

compounds. For example: *B. dysenteriae Flexner* produces acidity, never gas, in maltose and mannitol; *B. morgani* produces neither acidity nor gas in those two carbohydrates; the mixture *B. dysenteriae Flexner* + *B. morgani* produces, however, acidity and gas. For the phenomenon to take place several conditions are necessary; the most important one seems to be that the added bacillus, though inert on those particular carbon compounds, must be capable of producing fermentation with gas in glucose.

3025

Electrocardiographic studies of the action of propylene and some other anesthetic gases.

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Earlier experimental observations¹ and certain clinical experiences indicated the advisability of making an electrocardiographic study of the behavior of the heart under the influence of propylene, the results of which are here reported.

In four dogs and three cats the administration of propylene in concentrations from 25 per cent (less than sufficient to induce or maintain anesthesia) up to 40-50 per cent caused ectopic* ventricular beats, which promptly ceased when the gas was discontinued or the concentration lowered. With higher concentrations the ectopic beats usually became more and more numerous, often so much so that an ectopic ventricular tachycardia resulted. Under these conditions also discontinuance of the gas or a sufficient lessening of its concentration resulted in a return to the normal mechanism. In control observations with ether, chloroform, nitrous oxide, ethylene, and acetylene in varying concentrations ectopics were not observed.

¹ Halsey, J. T., Reynolds, C., and Prout, W. A., *J. Pharm. and Exp. Ther.*, 1925, xxvi, 479.

* Originating at various points in each ventricle.