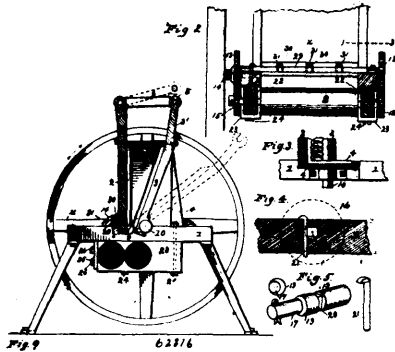


the coated grains to a temperature above the melting point of the substances used for covering them for the purposes and substantially as herein set forth. 3rd. The herein described granulated gun powders tamed and regulated by being covered with non-explosive substances such as are hereinbefore described applied to the grains, substantially as set forth.

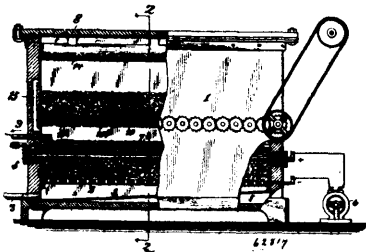
No. 62,816: Stone Crusher. (*Broyeur de pierre.*)



Francis H. Cook, Spokane, Washington, U.S.A., 6th March, 1899; 6 years. (Filed 30th November, 1898.)

Claim.—1st. The combination, with the fixed crushing-jaw, the movable jaw having the vertically extended arm 3¹, provided with an open slot, or notch, on its upper end, and eccentric shaft on which the movable jaw is mounted, and the swinging arms 6, pivoted to the extension of the fixed jaw and having a transverse connecting rod which is adapted to enter the aforesaid slot, and to be freely disengaged therefrom, as shown and described, for the purpose specified. 2nd. The combination with box-like frames arranged horizontally and having integral partitions, a fixed roll whose shaft is journaled in such partitions, a movable roll and journal blocks therefor which are adapted to slide in said frames, screw bolts passing through such partitions, and blocks and springs for cushioning the same, as shown and described. 3rd. The combination with the fixed frame, and a shaft held in its top, of the fixed jaw, parallel arms pivoted on said shaft, and a pivoted jaw, having a detachable connection with said arms, substantially as shown and described. 4th. The combination with the fixed jaw, of the breakable supporting L-bar arranged horizontally at the base of the same, and bolted thereto, and to the base proper, as shown and described. 5th. The reversible frame for roller journals, the same having a fixed partition and slots aligned lengthwise on opposite sides of the partition, as shown and described. 6th. The combination with the movable jaw, adjustable crushing roll, and gears on the shafts of the same, of a shifting gear 14, that meshes with the first-mentioned gears, the shaft 19 having an eccentric journal 17, and adapted to be rotated on its axis, and having polygonal portions, and the cotter-pin for securing said shaft in any desired rotary adjustment, as shown and described.

No. 62,817. Apparatus for Decomposing Solid Substances. (*Appareil pour décomposer les substances solides.*)

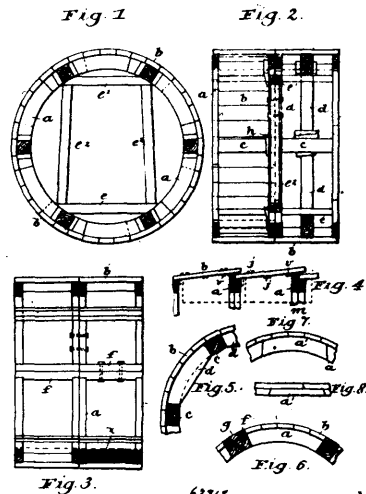


William S. Romme, New York City, New York, U.S.A., 6th March, 1899; 6 years. (Filed 25th November, 1898.)

Claim.—1st. The herein described process of decomposing solid substances electrically, which consists in placing the substance to be acted upon between electrodes, and causing a liquid solvent of the substance treated to percolate through the mass in such quantity as suffices merely to keep the mass moist, without submerging the mass in said fluid, and passing an electric current through the mass, substantially as described. 2nd. The herein described process of decomposing soluble salts of sodium and like substances, which consists in placing the salt in a solid state between electrodes and causing water to percolate through the mass in such quantity as suffices merely to keep the mass moist, without submerging the mass in the water, and passing an electric current through the mass, substantially as described. 3rd. The herein described process of

decomposing sodium chloride and like chlorides electrically, which consists in placing the sodium or other chloride in a solid state between electrodes, and causing water to percolate through the mass in such quantity as suffices merely to keep the mass moist, without submerging the mass in the water, and passing an electric current through the mass, substantially as described. 4th. The method of electrolyzing a readily soluble metallic salt, which consists in supplying to a granular body of such salt a liquid solvent in such quantity that the solvent will be retained between the particles of the salt by capillarity without submerging the body, in passing through such body and solvent a continuous current of electricity, and replacing as required such portions of the solvent as may have been removed by electrolysis and evaporation, substantially as described. 5th. In an apparatus for electrically decomposing solid substances, the combination, with a tank adapted to contain the substance treated, of electrodes within said tank, placed one above the other, and between which the substance treated may be placed, and adapted to be connected to an electric generator and to pass an electric current through the mass to be treated, the upper electrode having passages through which the substance to be treated may descend to the space between the electrodes, and the lower electrode being provided with openings through which fluids may pass, means for supplying a fluid to the mass within said tank, and means for collecting the soluble products of the decomposition which flow through the openings in said lower electrode, substantially as described. 6th. In an apparatus for electrically decomposing solid substances, the combination, with a tank adapted to contain the substance treated, of electrodes within said tank, placed one above the other, and between which the substance treated may be placed, and adapted to be connected to an electric generator, and to pass an electric current through the mass to be treated, the upper electrode having passages through which the substance to be treated may descend between the electrodes, and the lower electrode being a perforated plate forming the bottom of the chamber in said tank in which the decomposition takes place, means for supplying a fluid to the mass within said tank, and a collecting chamber below said lower electrode adapted to receive the soluble products of the decomposition which flow through said electrode, substantially as described.

No. 62,818. Wall or Lining for Shield Tunnelling and for Shaft Sinking. (*Mur ou garniture pour tunnels et creusage de puits.*)



George Henry Dunlop, 139 Bridgport Street, South Melbourne, Victoria, Australia, 8th March, 1899; 6 years. (Filed 13th August, 1898.)

N.B.—Patent No. 62,818 is a re-issue of Patent No. 57,674, dated 5th October, 1897.

Claim.—1st. In a device of the class specified, a series of wall rings bolted or otherwise secured to each other each ring being composed of ribs formed in segments to facilitate removal, laggings *b*, and struts *c*, arranged substantially as described. 2nd. In a device of the class specified, a series of wall rings bolted or otherwise secured together, each ring being composed of ribs *a*, formed in segments to facilitate removal, laggings *b*, struts *c*, and flanges *f*, all secured together and arranged substantially as described. 3rd. In a device of the class specified, a series of wall rings bolted or otherwise secured together, each ring being composed of ribs *a*, formed in segments to facilitate removal, laggings *b*, struts *c*, flanges *f*, and segments *d*, all secured together and arranged substantially as described. 4th. In a device of the class specified, wall rings bolted or otherwise secured to each other, each ring being composed of ribs *a*, one of which is of less diameter than the other and overlapping laggings *b*, as and for the purpose specified. 5th. In a device