blind, but leaves him, it may be, with all the ideal visions of Milton, the destruction of the sight-centres in the convolutions renders one incapable of thinking or representing visible things: his visual memory is gone. These ideas are in this chapter considerably elaborated; and in one part of it the subject of aphasia is discussed in a suggestive manner. But we cannot follow the author through these interesting pages, as our review has already attained unusual dimensions.

Two supplementary chapters are added—one giving a diagrammatic summary of the functions of the nervous centres, which will be useful for reference to those who have read the book, and the other going into the subject of cerebral and cranial topography. This last chapter carries the results of experiment on animals to the human brain, and shows the regions in it analogous to those in which the functions have been determined in the brains of the lower animals. The author in his nomenclature follows Ecker; and the points brought out here will be of great use to pathologists who desire to test the facts of observation on the post-mortem table.

It may be further noted that the author proposes to furnish "another treatise specially devoted to the consideration of diseases of the brain," for which work we shall look with some interest. For though there is much in the present volume which may need confirmation before it is considered fully established, yet there can be no mistaking the truly scientific method which has been adopted in the experiments on which the work is based. We opine that a mind which has been trained by these careful experiments will be able to bring lessons out of clinical and pathological facts which cannot fail to be of great importance.

II.—CLINICAL STUDIES, ILLUSTRATED BY CASES OBSERVED IN HOSPITAL AND PRIVATE PRACTICE. *By* SIR JOHN ROSE CORMACK, K.B., M.D. Two Vols. London: J. & A. Churchill. 1876.

INTO these two volumes of *Clinical Studies* Sir J. Rose Cormack has gathered all the contributions he has made to medical literature within the last thirty-five years. Most of the articles belong to an early part of this period, and they have been reproduced pretty much as they originally stood. They range over the whole realm of medicine, and present matter of very varied interest. Some of them might have been omitted, however, without any detriment to the book or the author's fame. But

laying such instances aside, the volumes bear on almost every page the marks of a wide experience and careful observation. One or two of the "studies" stand out prominently, not only from the vital import of the subjects themselves, but also from the manner in which the author has handled them. We will speak of these specially.

An account of the epidemic fever in Edinburgh in 1843 opens the series. Relapsing fever had been almost entirely unknown in Britain from 1828 up to 1843, and when it broke out in Edinburgh in the latter year it was looked upon as a new type of fever. Dr Alison, who must have seen it in 1828, failed to recognise it on its first appearance in 1843, and called it a "nova febris." It was evidently under the notion that it was such that Cormack reported his cases, and drew up his generalisations upon them; and viewed in this light, it must be confessed that his account of this epidemic shows him to be a very able observer, for with some very slight modifications his account affords a very truthful picture of the relapsing fever which has, at various times since he wrote, swept over the land. The only point on which he gave forth an uncertain sound was whether it was essentially different from typhus. The occasional occurrence of a rash that could be described as measly, and the close association in many instances of the two fevers, led him to suspend his judgment and inquire whether the two fevers, though apparently so different, were not the results of modification of the same morbid poison. He states in a note that soon after the publication of his memoir he became quite satisfied of the non-identity of the two.

The articles on diphtheria are to us the most interesting in the volumes. We fancy the author himself would consider this his pet subject, and what he writes on it is the product of his matured judgment. The cases which form the basis of the papers are reported in a very able and minute manner, and the many facts drawn from extensive researches in the literature of the disease show that it has been elaborated with especial care. In it the question of the identity or non-identity of membranous croup and diphtheria crops up, and is discussed at some length. Probably to some extent, from having been brought into close contact with French doctrine, he has adopted without reservation the idea of Bretonneau and Trousseau, that membranous croup is not an advanced stage of inflammatory croup, but the characteristic manifestation of diphtheria. We confess that to our thinking this position is not quite demonstrated, and although in recent years Sir William Jenner and Dr George Johnson have given in their adhesion to this doctrine, still

there are many able observers in England who cannot yet accept the identity of the two; and certainly if the character and succession of the symptoms are closely scrutinised, they seem to have some ground for their scepticism. Diphtheria is, as a rule, most insidious in its onset, the throat affection is rarely the primary symptom, the excessively depressed condition of the patient shows that he is labouring under a grave constitutional disorder; it is frequently accompanied by albuminuria, swelling of the glands in the submaxillary region, and often also in the axilla and groin; apt to be followed by paralytic sequelæ, and death supervenes in the great majority of cases, not from suffocation, but from mere poisoning of the constitution. Add to all this, that it is epidemic and contagious. And yet there are cases attended by false membrane in the larynx, which present a marked contrast to all this. They commence with pronounced laryngeal symptoms, associated with high fever; there are not marked signs of constitutional depression; the cases are sporadic and do not spread, and apnoea is a very frequent termination. On dissection a false membrane is found in the larynx and trachea. Is this diphtheria? We think it is an open question. The membrane may be of the same nature in the two cases, but the symptoms are very different, and form a just ground for distinction.

His treatment of diphtheria consists mainly of alimentation, stimulants, attention to hygienic conditions, and tracheotomy if necessary. He advises only the mildest topical applications to the throat, and indicates that this is now the prevailing opinion among French physicians. The medical mind in France must thus have undergone great modification since Trousseau insisted on the application of the strongest caustics for the destruction of the membrane, and as he thought, in some cases to mitigate the general disease. In the great majority of cases this form of treatment is worse than useless. The patients do not, as a rule, come under the eye of the physician till the membranous formation has made some progress. It cannot all be reached by topical applications, and the mere destruction of part of it will afford little benefit; and what is destroyed is in many instances quickly reproduced. If the exudation is found to be small and localised, then we think there might be advantage in destroying it, but in all other cases we agree with Cormack, that only mild applications should be employed.

Puerperal convulsions are the subject of an article, with two cases as its text. They both occurred in primiparæ, and this is quite in accordance with experience. He attributes them in

such cases to the unyielding condition of the abdominal walls, which do not relax readily under the pressure of the expanding womb, and so there is much pressure exercised on the great veins, giving rise to renal congestion. He says "the œdema, albuminuria, and convulsions are not in the puerperal woman pathognomonic of any organic disease of the kidney." This is all quite true; but a fact to which he does not call attention is that a considerable number of cases of Bright's Disease seem to have their starting point in the dropsies of successive pregnancy. We can recall several, and lately had an opportunity of seeing such a case. A woman pregnant for the third time was seized at the sixth month with convulsions, which lasted for three or four days, and then passed off under treatment. The history bore that she had dropsy of the feet, legs, and face in both the former pregnancies, which passed away after delivery; and the most careful scrutiny of the facts could detect no other clue to the kidney disease under which she was now labouring. The child usually dies if the convulsions are violent; but in this case we heard the foetal heart quite distinctly three weeks after the attack. Abortion is the rule, and when this takes place after the death of the child, Dr Cormack remarks "there is inevitable toxæmia, which may be looked on as nature administering a poison for the purpose of accomplishing abortion." He need not, we think, have wandered so far for an explanation; may not the dead foetus be expelled on account of it acting as a foreign body in the uterus?

There are a series of interesting articles on the "Presence of Air in the Circulation." The first of these was the author's graduation thesis at Edinburgh, and in it he controverts the notion of Bichat, that death in such cases is brought about by the poisonous action of the air on the brain. It is due to paralysis of the heart from over distension. Into this question we don't feel qualified to enter. These articles, however, contain descriptions of some experiments on animals that would make the anti-vivisectionists "gape and stare." There are also articles on cholera, general paralysis, congenital syphilis, &c., but they contain nothing of very special import, although they are very clearly detailed.

The volumes are well written, easy to read, and well worth a perusal.