Enzymes. Part I deals with constitutive biochemistry, and includes in addition to the constitution of proteins, carbohydrates etc., a chapter on the biochemical elements, and upon inorganic compounds, where the reader will see a good short account of pH, and some mention of techniques like those of paper chromatography. In Part II the book deals with dynamic biochemistry, where much effort must have been expended in bringing the material together in a readable form. The details of some tests are included, but the reviewer thinks it wise to have left these to a book on practical work. Appendixes are added dealing with the composition of representative food materials, and the composition of some biochemical reagents. A good index is included, and a valuable list of references at the end of each chapter. This is a very good elementary textbook at a moderate price.

R. A. PETERS

Human Genetics (British Medical Bulletin Vol. 17 No. 3, 1961). The Medical Department, The British Council. 20s.

DURING the last decade much progress has been made in Human Genetics. New biochemical methods have been introduced into the study of metabolic abnormalities, and greatly improved cytological techniques have become available for the analysis of human chromosomes. The progress is well represented in the current issue of British Medical Bulletin, which contains 15 reviews. Five articles are concerned with the chromosome basis of various pathological conditions such as mongolism, Turner and Klinefelter syndromes. The various chromosome abnormalities which are associated with multiple somatic malformations have been described by C. E. Ford (Harwell), L. S. Penrose (London), B. Lennox (Glasgow), P. E. Polani (London), D. G. Harnden and P. A. Jacobs (Edinburgh). Another five reviews deal with congenital diseases due to various errors in metabolism.

The pathogenesis and familial incidence of Galactosaemia, an abnormal accumulation of galactose phosphate in the red blood cells has been discussed by A. Holzel (Manchester) a specialist in this disease. But one of the most interesting developments in human genetics in recent years has been the discovery of a whole series of variations in the formation of different plasmaproteins. Some plasma protein variants, the method of their detection and their genetic basis have been summarized in an article by H. Harris (London). The introduction of two dimensional paper chromatography into clinical diagnosis made it possible to identify amino acids in blood and urine with relative ease. L. I. Woolf (Oxford) reviewed the most recent contributions dealing with 17 genetically determined amino acidurias, some of which are extremely rare. Many of these diseases are fatal in childhood and nearly all are more or less disabling, which naturally would account for their rarity.

H. Lehmann (London) reports on inheritance of low plasma pseudo-cholinesterase activity and its clinical implication. The low level of this enzyme in the plasma of healthy subjects causes prolonged respiratory paralysis, when suxamethomium, a potent muscle relaxant, is injected into such persons. More examples of similar behaviour are presented in another contribution by D. A. Price Evans and C. A. Clarke (Liverpool). Their survey: "Pharmacogenetics" deals with the genetically determined variations which are detected only by the effects of drugs. One such condition is acatalasia which is revealed by hydrogen peroxide; another is porphyria which is precipitated by taking barbiturates. The authors well illustrate how drugs can be used under certain conditions to investigate the fundamentals of biochemical genetics. These five contributions referred to above are highly recommended to all who are working in the field of biochemical pharmacology, if they wish to learn about the genetic control of metabolism.

The more formal aspect of human heredity is presented in four articles; they deal with the methods of analysis in multifactorial inheritance such as finger print patterns, stature, essential hypertension etc. by J. A. Frazer Roberts (London) and S. B. Holt (London). C. O. Carter (London) contributes a brief but excellent review on congenital pyloric stenosis, a tumour like condition in children, while A. C. Stevenson (Oxford) discusses the role of recurring mutations in maintaining the frequencies of congenital and hereditary disease present in our population.

The reviews are written by experts, are well documented and the references are up-to-date. This issue of the Bulletin is an important contribution to Medical literature.

P. C. KOLLER