ance, but function. Limb injuries represented 70 per cent. of all casualties, and the tendency to regard limb surgery as a kind of minor job safely to be left in inexperienced hands should be resisted.

Although there were on the platform ten young medical men who have returned from medical service in Spain on the evacuation of foreign personnel by the Republican Government, time could only be found for four of them to speak, but many questions were asked afterwards, the point of special interest being the blood transfusion service.

NEUROSES IN WAR-TIME LECTURES AT THE TAVISTOCK CLINIC

The third and fourth of the lectures in the series at the Tavistock Clinic on the general subject of neuroses in war-time, with special reference to the civilian population, were given on January 19, both of them by Dr. H. CRICHTON-MILLER, the first being on "Conversion Hysteria" and the second on "Anxiety States."

Conversion Hysteria

In his first lecture Dr. Crichton-Miller said that the problem to be discussed was to get individuals to adapt themselves to completely unfamiliar and extremely exacting conditions in the environment. It was generally assumed that the martial type of personality was capable of such adaptation, while the martial misfit should never be called upon to do anything unsafe. Modern war conditions had changed this idea to a great extent, with the probable exposure of the civilian population to attack by the enemy. The question was how far the civilian population would stand up to the demands upon its moral resistance.

Proceeding to discuss the individual's temperament and his emotional control and development, he mentioned various types, as, for example, the feeling type as opposed to the rational type, and the conceptual type as opposed to the perceptual. The Australian and New Zealand soldiers in the last war were excellent examples of the perceptual type, realists to the *n*th degree, unappalled by the prospects of pain and suffering, and extremely valuable men to the army. On the other hand the conceptual type, as illustrated by the Latin races, tended to collapse more quickly owing to the capacity for imagining and visualizing what had not yet happened. The great lesson to be learned from the study of temperamental adjustment and maladjustment was the careful pre-selection of those who were to be sent into the danger zones.

With regard to the emotional status of the individual, there were many who were well balanced emotionally and well fitted to meet excessive demands upon their adaptation, but who for transitory reasons were maladjusted. Different emotional states could influence the reaction of an individual to the demand for control. The degree of instability which was attributable to temperamental causes as opposed to that which was due to transitory toxic or other somatic causes must be ascertained, because there was a difference between the manner in which each set of cases should be treated.

In all war cases, whether relating to the civilian or the military population, the question of exhaustion had to be taken into consideration, particularly as it reinforced two great somatic factors, toxaemia and air concussion. Septic tonsils or other septic conditions and a certain amount of dysentery were very common in the trenches in addition to exhaustion; also, a very large number of men were affected in a much greater degree by air concussion as a result of their exhaustion. He hoped that during the next war some blood sugar observations might be made in such cases, because the effect of emotional exhaustion as opposed to the effect of toxicity or air concussion could

be understood and interpreted in terms of blood sugar much better to-day than twenty years ago.

The individual's emotional development was a very important subject for consideration and brought in the analytical point of view at once. The emotional pattern of childhood was likely to make a difference to every reaction, not merely in war but in peace. Unfortunately the world was not ready to realize that emotional fixation and bondage in early years was apt to be a millstone around the neck of the individual in adult life, and public opinion was not ready to allow those questions to be put which would enable an assessment to be made whether an individual was likely to react normally with self-control and self-discipline to the demands of war.

In a democracy lip service was paid to intelligence, but it was not realized that intelligence was not as important as emotional control. The people who had reached self-discipline were not necessarily the same as those who were well-disciplined in the external sense. In any army the show troops were those who had an adolescent personality in the ranks, individuals completely "condition-reflexed" to command, who could be relied on to behave in a solid way for so long as they were a solid body. That was totally different from the individual whose self-discipline and control over his emotional life were independent to a great extent of social support and whose initiative and capacity to think rationally were as nearly as possible unconditioned by the situation in which he found himself.

One final word upon this background related to the question of experience. In war, when men first underwent shelling they reacted pretty badly, but subsequently there was a great improvement. This would apply to the civilian population; the worst results might be expected on the first air bombardment, but later an improvement might be hoped for. In all normal reactions of the individual to any form of threat or menace the results were apt to be thought of in terms of concussion, trauma, fear, and so long as this was so only part of the picture was seen, because the picture with which he was going to be confronted was a much more complex one, one in which far more than the resultant effect would be notably present. Purposive reactions would become established and superimpose themselves upon the first and immediate biological reaction of fear. The "fight or flight mechanism" which belonged originally to the biological personality might be traced afterwards right up to the pensions board. Here was the man in the trenches reacting violently to the first explosion, and then passing through casualty clearing station, base hospital, and so on, until he reached home, during which pilgrimage his reaction became less and less somatic and more and more complex, until finally it was extremely human and purposive. The reactions which followed upon the first experience of biological fear tended to become those significant of escape from a future fear. The orientation of the individual gradually altered from its domination by the fear which was perceptual at the moment to the fear that was conceptual and future.

Passing to a consideration of shell shock, Dr. Crichton-Miller said that most medical officers up to the armistice had a routine disposal of these cases, some of them concentrating on the organic side and some on the manifestations, some being actuated by sympathy and others by severity. The war provided many thousands of cases in which physical factors coincided with fear resulting from war conditions. Many of the men had septic teeth or tonsils or other conditions which were intensified by life at the front. They were all afraid; most of them knew it, but not all; some admitted it, but some did not; and all of them wanted to get home, some of them trying to do so deliberately but most of them unconsciously. It was always easy to recognize the fear and treat it according to one's outlook, but it never was or would be easy to evaluate the measure in which the symptoms arose for defence purposes.

A medical officer giving a diagnosis of war neurosis might be asked the following questions: "How far do you suppose that a defence mechanism comes into this case, (a) conscious, (b) unconscious? How far do you suppose air concussion, cerebral concussion, or burial has been experienced?" That was going to be very important, because nearly all the cases of shell shock claimed to have been buried, and it was necessary to establish as an objective fact how far burial had happened and how far it had not. Other questions would relate to toxic factors, and to the extent the man was considered constitutionally incapable of rendering adequate service. The medical officer might also be asked to advise on disposal, a serious problem in dealing with the civilian population, where probably the medical officer would not have much choice, though he might ask himself whether a particular neurotic should be recommended for rest with isolation, rest with distraction, or rest with occupation; whether he needed the services of medical, surgical, or psychiatric experts; whether a given patient should be evacuated to a safe region, or a given air warden be reclassified or discharged. Perhaps these possibilities could not be set out in more exact terms, but at the same time doctors should know their own minds for the sake of clear thinking.

Dr. Crichton-Miller concluded with some remarks on anxiety neurosis, hysteria, and neurasthenia in shell-shock cases.

Anxiety States

In his second lecture Dr. Crichton-Miller dealt with anxiety states. Anxiety, he said, could be described as an emotional condition the only expression of which was given through the autonomic nervous system, whereby trembling, blushing, sweating, and palpitation were produced. When a patient complained of tremor one registered whether the tremors were fine, in which case they suggested hyperthyroidism or anxiety; or gross, in which case there was a purposive element involved, the central nervous system and not the autonomic was at work, and a hysterical subject would probably be found. But there were a very large number of cases in which both pictures existed. A thoroughly frightened person might have had his symptoms from the beginning tinged with a hysterical element, or a person who had begun with a state of pure anxiety might pass to a hysterical condition. An example of this might be cited in the case of a man in the war who had been blown up and had his arm broken. At the dressing station his arm would be set, he would be made comfortable, and the anxiety symptoms would pass off. But later at the base hospital, when the surgeon suggested that he would soon be ready to return to the trenches, the functional symptoms would reappear, more purposively than when the event happened, and be directed to a conceptual danger, to the possibility of re-experiencing danger, instead of being the result of a danger already experienced.

Most doctors during the war were able to recognize the deliberate consciously purposeful tremor of the malingerer as opposed to the unconsciously purposive tremor of the hysteric, and as distinct from the resultant and non-purposive tremor of the anxiety state. If one thought in terms of tremor one could get the three pictures.

The first step in differentiating the malingerer from the hysteric was the history. The hysteric gave himself away every time in the way he told his story, the dramatic exaggeration was so naïve. The malingerer did not do that. He gave his history much more guardedly. With the hysteric there was a stronger environmental factor than with the anxiety case, but in both of them psychotherapy ought to be successful. Dr. Crichton-Miller analysed the processes by asking any of his audience to imagine that they had been exposed to a high explosive, emerging with a thick head and a fine tremor in their limbs. Their first emotion would be one of self-pity, and gradually the thought would form in their minds, were

they going to be sent back into the area of danger? Their line of thought might well be, "If the medical officer realizes how rotten I feel he will not send me back. If he notices this tremor he will not send me back. Let me, then, see that this tremor does not go unnoticed." Thus the hysteria began. The point at which the resultant anxiety symptom became exploited for the hysterical purpose of the limelight was the point at which the medical man must go right down on his diagnosis with a fine razor edge.

What was the therapeutic problem for the anxiety case? The first thing the anxiety case needed was security. Dr. Crichton-Miller had no sympathy for the school which believed that with a sufficient use of the court-martial 95 per cent. of the cases could be returned to the trenches within ten days. The case must in the first place be treated with security, reassurance, and protection. Neither theoretically nor from his experience of civilian work could he get away from that. Much more could be done for such cases if there were time and opportunity. It might be that the transforming experience could be given them of discovering that their fear reactions under highexplosive shelling were based upon and conditioned by a pattern that they acquired when they were 5 years old. If one had the opportunity to do it, the probability was that a man who had been an anxiety case could be sent back to the danger zone prepared really to see the thing out. But there were not enough enlightened people to do this work for the thousands of patients who would be thrown on their hands in the event of war, and they must do the best that circumstances would permit.

The civilian patient, assuming that he was more or less "passenger," could be disposed of with a lighter heart. If it was an anxiety case, let him be sent to a situation of rest and safety. If a hysterical tendency had already been manifested the situation was not so simple. The reactions of the civil population would be most important during the first air raid. It was important to spread far and wide the idea that other civilians had gone through this same thing, and that it was possible to get used even to this hellish manifestation of warfare upon harmless civilians. After the first onset of fear there were compensation phenomena, and the important thing was to give such people a sense of responsibility. The degree to which responsibility could be distributed in the essential services and the manner in which people were to be allowed, within reasonable limits, to use their own initiative when in danger was a major problem. The more freedom and activity that was given to the individual in any given job, the better; the more a man was made immobile and dependent on superior orders, the more chance was there for anxiety to develop. Pre-selection of the individual for his job was a primary need. He felt that members of the medical profession were to be congratulated in that in such an emergency they would have plenty to do. Work at the dressing station was not a situation in which anxiety was likely to develop. In this connexion he made a reference to "battle dreams." In the last war one of the things most indicative of recovery in this class of case was the cessation of battle dreams. The battle dream represented not only biological but social fear; it represented what the anxiety case was striving to repress all the time, and if the man could be got to put his feelings into words, even to a nursing sister, the mere effect of talking it out was a great help. With the free expression of the fears of the anxiety patient much was accomplished towards the removal of those inhibitions which had so disastrous an effect upon his mind and behaviour.

In response to a Parliamentary question the French Minister of Public Health has recently issued the statement that there are as many as 4,388 persons of foreign nationality housed in French mental hospitals. This list is headed by 1,116 Italians, 982 Poles, 546 Russians, 352 Spaniards, and 243 Belgians. There are only sixty-four British subjects on this list.