

## RECENTLY PATENTED INVENTIONS.

## Agricultural Implements.

**CALF-WEANER.**—LEWIS H. SAUNDERS, Colby, Kans. In order to prevent a calf from sucking, the inventor employs a device comprising an inner frame of flat cheek-pieces, and an arched nose-yoke. The cheek-pieces are spread apart at their rear ends. To the inner, arched frame an outer, arched barbed frame is pivoted, to the rear ends of which a jaw-strap is secured which passes around the lower jaw of the animal. Should the calf attempt to suck or push the barbs up or down, the outer frame will force the jaw-strap against the lower jaw and hold the jaw shut.

**CORN-HUSKER.**—ARTHUR W. RICHARDS, Indianola, Iowa. The invention is a corn-husker which is adapted to operate upon the ears of corn after they have been cut from the stalk. The novel features are to be found in two series of rollers provided with pointed teeth. Both series extend in downwardly inclined parallel planes and are simultaneously rotated. The husks adhering to the corn ears are pierced by the teeth, shredded and stripped.

**DERRICK.**—ALVIN HODGSON, South Ottumwa, Iowa. Mr. Hodgson has devised a simple derrick which will doubtless be found of considerable usefulness on a farm for lifting and moving heavy weights, such as hay racks, wagon bodies, slaughtered animals, and the like. On a base comprising bottom rails, standards are erected, on which a table is supported. A post has a step bearing in the rails; and a plate secured to the post has a bearing in an opening in the table. The beam is mounted to swing on the post; and the winding-drum is carried by the post. Rope connections are provided between the drum and the end of the beam.

**CULTIVATOR.**—FRANK G. HOAG, Battle Creek, Mich. The inventor has devised a simple, compact, and strong machine which embodies means for the removal and replacement of a central toothed section; which also allows for the lateral adjustment of the toothed side frames, so as to cultivate both sides of a row of growing corn; and which allows the front portions of the side frames to be raised and to swing free.

## Apparatus for Special Purposes.

**STORAGE SYSTEM.**—J. R. RECTOR, Lipan, Texas. In this invention Mr. Rector provides a house for storing perishable goods in which the goods will be kept cool without the necessity of ice or other analogous means of lowering the temperature, the temperature of the house being kept at a sufficiently low degree by a peculiar arrangement of air-circulating passages.

## Engineering Improvements.

**MARINE-ENGINE GOVERNOR.**—MARTIN F. VOLKMAN, Santa Monica, Cal. Mr. Volkman has provided a simple mechanism which is intended to prevent dangerous racing should the shaft break, the propeller be loosened, or lifted out of the water by the pitching of the vessel. The principle of the invention consists in speeding the governor upon the rise of the propeller from the water.

**ENGINE-STOP.**—HENRY JONES, Watertown, N. Y. This new engine-stop is arranged immediately and automatically to stop the engine in case of an accident. The arrangement is such that the engine can be shut down or started without interfering with the stop in any way. The stop comprises a cylinder to which a steam pipe leads. A piston reciprocates in the cylinder. Between the piston and the throttle valve is a flexible connection. The valve in the steam-pipe is opened from a governor when its stem drops.

**VALVE-LUBRICATOR.**—PETER F. LABAN, Altona-on-the-Elbe, Germany. The lubricating liquid is distributed by the movement or action of the valve to different portions of the valve-seat and between the ports in the chest. The valve is so constructed that it will always occupy an operative relation to the point of liquid-feed, so as to be supplied from the latter, notwithstanding the travel or movement of the valve. The lubricant is distributed through the valve-chest by open or exposed ducts or channels, so that it can be taken up by the steam and carried to all parts that require lubrication.

## Mechanical Devices.

**VELOCIPED DRIVE-GEAR.**—FRANCIS A. RICH, Karangahake, Auckland, New Zealand. This changeable speed-gear for bicycles comprises an ordinary friction-clutch free-wheel sprocket, and a sprocket consisting of inner and outer members, normally loose relatively to each other. A driven mechanism can be shifted into operative engagement with the free-wheel sprocket, or with the outer member. A rocking clutch connects or disconnects the inner and outer members. A friction-roller on the rocking clutch is engaged by the guide of a rocking plate for the purpose of shifting the clutch.

**PORTABLE REVOLVING THEATER.**—CHARLES F. BRAMHALL, Kingman, Kans. In this portable revolving theater, there are embodied a central stationary stage and a circular revolvable auditorium. The audience is slowly carried around the stage so as to obtain a full

view of all the proceedings. An improved curtain is provided which can be easily and quickly operated.

**WASHING-MACHINE.**—LAURA B. PARKER, 2874 Washington Street, Ogden, Utah. The machine is of that type in which a concave bed is employed within an outer casing, upon which the convex "rubber" rocks. The present invention is designed to supply this oscillating rubber with an elastic pressure in a more simple manner than heretofore. To that end a spring attachment of peculiar construction is resorted to, which is capable of being applied to all washing-machines of the type mentioned.

**GRIPPER FOR PLATEN PRINTING-PRESSES.**—ARTHUR L. ANDERSON, Grundy Center, Iowa. Mr. Anderson has devised a simple gripper which will firmly hold the paper to be printed on where a narrow margin is desired. His device can be so adjusted that its inner edge will be close to the desired outside line of the printing, thereby avoiding the annoyance so often experienced when it is desired to print upon an article so as to leave a very narrow margin. Ordinarily the gripper cannot be placed so as to hold the paper by reason of the gage-pin's coming in contact with the gripper. That difficulty is now obviated.

**MEANS FOR AUTOMATICALLY CLOSING SWINGING DOORS.**—EDWARD F. HUARD, Springfield, Mo. The invention is a closure for ice-houses or vaults. Its object is to provide a self-closing door which guards the opening through which blocks of ice are introduced to the house or vault, preventing an improper rise in the temperature, and the accumulation of fog in the air-space of the house.

**HIGH-BALL ARCHER.**—WILLIAM H. PEASE, Joliet, Ill. Mr. Pease has invented a simple and ingenious device for throwing a projectile by the power of a rubber-band or the like. The invention comprises a body and an elastic structure which can be releasably held. The operating devices for actuating the structure comprise a trigger-arm, a connection between the trigger-arm and the holding means, a trigger working with the trigger-arm, and a spring actuating the parts normally to release the holding means.

**LIFTING-GATE.**—ANDERSON MILLER, Shelbyville, Ind. Mr. Miller is the inventor of a gate which embodies much that is new in its construction and operation. Mechanically considered, the gate consists of a post to which a frame is hinged, free to move vertically. The frame comprises top, bottom and side members. A rod connects the top and bottom members and serves as a brace. Upon the rod is a lever. Angle-braces are secured to the top and bottom members at points adjacent to the ends of the rod, and engaging one of the side members at a point between the ends. A cord engages the lever and post and partially encircles the pulley. The handle of the lever being depressed, the cord is pulled, thereby raising the gate.

**SNOW-PLOW.**—PETER W. MARTIN, Thumb Lake, Mich. The snow-plow can be quickly and easily adjusted to discharge snow at both sides, or to discharge snow at either side. The horses propelling the plow are placed at the back, so that they are not compelled to walk in deep snow, as would be the case were they harnessed at the front.

**POTATO-CREAMER.**—FREDERICK W. RUCKSTUHL, and ADELE POHLMANN, Manhattan, New York city. This device is arranged to reduce boiled potatoes or the like to a creamy consistency in the smallest possible amount of time. The device is very simple and durable in construction, can be cheaply manufactured and easily manipulated.

**GAGE AND BUTT-CUTTER FOR CIGARS.**—WILLIAM HEFFLEY, Jackson Township, Lebanon county, Pa. The invention relates to means for gaging the length and clipping the butts of cigars as they are being manufactured. The inventor has devised an apparatus of this character which is of simple construction, compact form, and very convenient in operation, producing a portable implement that can be set to cut off the butts of cigars at a desired length as a finishing operation in their manufacture.

## Miscellaneous Inventions.

**BANJO ATTACHMENT.**—H. M. BRONSON, Brandon, Vt. Mr. Bronson provides an improved attachment for banjos and like instruments which may be conveniently employed and will act to remove all harshness from the tone, rendering the music produced soft and sweet.

**UMBRELLA-STICK.**—T. H. SMITH, Lansford, Pa. The invention provides an umbrella which may be compactly folded and quickly and conveniently brought into a position for use. The construction is simple and durable, and is so arranged that the strength of the umbrella will not be lessened, also that the umbrella may be readily manipulated by any person of ordinary intelligence.

**GEM-SETTING.**—R. S. BIEBER, Brooklyn, N. Y. The usual method of setting stones of diamond shape is to fasten the stone by bending small fingers over its edge. This invention is designed to make a more secure setting for the gems by employing a band which encircles the edges of the gem and is held in place by the fingers of the setting.

**RANGE-FINDER ATTACHMENT FOR GUNS.**—A. P. COLLINS, Manilla, P. I. Sergt. Collins finds from practical experience that it is difficult for the average soldier to gage a distance of between 400 and 2,000 yards with sufficient accuracy to make his fire effective. He has, therefore, devised a simple attachment for use in connection with ordinary firearms which will enable a soldier to determine the range of the object to be fired at, and the corresponding adjustment required to be given to the elevating sight.

**FOLDING BASKET.**—T. J. LANGSTON, Johnston, S. C. Mr. Langston has invented an improved form of basket of that class which have a collapsible body portion and a folding handle frame. The handles are pivoted directly to the body of the basket. The lower ends of the handles are connected with the bottom of the basket and are extended to form legs.

**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 the information. In every case it is necessary to give the number of the inquiry.

MUNN &amp; CO.

Marine Iron Works. Chicago. Catalogue free.

**Inquiry No. 3066.**—For manufacturers of ice-making machinery.

AUTOS.—Duryea Power Co., Reading, Pa.

**Inquiry No. 3067.**—For manufacturers of office specialties, household novelties and articles suitable for mail order business.

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

**Inquiry No. 3068.**—For manufacturers of automobile castings.

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

**Inquiry No. 3069.**—For dealers in dummies used in ventriloquism.

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

**Inquiry No. 3070.**—For rope-making machinery.

Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.

**Inquiry No. 3071.**—For manufacturers of small engines and boilers.

Die work, experimental work and novelties manufactured. American Hardware Mfg. Co., Ottawa, Ill.

**Inquiry No. 3072.**—For manufacturers of paper novelties.

Our specialty is cutting and forming metal parts any shape. Metal Stamping Co., Niagara Falls, N. Y.

**Inquiry No. 3073.**—For manufacturers of small engines, two to three inch stroke and same size cylinders. Oscillating engine preferred.

Gear Cutting of every description accurately done. The Garvin Machine Co., 149 Varick, cor. Spring Sts., N. Y.

**Inquiry No. 3074.**—For manufacturers or dealers in game markers or counters.

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

**Inquiry No. 3075.**—For manufacturers of car-building machinery.

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

**Inquiry No. 3076.**—For manufacturers of rubber penholders.

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

**Inquiry No. 3077.**—For manufacturers of absorbent pulp plates.

Patents developed and manufactured, dies, special tools, metal stamping and screw machine work. Metal Novelty Works Co., 48-47 S. Canal St., Chicago.

**Inquiry No. 3078.**—For manufacturers of tubs.

The celebrated "Hornsey-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York.

**Inquiry No. 3079.**—For manufacturers of cork packing.

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. 3080.**—For wood-carving machinery.

**WANTED.**—A bright, active young man as assistant superintendent for a large machine shop, to take charge of all tools. Must be a hustler and familiar with modern practice as to cutting speeds, etc. State salary and experience. H. F. W. Box 773, New York.

**Inquiry No. 3081.**—For manufacturers of small water motors.

**FOREMAN BOILER MAKER WANTED.**—First class man wanted for a modern shop building marine and stationary boilers, and doing boiler and iron ship repairs. Applicants will please state age, experience, nationality, and give names of previous employers. This is a good position for a good man. Address P. O. Box, 2685, Boston.

**Inquiry No. 3082.**—For machinery for making nails and bolts.

Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application.

**Inquiry No. 3083.**—For a spring motor suitable for running a sewing machine.

**Inquiry No. 3084.**—For manufacturers of sheet aluminium.

**Inquiry No. 3085.**—For rough castings for gas or gasoline engines, also dynamos and motors.

**Inquiry No. 3086.**—For manufacturers of a telephone system for private use operated without a switchboard.

**Inquiry No. 3087.**—For manufacturers of the C. H. Webb adding machine.

**Inquiry No. 3088.**—For manufacturers or dealers in glass cloth.

**Inquiry No. 3089.**—For the address of the Libby Glass Works.

## INDEX OF INVENTIONS

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

August 19, 1902,

AND EACH BEARING THAT DATE.

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

Acid and making same, methylene di-aceto di-salicylic, S. L. Summers.....	707,178
Acid ester of methylene diguaiacol and making same, camphoric, S. L. Summers.....	707,278
Adding machine, Ellis & Perkins.....	707,309
Adjustable furnace, R. H. Hally.....	707,104
Advertising device, W. D. Butt.....	707,205
Air from sand-blast apparatus, apparatus for cleaning, J. E. Mathewson.....	707,134
Air heating apparatus, compressed, G. W. Hopkins.....	707,111
Albuminous substances, obtaining, A. Jolles.....	707,423
Amalgamator, G. H. Breyman.....	707,296
Atropinum alkyl nitrate, Dreser & Callsen.....	707,402
Auger, packing, E. E. Ziegenfuss.....	707,290
Autographic register, J. C. Shoup.....	707,458
Automobile, J. C. Henry.....	707,230
Automobile running gear, A. A. Medina.....	707,340
Automobile steering gear, J. G. MacPherson.....	707,435
Automobiles, transmission gear for, G. P. Davis.....	707,400
Balls, manufacture of playing, E. Kempshall.....	707,425
Band cutter and feeder, W. N. Crow.....	707,393
Bar. See Type bar.	
Bark from trees, apparatus for removing, W. P. Kidder.....	707,428
Beam machine, reciprocating, N. H. Seelye.....	707,168
Bearing, M. Steiner.....	707,176
Bearing for lawn mowers, ball, A. B. Case.....	707,298
Bearings for shafts of machines, N. H. Seelye.....	707,167
Bearing, roller, J. D. Twigg, Jr.....	707,465
Belt, conveying, J. J. Ridgway.....	707,355
Bevel and miter, combined, C. R. Stedman.....	707,461
Bicycle, W. N. Whitely.....	707,480
Bicycle gear, changeable, P. J. Scharbach.....	707,359
Bicycle lock, J. C. Fisher.....	707,310
Bicycle toe clip, G. W. Cole.....	707,209
Bicycles, device for coupling two, J. Kynaston.....	707,122
Bicycles or like vehicles, cushion frame for, Sager & Green.....	707,262
Binder needle, E. Will.....	707,482
Boards by means of cleats, machine for securing together, C. Johnson.....	707,116
Boats, etc., apparatus for removing material from, A. M. Acklin.....	707,371, 707,401,
Boiler, A. W. Oelfelt.....	707,519
Boiler and its furnace, S. A. Graham.....	707,509
Boiler furnace, steam, J. R. Bailey.....	707,495,
Boiler or water heater, D. M. & A. B. Burns.....	707,203
Boot or shoe welt, J. O. Bicknell.....	707,076
Bottle, non-refillable, E. I. Allen.....	707,068
Bottle, non-refillable, S. D. Blocker.....	707,199
Bottle, non-refillable, T. E. Shortell.....	707,265
Bottle, non-refillable, E. Hoerichs.....	707,512
Bottle stopper, J. J. Allison.....	707,193
Bottle stopper, C. C. Packer.....	707,348
Bowls or basins, clamp for marble wash, W. McClintock.....	707,153
Box fastener, W. Jordan.....	707,424
Braids and trimmings, machine for making, J. E. Kirberg.....	707,336
Brake, A. R. Moore.....	707,149
Brake beam, B. Haskell.....	707,105
Brake, fender, and step, combination, D. Neale.....	707,345
Brick machine, W. F. Stimpson.....	707,275,
Brooder, O. R. Lincoln.....	707,127
Broom handles, polishing and drying, C. A. Ridlon.....	707,159
Buckle, back band, E. H. Crum.....	707,394
Building material, box of, O. Nentwig.....	707,446
Burglar alarm, J. H. Howard.....	707,513
Burner, M. S. Walker.....	707,285,
Button, G. W. Buchanan (reissue).....	12,020
Button and making same, M. D. Shipman.....	707,456
Button feeding mechanism, J. Hornby.....	707,329
Button making machines, grip carrier for, J. Hornby.....	707,326
Button making machines, segmental gear for, J. Hornby.....	707,328
Button making machines, spindle adjustment for, J. Hornby.....	707,330
Button setting machine, E. E. Stimpson.....	707,274
Cable support, J. E. Gamalielson.....	707,314
Cable track roads, support for suspended, H. M. Harding.....	707,228
Camera, magazine, Perks & Fletcher.....	707,156
Camera, photographic, H. W. Hales.....	707,319
Camphene, making, K. Stephan.....	707,270,
Can opener, J. Chisholm.....	707,207
Can opener, J. W. Pierce.....	707,253
Cane stripper, sugar, T. A. Dutton.....	707,091
Canopy, F. C. Winants.....	707,483
Car brake, W. House.....	707,231
Car coupling, F. Hien.....	707,308
Car coupling, automatic, J. M. Stanley.....	707,289
Car door mechanism, E. J. Muller.....	707,342
Car door operating device, J. Simonson.....	707,350
Car haul, S. W. Bollinger.....	707,200
Car heating apparatus, railway, J. Q. C. Searle.....	707,361
Car, metallic railway, Hornbrook & Woodcock.....	707,416
Car, railway, G. W. Chipley.....	707,302
Car wheel, G. Killian.....	707,120
Carburetor, E. Walther.....	707,467
Carpenter's tool, M. F. Doyle.....	707,307
Carriages, feed pump and connection for horseless, J. C. Blevney.....	707,079
Cart, ash, W. Schaller.....	707,163
Cash register, F. B. Barnard.....	707,355
Cash register, F. H. Bickford.....	707,380
Cash register, G. S. Green.....	707,408
Casks, barrels, or like vessels, apparatus for lining, H. S. Russell.....	707,260
Centrifugal machine, H. de Raasloff.....	707,521
Checkreins, elastic connection for, J. M. Chaffin.....	707,388
Cheese marker, J. Wolfinger.....	707,528
Chute for loading wheat or flour on ships, F. W. Brink.....	707,297
Clip. See Bicycle toe clip.	
Clutch, tug sheave, H. B. Harding.....	707,321
Coal bagger, H. B. Sackett.....	707,358
Cock, hydrant, F. H. Kidder.....	707,119
Coke, manufacturing, J. W. Seaver.....	707,525
Coke quenching or cooling apparatus, L. Bertrand.....	707,379
Compartment box for checks or the like, J. T. Hicks.....	707,325
Compress, M. M. Kerr.....	707,426
Condensing apparatus, atmospheric steam, F. R. Brandt.....	707,081
Cooking utensil, steam, G. F. Edmiston.....	707,217
Cord holding device, F. H. Knapp.....	707,241
Corn pad, I. Duckworth.....	707,089
Corn shock loader for vehicles, W. A. Tea.....	707,280
Cotton gin, J. T. Fuller.....	707,096
Curb holder, W. C. Kewin.....	707,427
Curb and gutter block, combined, J. R. Jecklin.....	707,115
Current motor, synchronous alternating A. Churchward.....	707,389,
Damper attachment, stove, J. R. Stover.....	707,366
Deodorizing, F. M. Pratt.....	707,354
Detonating compound, U. Alvisi.....	707,493
Dish washing apparatus, J. D. Morley.....	707,443
Distribution system, J. F. Kelly.....	707,334
Door hanger, P. H. Luitink.....	707,131
Draft attachment, C. H. Falk.....	707,092
Draft rigging, W. E. Coffin.....	707,501
Drawing board and appliances, Schlachter & Allen.....	707,165
Dredge, hydraulic, L. W. Bates.....	707,293

(Continued on page 143)