RECENTLY PATENTED INVENTIONS.

Mechanical.

OUTLET AND CUT-OFF FOR IRRIGATING FLUMES.—Daniel W. Willard, Redlands, California. This invention relates to devices for controlling the outlet of flumes employed for irrigating purposes. It consists of a hollow plug in the form of a metallic shell, the inner end of which is closed; this closed end being integral with the shell. The plug is constructed to have a sliding movement to bring the orifice within the flume for the outlet of water, or without the interior of the flume for closing the said outlet or regulating the same. The plug has a rotary movement, serving to present the orifice upstream or down-stream as may be desired. The device is durable and can be produced at a price to warrant its use in large quantities.

VEHICLE ROAD SCRAPER.—William F. Smith, Marquez, Texas This invention relates to a device for removing dirt from the peripheries of vehicle wheels while the vehicle is in motion. It consists of supporting arms, each secured at their forward ends to the reach and extending rearward and diagonally outward beyond the axle, clips carried by the said arms embracing the axle, the rear ends of said arms beyond the axle being bent parallel to the plane in which the wheel rotates, and provided with clamping boxes and scraper devices to embrace the wheel tire, these scraper devices being vertically adjustable in the clamping boxes of the supporting arms.

UMBRELLA ATTACHMENT FOR BICYCLES.—Effie M. Battenberg, Decatur, Indiana. This improvement provides a means for conveniently attaching an umbrella to a bicycle in a hoisted position, so as to afford protection to the rider against the rain and sun, and still leave the hand of the rider free to guide the bicycle or for other use. It is so arranged that its angle may be quickly and conveniently changed in a direction to the front or rear or to either side. It comprises a main frame having a relatively large ball and socket joint, a smaller ball and socket joint arranged concentrically to the first, and forming therewith double spherical bearings and means for attaching this joint to the bicycle and means for holding the umbrella staff.

WIRE STRIPPING TOOL.—William McMurtrie, West Superior, Wis. The invention relates to improvements in tools for stripping insulation from wires, and the object of the invention is to provide a tool by means of which the insulating material on a wire may be stripped either from the ends of the wire or from any desired part thereof, and also to produce a tool which is adapted to split the insulation longitudinally to facilitate its easy removal, and is also adapted to cut the insulation transversely, so as to determine the length of the wire to be stripped. It comprises handles pivoted together and terminating in jaws, a peripherally grooved bearing wheel mounted to rotate on the side of one of the jaws and laterally of the adjacent side of the handles, and a cutter disk mounted to rotate on the side of the other of said jaws and aterally of the adjacent side of the handles, whereby the tool may be drawn lengthwise of a long stretch of wire.

Railway Appliances.

TRUCK BEARING.—Stephen A. Eisele, San Antonio, Fla. The object of this invention is to provide a bearing, the lower or oil-containing section of which may be readily slid out of slideways in the upper section to receive a supply of oil even though the trucks are under heavy timbers, as would be the case in sawmills, also to form an inclined or wedge-like joint between the two sections of the bearing, so that when slid in the lower or oil cup section it will be raised up close to the axle. In brief, it comprises an upper section and a separable lower section, wedge-like interlocking portions being extended in the direction of the length of the said section, whereby they may be held together.

RAIL JOINT.—Thomas Poley, Brooklyn, N. Y. In this rail joint, the end of one rail is provided at its upper and lower portions with centrally arranged recesses, while the upper and lower portions of the end of the other rails are provided with centrally arranged lugs projecting therefrom and arranged to enter the said recesses. The lugs and recesses have their adjacent faces inclined in opposite directions.

Electrical.

DISTRICT TELEGRAPH CALL BOX.—William H. Garven, Portland, Oregon. This invention is in the nature of a district telegraph call box designed to indicate by a visual pictorial representation the thing called for, and provided with means for an answer in return from the central office indicating that the call has received attention. In brief the call box has a rotary circuit breaker having an actuating handle and tension spring, a rotary disk having a circular series of representations of the call and gearing connecting the disk to the actuating mechanism to the circuit breaker for causing the setting of the circuit breaker to impart an equal or commensurate throw to the disk.

Agricultural.

CHURN.—Henry Obermeyer, Beatrice, Neb. The object of this improvement is to provide a churn wherein a vertically reciprocating dash will be employed, the dash being provided with valves closing at their down stroke. The further object of the invention is to provide within the churn an agitating compartment from which the liquid will be forced, by means of which the butter when it is made will be assembled upon the upper face of the dash, thereby enabling it to be readily removed.

Miscellaneous.

BUNG.—Gerhard Zeilstra, Grand Rapids, Mich. This is a new and improved bung, arranged for convenient insertion in and removal from a barrel or like vessel, and adapted to be securely locked in place to prevent leakage of the liquid or gases contained in the barrel or other vessel. The bung is provided with a fastening device, provided with a spring-yielding arm adapted to be spread and engage the inside of a barrel at the sides of the bung hole, and a cam lever for actuating the arms.

CAKE PAN.—Marie Louise Perrottet, New York City. This invention relates to that class of cake pans which are constructed in sections, the sections being adapted to be united during the process of baking or to be separated in order to facilitate the removal of the cake. The pan is so constructed that the bottom will be an integral portion of one of the sections, the opposing section being grooved or channeled to receive the bottom, and provided with a flange or ledge adapted to extend beneath the bottom and be brought in close contact therewith, in order to prevent leakage at that point where the bottom connects with the removable section.

PICTURE FRAME.—Jacob A. Booher, Pittsburg, Pa. The invention relates to a glass picture frame, and the object of the invention is to provide such a frame in the form of a glass plate with a picture-receiving recess or pocket between its opposite faces and having an opening at one edge of the frame for the insertion of the pictures, which will be placed back to back therein, so that a picture will be exposed at each face of the frame through the transparent glass.

WOVEN CHENILLE FABRIC.—Leedham Binns, of Philadelphia, Pa. The object of this invention is to provide a new and improved chenille fabric of a highly ornamental appearance and so woven that when the wefts are cut in the usual manner the radiating fabric portions formed thereby will be of different lengths, thus producing a novel effect. The invention consists principally of a central web and sets of warps arranged in clusters in such a manner that one set contains a different number of warp threads from other sets, either of the same cluster or of different clusters, the warp threads being bound in place by wefts connected with the central web, the ends of the wefts projecting from the outermost warp threads to form tufts.

BOTTLE AND STOPPER.—Robert Temple, Denver, Col. This invention relates to so-called safety bottles for preventing the possibility of fraudulently refilling the same. It consists of a seal with an elastic and unbroken central section sandwiched between two inelastic sections, independent means for attaching the inelastic sections to the elastic central section and a weighted plate interposed between one of the inelastic sections and the inelastic central section and combined by the said parts.

WINDOW OR BUGGY WASHER.—Charles C. Bridwell, Portsmouth, Ohio. The object of this invention is to provide a means of holding a sponge in close relation to a water-supplying nozzle, also a more effective window-rubbing strip. A rigid tube serves as a handle and also for conducting water for washing. This tube is provided with a peculiarly constructed valve by which the flow of water is regulated and also with improved devices for attaching thereto a sponge and window-rubbing strip. The chisel or scraper for removing the mud is also attached.

ADVERTISING DEVICE.—Isidor Roecher, Memphis, Tenn. This invention relates to an improvement in signs and has for its object the production of an attractive sign which will simulate a human or animal head. It is so constructed that the eyes and tongue may be connected at the back and pivotally connected with the head in order that movement may be imparted to the said parts during the travel of the vehicle from the motion given to the body of the vehicle, due to the springs and the passage of the wheels over tracks or roadways.

Designs.

DESIGN FOR AN ANTIRATTLER.—Seth H. Morton, Lake Ann, Mich. The leading feature of this design consists of a T shaped body, the head of the body having vertically depending ends and the shank being curved vertically and return bent, the lower end being out of the plane of the head. Another feature of the design consists in the form of the returned portion of the shank, the same having a compound curve and terminating in a forwardly inclined part of the upper end.

DESIGN FOR A HINGE.—Albert Wanner, Jr., Hoboken, New Jersey. The leading feature of this design consists in the hinge having ornamental work along the face of the hinge and disposed at an angle thereto. Another feature of the design is a depending elongated ornament adjacent to the meeting ends of the hinge members.

DESIGN FOR A VAPORIZER.—John S. Judge, of Peterborough, Canada. The leading feature of the design resides in the tapering body having longitudinal corrugations therein, and having a rounding lever end. Another feature of the design is the plain upper end of the body capped by a convex top with a curved elongated member departing from the center of the said top.

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NEW BOOKS AND PUBLICATIONS.

FREE PUBLIC LIBRARIES. Second report of the Board of Library Commissioners of New Hampshire, December 1, 1894. Concord, N. H.: Edward N. Pearson, Public Printer. 1894. Pp. 77.

This book, with its illustrations of typical libraries in the State of New Hampshire and notes on their progress, and the valuable table of statistics in the State of New Hampshire will be of very considerable value to modern librarians and can be warmly recommended to the presidents and directors of libraries everywhere.

SUNDELL'S SYSTEM OF PHILOSOPHY. Essays and speeches. By Albert F. O. Sundell. Shelby, Michigan: The Oceana Herald Print. 1895. Pp. 106.

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(6872) H. S. G. says: Will you kindly give me in your Notes and Queries a simple receipt, such as I can use at home without special apparatus, for "padding" sheets of paper into tablets? A. The composition is said to be prepared as follows: Glue, 4 pounds; glycerine, 2 pounds; linseed oil, ½ pound; sugar, ¼ pound; aniline dyes, q. s. to color. The glue is softened by soaking it in a little cold water, then dissolved together with the sugar in the glycerine, by aid of heat over a water bath. To this the dyes are added, after which the oil is well stirred in. It is used hot. Another composition of a somewhat similar nature is prepared as follows: Glue, 1 pound; glycerine, 4 ounces; glucose sirup, about 2 tablespoonfuls; tannin, one-tenth ounce. Give the compositions an hour or more in which to dry or set before cutting or handling the pads.

(6873) W. S. says: Will you kindly inform me in the SCIENTIFIC AMERICAN how the carpet soap is made which is used for cleaning carpets, woolens, silks, etc., or refer me to any book giving the desired information? A. Take 22 pounds of the best white soap and reduce it to thin shavings. Place it in a boiler, together with water, 8·8 pounds oxgall, 18·25 pounds. Cover up and allow to remain at rest all night. In the morning heat up gently and regulate it so that the soap may dissolve without stirring. When the whole is homogeneous and flows smoothly, part of the water having been vaporized, add turpentine, 0·55 pound; benzine, best clear, 0·44 pound; and mix well. While still in the state of fusion color with green ultramarine and ammonia, pour into moulds and stand for a few days before using. The product will be found to act admirably, and the yield is very good indeed.

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May 26, 1896,

AND EACH BEARING THAT DATE.

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