

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, Grady 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. RUCK-STUHL, 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.

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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., 49-47 S. Canal St., Chicago.

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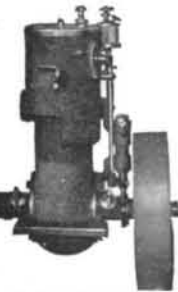
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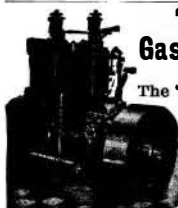
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CHEMICAL SOCIETIES OF THE NINETEENTH CENTURY. By Henry Carrington Bolton. Washington, D. C.: Published by the Smithsonian Institution. 1902. 8vo. Pp. 15.

Dr. Bolton has supplemented his Bibliography of Chemistry by a complete list of chemical societies of the nineteenth century, in which are listed practically all organizations of importance, devoted to chemical work.

THE CAR MOTOR. ITS NATURE, USE, AND MANAGEMENT. By Sir Henry Thompson, Bart. London and New York: Frederick Warne & Co. 1902. 110 pp., 3 illustrations. Price \$1.

The distinguished author of this little volume has written it from practical experience with his own automobile, a $6\frac{1}{2}$ horse power Daimler. The book forms an excellent elementary handbook of convenient pocket size, containing considerable desirable information from an owner who has had experience in driving a gasoline carriage. The rights of the automobilist on the road, and the methods pursued by the English constables in catching "scorchers" are thoroughly discussed, while an appendix of routes within 400 miles of London is by no means the least valuable feature. Considerable matter of legal interest will be found in this small volume, besides the concise instructions mentioned as to driving the different kinds of motor car.

A BIBLIOGRAPHY OF THE ANALYTICAL CHEMISTRY OF MANGANESE. 1785-1900. By Henry P. Talbot and John W. Brown. Washington: Published by the Smithsonian Institution. 1902. 8vo. Pp. vi-124.


A fitting supplement to Dr. Bolton's Bibliography of Chemistry is this latest addition to the Smithsonian miscellaneous publications. Messrs. Talbot and Brown have reviewed Dr. Bolton's work and selected that portion of the bibliography bearing upon the qualitative detection and quantitative separation and determination of manganese for the use of analytical chemists. From the year 1830 on, however, the authors' work has been entirely independent.

PLATTNER'S MANUAL OF QUALITATIVE AND QUANTITATIVE ANALYSIS WITH THE BLOWPIPE. Translated by Henry B. Cornwall, E.M., Ph.D., assisted by John H. Caswell, A.M. Eighth edition, revised after the sixth German edition by Prof. Friedrich Kolbeck, New York: D. Van Nostrand Company. 1902. 8vo. Pp. xi-463. Price \$4 net.

There probably has never been a better book prepared on the subject of blowpipe analysis than C. F. Plattner's admirable manual. The present edition, which is the eighth American edition, should be welcomed by students for the reason that it has been thoroughly revised after the latest German edition, thus bringing the book well up-to-date. The adoption of modern chemical notation and the omission of superfluous or antiquated tests considerably improve the work. Spectroscopic methods which properly do not belong in a book of this character are also omitted. Dr. Kolbeck, to whom the last German edition is due, was assistant to Dr. Richter, the unsurpassed master of blowpipe analysis and editor of the early Plattner editions.



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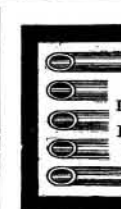
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