There is another point in which we must take exception to Dr Fox's book, and that is his arrangement. In a general text-book of Pathological Anatomy, it is perhaps expedient to consider, first, the various general diseases, inflammation, tumours, and so forth, and then proceeding to the various organs and systems, there take up the individual diseases. There are some who are opposed to this method, even in a general work on Pathological Anatomy—and the excellent work of Klebs has no general part, but enters at once on the individual parts of the organism, and describes the diseases as occurring there. But if the method is in any way doubtful where the whole subject is under consideration, it is surely much more than doubtful where only a department of it is the subject of discussion. We, therefore, seriously object to the arrangement which the author describes as follows:—"It is proposed to divide the subject into two parts; and, first, to describe the pathological anatomy of the brain and spinal cord; and, secondly, the mode in which these pathological results are grouped in certain conditions, which symptomatically have been given special names, as mania, melancholia, &c." The author himself sees that this is an illogical division; there seems no reason for placing tumours in the first section, any more than the second, for surely tumours of the brain have symptoms which enable us in some degree to group them classically under one head. The division adopted has, in fact, caused considerable repetition and confusion, and has produced, so far as we can see, very little good in return.

We can only conclude by commending the work to the careful consideration of all who are specially interested in this group of diseases.

III.—ON THE FUNCTIONAL DERANGEMENTS OF THE LIVER, *being the Croonian Lectures delivered at the Royal College of Physicians, in March, 1874.*
By CHARLES MURCHISON, M.D., LL.D., F.R.S., &c., &c. London: Smith, Elder & Co. 1874.

WE can imagine some literary dyspeptic, for years perhaps a "martyr to his liver," as he has been told or believes, procuring a copy of Dr Murchison's valuable treatise on *Diseases of the Liver*, published a few years ago, with the view of "reading up" his complaint. But amidst the fearful array of diseases therein discussed, with the doubtful exception of the first chapter on congestion of the liver, he would find little or nothing bearing on his particular case, and after glancing at

the dissertations on Hydatids, Cancer, Jaundice, and Dropsy, he would dismiss the book with a feeling of thankfulness that it referred to those who had more serious troubles than any from which he, as yet, suffered. Such an one should procure these Croonian lectures, if he wishes to console himself with the thought that he really has hepatic disorder. For if 9 persons out of 10 (outside of hospitals), who are said to suffer from their livers, would find but little encouragement in Dr Murchison's *first* book for this belief, 9 persons out of 10, suffering from almost any ailment whatever, would find in this *second* treatise ample justification for the idea that no small part of their symptoms might be referred to a "derangement of the liver." It is so easy to assert that the liver is out of order, and so difficult to prove such assertions erroneous, that this diagnosis had become as prevalent, and we may add, as unsatisfactory, as "teething" in children, or "change of life" in women. In the reaction which set in among more careful physicians against such reckless diagnosis, the slighter disorders of the liver have been perhaps of late somewhat ignored, and some of the multitudinous complaints referred to this organ have rather been spoken of as due to errors in the digestive functions, among which, of course, the function of the liver was more or less distinctly included as an important element.

The progress of physiology had long made us familiar with the great value of the biliary secretion as preparing pabulum for the blood (although the importance of the interchange thus constantly going on, by the secretion and re-absorption of fluids in the digestive tract, scarcely received the attention it deserved), and so the liver has long been regarded as fulfilling a nobler function than the mere secretion of a bile to stimulate the action of the bowels. But of late years pathology, experiment, and clinical observation, have shown the close connection of derangement in the hepatic functions with diabetes, and various other disorders associated with urinary disturbances, such as renal calculus and urinary sediments; while a strong conviction has been arising that this large gland has much to do with the formation of urea, and the development of animal heat. Founding upon these and similar recent advances, Dr Murchison seeks to re-instate the liver as one of the great regulators of health, and to bridge over the gulf which seems to separate scientific medicine from the routine prescription of blue pills and seidlitz powders for the popular "biliousness." The outcome of the work is very much to confirm the popular traditions respecting the

value of mercurials and salines, and the evil of over-eating, over-drinking, and deficient exercise, and the special danger of fashionable dinners, malt liquors, and champagne.

Founding on the connection of urinary sediments (lithates) with deranged liver, he describes a blood poison—lithæmia—allied to gout, although distinct from it, which is capable of poisoning and deranging nearly every function of the body. It is this comprehensiveness which somewhat alarms us: here is a bare catalogue:—

Corpulence, emaciation, diabetes, gout, urinary calculi, biliary calculi, degenerations of the kidney, deranged appetite, flatulence, constipation, diarrhœa, intestinal hæmorrhage, hæmorrhoids, jaundice, aching in limbs and shoulder, neuralgia, cramps, headache, vertigo and dimness of sight, convulsions, paralysis, noises in ears, sleeplessness, depression of spirits, irritability of temper, palpitations, irregularities and intermissions of the pulse, anæmia, angina pectoris, bronchitis, spasmodic asthma, deposits in urine, renal calculi, diseases of kidneys, cystitis, eczema, urticaria, boils, pigment spots, &c., and even cancer (see page 82.)

On reading over such a list, one is almost irresistibly reminded of the catalogues of disorders in quack advertisements, and the marvellous pills and skilful doctors whose treatment can cure all the ailments they enumerate; but if, as they say, they “correct the liver,” it would seem the miscellaneous disorders advertised by them are not so unscientifically arranged as we usually suppose.

It seems to us that Dr Murchison rather overdoes his case. The liver he shows to be connected with sanguification and the disintegration of albuminous matter; and its disordered function may naturally be expected to show itself in disorders of these. He then enumerates many disorders of these two functions, but we must remember that other important organs may also be concerned in both processes, and disorders in their functions may be responsible for many of the above symptoms. Why may not the spleen be credited, or rather debited, with a share of the above disagreeable derangements—at least, let us say, in proportion to its weight? Of course no one sees more clearly than Dr Murchison the deficiencies in the connection which he seeks to establish between many of the symptoms named and disorder of the functions of the liver. He deserves great credit for the masterly manner in which he has gathered up the immense mass of loose and vague floating medical tradition and

observation on this subject, almost impressing a scientific precision upon it. These lectures serve to sketch out the plan by which more definite observations may be made on this obscure and often intangible subject, so that we may hope in time to have reliable data to go upon in the diagnosis of functional as well as serious structural diseases of the liver. We need scarcely say that there is here, as in all Dr Murchison's writings, much valuable practical information on the subject of treatment, and especially on that important part of it, the question of eating and drinking, with all which we perfectly agree. These lectures, however, have been already so widely read and appreciated that we need not extract these passages, or prolong our notice of this remarkable work.

IV.—NOTES OF DEMONSTRATIONS ON PHYSIOLOGICAL CHEMISTRY. By S. W. MOORE, *Joint-Demonstrator of Practical Physiology at St George's Hospital, Medical School, F.C.S., &c.* Smith, Elder & Co., London. Pp. 56.

WITHIN the last few years animal chemistry has reached a stage in which it can be of practical use to the physiologist and practitioner. Until very lately, it may be said to have consisted of a mass of valuable but unconnected observations. Especially do we owe to the patient research of our German fellow-workers, the great advances which have now raised it to something like a definite system. For the student here, however, the scattered papers in which the information is contained, and often the barrier of a foreign language, have generally proved obstacles which his time would not allow him to surmount, even if inclined. But it is rapidly becoming apparent, that if he ever hopes to keep up with the strides his profession is making, he must at least know enough of physiological chemistry to understand what he reads. As yet happily we are not deluged with text books on this subject, and we, therefore, welcome Mr Moore's notes all the more cordially. Indeed, with the exception of the latter part of the practical physiology, edited by Professor Sanderson, we know of no book where the subject is sufficiently condensed, to permit of perusal by the already heavily taxed student, and even here, from the nature of Dr Lauder Brunton's paper, the instruction cannot be given in the systematic manner so advantageous in first studying a subject. Mr Moore's *brochure*, then, is well timed, and very successfully meets what is becoming a much felt want. It consists