## **REVIEWS**

## A MONOGRAPH ON MONGOLISM

DOWN'S ANOMALY. L. S. Penrose and G. F. Smith. J. & A. Churchill Ltd. 42s.

It is appropriate that, on the centenary of the paper by J. Langdon H. Down from which mongolism takes its name, the leading research worker on this subject over the last thirty years, should be co-author of this definitive monograph which covers the whole field, with the support of 600 references. The production is good and the price relatively low.

The only obvious omission is a reprint of Down's original paper.\* This is particularly distressing in view of the title of the book, and the thoroughness of the historical introduction. In fact even the reference is wrong, Langdon at that time being used as a Christian name and separated from Down by an H.

The term mongolism is used throughout the text, although the title might appear to condone the confusion of changing the terminology when the causal mechanism was just coming into view. The term trisomy 21, which was advanced before technical advances revealed the true difficulties of identification of the two pairs of small acrocentrics, is not used much in the text, but features in some diagrams and headings, and is occasionally confusing.

Dr Smith, to whom are attributed the pathological and clinical parts, has covered this vast field without pedantry or irrelevant references. The extraordinary confusion with cretinism, which greatly delayed clinical recognition, and whose scars are still evident in recent textbooks, is not discussed.

The text includes extensive tabulations of data, largely unpublished, and surveys in detail the relationship of parental age to the different cytological varieties. The parts dealing with cytological mechanisms are disappointingly short, and this brevity has led to a possible oversimplification of some of the diagrams, one of which seems to show the transmission of a chromosome unbroken by crossing over. Deficient crossing-over as a cause of non-disjunction is not formally considered.

The finger-prints and allied patterns are considered at length in a chapter which brings together Penrose's several communications on this, as well as including much new work.

The final chapter on prognosis ignores the rather scanty recent evidence which suggests that the majority of mongols conceived abort. If this is so the outlook for translocation carriers, in terms of births, may be very much better than the text suggests.

This is the definitive book on mongolism, a form of trisomy present in over one birth in a thousand. It is a necessary addition to any library dealing with either disease or genetics.

J. H. Edwards.

<sup>\*</sup> This almost unobtainable paper is republished in the present issue of HEREDITY (Vol. 21, Part 4, page 695).