

PATHOLOGY.

ON THE PATHOLOGY OF PHTHISIS.

From the Address in Medicine before the British Medical Association, by Dr. PARKER.

If the doctrine of inflammation has thus, as it appears to me, made the full circle of change, the same may be almost said of phthisis pulmonalis. Laennec's genius, so sure and accurate when he was dealing with the interpretation of physical phenomena, failed when he attempted a definition of phthisis. Like many a geographer, he wished to fill up his blank map, to insert a coast line here and a watershed there, and to have everything defined, described, and completed. It was an impossible attempt, for the country had not been surveyed.

Laennec's opinions on tubercle were widely influenced by those of Bayle, and doubtless his interest in the subject was heightened by the fact that, like Bayle, he was himself the subject of phthisis. Influenced probably also by reflection on the hereditary derivation of phthisis, he at last elevated tubercle into a special and peculiar product, and as the only sign and cause of phthisis; he took tubercle out of the category of common inflammatory changes, and made, so to speak, an entity of what may be merely a form. His influence was so great, his hypothesis (for it was no more) so exactly chirographed in with many of the facts of phthisis, and gave an explanation so simple and complete, that it met with general acceptance.

But in this country there are not wanting those who, from both clinical and pathological standpoints, never accepted Laennec's theory in its integrity. The masterly descriptions of Thomas Addison, of Guy's Hospital, published nearly thirty years ago, show how completely that great and original physician had seen the imperfection in the favourite view of tuberculosis. But Addison was not alone in this. It is but just to the memory of a man whose extraordinary talents did not save him from mistakes which eventually overshadowed a brilliant career, and left him in his old age neglected and stranded on the shallows whither a false light had enticed him; it is but just to John Elliotson to recall the fact that he constantly asserted the production of phthisis pulmonalis from common inflammation, and the identity of many so-called tuberculous and inflammatory processes. So also it is but justice to C. J. B. Williams, a pupil and follower of Laennec, to say that he also brought into great prominence the intimate connection between inflammation and tubercle.

But it was not until 1847 that Laennec's theory in its exclusiveness was to receive its death-blow. In that year Reinhardt, himself, like Laennec, soon to be a victim of phthisis, published his exhaustive examination of the microscopical characters of tubercle, and asserted that

there was no difference between tubercle and common inflammatory products.

Then, gradually, opinions seemed to settle down in three directions. There were some who held to the old theory of Laennec, that there was a specific tuberculous product or deposit; some who followed Reinhardt, that the deposit was of a common inflammatory nature; and some who steered between the two, and considered phthisis pulmonalis to be a generic term covering two, if not more, distinguishable morbid conditions. How we now stand in this matter it would be rash to assert, but it seems to me that the late able discussions in this country and in Germany tend more to the idea that the tubercular character is the consequence merely of an anatomical condition, and that the greater or less amount of lymphoid tissue in the lungs and the fact of its involvement will account for the peculiarity of form.

Time, indeed, has added two important facts to Reinhardt's masterly description; the one is the implication of the lymphoid tissue in the most typical form of tubercle, and the other is the demonstration of the infective character of phthisical inflammation, for which we have much to thank Villemin, Simon, Andrew Clark, Burdon Sanderson, Wilson Fox, and others.

There was a moment, indeed, when Villemin first announced the production of tubercle by inoculation, when it seemed as if the specific nature of tubercle might after all be true; but the researches in this country soon proved that the inoculation of many kinds of noxious matter might give rise to tubercle, and that there need not be anything special about the introduced starting point; and so tubercle has, perhaps, come to this, that it is merely a form of those common changes which are most conveniently grouped as inflammatory, with this addition, that the presence of a special structure impresses on it a special form. The tendency of inquiry seems to me to indicate that we must look to the anatomical condition of the bodily tissues, and especially to the abundance or special condition of the lymphatics in the lungs or throughout the body, to explain the hereditary nature of tubercle in certain cases, and also to account for those instances of general tuberculosis which formed the basis on which Bayle built up his hypothesis of phthisis.

But how in this whirl of controversy, in this endless assignment of names, and discussion, of what these names mean—how has the practical physician who had to treat phthisis found his practice changed? In some ways favourably, in others, as I conceive, unfavourably. The principal change in the treatment of phthisis has been the introduction of the supporting plan, based on the idea of tubercle being the indication of a weak, morbid nutritive condition. Cod-liver oil, practically unknown in my student days, reintroduced in this country (after long years of forget-

fulness) by Hughes Bennett, and tested by Charles Williams, has become an article of commerce on an enormous scale; good feeding in other respects, and exercise and pure air to improve the pulmonary circulation, are the main grounds on which many practitioners treat phthisis; so far, the effect of the view of phthisis to which I have referred has been most useful. But, in another aspect, I doubt whether we have not somewhat lost in the little attention paid until lately to the inflammatory conditions. Formerly there was a vast amount of local counter-irritation, and even local blood-letting, which certainly seemed to be very useful, and of measures used with the idea of removing exuded inflammatory products, such as the preparations of iodine and even mercury. There are many cases of phthisis which appear to be largely benefited by measures of this kind, or by a union of the two plans, and, in so far as the common notion of the peculiar specific nature of tubercle discouraged the use of anti-inflammatory measures in some cases, so far I conceive harm was done.

In two points late researches have, I think, influenced our view of looking at phthisis. In the first place, it has been shown how many cases of phthisis are caused by removable conditions: breathing of impure air, constrained positions, syphilis, &c., are now known to produce many cases of wasting lung disease; and as it is possible to prevent these, and thus to lessen the prevalence of phthisis, we have now a greater element of hope than formerly. On the contrary, the evidence of the so-called infective nature of phthisis—that is, the way in which it can originate in the lungs: from distant infected parts, the way in which it extends to adjoining parts, or, perhaps, to distant parts of the lung by absorption from a diseased lung centre, and thus returns and returns until fatal inroads are made on the organ or the system at large—the constant production, in fact, of fresh centres of spread—is a discouraging aspect. On the whole, the last thirty years have done much for the treatment of phthisis, but it is not all unmixed gain, and the amount of future progress is uncertain.

MATERIA MEDICA.

OPIUM CULTURE IN GERMANY.

* Mr. Julius Jobst states that the cultivation of the poppy for its opium is carried on to an important extent in Wurtemberg, and that the quality of the opium yielded is superior to the oriental product, containing from twelve to fifteen per cent. of morphia. During a tour in Asia Minor, in the winter of 1871, he became convinced that the climate of Wurtemberg is in every respect as well suited to the culture of opium as is that of Asia Minor, where, for example, it is regarded as a necessary condition to a good opium crop "that the poppy-field should be covered with snow during