

## DENTAL HISTOLOGY AND EMBRYOLOGY.

UNDER the title *Dental Histology and Embryology*<sup>4</sup> Dr. B. ORBAN, now professor of dental histology and pathology in the Chicago College of Dental Surgery, presents the results of his investigations into the nature of the dental tissues. Much of the work was done in the histological laboratory of the Dental School of the University of Vienna, and the author pays a kindly compliment to its director, Dr. Gottlieb, in the dedication of his book. In the preface criticism is invited—"for it is only through criticism that real constructive work can develop." The statement that well-developed enamel contains 3 per cent. organic substances; the conception of an enamel cuticle which is not keratinous and is destroyed by acids; the idea that the dentinal fibrils entirely fill the dentinal canaliculi; the importance ascribed to cementum as a controller of dentine calcification, and as governing the existence of alveolar bone; the omission of any reference to "sepsis" as a cause of cement hyperplasia (which is described as "a favourable reaction to irritation") or as a cause of destruction of alveolar bone (the distinction is ascribed to disuse, or to "physiological wandering of teeth")—these and other points will evoke criticism, but we think the author may be relied on to turn to good account the observations of his critics. For our part we are especially impressed by the photomicrographs showing removal of destroyed cementum, and by the method of constructing models of developing teeth, and in general by the excellence of the sections chosen to illustrate the work; dental sections are the most difficult of all to prepare. The book is a valuable addition to dental science.

## NOTES ON BOOKS.

PROFESSOR R. D. RUDOLF's *Notes on the Medical Treatment of Disease, for Students and Young Practitioners of Medicine*<sup>5</sup> has now deservedly reached a third edition. The previous issues in 1921 and 1923 were reviewed in our columns (1921, ii, 44; 1924, i, 327). The difficult task of keeping the text from considerable expansion while adding what is necessary about recent advances has been very successfully solved. Minot and Murphy's liver treatment of pernicious anaemia is, of course, given, and with the comment that, though it is premature to state that the disease can thus be cured, as long as the treatment is continued the blood usually keeps about the normal and the dreaded crises do not occur. In the account of Jennerian vaccination the importance of its performance in infancy is insisted upon, as the rare cases of post-vaccinal encephalitis practically all occur after primary vaccination done during the period of school life or later. The book reads easily, and conveys the fruits of long experience in clinical medicine.

Dr. HUBERT HIGGINS, in his *Biological Reversion and Hippocratic Anatomy*,<sup>6</sup> asserts that the results obtained by osteopaths have never been satisfactorily explained by their critics. There should, however, in his opinion, be no difficulty for those who understand Hippocratic anatomy. For example, the morbid anatomy of lymph stasis of the spinal canal is, according to the author, perfectly obvious in the living, though obscure in the dead, body. "There is," he considers, "an intrinsic cellular expansion, an active hypertonicity of the connective tissue inside the vertebral canal, which, being resisted by its rigidities, exercises pressure on its contents, and also on the nerves issuing from the intervertebral foramina. The dorsal interlaminar ligaments bulge, causing definite ridges of elastic resistance, which may be exceedingly difficult to overcome. Forcible separation of the dorsal vertebrae, by bending the dorsal curve backwards over the knee, will, in suitable cases; immediately diminish, or even temporarily abolish, this abnormal intravertebral resistance." One may be excused for mistaking this for pure osteopathy.

Dr. A. J. CHURA's little monograph on diphtheria,<sup>7</sup> which appears to be a reprint from *Bratislavské Léčarské Listy*, is divided into four parts, devoted respectively to the epidemiology, clinical aspects, occurrence of acetonaemia in diphtheria, and active immunization. For the benefit of those not familiar with the Czech language, to whom a bibliography of 219

<sup>4</sup>*Dental Histology and Embryology*. By B. Orban, M.D. Second edition. Philadelphia: P. Blakiston's Son and Co., Inc. 1929. (Med. 8vo, pp. xviii + 218; 201 figures. 4 dollars.)

<sup>5</sup>*Notes on the Medical Treatment of Disease, for Students and Young Practitioners of Medicine*. By Robert Dawson Rudolf, C.B.E., M.D., F.R.C.P. Third edition. Toronto: University of Toronto Press, 1930. (5½ x 9, pp. 516. 4 dollars.)

<sup>6</sup>*Biological Reversion and Hippocratic Anatomy*. By Hubert Higgins, M.R.C.S., L.R.C.P. London: H. K. Lewis and Co., Ltd. 1929. (Demy 8vo, pp. x + 149. 7s. 6d. net.)

<sup>7</sup>*Diphtheria*. By Dr. Alojz J. Chura. (Demy 8vo, pp. 153; illustrated.)

references may also be of use, summaries of the third part in French, English, and German are appended.

The Rev. H. G. G. HERKLOTS has gathered together a short series of *Hospital Sketches*,<sup>8</sup> written by various members of the Church Missionary Society who are working in Africa and the East. Missionary societies, in linking up hospitals and schools in savage districts to the Church, recall to mind the condition of Europe in the Dark Ages. The little book contains some interesting stories of the difficulties experienced among the savage races of Uganda and Nigeria, and in ancient civilizations such as the Persian and the Chinese. The value of tactful health propaganda is plain in each case.

Under the auspices of the Chadwick Trust courses of popular lectures are given every year in London and other large towns in Great Britain on almost every branch of sanitary science. Two lectures on *Sewage and Sewage Disposal*,<sup>9</sup> delivered last year at the Institution of Mechanical Engineers, have now been published, and can be recommended as a lucid summary of recent progress in this department of public health.

## CORRECTION.

In our review of Pottenger's *Symptoms of Visceral Disease* (April 12th, p. 700) it was stated that the price had gone up by 13s. 6d. We learn from the publisher, Mr. Henry Kimpton, that this should be 3s. 6d., as the price of the previous edition was 28s.

<sup>8</sup>*Hospital Sketches*. Edited, with an introductory chapter, by H. G. G. Herklots, M.A. London: Church Missionary Society. 1929. Cr. 8vo, pp. 81; 1 plate. 1s.)

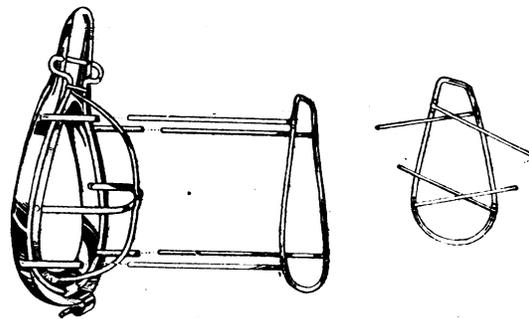
<sup>9</sup>*Sewage and Sewage Disposal*. By Arthur J. Martin, M.Inst.C.E., etc. London: Macdonald and Evans. 1930. (Demy 8vo, pp. 62. 2s. 6d. net.)

## PREPARATIONS AND APPLIANCES.

## A MODIFIED OGSTON'S INHALER.

DR. JOHN HALTON (Liverpool) writes: I have devised a modification of Ogston's inhaler which consists of: (1) a Schimmelbusch mask (modern type) to which are fixed four sockets; and (2) a wire frame, shaped in the general outline of the mask, having four 4½ in. hinged legs which fold flat. In use the mask is prepared as usual with five to six layers of gauze, the legs of the frame are fitted into the sockets, a towel is wrapped round the frame and pinned into position. Personally, instead of a towel, I use a strip of white lint, roughly 6 in. by 18 in., hemmed at one end to within 1 in. of each of its long sides. One of the legs is passed through this hem before being fitted to the mask, making the fixture more secure.

Ogston's principle is, briefly, that by means of a chamber placed round the mask more effective vaporization takes place, the heavy ether vapour is concentrated and conserved, and it is also warmed to a certain degree by the patient's own expira-



tory efforts. Thus smaller amounts of ether are necessary, and resultant post-anaesthetic complications are undoubtedly minimized as compared with the ordinary open method. The advantage claimed for this modification is that it folds flat and takes up no room in the anaesthetist's bag. With very little experience one finds that this method is almost ideal for the administration of long or short anaesthetics. For dental extractions, tonsillectomies, and other short operations, using a 1 in 12 to a 1 in 8 C.E. mixture, the mask is kept slightly raised for the first dozen breaths; then, as it is gradually lowered, the concentration can be rapidly increased with no discomfort to the patient. A short, quiet induction is usually obtained, and an anaesthetic period, with the mask removed, of two to five minutes, with recovery in twenty minutes, depending on the time of administration, is easily brought about. For longer operations a change over to pure ether is advisable, but one-half to one-third of the usual quantity of the drug only is necessary. A metal dropper—Bellamy Gardner's—is advantageous, as opposed to the usual wick method; it enables ether to be delivered to the mask in all positions.

Messrs. Alexander and Fowler of Pembroke Place, Liverpool, have constructed this apparatus for me, and the accompanying illustration is, I think, self-explanatory.