panied by exophthalmos, vertigo, and frontal headache. A free intra-nasal opening of the ethmoidal cells led to recovery. It was supposed that an ethmoidal mucocele had passed on to suppuration. In the second case an abscess pointed externally at the root of the nose, and a sequestrum consisting of part of the ethmoid was removed by external operation.

The author insists on the importance of speedy intervention in all cases where proptosis has occurred; he quotes a case recorded by Knapp where blindness from damage to the optic nerve supervened on the fourth day after the appearance of exophthalmos.

Chichele Nourse.

EAR.

Kishi, K. (Formosa).—*Otitic Dyspepsia in Infants.* "Archiv. f. Ohrenheilk." Bd. 70, Heft 1 and 2, p. 1.

The author reports several cases of purulent otitis media in infants in whom the disease was associated with digestive disturbances, flatulence, diarrhœa, emaciation, which ceased when the ear-disease was cured. The following is a brief summary of three of the cases:

(1) Child, aged ten months, breast-fed, Several days' general depression in health with some fever (102·4° F.), and convulsions. When admitted under Kishi's care was suffering from pyrexia, with tympanites, diarrhœa, and enlargement of liver. After six weeks' treatment the ears were examined. Both membranes were found to be bulging; the left was congested but not the right. In the naso-pharynx adenoids were present. Both membranes were incised. From the right came much muco-pus, less from the left. Next day the child was brighter, the diarrhœa was less, and the ears were freely discharging. Five days after the relief to the pent-up pus in the tympana the diarrhœa entirely ceased, and in a month the discharge from the ears dried up also.

(2) Child, aged nine months, fed on cow's milk. A sufferer from bronchitis; formerly constipated; it had been suffering from diarrhœa for several weeks before Kishi first saw it. There was some loss of weight. The stools were very liquid, thin, and green. Temperature normal. On examining the ears both tympanic membranes were found to be thickened, opaque, and bulging. The deeper parts of the external meatus were congested, but the membranes themselves were not reddened. The naso-pharyngeal mucous membrane was swollen and œdematous, and the tonsils were enlarged. Double paracentesis was performed; from the left ear thick stinking pus was liberated, from the right only blood. In spite of the relief thus afforded the diarrhœa continued unabated, and as the temperature now ran about 100·4° F. a typical Schwartze was performed upon the left mastoid, from which emerged at the operation a great quantity of thick muco-pus. In two days the diarrhœa had ceased, and the temperature had fallen to normal.

(3) Child, aged nine months, breast-fed. After an illness lasting two months and consequent upon measles, Kishi found on examination that, in addition to severe diarrhœa with emaciation, the child was suffering from middle-ear suppuration. The stools numbered twelve to fifteen a day, and there was tenderness on pressure over the whole abdomen. The temperature ran between 100° and 101·5° F. Both tympanic membranes were bulging, but neither showed any congestion. On paracentesis much pus was obtained from both. After a preliminary improvement in

the condition of the patient following the operation the symptoms again became severe, and Kishi was led to repeat the paracentesis on the left membrane. No benefit resulted, however, and the radical mastoid operation was then performed. Five days later the diarrhœa had ceased, the temperature had fallen to normal, and recovery followed.

In commenting upon his experience Kishi draws attention to the circumstance that in these cases no reddening of the tympanic membrane was present. He attributes the diarrhœa to the passage of pus into the alimentary canal by way of the Eustachian tubes. A toxæmic diarrhœa is a frequent incident in all forms of septicæmia, just as frequently, perhaps, in cases where pus cannot obtain an entrance to the alimentary tract as in cases where such an entrance is likely. At the same time this criticism does not, of course, invalidate the lesson of cases such as these, which is, to examine the ears of infants with the utmost precision as a matter of course, regardless of the apparent drift of the symptoms.

Dan McKenzie.

REVIEWS.

Some Points in the Surgical Anatomy of the Temporal Bone from Birth to Adult Life. By Arthur Cheatle, F.R.C.S., Aural Surgeon to King's College Hospital and to King Edward VII's Hospital for Officers. London: J. and A. Churchill, 1907.

When we consider the issues at stake in the treatment of disease in the temporal bone we must admit that it is impossible to overrate the importance of a complete and accurate knowledge of the anatomy of this bone in its typical and atypical forms. Those who have had much experience of operation on this part of the human body are familiar with the variability of the structure of the contained cavities, and have been forced to recognise the occurrence of aberrant forms through the disappointments in result dependent on their existence. The writer of this review has in his mind a case of comparatively recent date in which after what appeared to be a complete operation pus still welled up from the depths of the upper part of the attic. This is explainable by the observation on page 83 that "a recess or cell is occasionally seen in front of the head of the malleus and above the canal for the tensor tympani. The facial nerve lies against the inner wall." It is also well known that the temporal bone varies according to a somewhat regular scheme from one period of life to another, and according to the plan of this work these evolutionary changes are placed vividly before the reader. The range of inconstancy is also uncompromisingly displayed in the light of the actual examination of a large number of temporal bones. Mr. Cheatle forewarns us as to the atypical conditions we ought to be prepared to meet, and thereby puts us into a better position for dealing with them as they occur. We can never look at the temporal bone from too many points of view, and Mr. Cheatle, studying it as a practical surgeon, turns it upside down, and we may say inside out, so as to leave no nook or cranny unexplored. Among other points which seem to have been less strongly dwelt on by others, we may note on the under surface of the tegmen "a very distinct ridge running from before