#### RECENTLY PATENTED INVENTIONS. Agricultural Implements.

PLANTER AND CULTIVATOR.—J. Jones, Jackson, Miss. A seed-box and fertilizer distributer are employed on this ma-chine and means are provided for releasing and dropping the seed through the action of the fertilizer distributor to cause fertilizing material to be dropped upon or near the see after it has reached the ground. ment can be made whereby the fertilizer dis-tributer will deposit a continuous instead of an intermittent drill.

ROAD-SCRAPER .-- T. WILSON, Meyers Falls. Wash. The road-scraper is of such construction that a main and auxiliary draft beam are employed capable of adjustment relative to each other and to the blade or shovel whereby the dirt may be directed either to the right or left-hand side of the implement. The ground need not be turned up prior to the passage of the scraper over it, as the scraper will act as a plow as well an an evener.

#### Apparatus for Special Purposes.

INCANDESCENT VAPOR-BURNER.-E. L. FEE, Warren, Ind. This invention relates to improvements in burners of that class employed for burning gas for illuminating purposes formed from naphtha, gasoline, or other hydrocarbon oils. The object of the invention is to provide an incandescent burner of this class that shall be simple in construction and with which absolute safety is insured as well as per fect combustion.

### Electrical Apparatus.

BLOCK-SIGNAL SYSTEM .- L. RIEBE, Lansford, Pa. This system is electrically-controlled and particularly adapted for street-railways having a single track with switches at suitable intervals. Simple mechanism is provided whereby a car in leaving the switch will close the circuit to signals at each end of the block, thus indicating to the motorman of a following car that a car is running on the main track between the switches. The system is so arranged that the car upon leaving the main track of the block will cause the signals to be reset to "safety."

## Railway Improvements.

DRAFT ATTACHMENT FOR RAILROAD-CARS .- J. M. Donovan, Vicksburg, Miss. The invention relates to railroad cars having draw-rods extending from one 'end of the car to the other to connect with the draw-bars. An improved draft attachment is provided for railroad cars to insure easy drawing of the cars and to resist buffeting shocks, thereby relieving the car-body of undue strain and giving it longer life.

BRUSH.—F. BECKER, New York, N. Y. This brush is designed especially for use in connection with street railway tracks to clean them. These tracks, as generally constructed, have grooved rails which frequently become clogged with dirt so that it is necessary scrape and brush them. Mr. Becker has invented a novel means for conveniently attaining this end.

## Vehleles and Their Accessories.

WHEEL-HUB .- E. A. ROYCE, Excelsion Springs, Mo. The wheel hub has certain novel means for mounting it to turn with a minimum degree of friction. Various parts of the hub may be readily taken apart for repair and adjustment, and when one part has become worn, so that it no longer operates with perfect satisfaction, it may be easily taken out and a new part substituted without affecting

BICYCLE.-H. C. WEEKS, Bayside, N. Y. The bicycle is provided with endless treads on each side of the wheel forming an inclined walking surface for the rider's feet to walk on, thereby imparting a traveling motion to the treads which is transmitted by gearing to the bicycle wheel. As the rider stands on the inclined treads, it is evident that not only the walking power is used for propulsion, but also the rider's weight, and by the rider pushing on the handle-bar, power is added to propel the bicycle at a very high rate of speed.

# Miscellaneous Inventions.

EYEGLASSES .- A. B. CRITZER, San Antonio. Texas. 'The construction and manner of supporting the nose-pieces operate to project the whole eyeglasses upward in use. The nosepieces are so arranged that they will operate freely and will not become clogged or damaged in any way. They yield laterally toward the lenses and also have a longitudinal movement independent of the lateral movement.

SNAP-HOOK .- A. J. Towner, Santa Ana, Cal. The invention in an improvement in the class of so-called "twin snap-hooks." Improved means are provided for opening and closing the two hooks and holding them closed together when in use. The device employed for this purpose is an eccentric which is peculiarly arranged and rigidly connected with the loop to which a strap is attached in practical use.

NOTE.-Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.

# 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 them formation. In every case it is necessary to give the number of the inquiry. MUNN & CO.

Marine Iron Works. Chicago. Catalogue free. Inquiry No. 2667.-For makers of knitting ma

"U.S." Metal Polish. Indianapolis. Samples free, Inquiry No. 2668.-For makers of pumps for pumping sand and gravel.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J.

Inquiry No. 2669. -- For makers of broom corn eeding machinery. Handle & Spoke Mchy. Ober Mfg. Co., 10 Bell St.

Chagrin Falls, O.

Inquiry No. 2670.—For makers of typewriting and carbon papers. Sawmill machinery and outfits manufactured by the

Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 2671.—For parties to make small-sized special rivets. Metal cut. bent. crimped, embossed, corrugated; any size or shape, Metal Stamping Co., Niagara Falls, N. Y.

Inquiry No. 2672.—For a device for placing over the nose to prevent dust from entering the nostrils. We design and build special and automatic machinery for all purposes. The Amstutz-Osborn Company, Cleveland, Ohio,

Inquiry No. 2673 .- For dealers in metal novel-

For Machine Tools of every description and for Experimental Work call upon Garvin's, 149 Varick, cor. Spring Streets, N. Y.

Inquiry No. 2674.—For machinery for making different kinds of fiber from pine needles.

Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

Inquiry No. 2675.—For machinery for distilling an extract of essential pine needle oil from the needles.

Patents developed and manufactured, dies, special tools, metal stamping and screw machine work. Metal Novelty Works Co., 43-47 S. Canal St., Chicago.

Inquiry No. 2676.—For machinery for making a fabric from the fiber of pine needles.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York. Inquiry No. 2677.—For machines for stamping names on small aluminium plates.

IDEAS DEVELOPED.—Designing, draughting machine work for inventors and others. Charles E. Hadley, 584 Hudson Street, New York.

Inquiry No. 2678.—For the manufacturers of the "Little Giant" wood planer.

WANTED .- American agencies on commission lines for Australia or South Australia. References: J. B. Pitcher. No. 2 A. M. P. Buildings, King William Street, Adelaide, South Australia.

Inquiry No. 2679.—For makers of oil burners for small steam boilers.

PATENT FOR SALE.—Setting instrument patented March 18, 1902. Every machinist needs one. Used for different purposes. Send for circular. Morris Chamberlain, Bartley, N. J.

Inquiry No. 2680.—For a motor cultivator or har ow.

Press work done at short notice. Blanking and draw ing our specialty. Estimates cheerfully furnished. Tools for all work made on premises if desired. Copper. brass and nickel plating. Correspondence solicited. Acme Ball-Bearing Caster Co., Chappaqua, N. Y.

Inquiry No. 2681.—For an automatic press for eard printing.

Local agents in power using centers make \$5.00 to \$10.00 a day handling best specialty of kind in America. Exclusive territory. Particulars for 2 cent stamp. W.S. Raymond, 181 Chestnut St., Chicago.

Inquiry No. 2682.—For makers of typewriter ribbons, papers, etc.

Inquiry No. 2683.—For elevators for hoisting pumps for sand, etc.

Inquiry No. 2684.—For makers of automatic coal diggers or grapplers, which will pick up from 1 to 3 yards of sand or gravel. Inquiry No. 2685.—For manufacturers of brick press or machines.

Inquiry No. 2686.-For dealers in electric electat-

Inquiry No. 2687.—For a burner for brazing with crude oil and air pressure.

Inquiry No. 2688.—For manufacturers of cheap motors.

Inquiry No. 2689.—For dealers in electric novelties. Inquiry No. 2690.—For candy-making machinery, such as lozenges, etc.

Inquiry No. 2691.—For the manufacturers of an attachment for spoons to avoid slipping into dishes, also for the makers of a spoon with a perforated bowl for mixing batter, etc.

Inquiry No. 2692.—For manufacturers of coffee

Inquiry No. 2693.—For the address of Morton Evans & Co., makers of gasoline traction gear.

Inquiry No. 2694.—For makers of gasoline fuel marine steam engines and boilers 1 to 40 h. p. Inquiry No. 2695.-For machinery for making a feed brick under pressure.

Inquiry No. 2696.-For makers of hydraulic brick and clay-raking machinery. Inquiry No. 2697.—For makers of pocketbook rims and clasps.

rins and clasps.

Inquiry No. 2698.—For manufacturers of double automatic vard gates.

Inquiry No. 2699.—For a 20 to 25 h. p. traction engine for use on country roads for hauling freight.

Inquiry No. 2700.—For manufacturers of cheap clockwork to drive movable paper figures for advertising.

Inquiry No. 2701.—For parties to manufacture pecial machines. Inquiry No. 2702.—For manufacturers of paper novelties, such as spoons with hollow handles, etc. Inquiry No. 2703.—For dealers in second-hand belting.

Inquiry No. 2704.—For manufacturers of small refrigerating plants suitable for residences. Inquiry No. 2705.—For a gas plant for from 25 to 50 Bunsen burners, also wire and piping.

Inquiry No. 2706.—For a dynamo for 100 to 150 incandescent lights; also an engine for pumping water and running dynamo.

Inquiry No. 2707.—For makers of bathroom appliances.



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# INDEX OF INVENTIONS

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

May 27, 1902,

AND EACH BEARING THAT DATE. (See note at end of list about copies of these patents.

|   | Advertising device, H. L. Beach  | 701,249<br>701,272<br>701,205                        |
|---|--|--|
|   | Air cleansing and cooling device, J. Mc-<br>Creery   |  |
| ۱ | Creery Air compresser, E. Hill. Air diffuser, S. G. Smith. Air purifying and cooling apparatus, R. H. Thomas   | 700,859<br>701,212<br>700,962                        |
|   | Amalgamater, Marquette & Nelsen Annealing bex, J. J. Markey Arch, metal, R. Gray Asphaltum, extracting and refining, A. F. L. Bell Atemizer, C. J. Seltzer Atemizer, sir fercing device, C. J. Walz Automatic signal, R. L. Sterm Automobile, A. L. Kull Automobile driving mechanism, A. L. Kull Awning, S. Digness.  | 701,034  |
|   | Atomizer, C. J. Seitzer. Atomizer, sir forcing device, C. J. Walz Automatic signal, R. L. Storm Automobile, A. L. Kull   | 700,838<br>700,995<br>700,851<br>700,784<br>700,786  |
|   | Automobile driving mechanism, A. L. Kull Awning, S. Digness  | 700,786<br>701,170<br>700,780<br>701,065             |
|   | Axle lubricator, car, J. E. Gill.  Bag handle or carrier, E. L. & W. H. Cadwell  well  Bale tie, H. De Haven   | 701,030<br>701,146<br>.701,259                       |
|   | Baling press, Hilliard & Heidacker   | 701,039<br>700,940<br>700,922                        |
|   | Basket, C. P. Litchfield.  Battery, G. S. Bennett.  Battery plates, uniting, W. F. J. Lutz  Red R A Report   | 701,062<br>701,253<br>700,959<br>701 131             |
| ı | Bed bettem, J. Heey. Bed brace, J. H. Hartman. Bed, couch, D. C. Sterr. Bed ar anch interconvertible D. C. Sterr.  | 701,131<br>.700,939<br>700,917<br>700,853<br>700,852 |
| I | Belt, F. W. Brewn Belt, L. Hummel Belt, harvester, J. S. Seurek Bigyele padal W. H. Fauher   | 701,141<br>701,270<br>700,987<br>701,028             |
| ı | Bicycle pump, E. F. Smith  | 700,841<br>701,254                                   |
| ı | Block, see Brake block, Building block. Blotter, calendar, S. M. Dewey Boat launching apparatus, life, J. W. Bed-  | 701,173<br>701,169                                   |
| ı | Beat, life, A. Baumgart.  Beek cover, Knibb & Tewler.  Beek supporter, E. W. Behrens.  | 701,009<br>701,128<br>701,055<br>701,010             |
|   | Bettle, non-refilable, F. J. Herrington  Bettle, nursing, J. J. Minwegen  Bettle rinsing apparatus, G. Heurteaux   | 700,774<br>700,770<br>701,070<br>700,925             |
| ı | Autsmatic signal, R. L. Sterm. Autsmebile, A. L. Kull. Automebile driving mechanism, A. L. Kull. Automebile driving mechanism, A. L. Kull. Awning, S. Digness. Ax head, O. King. Axle bex and brass, car, G. W. Magee. Axle bax and brass, car, G. W. Magee. Axle lubricater, car, J. E. Gill. Bag handle or carrier, E. L. & W. H. Cadwell Bale tie, H. De Haven Baling press, Hilliard & Heidacker Bandage, R. W. Jehnsen. 700,938 Barrel helding cleats, apparatus for applying, F. E. Heinig. Basket, C. P. Litchfield. Battery plates, uniting, W. F. J. Lutz. Bed, R. A. Bennett. Bed bettem, J. Heey. Bed brace, J. H. Hartman. Bed bettem, J. Heey. Bed brace, J. H. Hartman. Bed, couch, D. C. Sterr. Bed or ouch, intercenvertible, D. C. Sterr Belt, F. W. Brewn. Belt, harvester, J. S. Seurek. Bicycle pedal, W. H. Fauber. Bicycle pedal, W. H. Bensinger. Blasting purposes, safety device for, J. M. Deyle Bleck, see Brake block, Building block. Bletter, calendar, S. M. Dewey. Beat launching apparatus, life, J. W. Bedfeel, and refillable, F. J. Herringten Bettle, nen-refillable, F. F. Fitzgerald et al. Bettle, nen-refillable, F. J. Herringten Bettle, nen-refillable, F. J. Herringten Bettle istopper, F. Stutz. Bettle stepper, F. Stutz. | 701,101<br>701,129<br>701,048                        |
| ۱ | Box plaiting device, F. H. Fisher  | 700,742<br>700,753<br>700,843<br>701,220<br>700,949  |
| ŀ | Bettle washing machine, H. L. Belknap. Bettles, device for preventing refilling of. F. W. Johnson. Bex or package, F. P. Croft. Bex plaiting device, F. H. Fisher. Bex shaping machine, W. S. Smith. Brake block, J. S. Odgers. Breeding pen for sews, O. S. Klindworth. Brick press, C. W. Reynolds. Bricks or blocks, machine for molding, C. G. Bavies  | 700,949<br>700,823<br>700,746<br>701,161             |
| ŀ | G. Davies  Bridle bit warming device, G. Davis.  Brine, vacuum apparatus for beiling, G. N.  Brooder, chicken, S. L. Hirshey   | 700,860<br>701,040                                   |
| l | Brush, bettle cleaning, A. A. Pindstofte<br>Bucket, cook, L. Moere<br>Buckle belt clamp, L. Sanders  | 701,182<br>701,084<br>700,968<br>701,091             |
| ı | Bride bit warming device, G. Davis.  Brine, vacuum apparatus fer beiling, G. N.  Vis  Brooder, chicken, S. L. Hirshey.  Broom, Ellis & Beug.  Brush, bettle cleaning, A. A. Pindstefte  Buckle, coek, L. Moore.  Buckle belt clamp, L. Sanders  Buckle, suspender, M. Rubin.  Buckle, suspender, H. H. Wilsen.  Building, J. A. Martin-Coeke  Building bleck, J. W. Chrisford.  Building bleck, A. De Man.  Bulkhead doors, apparatus for clesing on   | 700,828<br>700,872<br>700,794<br>701,150<br>701,165  |
| l | or opening water-tight, W. & A. R. Crawford  | 701,156  |
| Ì | Bung and tapping bush, combination, J. Scier Burglar alarm, J. Q. A. Cate. Burlal device, R. Kinney. Burner, See Gas burner, Hydrocarbon   |  |
| l | burner. Burner, H. C. Zenke  | 701,123<br>701,041<br>700,759<br>701,244             |
|   | Burner, H. C. Zenke. Butter printing apparatus, C. A. Hedge. Butten, J. C. Friedrich. Butten, cellar er cuff, e. F. Amburn. Butten making machine, J. B. Willyerd. Buttens, etc., mechanism fer eperating machines fer attaching, T. Leng.   | 701,244<br>701,116<br>700,790                        |
| ı | Cable connection for covering spliced joints,<br>C. Luke   | 701,210<br>701,198                                   |
| l | Camera, magazine, D. A. Lewthime<br>Can capper, J. R. Duncan<br>Can capping machine, Deyle & Gebble<br>Can testing appartus. H. C. Black   | 700,792<br>701,176<br>701,021<br>700,891             |
| ı | Car brake mechanism, railway, C. W.  | 100,000  |
| l | Pewell Car, metallic, H. S. Hart. Car or truck, transferring, R. A. Ludiew Car safety platform, railway, Helland & Wickline Car seat, L. Jansen.   | 700,818<br>700,767<br>701,207<br>701,202             |
|   | Car side coupling, railway, F. Kohn<br>Carbureter, E. R. Inman   | 700,782<br>700,777<br>700,953                        |
| ı | Cash register, E. H. Jannz   | 700,778  |
| ı | Cashier and register, combined mechanical I. S. Dement. Caster, ball, T. Galvin. Catheter or like instrument, R. P. McCully Center iron and lap ring, P. H. De Roche   | 700,748<br>701,196<br>701,075<br>701,168             |
| ı | ment Charceal manufacturing apparatus, C. J. T Burcey Chart, adjustable dress, J. H. Chequette. Cheese cutter, W. J. Spillman. Churn and butter werker, cembined, T  | 101,100  |
| l | Churn and butter we'ker, cembined, T<br>J. Hewve<br>Churn cover, T. H. B. Van Heezer<br>Chute and trap deer, ere, Lindall & Mattsei<br>Chute, coal, W. H. Simms<br>Cigarette machine, centinueus, F. J. Luding   | 700,775<br>701,234<br>1700,789<br>701,227            |
| ı | Chute, coal, W. H. Simms   | 701,227  |
| ١ | Clear, sheet metal fastering, F. E. Heinig<br>Clearre, C. Puddeford  | 701,086  |
|   | J. F. Bannon. Clutch, D. L. Winters. Clutch, magnetic, F. L. Sessions.   | . 701,248<br>. 700.875                               |
|   | Coke, apparatus for the manufacture of   | . 100,135  |
|   | P. Nacf  Collars, cuffs, etc., stiffening and making impervious to water starch-filled and ironed laundry-finished substance obodies of, H. A. Mann  | g<br>d<br>f<br>. 700,793                             |
|   | Combustion, fluid for promoting, T. Battis<br>tini<br>Compound engine, W. Hopkins<br>Condiment, T. L. Healy  | . 700,888<br>. 700,930<br>. 701,037                  |
|   | tini Cempeund engine, W. Hepkins. Cendiment, T. L. Healy. Cenduit, T. J. Milner. Corset steel, A. A. Harvey. Cotten machines, cevered reller for, Huthaway & Spencer. Couch frame, J. Watkins. Coupling. See Car side coupling, shafe  | . 701,214<br>. 700,918<br>. 701,266                  |
| ı | Continue.  | t 101,112  |
| • | (Continued on page 403)  |  |