

EXTRACTS FROM REPORT OF RESEARCH EXPERIMENTS ON THE PHYSIOLOGICAL ACTION OF PETROLEUM.

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In the report which follows, it is proposed to embody the experiments conducted by myself with petroleum, as to its behaviour physiologically in the body, with a view of explaining the clinical effects (which have already been observed and recorded largely) that follow its administration in diseases of various kinds, viz.: increase of weight, diminution of catarrh of mucous surfaces, relief of dyspepsia and constipation, relief of flatulence and cystitis, etc. After careful comparative chemical examinations, Angier's Petroleum Emulsion was selected because of its purity, palatability and because it was the best adapted form of petroleum for internal administration. Research experiments were made from chemical, bacteriological, histological, physiological, and clinical aspects.

Effect upon Fermentation.—With regard to the chemical portion of the investigation, in which I was ably assisted by Prof. Kelly, I found that while the emulsion completely inhibits vinous, lactic, and butyric fermentation and the growth of putrefactive bacteria, such as inhabit the alimentary canal, preventing the formation of spirit, lactic acid, or foul gases, it has no retarding action upon either peptic or tryptic digestion, both of which we were able to carry on successfully in presence of a very large percentage of petroleum emulsion.

As a Solvent and Vehicle.—Another not less interesting and important fact is that the emulsion is a solvent of considerable power both of drugs and of animal substances, such as oils and peptones, which latter it also emulsifies in larger percentages and holds, especially at the temperature of the body, for a considerable time, longer than would be required for absorption from the alimentary canal. Lard, cod-liver oil, clear bacon fat, etc., are readily dissolved in the emulsion, as also is butter fat, and an important effect of the mixture of these two substances is that the particles of fat are rendered more mobile, more easily miscible with water and fluids, and these fluids and