than the fact, that in many places where lands have been under tillage, and have afterwards been abandoned, and allowed to return to a state of nature, the pine-apple plants form the only trace of former cultivation; every other cultivated plant has died away before the encroachments of the surrounding wood, while they alone have remained increasing from year to year, and have spread into large beds.

In adverting to the present state of our West Indian colonies, we cannot but think that the discovery of this fibre will prove to them a most valuable acquisition. The small amount of labour and of capital requisite for the cultivation of the plant, its hardy growth, its abundant produce, the facility with which the fibre may be prepared from its leaves, the trifling cost at which it can be brought to market, and the value attached to it, as an article of commerce, by those manufacturers to whom it has been submitted, seem fully to justify the opinion that it is calculated to open a new source of wealth to the colonies, and become a staple and valuable article of British manufacture.

Mag. Pop. Sci.

On the Preparation of Sulphuret of Carbon.

M. Mulder directs, that in an iron bottle in which mercury is imported, besides the hole which is already there, another should be bored near it. Into the first of these openings a copper tube $\frac{1}{10}$ inch diameter, bent twice at right angles is to be screwed, and into the second a straight tube, also of copper, is to be introduced. Then the bottle is to be filled with pieces of charcoal, recently heated to redness, of such a size that they can easily pass down the tube. After having firmly screwed in the straight and curved tubes, place the bottle in a furnace and heat it, after having closed the opening of the furnace with a stone cut in halves to prevent inconvenience to the operator from the ascending heat.

Adapt to the curved tube a Woulff's bottle half filled with water and surrounded with a freezing mixture, and when the iron bottle is sufficiently heated, introduce by the straight tube fragments of sulphur and immediately close the mouth of the tube with a plug; the sulphur fuses, and falling upon, penetrates the pieces of charcoal, and when the sulphur is gradually added, but little gas is evolved and abundance of sulphuret of carbon obtained.—*Journal de Pharmacie*, Jan. 1837.

Lon. & Ed. Philos. Mag.

Researches made on the Bouquet of Wines. By MESSRS. LIEBIG AND PELOUZE.

It has been long suspected that wine contained a peculiar principle which is the cause of the agreeable odour generally known as the bouquet of wines, which principle seems hitherto to have eluded all the attempts which have been made to detect it. "We have now," however, remarks the authors of this extract, "the honour of presenting to the Academy certain experiments which we have made on an essential oil, which was sent to us by M. Deleschamps of Paris, and which, from all its properties, appears to be the principle so long sought after. This substance has an exact resemblance to the essences, and was given to us as such; its odour is completely that of old wine, with the exception of its intensity. Its chemical properties remove it from the class of essential oils, and regarding its constitution it sheds a new light on organic chemistry, in supplying the first well established example of the existence of a true ether, which is produced in the act of fermentation, and without the aid of the chemist. This ether is composed

of an atom of sulphuric ether, and an atom of a new acid which we propose to designate *ananthic acid*, and which is formed of $C^{14}H^{26}O^2$. The condensation of its vapour is that of formic and acetic ethers. The oil presents itself under the form of a greasy oil which crystallizes at 56° Fahr. In its free state it contains one atom of water, which it loses by distillation. By combining it with sulphuric ether, we can easily reproduce *ananthic ether*. We have deemed it necessary, for the purpose of establishing the composition of one of the most remarkable of these acids, viz. the *melitic acid*, to make some analytic investigations concerning its combination with oxide of silver. We believe that this acid may be regarded as a hydrous acid, and our experiments on this point confirm the views of M. Dulong respecting oxalic acid. The melitate of silver dried in vacuo, by the side of sulphuric acid, contains some hydrogen, which it loses only at the temperature of 356° Fahr. under the form of water, and with change of colour. There is not one other salt of silver which exhibits the same result; all the others are anhydrous. In this particular instance, the formation of water appears to be the consequence of the reduction of the oxide, and not a simple volatilization of water which had pre-existed in the salt. According to all known analyses, the melitic acid contains three atoms of oxygen. We have reason to think it contains four, and besides two atoms of hydrogen; and that this hydrogen enters into the constitution of all the melitates except into that of silver heated to 356° , so that this last represents a combination of metallic silver, with the radicle of hydrous acid."

Ed. New Philos. Jour.

Hot Air Blast.

The benefits which this new process appeared to promise, and the sanguine expectations of economy and profit that have been entertained, do not appear to be fully realized. Still it is not without its advantages, and with respect to the use of anthracite coal in the reduction of iron ore, the application of the hot blast has evidently afforded, under the management of Mr. Crane, in Wales, the most encouraging indications of a success, which in its application to our own mines of coal and iron may prove of incalculable importance.

The following extracts from a communication of W. Wood to the London Mining Journal, point out what he deems to be the causes of failure in the use of hot air in the smelting of iron, and also the incidental benefits which it already produces. It is much to be desired that experimenters and iron masters may not be too soon discouraged by the unfavourable nature of these statements, for it is very possible that the means may be hit upon of obviating the causes which appear to occasion a deterioration of the quality of the iron, and still secure to the hot air process all the facilities and advantages to which both science and fact most evidently give it a claim. G.

The use of heated air in smelting, has greatly facilitated the production of grey iron, and has, in many instances, occasioned a material increase in the make; but that it has been productive of the great advantages which were at first supposed to accrue from its use, has been by no means established. I do not mean to dispute, that at some concerns, a reduction in the quantity of fuel made use of may have been effected, but that this has been the general result, I believe I may safely say, is by no means the case; on the contrary, in the majority of the works where it has been made use of, the saving effected is a mere bagatelle—the aggregate quantity consumed