areas may be the cause of the attacks of stupidity and confusion, or excitement, from which epileptics occasionally suffer. Dr. Aldren Turner gives a clear resumé of the chemical pathology, and discusses the autointoxication theory, which he is inclined to favour, believing that there are arguments in support of it. He does not go so far as to say that all types of epilepsy may be explained by this theory, yet, when taken in conjunction with the results of the researches of Dr. John Turner, "there would appear to be proof that some types of epileptic paroxysms may be ascribed to auto-intoxication in persons hereditarily and structurally predisposed to convulsion. These are, serial epilepsy, the status epilepticus, and fits associated with acute psychoses, as post-convulsive symptoms." With regard to recovery, his standard is nine years without a fit, and, in his experience, about 10 per cent. may be regarded as possible cures.

Under treatment he urges prophylaxis by care in the upbringing of a neuropathic child, that over-exertion and strain, both intellectual and physical, should be avoided, and that the peculiarities of each child should be carefully studied. He deprecates the use of bromide salts in larger doses than 60 grains in the day; if benefit does not follow, some of the various other remedies should then be tried. Treatment in an institution, although not always possible, is often the best, on account of the ease with which patients can be brought under satisfactory supervision. There is a short description of epileptic colonies in the appendix, which is of value, as these are gradually being recognised as the most convenient way of dealing with the unfortunate sufferers from epilepsy in the present state of science. A good index completes the book.

Throughout the book there is continuous evidence of clear insight, an open mind, and broad views on the part of the author, enabling him to treat his own numerous observations and his extensive knowledge of the ideas of others in a careful and judicial manner. The result has been that this volume will certainly take its place as a work of authority, and it has enhanced the reputation of the author. It is a study of epilepsy which is very satisfactory to the asylum physician, as it brings all epileptics into line with the class he sees daily, and with the psychoses generally.

C. H. G. G.

Lectures on Neurasthenia. By Thomas D. Savill, M.D.Lond. London: H. J. Glaisher, 57, Wigmore Street, W. Pp. 216. Price 7s. 6d.

The third edition of these Lectures deserves perusal by every student of mental diseases, for the author's special experience of the various forms of exhaustion psychoses will be a fitting complement to that of the asylum physician who has the later care of not a few of those so lucidly and instructively described by Dr. Savill. The period in the history of several cases of insanity before that of actual registration is that described by Dr. Savill in these lectures, which are concise, clearly written, and eminently practical. The whole volume reminds us of

Trousseau's beautiful lectures. It is pleasurably written, well arranged, provided with a most useful bibliography, and it has a serviceable index. In it is a clinician's experience logically put forward after thorough investigation, the differential diagnosis of these perplexing cases is clearly described, the pathology is sound, and the treatment practical.

## Part III.—Epitome of Current Literature.

## 1. Neurology.

A New Method of Testing the Hearing of Dogs [Eine neue Hörprüfungs methode bei Hunden]. (Neur. Cbl., Nr. 7, 1907.) Kalischer, O.

Dr. Otto Kalischer has followed his valuable researches on the extirpation of the brain in parrots by a noteworthy inquiry into the function of the temporal lobe. In former ablations of portions of the brain, the significance of after-effects was left to observations dependent upon casual circumstances, sometimes under the influence of the whole cerebral cortex. Kalischer has hit upon the idea of subjecting the dogs upon whom he operated to a preliminary drill. He taught them not to seize upon a piece of flesh till a particular note was played on the organ, or on the piano. Ordinary dogs learned this lesson in about a fortnight, and arrived at such perfection that the dogs understood the smallest musical interval half tones higher and lower than the prescribed note. Even amongst pronounced dissonances the note for food was promptly recognised. It is worthy of remark that the dogs in general can hear the whole gamut, a capacity which few men with a musical ear are possessed of.

In his experiments, Dr. Kalischer took precautions to isolate the hearing function by blinding the drilled animals. In others, he removed the cochlea; if one of these organs was removed, there was no change in the dog's behaviour, but when both cochleæ were destroyed, the lessons of the drill were lost.

Kalischer now went on to the ablation of the temporal lobe. It need not surprise us that the notes were still recognised when but one temporal lobe was removed, but, what is singular, when both temporal lobes were extirpated in the second week after the animal, recognising the notes, was able to go through its former drill; Kalischer was even able to teach the animal to learn to observe a new note.

By the former less precise methods of observation, animals deprived of the temporal lobes ceased to show a response by obeying orders, or erecting the ears, or wagging the head; while Kalischer's dogs, as described, were attentive to the notes he had taught them. After a time, a slight reaction to sounds appeared with the dogs under ordinary observation.

Kalischer is of opinion that there are reactions to hearing from nerve tracts below the cerebrum. All those reactions which depend