

Macerate the ambergris and orris in the spirit for one month, in a warm place. Filter and add the ottos.

EXT. MUSK.

Grain Musk	-	-	-	-	$\frac{1}{4}$ oz.
Ambergris	-	-	-	-	$1\frac{1}{2}$ dr.
Otto Rose	-	-	-	-	45 M.
Alcohol deod.	-	-	-	-	35 oz.

Macerate for one month in a warm place and filter.

 THE PURITY OF CHLOROFORM.*

The substitution of grain spirit for pure spirit of wine appears to be the principal cause of the bad quality of certain commercial chloroforms. M. Rump has had the opportunity of rectifying large quantities of chloroform from various sources; one sample came from a manufactory in Saxony, another, in very good condition, from a depot established during the war of 1870. This chloroform was submitted to fractional distillation, and each tenth part separated. The last pound collected boiled between 72° and 82° C. The distillation afforded the following remarks. As the temperature reached 57° bubbles of steam rose, and, condensing, the neck of the retort bedewed. M. Rump attributes these traces of water to the steam of water evolved by the chloroform. The liquid commenced boiling between 59° and 59.5° ; the product ($D=1.480$ to 1.481) was shaken with water, to free it from alcohol, then dehydrated by chloride of calcium. After this treatment the product appeared pure; density, 1.499 . When the boiling point reached 60° the receiver was changed, and the temperature rose slowly to $60^{\circ}.75$. The fractionation of the products gave perfectly pure chloroform, boiling at $60^{\circ}.5$, under a pressure of 760 millimetres. Further distillation separated products boiling between 61° and 62° , which consisted mainly of impurities. Their odour suggested amylic and butyric compounds, and recalled the smell perceived when chlorine or chloride of lime acts on animal substances. One sample of commercial chloroform, origin unknown, submitted to the same treatment, gave an odour of acetic ether. No sort of solid chlorine compound could be obtained from any of these products. The dense liquids arising from these different chloroforms were distilled over alcoholic potash. There was effervescence, and the density of the products rose to 1.51 , and the boiling point to 70° . A very small quantity of alcohol

* Journ de Pharm. et de Chemie, from Archiv. de Pharm., October 1874, p. 373. Translated in Chemist and Druggist.