

**ELECTRIC JEWELRY.**

Among the specialties for which the French are noted there is nothing more curious than the electric jewelry, several specimens of which are shown in the accompanying cuts, which we take from *La Nature*.

The scarf pin represented in the left-hand figure consists of a small golden rabbit holding a liliptian mallet in each paw, with which it beats a roll on a small golden gong. The right-hand figure represents a golden skull, with movable diamond eyes and an articulated jaw. This is also a scarf pin, and its eyes and jaw are made to move in a singular manner. The bird shown in the center of the engraving is an ornament of the head dress. It is of gold, thickly studded with diamonds.

These pieces are connected by a fine concealed wire with a small battery carried in the vest pocket. When the battery is made to operate, the rabbit will strike the gong, the bird will move its wings, and the skull will roll its eyes and gnash its teeth.

The battery consists of a zinc and carbon couple contained in a hermetically closed vulcanite case, the zinc and carbon occupying the upper half of and the exciting fluid the lower half of the case. When the case is in a vertical position the exciting fluid does not touch the zinc or carbon, but when it is inverted or placed horizontally, the fluid comes into contact with the zinc and carbon, and the current traverses the coils of the diminutive magnets, which operate the mechanism of the pieces. The arrangement of the internal parts of both battery and scarf pin will be understood by reference to Fig. 2. The mechanism is much like that of an ordinary vibratory electrical bell.

**PALISSY PLATE.**

The plate shown in the accompanying engraving is a copy of one of the rare and valuable productions of Palissy. It is painted in enamel colors, both opaque and transparent.

**MISCELLANEOUS INVENTIONS.**

Mr. Robert P. Lummis, of Altoona, Kan., has patented an improved clothes washer, which is simple in construction, convenient, and effective, washing the clothes very quickly and thoroughly. The invention consists in the combination of an air-forcing apparatus with the funnel or pounder of a clothes washer.

Mr. Charles W. Ball, of Macon, Ill., has patented improvements in axles for carriages, wagons, and other vehicles, the object being to more uniformly and efficiently lubricate the spindles, and to obtain a more perfect adjustment of the running gear. The axle has an oil reservoir, and in its spindle a recess separated by an apertured partition from the reservoir, so that the recess may be filled with packing that cannot work into and wrap around the spindle.

Mr. Charles N. Pike, of Readsborough, Vt., has patented an improved machine for cutting grass and grain, which is so constructed as to have no down-draught upon the horses' necks.

An improvement in sewer gas consumers has been patented by Mr. William H. Ransom, of Philadelphia, Pa. The object of this invention is to prevent escape of sewer gas and vitiated air from sewers, cesspools, and holds of vessels into the house or vessel, by leading such gases to a chamber heated sufficiently to kill the virile matters, and afterward discharging the same to a chimney flue.

Mr. Benjamin Sniffin, of Sing Sing, N. Y., has invented a rowlock which is so constructed as to support the oars firmly when in use, and at the same time may be readily detached from the gunwale of the boat when not in use. It consists in a rowlock provided with a tapered dovetailed base plate and a set screw, in combination with a bed-plate provided with a tapered dovetailed groove.

An improved apparatus for defecating cane juice has been patented by Mr. Lewis B. Hart, of Hope Villa, La. This improvement relates to sulphur machines for defecating cane juice, and are for the purpose of purifying and cooling the sulphur fumes before they enter the juice box, and to cause the complete

mingling of the fumes with the juice in the box. It consists in the combination of a furnace, a water box, and a juice box, the latter being provided with corner strips, spirally arranged paddles, with their faces inclined to their shaft, and a connection with the furnace through the water box.

of a double hook; or a hook having a barb on the back of the shank near the eye, through which one end of the band is looped, while the other end of the band is provided with two slots, in which the hook and barb engage.

An improvement in earth closets has been patented by Mr. Richard W. Riddle, of Minneapolis, Minn. The invention consists essentially in a novel construction and arrangement of devices for operating the earth-carrying apron by the raising and lowering of the lid of the seat, whereby economy of space is secured, and the apparatus is adapted to be used either in connection with a stationary closet or a vault out of doors, or with a portable closet or commode used in the house.

Mr. John L. Petterson, of Brooklyn, N. Y., has patented an improved portable fire escape, which can be readily fitted for use, easily manipulated, and is especially adapted for carrying sick persons. It consists in a car inclosed on all sides by canvas, having top and bottom frames, entrance openings, and foot openings.

An improvement in raising and transferring hides in tan vats has been patented by Mr. Joseph A. Smith, of Rochester, N. Y. The object of this invention is to improve the construction of the machine for which letters patent Nos. 205,596 and 214,220 were granted July 2, 1878, and April 8, 1879.

Mr. Henry Smith, of Charlotteville, N. Y., has patented an improvement in the construction of the stools used by undertakers as a support for burial caskets, etc. It consists in pivoting the upper ends of the legs on one side to those on the opposite side, just below the top bar of the stool, and connecting the legs midway of the length of the stool by a jointed rod having its ends pivoted to opposite side bars, whereby the legs are capable of being folded together.

An improvement in combined pipe case and tobacco pouch has been patented by Mr. Rufus E. Dixon, of New York city. This invention relates to improvements upon the invention for which letters patent No. 35,305 were granted to the same inventor on the 20th day of May, 1862. These improvements relate to the construction of the opening through which the tobacco passes down into the bowl of the pipe, the slide or valve for closing the said opening, and the arrangement of the match box in the case.

Mr. Henry McCue, of Terre Haute, Ind., has invented an improved kiln for burning brick, which is so constructed as to prevent the shriveling, cracking, breaking, or glazing of eye or jet bricks, to form less soft or clinker brick, to burn the brick to a more uniform size and color throughout the kiln, to use less fuel, to produce a better combustion, to allow the heat to be directed to any desired part of the kiln, and to require less labor in working the kiln.

An improved pendant for watch cases has been patented by Mr. Casimir H. Bisson, of Henderson, Minn. The object of this invention is to construct a watch case having all its joints air-tight, so as to thoroughly prevent access of dust to the works in the case. It consists in combining, in a stem-winding watch, a flanged stem, crown, and chambered pendant with a packing ring and nut.

An improved couch, patented by Mr. Benjamin F. Dare, of St. Louis, Mo., serves the double purpose of a seat and couch by day and a perfect double bed by night. It is simple in its construction and easily adjusted to its different uses. When the couch is unfolded it forms a bed of full dimensions, that rests firmly on its permanent support. It has ample room for bed clothing and pillows, and has the advantage of thorough ventilation and protection from dust.

Mr. John S. Gilbert, of New York city, has invented an improved discharge plug for wash basins, bath tubs, and other receptacles of water connected with a waste or discharge pipe leading to a sewer or other receiver, and it is so constructed that it may be tilted to allow obstructions to be removed from the upper ends of the discharge pipes, and may be detached to allow the pipe of a suction or force pump to be inserted for removing obstructions lodged further down.

An improved key ring, patented by Mr. John W. Jochim, of Ishpeming, Mich., is formed of the open ring having a notched flange

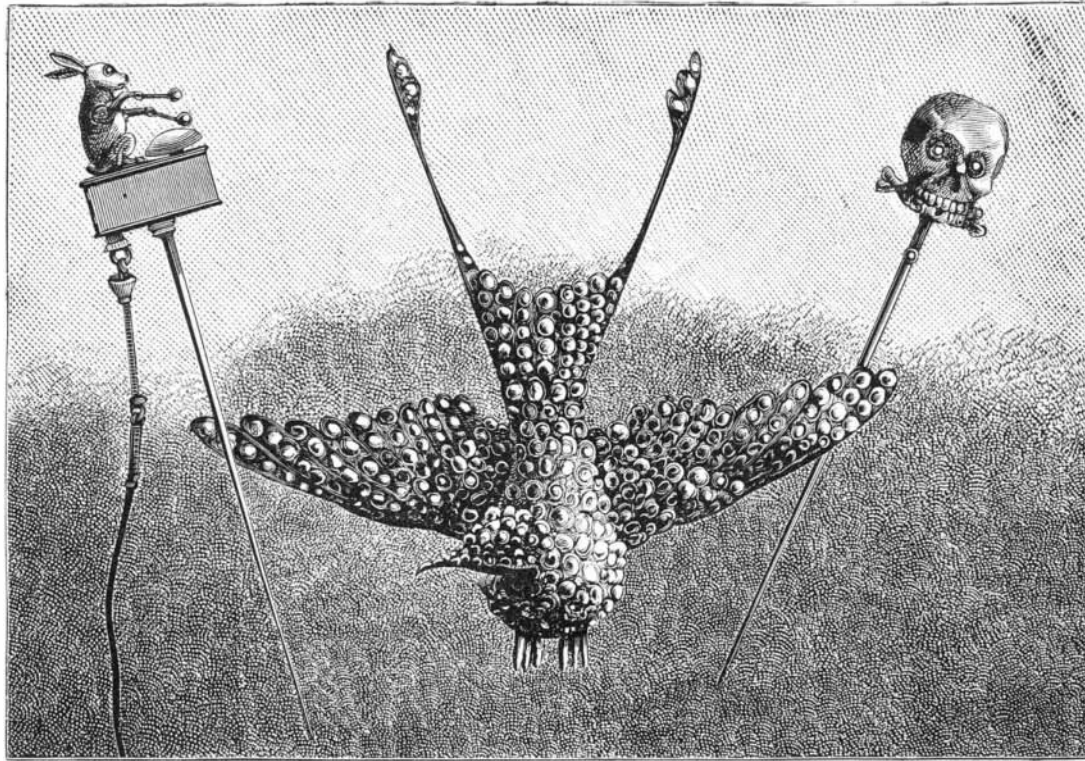


Fig. 1.—FRENCH ELECTRIC JEWELRY.

Messrs. Charles F. Leimer and Ludwig W. Kempf, of Deadwood, Dakota Ter., have patented a miner's knife having a compass arranged at the side, a pivoted magnifying glass at the rear end, and a pencil holder at the back.

FIG. 2.

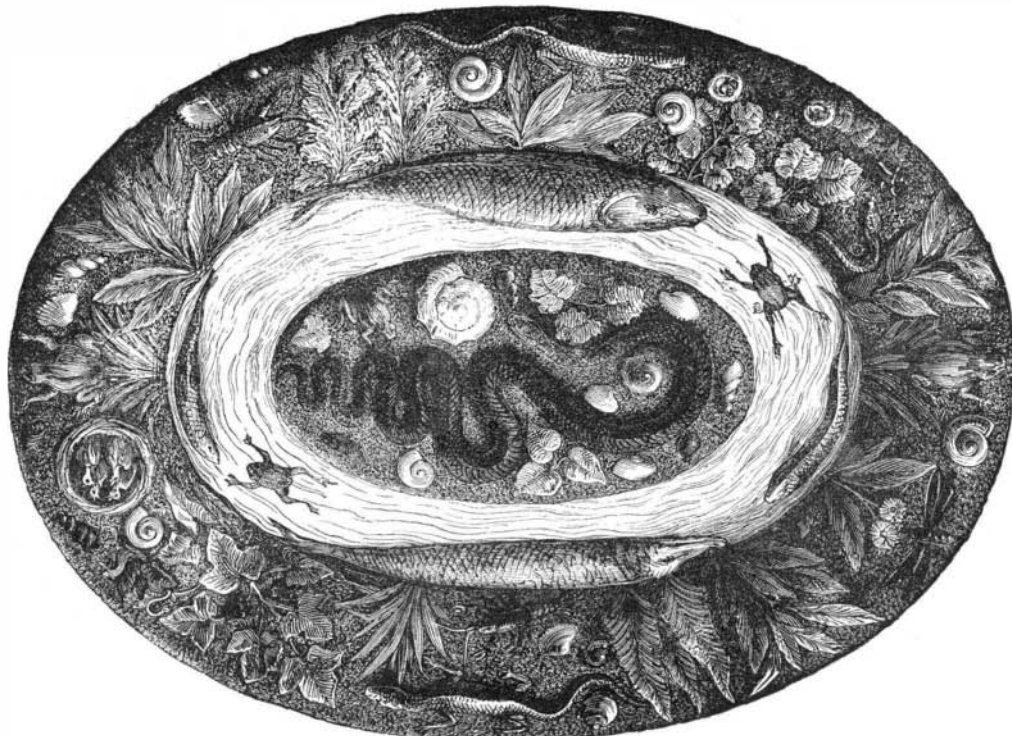


Mr. John Dimelow, of Austin, Tex., has invented an artificial stone formed of hydraulic cement, hard clinker, soft clinker, and water.

An improvement in bake pans has been patented by Mr. Charles Jackson, of California, Ohio. The object of this invention is to improve the construction of the bake pans for which letters patent No. 204,975 were granted to the same inventor June 18, 1878. The invention consists in the combination, with the two pans, of fasteners provided with the handles, and made of tubes slotted longitudinally to receive and fit upon the wires of the pans.

An improvement in buttons, patented by Mr. Rudolph Liebmann, of New York city, consists in providing the button with a socket in which is inserted a spiral spring, and in applying it by causing the free end of the spring to engage the material and draw it up into the socket, so as to form a shank, which is held securely, and thus fastens the button to the clothing.

An improvement in bale ties has been patented by Mr. William Hill, of Henderson, Texas. The invention consists



PALISSY PLATE.