Book Reviews

ORAL SENSATION AND PERCEPTION. Development in the Fetus and Infant. Ed. James F. Bosma. xvii + 419 pp., figures, bibliography, index. DHEW Publication No. (NIH) 73-546, U.S. Department of Health, Education, and Welfare, National Institutes of Health, Bethesda, Maryland. 1973.

This volume contains the papers presented at a symposium held at the National Institute of Dental Research in November, 1972. Despite the usual delay in publication, this book contains much that is new and much of interest to orthodontists. At least some orthodontic problems can be traced to disturbances of fetal or infantile growth and development. Each reader must make his own selection from the many chapters, and the detailed discussions, and locate for himself that new knowledge that he finds of particular theoretical or practical interest. This personal effort is necessary because the contributors have paid little or no attention to the practical implications of their work.

Recent investigations of sucking behavior from the viewpoints of comparative anatomy, embryology, cytology, reflexes and mother-child interactions are provided by Bryce Monger, Josephine Brown, Arnold Sameroff and Dugal Campbell. The development of neurophysiological mechanisms cerned in tongue movements is described by Roy Peach, Yojiro Kawamura, Toshifumi Morimoto, Rhyuji Sumino, Barry Sessle, David Kenny, James Weiffenbach, Bradley Thach and Geoffrey Nowlis. This work shows that the neural structures that will innervate the buccal cavity are among the first to differentiate and that the tongues of newly-born premature infants react to tactile stimuli. The human newlyborn infant has an almost fully functional oral sensory system and can respond differentially to varied stimuli including different tastes.

The final, and perhaps the most important chapter, was contributed by Pruzansky. He points out that modern knowledge of oral physiology, in the widest sense, should form a much larger part in dental education. Therefore, there is a need for instruction manuals that would emphasize the incorporation of recent research knowledge into the educational process.

Research, of course, is self-perpetuating. It is no surprise to find Pruzansky recommending that the present findings from normal human beings and experimental animals should be the basis for corresponding studies in congenital malformations.

This is a fine book. It should be in every dental school and every orthodontist would benefit from the broadening of his horizons that would result from reading and assimilating it.

A.F.R.

ORTHODONTICS FOR UNDER-GRADUATES. H. Perry Hitchcock, University of Alabama, Lea and Febiger, 532 pages, 580 illustrations. Published September 1974, \$27.00.

This text was written as an aid to prepare the undergraduate student to anticipate and detect incipient malocclusions, provide preventive measures where possible, recognize conditions which require advanced orthodontic diagnosis, understand the possibilities of comprehensive orthodontic treatment, and use orthodontic principles as an adjunct to treatment procedures in all other phases of dental practice. Its purpose is to give a student the background he needs to appreciate what he is doing when treating "simple"

cases. The major emphasis concerns the preventive aspect of orthodontics.

There are five sections: preparation, preventive practice, paradiagnostic procedures, possibilities of the specialty of orthodontics and interaction with other branches of dentistry.

All important factors of orthodontics and its study are included, even a short chapter on statistics worthy of graduate student attention. Growth and development are covered rather fully. Cephalometric roentgenography is mentioned throughout the text and considered in detail in its own chapter. Quite naturally the Alabama analysis and technique are outlined fully and discussed in minute detail.

Hitchcock recognizes that orthodontic teaching is controversial in concept; some feel it should only be taught at postgraduate or graduate level. Regardless of the differences in opinions he has fulfilled his role as author of an excellent text for undergraduate teaching.

A.B.L.

The Angle Orthodontist

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