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Lipids of the Tooth Pulp.*

HAROLD C. HODGE. (Introduced by W. R. Bloor.)

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Tooth pulps were collected by cracking teeth. Fibrous, calcified and putrescent pulps were discarded. For human teeth, the sample of pulps weighed 0.43 gm. Micro-lipid analyses were carried out using the Bloor oxidative procedures. The total lipids were 0.91% (moist weight), phospholipids 0.70%, and cholesterol 0.11%. For cow teeth, 214 incisor pulps weighing 33.72 gm. were collected. After lipid extraction, saponification of the residue gave 0.16% lipids unextracted. The total ether-soluble lipids (0.85% of moist weight) contained 50% unsaponifiable matter; of the saponifiable fraction, the fatty acids composed 76.6%, iodine number—72.3. Using the Twitchell procedure, 79.9% liquid fatty acids and 3.0% solid fatty acids were found.

8854 P

An Electromagnetic Flowmeter. Principle of the Method and its Application to Bloodflow Measurements.

A. KOLIN. (Introduced by L. N. Katz.)

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The Rein "Thermostromuhr",[1] the best method available for measuring flow in unopened vessels, is limited to mean flow measurements. In this laboratory a new method was developed which can follow rapid flow changes and which, besides, possesses the further advantage that the deflection bears a linear relation to the flow.

This flowmeter is based on the principle that an electromotive force is induced in a conductor moving so as to cut the lines of force in a magnetic field. If a wire is moving through the field in a direction perpendicular to its own axis and to the lines of force, then the

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[1] H. Rein, *Z. f. Biol.*, 1928, **87**, 394.