#### RECENTLY PATENTED INVENTIONS. Electrical Apparatus.

ELECTRIC LAMP.—W. McConnell, Brooklyn, N. Y. The lamp or torch is of the class designed to be carried in the hand or pocket. and the invention lies in a circuit-closer, by means of which an intermittent or flash light may be produced, or the circuit held closed for any desired length of time. The lamp comprises a body portion containing an electric cell and a lamp in connection with one pole of the cell. A spring-plate on the body has elecplate having connection with the lamp.

### Mechanical Devices.

MACHINE FOR MAKING PIPE.—J. H. MARTIN and D. ORMAND, Riverside, Cal. Two patents have been granted to these inventors for a machine of this kind. The inventions relate to apparatus for making pipe of plastic material, such as asphalt. In the first invention, the asphalt is fed into an annular revoluble mold. Stamps working therein pack the material down, and trailers attached to the stamps keep them at the proper elevation with respect to the upper  ${\tt end}$  of the pipe section.

The second machine is designed for making continuous lengths of pipe, such piping being adapted particularly for use in conduits or trenches carrying electrical wire. The plastic material is placed in a hopper and automatically pushed down into the throat of the machine. Upon starting the motor, the plastic material is pushed out from the throat around a core and within the rear part of the casing. This forms a continuous piping, and as the piping sets or hardens, the action of a plunger causes the entire machine to be pushed for ward.

COAL-WASHER AND ORE-CONCENTRA-TOR .- A. C. CAMPBELL, Asheville, N. C. A reciprocating motion and a percussive action is given to the pan to cause the separation of in warm weather, an unnecessary quantity of more dense stuff and the less dense stuff into two principal layers. The top layer is floated away by the escaping water and is discharged and imperfect impression. In this pad a practically uniform surface thickness is at all times over the tail end of the pan into a sluice, while the lower layer or more dense stuff is! discharged at the head of the pan.

MACHINE FOR MAKING COMPOUND PA-PER.-C. P. Brown, Comstocks Bridge, Conn. The machine is designed for pasting together two webs of paper during the process of manufacture, and comprises a plurality of press rolls arranged in the form of a hollow square in which is located a paste roll for applying paste to one of the webs before they are pressed together.

prises a frame arranged in a trunk formed in frame, it is morely necessary to add short tubethe vessel and adapted to be lowered below the bottom of the vessel. The invention is applicable to boats of all kinds, and if applied to a centerboard vessel, the trunk carrying the centerboard may be enlarged so as to receive also the propeller gear and one or more center-

MACHINE TREADLES.—F. P. HARRIS, and is so arranged that upon lifting the device Greenville, Ky. The physical exertion required for operating the ordinary sewing-mater out of the clothes, after which it may be the company of the clothes, after which it may be the company of the clothes, after which it may be chine treadle is greatly reduced by using the suspended from an attachment on the boiler rocker attachment here described. A foot rocker is mounted on the treadle, being held thereto by springs which tend to keep it balanced. When pressure is brought to bear on the toe or heel of the rocker, the power must be conveyed to the treadle through these springs, thus giving an elastic motion free from any sudden strain.

RAKING DEVICE FOR FURNACE GRATES .- J. C. McDonald and M. Brennan, Sidney, N. Y. The device comprises a raking frame normally located under the grate and. provided with spaced bars adapted to pass between the grate bars. A crank shaft is connected to one end of the rocking frame, which gives the frame an up-and-down swinging and lengthwise-traveling motion between the grate

# Vehicles and Their Accessories.

WHEEL.—A. A. Vérel, Glasgow, Scotland. The distinguishing feature of this wheel is found in an outer rim held to the hub by spokes passing through slots in an inner rim. Tension and compression springs are applied between them and the hub.

county, Ky. The truck comprises a beal or curved around a horizontal axis presenting the platform provided with an opening, into and concave side to the front of the grader to form out of which a platform section is vertically a bucket. Blades are fastened along each edge movable. This section may be raised to re- of the bucket. ceive or deliver goods at different heights, this being desirable when the truck is used for baggage or freight in connection with railroads or in commercial houses.

WAGON GEAR .- J. AUSTIN, Pitkin, Colo. The invention relates to mechanism for facilitating the starting movement of wagons or the crown tooth and is anchored in the canal in other vehicles. It consists in a gear con- the root to which the crown is applied. The nected directly with the team and arranged to metallic backing and the stud are separable act directly on the wheels so as to impart; from the crown so that the latter can be conturning movement thereto, after which the veniently ground to accurately fit upon the gear is automatically thrown out of action, outer end of the root. and the vehicle is drawn in the usual manner.

curing elastic tires to the rim of a wheel by bands. The invention consists essentially of a combined tension screw and worm gear, the latter acting as a nut to apply the requisite tension to the screw. The tension screw is curved approximately to the curvature of the wheel rim, and is provided with a hook or other means of making detachable engagement with one end of the holding-on band, the other end of which is fixed.

WHEEL FOR VEHICLES .- H. EDEN BOROUGH, Snaresbrook, England. The inventrical connection with the other pole of the tion relates to wooden wheels of field guns, cell and is adapted to be engaged by a keeper- wagons or other vehicles, and provides for readily tightening up the wheel when the fellies and spokes become loose. The wheel has its rim coned in opposite directions on the external circumference. An outer encircling tire-band forms the tread of the wheel, and two opposed series of segmental wedges are located between the rim and the tire-band, these wedges being oppositely coned on their internal circumference to correspond with the circumference of the wheel rim. Transverse bolts are adapted to draw the outwardly coned segments toward each other with a wedge-like action, so as to take up all slack.

> VEHICLE ATTACHMENT.-W. P. LEE, Fairfax, Minn. The purpose of the invention is to provide an attachment for single-horse vehicles which will enable the wheels to run in the beaten track, while the horse may travel at one side of the center of the road in one of the tracks made by a double team of horses. The thills are attached to the front axle at one side of the center. In order to compensate for the non-uniform draft which this arrangements transmits to the axle, a compensating spring is provided.

#### Miscellaneous Inventions.

STAMP PAD.-E. G. WOODY. New York. N. Y. With the usual form of stamping pad constructed of felt, at certain times, especially maintained. The stamp pad consists of open grained wood impregnated with ink and having rough surface which serves to insure an even distribution of the ink.

BED SPRING .- F. MOEHLE, Sheffield, Iowa The object of the invention is to provide a bedspring that may be readily adjusted to bedsteads of different sizes and may be quickly taken apart and packed in a small space. The frame of the bed-spring comprises side rails of tubular metal threaded at their ends into corner castings. The head and foot rails consist PROPELLER GEAR. — G. W. GARDINER, of pairs of bars. Rollers or tubes are mounted Philadelphia, Pa. The propeller gear com- on these bars. If it be desired to widen the sections. The springs consist of metal plates which pass over the rollers at the head and foot of the frame, and whose ends underneath are connected one with another by helical springs.

WASH BOILER ATTACHMENTS .- MARY C. Sonneborn, Laporte, Ind. The device is de-ROCKER ATTACHMENT FOR SEWING signed for lifting clothes from a wash boiler, to permit draining.

CARPET STRETCHER. - J. WHIREHART. Zanesville, Ohio. The stretcher has a longitudinal member provided at one end with a metallic claw. Pivoted to the other end is a lever which rests at one end on the floor and has pivoted to its other end the stretching lever. This lever has a handle and terminates at its lower end in a cross bar provided with teeth. By pressing down on the handle these teeth are caused to force the carpet toward the anchor claw. A ratchet bar holds all the parts in the position they assume when the handle is depressed.

FENCE JACK .- L. C. KELLY and C. E. AM-SPACHER, Charlotte, Mich. The leading object of the invention is to provide improved details for a fence jack which will keep the carrying wires of the fence taut and compensate for the general shortening of these wires when twisted to retain upright pickets in spaced position thereon.

GRADER .- J. BAGLEY, Tacoma, Wash. The apparatus is adapted for scraping and hauling earth in grading and is also applicable in to the inner ends of the spokes, and interpose ditching and dredging. It has vertical side plates rigidly connected together. A rear end TRUCK .- E. S. PERKINS, Auburn, Logan plate extends between the side plates and is

> ARTIFICIAL DENTURE.—A. F. COGSWELL Crete, Neb. The invention relates to artificial crowns for natural roots of teeth and provides metallic backing for the wearing surface of the tooth, also, in connection with this backing, an anchor post or stud. This stud extends through

Note.-Copies of any of these patents will be MEANS FOR SECURING ELASTIC TIRES furnished by Munn & Co. for ten cents each. TO WHEELS.-W. F. WILLIAMS, London, Eng. Please state the name of the patentee, title of land. Improved means are employed for set the invention, and date of this paper.

# Business and Personal Wants. INDEX OF INVENTIONS

READ THIS COLUMN CAREFULLY.—You will tind 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.

MILIN A. MUNN & CO.

Marine Iron Works. Chicago. Catalogue free Inquiry No. 2370.—For manufacturers of malle-

Motor Vehicles. Duryea Power Co., Reading, Pa. Inquiry No. 2371 .- For makers of laundry ma

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

Inquiry No. 2372.—For manufacturers of match aking machinery. WATER WHEELS. Alcott & Co., Mt. Holly, N. J. Inquiry No. 2373 .- For dealers in asbestos paper. Stove, range and heater castings. Atlantic Foundry,

Phillipsburg, New Jersey. Inquiry No. 2374.-For dealers in ascending balloons of large size.

WANTED.-Sole agency, Facific coast, good article. Have capital. Box 856, Fresno, Cal.

Inquiry No. 2375.—For makers of cheap thin metal which can be bent by the fingers.

FOR SALE.-A valuable patent for the right parties. Address Profit, Box 773, New York. Inquiry No. 2376.—For a machine for pasting paper or pasteboard together.

Sawmill machinery and outfits manufactured by the

Lane Mfg. Co., Box 13, Montpelier, Vt. Inquiry No. 2377.—For manufacturers or dealers n machines for lapidary work, slitting saws, table laps,

Rigs that Run. Hydrocarbon system. Write St. Louis Motor Carriage Co., St. Louis, Mo.

Inquiry No. 2378. - For dealers in lamps and cook-ng stoves using carbureted alcohol of 60 O. P., specific gravity .818 to .83.

Metal Stamping Co., Niagara Falls, N.Y., cuts and forms sheet, bar, rod, or wire any shape.

Inquiry No. 2379.-For a planter for planting coton seed.

Specialty sales man for late up-to-date inventions, etc. Address A. W. Kirkpatrick, Greeneville, Tenn.

Inquiry No. 2380.—For parties making small steam turbines of  $5\,\mathrm{h}$ . p. and less.

Are you looking for anything in bent woodwork? Write Tucker Bicycle Woodwork Co., Urbana, Ohio.

Inquiry No. 2381.—For a machine for placing stamps on letters.

WANTED-A firm to se'l valuable patents to foreign countries, on commission. Address Patents, Box 773.

Inquiry No. 2382.—For parties to undertake the manufacture of an improved thread-cutting die.

We design and build special and automatic machinery for all purposes. The Amstutz-Osborn Company, Cleveland, Obio.

Inquiry No. 2383.—For manufacturers of aluminium hooks.

Automobiles built to drawings and special work done promptly. The Garvin Machine Co., 149 Varick, cor. Spring Streets, New York.

Inquiry No. 2384.--For machinery for coating blue-print or other sensitive surface papers.

IDEAS DEVELOPED.—Designing, draughting machine work for inventors and others. Charles E. Hadley, 534 Hudson Street, New York.

Inquiry No. 2385 .- For manufacturers of spring

Factory room with power, steam, elevator, etc.; good light, also storage room. Chas. F. Kilburn, 84, 86, 88 Mechanic Street, Newark, N. J. Inquiry No. 2386.—For manufacturers of springs for bodies of automobiles and vehicles.

WANTED. - Partner to finance several inventions.

Foreign and domestic patents to secure. Address Inventor, Box 81, Cygnet, Ohio. Inquiry No. 2387.—For dealers in granite-steel and tin cooking utensils.

FOR SALE.—To party direct, for cash. patent 608,925

on folding umbrellas. No selling agencies need answer. M. R. Studams, Bridgeton, N. J.

Inquiry No. 2388.—For dealers in uncured sheet rubber of different thicknesses and degrees of softness. Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Com-pany, 18 South Canal Street, Chicago.

Inquiry No. 2389.—For manufacturers of mortar-mixing machines. 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. 2390.—For a portable machine for extracting hemp fiber from the bemp plant.

ELECTRIC DRY BATTERY .- Manufacturers submit free samples with casting qualities. Quote prices for quantities. Darling Motor Company, Chicora, Pa.

Inquiry No. 2391.—For machinery for making ticky fly paper. 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. 2392.—For manufacturers of double-braid asbestos wire.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers. 361 Broadway, N. Y. Inquiry No. 2393.—For parties to spin asbestos in sheet form.

Wanted-Revolutionary Documents, Autograph Leters, Journals. Prints, Washington Portraits, Early American Illustrated Magazines. Correspondence Solicited. Address C. A. M. Box 773, New York.

Inquiry No. 2394.—For machinery for weaving or knitting elastic patches for stockings, also under-

PATENT FOR SALE ON ROYALTY.—Domestic cre-mator for household garbage. Effective odorless, cheap, disposes of all garbage daily. Address E. S. Nowlan, 452 East Division Street, Chicago, Ill.

Inquiry No. 2395.—For machinery used for clean-ng carpets by air-blast exhaust fan.

LAUNCH DESIGNS AND WORKING DRAWINGS FOR SALE.—Special designs made to order. Send stamp for booklet of designs of modern gasoline launches.

Harry J. Perkins, Naval Architect.

Grand Rapids, Mich.

Inquiry No. 2396.—For makers of lawn mower.

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

## April 1, 1902,

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

Account device, manifolding, C. Ormsby Accumulator, De Roussy de Sales & Gueug-	696,584
Accumulater, De Reussy de Sales & Gueug- nen Acid ether of cinchena alkaleids, succinic, H. Thren Adding and subtracting machine, W. A. Day Adding machine, C. H. Platt Advertising wagen, J. Leightham Air brake, pistons, holding teel, fer, J. Korinek Air compresser regulating device, Sergeant & Frellwitz	696,496 696,609
Adding and subtracting machine, W. A. Day Adding machine, C. H. Platt Advertising wagen. J. Leightham	696,415 696,481 696,907
Air brake, pistons, holding tool, for, J. Kerinek	696,453
& Frellwitz Amaigamater, E. J. Kiss Apren fastener, sterm, C. C. Lares Arch construction, concrete, W. C. Parm-	. 696,504 696,452 696,574
Arch construction, concrete, W. C. Parm- ley	696,838 696,398
Arch construction, concrete, W. C. Parmley Armature coil, A. F. Batchelder. Assayer's furnace, Lonergan & Calkins, reissue Assaying furnace, A. C. Calkins Automobile, E. J. Pennington Automobile, W. E. Trufant Automobile condenser, E. J. Pennington Badge and pencil holder, combined, J. A. Mangold Bag. See Feed bag. Bag for remedial annications, F. C. Helmos	11,979
Automobile, W. E. Trufant	696,548 696,477 696,660
Badge and pencil helder, combined, J. A.  Mangold  Pag. See Food bog	696,478 696,6 <b>51</b>
Mangold  Bag See Feed bag.  Bag for remedial applications, F. C. Holmes  Baling machine, cotton, E. Motz  Baling press for cotton, etc., Harvey &  Wener.  Baling press, roller, J. J. Faulkner  Balling press, roller, J. J. Faulkner  Balling press, roller, J. J. Faulkner  Balling machine, W. Fleming  Band fastener, G. P. Rasck  Balling press, plate separator, J. K. Pumpelly.  Beating, ball, B. D. Ward  Beating, ball, B. D. Ward  Beating engine, E. A. Jones.  Bed, interconvertible couch, A. E. Kenney.  Bedstead, S. E. Claussen  Bicycle gear, I. W. Keithley  Biscuits, etc., apparatus for automatically  coating, Baker & Carr.  Boiler flue, detachable, J. F. Drake.  Boi	$696,\!441 \\ 696,\!743$
Werner  Bailing press, reller, J. J. Faulkner  Ball See Golf bell Plering bell	696,432 696,8 <b>6</b> 3
Balling machine, W. Fleming	696,669 696,592
Bearing, ball, B. D. Ward  Beating engine, E. A. Jones  Bed intergenvertible county A. F. Kenner	696,777 696,822
Bedstead, S. E. Claussen  Bicycle gear, I. W. Keithley  Bigenits etc. appareins for enterpolically	696,858 696,448
coating, Baker & Carr  Boat, etc., life, C. E. Baarsen  Boiler the detachable I F Drake	696,536 696,621
Boiler furnace, steam, Peabody & Johnson.  Bott anchor, F. C. Palmer 696,586,  Boring tool J. Gray Sr	696,840 696,587
Bettles, etc., stepper for, G. Koch	696,571 696,813
Brake slack adjuster, H. A. Wahlert  696,521 te 696,521, Brake slack adjuster, railway, H. A. Wahlert Bridge gate, F. I. Pleck Breiler er teaster, E. B. Lydick Breecb, A. Pellard Breen helder, H. Rlame	696,526
Bridge gate, F. I. Pleck  Broiler or toaster, E. B. Lydick	696,524 696,589 696,876
Broom holder, H. Blome Brush, J. M. Chambers Brush, beth W. A. McMochen	696,487 696,542 696,798
Brush machine, H. M. Schwartz.  Brush, pelishing, W. Dixon  Bucket and energing mechanism clam	696,470 696,761 696,725
Breiler er tesster, E. B. Lydick Breech, A. Pellard Breenh, J. M. Chambers Brush, J. M. Chambers Brush, bath, W. A. McMechan. Brush machine, H. M. Schwartz. Brush polishing, W. Dixon Bucket and eperating mechanism, clam shell, F. E. Hulett Burlal casket, C. H. Hiser Butner, See Hydrocarbon burner. Butnerle machine, R. W. Themson.	696,444 696,439
Butten making machine, M. Garbeil.  Butten making machine, M. Garbeil.  Butten, separable treusers, A. Luethi.  Cam fastening for stamp mill shafts, E. A.  Blanten, Jr.  Camera, H. L. Silver  Cane and whip, combination, M. A. Allen.  Car brake, C. B. Fairchild.  Car, convertible railway, J. A. Brill,  696408.	696,629 696,908
Blanten, Jr. Camera, H. L. Silver Cane and whip, combination M A Allen	696,403 696,600 696,705
Car brake, C. B. Fairchild	696,901 696,409
Car deer, grain, Dewns & Draper	696,861 696, <b>741</b>
Carbureting device for explosive engines, McCormick & Miller	696,909 696,437
quard, J. T. Belten Caster, warehouse truck, T. E. J. Schaibly. Catamenial bandage, H. Bauer	696,708 696,499 696,538
Chair attachment, A. H. Hunting Check hook, Harrison & Platts Chimney and ventilator, W. Davis	696,680 696,674 696,724
Chute, V. B. Jehnsen	696,683
Cigar meistener and price and brand ticket, S. Strauss Cigar packing machine, J. G. Gabel	696,512 696,868
Clamp for washbowls, etc., E. S. Duffy Clamping wrench, R. A. Breul Cock adjuster for air brakes, angle, W. S.	696,422 696,405
Cattin Bratectar Black & Bunker	606 707
Coin freed apparatus for sale of stamps, tickets, etc. K. Uchermann	
Sen	696,567
Commutator trimming apparatus, J. Phillips Composing machines, differential letter space register for, G. A. Goodson. Concentrator, W. H. Sullivan. Conduit for underground conductors, F. Jones Conduit outlet box, interior, W. F. Bossert Conduit outlet boxes, making, W. F. Bossert Connecting device, J. R. Carter.	696,479
Conduit for underground conductors, F.	696,732 696,913
Conduit outlet box, interior, W. F. Bos- sert Conduit outlet boxes, making, W. F. Bos-	696,737
Connecting device, J. R. Carter	696,709 696,549 696,531
Conduit outlet boxes, making, W. F. Bosser sert  Connecting device, J. R. Carter.  Conveyor, pneumatic, J. M. Akers.  Cork extractor, A. Baumgarten  Corset, P. J. Menahan  Counter guard wall telescoping wicket, R.  B. Browne  Culm drier and separator, J. W. Perry  Cultivator, J. T. Bender  Curtain fixture, W. H. Bongart	696,399 696,465
B. Browne Culm drier and separator, J. W. Perry Cultivator. J. T. Bender	696,546 696,841 696,623
Cuttain pole, J. Assel Cutter head, N. Bly Dental articulater, Tiffin & Bentley Dental crewn slitting tool, G: W. Teufel. Dental engine wall bracket, A. W. Brewne. Dental latbe, J. J. Brewn. Dental butunder, A. F. Merriman, Jr. Designs, apparatus for producing repeat, H. Mackintosh	696,534 694,794 696,774 696,772
Dental engine wall bracket, A. W. Browne.  Dental latbe, J. J. Brown  Dental obtunder. A. F. Merriman, Jr	696,774 696,772 696,545 696,713 696,652
Designs, apparatus for producing repeat, H. Mackintosh Detachable coupling, H. M. Sturgis	696,877 696,513
Dish washer, I. Ervin	696,556 696,628 696,560
Door check, liquid, H. G. Voight	696,776 696,575
Designs, apparatus for producing repeat, H. Mackintosh Detachable coupling, H. M. Sturgis. Dish washer, I. Ervin Disintegrating machine, A. A. Dickson Dividing apparatus, J. Guilmartin. Door check, liquid, H. G. Voight Dough, etc., machine for mixing and knead- ing, J. Lee Draft equalizer, J. D. Ingram Draftman's instrument, E. C. Loetscher. Dredging, self-loading bucket for, J. A. Mumford	696,631 696,828
Mumford Dress shield holder, J. F. Murphy Dye and making same, blue sulfur, C. Ris.	696,581 696,689 696, <b>75</b> 1
Eggs, preserving, J. A. Rylander Electric circuits, automatic regulator for	696,690 696,495
Dretging, self-leading bucket for, J. A. Mumford Dress shield helder, J. F. Murphy Dye and making same, blue sulfur, C. Ris. Educational device, J. E. Murray. Eggs, preserving, J. A. Rylander. Electric circuits, automatic regulator for, F. C. Newell Electric indicating instrument, R. Fleming, Theories Egating and apparatus therefor, system of, F. Lapertot et al. Electrical instruments, shunt for, M. C. Rypinski	696,473 696,427
System of P. Lapertot et al Electrical instruments, shunt for, M. C. Rypinski	696,662 696,757
Electrical switch, E. G. Kastenhuber Elevator, C. W. Baldwin	696, 147 696, 706
(Continued on fage 204)	