be consulted, and we recommend it to all photographer upon its merits.

POOR'S MANUAL OF RAILROADS, 1887. Twentieth annual number. New York: H. V. & H. W. Poor. Pp. xliii., 1053. \$6.

To any one interested to understand the details of the railroad business of the United States, the financial position of the different companies and the various pro perties, this book is simply invaluable. During the twenty years since the first edition was published, each successive volume has represented a larger aud larger mass of more carefully compiled statistics, much being from the sworn statements of railway officials, giving tite iron ores finely ground, and simply mixed with the work a high standing as an authoritative record in a field in which it has no competitors. From the summary statement in the iutroduction, it appears that there are now employed by all the railroads 26,415 locomotives, 19,252 passenger cars, 6,325 baggage and mail cars, and 845,914 freight cars, and that of a total of 168,047 miles of track, 105,723 miles are now laid with steel rails. The net earnings on all the capital invested is placed at not quite 3% per ceut for the last year.

POOR'S DIRECTORY OF RAILWAY OFFI-CIALS. New York: H. V. & H. W. Poor. Pp. xliii., 372. \$2.

This is properly a supplement to the Manual, bringing within convenient compass the names of all officials desirable to know, for business purposes, to the number of some 30,000, including the names of officers of street and lumber railways as well as steam railways express and sleeping car companies, and manufacturers of railway supplies.

The Curio is the title of a new illustrated magazine, commenced by R. W. Wright, of No 6 Astor Place, New York. It is in quarto form, hand somely printed, and intended to satisfy the tastes and set forth the possessions of collectors of the rare and curious in the departments of genealogy and biography, heraldry and book plates, coins and autographs, rare States government was \$242,483,138. Any such com-books and works of art, old furniture and plate, and parison, however, would be greatly misleading with other colonial relics. The first number is handsomely embellished with valuable illustrations.

The Machinery of Small Boats for Ships of War, etc., a paper read before the Institution of British Naval Architects, by A. Spyer, presented on application by Fred. M. Wheeler, 95 Liberty Street, N. Y.



HINTS TO CORRESPONDENTS.

HINTS TO CORRESPONDENTS.
Names and Address must accompany all letters, or no attention will be paid thereto. This is for our information, and not for publication.
References to former articles or answers should give date of paper and page or number of question.
Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all, either by letter or in this department, each must take his turn.
Special Written Information on matters of personal rather than general interest cannot be expected without remuneration.
Books referred to promptly supplied on receipt of mind.

Minerals sent for examination should be distinctly marked or labeled.

(1) A. F. M. desires a recipe for making a good thin shellac varnish. A. Break the gum into small pieces and macerate in a stoppered bottle with ether. After swelling up sufficiently, the excess of ether is poured off, when the shellac will dissolve quite readily in alcohol.

(2) H. S. W. desires a receipt for the cure of warts, one that will remove them permanently. Also please give me the cause of warts. A. Their cau so is uncertain; they are said to be caused by uncleant, it by pouring boiling water over it and in sufficient ness. Their removal is easiest effected by me and of quantity to cover it 5 inches deep, stirring it briskly caustics, such as silver nitrate, nitric acid, or admatic vinegar.

(3) A. F. S. asks (1) a good receipt for making hektograph ink, both purple, blue, and black. A. Take 1 part aniline of desired color, dissolve in about 7 parts water and add 1 part glycerine. 2. The cause of the glass plates cracking in the Wimshurst electric machine? A. The trouble may be in the clamping-the flanges may not fit, or may not be properly packed. For electrical supplies, address any of the makers of or dealers in such goods advertising in our.

bled of late with what is generally termed sour stomach, and have been taking a third of a teaspoon of saleratus or thereabout, to overcome the acidity. Is that a proper corrective? A. You had better take a cup of clear warm water an hour before meals, and occasionally a bottle of citrate of maguesia to clear the stomach, with good habits and plenty of exercise. See most interesting lectures on dyspepsia, its treatment and cure, in Scientific American Supplement, Nos 323, 129, 215.

sible. 'I'o get at the full scope, the book itself should | temperature as ice formed in North Carolina? A. Ice | little water to run the gauge up to 100 pounds after the can be of all degrees of temperature below 32° Fah. The fixed point of temperature is its melting point. This is always 32° Fah.

(7) P. H., Jr., asks: 1. Will a siphon draw water through 2.400 feet of 11 inch pipe with a rise of 20 feet and a fall of 80 feet? A. Yes; but it requires care in filling or charging, to free every part from air, and an air chamber at the apex to prevent a break in the flow by accumulation of air which is liberated by the partial vacuum. Lower end should be immersed or turned up to prevent air drawing into the end, if the slope is steep. 2. A receipt for roof paint for corrugated iron roofing. A. Use pulverized oxides linseed oil and a drier.

(8) F. H. S. asks : What is the best battery for running a small electric turntable for show windows? How is the battery made? I have a plunge battery of ten cells carbon and zinc plates in electropoion fluid. Would this be suitable to run the above or a small electric lamp, or would it soon run out? A. For the above purposes a Bunsen battery is perhaps the best. For description of this and other forms, see our SUPPLEMENT, Nos. 157, 158, and 159. The plunge battery, however, is very serviceable.

(9) G. A. M.-Rule for surface of oblate spheroid: Square their diameters, aud multiply square root of half their sum by 3.1416 and this product by the transverse diameter, or

 $\sqrt{\frac{d^2 + d'^2 \times 3.1416 \times d'}{2}}$

For prolate spheroid: As above by inserting conjugate diameter in place of transverse. The other formulæ asked for involve conditions in mathematical astronomy too complicated for this column.

(10) J. W. D. L.-The expenditures of the German government last year, including cost of army and navy and ordinary expenses of the empire, were \$174,153,877. The general cost of the United out counting the expenses of the several States, which in Germany have to support their army contingents, which is not the case here. Prussia. for instance, has a total expenditure of \$324,868,000, Bavaria \$60,000,000, Baden \$41,000,000, etc. Our State governments are expensive, but paying for a large special army contingent each does not figure^{*}in such expense

(11) P. L. asks: What is the proper composition of the metal in a safety plug for a boiler, and at what temperaturedoes it melt? A. We have no record of the composition used by various parties advertising the sale of fusible plugs. The following alloys, with their corresponding melting points, together with the temperature of steam at various pressures, may be found useful:

in	6 5	Lead	11			381° F. 378° ''	Steam pressure by gauge	Temp.
••	4	••	1			365° "	120 lb.	350° F.
"	3	**	1			356° "	105 lb.	341°"
"	2	••	1			340° "	90 lb.	331° ''
••	11/2	" "	1			3 34° ''	75 lb.	3200 **
"	4	**	4	Bismuth	1	320° ''	60 lb.	307° ''
••	3	*6	3	**	1	310° "	45 lb.	282° **
••	z	**	2	••	I.	292 ' ''	30 lb.	2749 **
••	1	**	1		1	254° "	15 lb.	250° `"
				-				

т

So much depends, however, on the way in which an alloy is made, the purity of its original metals, and the changing conditions to which a fusible plug is subjected, that it is very doubtful whether they should ever be depended upon in critical places.

(12) Jones asks how to use glucose in making pop corn balls. A. We know of nothing bet-ter for making pop corn balls than molasses boiled until stringy and then rolling the corn in it. Glucose

we whitewash for outside work. A. Take a clean, water-tight barrel and put into it 🄀 bushel lime. Slake it by pouring boiling water over it and in sufficient till thoroughly slaked. When slaking has been effected, dissolve in water and add 2 pounds sulphate of zinc and one of common salt.

(14) W. L. F.—There are several receipts for making the black color on brass: 1. 5 drachms ni-trate of iron, 1 pint water. 2. 5 drachms percoloride of iron, 1 pint of water. 3. A solution of chloride of platinum in water. (127 R. K. B.—The curvature of the earthis such thata straight line a mile in length would

the 2.04 inches from the surface at either end. If the line were two miles long, either end would be 8'004 (4) G. F. D. writes: I have been trou- inches from the surface. The measures are found by

boiler has been filled. If you have a steam pump at tached to the boiler, a lever may be arranged to worl the pump a few strokes for the required pressure. The engine in the absence of all pumping appliances may be made to put pressure upon the boiler by pulling i backward and pouring water into the exhaust, but this should bemanaged cautiously. With proper precautions the following method may be used. Fill the boiler with water, leaving absolutely no air space. It must be solid water. Then by slowly firing, the pressure can be run up to any desired amount. The instant the pressure is reached, or an instant before, draw the fire. This should only be done by an experienced engineer

(18) A. M. H. asks directions for making paint to paint pipes and radiators for steam heating. A. A little clear japan varnish mixed with ordinray colors makes a very good cheap paint for radiators. The regular japan varnishes in colors are used for fine This requires to be baked in an oven at 250°, and makes a permanent color. Sometimes ordinary colors in oil are used. When dry, varnish with copal.

(19) B. F. B.-Hard solder is generally nade of brass of a lower grade than the work to be brazed. For brazing the ordinary commercial brass, use the same kind of brass, melting in a crucible and adding 20 per cent of zinc. For brazing iron, use conper or ordinary brass. Flux with borax.

(20) P. A. asks: Which is the best-a piston or a rotary fire engine? A. Both are manufacturned and in use. The piston engine and pump are preferred by the New York fire department.

(21) J. H. L.-Fulminate of gold explodes by slight increase in heat caused by compression, but is exceedingly uncertain and dangerous. Fulminate of platinum is next safer and explodes at a temperature of 400° Fah. Both the above are very violent. and explode with the slightest blow. Pure fulminate of mercury is very quickly and easily exploded. It is mixed with potassium nitrate or chlorate to moderate its violence, when used for charging gun caps

(22) J. M. C. writes : In "Haswell," issue of 1884, on page 480, he says, the evaporative power of one pound of anthracite coal is 7.05 to 9.05 pounds of fresh water. Through how many degrees is this water supposed to be raised? A. The note referred to in 'Haswell" is only an average or generalization of evaporative effect from mean temperature or 60°. The ultimate evaporative effect of the best coal, less the ash, is 14.9 pounds from water at temperature of 212° with out pressure. When tests are made under pressure, the evaporative effect is reduced to and from 212° temperature without pressure. Thus the best forms of boilers doing low duty may run up to 12 pounds per pound of coal, and even higher than this is claimed with regenerative furnaces. The quality of coal varies greatly, as well as the condition of boilers. You will also find in "Haswell" interesting tables of the effective value of different kinds of coal. A large percentage of boilers in use are evaporating 5 pounds and under per pound of coal. Incrustation, dirty flues or tubes and overwork are the main features of small boiler duty.

(23) R. B. says: I am going to build a small steam engine 3 inches bore and 5 inches stroke, what is the rule in plain figures to get at the power?, A. For small engines of uncertain cut off multiply the area of the cylinder by four-fifths the steam pressure and this product by the travel of the piston in feet per minute. Divide last product by 33,000 for the horse power. 2. What size boiler shall I need to get one-half horse power from this engine? A. Your boiler should contain for a half horse power 8 square feet of surface exposed to the fire. 3. What size boiler should I need to rnn it at its fullestcapacity? A. Your engine is equal to 4 horse power at 200 revolutions per minute and 100 pounds steam pressure. For this you will need a 5 borse power boiler or one containing 70 square feet of fire surface. 4. What is the rule to get at the power of inclosed water wheels or turbine? A. Turbines give from 75 to 80 per cent of the value of the water flow. The value of the water flow is the volume falling 1 foot is decidently inferior. (b) G. S. asks the best way to mix the horse power, divide the above product by 33,000. per minute multiplied by the weight of a cubic foot. For

(24) M. asks the best method of gluing emery on wheels and belts. A. Use the best emery and good tough glue made thick. Brush the glue on rather thick and follow the brush at once with the emery from the hand or a small piece of wire cloth soldered to the edge of a small shovel, so as to distribute the emery readily. Use the flat hand to press the emery close. A small flat piece of wood may also be used to advantage

(25) A. L. G. asks: 1. What is the best for polishing bright iron work, such as cylinder heads and guides? A. Polish bright iron work with rottenstone and oil, if it is running machinery. Work not liable to have its running parts injured by emery, may be polished with emery cloth or flour emery and oil, as it is a quick way. You may polish the cylinder head with emery, but not the slides of an engine. Tripoli and oil makes a bigh finish after the emery. 2. What is best for polishing Ruzsia iron? A. Russia iron should only be wiped clean with oil. The black surface will come off if polisbed with abrading material. MINERALS, ETC.-Specimens have been eceived from the following correspondents, and have een examined with results stated. A. D. G.-The material sent is sand containing iron ore, and is of value only if in sufficient quantity and our Consul General in Brazil is H. C. Armstrong, Rio purity to smelt economically, which is very seldom the case, TO INVENTORS. An experience of forty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unqualed facilities for procuring patents everywhere. synopsis of the patent laws of the United States and all foreign countries may be had on application, and persons contemplating the securing of patents, either at home or abroad, are invited to write to this office for prices. which are low, in accordance with the times and our ex-tensive facilities for conducting the business. Address MUNN & CO., office SCIENTIFIC AMERICAN, 861 Broadway, New York.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

September 27, 1887,

AND EACH BEARING THAT DATE.

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

Adding machine, S. E. Austin Adjustable wrench. C. M. Brown	370,719 370.447
Agrng and purifying liquors, device for, Lochner	3. 01TE1
& Oester	370,549
Air compressing apparatus, L. S. Chichester	370,376
Air purifier and evaporator, J. W. Collins	370,529
Alarm lock. Bradshy & Hagee	870.677
Alarm lock, U. V. Jaeggi.	310,480
Animal power, E. B. Studebaker	370,569
Animal trap, J. F. Hay	870,700
Anti-incrustation compound, W. J. Williams	870,583
Area, floor, roof, and sidewalk construction, P. H.	000 000
Ax. J. Ballard	370.598
Axle box, car, G. M. Brill	370.722
Axle box, car, J. W. Cloud	370,449
Bag. See Tobacco bag.	
Bags, machine for making satchel bottom or	
square bottom, W. Liddell	370,548
Balcony, portable adjustable, W. B. Hysan	370,739
Bale tie, F. T. Warburton	370,508
Baling press, J. A. Hampton	370.475
Baling press, S. J. Webb	370,509
Baling sawdust, machine for, C. E. Mitchell	370,488
Ball grounds and tennis courts, device for laying	
off base, B. E. Allen	370,593
Balling slivers, machine for, G. J. Torrance	870,574
Bauker's salety express box, C. R. Arnold	ə70,671
Dar. See 10ke Dar. Barrel nackage half Marvil & Pobinson	370 627
Basket, fruit, D. D. Forman	370.365
Bed, folding, A. Stark	870,426
Berth, car, F. S. Tul]	370,429
Bicycle, G. M. Collicutt	810,450
Bin, H. C. E. Petersen	370,557
Board. See Drawing board. Game board.	
Boller. See Steam boller.	
Doners, device for preventing the explosion of, B.	370.641
Bolt. J. M. Case	370.724
Book attachment, A. Bieber	870,525
Boor or shoe heel, H. A. Henderson	370,621
Boot, waterproof, L. Slessinger	370,498
Boots or shoes, device for inking the soles of, W.	050 180
W. Crooker	310.452
Bottles, machine for cleaning, S. L. Gillett	370,693
box. See Axie DOX. Banker's safety express	
JUL UNAL AND DICAU DUA. JULIAI DUA. FA-	
per box. Water closet service box.	
per box. Water closet service box. Bracket. See Fence bracket.	
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin	370,411
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule	370 ,411 870,565
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sadding machine, H. & G. Martin	370 ,411 370,565 370,635
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruim Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge gurd W. C. Normer	370, 411 870,565 370,635 870,669
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruim Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman Brush, C. & Thony neon	370,411 870,565 370,635 870,669 370,403 370,403
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Bridge gate, Swing, M. Wheeler Bridge guard, W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck	370,411 870,565 370,635 870,669 370,403 370,571 370,717
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck Bucket, automatic dump, A. E. Brown	370,411 870,505 370,635 870,669 370,403 370,571 370,571 370,679
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown Bucket, J. C. Hyde	370,411 870,565 370,635 870,669 370,403 370,571 370,717 370,679 \$70,738
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge gauard, W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde	370,411 870,565 370,635 870,669 370,403 370,571 370,717 370,679 870,738 870,669
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruim Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. W heeler Bridge gate, swing, M. W heeler Bridge gate, S. Nowman Brush, C. E. Thom pson Brush band, S. A. Verbryck Buckle, J. C. Hyde	370,411 870,505 370,635 870,669 370,703 370,571 370,679 870,738 870,660 870,439
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruim. Brick handler, G. W. Soule. Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler. Bridge guard, W. C. Newman. Brush C. E. Thompson. Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Buckle, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart. Burner. See Lamp burner. Vapor and steam burner.	370,411 870,505 370,635 870,669 370,403 370,571 370,571 370,679 870,738 870,660 870,439
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick handler, G. W. Soule Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde Buckle, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart Burner. See Lamp burner. Vapor and steam burner.	370,411 870,565 370,665 870,663 370,403 370,571 370,717 370,679 870,789 870,789 870,439
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge guard, W. C. Newman. Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde	370,411 870,505 370,635 370,635 370,635 370,717 370,717 370,679 370,7679 370,738 370,439 370,375 370,411
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman. Brush, C. E. Thompson Brush band, S. A. Verbryck. Buckle, J. C. Hyde Buckle, J. C. Hyde Buckle, suspender, D. L. Smith. Burklar alarm, electric, Yeakle & Steuart Burner. Bust form. E. Case	370,411 370,535 370,635 370,635 370,639 370,403 370,571 370,777 370,778 370,439 370,439 370,439
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruim Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Buckle, suspender, D. L. Smith. Burkle, suspender, D. L. Smith. Burkle, suspender, D. L. Smith. Burkle, suspender, D. L. Smith. Burkle, suspender, D. L. Smith. Burkle Steuart Burner. See Lamp burner. Vapor and steam burner. Bust form. E. Case Button, W. Appleton Button, N. Mitchell Button for dress trimmings, C. Seel	370,411 370,535 370,635 370,639 370,403 370,571 370,717 370,717 370,717 370,717 370,718 370,439 370,375 370,441 370,375
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck Bucket, automatic dump, A. E. Brown Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde Buckle, J. C. Hyde Buckle, suspender, D. L. Smith. Burklar alarm, electric, Yeakle & Steuart Burner. See Lamp burner. Vapor and steam burner. Bust form. E. Case Button, N. Mitchell	370,411 370,655 370,655 370,669 370,403 370,571 370,717 370,679 370,403 370,717 370,679 370,403 370,439 370,441 370,489 370,441 370,489 370,441 370,499 370,467
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin	370,411 370,655 370,655 370,669 370,717 370,679 370,771 370,679 370,778 370,679 370,439 370,439 370,439 370,441 370,489 370,441 370,489 370,619 370,619
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Buckle, J. C. Hyde Buckle, J. C. Hyde Buckle, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart Burner. See Lamp burner. Vapor and steam burner. Button, W. Appleton Button, N. Mitchell Button, N. Mitchell Button for dress trimmings, C. Seel Cable road curve, D. Deviln Cakle or bread box, C. Forster.	370,411 870,545 370,635 870,669 370,671 370,717 370,679 870,669 870,489 370,475 370,411 370,419 370,499 370,419 370,897 370,464
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde	370,411 370,635 370,635 370,669 370,717 370,673 370,717 370,679 370,439 370,439 370,439 370,441 370,464 370,871 370,464 370,830
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde Buckle, J. C. Hyde	370,411 \$70,635 \$70,669 370,403 \$70,717 \$70,679 \$70,717 \$70,679 \$70,439 \$70,375 \$70,441 \$70,441 \$70,697 \$70,441 \$70,697 \$70,891 \$70,691 \$70,691 \$70,891 \$70,464 \$70,310
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick handler, G. W. Soule Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde Buckle, suspender, D. L. Smith Burglar alarm, electric, Yeakle & Steuart Burner. See Lamp burner. Vapor and steam burner. Button, W. Appleton Button, N. Mitchell Button for dress trimmings, C. Seel Cab, hansom, J. H. Hannay Cable road curve, D. Devlin Camera plate holder for bolding negative paper. T. H. Blair Can. See Sheet metal can. Candle, lamp, F. F. Schmitt	370,411 370,635 370,669 370,403 370,717 370,679 370,717 370,679 370,738 370,439 370,439 370,441 370,489 370,489 370,489 370,489 370,464 370,351 370,464 \$70,350 \$70,562
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush, C. K. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, C. Seel. Cab, hansom, J. H. Hannay. Cable road curve, D. Devlin. Cake or bread box, C. Forster. Camera plate holder for holding negative paper, T. H. Blair. Can, See Sheet metal can. Candle, lamp, F. F. Schmitt. Car, R. H. Burdge.	370,411 870,505 370,635 870,635 870,639 370,571 370,717 370,679 870,489 370,419 370,419 370,419 370,419 370,419 370,419 370,419 370,419 370,419 370,419 370,552 370,445
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, J. C. Hyde Buckle, J. C. Hyde Buckle, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart Button, W. Appleton. Button, W. Appleton. Button, N. Mitchell. Button, N. Mitchell. Button for dress trimmings, C. Seel. Cab, hansom, J. H. Hannay. Cable road curve, D. Deviln. Cake or bread box, C. Forster. Camera plate holder for holding negative paper, T. H. Blair. Can, See Sheet metal can. Canker, J. D. Stovall.	370,411 870,565 370,663 370,663 370,663 370,717 370,673 370,717 370,673 370,469 370,439 370,439 370,449 370,464 370,897 370,464 870,310 870,662 370,462 370,462 370,462
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge guard, W. C. Newman. Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Buckle, J. C. Hyde	370,411 \$70,635 \$70,669 \$70,669 \$70,717 \$70,679 \$70,717 \$70,679 \$70,769 \$70,439 \$70,439 \$70,439 \$70,441 \$70,459 \$70,419 \$70,461 \$70,575 \$70,461 \$70,575 \$70,461 \$70,575 \$70,461 \$70,575 \$70,461 \$70,562 \$70,445 \$70,626
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush c. s. Thompson Brush band, S. A. Verbryck Bucket, automatic dump, A. E. Brown Bucket, suspender, D. L. Smith. Burkle, suspender, D. L. Smith. Burner. See Lamp burner. Vapor and steam burner. Button, N. Mitchell Button, N. Mitchell Button, N. Mitchell Cab, hansom, J. H. Hannay Cable road curve, D. Devlin Cake or bread box, C. Forster. Camera plate holder for holding negative paper, T. H. Blair Can. See Sheet metal can. Car, Can le, I. Stovall Car coupling, H. Hadden	370,411 \$70,635 \$70,669 \$70,669 \$70,679 \$70,717 \$70,679 \$70,717 \$70,679 \$70,439 \$70,375 \$70,441 \$70,370 \$70,441 \$70,697 \$70,469 \$70,697 \$70,469 \$70,469 \$70,506 \$70,465 \$70,565 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70,656 \$70
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin	370,411 870,505 370,635 370,635 370,635 370,717 370,717 370,673 370,439 370,445 370,445 370,445 370,445 370,445 370,445 370,464 370,500 370,662 370,625 370,625 370,476
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, J. C. Hyde	370,411 870,565 370,635 870,669 370,571 370,717 370,679 870,669 870,489 370,489 370,475 370,411 370,475 370,411 370,464 870,562 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370,428 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge guat, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, J. C. Hyde	370,411 370,635 370,669 370,603 370,717 370,679 370,717 370,679 370,439 370,439 370,441 370,441 370,441 370,464 370,464 370,562 370,464 370,562 370,464 370,562 370,464 370,562 370,464 370,625 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,627 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370,626 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler. Bridge gate, swing, M. Wheeler. Brush band, W. C. Newman. Brush, C. E. Thompson Brush band, S. A. Verbryck Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Buckle, J. C. Hyde Bucket, automatic dump, A. E. Brown. Buckle, suspender, D. L. Smith. Burkle suspender, D. L. Smith. Burlar alarm, electric, Yeakle & Steuart. Burner. See Lamp burner. Vapor and steam burner. Button, N. Mitchell. Button, N. Mitchell. Button, N. Mitchell. Button, Or dress trimmings, C. Seel. Cab, hansom, J. H. Hannay. Cable road curve, D. Devlin. Cake or bread box, C. Forster. Camera plate holder for holding negative paper. T. H. Blair. Car, See Sheet metal can. Car, Cand le, Iamp, F. F. Schmitt Car coupling, H. Hadden Car coupling, J. Harding, Jr. Car coupling, J. Harding, Jr. Car coupling, M. Phillips. Car coupling, Stovall & Whittington. Car door, T. Z. Roraback	370,411 \$70,635 \$70,669 \$70,669 \$70,717 \$70,679 \$70,717 \$70,679 \$70,769 \$70,755 \$70,439 \$70,439 \$70,439 \$70,441 \$70,459 \$70,441 \$70,451 \$70,469 \$70,459 \$70,451 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,467 \$70,462 \$70,462 \$70,462 \$70,462 \$70,462 \$70,462 \$70,462 \$70,462 \$70,462 \$70,490 \$70,472 \$70,499 \$70,712
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick handler, G. W. Soule Bridke gate, swing, M. Wheeler Bridge gate, swing, M. Wheeler. Brush band, S. M. Verbryck. Bucket, automatic dump, A. E. Brown Buckle, suspender, D. L. Smith Burglar alarm, electric, Yeakle & Steuart Burner. See Lamp burner. Vapor and steam burner. Button, W. Appleton Button, N. Mitchell Button for dress trimmings, C. Seel Cab, hansom, J. H. Hannay Cable road curve, D. Devlin. Cake or bread box, C. Forster. Camera plate holder for bolding negative paper. T. H. Blair Can. See Sheet metal can. Car, coal carrying, W. R. Jenkins, Jr Car coupling, H. Hadden Car coupling, J. Harding, Jr. Car coupling, M. Phillips Car door, T. Z. Roraback Car door, T. Z. Roraback Car door, treight, F. G. Sussenihl	370,411 870,505 370,603 370,603 370,571 370,771 370,679 370,478 370,478 370,489 370,441 370,489 370,419 370,419 370,419 370,419 370,419 370,419 370,501 370,501 370,500 370,562 370,500 370,562 370,500 370,562 370,500 370,562 370,500 370,562 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370,500 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin	370,411 870,505 370,635 370,635 370,635 370,717 370,679 370,717 370,679 370,439 370,441 370,489 370,419 370,419 370,419 370,419 370,419 370,419 370,419 370,419 370,420 370,562 370,464 370,562 370,562 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,429 370,500 370,562 370,455 370,429 370,500 370,562 370,458 370,458 370,500 370,562 370,458 370,458 370,459 370,562 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370,550 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, J. C. Hyde Bucket, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart. Butrer. See Lamp burner. Vapor and steam burner. Button, W. Appleton. Button, W. Appleton. Button, N. Mitchell. Button for dress trimmings, C. Seel. Cab, hansom, J. H. Hannay. Cable road curve, D. Devlin. Cake or bread box, C. Forster. Camera plate holder for holding negative paper, T. H. Blair. Can, See Sheet metal can. Car, R. H. Burdge. Car brake, J. D. Stovall. Car coupling, J. Harding, Jr. Car coupling, J. Harding, Jr. Car coupling, M. Phillips. Car door, T. Z. Roraback. Car door, T. Z. Roraback. Car door, T. Z. Roraback. Car door, freight, F. G. Susemihl. Car, Car, dumping, F. Peteler Car, Canding, F. Peteler Car coupling, F. Peteler Car coupling, F. Peteler Car coupling, F. Peteler Car door, freight, F. S. Susemihl. Car door fastener, E. F. Hardin. Car door, freight, F. Susemihl. Car door fastener, S. F. Hardin. Car door, freight, F. Susemihl. Car door, freight, F. Susemihl. Car door, freight, F. Susemihl. Car door fastener, S. F. Hardin. Car door fastener, S. F. Hardin.	370,411 370,655 370,669 370,669 370,673 370,717 370,679 370,679 370,679 370,649 370,439 370,439 370,449 370,449 370,464 370,464 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,462 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370,562 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, J. C. Hyde Buckle, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart Butron. See Lamp burner. Vapor and steam burner. Button, W. Appleton. Button, N. Mitchell. Button for dress trimmings, C. Seel. Cab, hansom, J. H. Hannay. Cable road curve, D. Devlin. Cake or bread box, C. Forster. Camera plate holder for bolding negative paper, T. H. Blair Can. See Sheet metal can. Can, See Sheet metal can. Car, R. H. Burdge Car brake, J. D. Stovall. Car coupling, H. Hadden Car coupling, M. Phillips. Car coupling, M. Phillips. Car door, T. Z. Roraback. Car door, T. Z. Roraback. Car door, freight, F. G. Susemihl. Car door, grain, W. T. Spillane Car, freikht, A. O. Baldwin.	370,411 \$70,635 \$70,669 \$70,669 \$70,717 \$70,673 \$70,717 \$70,673 \$70,743 \$70,743 \$70,669 \$70,439 \$70,439 \$70,441 \$70,459 \$70,441 \$70,459 \$70,441 \$70,451 \$70,464 \$70,573 \$70,464 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,499 \$70,562 \$70,499 \$70,562 \$70,499 \$70,562 \$70,499 \$70,562 \$70,499 \$70,562 \$70,499 \$70,562 \$70,499 \$70,562 \$70,499 \$70,562 \$70,562 \$70,562 \$70,625 \$70,625 \$70,626 \$70,562 \$70,626 \$70,562 \$70,562 \$70,562 \$70,626 \$70,562 \$70,626 \$70,562 \$70,626 \$70,562 \$70,626 \$70,562 \$70,626 \$70,562 \$70,626 \$70,562 \$70,656 \$70,562 \$70,656 \$70,562 \$70,656 \$70,770 \$70,656 \$70,770 \$70,656 \$70,770 \$70,656 \$70,770 \$70,656 \$70,770 \$70,770 \$70,770 \$70,770 \$70,770 \$70,770
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler. Brush cast of the service s	370,411 \$70,635 \$70,669 \$70,669 \$70,717 \$70,679 \$70,717 \$70,679 \$70,769 \$70,743 \$70,679 \$70,439 \$70,439 \$70,441 \$70,419 \$70,419 \$70,441 \$70,419 \$70,697 \$70,464 \$70,570 \$70,464 \$70,562 \$70,625 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70,626 \$70
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin	370,411 870,505 370,635 370,635 370,635 370,717 370,717 370,673 370,439 370,441 370,449 370,449 370,449 370,449 370,449 370,449 370,449 370,449 370,449 370,449 370,500 370,562 370,562 370,562 370,562 370,562 370,563 370,563 370,563 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370,565 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, J. C. Hyde	370,411 370,505 370,635 370,635 370,635 370,717 370,679 370,717 370,679 370,439 370,439 370,439 370,448 370,448 370,448 370,448 370,448 370,448 370,464 370,464 370,464 370,464 370,464 370,465 370,448 370,500 370,465 370,448 370,500 370,465 370,448 370,500 370,465 370,428 370,428 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,492 370,595 370,492 370,492 370,595 370,492 370,492 370,595 370,492 370,595 370,492 370,595 370,492 370,595 370,492 370,595 370,492 370,595 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush, C. E. Thompson Brush band, S. A. Verbryck. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Bucket, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart. Button, W. Appleton. Button, W. Appleton. Button, N. Mitchell. Button, N. Mitchell. Button for dress trimmings, C. Seel. Cab, hansom, J. H. Hannay. Cable road curve, D. Devlin. Cake or bread box, C. Forster. Camera plate holder for holding negative paper, T. H. Blair. Can, See Sheet metal can. Car, R. H. Burdge Car brake, J. D. Stovall. Car coupling, H. Hadden Car coupling, M. Phillips. Car coupling, M. Phillips. Car door fastener, E. F. Hardin. Car door, freight, F. G. Susemihl. Car door, freight, F. G. Susemihl. Car door, freight, F. G. Susemihl. Car, See Shoeter, W. H. Murdoch. Car coupling, F. Peteler Car door, freight, F. G. Susemihl. Car door, freight, F. Susmith. Car, Car, See Bhown. Car soupling, F. Peteler Car, skip, A. E. Brown. Car soupling, J. Harding, J. C. Wands Car, skip, A. E. Brown. Car soupling, J. A. Brill. Car, skip, A. E. Brown.	370,411 370,635 370,663 370,663 370,717 370,673 370,717 370,673 370,717 370,673 370,489 370,489 370,489 370,489 370,464 370,464 370,464 370,562 370,464 370,562 370,464 370,562 370,462 370,462 370,462 370,493 370,509 370,462 370,493 370,509 370,493 370,509 370,493 370,509 370,495 370,495 370,495 370,495 370,495 370,495 370,495 370,502 370,502 370,678 370,678 370,678 370,678 370,678 370,678 370,678 370,678
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick mould sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler. Brush cast and W. C. Newman Brush, C. E. Thompson Brush band, S. A. Verbryck Bucket, automatic dump, A. E. Brown. Bucket, automatic dump, A. E. Brown. Buckle, J. C. Hyde Bucket, automatic dump, A. E. Brown. Buckle, J. C. Hyde Bucket, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart. Burner. See Lamp burner. Vapor and steam burner. Button, N. Mitchell. Button, N. Mitchell. Button, N. Mitchell. Button, N. Mitchell. Button, Or dress trimmings, C. Seel. Cab, hansom, J. H. Hannay. Cable road curve, D. Devlin. Cake or bread box, C. Forster. Car, See Sheet metal can. Car, See Sheet metal can. Car, See Sheet metal can. Car coupling, H. Hadden Car coupling, J. Hading, Jr. Car coupling, M. Phillps. Car coupling, M. Phillps. Car door, T. Z. Roraback Car, Grastener, E. F. Hardin. Car door, treight, F. G. Susemihl. Car door, freight, F. G. Susemihl. Car, can, Stovall & Whittington. Car door, treight, F. G. Susemihl. Car door, treight, F. G. Susemihl. Car door, grain, W. T. Spillane Car, stip, A. D. Baldwin Car ventilator, railway, J. C. Wands. Car, song or bell for street railway, Caldwell & Cars, See J. A. Brill.	370,411 \$70,635 \$70,669 \$70,669 \$70,717 \$70,673 \$70,717 \$70,673 \$70,743 \$70,743 \$70,669 \$70,439 \$70,439 \$70,441 \$70,459 \$70,441 \$70,459 \$70,464 \$70,573 \$70,464 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,562 \$70,665 \$70,665 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,667 \$70,678 \$70,678 \$70,678 \$70,678 \$70,678 \$70,678 \$70,678 \$70,678 \$70
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin Brick handler, G. W. Soule Brick handler, G. W. Soule Bridke muid sanding machine, H. & G. Martin Bridge gate, swing, M. Wheeler Brush c. S. Thompson Brush band, S. A. Verbryck Bucket, automatic dump, A. E. Brown Buckle, J. C. Hyde Buckle, suspender, D. L. Smith. Burglar alarm, electric, Yeakle & Steuart Burner. See Lamp burner. Vapor and steam burner. Button, N. Mitchell Button, N. Mitchell Button, N. Mitchell Cab, hansom, J. H. Hannay Cable road curve, D. Devlin Cake or bread box, C. Forster Camera plate holder for bolding negative paper. T. H. Blair Car, See Sheet metal can. Car, coupling, J. Harding, Jr. Car coupling, M. F. Schmitt Car coupling, M. R. Jenkins, Jr Car coupling, Stovall & Whitington Car door, freight, F. G. Sussenihl Car door, freight, F. G. Sussenihl Car door, freight, F. G. Sussenihl Car door, grain, W. T. Spillane Car, dumping, F. Peteler Car, car sting, M. F. Dillos Car coupling, Stovall & Whitington Car door, grain, W. T. Spillane Car, car etake, J. O. Baldwin Car, sent, J. A. Brill Car, sent, J. A. Brill Car, sent, J. A. Brill Car, sent, J. A. Brill Cars, gong or bell for street railway, Caldwell & Peterson	370,411 870,505 370,609 370,673 370,717 370,679 370,775 370,478 370,489 370,441 370,489 370,419 370,419 370,419 370,441 370,489 370,419 370,441 370,489 370,419 370,441 370,581 370,581 370,464 370,565 370,565 370,465 370,476 370,565 370,476 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370,566 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin	370,411 870,505 370,635 370,635 370,635 370,717 370,679 370,717 370,679 370,439 370,445 370,445 370,445 370,445 370,464 370,562 370,464 370,562 370,465 370,428 370,562 370,562 370,563 370,563 370,563 370,651 370,651 370,651 370,651 370,651 370,651 370,653 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,665 370,675 370,675 370,675 370,675 370,675 370,675 370,675 370,675 370
per box. Water closet service box. Bracket. See Fence bracket. Breastpin, H. P. Pruin	370,411 370,635 370,635 370,635 370,637 370,717 370,679 370,717 370,679 370,439 370,439 370,439 370,448 370,448 370,448 370,448 370,448 370,448 370,464 370,464 370,464 370,464 370,465 370,428 370,428 370,428 370,500 370,620 370,651 370,651 370,651 370,652 370,663 370,663 370,660 370,660 370,660 370,660 370,660

(5) H. G. asks a recipe for a good paint or stain for patterns for castings. A. Shellac var nish alone or with lampblack or vermilion is in ordinary use for varnishing patterns. Methylic or wood alcohol is the best solvent of shellac for making the varnish. Shellac varnish may also be purchased through the paint trade.

(6) J. McD. asks: 1. Is there really a fourth state of matter, known as radiant matter? A. The question is vetundec.ded. It is safest to conclude that there is probably no fourth state of matter. 2. Does all ice maintain a fixed temperature or degree of cold? In other words, would ice frozen at or near north pole and brought to North Carolina be of same

(16) J. E. N.—The cultivation of the ree that yields annotto would not prove profitable, as the demand for the product is too limited. It is used chiefly for coloring butter and cheese. Messrs. W. H. Schieffelin & Co., 170 William Street, New York, and all other large drug houses import it in quantities such as to suit the demands of their trade.-The address of de Janeiro.

(17) J. S. asks if there is any simple and reliable method of testing a 12 horse power boiler at 100 pounds water pressure. The said boiler is situated in a part of India where no government test is procurable, and it cannot be sent to any boiler works. What apparatus is necessary for the purpose? A. We know of no safe way of testing the boiler except by improvising a pump, no matter how small. A common nlumber's force nump is sufficient. Fill the boiler full of water by any convenient means, through the safety valve or otherwise. Use the pressure gauge attached to the boiler, if you think it is correct. Also set the safety valve weight at 100 pounds by its mark. Then pump water in by any means at hand. It takes but very

Carpet sweeper, W. J. Drew	370,384
Carrier. See Cash carrier.	
Case. See Ticket case.	
Cash carrier, D. Kahnweiler	870,627
Cash received, apparatus for checking and record-	
ing, S. Firth	870.692
Caster, furniture, C. A. Bertsch	370,309
Catamenial bandage, W. B. Robinson	370,415
Celluloid, producing designs upon, A. Le Roy	370,546
Centerboard wells, calking the seams of, A. F.	
Stubbs	370,669
Chair. See Child's chair.	
Check, baggage, H. A. Deraismes	370,455
Child's chair, J. A. Crandali	870,58n
Chimney thimble, P. D. Sexton	870,420
Chopper. See Stalk or weed chopper.	
Chronometers, thermometer attachment for	
ships', T. C. McLean	370,400
Churn dasher, L. B. Brown	370,724
Cigar mould press, H. K. Weaver	370,579
Circuits, regulating device for alternate current,	
E. Thomson	370,573
Clamp. See Miter clamp.	
Clamp, F. F. Houston	370,541
Clay, apparatus for preparing, W. Mendham	370,553
Cleaner. See Pen cleaner.	
Coal, etc., apparatus for splitting, R. R. Von Wal-	
cher-Uysdal	870.749