RECENTLY PATENTED INVENTIONS.

Electrical Devices.

HIGH-POTENTIAL INSULATOR.—L. STEINBERGER, New York, N. Y. In the present patent the invention has reference to high-potential insulators and admits of general use, but is of peculiar service upon transmission-lines employed for conveying currents of high potential from one point to another distant therefrom.

SPARK-GAP AND MUFFLER THEREFOR.—A. E. HARRISON, New York, N. Y., and C. M. HASLETT, Jersey City, N. J. The invention relates to spark-gaps of the kind used in wireless telegraphy and in relations analogous thereto, the more particular object being to provide an improved form of muffler for inclosing the spark-gap so as to reduce to a minimum the annoyance caused by sound proceeding therefrom.

Of Interest to Farmers.

BAND-CUTTER AND FEEDER FOR THRESHING-MACHINES.—T. L. CUMMINGS, Spencer, Iowa. The invention is an improvement in band-cutters and feeders for threshing-machines, and it provides means for feeding bundles from either or both sides of the machine, comprising two feed-aprons revolubly mounted upon a trackway and adapted to be swung to the front or the sides of the machine.

COTTON-CHOPPER.—H. T. JOHNSON, Timmonsville, S. C. The purpose of the invention is to provide a machine for chopping out young cotton-plants wherein a hoe will be automatically given a rotary chopping action as the machine is drawn over the ground and to provide a machine which will be simple, economic in construction and which will have few parts and those not liable to get out of order.

REPLANTER ATTACHMENT FOR CULTIVATORS.—O. FROMAN and J. C. CAVE, Edna, Kansas. The object of the inventors is to provide an attachment readily applied to any cultivator and operated by the operator either by hand or foot and to so construct the device that a person operating the cultivator may instantly and accurately drop a set or a hill of corn or other grain in a lost hill and to add to one thinly planted and cover the same while the field is being cultivated.

Of General Interest.

BLOCK-MOLD.—J. A. GIBSON, Buffalo, N. Y. Means provide for automatically separating the walls of the mold when the lifting-frame ordinarily employed is raised and for accurately replacing the mold-walls in proper position for receiving the molding material when the frame is lowered and the mold placed on the pallet. Means provide for securing cores to the pallet so there will be no projecting handle or the like to interfere with smoothing off the top of mold, thus necessitating use of a heavy tamp, and also a hopper for directing material into the mold and preventing loss thereof.

ADJUSTABLE SHELF.—B. J. WHITCOMB, Kennebunk, Maine. The object in this case is to provide details of construction for a device which are simple, practical, convenient in adjustment, and that enable the secure attachment of a shelf horizontally between stiles of window or door casements which may be of different widths and permit the instant removal of the shelf without the use of tools and also without injuring woodwork of window or door frame.

CAMERA.—W. H. WALLACE, New York, N. Y. The aim is to produce an arrangement to enable a camera to be focused upon a sensitized plate or film by means of an auxiliary focusing-screen, the general purpose being to enable a camera of one compartment to be used in this way without admitting injurious light to the sensitized plate and without necessitating the operator's perceiving the image actually formed at the position of the sensitized film.

PLASTERING DEVICE.—N. C. PETERSEN, Perth Amboy, N. J. In the operation the casing is to be filled with plaster and then the device is to be moved upward along the wall, and as the toothed wheels project forward of the casing and engage with the wall they will impart a rotary movement to the spreader, so that the plaster will be forced out through a cylinder opening, and the smoothing-plate will impart an even surface to the plaster.

LEACHING-TANK.—C. VOELKER, Helena, Mont. The invention refers to improvements in leaching tanks or apparatus for pulp, the object being to provide in the leaching-tank a simple and novel device to prevent the packing of the pulp, thus permitting the free circulation of the leaching liquid.

SNOW GUARD AND FENDER.—H. N. SIEGER and R. H. SIEGER, Slatington, Pa. In this case the invention pertains to improvements in guards or fenders to prevent snow from sliding from a roof, an object being to provide a device for this purpose that will be simple in construction, light in weight, and yet strong. The guard may be made of any suitable metal and have any ornamentation desired.

DRILLING-TOOL.—A. C. SHUSTER, Arroyo Grande, Cal. The object of the inventor is to provide a tool arranged to permit fishing up of a lost bit, to prevent injury to the drive-pipe shoe or pipe by the socket of the bit, and to allow the drillings to pass up away from the cutting edge of the bit to prevent clogging of the same and to permit it to be readily turned in the well.

PLASTIC COMPOSITION.—J. E. BECK, New Orleans, La. The product has when warmed a strong adhesive quality, which enables it to be applied and adhere to canvas, burlap, etc., which serves as a backing, and to be so treated as to form any geometrical or other figure or appearance of blocks, etc. It may be utilized without the backing as a covering for floors and walls, also for wainscoting. To produce a substitute for linoleum, the required thickness of the material having been applied to the backing, the same is run through a hydraulic press to give it solidity and coherence.

FILLING APPARATUS.—W. H. SHEFFIELD, Hobart, N. Y. The object of the inventor is to provide an apparatus more especially designed for filling milk and other liquids into a number of bottles or receptacles moved intermittently over a stationary table, the arrangement being such that the waste or loss of the liquid is reduced to a minimum and the receptacles are accurately and uniformly filled to desired height. It relates to apparatus shown and described in Letters Patent formerly granted to Mr. Sheffield.

FASTENING DEVICE.—C. B. LONGENECKER, Philadelphia, Pa. The improvement relates to fastening devices for garments or other purposes, and is particularly useful in connection with closures where it is only possible to use direct vertical pressure or pull in fastening or unfastening the clasp. The object is to provide a clasp which can be attached to the fabric without difficulty and will not easily tear loose therefrom, which can be fastened or unfastened by simple manipulation and which strongly resists all lateral pull.

TURPENTINE BOX AND SPOUT.—S. G. LEWIS and V. J. WARD, Millard, Fla. The invention relates to means for attachment to pine trees for the collection of sap known as "crude turpentine," and has for its object means consisting of a peculiar face or spout adapted for ready attachment to the tree under the usual scoring of its bark, and a peculiar tank or box detachably supported by the face or spout, the tank or box having a hinged cover provided with an opening leading thereunto.

BANJO.—W. B. FARMER, New York, N. Y. The object here is to provide a banjo or similar instrument arranged to produce an exceedingly sharp, clear, and yet very melodious tone when the instrument is played, to allow of convenient loosening of the membrane with a view to relieve it of undue tension after playing and while the instrument is not in use, and to permit of readily adjusting the membrane to bring it into proper relation to the frets in case the neck of the instrument should warp.

PROPELLER.—J. CROWTHER, Dallas, Ore. The invention refers to propeller-wheels, and has for its object construction whereby minimum power is required for its operation and which shall be fashioned, affording improved results over similar wheels as heretofore constructed. The results are obtained by constructing the blades of flat sheet metal, having their front edges sharpened the better for cutting weeds and other entanglements, and by fashioning the rear portion of the blades into wing-like form with the same disposed projecting rearwardly at an angle to the front portion of the blade.

ASSORTER AND WASHER FOR SAND AND GRAVEL.—P. P. CHMELEFF, Moscow, Russia. The invention pertains to apparatus for washing, sifting, and assorting sand used for filling water-filters, for concrete-works, and the like, and also for gravel and other granular materials of all kinds. Further objects are to separate sand from gravel and to thoroughly clean all kinds of granular material from dust and fine particles.

FENCE-POST.—R. R. BUETO, Slaughter, La. Mr. Bueto's invention is an improvement in the class of metallic fence-posts which are provided with means for anchoring them in the ground. The anchor plate has a central opening and provided at its opposite ends with flanges bent down at a right angle to enter the ground, and made of a uniform width throughout their lengths whereby their flat edges at the lower ends of the flanges are provided to prevent rocking or tilting of the plate in the ground.

Hardware.

HAMMER.—H. C. LYON, Howard Lake, Minn. The invention relates more particularly to hammers of the magazine type, which carries and supplies nails in position for driving. The device enables the workman to supply and drive with one hand, leaving the other hand entirely free to hold or place the work. This allows such operations as shingling and lathing to be carried on with great speed.

SASH-LOCK.—C. S. WRAY, Highland Mills, N. Y. Mr. Wray's invention relates to sash-locks such as are used on sliding sashes for locking the same to the window-casement. The object is to produce a sash-lock of simple construction which will not become inefficient from wear under constant use.

Heating and Lighting.

GAS-METER.—A. S. J. WEIR and T. J. HENNING, San Diego, Cal. The improvement is in the class of so-called "diaphragm" meters, in which the casing is divided by a central vertical partition into equal compartments, each containing a bellows or expansible diaphragm adapted to alternately receive and discharge a certain volume of gas and connected with valves controlling the alternate inlet and outlet of gas and also connected with a register whereby gas passing through the meter to the house service-pipe is accurately measured.

Household Utilities.

WINDOW-SCREEN.—T. LANDSBERG, New Brunswick, N. J. The object of this inventor is to improve the arrangement of window-screens which are provided with means for automatically returning them to folded position. It is the object also to so construct and arrange the screen and its coacting parts that the connection between the screen and the window frame will be such as to insure at all times the exclusion of flies and other insects.

ROCKING-CHAIR.—J. E. NUTTER, Ferris, Texas. Mr. Nutter employs a base for the chair of special construction, working upon which are specially constructed rockers, between which and the seat are disposed special cushioning devices for the seat. The movable portions are easy working and practically noiseless in operation, and capable of being readily taken apart and again put together.

Machines and Mechanical Devices.

SPEED-INDICATOR.—E. H. RIORDAN, Idaho City, Idaho. The invention refers to talking-machines; and its object is to provide an indicator arranged to enable a user of the machine to conveniently and quickly adjust the speed of the motor, and consequently that of the record, to insure playing of the record-piece in proper time.

VARIABLE-SPEED DRIVING MECHANISM.—R. M. RUCK, 44 Thurloe Square, South Kensington, London, England. The invention relates to variable-speed driving mechanism, more particularly such as used in transmission of power from high-speed motors; and the object is to provide apparatus which shall combine the advantages (with regard to positive driving and graduated alteration of speed ratio) and avoid the disadvantages (with regard to shock and slip) incidental to the use of toothed-wheel gearing and of conoidal friction-pulley variable-speed mechanism.

BOTTLE-LABELING MACHINE.—A. HANKE, Jersey City, N. J. The improvement pertains to label-affixers, and its object is to provide a machine more especially designed for conveniently and quickly applying labels to bottles while filling and corking the same, the label-affixer being actuated by and in unison with the filling and corking devices.

ICING-MACHINE.—P. S. GUILFORD, Portland, Ore. By means of this invention the cakes to be iced are supported during the different operations of icing, turning, and drying upon forks connected to an endless carrier having its course of travel arranged to pass cakes through the various positions required by such operations.

LUBRICATOR.—C. E. MCCAFFREY, Winsted, Conn. The lubricator is more especially designed for use on the steam-cylinders of rock-drills and other steam-actuated machines and arranged to prevent leakage and waste of the lubricant, to insure regular feed of the lubricant in predetermined quantities, and allow of readily refilling without stopping the machine to which the lubricator is applied.

STRIPPING AND CLEANING MACHINE.—E. BEHRENDT, Manila, Philippine Islands. The invention relates to machines for stripping and cleaning the leaf-sheaths or band-like material from the abaca and the like plants—such as shown and described in application for Letters Patent of the U. S., formerly filed by Mr. Behrendt. The object is to provide a machine arranged to cut and break the pulp to separate the latter from the fiber and to remove the pulp previous to winding the fibers on a roller or spool.

MACHINE FOR DECORATING DISHES.—C. E. BELL, Kittanning, Pa. One purpose here is to provide a machine whereby decorations may be stamped wherever desired upon dishes, one operation only of the machine being necessary to effect the decoration. Another is to provide a machine whose construction essentially comprises a plunger-operated stamp-support, to which stamps or pads carrying the design are applied, and guide-supports for the dish to be decorated.

ANIMAL TRAP.—H. H. STICK, Glenville, Pa. The trap is especially adapted for catching animals of varying sizes, from a rat to a small dog; and consists of a cage having a double floor and opened at both ends, the ends being closed when the trap is not set by spring-operated doors. The upper floor is made in two parts hingedly connected together, which, through the intermediary of a novel trigger mechanism, springs the trap and closes the door or doors by the weight of the animal.

FEED DEVICE FOR THE INKING-RIBBONS OF WRITING-MACHINES.—A. STEINER and R. REIN, Berlin, Germany. Means are furnished for feeding the inking-ribbon in writing-machines in which the two vertical spindles carrying the ribbon spools are each provided with a ratchet-wheel, with which engage the pawls rocking in horizontal planes, while the ribbon spindles rotating in horizontal planes feed the ribbon lying in a vertical plane. By the displacement of an adjustable bar the ratchet-wheels are thrown out of gear by means of pawl mechanisms alternately oppositely set, this displacement part being arranged between the rocking lever and the ratchet-wheels.

Prime Movers and Their Accessories.

BOILER.—H. KELLER, Chattanooga, Tenn. The invention pertains to stationary and locomotive boilers, and provides a sectional front end ring and door for the same, the end ring being arranged to provide for expansion and contraction with a view to prevent breaking or cracking of the sections, at the same time rendering the end ring air-tight and allowing ready removal of the sections when worn out and replacing the same by new ones.

BOILER-FURNACE.—P. JACKSON, Macon, Ga. The object of this inventor is to provide a furnace capable of using coal, mill refuse, bagasse and the like as a fuel and arranged to insure a complete combustion of the burning fuel and to utilize the heat to the fullest advantage with a view to economize in fuel and to quickly generate steam without danger of burning the boiler-shell.

ROTATING MOTOR.—H. J. DABONVILLE, 2 Rue Bellefond, Paris, France. The subject of this invention is a system of rotating motors; and it consists of a rotating compression and expansion motor of progressive and variable speed, reversible or non-reversible, and capable of being driven by steam, compressed air, water, gas, or any liquid or fluid. The principal characteristic is the mounting on the motor-shaft of a loose crown moving in a cylinder under the impulse of the motive power acting on wings or pistons articulated on the loose crown.

VALVE-GEAR FOR STEAM-ENGINES.—C. W. CRAWFORD, Brazil, Ind. The present invention has for its aim to provide a gear for steam-engines arranged for producing reduced clearance, silent action of the valve when running the engine at a high rate of speed, quick positive opening and closing of the valves, and keeping them stationary when closed. It relates to gears described in the application for Letters Patent of the United States formerly filed by this inventor. Mr. Crawford has invented another valve-gear for steam-engines arranged to permit of running the engine at a high rate of speed, to insure a proper working of the inlet and exhaust valves without danger of undue wear, and to reduce to a minimum the clearance-space of the piston relative to the admission and exhaust ports.

AUTOMATIC PRESSURE-RETAINING VALVE.—A. ASHCRAFT, Fort Smith, Ark. The design of the inventor is to have the improvement take the place of the well-known hand-operated pressure-retainer, one object being to automatically retain a predetermined amount of braking pressure in the brake-cylinder of a car, locomotive, or tender, and to produce a device absolutely under the engineer's control.

Pertaining to Recreation.

AMUSEMENT DEVICE.—O. HENRICHSEN, New York, N. Y. One purpose here is to provide an amusement device so constructed that objects—such as yachts, boats, or swimmers—may be individually moved at the surface of the water with more or less speed through the medium of a motor controlled by the instrumentality of lung-power or exhalations of individuals playing the game, whereby to afford amusement in the form of racing and secure benefit by reason of the lung exercise obtained.

GAME APPARATUS.—E. BAWDEN, New York, N. Y. In the present patent the invention has reference to game apparatus, and the more particular object of the improvement is the production of a chance-controlled mechanism provided with means for keeping the record of the scores made by the several players in the game.

GAME APPARATUS.—J. E. HERON, Meeteetse, Wyo. The apparatus is adapted to represent the game of life to the players, wherein the aim of all the players is to pass without impediment to a given goal, but wherein through the incidents of the game retrograde and advance movements are necessarily present, due to factors and movements which represent prosperity, sickness, or accident.

Pertaining to Vehicles.

BICYCLE ATTACHMENT.—S. J. TAYLOR, Grants Pass, Ore. The improvement is especially adapted for attachment to ordinary bicycles, thus making a cushion-frame without change in the frame proper. It does not weaken the frame proper and adds but little to the bicycle weight and can be attached to any chain-bicycle. It can be put on or taken off whenever desired and requires no alteration whatever in the original frame.

PNEUMATIC-TIRE SHIELD.—J. H. LOWREY, Neola, Iowa. In this case the object is to provide a durable shield to be applied to the pneumatic tires of automobiles and other vehicles to protect against injury to the tire, increase the tractive adherence to the road, so as to successfully travel over ice, snow, and mud or climb hills without slipping, and prevent accidents occurring by reason of front wheels failing to respond to the guiding influence of the steering-gear.

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.