### RECENTLY PATENTED INVENTIONS. Of General Interest.

SHIELD TUNNEL CONSTRUCTION .- W. I. AIMS, New York, N. Y. The invention relates to tunnel construction in the bed of waterways and other places, the object being to provide a construction arranged to permit of driving the shield readily through sand, gravel, and other loose material, to protect the workmen in the shield in case of a sudden inflow of water or loose material by closing doors in the shield, and to allow of conveniently and quickly placing the sections of metal lining for tunnel in position.

MANUFACTURE OF PLATES FOR PRINT-ING .- E. A. NEBEN, New York, N. Y. The invention relates to the art of preparing reliefplates for printing typographically therefrom. The object is to provide certain improvements in the manufacture of plates, whereby zinc or copper plates are produced for receiving any desired design in half-tone effects, together with the necessary contrasts of high lights, solids, and shades to allow of using the plates for reproduction of color-work for fine color-printing.

TRUCK .- H. C. HARRINGTON and W. M. TOWERS, Rome, Ga. It is a very difficult matter to handle sacks of grain or heavy casks of merchandise with the ordinary truck from the fact that in loading material the pressure backward is very great, and unless the truck is held in position by an extra hand it will often slip backward, dumping the load and causing re-loading. The improvement seeks to prevent any backward movement of wheels when truck is in position to receive load until the truck is adjusted out of such position toward a position for carrying the load.

### Machines and Mechanical Devices.

BREAD-MAKING APPARATUS.—E. D. LYNDS, Newman, Ill. One object of this invention, among others, is to provide a novel construction for mixing flour and milk, water, or other liquid constituent through the aid of a rapidly-revolving disk, from which the liquid element will be discharged in a finely-divided state into the flour, and thoroughly mixed with the flour in the mixing-chamber.

MUSIC-LEAF TURNER.—N. P. JENSEN, Ephraim, Utah. The object here is to provide a turner for use on pianos, organs, music-racks, and the like, and arranged to permit of conveniently turning the leaves successively over in either direction to permit of operating the device either by hand or foot, and in the latter case to render the device especially serviceable for use on portable racks such as used by band-

### Pertaining to Vehicles.

BRICK-ELEVATING ATTACHMENT FOR TRUCKS .- S. P. Hedges, Greenport, N. Y. The invention relates to an attachment for trucks, especially trucks for carrying brick and other material to be burned, stacked, stored, or dried. The purpose is to provide stationary uprights and a movable frame mounted between them and adapted to carry pallets on which material is placed and to so construct the truck and carrying-frame that they will be more substantial than ordinary, being built with the least number of posts and posts not liable to bend or get out of shape.

### Prime Movers and Their Accessories. WIND-WHEEL.—E. PAVON Y MORALEDA,

Madrid, Spain. The object of the inventor is to provide a construction whereby the wheel ester, N. Y. will not be bound or locked at any time by the action of the wind, as when one blade is in position to receive the pressure of the wind the blade in front will be free to spill the wind, thus preventing the wheel from remaining stationary by reason of the wind blowing in an angular pocket having fixed walls.

## Railways and Their Accessories.

CAR-COUPLING .- R. REARDON, Savannah, This improvement relates to automatic double-knuckle car-couplers. The objects are to provide for insuring the certainty of action of a coupling of the type mentioned, for providing an absolutely secure coupling, and for providing means for quickly and easily uncoupling the device by automatic action when the locking device is operated to unlock the knuckle. The invention is an improvement upon a previous patent granted to Mr. Reardon, and it has been successfully used on the Atlantic Coast Line R. R.

RAIL-JOINT FASTENER .- J. A. GOSSARD Jr., South Solon, Ohio. The object in this instance is to provide details of construction for a fastener which are adapted to be placed in position for securing together two meeting endsof track-rails under spring tension of parts of the fastener by use of suitable tools or be removed by the same means, as occasion may require, a further object being to provide a fastener that is held in place for connection of the rail ends and their lateral support at joint by spring tension of its parts only and is devoid of bolts and nuts usually employed.

MONORAIL TRACTION .- C. E. FAROUX, 106 Rue de Courcelles, Levallois-Perret, Seine, France. This invention has for its object a method of and means for monorail traction whereby high speeds may be attained under good economical and practical conditions. The device comprises a single rail of suitable section, upon which travels the locomotor-vehicle, Address Safety Brake, Box 773, New York.

which rests upon a truck. prises a vehicle including a body, flanged wheels supporting the body, a rail having in-clined sides with which the wheel-flanges engage at two points only, guide-wheels bearing on the upper edge of the rail, a track above the vehicle, and wheels carried by the vehicle and engaging the opposite sides of the lastnamed rail.

enlarges from the bottom up, and on the same near the bottom, is a series of like figures, in low relief or intaglio, each comprising a series of rays radiating upward from a common point where the capital letter X is located, the whole indicating "X rays."

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## Business and Personal Wants.

READ THIS COLUMN CAREFULLY.-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. In every case it is necessary to give the number of the inquiry. MUNN & CO.

Marine Iron Works. Chicago. Catalogue free

Inquiry No. 6242.—For parties to manufacture, on contract, small machines weighing 6 pounds.

AUTOS.-Durvea Power Co., Reading, Pa.

Inquiry No. 6243.—For the address of the manufacturers of the wire-wound wooden pipe, in the United States and Canada.

"U.S." Metal Polish. Indianapolis. Samples free

Inquiry No. 6244.—For makers of round, woven wire belting or round chain belting, sizes from 1/4 inch to 1/4 inch diameter.

Perforated Metals, Harrington & King Perforating Co., Chicago.

Inquiry No. 6245.—Wanted, to purchase a good patent or novelty suitable for mail order business.

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

Inquiry No. 6246.—For information as to process of making rubber stamps without steam heat.

If it is a paper tube we can supply it. Textile Tube Company, Fall River, Mass.

Inquiry No. 6247.—For makers of high-grade tools for school use,

Adding, multiplying and dividing machine, all in one. Felt & Tarrant Mfg. Co., Chicago.

Inquiry No. 6248.—For parties controlling the sale of the Belden trip hammers, or for the makers thereof. Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 6249.—For makers of hydraulic presses with surface about 36 x 56 with moving stroke of about 2 inches or 3 inches only.

Thermo-piles for electrolytic assays and direct-current work. \$3 each. Walsh's Sons & Co. Newark, N. J. issue of your paper. A contends that when Inquiry No. 6250.—For small, simple machines for ginning, spinning and weaving cotton.

Inquiry No. 6251.—For the makers of the Cheeseman roller gin, or any other make of roller gin.

If you wish to buy patents on inventions or sell them, write Chas. A. Scott, 340 Cutler Building, Roch

Inquiry No. 6252.—For makers of vane cutters and other machinery for manufacturing baskets and berry bexes.

We manufacture tripoli stones of all dimensions, disc, cylinders, etc., samples free. Seneca Filter Co.,

Inquiry No. 6253 .- For manufacturers of dyna-

Patented inventions of brass, bronze, composition or aluminum construction placed on market. Write to Write to American Brass Foundry Co., Hyde Park, Mass.

Inquiry No. 6255.—For parties engaged in all-kinds of spring work.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Machine Company.

Foot of East 135th Street, New York.

Inquiry No. 6256, -For the address of the manuacturers of the Endfield apparatus for treating disease LIVE MAN WANTED.-If you have \$5,000 and want

Inquiry No. 6257. For parties making machinery for manufacturing wood alcohol.

Manufacturers of patent articles, dies, metal stamp lng, screw machine work, hardware specialties, machin ery and toois. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

The SCIENTIFIC AMERICAN SUPPLEMENT is publishing a practical series of illustrated articles on experi-



HINTS TO CORRESPONDENTS.

Designs.

Designs.

Designs.

Designs.

Designs.

DESIGN FOR A CULINARY VESSEL.—F.

H. Gris wold, Springfield, Mass. The design is applied to an open kettle or vessel for cooking fruits, meats, and vegetables. The body enlarges from the bottom up, and on the same

(9486) A. H. S. asks: Theoretically, a rifle ball (or any body) fired vertically should return with exactly the same force. Practically, anyone who has tried, knows that a ball capable of a penetration of say four inches of wood at the muzzle will hardly more than dent the same wood on return. Please explain. A. The resistance of the air, which is very great in a body with a high velocity, prevents a rifle ball from rising as high into the air as it otherwise would, and hence it does not have as far to fall as its velocity on leaving the gun would indicate. The air also retards its fall, hence it does not acquire as great a velocity in falling as the height from which it falls would require. Both in ascending and descending its velocity is reduced, and hence its force on reaching the ground is much less than the velocity with which it left the muzzle of the gun.

(9487) H. H. asks: 1. Is the horsepower of a motor calculated the same as the horse-power of a steam engine? A. horse-power of an electric motor is calculated by multiplying the volts and amperes together, and dividing the product by 746. 2. have a circuit carrying 100 volts through 5,000 ohms resistance; if we add 1,000 ohms more to the circuit, how much more voltage will we have to have in order to have the same results at the end of the circuit? A. If you have 100 volts acting through 5,000 ohms resistance, you have 1-50 ampere flow To have the same through 6,000 ohms ing. you will require 120 volts pressure. First case:  $C = E \div R$ ; or  $100 \div 5{,}000 = 1.50$ . Second case: E = C R; or 1-50  $\times$  6,000 = 120.

(9488) G. A. B. asks: We should like to get your valued opinion on a discussion with reference to sharp turns made by vehicles in general, and shall feel greatly obliged if you will submit your answer in the next an automobile makes a sharp turn, the outer wheels leave the ground, and the weight is all Leyden Chemical Works. Sole manufacturers of alluminous preparations. SSE East 182d Street, New York. outer wheels; as proof, he offers as example the toboggan slide, where a person is thrown toward the outer end when it makes many turns. A. The centrifugal force developed by a vehicle in turning a corner causes the wheels to press outward, and the vehicle to overturn if the velocity is sufficient to throw it over. It is inconceivable that a force directed  $\bullet ut$ ward should cause the vehicle to be upset inward, or toward the center of the curve. To offset the outward pressure of a train, the outside rail is raised on curves in building railroads, we manufacture anything in metal. Patented articles, metal stamping, dies, screw mach. work, etc. wated tracks in the city. The elevation is calculated to be sufficient to make the control of the city. The elevation is calculated to be sufficient to make the city. Inquiry No. 6254.—For makers of simple, up-to. on the inner rail again equal to that upon the date machines for boring iron pump cylinders. outer rail; to tip the train in again, enough to balance the effect of the centrifugal force in tipping the train outward, and tending to upset the cars toward the outside of the curve. In bicycle tracks, where the vehicles often take the curves at high speeds, this elevation of the outer side of the track is very great, and in addition to this the rider finds it necessary to lean in a great deal, to balance the tendency to upset toward the outside.

## \$1,000 yearly in manufacturing business. Big demand, INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending

November 22, 1904

Indicated a practical series of illustrated articles on experimental electro-chemistry by N. Monroe Hopkins.

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Can bedy machine, locked seam, J. H. 775,880 Can body machine, C. B. McDonald. 775,330 Can car piper archine, C. B. McDonald. 775,330 Car, car piper archine, C. B. McDonald. 775,330 Car car piper archine, C. B. McDonald. 775,330 Car c	Burglar alarm, electric, A. Getto
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Copper or like metals from their ores, separating, P. & A. Weiller	Henschen 775,686, 775,685 Condenser, variable air gap, F. F. Streng 775,871 Contreller, E. Schattner 775,561 Cenvertible chair, E. L. Thompson.775,387, 775,388
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Dесемвек 3, 1904.	
Detachable handle, W. I. Lyon Die, G. Keppler Die press, A. W. & A. H. Roovers. Door fastener, slieling, A. W. Zimmer-	775, <b>662</b> 775,82 <b>6</b> 775,354
Door, sidewalk, E. Johnson	775, <b>6</b> 18 775,425
Doubling and twisting machine, yarn, B. S. Allen  Dowel pin making machine, C. F. Stewart.  Draft equalizer, W. J. Robinson.  Draft equalizer, N. N. Egge  Drawing and twisting or spinning worsted or other yarns, mechanism for, S. Sykes	775,550 775,432 775,312 775,748
Draft equalizer, N. N. Egge	
Sykes Dredge, chain sand, R. Smith Drier, Andrews & Loewenthal Driving machine Prester & Schwartz	775,690 775,686 775,717
Drup light, V. A. Menuez  Drum, E. T. Turney  Drum spare strainer, E. T. Turney	775,7 <b>6</b> 3 775,304 775,711 775,712
Dust separator and collector, C. McVeety  Dye, blue anthracene, M. Kugel  Dye, dark blue sulfur, A. L. Laska	775,664 775,368 775,570 775,367
or other yarns, mechanism for, S. Sykes Dredge, chain sand, R. Smith Drier, Andrews & Loewenthal Drying machine, Prector & Schwartz Drop light, V. A. Menuez Drum, E. T. Turney. Drum snare strainer, E. T. Turney. Dust separator and collector, C. McVeety. Dye, blue anthracene, M. Kugel Dye, dark blue sulfur, A. L. Laska Dye, green anthracene, M. Kugel. Dye, green shue anthraquinene, M. Kugel. Dyeing, etc., apparatus for, A. Fankhauser, et al Electric circuit controlling switch, M. W.	775,367 775,369 775,621
Electric circuit controlling switch, M. W. Day Electric controller, Smith & Lippert Electric current generating apparatus, C.	775,445 775,317
Electric current generating apparatus, C. S. Bradley	775,891 775,654 775,714
Electric machinery, dyname, H. G. Reist, 775,458, Electric machines, regulating dyname, W.	775,857
Electric machines, regulating dyname, W. L. Merrill Electric meter, alternating current, B. G. Lamme	775,453 775,334
G. Lamme  Electric time switch, C. S. Moore  Electric transmission system, C. G. & E. J.  Burke  Electrical energy, converting fuel energy	775,844 775,41 <b>6</b>
Electric transmission system, C. G. & E. J. Burke  Electrical energy, converting fuel energy inte, H. Jone Electrical register and system therefor, L. A. Schmidt Electromagnetic brake, R. C. Lowry, 775,834,	775,472 775,408
Electromagnetic brake, R. C. Lowry, 775,834, Elevator safety stop, Robinson & Casey Engine bushing, tandem compound, J.	775,835 775, <b>6</b> 08
Metzger Engine speed regulator, explosive, J. S. Losch	775,376 775,908 775,329
Engine step, J. H. Cary Engines, incandescent igniter for explosive, P. J. Shouvlin Ersser, F. W. Warren	775,385 775,616
Elevator safety stop, Robinson & Casey Engine bushing, tandem compound, J. Metzger Engine speed regulator, explosive, J. S. Losch Engine stop, J. H. Cary Engines, incandescent igniter for explosive, P. J. Sheuvlin Eraser, F. W. Warren Evaporating apparatus, vacuum, C. Ordway Evening and grading machine, E. P. Nichols, reissue Exercising device, R. Patterson Exercising machine, F. Bitter Explosive engine, P. Schmit Explosive engine, C. & W. Hibbard Extension table, J. Mitchell Eyeglasses, L. Kirsch Fabric coating machine, J. H. Shugg Fanning mill, L. T. Larson Farm gate, W. B. Miller Fastener or holding device, G. A. Danielson. Fastening device, J. F. Werle Feed water regulator, W. A. Garrigus Feed water regulator, N. F. Roadhouse.	12,288
Exercising machine, F. Bitter  Explosive engine, P. Schmit  Explosive engine, C. & W. Hibbard	12,288 775,309 775,718 775,314 775,819
Extension table, J. Mitchell Eyeglasses, L. Kirsch Fabric coating machine, J. H. Shugg	775,377 775,828 775, <b>6</b> 84
Fanning mill, L. T. Larson Farm gate, W. B. Miller Fastener or holding device, G. A. Danielson. Fastening device, J. F. Werle	775,755 775,536 775,801 775,433 775,396
Feed water regulator, W. A. Garrigus Feed water regulator, steam boiler, Woods & Graves	775,3 <b>96</b> 775,412
	775, <b>682</b> 775,335 775,75 <b>9</b> 775,518
Fence post, A. F. Weissinger Fender. See Car fender. Fertilizer distributor, T. J. Waddell	775,715 775,357
File, paper, M. G. Bristew Filter, Mehnert & Pape Filter, ail B K Williams	775,430 775, <b>6</b> 45 775,475 775,323
Fence, J. A. Le Hew Fence, H. Meinecke Fence post, E. Bruley Fence post, A. F. Weissinger Fender. See Car fender. Fertilizer distributor, T. J. Waddell File, paper, C. E. Shell File, paper, M. G. Bristow Filter, Mehnert & Pape Filter, oil, R. K. Williams Fire escape, M. A. Kierman Fire escape, O. B. Howe Fire extinguishing sprinkler, automatic, G. Mills	775, <b>6</b> 04 775,704
Fire shield for prospenium arch anenings of	775,729 775,8 <b>6</b> 5
theaters, H. M. Smith Fireproof covering for columns or pillars, S. Goliek Fireproof flooring, D. W. Boyd Fish hoek, W. E. Koch Fish trap, A. L. Brooks Fluid tank indicator, Rantz & Collin Flushing device, A. C. Davidson Forces due to inertia and weight of valve gear, device for relieving, L. D. Levekin Funi picker, J. W. Buchanan Furnace reversing valve, S. M. Guss Furniture, article of, G. W. Bent Fuse, projectile, J. B. Semple Galvanic element or battery, P. Brandt Gament supporter, M. P. Zindorf Gas burner, atmospheric, F. Gross Gas generator, H. Weigle	775,562 775,516 775,727 775,389
Fluid tank indicator, Rantz & Collin Flushing device, A. C. Davidson Forces due to inertia and weight of valve	775,544 775,71 <b>9</b> 775,573
Fruit picker, J. W. Buchanan	775,519 775,563 775,466
Fuse, projectile, J. B. Semple	775,466 775,861 775,892 775,864
Gas burner, atmospheric, F. Gress Gas generater, H. Weigle Gas generater, acetylene, E. R. Cook Gas meter protective valve coupling, F. L.	775,882 775,470 775,641 775,700
Gas meter protective valve coupling, F. L. Finnegan Gas purifier, centrifugal, A. Steinbart Gas purifier, centrifugal, F. V. Matton Gasolene light generating machine, T. A. Davis	775,648 775,462 775,758
Gasolene light generating machine, T. A. Davis Gate, G. F. Moors	775,746 775,306
Davis Gate, G. F. Moors Gear, change speed, Soames & Langdon- Davies Gear, drive, A. Mills Construction of the machine teels change	775,503 775,47 <b>6</b>
Davies A. Mills Gear, drive, A. Mills Gear mechnism for machine tools, change, W. T. S. Johnson Gin rib, L. W. Ellman Glass, chipping, P. J. Handel Glass grinding machine, Goehring & Troche Glass manufacturing apparatus, Wilson & Dbull	775,471 775,349 775,818
2411	775,740
C. Pyle Globe, collapsible, R. D. Gallagher, Jr Goggles, motor, H. Newbold	775,709 775,364 775,381
Gold from ores, extracting, H. R. Cassel Governor, explosive engine, C. & W. Hibbard Grain binder attachment, H. C. Raesner Grain drill distributor, F. R. Packham	775.597 775,820 775,341 775,851
Glassware, machine for making hellow, G. C. Pyle  C. Pyle  Globe, cellapsible, R. D. Gallagher, Jr  Goggles, moter, H. Newbold  Gold from ores, extracting, H. R. Cassel  Governor, explosive engine, C. & W. Hibbard  Grain binder attachment, H. C. Raesner.  Grain drill distributor, F. R. Packham.  Grain separator and dust cellector, combined, E. R. Draver  Grate, E. R. Cahoone  Corte experience appliance. C. A. Ellis	775,418 775,328
Grease cup, F. H. Begart	775,697
Hand brake, H. B. Vickers	775,352 775,8 <b>6</b> 3 775,713
Hat pressing machine attachment, W. H. Kendall Hatches, trap doors, etc., apparatus for operating armored, W. B. Cowles. Hay or grain leader or unloader, W. Kouns. Hay press, E. A. Smith Hay rake and elevator, Irish & Hoover Head gate, floating weir, Hart & Fairall. Heater and mixing faucet, L. M. Hooper High frequency apparatus, portable, F. F.	775,7 <b>6</b> 8
Hay press, E. A. Smith	775,612 775,751 775,532
Heater and mixing faucet, L. M. Hooper High frequency apparatus, portable, F. F. Strong	775, <b>6</b> 55 775,870 775,701
Heater and mixing faucet, L. M. Heeper High frequency apparatus, pertable, F. F. Streng	775,691
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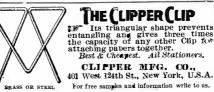
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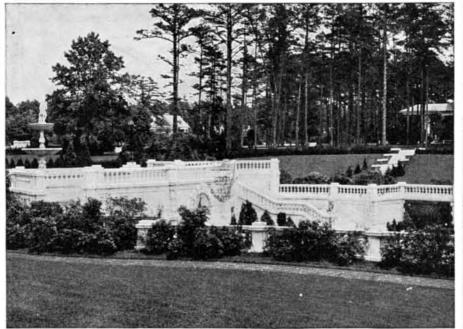
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Paving block or set for use along tramway rails, J. G. Wolf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jacob Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, producing invisible, E. Deberenz.	775,511 775,829 775,330 775,484 775,486 775,907 775,734 775,493 775,423 775,707 775,814 775,785 775,785
Paving block or set for use along tramway rails, J. G. Wolf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jacob Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, producing invisible, E. Deberenz.	775,511 775,830 775,434 775,486 775,907 775,734 775,493 775,493 775,781 775,781 775,785 775,591 775,785 775,886 775,747 775,541
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Bensen Pictures, preducing invisible, E. Deberenz. Pipe covering and making same, J. A. McConnell A. McConnell A. McConnell	775,511 775,830 775,434 775,486 775,907 775,734 775,493 775,493 775,781 775,785 775,785 775,814 775,785 775,886 775,747 775,841 775,747
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Bensen Pictures, preducing invisible, E. Deberenz. Pipe covering and making same, J. A. McConnell A. McConnell A. McConnell	775,511 775,830 775,434 775,486 775,907 775,734 775,493 775,493 775,781 775,785 775,785 775,814 775,785 775,886 775,747 775,841 775,747
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Alken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-step for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe expending and flanging machine, metal, L. D. Levekin Pipe finishing teel, flanged, L. D. Levekin Pipe threader, D. Edwins Pipe wrench and cutter, double acting, G. E. R. Rethenbucher.	775,511 775,830 775,434 775,486 775,907 775,749 775,749 775,784 775,555 775,785 775,555 775,436 775,747 775,541 775,541 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Alken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-step for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe expending and flanging machine, metal, L. D. Levekin Pipe finishing teel, flanged, L. D. Levekin Pipe threader, D. Edwins Pipe wrench and cutter, double acting, G. E. R. Rethenbucher.	775,511 775,830 775,434 775,486 775,907 775,734 775,493 775,493 775,781 775,785 775,785 775,814 775,785 775,886 775,747 775,841 775,747
Paving black or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame, Smyth & Hauer Picker sticks, adjustable back-stop for, O. Benson Pictures, producing invisible, E. Deberenz. Pipe ceverings, apparatus for molding, J. A. McConnell Pipe frame, Smyth & Hauer Pipe finishing tool, flanged, L. D. Levekin. Pipe threader, D. Edwins Pipe wrench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plastic composition, R. McCarrel	775,511 775,830 775,434 775,486 775,486 775,780 775,907 775,775,775 775,781 775,785 775,555 775,555 775,556 775,554 775,574
Paving black or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame, Smyth & Hauer Picker sticks, adjustable back-stop for, O. Benson Pictures, producing invisible, E. Deberenz. Pipe ceverings, apparatus for molding, J. A. McConnell Pipe frame, Smyth & Hauer Pipe finishing tool, flanged, L. D. Levekin. Pipe threader, D. Edwins Pipe wrench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plastic composition, R. McCarrel	775,511 775,830 775,434 775,486 775,907 775,734 775,493 775,493 775,785 775,785 775,555 775,436 775,747 775,514 775,541 775,541 775,572 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Alken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame support, J. S. Cummings Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame, support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-step for, O. Benson Pictures, producing invisible, E. Deberenz. Pipe cevering and making same, J. A. McConnell T775,537, A. McConnell Pipe evereing and flanging machine, metal, L. D. Levekin Pipe finishing teel, flanged, L. D. Levekin Pipe mench and cutter, double acting, G. E. R. Rethenbucher. Plane, J. Muchl Plastic composition, R. McCarrel Plastic material melding apparatus, J. A. McConnell Plate or saucer helder, J. E. Twitchell. Plates of composition, R. McCarrel Plastic material melding apparatus, J. A. McConnell Plate or saucer helder, J. E. Twitchell. Plowshares, manufacture of landsides for, J. B. Jarmin Powder charger, Lippart & Warren.	775,511 775,830 775,434 775,486 775,507 775,734 775,493 775,781 775,781 775,785 775,555 775,436 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,575 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,575 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,575 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Alken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame support, J. S. Cummings Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame, support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-step for, O. Benson Pictures, producing invisible, E. Deberenz. Pipe cevering and making same, J. A. McConnell T775,537, A. McConnell Pipe evereing and flanging machine, metal, L. D. Levekin Pipe finishing teel, flanged, L. D. Levekin Pipe mench and cutter, double acting, G. E. R. Rethenbucher. Plane, J. Muchl Plastic composition, R. McCarrel Plastic material melding apparatus, J. A. McConnell Plate or saucer helder, J. E. Twitchell. Plates of composition, R. McCarrel Plastic material melding apparatus, J. A. McConnell Plate or saucer helder, J. E. Twitchell. Plowshares, manufacture of landsides for, J. B. Jarmin Powder charger, Lippart & Warren.	775,511 775,830 775,434 775,486 775,486 775,734 775,734 775,737 775,737 775,737 775,785 775,555 775,555 775,886 775,747 775,541 775,540 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,575 775,775 775,771 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic shutter, J. S. Wright Picker sticks, adjustable back-stop for, O. Benson Pictures, producing invisible, E. Doberenz. Pipe ceverings, apparatus for molding, J. A. McConnell Pipe ceverings, apparatus for molding, J. A. McConnell Pipe evapanding and flanging machine, metal, L. D. Lovekin Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Pipe wench and cutter, double acting, G. E. R. Rethenbucher. Plane, J. Muehl Plastic composition, R. McCarrel Plastic material molding apparatus, J. A. McConnell Plate or saucer helder, J. E. Twitchell Plate or saucer helder, J. E. Twitchell Plowshares, manufacture of landsides for, J. B. Jarmin Powder charger, Lippart & Warren Power transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan	775,511 775,826 775,330 775,434 775,486 775,487 775,734 775,737 775,734 775,737 775,785 775,555 775,555 775,886 775,747 775,541 775,541 775,540 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,572 775,581 775,587 775,587 775,587 775,587
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic shutter, J. S. Wright Picker sticks, adjustable back-stop for, O. Benson Pictures, producing invisible, E. Doberenz. Pipe ceverings, apparatus for molding, J. A. McConnell Pipe ceverings, apparatus for molding, J. A. McConnell Pipe evapanding and flanging machine, metal, L. D. Lovekin Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Pipe wench and cutter, double acting, G. E. R. Rethenbucher. Plane, J. Muehl Plastic composition, R. McCarrel Plastic material molding apparatus, J. A. McConnell Plate or saucer helder, J. E. Twitchell Plate or saucer helder, J. E. Twitchell Plowshares, manufacture of landsides for, J. B. Jarmin Powder charger, Lippart & Warren Power transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan	775,511 775,826 775,330 775,434 775,486 775,907 775,734 775,493 775,785 775,555 775,436 775,555 775,436 775,574 775,574 775,574 775,572 775,574 775,572 775,573 775,574 775,572 775,574 775,573 775,574 775,572 775,574 775,572 775,414 775,572 775,414 775,572 775,414 775,572 775,414 775,572 775,414 775,572 775,414
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic shutter, J. S. Wright Picker sticks, adjustable back-stop for, O. Benson Pictures, producing invisible, E. Doberenz. Pipe ceverings, apparatus for molding, J. A. McConnell Pipe ceverings, apparatus for molding, J. A. McConnell Pipe evapanding and flanging machine, metal, L. D. Lovekin Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Pipe wench and cutter, double acting, G. E. R. Rethenbucher. Plane, J. Muehl Plastic composition, R. McCarrel Plastic material molding apparatus, J. A. McConnell Plate or saucer helder, J. E. Twitchell Plate or saucer helder, J. E. Twitchell Plowshares, manufacture of landsides for, J. B. Jarmin Powder charger, Lippart & Warren Power transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan	775,511 775,529 775,330 775,434 775,486 775,907 775,734 775,493 775,493 775,785 775,555 775,436 775,555 775,541 775,541 775,541 775,574 775,575 775,409
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe ceverings, apparatus for melding, J. A. McConnell Pipe expanding and flanging machine, metal, L. D. Levekin Pipe threader, D. Edwins Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plate or saucer helder, J. E. Twitchell. Plewshare sharpener, L. J. Cox Plewshares, manufacture of landsides for, J. B. Jarnin Pewer transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan Precious metal from ores, extracting, J. Berrigan Precious stones, apparatus for cutting and pelishing, F. R. Kneip Press or machine for making saggers, etc., E. W. Leigh	775,511 775,529 775,330 775,434 775,486 775,907 775,743 775,493 775,493 775,785 775,555 775,436 775,555 775,436 775,574 775,541 775,574 775,575 775,574 775,575 775,575 775,576 775,577
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe ceverings, apparatus for melding, J. A. McConnell Pipe expanding and flanging machine, metal, L. D. Levekin Pipe threader, D. Edwins Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plate or saucer helder, J. E. Twitchell. Plewshare sharpener, L. J. Cox Plewshares, manufacture of landsides for, J. B. Jarnin Pewer transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan Precious metal from ores, extracting, J. Berrigan Precious stones, apparatus for cutting and pelishing, F. R. Kneip Press or machine for making saggers, etc., E. W. Leigh	775,511 775,826 775,330 775,434 775,486 775,487 775,734 775,737 775,734 775,737 775,737 775,737 775,785 775,555 775,886 775,747 775,541 775,541 775,541 775,542 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,575 775,640 775,676 775,676 775,676
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe ceverings, apparatus for melding, J. A. McConnell Pipe expanding and flanging machine, metal, L. D. Levekin Pipe threader, D. Edwins Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plate or saucer helder, J. E. Twitchell. Plewshare sharpener, L. J. Cox Plewshares, manufacture of landsides for, J. B. Jarnin Pewer transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan Precious metal from ores, extracting, J. Berrigan Precious stones, apparatus for cutting and pelishing, F. R. Kneip Press or machine for making saggers, etc., E. W. Leigh	775,511 775,830 775,434 775,486 775,487 775,734 775,734 775,737 775,734 775,735 775,735 775,555 775,555 775,886 775,747 775,541 775,541 775,541 775,542 775,574 775,676 775,676 775,677 775,687
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe ceverings, apparatus for melding, J. A. McConnell Pipe expanding and flanging machine, metal, L. D. Levekin Pipe threader, D. Edwins Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plate or saucer helder, J. E. Twitchell. Plewshare sharpener, L. J. Cox Plewshares, manufacture of landsides for, J. B. Jarnin Pewer transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan Precious metal from ores, extracting, J. Berrigan Precious stones, apparatus for cutting and pelishing, F. R. Kneip Press or machine for making saggers, etc., E. W. Leigh	775,511 775,830 775,434 775,486 775,483 775,493 775,734 775,75,707 775,775,775,775,775,775,775,775,775,77
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe ceverings, apparatus for melding, J. A. McConnell Pipe expanding and flanging machine, metal, L. D. Levekin Pipe threader, D. Edwins Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plate or saucer helder, J. E. Twitchell. Plewshare sharpener, L. J. Cox Plewshares, manufacture of landsides for, J. B. Jarnin Pewer transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan Precious metal from ores, extracting, J. Berrigan Precious stones, apparatus for cutting and pelishing, F. R. Kneip Press or machine for making saggers, etc., E. W. Leigh	775,511 775,521 775,330 775,434 775,486 775,486 775,767 775,777 775,777 775,787 775,787 775,551 775,552 775,554 775,541 775,574 775,575 775,645 775,647 775,677 775,706 775,677 775,706 775,677 775,706 775,677 775,706 775,677 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenol compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic shutter, J. S. Wright Pick, miner's, W. Ashert Picker sticks, adjustable back-stop for, O. Benson Pictures, preducing invisible, E. Doberenz. Pipe cevering and making same, J. A. McConnell Pipe ceverings, apparatus for melding, J. A. McConnell Pipe expanding and flanging machine, metal, L. D. Levekin Pipe threader, D. Edwins Pipe whench and cutter, double acting, G. E. R. Rethenbucher. Plastic composition, R. McCarrel Plastic composition, R. McCarrel Plate or saucer helder, J. E. Twitchell. Plewshare sharpener, L. J. Cox Plewshares, manufacture of landsides for, J. B. Jarnin Pewer transmitting and reversing mechanism, R. Symmonds Precious metal from ores, apparatus for extracting, J. J. Berrigan Precious metal from ores, extracting, J. Berrigan Precious stones, apparatus for cutting and pelishing, F. R. Kneip Press or machine for making saggers, etc., E. W. Leigh	775,511 775,521 775,330 775,434 775,486 775,486 775,767 775,777 775,777 775,787 775,787 775,551 775,552 775,554 775,541 775,574 775,575 775,645 775,647 775,677 775,706 775,677 775,706 775,677 775,706 775,677 775,706 775,677 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706 775,706
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Paving black or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame, Smith & Hauer Picker sticks, adjustable back-stop for, O. Benson Picker sticks, adjustable back-stop for, O. Picker sticks,	775,511 775,521 775,330 775,434 775,486 775,487 775,734 775,734 775,737 775,734 775,551 775,555 775,555 775,556 775,541 775,542 775,541 775,542 775,541 775,542 775,541 775,542 775,541 775,542 775,541 775,542 775,541 775,542 775,543 775,542 775,543
Paving black or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame, Smith & Hauer Picker sticks, adjustable back-stop for, O. Benson Picker sticks, adjustable back-stop for, O. Picker sticks,	775,511 775,521 775,330 775,434 775,486 775,486 775,493 775,707 775,775 775,785 775,551 775,552 775,554 775,540 775,574 775,648
Paving black or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame, Smith & Hauer Picker sticks, adjustable back-stop for, O. Benson Picker sticks, adjustable back-stop for, O. Picker sticks,	775,511 775,521 775,330 775,434 775,486 775,484 775,493 775,734 775,75,777 775,775,775,775,775,775,775,
Paving black or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamsen Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenel compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken Photographic printing frame, Smith & Hauer Photographic printing frame, Smith & Hauer Photographic printing frame support, J. S. Cummings Photographic printing frame, Smith & Hauer Picker sticks, adjustable back-stop for, O. Benson Picker sticks, adjustable back-stop for, O. Picker sticks,	775,511 775,521 775,330 775,434 775,434 775,434 775,734 775,737 775,734 775,737 775,737 775,737 775,531 775,531 775,541 775,541 775,541 775,542 775,574 775,575 775,631 775,576 775,631 775,576 775,631 775,576 775,631 775,576 775,631 775,576 775,631 775,576 775,631 775,631 775,631 775,631 775,631 775,631 775,631 775,631 775,631 775,631 775,631 775,631
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Paving black or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenolic compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken	775,511 775,521 775,330 775,434 775,438 775,438 775,438 775,493 775,707 775,775 775,785 775,551 775,552 775,554 775,572 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,575 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,581 775,587 775,581 775,587
Paving block or set for use along tramway rails, J. G. Welf Pen, fountain, A. R. Leib Penhelder, W. H. Reed Pencil, J. D. R. Lamson Pencil, lead, A. P. Jaceb Pencil sharpener, F. P. Levejey Phenolic compound, C. Gentsch Phonograph repeating attachment, E. L. Aiken	775,519 775,819 775,830 775,434 775,434 775,438 775,737 775,734 775,737 775,733 775,737 775,531 775,531 775,541 775,541 775,541 775,541 775,541 775,541 775,541 775,541 775,541 775,574 775,541 775,574 775,574 775,574 775,574 775,574 775,574 775,574 775,575 775,673 775,675 775,676 775,677 775,677 775,766 775,677 775,766 775,677 775,766 775,677 775,767 775,767 775,767 775,767 775,767 775,767 775,767 775,767 775,767 775,767 775,767 775,767 775,767 775,767
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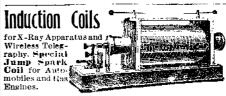


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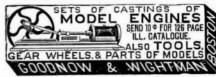
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