

headed and mortised to form a joint, the one having two rows of pins, the other but one, and the means of making and holding said joint, as and for the purposes described. 4th. A frame for stretching fabrics, having two side bars headed, as herein described, an upper bar consisting of two sections, each provided with a row of pins, both dovetailed to form a joint, one of said sections having at its dovetailed end means for making and holding said joint, and a lower bar having two sections, both headed and mortised to form a joint, the one having two rows of pins and the other but one, and the means for making and holding said joint, as and for the purposes described. 5th. In a frame for stretching fabrics, a bar having two sections, dovetailed to make a joint, both of said sections having a row of pins equidistant from one edge, and one of said sections having a back piece fitted with a clamp attached to and extending past its dovetailed end, as and for the purposes described.

No. 39,269. Closet Bowl. (*Bassin de latrine.*)

Levi Stamworth, Toronto, Ontario, Canada, 13th July, 1892; 6 years.

Claim.—1st. In a closet bowl or basin, having a central opening as the outlet, the supply pipe connecting with the bowl at a tangent to the periphery, substantially as shown and described. 2nd. In a closet bowl or basin, having a central opening in the bottom as the outlet, the annular ridge commencing in the entrance of the supply pipe and extending to and around the central outlet in the bottom and terminating in a wall connected to the interior of the bowl, substantially as shown and described. 3rd. In a closet bowl or basin, having a central opening in the bottom as the outlet, the tangential groove extending from the central outlet to the entrance of the supply pipe, extending from the periphery of the bowl and tangential thereto, substantially as shown and described. 4th. In a closet bowl or basin, the combination of the annular ridge around the outlet opening and extending into the entrance of the supply pipe, and the channel commencing in the entrance of said supply pipe and terminating at the said central outlet and tangential thereto, substantially as shown and described.

No. 39,270. Potato Digger. (*Arrache-patates.*)

Alfred P. Goodell, White Lake, Michigan, U.S.A., 13th July, 1892; 6 years.

Claim.—1st. The combination, with the frame, the digger or blade and its support, of the two finger shafts F and F^1 , with their fingers arranged to vibrate in alternate spaces, and mechanism for vibrating said finger shafts in opposite directions, whereby the fingers of one shaft are caused to rise as the fingers of the other shaft are caused to fall, and *vice versa*, substantially as described. 2nd. The combination of the following elements:—The frame, the digger, draft bars for supporting the same, and means for vertically adjusting the said digger, and in connection therewith two finger bars with alternating teeth, their actuating levers f^2 , the crank shaft F^2 geared with the axle, and connecting bars or rods engaging the cranks on the said crank shaft with the said levers f^2 , respectively, substantially as described. 3rd. The combination, with the shaft F and its fingers f , of the shaft F^1 , with its fingers f^1 , the latter constructed to vibrate its fingers between the fingers f , and arranged as described, to avoid interference of either set of fingers with the other set of fingers of their respective shafts, substantially as described. 4th. The combination, with the shaft F and its fingers f , of the shaft F^1 and its fingers f^1 , the latter shaft having depressions between its fingers to avoid interference with the fingers as the latter are vibrated, substantially as described.

No. 39,271. Dynamo Electric Machine.

(*Machine dynamo-électrique.*)

William Hochhausen, Brooklyn, New York, U.S.A., 13th July, 1892; 6 years.

Claim.—1st. In a dynamo electric machine or motor, a field magnet pole piece, the outer portion of which is hinged to permit it to be opened back when the armature is to be removed. 2nd. In a dynamo electric machine or motor, a field magnet having a projecting or salient grooved pole piece, the outer portion of which is clamped to the inner portion supported by the magnet, and is joined to such inner portion in a plane parallel to the plane of revolution of the armature shaft. 3rd. In a dynamo electric machine or motor, a projecting or salient grooved pole piece bisected on a line parallel to the plane of revolution of the armature to permit the part coming down over the outer side of the armature to be removed, as and for the purpose described. 4th. In a dynamo electric machine or motor, a grooved pole piece, a section b of which is separated from the main portion, in combination with a hinged support B^2 and suitable clamping bolts B^3 . 5th. In a dynamo electric machine or motor, field magnet coils wound in two or more superimposed sections separated from one another by ventilating spaces, the outer sections being subdivided by spaces O^7 , communicating with the spaces separating the superimposed sections. 6th. In a dynamo electric machine or motor, the combination, with the field magnet coils wound in two or more sections, of separating blocks O^2 , interposed between such sections and separated from one another by air spaces, the outer section being subdivided into sections separated by spaces O^7 , as and for the purpose described. 7th. The combination, with the field magnet coils wound in superimposed sections

separated from one another by ventilating spaces, of magnet spool heads having perforations or openings opposite such spaces and spaces O^7 , between the parts of the outer section, as and for the purpose described. 8th. The combination of the regulating electric motor, an adjustable commutator, the adjustable member of which is geared to the motor, a field magnet switch box mounted between the field magnets of the generator, and the counter shaft between the movable switch contacts and the regulating electric motor. 9th. The combination, with the regulating motor and the adjustable commutator, of the switch mechanism controlling the strength of the field magnet, the generator, and intermediate connecting devices between such switch and motor having adjustable mechanism, whereby the throw of the switch as compared with the throw of the adjustable commutator may be regulated. 10th. The combination, substantially as described, of the regulating electric motor, the commutator yoke carrying the segment geared to such motor, the adjustable switch governing the connections of the field magnet coils for determining the strength of such field magnet, the rock shaft having crank and connections to the movable part of the switch, and a link or pitman E^5 , for connecting such rock shaft with the motor. 11th. The combination, with the adjustable commutator and the actuating electric motor, of the adjustable switching devices governing the circuits of the field magnet, and a connecting rock shaft and pitman between the motor and switch, such pitman having means for adjusting its length and its point of attachment to the crank of the rock shaft for varying the throw. 12th. The combination, substantially as described, with the adjustable commutator, of an electric motor geared thereto and having its armature placed in the field between the polar ends of the two arms extending from the field magnet poles in a plane parallel with the armature shaft, an electric switch controlling the connections of the field magnet coils for varying the strength of such field magnet, and mounted between the legs of the field magnet, a rock shaft parallel with the armature and extending from the outside of the field magnet poles toward the inner side thereof, and connections from such rock shaft to the electric motor and to the movable contacts of the switch, as and for the purpose described. 13th. The combination, substantially as described, of the adjustable commutator, the actuating electric motor having its armature mounted between the polar extensions from the field magnet poles of the machine, a controlling switch having connections to the field magnet coils, an adjustable switch contact for determining the strength of the field magnet, a rock shaft mounted in bearings secured to the pole piece of the machine and links or pitman connecting such rock shaft to the electric motor and the movable contacts of the switch. 14th. The combination, with the sectional field magnet pole, of connecting boxes or slides, the two members of which are mounted respectively on the two sections of the field magnet pole and form a portion of the connections between the external circuit and the machine, as and for the purpose described. 15th. The combination, with the connecting boxes or slides mounted on the field magnet poles, of a shunting switch N^6 , between the contacts or slides, connected respectively to the terminals of the field magnets of the machine. 16th. The combination, with a dynamo electric machine, of regulating appliances, a controller magnet and controller contacts governing an electric motor which actuates the regulating appliances, said contacts and motor being in series with the translating devices or main circuit, and a permanent safety resistance R^2 , forming a safety shunt from the main line circuit around such contact and motor. 17th. The combination, with the controller magnet, controller contacts and the resistances R^1 , R^2 , placed in the circuits from the connections to the motor armature, of the switch x^1 , placed in a shunt around such contacts and resistances. 18th. The combination, with the controller contacts and the motor armature connected thereto, both placed in the main line circuit, of a permanent branch resistance R^2 , around said contacts and motor, and a shunting switch x^1 , for shunting said resistance out of the main line. 19th. In a dynamo electric machine or motor, the combination, with the armature shaft, of journal boxes supported on the field magnet frame and insulating interposed between such boxes and frame. 20th. The combination, with a dynamo machine or motor, of an armature shaft and connected journal boxes longitudinally adjustable in supports formed in the field magnet, as and for the purpose described. 21st. In a dynamo electric machine or motor, the combination, with the two journal boxes mounted in the field magnet, of the connecting piece I^3 parallel with the field magnet core. 22nd. The combination, with the armature shaft, of journal boxes, the lower halves of which are cast in one piece with a connecting piece I^3 , and are properly mounted in the yoke piece of the field magnet, and a strut connecting the pole ends thereof. 23rd. The combination, with the armature shaft, of the two connected journal boxes mounted in the field of force magnet and having oil wells connected by an oil way. 24th. The combination, with the armature shaft and connected journal boxes, supported in the yoke piece for the field magnet, and in a strut connecting the pole ends of said magnet, of the adjusting pull and push screws for adjusting and setting the same in any desired longitudinal position. 25th. The combination, with the armature shaft and connected journal boxes resting at one end in the yoke piece of the field magnet frame, of a flange at the rear end of the machine and adjusting screws tapped in and bearing against the connecting part A^2 of the field magnet frame. 26th. The combination, with the armature shaft and connected journal bearings, of an adjusting screw L^2 bearing against, but in-