topics is wide indeed, with Cori writing on carbohydrate metabolism, Enders on viruses, Castle on physiological advances stimulated by studies on anaemia, Bauer on rheumatic diseases, Aub on cancer and normal cell growth, and many others. The theme of the series of lectures is brilliantly illustrated and it is good to be reminded that medicine is not always the beneficiary in the relationship between itself and the basic sciences. The moral which emerges, however, is that the relation is essentially one of mutual dependence and, as Paul Weiss says, 'The meaning of setting the two apart, as if they were opposites or even separable, escapes me. Clinical investigation and biological research are integral parts of the same endeavour'. In the last chapter, Dubos, in a sombre contribution, points out that medical Utopias, no less than political Utopias, are likely to prove illusory and he warns that unless medical scientists are prepared to take the long view they 'may come to know the anguish that atomic scientists experienced as they watched the tragic effects of their scientific triumphs'. This is a book for every pathologist with a live interest in the relation between his work and the whole body of science. Most of it is easy to read, all of it is stimulating, and many of the contributions have the merit of posing more questions than they answer.

F. HAMPSON

BIOCHEMICAL VALUES IN CLINICAL MEDICINE: THE RESULTS FOLLOWING PATHOLOGICAL OR PHYSIOLOGICAL CHANGE.
Robert Duncan Eastham. (Pp. iv + 144. 15s.)
Bristol: John Wright. 1960.

The average medical registrar will find this book attractive because it gives him, in summarized form, the means of interpreting chemical pathological results. But it is impossible in a book of this size to indicate the criteria of utility of any investigation; a critical approach to laboratory results is essential if the patient is to have proper care and therefore this book is unlikely to help the patient. There are one or two factual errors, *e.g.*, the alkaline phosphatase tends to rise with advancing years, not to fall. A number of investigations have been included, such as the determination of β -glucuronidase in urine and the serum diphenylamine reaction, which are not in common use and would be better omitted. The limitations of other investigations might have been brought out more clearly: for example, the congo red test is not usually helpful, Bence-Jones protein is commonly absent from the urine in myelomatosis, and the hippuric acid synthesis test yields unsatisfactory results in the presence of a peptic ulcer. There are always statements with which one must disagree, and amongst these must be included the statement that the upper limit of the serum cholesterol level in adults is 250 mg./100 ml. (it is higher than this and increases with age), and the failure to make clear the significant relationship between the average daily protein intake and the blood urea clearance. The statement that estimation of radioactive iodine uptake by the thyroid gland is more accurate than estimation of the B.M.R. may be true if iodine has not been exhibited recently, but the investigation is one to be avoided in the youthful; qualifications such as these must not be omitted.

ARTHUR JORDAN

The Association of Clinical Pathologists

SUMMARIES of two papers presented at the meeting of the Association of Medical Pathologists and the Association of Clinical Biologists on 29 October, 1960 at the Royal College of Surgeons, London, follow. They were omitted from the full account of the meeting published in the November issue of the Journal.

MINIMAL CRITERIA FOR THE DIAGNOSIS OF MEGALOBlastic ANAEMIA OF PREGNANCY

I. RANNIE and H. MCTAGGART said that during a 21-month period 45 cases of megaloblastic anaemia of pregnancy were diagnosed in a series of 3,741 women delivered in hospital.

Specimens of venous blood were collected with Sequestrin as anticoagulant and in most cases were not received in the laboratory until the following day, having been stored overnight at room temperature or 4°C. and then transported by van.

When the specimen was received the haemoglobin was estimated. If this was 75% (11.1 g.%) or below, or if the case was already being followed, the reticulocytes and packed cell volume were estimated and a buffy coat film was made.

The packed cell volume was estimated using a Hawksley micro-haematocrit centrifuge, after which the capillary tube containing the blood was cut and the buffy coat and some of the underlying red cells were used to make a smear which was stained with Leishman's stain.

The diagnosis of megaloblastic anaemia was not made until megaloblasts appeared in the peripheral blood but the diagnosis can in fact be established before this time by finding macrocytes, polylobing of polymorphonuclear leucocytes and normoblasts in which the degree of haemoglobinization is in advance of nuclear maturation.

Details of four of the cases were given, with special reference to time of diagnosis, the buffy coat film, and the appearance of megaloblasts in the blood following intravenous or intramuscular iron therapy.

Accurate haemoglobin estimations are an important part of antenatal care. Any haemoglobin found to be below 75% (11.1 g.%) should be followed by the examination of buffy coat films so that folic acid deficiency anaemia of pregnancy can be diagnosed and treated as early as possible.

METABOLIC CHANGES FOLLOWING SEVERE TRAUMA

I. G. GRABER said that mortality from severe skeletal trauma has been reduced from 40% to 1.4% in the last decade largely due to adequate blood transfusion, but