

merozoites take an abnormally long time to develop, or whether numbers of parasites are destroyed and others from the internal organs take their places, it is impossible to say. The increase as the parasites developed from the ring to the half-grown stage was present, at some period, in ten out of fourteen cases, but in 60.9% of the number of transitions from the one stage to the other.

In four patients the parasites remained very scanty during the first few days, suddenly to increase later. In five out of ten patients a relationship was found between the numbers of parasites and the degree of fever. In these five cases the same number of parasites was not accompanied by the same degree of fever in different patients, but as the temperature became greater the parasites increased, and decreased as the rises of temperature became smaller.

The number of gametocytes was enumerated in cases in Series 2 and 3. The error in Series 2 is 25%, as with the asexual forms. The curves are more regular than in the case of the asexual forms, but there is a tendency for the numbers of the gametocytes to vary with the numbers of the asexual types. J. R. LORD.

*Basal Metabolism as Determined by the Respiratory Exchange.* (Proc. Royal Soc., B, vol. ci.) Pickworth, F. A.

SUMMARY.—The numerous determinations of the basal metabolic rates by the bag method have involved certain variable and preventable factors, such as muscular tonus and attention, which may have considerably obscured the results; and the usual accepted limits by this method of up to 15% are too large, so that more refined methods of investigation are needed.

The paper shows how figures can be obtained which approach more nearly the true basal rate; and by reducing the magnitude of certain variable factors results more than 20% lower than those by the bag method are obtained with normal subjects.

The effect of various factors upon the metabolism has been studied and figures illustrating the effect of relaxation of mind and body sleep, fatigue, diet, irritation, hot baths, etc., are given.

J. R. LORD.

*The Pathological Effects of Hypnotic Drugs upon the Central Nervous System of Animals.* (Brit. Journ. Exper. Path., 1926.) Mott, Sir F. W., Woodhouse, D. L., and Pickworth, F. A.

The occurrence of mucinoid material in such remarkable amounts in the nervous system of the treated animals is the most interesting feature of the effects of continued treatment with hypnotic drugs.

Although the drugs sulphonal and veronal have been isolated from brain-tissue (Russel and Parker, 1914), and might be present in the nervous systems of animals treated as above, the mucinoid substance does not consist of these, but it shows entirely different physical properties. It also appears improbable that substances of such widely different chemical constitution as the barbitone and sulphonal groups of drugs would combine with the mucinoid material.