

RECENT INVENTIONS

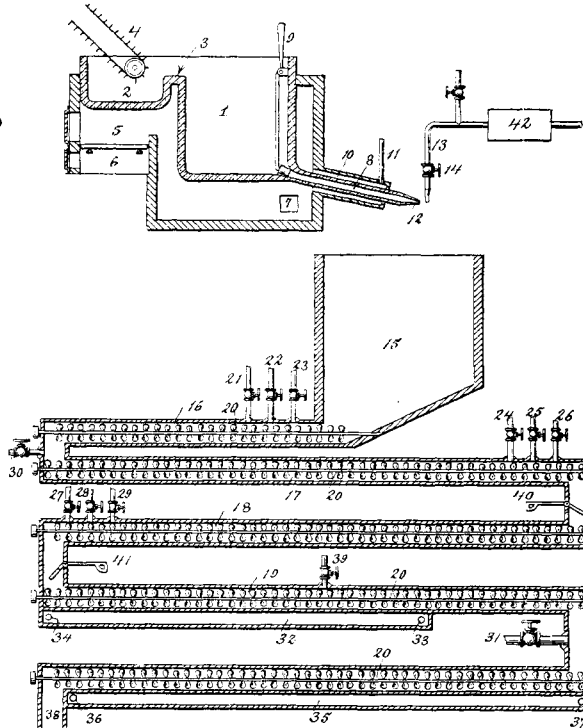
Reported by C. L. Parker, Solicitor of Chemical Patents, McGill Building, Washington, D. C.

CONTINUOUS PROCESS OF MAKING WHITE LEAD AND APPARATUS THEREFOR.

U. S. Patent No. 1,002,246, to Carleton Ellis, Montclair, N. J.

This invention is a process of making white lead in a continuous or non-cumulative manner, which makes the operation an automatic one from the time the lead is introduced into the melting pot up to the time when the finished white lead is ready to be packed for shipment.

The invention involves melting the lead, preferably in a tank equipped with a melting pot and molten lead reservoir, in comminuting the molten lead by means of a jet of compressed



air, inert gas, steam or water, collecting the comminuted product and maintaining it by such means as an extensive conveying system, in contact with air and carbon dioxide and water or steam or both, until the lead has become converted into basic carbonate of lead or hydrated carbonate of lead, corresponding to the accepted formula for white lead, and finally freeing the product from its moisture.

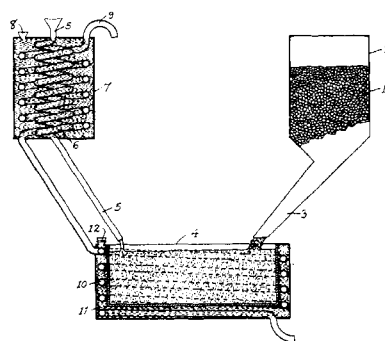
The illustration shows apparatus in which the process is carried out.

PROCESS OF MAKING SUPERPHOSPHATES.

U. S. Patent No. 1,003,681, to Rinaldo Williams, of Birmingham, Alabama.

This invention is a process for the manufacture of superphosphate or acid phosphate particularly where phosphate rock containing a relatively large percentage of impurities, such as oxid of iron, alumina, etc., is treated with sulfuric acid to form available phosphoric acid in the form of $\text{CaO}_2\text{H}_2\text{OP}_2\text{O}_5$ or $2\text{CaOH}_2\text{OP}_2\text{O}_5$.

The patentee has found that sulfuric acid will not act on the impurities in the phosphate rock, or at the most will act but little where the reaction between the acid and phosphate takes place at a low temperature. In other words, when the sulfuric acid and crushed phosphate rock are mixed in the pan or retort if the mixture and, if necessary, the pan itself be kept cool or below 100°F ., the sulfuric acid will act only on the tricalcic phosphate in the rock, converting the latter almost entirely into available phosphoric acid in an acid phosphate

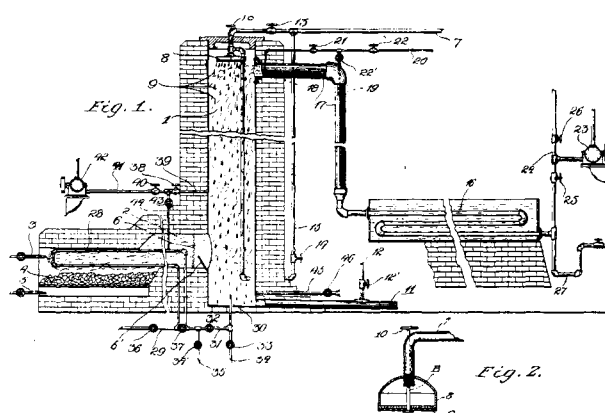


mixture which will contain in addition to said acid phosphate only the quantity of impurities originally in the phosphate rock, the same constituting practically a fixed element.

TREATMENT OF PETROLEUM.

U. S. Patent No. 1,002,570, to J. A. Dubbs, Santa Monica, Cal.

This invention relates to the distillation of petroleum to produce asphalt and asphaltic residual bodies.



The process consists in treating petroleum to dry, and free the same from water, distil or produce asphalt therefrom, consisting in continuously causing the petroleum to drop, *in vacuo*, in the presence of ascending currents of combustion gases to drive off the lighter products from each of said drops while in suspension and collecting the asphaltic residuum below the heat zone, the size of the drops being varied according to the ascending heat and to the product desired.

The illustration shows apparatus in which the process is carried out.