RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

RIDING ATTACHMENT FOR WALKING-PLOWS.—EDWARD B. WINTERS, Coffeyville, Kan. This riding attachment consists of opposing plates which can be clamped to opposite sides of a plow-beam, one of the plates being provided with a sleeve, and the other plate having a rack formed at its upper portion. An axle is passed through the sleeve; and through both of the plates an adjusting-lever is attached to the axle to engage the rack. The attachment can be readily adjusted to any form of walking-plow. Either supporting-wheel of the attachment can be raised or lowered to suit the character of the ground and to permit the share to enter the ground to a greater or lesser degree.

Electrical Apparatus.

ELECTRIC ALARM-MAT.—ALBERT D. SHAW, Richmond Hill, Queens, New York city. The mat is adapted to be placed on the floor, above or below carpet or linoleum, and is provided with suitable connections for attachment to electric alarm device. The mat is so constructed that upper and lower metallic elements in circuit connection with the alarm device are normally held out of contact by interposed strips of rubber. The weight of a person is sufficient to produce a contact of the upper and lower elements and complete the circuit connection with the alarm device, when the circuit is not interrupted by an interposed switch.

Apparatus for Special Purposes.

FIRE-EXTINGUISHER.—GEORGE A. SWENSON, Brooklyn, New York city. Mr. Swenson has invented a device for automatically setting into operation a sprinkling apparatus to extinguish a fire in buildings. Briefly stated, the apparatus comprises a source of water supply and an automatically-actuated valve for permitting this water to pass into and through the sprinkling-pipes. If desired, an alarm mechanism can be used in conjunction with the extinguisher.

ACETYLENE-GAS MACHINE.—JOHN W. GREGORY, St. Joseph, Mo. The invention provides a novel form of acetylene-gas apparatus which is automatic in its operation and simple in its construction. New water-supply devices have been invented which have added much to the efficiency of the machine. A frost-proof case for the apparatus is provided, which is probably a new feature in acetylene-machines.

METHOD OF DISPOSING OF THE SPENT LIQUOR IN WOOD-PULP MAKING.—WILLIAM M. STONE, Keeseville, N. Y. The invention relates to the manufacture of wood-pulp by the well-known sulfite process, and the object is to provide a new means for disposing of the spent liquor. The spent liquor is first drawn into a separate receptacle having a discharge nozzle. A current of air or steam is forced through the receptacle, whereby the liquor is completely atomized and dissipated.

EVAPORATING APPARATUS.—OTTOKAR HOFMANN, Argentine, Kas. The invention provides an apparatus for concentrating by evaporation solutions of metallic and alkali salts for the purpose of crystalizing such salts from the solutions in which they are held and of concentrating liquids which are commonly used in the chemical arts. To this end, the inventor has devised a novel evaporating apparatus, which comrises a pan traversed by hot-air tubes serving the purpose of highly heating the solution poured into the pan. The solution is so fed into the pan that it is gradually, though quickly, heated to the temperature of vaporization, and that it emerges from the pan, highly concentrated.

COFFEE OR TEA MAKING APPARATUS.—CHARLES G. and LOUIS P. DUREL, New Orleans, La. The apparatus embodies a water-reservoir having communication with a base in the form of a vessel in which the water is heated, and from which passes a pipe to conduct the boiling water upward and through a can in which the herbs are placed, so as to subject them to the action of the boiling water.

COMPUTING APPARATUS.—HAROLD W. BYRON, Mercersburg, Pa. In 1897 the inventor received a patent for a computing apparatus, which he has now improved. The improvements in question relate to certain spreading devices, which indicate the weight per square foot of a sheet of leather or similar material. In the present invention the spreading devices are constructed in such a manner that they open and close in a longitudinal direction.

Mechanical Devices.

LEATHER-WORKING MACHINE.—FRANK F. CUMMS, Rutland, Vt. The invention relates particularly to improvements in machines for finishing leather straps, reins, and the like. The object of the invention is primarily to provide a machine of simple construction which operates to apply blacking to the edges of the strap, crease the surface, grease the edges and punch holes at desired distances apart.

CRANK MECHANISM.—CHARLES G. HOLMBERG, Woonsocket, S. Dak. The crank mechanism is more especially designed for use on oscillating engines and other machines, and is arranged to avoid dead-center positions. The crank is made in sections, and links connect the inner ends of the sections with each other. Such is the construction that the shaft receives at all times power from two points.

DOG-TRIP FOR PRINTING-PRESSES.—ROBERT NAUMANN, Manhattan, New York city. This dog-trip for platen presses is of such construction that the moment the impression is drawn off by operating the usual throw-off lever, the supply of ink to the distributing rollers, operating over the platen, will be immediately stopped, the ink supply from the fountain being easily set in operation when the throw-off lever is restored to its normal position.

COMPUTING APPARATUS.—HAROLD W. BYRON, Mercersburg, Pa. The invention is an apparatus designed especially for computing the weight per foot of leather, and has for an object, among others, so to combine a device for measuring the total area of the leather, with a weighing-platform arranged in position to receive the leather discharged from such device, and with a computing device having means operated by the platform and hand-operated means arranged for co-operation with the platform-operating means, that the computation can be quickly, accurately, and practically automatically effected.

CLOTH-PILER.—WILLIAM N. DUNN, Martinsburg, W. Va. This new and improved laying or cloth-folding machine is simple and durably constructed, very effective in its operation, and arranged to lay or fold cloth of any desired width or length to insure a proper cutting of trousers or other garments. A carriage is mounted to travel above a table on which the cloth is to be laid or folded. A cloth-roll hanger is revolubly supported from the carriage, means being provided for unwinding the cloth only during a forward travel of the carriage and for turning the cloth-roll hanger during the return travel of the carriage. These means are controlled by the travel of the carriage.

MOTOR-BICYCLE.—EMIL F. HAFELFINGER, Weehawken, N. J. The object of the invention is to provide a motor-bicycle in which the parts are all assembled so that little space is required. In order to secure this compactness, the inventor has devised a special form of bicycle-frame which comprises a vertical brace having a socket section for the seat-post and a series of arms extended downwardly from the socket section. These arms are curved outwardly between their ends and are arranged one pair forward of the other pair. Between these arms the motor is supported.

DISPLAY-RACK.—ANDREW TODD, Piedmont, O. The rack is used for displaying and handling garments, such as coats, vests and the like. In tailor-shops and clothing-stores, it is the practice to fold coats with the lining outward, and to place them in piles. When it is desired to remove a coat, it is taken hold of and drawn out, by which operation all of the coats in the pile are more or less disarranged. The present invention provides a simple mechanical device in which a number of coats can be placed in a pile closely together, any one of which coats can be removed without disarranging the others.

JACK.—JOHN A. JOHNSON, Hoquiam, Wash. The lifting-jack has a lever with a ratchet-like gear to raise the bar. The improvement lies in the form of the lever and its arrangement with respect to the gear that acts on the bar.

LEMON-SQUEEZER.—PAUL F. SMITH, Denver, Col. The principal feature of the invention is a strainer serving to receive and contain the pits, which strainer is held by a member, spring-actuated normally to lie sidewise from the squeezing devices. Immediately after the lemon has been squeezed, the strainer is released, whereupon it is moved sidewise and the rind of the fruit conveniently dropped into any desired receptacle.

Railway Contrivances.

TRACK-RAIL CONNECTION.—WILLIAM M. DONAHUE, Lindsey, Pa. Mr. Donahue has devised a novel track-rail connection for holding the adjacent ends of track-rails properly alined, which connection affords simple and trustworthy means to compensate for the expansion and contraction of such rails, and also maintain the joint-connections secured against side strains that are liable to displace the rails at their connections.

RAILROAD-CAR VENTILATING APPARATUS.—FRANK L. JOBSON, Richmond, Va. The air gathered from the motion of the train passes into the open mouth of a funnel-shaped hood on the end of the car, and is there utilized in actuating a fan, operating as the motor of an attached suction-fan with blades, so constructed and adapted, as to draw in and force fresh air into and through a filtering, cleansing, and temperature-regulating chamber, where it is rendered pure and sanitary, by the removal of all floating dust, cinders, and noxious gases.

Tools.

GLASS-CUTTER.—JOHN W. TESTER, Minneapolis, Minn. The glass-cutter is of the small type which is constantly used by glaziers. The implement comprises a bottom-plate, at right angles to which is a guide-plate. These parts together are provided with an L-shaped slot for use as an anchorage for engaging a centering arm in combination with a cutting-tool. Among the many merits of the device are durability, lightness, simplicity, cheapness, and the fact that several distinct tools are harmoniously combined in a single instrument.

Miscellaneous Inventions.

BOOT-HEEL.—CHARLES E. KELLER, Los Angeles, Cal. A rubber cushion is arranged in such a manner that the full benefit of the cushion effect is derived, and at the same time the rubber is protected from contact with the earth and securely held in place, forming a compact and durable heel.

PAPER HOLDER.—HENRY R. SMITH, Stamford, Conn. This device is arranged to hold a pad of paper conveniently in position on the inclined surface of a telephone-desk. The need for an invention of this kind has undoubtedly often been felt. The present device is simple and cheap, so that it can easily be manufactured, and will dispense with the usual cord whereby a pad of paper is but very inadequately held.

METAL HOSE-COUPLING AND WASHER.—FRANCISCO D. JOY, Glendora, Cal. The invention is an improvement in that class of hose-couplings employed for connecting different sections of hose with each other or with a hydrant or tank. The improvement relates particularly to the construction of the coupling proper and the washer used therewith, whereby when the washer is placed in position it will retain it under all ordinary conditions of use and disuse until intentionally removed.

GATE.—ELISHA A., CLAUDE D., and NELSON L. ROUSE, Bozeman, Mont. The purpose of the invention is to provide a simple form of gate, which, when opened, will be carried in a lower vertical position to an upper vertical position, and so to construct the operating mechanism that in stormy weather the gate will be held in either position. A further purpose of the invention is to provide a latch constructed in co-operating sections, both of which are simultaneously operated by a single lever, link, or its equivalent.

BALANCE-SHEET BLOTTER.—FREDERICK F. MULLER, near Cardiff, Ala. The balance-sheet blotter is to be used in making a transfer of figures posted to a ledger, the object being to obtain a perpetual balance and to locate errors in posting without loss of time by checking, or a sheet which is in convenient form to be filed away for future reference. The balance-sheet blotter has a border which may be written or figured upon and a body member of blotting material.

CAN.—JOSEPH W. KOHNEN, Buffalo, N. Y. The can is designed especially for the reception of ashes, garbage, and similar substances. The can is mounted on wheels, so that it can be readily transported from point to point. When the ground is covered by ice or snow, runners can be used, instead of the wheels.

DUPLICATE-WHIST SCORING DEVICE.—GEORGE L. CASTNER, Clarksville, Tenn. The device is designed to take the place of other methods of scoring the game of duplicate-whist. A degree of accuracy offered by no other method now in use is obtained; and the operation of keeping a score is considerably shortened. Without altering its general principles of construction, this device can also be adapted for scoring other kinds of games.

REDUCING-FURNACE.—CHARLES BISHOP, San Francisco, Cal. The reducing-furnace has fireboxes at its opposite sides, and a series of perforated arched plates arranged in the furnace behind the fireboxes. Inclined runways extend below the plates. A settling-tank receives the material from the runways. A bullion-pot is connected with the tank. The heat passes upward through the ore on the arched plates, so that the metal is reduced and flows down into the settling-tank.

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.

NEW BOOKS, ETC.

SHOP AND ROAD-TESTING OF DYNAMOS AND MOTORS. A Practical Manual for Test Floor, the Car Barn and the Road. By Eugene C. Parham, M.E., and John C. Shedd, Ph.D. New York: Electrical World and Engineer. 1901. 12mo. Pp. 627. Price $2.50.

The present work is calculated to help the student fresh from the theoretical side of the subject, but unacquainted with shop details, and the so-called practical man who is largely self-taught as to the theory of the machines he handles. From the nature of the case mathematical treatment has been simplified to the last degree, and even the graphical method is but little used. The present is the second edition, and it has been extended so as to include the field of street car equipment and operation. The diagrams are clear and easily understandable.

The magazine Outing for October deserves special notice for the very handsome manner in which it is gotten up, and the many well-known writers on natural history and sport who have contributed to its pages most strongly appeal to any one interested in out-door sports and recreation. There is a very interesting article by W. A. Baillie Graham, who is well known in most parts of the world as a distinguished naturalist and sportsman. Edwyn Sandys writes most interestingly of the different rarities in this country and Canada. John Corbin treats on English and American University Athletics. They are all treated in a clear, clever and intelligent manner. Mr. Casper Whitney is the editor, and is deserving of much credit for the able manner in which he conducts the magazine.

Business and Personal Wants.

READ THIS COLUMN CAREFULLY.—You will find inquiries for certain classes of articles numbered in consecutive order. If you manufacture these goods write us at once and we will send you the name and address of the party desiring the information. **In every case it is necessary to give the number of the inquiry.**

MUNN & CO.

Marine Iron Works. Chicago. Catalogue free.

Inquiry No. 1438.—For the address of the Riverside Tool Co., manufacturers of files, in New York City.

TURBINES.—Leffel & Co. Springfield, Ohio, U. S. A.

Inquiry No. 1439.—For machinery for making matting and chair seats of bulrushes.

"U. S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 1440.—For parties to make swedged brass or iron wire handles, round or hexagonal, 3 inches long to taper from 5 or 6 inches to 1-10 of an inch.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J.

Inquiry No. 1441.—For manufacturers of hand power broom machines.

Yankee Notions. Waterbury Button Co., Waterb'y, Ct.

Inquiry No. 1442.—For manufacturers of stone crushers suitable for country roads.

Gasoline Lamps and Systems. Turner Brass Works, Chicago.

Inquiry No. 1443.—For manufacturers of gas balloons.

"Perfect aluminium solder. Amer. Hdw. Mfg. Co., Ottawa, Ill."

Inquiry No. 1444.—For the manufacturer of the automatic kneading trough invented in Boston.

WANTED.—Good, automatic gear cutter. Chicago Recording Scale Co., Waukegan, Ill.

Inquiry No. 1445.—For manufacturers of shooting gallery supplies.

Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 1446.—For the address of the Eureka Doorholder Company.

For Sheet Brass Stamping and small Castings, write Badger Brass Mfg. Co., Kenosha, Wis.

Inquiry No. 1447.—For manufacturers of novelties.

Rigs that Run. Hydrocarbon system. Write St. Louis Motor Carriage Co., St. Louis, Mo.

Inquiry No. 1448.—For manufacturers of a packed stuffing box that will remain tight under rotary motion.

Ten days' trial given on Daus' Tip Top Duplicator. Felix Daus Duplicator Co., 5 Hanover St., N. Y. city.

Inquiry No. 1449.—For manufacturers of horse-shoe machinery.

Kester Electric Mf'g Co's, Self-fluxing solder saves labor, strong non-corrosive joints, without acid, Chicago, Ill.

Inquiry No. 1450.—For manufacturers or patentees of sewing machine motors; spring motors preferred.

MANUFACTURERS! Want any parts made of any metal? Write us. Metal Stamping Company, Niagara Falls, N. Y.

Inquiry No. 1451.—For address of the manufacturer of a one-horse lawn mower with guards and knives like ordinary mowing machines, but with cutting bar running behind or before the wheels, like the old Eureka machine.

Automobiles built to drawings and special work done promptly. The Garvin Machine Co., 149 Varick, cor. Spring Streets, New York.

Inquiry No. 1452.—For manufacturers of cooking kettles, with water jacket or steam heating device, for cooking food for cattle.

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

Inquiry No. 1453.—For manufacturers of electrical supplies, novelties, machinery, etc.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York.

Inquiry No. 1454.—For manufacturers of stills for burning charcoal and making wood alcohol.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, $4. Munn & Co., publishers, 361 Broadway, N. Y.

Inquiry No. 1455.—For manufacturers of anti-rust compound to be applied cold and not destroy polish.

Gentleman established over twenty years in Paris, and well acquainted with the trade there, wishes to represent a few American first-class manufacturers in France. Address with full particulars France, Box 773, N. Y.

Inquiry No. 1456.—For manufacturers of fish net machinery.

An all round mechanic of long experience, as millwright and general repairer—metal and wood—able to construct and work out ideas of others, will be open to engagement November 1. Excellent references. F. W. Jensen, 508 Second Avenue, Long Island City.

Inquiry No. 1457.—For manufacturers of broom machinery.

REPRESENTATION FOR HOLLAND.—Well established, leading Rotterdam firm, with travelers covering Holland and large connections, wants the sole representation of iron and woodworking machinery or tools. First class references. Cash in advance, if desired. Apply "Iron," care of Filiaal Nederl. Kiosken Maatschappij, 55 Eland Straat, The Hague, Holland.

Inquiry No. 1458.—For manufacturers of double automatic relief check valves

WANTED.—First class draftsman on marine engine work. Gas Engine and Power Co. and Charles L. Seabury & Co., Cons., Morris Heights, New York City.

Inquiry No. 1459.—For manufacturers of duplophones and polyphones.

Inquiry No. 1460.—For manufacturers of chemical laboratory supplies.

Inquiry No. 1461.—For manufacturers of small castings for dynamos from 10 to 50 volts.

Inquiry No. 1462.—For parties to manufacture pen holders having hard rubber ferrule, aluminium ferrule, cedar stem and cork covering for the aluminium ferrule.

Inquiry No. 1463.—For manufacturers of all kinds of bent wood.

Inquiry No. 1464.—For machinery for the manufacture of pulp from waste wood. Also information regarding same.

Inquiry No. 1465.—For manufacturers of round hardwood handles 1 inch by 4 feet long.

Inquiry No. 1466.—For parties who build "The Figure 8 Coasters" and other novelties for summer resorts

Inquiry No. 1467.—For manufacturers of gas engines for electric generators of 15 or 18 h. p.