RECENTLY PATENTED INVENTIONS.

Agricultural Improvements.

PLOW.—J. MICHALKA, Cameron, Tex. The shoe-bar in this plow is rigidly secured to the beam and the standard is arranged to permit quick and convenient adjustment to any height or depth of cut and any inclination found necessary in setting the plowshare or sweep. Means are provided for adjustably locking the standard brace to the standard in such a manner that the standard cannot be accidentally moved from position.

Apparatus for Special Purposes.

GAS-PRODUCING APPARATUS.—J. H. MILLER, Jr., Irwin, Pa. This apparatus is more particularly adapted for making illuminating gas and comprehends a novel, co-operative, and peculiar arrangement of parts, whereby a large amount of heating surface is provided, and in charging the apparatus the nitrogen is driven off and the desired gas product is left practically free of nitrogen. By this construction five hundred to six hundred heat units may be obtained as against three hundred and fifty secured in water gas.

Electrical Apparatus.

ELECTRIC BATH APPARATUS.—J. D. RANDALL, Memphis, Tenn. The invention relates to improvements in cabinets for giving electrically-heated air baths to invalids afflicted with various forms of diseases. The apparatus is so arranged that it may be lowered or placed over a person and produce varying degrees of heat by an electric current.

SOCKET-COVER AND GLOBE-HOLDER.—J. F. WRIDE, Brooklyn, N. Y. The improvement provides a combination of a socket-cover and globe-holder for an electric lamp which can be readily and securely placed in position to cover the lamp-socket and to form an exceedingly strong globe-holder requiring no separate attachment on the cover.

POLE-CHANGER.—J. M. G. BEARD, Fruita, Col. This pole-changer is more particularly used for electricity of high potentials, such, for instance, as currents from static machines, induction coils and oscillators, and the device affords a simple and effective means for changing the direction of the currents.

Hardware.

ADJUSTABLE SOCKET-WRENCH.—J. L. PAXSON, Mobile, Ala. The wrench consists of two members which are flat at their centers and beveled upwardly at each end, thereby forming a rocking fulcrum at the centers. A sleeve or nut is slipped over the smaller end of the wrench and engages a thread on the outer surface of these members. By sliding or screwing the sleeve or nut in either direction, the half-sockets in the opposite faces of the two members are made to approach each other and grip the object between them.

VISE.—F. I. WEBBER, Oxford, Neb. This vise or holder is more especially designed for securely gripping the sucker or plunger rods of tubular wells, or the drill rods of well-drilling apparatus, or other work undergoing repairs and the like. The vise is very simple in construction and effective in operation, and is arranged to prevent the work from sliding or turning in the jaws.

BENCH-CLAMP.—V. F. SIMOLA, Bergenfield, N. J. This bench-clamp which is simple in construction, and of economical form may be attached to any carpenter's bench. The design is such that curved or straight articles may be firmly gripped and held in position to be worked upon, and articles may be held above the bench and turned in their supports as required.

Improvements in Motors and Engines.

REVERSING VALVE-GEAR. A. B. LEFTWICH, Pueblo, Colo. In the ordinary link-motion for locomotives two eccentrics on the axle are required for each valve. In this invention only a single eccentric is employed for each valve and a simple construction of reversing gear is provided which is susceptible of the two positions necessary to reverse the valve, and a middle position which has no influence on the valve, as well as various intermediate positions.

PULSOMETER.—P. HAUSSMANN, Burg, near Magdeburg, Germany. This invention relates to steam water-lifters or pulsometers and more particularly to the construction of the injecting nozzles which produce the condensation of the steam. These nozzles are so arranged as to render the injector-tube adjustable, while the mouth of such tube is adapted to act in conjunction with the spraying device provided in the interior of the chambers, whereby it is possible to regulate the quantity of the refrigerating water to existing conditions of working.

SLIDE-VALVE GEAR.—S. S. YOUNGHUSBAND, Darlington, England. The invention consists in the special construction of eccentric sheave and stud for working the expansion or reversing link of the valve-gear of a locomotive. Motion is transmitted from the reversing links to the slide-valve through an intermediate lever, having a pivotal connection with the die-block of the link. This lever is connected by its shorter arm to the valve-rod and suspended by its other arm from arms on the way-shaft. The connection with the expansion-link of the link-suspension device and the rods of the forward and backward eccentrics is effected by means of gudgeons carried by a pair of cheek-plates fixed to the expansion ling at either side thereof.

WIND-MOTOR.—J. M COCHRAN, Gober, Texas. The construction of this wind-motor is simple and durable and is arranged to permit the use of large wind-wheels without danger of creating undue tortional or other strains. The construction also permits the vane to freely hold the wheel into the wind and to insure a proper transmission of the power developed.

CURRENT-WHEEL.—J. A. WELLS and J. D. SUMRALL, Knight, Tex. The paddles of this current-wheel are mounted to slide upon the spokes of the wheel in order to prevent breakage by drift material and to prevent the wind acting detrimentally upon the paddles. The invention also utilizes the power generated by the movement of the wheel to raise and lower said wheel whenever the condition of the stream may require such adjustment to enable the paddles to act upon the water advantageously at all times.

Machines and Mechanical Devices.

HOIST.—C. PETTY, Oakwood, Tenn. The invention relates to a hoist adapted especially for lifting barrels, kegs, etc. The device may be employed for lifting and carrying barrels from one point to another and placing them or loading them upon the desired object without involving exercise of any considerable force.

ADDING-MACHINE.—E. WISWALL, Island, Ill. The invention is in the nature of a novel form of adding-machine which will also aid in solving problems in subtraction, multiplication and division. It consists of a peculiar construction and arrangement of parts, particularly adapted for the uses to which it is put. On each side of the case of the adding mechanism there is a row of figures opposite the keys to facilitate the working of problems in subtraction and division.

CANE-LOADER.—H. S. PADGETT, Waipahu, Hawaii Territory. The cane loader is employed in loading cane on cars or other carriers. In connection with suitable framing the machine is provided at the front with a transversely extending endless carrier which extends from side to side of the machine beyond the wheels and discharges from one end into an upwardly-inclined elevator. This elevator is designed to discharge the cane into a car or other receptacle.

LOG-TURNER.—W. L. LELAND, Sisson, Cal. This log-turner is employed in sawmills to move a log from the log deck upon a log carriage, to conveniently and automatically turn the log over after several boards have been sawed off, and then to return the log to position against the knees of the head-block on the log-carriage.

PAPER-JOGGER.—W. E. JELF, Chattanooga, Tenn. The invention relates to a device for jogging or jolting superimposed sheets of paper so that they will be caused to assume positions in which their edges lie true with respect to each other. Thus preparing the sheets for binding, cutting and analogous purposes.

WASHING-MACHINE.—J. WOERNDL, Frances, Wash. This washing-machine belongs to that type used upon the top of wash-tubs and operated without direct submersion in the water. The clothes to be washed are wet, spread out, and rubbed with soap, and then bundled up into a ball. This ball of clothing is then rolled forward and backward, the internal surfaces rubbing against each other with a gentle friction, thus loosening the dirt and causing the same to mingle with the water.

SCALE ATTACHMENT.—W. D. EVANS and J. T. MARSHALL, Eupora, Miss. The invention relates to improvements in attachments for weighing-scales and provides a device of simple construction, designed to co-act with the scale beams to indicate on the dial the weight of an article on the scale, and obviate the use of the usual weights.

EXPANSIBLE PULLEY FOR MOTOR-VEHICLES.—PAUL ISIDORE VIEL, 99 Rue de la Verrerie, Paris, France. The invention relates to transmission and speed gear for motor vehicles and is characterized by extensible pulleys which enable the ratio of the diameters between the driving and driven pulleys to be altered in such a manner as to alter the speed of the driven shaft in the same ratio. Furthermore the extensible pulley permits of instantly stopping the driving belt.

Miscellaneous Inventions.

SHEARS. R. HAMILTON, Pensacola, Fla. This invention is an improvement in shears designed for cutting heavy material. A base plate is employed in connection with the lower blade to slide beneath the material being cut. The construction is such that the handle of the fixed blade may be grasped by the thumb and forefinger of the hand in such manner as to hold the shears steadily in operating and guiding the same, while the handle of the upper blade may be operated by the other fingers of the hand.

TOBOGGAN-SLIDE. E. C. MERRILL, New York, N. Y. This toboggan-slide is so arranged as to secure the novel effect of cars racing side by side at a varying rate of speed, whereby it becomes possible for the cars to take the lead alternately, thus adding considerably to the enjoyment of the occupants of the cars.

DETONATOR FOR RAILWAYS.—F. LEMAIRE, Paris, France. This detonator possesses the advantage of exploding loudly upon the passage of the first vehicle or of the locomotive, so that the explosion is always audible to the driver. The improved detonator does not injure or deteriorate either the rail or the tire of the wheels, and in addition affords great security owing to the certainty of its operation. It is adapted to resist accidental shocks which may arise from falls during transportation, or from knocks or blows during storage.

CHAIR.—H. P. BLACKARD, Omaha, Ill. This reclining chair is so arranged that a person while on the chair may readily adjust it to any desired angle from an upright or sitting position to a reclining position. It may be readily adjusted to a sitting position by the weight of the person rising from the sitting position, or in other words the chair is self-adjusting to any point on upward movement.

FIRE-ESCAPE.—E. M. CHRIST and W. I. HALDEMAN, Pinegrove, Pa. The invention resides in a peculiar form of spiral around which the rope is wound, in order to give the rope the number of turns sufficient to furnish the necessary resistance to the movement of the rope. The construction of the spiral permits the rope to engage and disengage the ends of the spiral without turning sharp or abrupt corners which would obviously tend to prematurely destroy the rope.

WATER-RESERVOIR FOR RANGES.—G. H. GRIMM, Rutland, Vt. This water-reservoir ensures quick heating of the water and aids in the combustion of the fuel. The generation of steam is reduced to a minimum, and its escape into the room or into the reservoir casing and range are prevented, thus avoiding the formation of a destructive alkali by the mixing of the steam with soot and ashes.

REPEATING FIREARM.—W. W. HUMPHREYS, Sheffield, Ill. The improvement relates more particularly to repeating shotguns of that type in which the receiver is open at the bottom. The construction permits the shooter to expel one or all the cartridges from the magazine by the magazine spring, so that at the end of a hunt the sportsman can unload his gun with rapidity and perfect safety, avoiding danger of accidental explosion.

CAMERA AND FOCUSING - FINDER THEREFOR.—U. NEHRING, New York, N. Y. The invention relates more particularly to the production of a combined camera and means for automatically finding an object and focusing the camera upon said object. Means are provided for reducing the volume of the finder and focuser so that the same will be in as compact form as possible.

WINDOW ATTACHMENT.—R. HAMILTON, Pensacola, Fla. This improvement is in the nature of means for carrying the shade roller and lace curtain on the upper sash of a window and comprises devices whereby the sashes may be locked when closed or opened to any desired extent.

METHOD OF RAISING SHEETS OF STONE.—A. W. PRATT, North Jay, Me. Mr. Pratt has invented a new method of quarrying or raising sheets of stone from the mother ledge or solid mass where there is no natural bed or seam. The sheet of stone of required thickness may, by this process, be raised or separated without flaw or fracture and brought to an edge, so that it can be cut up into blocks or slabs of suitable dimensions for use in the erection of buildings, monuments, etc.

NECKTIE-HOLDER.—P. M. LEWIS, New York, N. Y. The improvement consists of a clip member attached to a shield and adapted to engage with the collar-button. The holder-clip is so formed as to engage yieldingly with the back of the shield at a considerable distance from its center, thus preventing the bending and consequent breaking of the shield, but permitting it to conform to a collar.

INCANDESCENT GAS-BURNER.—A. A. PRATT, New York, N. Y. The object of the invention is to provide a new and improved incandescent burner which is simple and durable in construction and arranged to give a very bright light on high or low gas pressure and without increase in the consumption of the gas over ordinary incandescent burners now in use.

TABLET. A. L. HOLTON, Norfolk, Va. This invention is an improvement in paper tablets of that class comprising a number of loose leaves and means for holding them together. This holding means is of such a construction as to permit the sheets as they are filled to be turned back until they lie perfectly flat. When all the sheets have been used the tablet may be reversed and the opposite sides of the leaves used.

NOTE-BOOK.—A. L. HOLTON, Norfolk, Va. This invention is an improvement in note-books designed for use by stenographers and others, the notes of which are to be transcribed. The invention has for its object to provide a simple construction by which the note sheets may be held, will lie flat from end to end and throughout the entire pile, and can be readily applied and removed in use.

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

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

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

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Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W. A. Wilson Machine Company, Rochester, N. Y.

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