

**RECENTLY PATENTED INVENTIONS.**

**Electrical Devices.**

**TELEPHONE ATTACHMENT.**—F. F. HOWE, Marietta, Ohio. This invention is an improvement in telephone-receiver supports; and it consists of a universal jointed arm which holds the receiver and permits the latter to be moved into position against the ear. This movement works a lever which is connected with the switch of the telephone in such manner as to cut the receiver into circuit.

**AUTOMATIC TAKE-UP DEVICE FOR TELEPHONE CONNECTIONS.**—F. B. LONG, Los Angeles, Cal. One of the principal objects of the inventor is the provision of means for storing the electrical connections for the receiving and transmitting instruments of an ordinary telephone in such manner that during the time the instruments are hung up or out of use there will be no slack or loose portions of the connections hanging about the telephone.

**TELEPHONE ATTACHMENT.**—V. REBHUN, Schaghticoke, N. Y. The more particular object of this inventor is to provide means for improving the acoustic effects of the receiver, to enable the operator to avoid holding the receiver by hand, to enable the receiver to be adjusted to various positions of the head, and to accommodate the receiver to the use of persons whose hearing in one ear is better than in the other.

**ELECTRIC TEMPERATURE-ALARM.**—C. P. HEPLER, Smithton, Pa. The invention refers to a device for application to a receptacle and designed to give a signal when any certain predetermined temperature is reached in the receptacle. The principal objects are to provide an alarm which can be easily set for any desired temperature, which will be entirely automatic in operation, useful in a large number of different kinds of business—as, for example, distilleries, breweries, bakeries, confectioneries, etc.—and which will be simple in construction and easy to maintain.

**Of Interest to Farmers.**

**LEVELING ATTACHMENT FOR SEPARATORS.**—O. G. VOLD, Dawson, Minn. The object of the invention is to provide a new and improved leveling attachment for portable grain-separators and similar machines on wheels and arranged to permit convenient application to the machine without altering the construction thereof and to form level furrows for the wheels of the machine to stand in.

**TANK-HEATER.**—W. DIXON, Kimball, Minn. The object of this invention is to provide a heater arranged to prevent the seam of the heater-body from coming in contact with the burning fuel, to prevent the seam from becoming leaky, and at the same time providing a space within the heater-body unobstructed by the draft-flue to provide ample space for the burning fuel. It relates to the care of live stock, and more particularly to heaters for use in stock-tanks to prevent the contents from freezing.

**FURROW-OPENING DISK.**—H. C. HAM, Liberty, Ind. The invention relates to implements which comprise rotary disks in their make-up, which disks roll upon the ground as the implement advances. While intended to be used especially in connection with furrow-openers when used in planters or seeding-machines, it should be equally useful in the construction of disk harrows and other agricultural implements employing disks for any purpose. Improved means are provided for attaching the disks.

**MACHINE FOR TOPPING BEETS.**—A. H. KRAMER, Montevista, Col. The purpose of the improvement is the provision of durable and effective devices for topping the beets and means for controlling the topping devices, so that whether or not the beets extend more or less out of the ground all of the beets will be topped in a uniform manner. It may be quickly brought into action and as rapidly and readily carried out of action, on entering or leaving a field.

**BROODER.**—G. H. LEE, Omaha, Neb. The object of the inventor is to produce a brooder of simple construction provided with improved means for diffusing the heat supplied thereto and provided also with an improved arrangement for hovering or covering the chicks within the brooder, one of his purposes being to prevent the tendency to crowding of the chicks in the heated space.

**INCUBATOR.**—G. H. LEE, Omaha, Neb. The inventor's object in this instance is the provision of a construction which conduces toward a thorough circulation and uniform heating of the air within the incubator, at the same time shielding the eggs from direct air-currents. The construction facilitates separation of newly hatched chicks from the eggs and also from chicks previously hatched and provides also an arrangement whereby it will be unnecessary to open the main door of the incubator in order to remove chicks from the interior.

**Of General Interest.**

**MAIL-POUCH HANGER AND SHIELD.**—G. A. CLARK, Nashville, Tenn. The aim of this improvement is to provide a device whereby one or more pouches may be supported between the arms of the mail-crane, and to the manner in which such mail-pouches may be protected from contact with the receivers of the mail-pouch catchers.

**TENT.**—T. D. MCCALL, St. Louis, Mo. This invention is in the nature of an improved tent of the same general character as those heretofore patented by Mr. McCall, the same being light portable tents with the canvas floors forming a part of the tent. It is designed to provide a tent of this general character which may be used singly or in pairs to form a larger shelter-tent.

**COMBINATION HAT, COAT, AND UMBRELLA RACK.**—A. ABELSON, New York, N. Y. In the present patent the invention has reference to combination-racks for the storage of articles, and more particularly to the type of rack suitable for storing hats, coats, and umbrellas so as to render the same comparatively secure. Piracy of articles is prevented by the fact that only a key of a certain type can be used to move the sliding plate or bolt from its position.

**EDUCATIONAL DEVICE.**—J. B. OLIVERA, Matanzas, Cuba. One purpose of the invention is to provide a means whereby children or students may not only familiarize themselves with letters of the alphabet, but may arrange them in words or series of words, and whereby the device may be placed on the desk of each student and a similar device be employed by the instructor to give the initial idea of the grouping of letters to form words, leaving pupils to themselves afterward to spell out the different words.

**BARBER'S ANTISEPTIC UTENSIL.**—H. ROSENTHAL, New York, N. Y. In the present patent the invention has reference to barber's supplies; and the inventor's object is the provision of a new and improved barber's antiseptic utensil, insuring to the person to be shaved at a barber-shop the use of an antiseptic-cup, an antiseptic brush, and antiseptic soap.

**LEGGING.**—J. W. PYNCH, Ripon, Wis. One purpose of the improvement is to so construct a legging that it will lace at the front and so that the front will be open for the introduction of the foot only a portion of the length of the legging, the lower part of the front being permanently closed by a folding tongue. Further, to so locate and hold the lace at the bottom of the legging that it will not drop under the foot while the legging is being placed upon the person.

**HOSE-COUPLING NUT.**—W. C. C. MILLER, Vacaville, Cal. The aim of this inventor is to provide details of construction for a nut which adapt it for a speedy and reliable connection of an end of a hose having the nut thereon with the threaded nozzle of a fire-plug and also for an instant connection or detachment of two sections of hose, one section having the improved nut on its end and the other section a male-threaded nipple, forming a reliable water-tight joint-coupling between the hose ends that are detachably connected by means of the improvement.

**COUPLING.**—R. G. McDOWELL, Anaconda, Mont. This coupling is intended for joining sections of pipe and hose and also for use in connecting nozzles and fire-plugs and various other analogous uses. It comprises mating sections fitting one within the other, the coupling having a peculiar packing, making a hermetic joint and the outer section carrying a peculiar spring-dog capable of projecting a part through an opening in the outer section into engagement with a shoulder on the inner section, thus removably yet securely holding the sections engaged.

**HOISTING DEVICE.**—J. KAMBISH, JR., Piney, W. Va. The intention in this case is to provide a new and improved hoisting device, more especially designed for raising and lowering deep-well tubing, pump-rods, and the like, and arranged to allow convenient and quick raising and lowering of a load without much expenditure of power.

**SHOE-LAST.**—A. R. GARROD, New York, N. Y. The principal object of the invention is to provide a shoe-last of a construction by which to impart to the tread or under surface of the sole of a shoe made thereon a curvature or form tending to turn the foot of the wearer of the shoe in an outward direction in the act of walking.

**STANDARD FOR SUPPORTING WIRES.**—W. V. GILBERT, Port Elizabeth, Cape Colony. This invention is peculiarly valuable for purposes of fencing. It relates more particularly to a certain form of standard made, preferably, of sheet metal and formed from a blank of such metal bent into suitable conformity to be driven into the earth and to support the wires or cables, the standards being particularly adapted to be nested in order to save transportation expenses and possessing many constructional advantages.

**SKIRT-GAGE.**—FRANCES M. DE LEON, New York, N. Y. This invention concerns itself especially with the construction of a skirt-gage, which is to facilitate the fitting of the skirt with respect to its length. The object is to produce a gage which will not only enable the skirt to be marked at the desired point at which the lower edge should be turned up, but also to provide an arrangement whereby the accuracy of the measurement is much enhanced.

**PROTECTING BOX OR CASING.**—H. W. CLARK, Mattoon, Ill. This improvement is in boxes or casings for housing water-meters, stop-cocks, valves, and other water appliances and oil and gas appliances and distributors, also telephone and other electric conductors and appliances and protecting them from im-

proper access or injury by contact and frost either below surface of ground or exposed places. The invention relates particularly to an improvement in the lid applied to the neck of the box-cover and means for fastening it, whereby it is held when in use yet adapted for detachment to allow access to enclosed meter for reading, detecting leaks, etc.

**BOTTLE.**—R. G. DAVIS, Hot Springs, Ark. In the present patent the invention has reference to improvements in bottles of the non-refillable class, the object being to provide a bottle of this character that will be of simple construction, practical to manufacture, with the valve mechanism so arranged as to prevent refilling, but permitting the ready outflow of liquid.

**SURGICAL APPLIANCE.**—A. BRESLIN and J. LEES, Summithill, Pa. The object of the invention is the provision of an appliance adapted for attachment to the body of a patient or sleeper to frustrate his attempts to turn to an inclined or other position and to retain him in the desired position without disturbing or awakening him. It is an improvement upon one for which the inventors have filed an application for patent, which has been allowed.

**SLEEVE-PROTECTOR.**—HELEN GARDNER, New York, N. Y. In the present patent the invention has reference to protectors for the sleeves of garments, having for its principal object the provision of an effective device of this class which while maintaining its position will neither interfere with the garment nor the movements of the wearer.

**FOUNTAIN-BRUSH.**—W. L. PAYN, Checotah, Ind. Ter. In the present patent the intention of the inventor is the provision of a brush of this character which shall be adapted to contain and supply shampooing powder or fluid made into lather by the water supply through the brush and at the same time be useful for general bathing or washing purposes.

**HOSE-COUPLING.**—J. D. O'BRIEN, Mullan, Idaho. The principal objects of the invention are the provision of a secure device which may be readily connected and disconnected. The means provided make a fluid tight joint, effectually preventing leaking. Uncoupling the members is readily done. Uncoupling cannot accidentally occur under pressure or twisting of the hose. The packing-ring will stay in place whether members are coupled or uncoupled, but yet may be readily removed and renewed. There are no threaded or similarly-movable elements to effect the closure.

**Hardware.**

**WRENCH FOR THRESHING-CYLINDERS.**—M. MAHLEN, Osakis, Minn. This invention relates to wrenches used in applying the nuts which retain the teeth of threshing-cylinders upon the bars thereof. The object is to produce a wrench which is so formed as to enable the same to be applied readily in practice, certain parts of the said wrench having useful functions in connection with the straightening of the teeth of a threshing-cylinder where they have become bent or twisted.

**Heating and Lighting.**

**FURNACE.**—G. S. KENT, Buffalo, N. Y. One purpose of the invention is to provide an improvement upon a furnace for which a former patent was granted to Mr. Kent, the main object of the invention being to so construct a furnace that it will be an overdraft-furnace and will have a vast capacity for producing heat and which will thoroughly burn fine coal before the fuel can escape to the ash-pits.

**STRAINER AND SEPARATOR.**—J. G. ANSON, San Francisco, Cal. The aim of this invention is to provide a strainer and separator more especially designed for use in steam-generating plants using crude oil as a fuel in furnaces and the like and arranged to separate the water from the oil, to insure a thorough straining of the oil previous to the latter reaching the burners, and to allow quick and convenient cleaning of the device.

**Household Utilities.**

**DOOR-HANGER.**—H. LOBEL, New York, N. Y. The invention refers to improvements in hangers for sliding doors, the object being to provide a hanger of simple construction and having means for so suspending a door that it will hang in direct downward alignment with the slide-bearings, thus preventing any vertical strain on the sliding member, and therefore permitting an easy sliding movement of the door.

**SUPPORT FOR BED-BOTTOMS.**—C. L. HARRELL, New York, N. Y. Mr. Harrell's invention pertains to supports for springs or other bed-bottoms. His principal objects are to provide such a device which may be readily attached and which will furnish a general yield or spring effect to the entire bottom structure, even at the ordinarily-rigid edges.

**KITCHEN-CABINET.**—H. CLARK, Whitefish, Mont. In this case the invention has reference to improvements in kitchen-cabinets particularly adapted for the use of pastry-cooks, an object being to provide a kitchen-cabinet so arranged that the several ingredients required for use will be conveniently at hand.

**Hydraulics.**

**WATER-WHEEL.**—T. LAMBETH, Rachel, N. C. In this instance the invention pertains to improvements in water-wheels of the under-shot type, the object being to provide a simple and novel means for positively moving the blades outward to receive the water-pressure and moving them inward or into the wheel-body upon leaving the water, thus preventing back pressure.

**WATER-ELEVATOR.**—J. J. POWERS, Centralpark, N. Y. In Mr. Powers' patent the invention has reference to improvements on apparatus for elevating water from wells, the object being to provide a water-elevator of simple and novel construction and in which the water is forced to the point of discharge by air-pressure.

**Machines and Mechanical Devices.**

**SAW-SET.**—C. DIENER, New York, N. Y. One purpose of the invention is the provision of an effective saw-set adapted for use in connection with any character of saw, one which can be conveniently operated and which will have a hammer action, enabling the teeth of the saw to be set as accurately and readily outside of the shop as at a bench within the shop.

**THREAD TWISTING AND WAXING MACHINE.**—A. H. FORSYTHE, Sarcoxie, Mo. The invention pertains particularly to improvements in machines for twisting together a plurality of threads and waxing the same for use in a leather-sewing machine, an object being to provide a machine for this purpose that will be simple in construction, positive in action, and that may be readily attached to a sewing-machine.

**DRYING APPARATUS.**—G. STIFF, Norwich, Conn. The invention refers particularly to improvements in vacuum-driers, the object being to provide a drier in which material to be treated may be readily placed and removed therefrom. When the trays containing material to be treated are in the chamber the door is closed, thereby forcing the trap into position and making steam-tight connections, and steam is admitted and passes through tubes into the chambers of the trays, then passes around the ends of partitions and out through exhaust tubes. This exhaust-steam passes into spaces around the vacuum-chamber, the water of condensation flowing away by its own gravity.

**CAM-FINISHING MACHINE.**—G. MEYER, Grünhof, near Stettin, Germany. Mr. Meyer's invention relates to a machine for finishing, with the aid of a file, cams which have been coarsely worked by a milling-machine or other machine-tool and possess such a shape as to be capable of engaging and sliding in slots with parallel faces. Such cams have an equal diameter in certain directions and are used in many machines—for instance, in sewing machines. Cams finished on this machine will be superior to those by hand, since the file is mechanically and positively guided.

**COIN-DISTRIBUTER.**—C. H. HALL, Fresno, Cal. The claim of the inventor as an object of his invention is the provision of a new coin-distributor which is simple in construction, not liable to easily get out of order, and arranged to distribute the assorted coins according to their size and value and in the proper sequence.

**MECHANICAL MOTOR.**—E. PUTNAM, Rossville, Ill. This improvement relates to a mechanical motor for elevating materials or for driving machinery of various sorts. It is particularly useful in connection with animal-power as contradistinguished from use in transmitting engine-power. It is particularly adapted for use in driving grain dumps and elevators, especially in case steam or other engine power is not practical or convenient.

**MACHINE FOR SHARPENING AND REPAIRING DRILLS.**—J. J. BROSSOIT, Grand Rapids, Wis. The apparatus is for operation on rock-drills, particularly the usual cruciform drills, by which to sharpen, re-shape, and otherwise repair the drills. It comprises means for mounting and moving the drill toward and from the tools of the apparatus, these tools furnishing means for reshaping the drill and acting on the edges thereof to sharpen the same. Preferably the shaping-tools are in the form of an anvil and hammer, between which the point of the drill is introduced, means being provided so as to give the drills the usual V-shaped edge.

**TICKET-COLLECTING APPARATUS.**—H. L. DES ANGES, New York, N. Y. The invention refers to an apparatus particularly intended for use in connection with steamboat and railway systems to collect admission-tickets from the passengers as they pass aboard the train or boat. It is not, however, limited to this particular use and may be employed under various other analogous conditions. The principal object is to so construct and arrange the apparatus that fraud on the part of persons in charge will be impossible.

**CHUCK.**—C. O. BERGMAN and M. ELMER, Hastings, Mich. Among other things this invention has for an object to provide for conveniently holding the work on machines. In operation, when centering a piece of metal too large to be held in the milling-machine or shaker-chuck, two prick-punches are made upon one side of the piece and one upon the other, and three spurs are manipulated so as to enter the prick-punches and securely hold the work in place. Means are provided for securing both long and delicate adjustments.

