

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

PULVERIZER.—JAMES W. RIGG, Mount Carmel, Ill. Journalled in the frame of this pulverizer, are a front roller and a rear-spiked roller. Between the rollers a drag is mounted. Cutters extend down under the spike-roller between the spikes. Runners movable on the frame are adapted to lift the rear end of the frame, in order to bring and hold the spiked roller and drag above the ground. The drag can be raised or lowered in order to break up the clods left by the front roller. The spiked roller in the rear rolls the ground a second time, and the spikes, by passing into the earth, loosen the soil and prepare the ground for the seed.

WHEELED CULTIVATOR.—CHARLES L. KING, Stella, Neb. The improvement in cultivators devised by this inventor consists of a supporting frame, wheel-guiding supports having journaled upright portions, crank-arms at the lower ends of the upright portions extending normally in the direction of the cultivator's motion, lateral spindles on the crank-arms, and wheels on the spindles. The construction for supporting and guiding the wheels is easily controlled, responds quickly to the lever by which it is operated, and includes a construction of connecting bar which acts as a spring for driving detent devices by which the guiding mechanism is held in any desired adjustment.

CULTIVATOR.—WILLIAM M. STEVENSON, Honey Grove, Tex. This invention is an improvement in cultivator-saddles or attachments for the beams thereof, which saddles consist of devices carrying "feet" or standards to which shovels, plows, and the like are secured. The chief characteristic of the improvement is found in the use of rotatable sleeves or cylinders to which the shovel or plow standards are so attached that these standards may be adjusted in different positions or angles, to cause the shovels or plows to work nearer together, farther apart, or to be thrown out of work altogether. The sleeves or cylinders are mounted on horizontal axes, and are held in any position by means of screw-clamps.

Mechanical Devices.

BALLOTING MACHINE.—WILLIAM M. DOUGHERTY, St. Joseph, Mo. The balloting machine of this inventor has for each candidate a numbering apparatus operated by an arm projecting through the casing of the machine, the numbering apparatus being connected with the door of the voting-booth, so as to be operated by the movement of the door. The numbering device or counter for each candidate is included in a box or casing. These boxes or casings are separate from one another, and in the operative machine are held in proximity by fastening devices. As a voter, in entering, opens and closes the door of the booth, the parts of the machine are placed in operative position. By pulling upon one of the arms, previously mentioned, the voter casts his ballot for any desired candidate. Means are provided whereby it is made impossible to vote for two candidates running for the same office.

TOWER WINDMILL.—MAYRO KEENEY, Somersville, Conn. The purpose of this invention is to construct a wind-wheel of a tower-windmill that it shall be simple, durable, and self-governing, the regulator being capable of such adjustment as nearly to close the fans or blades if the revolutions of the wheel become too numerous. The wheel is so constructed that its fans or blades shall catch the wind from all quarters without changing position, thus obviating the loss of speed or power, and the irregular motion common to many windmills. The fans or blades used are angular in cross-section. This angular construction enables the wheel to turn, not only when the wind is entering the wheel, but also when the wind is leaving the wheel.

HOISTING APPARATUS.—SAMUEL L. COOPER and FRANK W. KEYS, Yonkers, N. Y. This invention provides a hoisting apparatus designed to be attached to a wagon used in street and sewer cleaning. Upon the wagon a crane is mounted to swing. A hoisting rope, to the outer end of which a bucket is attached, passes over a wheel journaled in the upper end of the crane, and is wound about a drum mounted in the vehicle. The bucket, after having been filled, is raised by rotating the drum. When it has reached the desired height, the bucket is swung inwardly by means of the crane, and the contents dumped into the wagon.

CLOTHES-WRINGER.—ALBERT G. CARLING, Hackensack, N. J. With a frame and with two shafts carrying rolls and rotating in the frame, are connected two interchangeable, meshed cog-gears and two countershafts. The cog-gears are located one on a roll-shaft and one on a countershaft. On the lower roll-shaft and on both countershafts, sprocket-gears are mounted and connected in pairs by sprocket-chains. The rolls and shafts are driven by means of a crank-handle adapted to engage with an end of the lower roll-shaft or with an end of one of the countershafts. By changing the positions of the gearing and of the crank-handle, heavy goods or light goods may be wrung, and the necessary power for each properly applied.

SAWMILL-DOG.—ALBERT D. LANE, Montpelier, Vt. Crooked logs, owing to their peculiar shape, are not readily held in place by ordinary dogs, and hence cannot be readily sawn. In the present device, two dogs are used, one engaging the log from the under side and the other from the upper side. Both are readily adjustable in height, by means of a hand-wheel which operates a rack and pinion to draw the dogs toward each other in order to hold the log firmly in place.

TYPE-WRITING MACHINE.—FREDERICK S. WENDELKEN, Dallas, Tex. The present invention endeavors to provide means whereby a type-writer platen may be turned and the carriage brought back to its starting point by depressing keys or key-levers. To turn the platen automatically when the carriage is returned, the inventor provides the carriage with a bell-crank lever having one arm arranged to engage an abutment on the frame, and its other arm connected with one end of a lever pivoted between its ends and arranged at its other end to bear beneath the bell-lever so as to lift the bell-lever when the bell-crank is in engagement with the abutment. The carriage is automatically returned to its original position by means of a key-lever which acts on a spring and gearing to bring the carriage back to its original position.

Miscellaneous Inventions.

FURNACE-CLEANER.—DR. PAUL MEYER and LATIMER D. GRAY, Golden, Col. The purpose of this invention is to furnish an attachment for fire-boxes, by means of which attachment the ashes may be quickly removed from a grate. The furnace is provided with a rigid dead-plate located forwardly of the grate-bars and provided with an opening through which clinkers may be dropped into the ash-pit. A cover commands the opening, is mounted to slide back and forth on the dead-plate in a plane parallel with that of the plate, and is supported by continuous engagement with the top of the dead-plate.

LUBRICATOR.—WILLIAM HUNT, Winnipeg, Canada. This invention has for its object the provision of a dust-proof lubricator arranged to operate in a simple manner. The lubricator consists of a cup containing oil, which cup is formed on the bottom with a stem screwing into the part to be lubricated. The stem is formed with a passage, through which oil flows to the parts to be lubricated. This passage is adapted to be closed by a valve formed on a screw-plug. By screwing the plug up or down, the flow of oil can be regulated, means being provided whereby the plug is held in adjusted position. The lower end of the plug has an opening normally closed by some soft fusible material which melts when the parts to be lubricated become heated, and thus permits the oil to flow to the operating parts of the machine to which the device is applied.

SCRAPER.—ALICE E. HOUGHTON, Slidell, La. The scraper provided by the present invention is intended for use in kitchens. The scraper comprises a plate or thin bar bent into a flattened S shape to form three parallel sections connected by bends. The outer sections are sharpened and the middle section serrated at one edge. The peculiar shape and construction of this device enable it to be used in scraping surfaces of nearly every variety.

CASKET-LOWERING DEVICE.—MARQUIS T. ROBB, Granby, and ANDREW J. PATTERSON, Wentworth, Mo. In this device are combined a railing for an open grave and a bier adjustable on the railing, together with a windlass carried by the railing or frame, through the medium of which a coffin may be conveniently lowered. The entire device is so constructed that the parts may be conveniently wheeled from place to place.

CURTAIN-POLE.—WILLIAM OSTENDORFF, Union, Hudson County, N. J. This invention seeks to provide a simple curtain fastener which, when applied, will hold a curtain in any desired position. The fastener can be made of a single piece of spring wire or like material. The fastener is so constructed that rings and the like will be dispensed with. When applied, the fastener will be entirely hidden when the curtain is in place, and will be but partially exposed when the curtain is down.

BRINE-EVAPORATOR.—ROBERT D. MILLER, Warsaw, N. Y. By means of this apparatus, the salt crystals obtained by evaporating brine are deposited upon a suitable conveyor and automatically conducted away. The brine-evaporator has a tank provided in its upper portion with an inclined bottom having projecting lower edges, beneath which edges the tank is extended to form a well. An inclined chute extends upwardly from one end of the well to the water-level. Two parallel endless chains extend along the well and through the chute to a point above the water-line. Bars connect the chains at frequent intervals, and a belt is connected with the chains and bars. The inclined bottom extends over the edges of the belt, so that the salt crystals are collected upon the belt and automatically conveyed outside of the tank.

APPARATUS FOR DEVELOPING AND REGULATING WATER SUPPLY.—HOWARD V. HINCKLEY, Topeka, Kan. In order to draw water at pleasure from a subterranean flood-plane or underflow, this inventor employs a series of submerged wells or cribs, and a series of inclined conduits connecting the wells to draw the water therefrom by gravity. The flow of the underground water is regulated by gate-valves. The system is designed for use in the arid regions of our Western States and Territories.

SPRING-HEEL FOR BOOTS AND SHOES.—EDWIN L. BARBER, Larwill, Ind. This invention is an improvement in spring-heels such as are used for the purpose of relieving one of the strain due to walking. The spring-attachment comprises a spring-heel plate having one or more front fingers, and a base-plate having one or more transverse slots, through which the fingers project. The inventor has also applied his device to detachable insoles.

INK-WELL.—JOHN T. FORREST, Chehalis, Wash. In the present invention an ink-well has been provided which comprises two pivoted plates, the one having screw-holes for attachment and the other having an ink-well pocket. The two plates have a cam-joint at their pivoted ends, by means of which joint one plate is tightly bound against the other when the well is closed. Thus there is produced an air-tight and dust-proof joint.

APPARATUS FOR MAKING CLEAR CAN-ICE.—JOHN E. SIMON, Louisville, Ky. In manufacturing "can-ice," there is formed an objectionable center core, which detracts from the appearance of the ice-block and causes the ice to become offensive to taste and smell. The present invention seeks to overcome this objection by introducing air into the can during the freezing process. This is accomplished by means of a flexible tube adapted to hang down into the can and supported by a rod extending over the can beneath the lid.

Designs.

WIND-WHEEL.—THEODORE A. SCHLAEBITZ, Lincoln, Neb. The leading feature of this design is a pyramid surmounted by a globe or sphere. The pyramid rests upon a disk, below which disk a second disk of larger diameter is mounted. Upon this second disk funnels are located. Above the ball or sphere is the figure of a cock standing upon a weather-vane.

SPOON.—FRANK S. SWALM, Brookhaven, Miss. This inventor has designed a paper spoon having a ring formed at the outer end of the handle. The spoon-bowl is so formed that the handle, if prolonged, would bisect the ring.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for 10 cents each. Please send the name of the patentee, title of the invention, and date of this paper.

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Names and Address must accompany all letters of information and not for publication. References to former articles or answers should give date of paper and page or number of question. Inquiries not answered in reasonable time should be repeated: correspondents will bear in mind that some answers require not a little research, and though we endeavor to reply to all either by letter or in this department, each must take his turn. Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same. Special Written Information on matters of personal rather than general interest cannot be expected without remuneration. Scientific American Supplements referred to may be had at the office. Price 10 cents each. Books referred to promptly supplied on receipt of price. Minerals sent for examination should be distinctly marked or labeled.

(7526) W. H. J. asks: For what purpose is a solution used on copper wire previous to winding on the silk when insulating? What is the solution composed of? A. We do not know any solution universally used on copper wire before winding on the silk insulation. If it were desired to improve the insulation, shellac could be used in this way.

(7527) J. O. N. asks: Is there any substance through which two magnets will have no attraction for one another, and the substance not to exceed 1/2 inch in thickness? A. A magnet is screened from exterior magnetism by surrounding it with a covering of iron. Iron less than one-half inch thick will answer this purpose.

(7528) G. E. S. asks: Is there any process or preparation by which cast steel can be made to have the appearance of frosted silver? A. By etching the polished surface with acid. The articles are first heated to about 212°, then a thin coat of beeswax is melted over their surface, and when this cools the design is scratched through the wax by a needle, the acid is then poured on the design, and may be prevented from falling off by a little wax built around the design. Muratic acid answers very well for etching. The time required for the operation is best found by a little practice, as the fine lines of the design take more time to etch than is required for the coarse ones. When it is decided that the etching is complete, with clean cold water thoroughly wash away all traces of acid, and then with a little benzine remove the wax and polish with clean, dry chamois leather. 2. Would such process or preparation or bluing be cheaper than nickel plating? A. No; use bluing.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

NOVEMBER 29, 1898,

AND EACH BEARING THAT DATE.

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

Table listing inventions and their patent numbers. Includes items like Adjustable and extension table, Advertising board, Amalgamator, Animal trap, Awning, etc.

Table listing inventions and their patent numbers. Includes items like Bicycle lock, Bicycle pedal, Bicycle saddle, Boiler cleaner, Bottle cap, etc.

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