

HOSPITAL CLINICS AND MEDICAL PROGRESS.

FATIGUE AS A CAUSE OF CONSUMPTION.

WRITING on the etiology of pulmonary tuberculosis, Dr. Burton-Fanning¹ draws attention afresh to the long time which may elapse between the reception of the infection and the manifestation of symptoms of such gravity as to suggest the existence of tuberculosis. It is usual, he says, for an indefinite length of time to elapse between the lodgment of the tubercle bacillus in the body and the manifestation of symptoms of consumption. In some cases nothing may have occurred to show, even in the light of subsequent events, that the patient was previously the subject of tuberculous deposit. In the larger number, however, we may elicit by questioning, clear evidence of the existence of tuberculosis prior to the date which the patient gives as that of the commencement of his illness.

Thus we may explain and reconcile the long-standing difference between pathologists and clinicians in regard to the infectivity of the disease. The clinical histories of many patients point to the fact, Dr. Burton-Fanning says, that early in their life the tubercle bacillus gained an entrance to their bodies. It then secreted itself in a lymphatic gland or portion of lung, and lay dormant for any number of years. Thus the individual who eventually develops pulmonary tuberculosis has usually been harbouring the virus of the malady for a number of years, and the definite onset of symptoms only marks his inability to hem in the bacillus any longer. According to this conception of the sequence of events, although, pathologically, the bacillus retains its place as the *causa causans* of the disease; clinically, the implantation of the infection fades away into bygone history, and assumes the position of the implantation of a "tendency," and so far as the existing condition is concerned, the exciting cause of the present malady has to be sought among those accidents which have allowed this "tendency" to manifest itself, or in more accurate language, have enabled the long dormant tuberculosis to burst its bounds and infect new areas of tissue. This is a view which, if thoughtfully worked out, must have far-reaching influence upon our practical dealing with patients, and especially with convalescents. It has long been considered that those who have been, as the saying is, "pulled down" by illness, overwork or exhausting influences are more particularly liable to be attacked by tuberculosis. They are, in modern parlance, "fit soil" for the growth of the bacillus, and we are all accustomed to insist that until the health of such patients becomes re-established, they shall be carefully protected from exposure to infection by tuberculosis. According to the view so ably reinforced by Dr. Burton-Fanning we must go much further than this. Accepting the statement that some 40 per cent. of the population have a more or less marked tuberculous deposit hidden away somewhere or another within them, we may at once assume that anyone who has in previous years shown any "delicacy" is likely to be one of this tuberculous host, and that in dealing with such a patient everything must be avoided which might bring this latent tuberculosis into activity. This brings us to a point which is more particularly

raised by Dr. Burton-Fanning, namely, the influence of overwork and anxiety in the etiology of consumption. Physical over-exertion he believes to be a most powerful determining cause of the breakdown of the system's limiting or protecting agencies against tuberculisation. In 10 per cent. of his cases he attributed the occurrence of manifest pulmonary tuberculosis to over-fatigue. Even a single excess in this respect may do the mischief; thus one of his patients was said never to have recovered from the exhaustion consequent on a whole day's bicycling in very hot weather and without previous preparation. Over-indulgence in tennis, dancing, climbing, and hunting have also seemed to be sufficient to bring into activity an unsuspected latent tuberculosis. In the management of convalescence from acknowledged tuberculosis, over-exertion is to be especially avoided. "Over and over again recrudescence of the malady has been brought about by a tiring journey, by too long a day of shopping or sight-seeing, by allowing the calls of family or society to interfere with the ordained hours of rest."

¹ Practitioner, March, 1902.

ENLARGED PROSTATE.

WITH the object of ascertaining what it really is that is removed in the operation of prostatectomy, in which, as is claimed by some, the whole prostate is enucleated "in its capsule," Mr. Cuthbert Wallace¹ has made a careful examination of many sections of various enlarged prostates. The points which he endeavours to determine are the nature of the pathological alteration in the organ, the nature and origin of the "capsule," and the relation which this bears to the normal sheath. To do this numerous specimens have been examined, and in all the same changes, though in different degree, have been found. It would seem that the first pathological change is an unequal growth of the glandular elements. The more rapidly-growing areas increase at the expense of the more slow-growing ones, which are compressed and stretched over the surface of their quickly-growing neighbour. By this process a capsule is formed, ill-defined at first, but later becoming very distinct. The adenomatous mass can now be easily enucleated, and not only presents a smooth surface, but also leaves behind a smooth-lined cavity. These adenomata are often, indeed usually, compound, and may occupy the whole space within the "capsule." What then is this capsule? In the normal state there certainly is no capsule comparable to that of the kidney, for the fibrous covering is intimately combined with the organ, and except for a small area on the rectal surface any attempt at separating it simply leads to tearing the prostatic tissue. There can be no doubt, Mr. Wallace says, that the capsule met with in the specimens examined is a structure which does not normally exist, and must therefore have been formed during the enlargement of the organ. The capsule is in fact an integral part of the gland, as is shown by the presence within its layers of normal prostatic tissue. What happens would seem to be that as the adenomata enlarge, the surrounding tissue, whether it be normal prostate or that which has undergone glandular hyperplasia, is stretched over the more rapidly growing part and at the same

time compressed, the result being that the glandular elements become less obvious, and the other elements become disposed in a laminated manner. Thus the "capsule" consists of the stretched and laminated prostatic tissue. The outcome of the whole investigation, which we may add appears to have been conducted in a most thorough manner, is that "there are no appearances presented by tumours removed from the prostate, and supposed to represent the whole organ, that cannot be accounted for equally well on the supposition that they are adenomata," and that the facts "seem to leave no reasonable doubt that the so-called total prostatotomy is nothing more than the removal of adenomatous masses."

¹ Brit. Med. Journ., March 29.

TYPHOIDETTE.

AMONG the many interesting matters dealt with by Professor Corfield in the Milroy Lectures we find reference to a question which urgently demands a solution, namely, the manner and extent to which persons habitually exposed to the infection of typhoid fever attain thereby immunity to the disease. It is easy to maintain that in a community constantly exposed to such infection a large proportion of the people are likely to have passed through attacks of the disease and thus to have become immune. But it may still further be suggested that they may have passed through attacks, not of true recognisable typhoid, but of a disease so modified as to be clinically as different from fully-developed enteric fever as varioloid is from small-pox, and may still have obtained thereby a considerable degree of immunity to the major malady. Dr. P. Lorain has said "Perhaps there is a *typhoidette* as there is a varioloid. There is no reason why one should not admit this hypothesis, but it is a hypothesis." Speaking of certain cases of so-called gastric disturbance, apparently not specific, but occurring alongside of other well-marked cases of typhoid in the course of an epidemic, Professor Brouardel says "That which Lorain considered as a hypothesis seems to me to-day absolutely proved, and I demand that one should admit in nosology this name of *typhoidette* which has the great advantage of recalling, more than the names actually used, the source from which some of these gastro-intestinal conditions originate." Professor Brouardel then asks whether these mild forms of infection afford a relative immunity from a fresh attack of the disease. "Does the *typhoidette* differ from typhoid fever as the varioloid does from variola?" He considers that it does so, and that to this cause we must attribute the relative immunity which the inhabitants of countries often visited by typhoid fever enjoy, and Professor Corfield adds, "this very fact has been observed among the Boers during the present war." The matter is one of much interest and importance, for this hypothesis suggests that while the sanitary improvements, on which all civilised countries are at the present time spending such vast sums of money, do undoubtedly diminish disease in the protected areas, they nevertheless may, perhaps, leave the people who are brought up among these improved conditions more liable to be attacked by fatal forms of filth diseases than those who from their birth onwards have been exposed to the various infections, which are bred in dirt.

THE TREATMENT OF INFANTILE PARALYSIS.

SPEAKING lately at the Polyclinic on the subject of infantile paralysis, Dr. James Taylor referred to the treatment of this condition, dividing it into two parts, namely, that which is required at the onset of the paralysis and that which is to be employed later on, when all that can be done is to attempt to restore the function of the paralysed parts. As to the treatment at the time of the attack, this must be on general lines, as if one had to do with a general fever, the great point being not to overlook the possibility of any case of illness in a child, in which high temperature is associated with pain in the limbs, being one of commencing infantile paralysis. It often happens that it is only on a child beginning to get about again after a febrile attack that the paralysis which explains the nature of the preceding fever is discovered. There is no specific drug to be recommended at this stage, although salicylate of soda naturally occurs to mind as a means of neutralising the poison to which the condition may be due, or of relieving the pain that may be present. Later on, massage and passive movements come first in importance so as to prevent contractures and to favour the nutrition of the muscles. Then comes electricity; but, important as this is, it is far less important than massage. Its object is to produce a contraction in those muscles which no longer respond to voluntary efforts. It is, indeed, a mode of giving exercise to these muscles. The constant current is the form to employ, and it is very important to make the child well accustomed to the apparatus and the contact of the poles before any current is turned on, so as to avoid all fright and screaming. If one can produce a visible contraction of the paralysed muscles that is enough, but even though no visible contraction may occur, if one is sure that a good current is passing through the muscles one may be pretty confident that they are responding so far as they are capable of so doing, which is the great point. Thus, although the treatment falls into very small compass, it is important that it should be fully and carefully carried out.

SURGICAL TREATMENT OF GALL-STONES.

A RECENT meeting of the Royal Medical and Chirurgical Society was engaged in a discussion on the surgical treatment of obstruction in the common bile duct caused by concretions. Mr. Mayo Robson communicated a paper on this subject in which he showed that in one out of every five or six cases in which it was necessary to operate for cholelithiasis the common bile duct had to be attacked. In 10 cases he had been able to manipulate the concretions back into the gall bladder and then remove them by cholecystotomy, and in 30 cases he had crushed them in the common duct. The latter method, however, was only suitable for soft stones, and for cases in which it was plainly possible to get rid of the fragments produced. In other cases choledochotomy was he thought the only operation on which reliance should be placed. By the improved methods now employed it was possible to complete the operation in 30 to 40 minutes. He regarded hæmorrhage and shock as the most important causes of death in these operations. He showed, however, that in his hands with increasing experience the mortality attending