

Trousseau's beautiful lectures. It is pleasantly 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

upon the awakening of the attention of the animals, that is upon a connection of the hearing organs with the functions of the upper brain, cease to occur when the temporal lobes are removed, while with the dogs subjected to the drill, the sound of the note only served for the invitation or summons of the process of eating.

Further experiments upon the destruction of the corpora quadrigemina went to show that the hearing process concerned in the drill may fall below these ganglia.

WILLIAM W. IRELAND.

2. Psychology.

Psychopathology in Schiller's and Ibsen's Plays [*Psychopathologisches bei Schiller und Ibsen*]. (*Centralb. f. Nervenheilk. u. Psychiat.*, March 15th, 1907.) Hoppe, A.

The psychiatric investigation of the imaginary beings created by dramatists has long been a favourite amusement of alienists. Not long since a Paris thesis was devoted to an examination of the mental state of all Ibsen's leading heroes and heroines. The lawyers are now beginning to join in from their point of view. Wulffen, a Dresden lawyer, has published a criminological study of the Moor family in the *Robbers* and of Nora in the *Doll's House*, and Dr. Hoppe, as an alienist, now criticises Wulffen and sets forth what he conceives to be the sound psychiatric view of these personages. As Hoppe very truly remarks, the poet, in pursuing his own ends, is not bound to be scientifically exact; it is impossible to give an exact diagnosis of the insanity of Faust's Gretchen, yet the prison scene is just as moving to an alienist as to anyone else. The layman, however, is apt to think that medical handbooks will yield the names of mental conditions depicted by the poet, and Wulffen, Hoppe believes, has not quite escaped this tendency. He regards the Moors as a family in the course of hereditary degeneration. Franz Moor, in Wulffen's opinion, is a "born criminal," though without "moral insanity," and represented with profound insight; "from the present standpoint of science he is not criminally responsible." Hoppe considers that even if this diagnosis were correct, from the dramatic artist's point of view there would be loss rather than gain, for the artist desires that his creations should share the common characters of humanity, and if they are mere mental monstrosities, working according to laws of their own, they lose in human interest. While Hoppe is not in agreement with those who hold that Schiller avoided the introduction of psychopathic elements, he thinks such elements are much vaguer than is maintained by Wulffen, who also believes that Karl Moor is a picture of paranoia, a contention Hoppe will by no means agree to. With regard to Nora, however, he agrees with Wulffen in seeing a case of hysteria, or at all events a character who may be fairly regarded as hysterical. It is interesting to note that Wulffen does not regard Nora's proceedings as coming within criminal law. While differing from Wulffen at many points, Hoppe considers that his discussion is marked by great dialectical skill.

HAVELOCK ELLIS.