

ON THE USE OF PETROLEUM BENZIN IN PHARMACY.*

BY L. WOLFF.

Petroleum benzin has been frequently proposed and variously experimented with by different operators, with the view of substituting the much higher priced ether in preparing oleoresins, and has been repeatedly found to not answer the purpose intended for it. ("A. J. Ph.," 1872, page 208). Although its valuable solvent powers for fatty matter, wax and essential oils cannot be disputed, it fails to extract the resins and the active ingredients, which are of the utmost importance in oleoresins. Ginger treated with benzin yields an oil containing all the odoriferous properties thereof, but extracting none of the pungent-tasting resin for the remedial properties of which it is justly celebrated, and which subsequent to the benzin process is readily dissolved from it by ether or alcohol. Buchu under a like treatment, as reported by another contributor of this journal on this subject, gives an oily substance devoid of the diuretic properties of the leaves, though possessing their specific odor. Cubebs, though completely exhausted by it of its fixed and essential oils, fails to yield its cubebic acid to it, black pepper its piperin, and wormseed its resin and santonin; but all of the mentioned substances, and many more which have been subjected to the same process, are readily deprived of their fixed and essential oils, leaving them inodorous, seemingly dry and incoherent, powders, that are, if treated with alcohol, ether or chloroform, readily deprived of their resins, thus affording a method for obtaining them separate from wax, fixed and essential oils.

Its extraordinary solvency for essential oils destines benzin for an important place in pharmacy, and oils derived by its aid from cinnamon, cloves and other drugs are, if their odor is any indication of their value, if not superior, certainly not inferior to the distilled oils of these articles.

The oils obtained by exhaustion with benzin and its subsequent evaporation are mixed with wax and fixed oils to some extent, which can easily be separated therefrom by dissolving in alcohol, in which the latter are insoluble, filtration of this solution, and either expulsion of the alcohol by evaporation at the moderate heat of a water-bath or, much safer and better, by mixing the filtered alcoholic solution with several times its bulk of water, when the essential oil will rise to the surface or subside beneath it, as its specific gravity may be.

The oils by this cold process have a beautiful aroma, superior

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