

THE PRODUCTS OF DRY DISTILLATION AT THE VIENNA EXHIBITION.*

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The products of dry distillation may be divided into several groups according to the substance which is subjected to distillation.

TURPENTINE.

First, we have the production of turpentine and rosin. Quite an extensive strip of country between Wiener-neustadt and Gloggnitz, is devoted to the cultivation of the black fir, and the production of rosin and other products. Andes and Frobe, in Simmering, exhibited a handsome collection of tools and apparatus employed, and products obtained. Several extensive manufactories, such as Furtenbach's and Biach's, distill the crude turpentine by steam heat to obtain oil of turpentine and colophony, beside subjecting the rosin to dry distillation, which breaks it up into pinoline, a heavy rosin oil and pitch. This rosin oil is mixed with caustic lime and employed as wagon grease, being sometimes colored black with soot or lamp black. Portugal has for years devoted a large tract in the State forest, where the pine flourishes, to this industry. The product obtained contains a large quantity of oil of turpentine. In 1871-2, as much as 275,000,000 kilos. of turpentine were collected, which yielded 45,000,000 kilos. of oil of turpentine, 189,000,000 kilos. colophony, and 36,000,000 kilos. yellow rosin, while the remainder was sold as crude turpentine, going to London and Lisbon. Spain sent rosin also from Guadarama.

PETROLEUM.

The second group embraces petroleum, photogene and paraffin, the hydrocarbons so much used for illumination. Strictly speaking petroleum is by no means to be considered as a product of dry distillation. It agrees so completely with photogene in its properties and uses that we may leave this theoretical question out of view. Among all the countries where petroleum is found, North America, without doubt, ranks first, the value of her annual production of petroleum being only second to that of cotton and wheat. Galicia in Austria, the trans-Caucasian provinces of Russia, and those on the Caspian, with Farther India (Rangoon), and finally Roumania, are of nearly equal importance. Roumania had numerous exhibitors of oil and paraffin, and is beginning to play an important part in these articles. The cost of production there is so low that, in spite of import and export duties, and transportation for 150 miles by land and railroad, it can be brought to Galicia so as to compete

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