667.—Wanted to buy needle, pin and pen machinery.

FOR SALE.—Rip-saw Dog. Big Profit. Fast Seller Will sell cheap. For full particulars write Geo. H. Schaller, Jr., 715 Bakewell Street, Covington, Ky.

Inquiry No. 8682.—Wanted to buy model of old battleship "Maine."

FOR SALE.—The Rodick Automatic Trolley Car Fender. For further information address J. Colbert, 323 Warren Street, Boston. Mass.

Inquiry No. 8685. Wanted to buy 11/2 to 2-inch No. 13 to 18 tempered spring steel.

FOR SALE.—Patent No. 883,904 Vard Truck. Also Canadian Patent applied for. A great labor saver in handling lum ber around saw mills and lumber yards, H. Paulson, Box 27, Orting, Wash.

# WANTED-MISCELLANEOUS.

FWANTED.—To manufacture specialties in brass. Equipment for spinning, casting and machine work. Chandelier and Art Brass Works, Richmond, Ind.

Inquiry No. 8687.-Wanted to buy motor plows.

2d-hand paper paraffining mach. A. R. Co., Box 773, N.Y. inquiry No. 8691.—Wanted to buy for export to British Guiana alcohol motors.

# BOOKS AND MAGAZINES.

BUILD MISSION FURNITURE. Send 20 cents for three designs of easily made pieces of furniture for hall, den or library. Full directions for making and putting together. Furniture can be made by anyone who can handle a saw. List of books on home handicrafts free. Ask for free sample copy of Electrician and Mechanic, finely illustrated magazine written in popular style, devoted to all kinds of mechanical work. Sampson Publishing Company, 1151 Beacon Building, Boston, Mass.

Inquiry No. 8692.—Wanted to buy kerosene oil motors for export.

# LISTS OF MANUFACTURERS.

COMPLETE LISTS of manufacturers in all lines supplied at short notice at the rate of \$13.00 per thousand, ir large quantities, for big industries and callings. Small and special lists compiled to order at various prices. Thus 100 windmill manufacturers list would cost \$2.50. etc. Certain lists of rare trades are much more expensive. Thus 100 names of oatmeal manufacturers would cost \$15. Estimates should be obtained before remitting. Address A. A. H., Bix 773, New York.

Inquiry No. 8694.—Wanted to buyflywheels and ball bearings.

A LIST OF 1.500 mining and consulting engineers on cards. A very valuable list for circularizing, etc. Price \$15.00. Address A, A. H., Box 773, New York.

- Wanted to buy two stranded

Inquiry No. 8701 .- Wanted to buy solar engines. Inquiry No. 8710. -For machinery for carding spinning and weaving jute.

Inquiry No. 8716.—For manufacturers of flowe garden and light frame tools for cultivating, etc.

Inquiry No. 8719.-For manufacturers of safes. Inquiry No. 8721.-Wanted unwelded tubing that is used for structural work.

Inquiry No. 8726.—For parties who make "Yankee Metal Polish."

Inquiry No. 8728.—Wanted the address of The Frear Novelty Co.

Inquiry No. 8735.—For parties making a still for the purpose of extracting alcohol from saw-dust.

Inquiry No. 8736. For manufacturers of machinety for making matches, also machinery for making purses and hand bags.

Inquiry No. 8737.—For manufacturers of machinery for making tooth-brushes, shaving brushes, galvanized water buckets, locks, nibs and holders.

Inquiry No. 8738.—For parties manufacturing casein cement.

Inquiry No. 8742.—For manufacturers of water still, also of thermometer tubing.

Inquiry No. 8745.—For manufacturers of hoops such as used as toys, varying in diameter from 2½ to 4 feet, cross section approximating 1/21/2 inch, the ends being lapped and tacked.

Inquiry No. 8746.—For dealers in paper and card-board making machines.

Inquiry No. 8748.—Wanted to buy polished or lac-quered brass in sheets 29 gauge, quarter bard in temper. Inquiry No. 8749.—For makers of very large springs, used for running machinery.

Inquiry No. 8751.—For manufacturers of brass, tea, dessert and table spoons for silver plating.

Inquiry No. 8752.—For manufacturers of paper mill machinery for the manufacture of strawboard and wrapping paper.

Inquiry No. 8757.—Wanted address of the manuacturer of "The Index Incandescent Kerosene

Inquiry No. 8759.—For a firm to do porcelain enameling of ventilator tops, such as used on the outside of arc lamps.

Inquiry No. 8761.—Wanted to buy a small carriage propelled by electricity so that a lame person may get about by himself.

Inquiry No. 8765.—For manufacturers of insulating paper linings used in metal covers of electric snap switches; also makers of insulating papers and tools.

Inquiry No. 8766.—For parties making pressed paper goods.

Inquiry No. 8769 -For manufacturers of an appliance to attach to the old style razor blade to make same a safety razor.

Inquiry No. 8770.-For parties who make short link twist chains, links from 1/2 inch up,

Inquiry No. 8771.—Wanted to buy tune sheets for Criterion music boxes.

Inquiry No. 8772.—For a machine to make paper bottles for holding milk, Inquiry No. 8774.-For machinery for making bags from sisal hemp.

Inquiry No. 8775.—Wanted to buy stock novelty or jewelry catalogues.

Inquiry No. 8778.—For manufacturers of reapers, binders and mowers.

Inquiry No. 8779.—For parties manufacturing gas, gasoline, steam engines and boilers; also macking and mineral wool, steam supplies, iron and lead pine, power transmission machinery and steam fitters' tools.

Inquiry No. 8780.-For parties who make gasoline stoves.

Inquiry No. \$781.—For manufacturers of bass and spare drum shells and hoops.

Inquiry No. 8782.—For manufacturers of Chinese yood drums, tom toms and cymbals.

Inquiry No. 8783.—For manufacturers of small drummer's traps as whistles, rattles, rooster crows, etc. Inquiry No. 8784.—For manufacturers of alcohol ourners for lights and stoves.

Inquiry No. 8786.—For parties to manufacture glass balls blown about 1½ inch in dlameter with a 1½ inch hole through the center, should hold about 200 pounds to the square inch of steam pressure.

Inquiry No. 8787 .- For parties who manufacture

Inquiry No. 8788.—For manufacturers of music rolls for self-playing planos and organs; also spring motors for same.

Inquiry No. 8790. - For the manufacturer of Brooks improved haud pump."

Inquiry No. 8792. For a firm that manufactures glass holders made of glass.

Inquiry No. 8794.—For manufacturers of the "Ideal Dust Pan."

Inquiry No. 8795.—For a mechanical device for catching or destroying files, mosquitos, etc.; also traps for catching snakes. Inquiry No. 8796.—For concerns manufacturing stills adapted to the manufacture of denatured alcohol.

Inquiry No. 8797.-For manufacturers of fiber. Inquiry No. 8798.—For manufacturers of micro ensused in small articles such as pencils. charms, etc

Inquiry No. 8799.—Wanted to buynew or second-hand box nailing machine for small packing cases. Inquiry No. 8800.—Wanted complete data in regard to pegamoid.

Inquiry No. 8802.—Wanted to buy machinery for cutting and polishing oilstones, whitestones or grindstones.

Inquiry No. 8803.—For manufacturers of files, screws, druggists' supplies, hardware in general, and agricultural machinery.

Inquiry No. 8804.-For parties dealing in windmills, wood split pulleys, wheelbarrows, cutlery and picks.

Inquiry No. 8805.—Wanted to buy outfits and supplies for brazing, Inquiry No. 8806.-For manufacturers of draw ing materials.

Inquiry No. 8807.-For dealers in second-hand cotton machinery.

Inquiry No. 8808.—For manufacturers of machinery for making bungs for barrels.

Inquiry No. 8809.—For the manufacturers of metalized flowers used for hat pins, etc. Inquiry No. 8810.--For makers or importers of corous water bottles or jars to cool grinking water by

Inquiry No. 8811.—Wanted to buy electric tattooing needles, inks and stencils.

Inquiry No. 8812.—Wanted to buy outfits for manufacturing fuel briquettes from sawdust.

Inquiry No. 8813.—For manufacturer of the 'Steele' mixer for mixing food products, etc. Inquiry No. 8814.—Wanted to buy hand lever air pumps, 100 lbs. pressure.

Inquiry No. 8915.—Wanted to bny carriage and wagon hardware, coal, iron and steel. Inquiry No. \$816.-For dealers of portable generating outfit to be carried around asbaggage, a. c. or d. c. current, same to light about 60, 16 c. p. lamps.

Inquiry No. 8817.—For a firm that forms small rticles of wire, also a firm to make wooden rings about articles of wire, also a 23 or 4 inches in diameter.

Inquiry No. 8818.—Wanted to buy splarge quantities. Inquiry No. 8819. For manufacturers of Excelsior Welding Compound.

Inquiry No. 8820.—Wanted to buy pressed fiber boards I foot wide and from 1-16 to 4 inch thick.

Inquiry No. 8821.—Wanted to buy machinery for making a rough composition board, something like a straw board. Inquiry No. 8822.—For manufacturers of dredging machinery to be operated by gas engine.

Inquiry No. 8823. For manufacturers of crepe paper and paper novelties.

paper and paper moventes.

Inquiry No. 8824.—For a firm to design and build an automatic machine for making finger shields. Inquiry No. 8825.—For manufacturers of a new device to split wood.

Inquiry No. 8826.—Wanted to buy small fuel com-pression machines both manual and engine power. Valv Inquiry No. 8827.—For manufacturers of annealed Valv glass.

Inquiry No. 8828.—Wanted to buy thin, highly tempered steel for safety razors. Inquiry No. 8829.—Wanted to buy machinery for making pins, hair pins, hooks and eyes.

Inquiry No. 8830. - Wanted to buy machinery for making brushes and baskets. Inquiry No. 8831.-Wanted to buy knitting machines.

Inquiry No. 8832.—Wanted addresses of high-grade label weavers, preferably in New York.

1		- 1
ı	Road, and street clearing machine, land, J.	895,332
l	von Bertouck Roll protector, C. J. Rothermel Roller skaters in rinks, supporting apparatus for, C. A. Spooner. Rope clamp, W. A. Boulter Rope clamp, B. Brazelle Rotary engine, F. Rossbach-Rousset Rotary engine, F. Beuc Ruler, H. J. Klmmel Ruler antiblotting M. W. Alexander	894,306
l	Roller skaters in rinks, supporting appa-	002,000
ı	ratus for, C. A. Spooner	895,055
ı	Rope clamp, W. A. Boulter	895,065
Į	Rope clamp, B. Brazelle	895,397
i	Rotary engine, F. Rossbach-Rousset	895,043 895,233
ı	Ruler H I Kimmel	895,373
I	Ruler, H. J. Kimmel Ruler, antiblotting, M. W. Alexander. Running gear, W. M. Hargrove Sad iron, A. L. Eccles Sad iron, H. E. Asbury 805,326, Safe, W. E. Arnold Sash banger, J. W. Cooper Sash lock, A. N. Porter Sauerkraut, desiccating, J. R. Hare. Saw guide, Kiger & Hohman Saw guide, Kiger & Hohman	895,137
١	Running gear, W. M. Hargrove	895,368
ı	Sad iron, A. L. Eccles	894.943
ı	Sad iron, H. E. Asbury895,326,	895,327
I	Safe, W. E. Arnold	894,932
ı	Sash look A N Portor	895,162   895,193
ı	Sauerkrant desicesting J R Hare	895,262
I	Saw guide, Kiger & Hohman	895,091
İ	Saw setting and sharpening machine, J. F.	
ı	Bond Scale, J. L. Theobald Scale, weighing, J. H. & A. McLeod Scale, mechanical, I'. P. Pfleghar	895,150
ı	Scale, J. L. Theobald	895,125
1	Scale, weighing, J. H. & A. McLeod	895,289 895,108
ı	Searchlight for submering observation A	095,100
ı	L. Farr	895,355
1	Seating, Hale & Ki'burn	894,828
ı	Searchlight for submarine observation, A. L. Farr Seating, Hale & Ki'hurn Seed distributer, V. G. Guthrie. Seed testing apparatus, D. W. Miner. Seeder attachment, J. W. Hunze	894,948
ı	Seed testing apparatus, D. W. Miner	894,970
ı		895,022
١	Self players, pneumatic action for, Long & Tappe Self regulating separator, O. Boyer Seyarator, J. H. Rector Sewage, treating, C. C. E. Beddoes Sewing machine, C. A. Dearborn Sewing machine buttonhole sewing attachment, C. E. Ongley Sewing machine guiding attachment for edging, R. G. Woodward Sewing machine will guide welf. W.	895,382
J	Self regulating separator, O. Bover	895,153
ı	Separator, J. H. Rector	895,040
ı	Sewage, treating, C. C. E. Beddoes	895,229
١	Sewing machine, C. A. Dearborn	894,819
ı	ment. C. E. Ongley	894,977
ı	Sewing machine guiding attachment for edg-	001,011
ı	ing, R. G. Woodward	895,394
1	Sewing machine welt guide, welt, W.	004000
ı	Thompson	894,990
1	Rreitenfeld	895,237
1	ing, R. G. Woodward  Sewing machine welt guide, welt, W. Thompson	000,201
1	801 884 805 408	895,409
	Shaft polishing machine, J. S. Griffin	895,364
١	Shaft polishing machine, J. S. Griffin Sharpener, sprug, J. McDonald Sheet metal blanks, apparatus for flanging,	895,287
	Sheet metal branks, apparatus for hanging,	
	crimping, or otherwise shaping, Bruck- mann & Dempewolf	895,067
	Shipping case, N. A. Smith	895,209
	Shock absorber, J. A. Scott	895,113
	Shoe sole support, J. W. Arrowsmith	895,142
	Shipping case, N. A. Smith. Shock absorber, J. A. Scott Shoe sole support, J. W. Arrowsmith. Slik, ungunnning raw, P. Schmid. Slicer and cutter, vegetable and fruit, J. A.	895,112
9	Childress	895 161
	Childress Slicer, vegetable, C. E. Wagner. Slicing machine, R. Heller Slicing machine, W. A. van Berkel Snap hook, M. Pike Snap hook, J. Iv. Lyman Snow plow, A. S. Cerkez Sound reproducer, A. Lynod	895,216
	Slicing machine, R. Heller	894,829
	Slicing machine, W. A. van Berkel	895,213
	Snap hook, M. Pike	895,190
l	Snap nook, J. F. Lyman	895,279
j	Sound reproducer_and recorder, A. Junod	895,002
,	Bound reproducer and recorder, A. Junou	895.009

anar pener, sprag, J. McDonard	0331201
Sheet metal blanks, apparatus for flanging,	
crimping, or otherwise shaping, Bruck-	
mann & Dempewolf	895,067
Shipping case, N. A. Smith	895,209
Shock absorber, J. A. Scott	895,113
Shoe sole support, J. W. Arrowsmith	895,142
Silk, ungumming rav, P. Schmid	895,112
Slicer and cutter, vegetable and fruit, J. A.	
Childress	895,161
Slicer, vegetable, C. E. Wagner	895,216
Slicing machine, R. Heller	894,829
Slicing machine, W. A. van Berkel	895,213
Snap hook, M. Pike	895,190
Snap hook, J. F. Lyman	895,279
Snow plow, A. S. Cerkez	895,002
Sound reproducer and recorder, A. Junod	894,956
Spark arrester, W. A. Gooch	895,009
Spark arrester, II. A. Hurtienne	895,270
Spark plug, J. Lang	895,030
Spark plug, W. L. Ash	895,225
Speed mechanism, constant, A. H. F. Schaar	895,308
Speed meter, C. J. Stuart	895,121
Speed transmission, variable, II. II. Cutler	894,878
Spike, A. Eisenreich	895,080
Spinning and twisting machines, underclear-	
er or "fluker" for, Williams & Green-	
wood	895,131
Spinning wheel, pottery, C. D. Weeks	895,060
Spoke tightener, J. L. Zane	894,930
Spring lid box, J. R. Sundee	895,124

Contains ind out, o. It. billidee	030,12 x
Sprinkler system, automatic, G. I. Rock-	
wood boow	894,904
Square, carpenter's, P. J. Cooley	895,241
Square, try and bevel, E. H. Horton	
Stand. See Switch stand.	00 4,000
Station indicator, B. R. Skinner	895,118
Steam power and heating apparatus, com-	
bined, E. F. Osborne	894,897
Sterilizers, making, A. Engle	895,353
Stirrup, elastic, B. F. Nagle	895,291
Stitch separating machine, J. B. Hadaway	894,883
Store goods lifter, I. T. Lee	895,406
Stoves, air-heating attachment for, G. W.	000,200
Smith	895,052
Street cleaning machine, F. Rogowski	895,201
Street tarring and sanding machine, W. C.	000,=01
Southgate	894,859
Striping device, G. E. Duval	894,821
Stropping machne, J. Lorenzen	894,841
Stump puller, J. Lynch	894,843
	895.398
Subaqueous foundaton, A. F. Eells	
Superheater, E. D. Meier	895,187
Surgical appliance, W. C. Yates	894,929
Suspenders, A. Schad	894,907
Switch stand, W. W. Allen	895,395
Table, J. A. Tysklind	895,212
Table lock, pedestal extension, C. S. Burton	895,671
Tack and staple puller, C. H. Miles	894,969
Talking machine, M. Samuel	
Talking machine, M. Bamter	030,010

Tack and staple puller, C. H. Miles	894,969
Talking machine, M. Samuel	895,046
Tap and reamer, collapsible taper thread,	
W. W. Vosper	894,863
Telegraph system, multiplex, A. W. Douglas	895,350
Telegraphic and telephonic impulses simul-	
taneously, receiving, I. Kitsee	
Telegraphy, P. B. Delany	
Telephone system, W. W. Dean	895,166
Tension guide and thread cleaner, W. J.	
English	895,354
Theatrical property, M. Fortuny	895,359
Tie plate, M. Sellers	894,986
Timepiece compensating controller, F. Ecau-	
bert	895,172
Tin and terne plates, automatic plate car-	
rier for use in the manufacture of, T.	
	00-004

Timepiece compensating controller, F. Ecau-	
bert	895,172
Tin and terne plates, automatic plate car-	- 1
rier for use in the manufacture of, T.	
	895,024
Tire, A. G. Ritchie	895,301
Tissues or flies and attaching them to boxes,	
machine for making, A. Kingsbury	894,959
	894,867
Tongue support, N. Kessler	895,185
Tool points, means for attaching, Hender-	
shot & Apgar	895,370
Tool, pneumatic, T. Donohoe	895,349
Torpedoes, gyroscopic steering gear for, F.	
M. Leavitt	894,838
Toy, H. Stubert	895,312
Toy, mechanical, T. A. Killman	895,186
Tracker board, H. Pierce	895,392
Train order delivery apparatus, E. E. Sap-	
penfield	895,307
Train order holder and deliverer, J. J. Metz	895,282
Transom operating mechanism, C. F. Har-	005 018
rington Trolley, L. W. Campbell	895,013
Trolley, L. W. Campbell	895,339
Trolley catcher, G. Gessert	895.251
Trolley guard, C. H. Yarrington	895,321
Trolley pole, automatic collapsing and re-	895,314
erecting, G. S. Thomson	899,314
and collapsible, J. & R. Lindsay	895,378
Trolley pole mount, E. H. Burnes	895,070
Truck, car, S. P. Bush	895,157
Truck, combination, E. Willer	895.319
Truck locomotive rear swing K Rushton	895 204

١	Trolley pole, automatic collapsing and re-	
١	erecting, G. S. Thomson	895,314
١	Trolley pole for electric vehicles, reversible	
١	and collapsible, J. & R. Lindsay	895,378
١		895,070
ı	Truck, car, S. P. Bush	895,157
ı		895,319
ı	Truck, locomotive rear swing, K. Rushton.	895,204
ı	Trucks, folding platform for operators of	,
ı		895,069
ı	Turbine, J. Kadiera	895,027
	Turbine, fluid pressure, G. Westinghouse	894.927
	Turpentine, purifying, H. O. Chute	895,003
	Twine knotter and cutter, hand, A. Larson	895,277
	Twisting machine, E. Stickler	894,860
	Typewriter ribbon for use in lithographing,	00 -,000
	W. F. Clarke	894.815
	Typewriting machine, J. Hinklein	895,088
	Typewriting machine, C. W. Brown	895,238
	Umbrella rib, M. G. McGuire	895.390
	Undergarment, C. H. Little	894,840
	Universal joint, M. E. Blood	859,149
	Valve W. J. Kennedy	801057

п	Undergaiment C. H. Little	894,840
1	Universal joint, M. E. Blood	859,149
1	Valve, W'. J. Kennedy	894.957
ı	Valve, J. F. Robertson	895.302
l	Valve, Russell & Eckland	895,306
П	valve and valve casing, C. G. Sprago	895.056
۱	Valve, blowing engine inlet, M. A. Neeland	895.292
Н	Valve, boiler feed, G. W. Collin	895 342
	Valve, exhaust, F. H. Chisholm	895 073
	Valve for air compressors, eduction, J.	000,018
	Rogers	894.905
		895 341
	Valve setting machine, Wyllie & Twohig	894 995
•	Valve, thermostatic, A. F. Ames	894.806
П	Valve, water and air relief, A. Harrison	895.265
٠.	Valve water and air relief, A. Harrison Vehicle running gear. G. M. Phillips	894 980
1	Vehicle wheel, N. Schenk	895.111
		000,111



LATHES THAT LAST STAR Foot or Power LATHES

# **Engine and Foot Lathes**

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



3 to 5 H. P. Sittle Siant GASCLINI HOTORS

# Noteworthy Articles

ON TIMELY TOPICS

Each number of the Scientific American Supplement costs 10 cents by mail.

SEWAGE AND ITS DISPOSAL, A review of modern methods. By H. LEM-MOIN-CANNON. SCIENTIFIC AMERICAN SUPPLEMENT 1551.

ELECTRIC LIGHTING FOR AMATEURS. How a small and simple experimental installation can be set up at home. SCIENTIFIC AMERICAN SUPPLEMENT 1551.

CHEMICAL AFFINITY. Simply explained by SIR OLIVER LODGE. SCIENTIFIC AMERICAN SUPPLEMENT 1547.

CASE. HARDENING, By DAVID FLATHER. SCIENTIFIC AMERICAN SUPPLEMENT 1547. ELECTRIC IGNITION SYSTEMS. A comprehensive article by E. W. ROBERTS. SCIENTIFIC AMERICAN SUPPLEMENT 1546.

CONCRETE. A general article on its merits and defects. Scientific American Supplement 1543.

PLEMENT 1543.

REINFORCED CONCRETE. Some of its Principles and Applications with practical Illustrations. SCIENTIFIC AMERICAN SUPPLEMENTS 1547, 1548, 1551.

ELECTRONS AND THE ELECTRONIC THEORY are discussed by SIR OLIVER LODGE in SCIENTIFIC AMERICAN SUPPLEMENTS 1428, 1429, 1430, 1431, 1432, 1433, 1434.

THE PANAMA CANAL MARKET STATES.

THE PANAMA CANAL is described from the engineering standpoint in SCIENTIFIC AMERICAN SUPPLEMENT 1359.

AMERICAN SUPPLEMENT 1359.

WIRELESS TELEGRAPHY. Its Progress and Present Condition are well discussed in SCIENTIFIC AMERICAN SUPPLEMENTS 1425, 1426, 1427, 1386, 1388, 1389, 1383, 1381, 1327, 1328, 1329, 1431.

HOW TO CONSTRUCT AN EFFICIENT WIRELESS TELEGRAPH APPARATUS AT SMALL COST is toldin SCIENTIFIC AMERICAN SUPPLEMENT 1363.

1363.

SUBMARINE NAVIGATION. An exhaustive review of the subject is published in SCIENTIFIC AMERICAN SUPPLEMENTS 1414, 1415, 1222, 1223.

SELENIUM AND ITS REMARKABLE PROPERTIES are fully described in SCIENTIFIC AMERICAN SUPPLEMENT 1430. The paper is illustrated by numerous engravings.

THE INTERNAL WORK OF THE WIND. By S. P. I, ANGLEY. A painstaking discussion by the leading authority on Aerodynamics, of a subject of value to all interested in airships. SCIENTIFIC AMERICAN SUPPLEMENTS 946 and 947.

LANGLEY'S AERODROME. Fully described and illustrated in Scientific American Supplements 1404, 1405 and 1546.

STEAM TURBINES. Their Construction, Operation and Commercial Application, SCIENTIFIC AMERICAN SUPPLEMENTS 1306, 1307, 1308, 1422, 1400, 1447, 1370, 1372, 1521. The articles have all been prepared by experts in steam engineering.

PORTLAND CEMENT MAKING is described in excellent articles contained in SCIENTIFIC AMERICAN SUPPLEMENTS 1433, 1465, 1466, 1510, 1511.

1465, 1466, 1510, 1511.

AERIAL NAVIGATION. Theoretical and Practical Discussions. Pictures and Descriptions of actually-built dirigible balloons and aeroplanes will be found in SCIENTIFIC AMERICAN SUPPLEMENTS 1161. 1149, 1150, 1151, 1404, 1405. 1413, 1455.

THE TANTALUM LAMP. A full illustrated description of a lamp having a metallic filament and burning at once without preliminary heating appears in SCIENTIFIC AMERICAN SUPPLEMENT 1523.

THE WATERPROOFING OF FABRICS

THE WATERPROOFING OF FABRICS is thoroughly discussed in SCIENTIFIC AMERICAN SUPPLEMENT 1522 by an expert.

THE SPARK COIL, ITS CONSTRUCTION AND MAINTENANCE, is the subject of a painstaking article in SCIENTIFIC AMERICAN SUPPLEMENT 1522.

ELECTRIC IGNITERS FOR GAS ENGINES are discussed in SCIENTIFIC AME-RICAN SUPPLEMENT 1514. CARBURETERS, a subject of immense importance to automobilists and the users of oil engines, is well treated in SCIENTIFIC

AMERICAN SUPPLEMENT 1508. EPICYCLIC TRAINS, which play an important part in toothed gearing, are ably described in Scientific American Supplement 1524.

Each number of the Scientific American Supplement costs 10 cents by mail.

MUNN @ COMPANY

361 Broadway

New York

# THE WRENCH WITH A GRIP

NEW WRENCH. Drop forged of the finest quality Tool Steel. For turning or holding pipe, pipe fittings, bolts, bars, shafts, etc. Simpler, stronger, lighter and more efficient than any other pipe wrench on the market. Designed on new lines. Upper jaw, shank and handle forged in one piece. No rivets, no loose parts to get out of order. The most satisfactory tool of its kind ever made. Household size \$2.00, express prepaid.

Write to-day for Illustrated Booklet Crescent Forgings Company

1203 Railroad St., Oakmont, Pa.

# FRICTION DISK DRILL

FOR LIGHT WORK.
Has These Great Advantages:

The speed can be instantly changed from 0 to 1600 without stopping or shifting belts. Power appined can be graduated to drive, with equal safety, the smallest or largest drills within its range—a wonderful economy it, time and great saving in drill breakage.

W. F. & JNO. BARNES CO., Established 1872. 1999 Ruby Street, - Rockford, Ill.





# Palmer Motors

Two and Four Cycle. One, Two and Four Cylinder. Stationary and Marine. One to Twenty H. P. Catalogue FREE. H. F. Catalogue FREE:

PALMER BROS., Cos Cob, Conn.

New York: 30 East 90th Street
Philadelphia: The Bourse
Boston: 85 Union Street
Potland, Me.: Portland Pier
Seattle, Was h.: Colman Dock
Vancouver, B. C.: 1800 Powell St.

# Concrete, Reinforced Concrete Concrete Building Blocks

Scientific American Supplement 1542 contains an article on Concrete, by Brysson Cunningham. The article clearly describes the proper composition and mixture of concrete and gives results of elaborate tests.

Scientific American Supplement 1538 gives the proportion of gravel and sand to be used in concrete.

Scientific American Supplements 1567, 1568, 1569, 1570, and 1571 contain an elaborate discussion by Lieut. Henry J. Jones of the various systems of reinforcing concrete, concrete construction, and their applications. These articles constitute a splendid text book on the subject of reinforced concrete. Nothing better has been published.

Scientific American Supplement 997 contains an article by Spencer Newberry in which practical notes on the proper preparation of concrete are given.

Scientific American Supplements 1568 and 1569 present a helpful account of the making of concrete blocks by Spencer Newberry.

Scientific American Supplement 1534 gives a critical review of the engineering value of reinforced concrete.

Scientific American Supplements 1547 and 1548 give a resume in which the various systems of reinforced concrete construction are discussed and illustrated.

Scientific American Supplement 1564 contains an article by Lewis A. Hicks, in which the merits and defects of reinforced concrete are analyzed.

Scientific American Supplement 1551 contains the principles of reinforced concrete with some practical illustrations by Walter Loring Webb.

cientific American Supplement 1573 contains an article by Louis H. Gibson on the prin-ciples of success in concrete block manufac-ture, illustrated. Scientific

Scientific American Supplement 1574 discusses steel for reinforced concrete.

Scientific American Supplements 1575, 1576, and 1577 contain a paper by Philip L. Wormley, 1577 contain a paper by Philip L. Wormley, Jr., on cement mortar and concrete, their preparation and use for farm purposes. The paper exhaustively discusses the making of mortar and concrete, depositing of concrete, facing concrete, wood forms, concrete sidewalks, details of construction of reinforced concrete pages. concrete posts.

Each number of the Supplement costs 10

A set of papers containing all the articles above mentioned will be mailed for \$1.80. Order from your newsdealer or from

MUNN @ CO. 361 Broadway, New York City

# 

### DESIGNS.

TRADE MARKS. Ale, beer, porter, and stout, Yonkers Brew-Lamps, incandescent electric, Banner Electric radrik
Stereoscopes and graphoscopes, H. C. White Stereoscopes and graphoscopes, H. C. White
Co.
Stoves and beating apparatus, certain, Buck's
Stove & Range Co.
Stoves and beating apparatus, certain, Buck's
Stove & Range Co.
To,128
Sugar, beet, American Beet Sugar Co., 70,141, 70,142
Tablets containing olive oil, F. M. Edwards 70,161
Tobacco, cigars, and cigarettes, Abdulla & 70,157
Toilet waters, A. A. Vantine & Co.
Tools. certain hand, Chillington Tool Co., Limited
Tops. double, E. Vuillaume
Tops. double, E. Vuillaume
Troche or tablet, Verno Co.
Water, aerated and still, Red Rock Spring
Water Co.
To,167

LABELS. 

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for 10 cents, provided the name and number of the patent desired and the date be given. Address Munn & Co., 361 Broadway, New York.

York. Canadian patents may now be obtained by the inventors for any of the inventions named in the foregoing list. For terms and further particulars address Munn & Co., 361 Broadway, New York.

A MONEY MAKER

Hollow Concrete Building Blocks Best. Fastest. Simplest, Cheapest Machine. Fully guaranteed. THE PETTYJOHN CO, 615 N. 6th Street. Terre Haute, Ind.



Convert Your Bicycle Into a Motor-Cycle

withour Attachable Outfit. Fits anywheel.
Also a complete line of finished Motors
and Rongh Castings for Marine, Auto, or
Stationary. Send stamp for particulars. STEFFEY MFG. CO., 2911 West Girard Ave., Philadelphia, Pa.

LET US BE YOUR FACTORY
STAMPINGS, MODELS, EXPERT WORK
THE GLOBE, MACHINE AND STAMPING CO.
270 Hamilton St. Clevelingle. O.

Corlise Engines, Brewers'
and Bottlers' Machinery. THE VILTER
MFG. CO., 899 Clinton St., Milwaukee, Wis

MODELS & EXPERIMENTAL WORK Inventions developed. Special Machinery E. V. BAILLARD, 24 Frankfort Street, New York.

RUBBER Expert Manufacturers
Fine Jobbing Work PARKER, STEARNS & CO., 228-229 South Street, New York

ELECTRIC GOODS,-Big Cat. 3 cts. Want Agents. Ohio Electric Works, Cleveland, O.

HOEFT & COMPANY
Die Makers, Machinists and Machinery Builders
120 Michigan St., Chicago, U. S. A.

MODELS & EXPERIMENTAL WORK, Gears, Dies, Tools, Novelties manufact'd.
M. P. SCHELL, 1759 Union Street, San Francisco

MODELS | INVENTIONS PERFECTED UNION MODEL WORKS DRYING MACHINES For all kinds of grandler ular materials. S. E. Worrell, Hannibal, Mo.



SEALED PROPOSALS

U. S. ENGINEER OFFICE, JONES BUILDING, Detroit, Mich., July 22, 1998. Sealed propossis for earth excavation for lock pit at Sault Ste. Marie, Mich., will be received at this office until 3 P. M., August, 24, 1908, and then publicly opened. Information on application. C. McD. TOWNSEND, Lieut.-Col. Engineers.

U. S. ENGINEER OFFICE, JONES BUILDING. Detroit, Mich. July 22, 1998. Scaled proposals for furnishing 10,800 barrels of Portland cement will be received at this office until 3 P. M., August 24, 1998, and then publicly opened. Information on application. C. Mcb. Townsend, Lieut-Cel. Engineers.

WANTED Competent, thoroughly trained engineer and practical shop manager for factorymanufacturing automobiles. now in successful operation. Must have enough experience to design and build carsin all their details. To the right man a reasonable salary and unlimited opportunity assured. Advise continentially with exceedingly full particulars and references. COMPETENT, Box 773, N. Y.

MODELS SPECIAL TOOLS MACHINERY WORK If made in metal, we can make it.
NATIONAL STAMPING AND ELECTRIC WORKS
153-159 S. Jefferson Street, Chicago, Ill.



EMENT BOOKS. How to Use Portland Cement Struction, 50c.; Reinforced Concrete Construction, \$2.50; Hollow Concrete Block Building Construction, 50c. Sent postpaid. low Concrete Block Building Constitution, See EMENT AND ENGINEERING NEWS, Chicago, III.

PLATING DYNAMOS. - SCIENTIFIC AMERICAN SUPPLEMENTS 720 and 793 describe their construction so clearly that any amateur can make them. Price 10 cents each, by mail. Munn & Company, 361 Broadway, New York City, and all newsdealers.



Mated pair kissing.—
From eggs tosquabs in Howte make noneybreeding Squabs PLYMOUTH ROUK SQUAB CO, 361 Howard St, Melrose, Mass

# **BUILD A FIRELESS COOKER WITH CEMENT**

Send twenty-five cents in either stamps or money order and I will mail you plans for building a Fireless Cooker with cement that will hold four quarts and will not cost you when finished to exceed one dollar. A modern kitchen utensil, safe and economical. Full instructions for the use of this Fireless Cook Stove are included in this offer.

C. Y. PRESS. EFFINCHAM, KANSAS

Just Published

# The New Agriculture

By T. BYARD COLLINS

12mo, 374 pages, 106 illustrations, cloth, price \$2.00

HIS new and authoritative work deals with the subject in a scientific way and from a new viewpoint. Dr. Collins has devoted his lifetime to the study of changing economic agricultural conditions. "Back to the soil" was never a more attractive proposition and never so worthy of being heeded as during these opening years of the twentieth century. Farm life to-day offers more inducements than at any previous period in the world's history, and it is calling millions from the desk. The reason for this is not at first obvious, and for this reason Dr. Collins has prepared the present work, which demonstrates conclusively the debt which agriculture owes to modern science and the painstaking government and State officials. Much of the drudgery of the old farm life has been done away with by the use of improved methods, improved stock and varieties. All this tends to create wealth by increased value of the product and decreased cost of production. Irrigation, the new fertilization, the new transportation, the new creations, the new machinery, all come in for a share of attention. The illustrations are of special value, and are unique. All who are in any way interested in agriculture should obtain a copy of this most timely addition to the literature of agriculture. A full table of contents, as well as sample illustrations, will be sent on application.

MUNN & CO., "Selentific American," 361 Broadway, New York

# *DON'T BUY GASOLINE ENGINES*