

These results indicate that premature children, after a short period of retarded growth incident to the adjustment to the extrauterine environment, tend to regain the fetal rate of growth and to follow this course of growth until some time in the latter part of the first year when the rates of fetal and postnatal growth approximate one another. In other words the growth tendency of prematures is in general that of fetuses of the same size and age rather than that of full-term children. These results are in agreement with those of Hammett¹ on growth capacity and body weight in the first two weeks of postnatal life, and with certain findings of Cammerer,² but seem to be in opposition to some of the conclusions of Schwarz and Kohn³ and of Ylppö.⁴ That this opposition is apparent rather than real will be shown in a later communication.

68 (1815)

An undetermined principle obtained from poison ivy.

By E. D. BROWN.

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An undetermined principle has been obtained from poison ivy which so far as I have been able to find differs in its behavior from that of any substance previously described.

It came down as a precipitate after long standing of a filtrate after precipitating with lead acetate.

No work has as yet been done with the substance except to determine a few of its properties.

It is non-irritant when applied to the skin, neutral to litmus and is bitter to the taste. It has a melting point of 190° when heated slowly, insoluble in cold water and fairly soluble on boiling, imparting a lemon yellow color to the solution. It is soluble in ammonia water, acetic acid and hot alcohol. Insoluble in alcohol in the cold, ether, chloroform, petroleum ether and acetone. It

¹ Hammett, F. S., *Amer. Jour. Physiol.*, 1919, xlv, 396.

² Cammerer, W., *Jahrb. f. Kinderheilk.*, 1900, liii, 381.

³ Schwarz and Kohn, J. L., *Amer. Jour. Dis. Children*, 1921, 296.

⁴ Ylppö, *Zeitschr. f. Kinderheilk.*, 1919, xxiv, 179.

gives striking color reactions with H_2SO_4 , HNO_3 , KOH , $CaOH$ and other reagents.

A solution to which a few drops of silver nitrate are added gives a pink color changing quickly to a dull green.

Iodine as Lugol's solution gives a pink color which quickly fades.

With ferric chloride a very dark blue or black changing to brown.

On the addition of Fehling's solution it turns green and on boiling a slight reduction occurs.

It does not reduce Fehling's solution in the cold on long standing even after it had been previously boiled with acid and again rendered neutral. This leads to doubt as to its being a glucoside.

With Millon's reagent it turns a port-wine color rapidly becoming darker which suggest the possibility of its belonging in the group of the phenols.

69 (1816)

The effect of heat on the calcium salts and rennet coagulability of cow's milk.*

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When milk is boiled a precipitation of a portion of the calcium phosphates occurs, the amount of fixation being proportional in general to the amount and duration of heat applied. Söldner¹ first called attention to this fact and his observations have been confirmed by numerous investigators, among whom may be mentioned Boekhout and de Vries,² Purvis, Brehaut and McHattie,³ and Grosser.⁴

It has been commonly believed, also, that some fixation of the

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¹ Söldner, F., *Landw. Versuchs.*, 1888, xxxv, 351.

² Boekhout, F. W. J., and de Vries, J. J. O., *Landw. Versuchs.*, 1901, lv, 221.

³ Purvis, J. E., Brehaut, A. H., and McHattie, A. C. N., *Roy. Sanit. Inst. Journ. Trans.*, 1912, xxxiii, 154.

⁴ Grosser, Paul, *Biochem. Zeitschr.*, 1913, xlvi, 427.