



# Separation of gold and platina

To cite this article: (1842) Separation of gold and platina, Philosophical Magazine Series 3, 20:129, 171-171, DOI: [10.1080/14786444208650543](https://doi.org/10.1080/14786444208650543)

To link to this article: <http://dx.doi.org/10.1080/14786444208650543>



Published online: 01 Jun 2009.



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salts of iron also precipitate it; and when a solution of chloride of iron is mixed with one of euchroic acid, no change is produced till an alkali is added, and then a bulky precipitate of a beautiful blue colour is formed.—*L'Institut*, No. 383.

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#### SEPARATION OF GOLD AND PLATINA.

Mr. Kemp has found that oxalic acid reduces the solutions of gold, and has no action on those of platina. To separate these two metals, therefore, and to determine their quantities, a solution may be made in aqua regia and the gold precipitated by oxalic acid in the metallic state, and the platina by formic acid. The difficulty of separating these two metals which has hitherto existed, renders this process of considerable importance.—*Journal de Pharmacie*, Jan. 1842.

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#### LITHOFELLIC ACID.

M. Göbel has discovered in a biliary calculus, deposited in the Zoological Cabinet of Dorpat, a new body, to which he has given the above name. In order to obtain it, he dissolved the calculus in boiling alcohol of 99 per cent., and he slowly evaporated the filtered liquor, which was of a greenish-brown colour; solid crystalline deposits of the same colour were formed, which were powdered and treated repeatedly with cold alcohol: by this process he succeeded in extracting the more soluble colouring matter of the bile, and obtained a yellowish powder; this being re-dissolved in boiling alcohol, the lithofellic acid was separated by slow evaporation in the form of crystalline crusts; the crystals are rhombic prisms, terminated by an oblique surface; when these are examined with a glass some of them are entirely colourless.

Lithofellic acid dissolves in 294 parts of alcohol of 99 per cent. at 68° F., and in 6½ parts of boiling alcohol; it requires 444 parts of absolute æther at 68° F., and 47 parts at a boiling heat. It fuses at 400° F. into a liquid of a slight yellow colour, and forms after cooling a solid mass, which is colourless and crystalline. When heated in a small retort this acid emits white vapours, which condense into a yellowish liquid, and gives a mixture of empyreumatic oil and a little acidulous water. The distilled product has a penetrating odour resembling that of oil of amber; a very small quantity of carbon remains in the retort. This empyreumatic product appears to contain a new acid; it forms a soap with potash, which is decomposed by hydrochloric acid.

When the lithofellic acid is treated with a solution of potash or soda, saponification soon takes place if the solutions are strong and the soap separates; but if the solution be dilute, the soap dissolves in and separates only on concentration.

The soap floats on the surface in the state of a fluid mass, of a light yellow colour, as long as the liquor is hot. On cooling it forms