revulsion of feeling. The terrible picture presented by the acute sufferer appealed most forcibly to the finer sentiments of all, and an excess of sympathy and indulgence followed quickly. The patients were nursed with the tenderest care, surrounded with luxury, and considered in every way. Nerve tonics and sedatives were freely given, and when the milder cases improved somewhat, these patients were sent on sick leave to their friends, who said: "He is very low spirited; we must have a few people in and a merry evening to cheer him up. He wants a little stimulant, whisky or wine. We will take him for a motor ride. He shall go and stay with So-and-So at X (a large town, low-lying and relaxing), and be taken to the theatres and cinemas." All bad for the patient! So he did not improve, and a relapse frequently followed.

Now the treatment which has been found most efficacious is very different. The patients with acute symptoms are kept in bed, but made to get out and walk a few steps every day, when able, and are transferred to the Neurasthenic Hospital for special treatment as soon as possible. In the meantime, if sleepless, they are given medicinal, trional, or bromide and chloral at night. Absolute quiet and fresh air (verandah life if weather permits) are essential, and no stimulants can be allowed. These acute cases are mostly treated at the base, at Netley, and in the special nerve hospitals of the command. I have seen patients, however, who have been kept in bed for weeks and weeks, petted and favoured in every way, who made no effort to help themselves, and consequently made no progress whatever. These were speedily moved to other surroundings, for treatment elsewhere.

The milder cases with tremors and those with hysterical or pithiatric, and mild hystero-epileptic symptoms improve under bromide and valerian, nux vomica, arsenic, and other nerve tonics, but environment and habits of life play an even more important part than drugs. Convinced of this I drew up last November the following "rules of health" for these patients, to be specially applicable to those in the sectional, auxiliary, V.A.D. and Red Cross hospitals, and to convalescents on sick leave. These were approved by the Deputy Director of Medical Services and issued.

Rules of Health to be Observed by Shell Shock and Neurasthenic Patients.

1. Live as much as possible in the open air by day and night. Always have a window open at night.
2. Exercise both of body and mind is essential, but it must be carefully regulated and never taken to exhaustion. When the legs tire, sit down. When the head swims or aches and you cannot collect your thoughts, put the book down.
3. Avoid crowded rooms, cinemas, and theatres. Excitement and close rooms are harmful.
4. Avoid all alcoholic stimulants; they are most injurious in shell shock cases, as also is the excessive indulgence in tobacco, especially in the form of the cigarette.
5. Keep early hours. To bed before 10 p.m.
6. Let the meals be regular and the dietary simple, liberal, and highly nutritious. Rest for an hour to an hour and a half after the midday meal.
7. Avoid cold baths until you can get the afterglow. Prolonged hot baths are enervating. Tepid are best.
8. Electricity and massage are of no use, except for wasted muscles or stiffness of joints.*
9. Exercise self-control to re-establish self-confidence by re-education, recognizing all the time that your condition is one which should result in complete recovery.
10. When on leave and your movements are under your own control: (a) Be in the country rather than in a town. (b) Avoid all worry, noise, and excitement, all raided areas, proximity to training camps, and the jar of explosives and gunfire. (c) Never travel by train, motor car, or tram if you can avoid it. (d) Stay at a high altitude where the air is bracing in preference to a low level, where it is generally relaxing. This does not apply to bracing seaside resorts.

Carefully controlled employment of mind and body is most necessary to expedite recovery and divert the patient's thoughts. He must be out of doors whenever the weather permits, engaged in gardening, wood-cutting, and outdoor sports and games, and, when indoors, in workshops, and in taking part in the various amusements of home life. Clear, bracing air is very important. A number of our neurasthenic officers who were not doing at all well in a palatial low-lying residence were moved to a castle at a higher altitude a few miles away, and they improved at

* This rule requires qualification. It means electricity and massage in unskilled hands, and not in those of the skilled physician, to whom electricity is most useful in demonstrating to the patient that his muscles will act if he has confidence and will make the effort.

once. Patients moved from large towns to bracing seaside resorts have made similar progress.

For the severe neuralgic headaches we give aspirin and phenacetin, and, to those who have been in Mesopotamia and Salonica, quinine. The man who stammers needs re-education. I tell him to read aloud to himself for half an hour, morning and afternoon; then to read to one or two of his fellow-patients, one of whom, if possible, should have had the same trouble and got the better of it. Treatment of functional paralyses and hysterical symptoms by hypnosis and psychotherapy has given excellent results with a high percentage of permanent cures. Psychotherapy is the chief method of treatment adopted at the Neurasthenic Hospital, Maghull. It embraces suggestion, persuasion, therapeutic conversations, re-education, and exercise of the functionally paralysed limbs. The physician, as it were, masters the patient, gains his entire confidence, analyses his troubles and morbid ideas, and sets his mind at rest.

A Special Neurasthenic Invaliding Board under the Ministry of Pensions deals with shell-shock cases, and most difficult are these patients to adjudicate upon, for many will recover completely when they are once out of the army, and have lost all fear of ever again being in the fighting line. It is doubtful whether any of the many I have examined in this command will be fit for active service in the fighting line during this campaign, but I believe nearly all will ultimately recover, and many of them are brave fellows (there are V.C.s among them) who have given of their best in the service of their country.

WAR PSYCHOSES OCCURRING IN CASES WITH A DEFINITE HISTORY OF SHELL SHOCK.

BY

MAJOR R. EAGER, R.A.M.C.,

MEDICAL OFFICER IN CHARGE, MENTAL DIVISION, THE LORD DERBY WAR HOSPITAL; SENIOR ASSISTANT MEDICAL OFFICER, THE DEVON COUNTY ASYLUM.

The opinions here expressed have been formed from the examination of over 4,000 cases of soldiers admitted to the Mental Division of the Lord Derby War Hospital from the Expeditionary Forces. The symptoms have been all quoted from personal records and observations on cases where the history showed definite proof of actual close proximity to shell explosion.

The following were by far the commonest: Amnesia, melancholia, mental confusion, delusions, and hallucinatory disturbances. The condition of stupor was also met with, but was not so common as the aforementioned, and in some instances the sequence of events showed that cases which had been admitted to hospital originally as definite cases of "shell shock" have subsequently passed into a neurasthenic condition, which again has not improved, but drifted into states closely resembling dementia praecox. Retardation of thought was a pronounced symptom in the majority of cases; mutism and deafness were also met with. Associated with the above symptoms were headache, insomnia, terrifying dreams, general nervousness, and varying strange sensations in the head. As regards the physical signs, the deep reflexes were always very much increased, tremors were present almost universally in the tongue and outstretched hands, and the pupils were generally dilated. Frequently patients complained of throbbing sensations in the precordia, clamminess of the skin, and appeared before one as highly strung and emotional.

Amnesia.

This, in my experience, is by far the most common symptom; the cases that have come under my review have covered periods of very varying duration. I will give a few of the very many instances:

CASE I.

Pte. L., admitted with the history that after leaving the trenches he had absented himself from his unit, and when found could not state where he had been or what he had done with his belt or bayonet. He appeared generally strange, and on this account was evacuated to England as a mental case. The period of absence in this case seems to have been only a few hours, but on recovery from his accompanying mental symptoms in this hospital he sternly denied that he had any recollection of what happened or where he had been during

this time, and excused himself on the grounds that he had been recently subjected to a very heavy bombardment and felt "done up" when he left the trenches owing to loss of sleep.

CASE II.

Gnr. P. was serving the gun when he was knocked over by the recoil. Shells were bursting around him and he was carried to the dressing station. He remembers nothing till he found himself on a hospital ship coming to England. Documents accompanying the case showed that upon August 18th, 1916, he was found wandering away from his unit, and as he did not reach England until August 21st, it is certain that his period of amnesia must have lasted over two days at any rate, and perhaps longer. He could recall nothing from the time he went to the dressing station till he was on the boat.

CASE III.

Pte. H. was admitted to a casualty clearing station on September 17th, 1916, with a report that he had been buried by a shell. He could give no information about himself in the various hospitals he had passed through, and was eventually admitted to the Lord Derby War Hospital on October 4th as unimproved. Upon recovery, which was gradual and indefinite, he stated that he recollected something happening in the shape of a shock to his head when in the trenches, but nothing more. He did not remember going into hospital, and until October 12th did not seem to be able to remember anything.

Many other instances could be quoted, but it is thought that the above typical instances will suffice.

Melancholia.

All grades of this condition were met with and were often associated with active suicidal promptings. I quote the following as examples:

CASE IV.

Pte. D. was admitted to hospital in France in July, 1916, as a case of shell shock, for which he was sent down to the base; after being a week there he was returned up the line again as an officer's servant. After having been again under bombardment in the trenches he became strange in his manner, and the officer to whom he was servant noticed that he was very depressed. He was again admitted to hospital on this account on August 19th of the same year, and eventually transferred to the Lord Derby War Hospital, where his most prominent symptoms on admission were those of melancholia and complaints of great pains in the head.

CASE V.

Gnr. C. had been three months under considerable trench and shell experience when he noticed that he was unable to sleep at night and felt "queer." He carried on for another four weeks, when he mentioned it to his corporal, but asked him to say nothing to the doctor. Two months later he was reported sick owing to the fact that he was quite unable to do his duty and had refused anything to eat or drink for several days, and would not answer questions. He was admitted to hospital, where he was found to have several sticks of cordite in his pocket. He was evacuated down the line, where he is described as being in a depressed mental condition, seldom saying anything more than "Yes" or "No," and eventually admitted to the Lord Derby War Hospital in much the same condition, presenting all the features of melancholia.

CASE VI.

Pte. F., on July 1st, 1916, when in a dug-out, was hit on the head by shrapnel splinters. He was admitted to hospital, apparently with superficial wounds, and remained there ten days. He was then discharged to convalescent camp; whilst there, he felt his head bad, and was eventually found walking about with an open razor in his hand in a dull, depressed condition. He was evacuated to England, and admitted in the middle of September to the Lord Derby War Hospital, showing still a good deal of depression, and answering all questions in a melancholic voice. He said he felt worried about what he had seen in the trenches, and this kept him awake at night. He was in a typical melancholic condition.

Confusional States.

The symptoms under this heading varied from general muddled feelings in the head to a complete disorientation of time and place, and attacks of complete amnesia.

CASE VII.

Pte. R. was knocked out by shell explosion at Albert on July 12th, 1916, and appears to have been buried also. He was evacuated to the base, and was admitted to the Lord Derby War Hospital early in August, when he presented a dull, heavy, far-away look, with general confusion of thought, and difficulty in concentrating his attention. He stopped in the middle of replies to questions, as if muddled and unable to express what he wanted to say. He complained of a dizziness in the head, as well as severe occipital and vertex headache, and also of buzzing in the ears. He often repeated the last word in reply to questions—for example, asked when he went to France for the second time, he said, "May, 1916, 16, 16, 16." His mentation generally was slow, and there was considerable difficulty in obtaining

from him any history of his experiences. He said, in fact, that he "could not think," but that he had been all right until the shell came.

CASE VIII.

Pte. M. was buried by shell about the middle of August, 1916; he tried to carry on, but was noticed acting strangely. He was brought before his R.M.O. on this account on September 5th and evacuated to the base. He was eventually admitted to the Lord Derby War Hospital in the middle of September in a very confused condition, completely disorientated in time and place, and apparently thinking that he was still in France. Otherwise, in answering most questions he was sensible, and could give a good account of his experiences prior to being buried. His memory for recent events, however, was very defective.

CASE IX.

Spr. J. He describes two shells dropping about the end of June, 1916, one on each side of him, in a front line trench. He said he had the sensation as if his head were off, and he felt very much shocked but did not lose consciousness. He returned to his billet, and the next morning complained of pains in his head and a shivering feeling all over him. On this account he was evacuated to the base. He was admitted to the Lord Derby War Hospital on August 25th complaining of severe pain in his head, especially at night, which prevented him from sleeping, that he had a muddled feeling in his head, and could not concentrate his mind on anything. There was some degree of melancholia also, but the prevailing symptoms were those of confusion and inability to give any details of his illness, associated with extreme nervousness, amounting even to fear when spoken to:

Delusional States.

All forms of delusion were met with, some taking even the grandiose type, which, associated with the tremors and markedly increased deep reflexes, led to the erroneous diagnosis of general paralysis in a few instances. The commonest delusions met with, however, were of the persecutory type. The three following examples will suffice:

CASE X.

Pte. D., at the end of April, 1916, after having been ten months on and off in the trenches and subjected to heavy bombardments, complained of pains in his head and noises in his ears. During the night he began roaming about, and was sent sick to a field ambulance. He was described as being, when there, in a dazed condition; he was thought to be suffering from severe nervous exhaustion, and was passed down the line. He was eventually evacuated to England and admitted to the Lord Derby War Hospital, where it was elicited that, in addition to other symptoms, he had the idea that the hospital was mined, was apprehensive that some commotion was going on outside the building, and stated that he often heard the sound of rifles going off.

CASE XI.

Another man thought the men of his regiment were plotting against him and were trying to get him into trouble, that they sneered at him and made insulting signs at him, that they talked outside his billet and called him filthy names.

CASE XII.

A third man seemed to think that he had done something wrong and that other people thought that he had committed some crime for which he was going to be shot.

Instances in which the patient had the idea that he was being looked upon as a German spy were so common that they deserve mentioning on this ground alone.

Hallucinatory States.

Both aural and visual hallucinations were met with, but the former were more common. The following are cited as examples in which the hallucinations were the predominant feature.

CASE XIII.

Pte. D., after service in the Dardanelles, where he contracted dysentery and was invalided back to England, rejoined his regiment and was sent to France. There he was subjected to very heavy bombardment in the trenches, and said that he absolutely could not stand it and had to put his fingers in his ears—it so frightened him. He was sent from his regiment to a field ambulance towards the end of April, 1916, complaining of pains in the head and noises in the ears, and on examination was found to be in a very lost mental condition. He was evacuated to the base and subsequently transferred to England and admitted to the Lord Derby War Hospital, where he was found to have passed through an attack of complete amnesia. He described a heavy bombardment going on and that the next thing he was aware of was finding himself in hospital. He was very depressed and acutely hallucinated, saying that he heard "the voice of God" reprimanding him for his past misdeeds. This condition remain fixed, and he subsequently developed the delusions that his bed was affected by electricity and that he was the subject of magnetism. This condition still persisted after eighteen months' residence.

CASE XIV.

Another man who was found wandering from his unit after heavy bombardment was admitted to hospital in a dull, listless, and apathetic condition. On admission to the Lord Derby War Hospital he stated that he had distinctly seen a vision of his mother whilst he had been in bed at night. There was also a period of complete amnesia in this case from the time he was found wandering till shortly before his admission to this hospital, covering a period of about twelve days.

Many of the symptoms above quoted were, of course, associated in the same case, and the following *précis* of the history and progress of such cases will now help further as illustrations:

CASE XV.

Pte. H., aged 23, gave no history of any nervous or mental trouble in his family. He left school, aged 13, Standard VI, and assisted his father, a furniture dealer, in which work he was occupied at the outbreak of war. He had had no illnesses of any importance up to the time of his enlistment in November, 1915. He went to France in April, 1916, and was in the Somme advance. He was admitted to hospital in France as a case of "shell shock" in August, 1916. He complained of very severe headache, and was unable to give his number, name, or regiment. The day after his admission he was found wandering along the road about half a mile away from hospital in a confused condition. He was returned to the hospital and kept for a further period under observation, during which time some suspicion was aroused as to his being a malingerer. It was finally decided, however, that he was "weak-minded," and he was evacuated to England as a case of "dementia."

When admitted to the Lord Derby War Hospital in the first week of September, 1916, he complained of "feeling funny in his head," and that he could not sleep at night owing to the thoughts of his experiences in France. He was unable to give a clear account of how he reached hospital, but had some hazy recollection of being in a base hospital in France. The last thing he recollected clearly, however, was being with a machine-gun section in the trenches. No hallucinations could be elicited, and although he was somewhat slow in his reply to questions he showed no signs of being a mental defective. Physical examination revealed no wounds or signs of injury and no stigmata of degeneration. No marked neurological signs were present. The case progressed satisfactorily under treatment; he regained his full memory for both recent and remote events, and on November 21st, 1916, was sufficiently well to justify his being discharged from hospital to duty for home service.

CASE XVI.

Gnr. G., aged 22. No nervous or mental trouble could be traced in the family. He left school, aged 13, Standard ex-VII, and started work as a cabinet maker, which trade he worked at up to the time of his enlistment. He had had no previous illnesses and was a teetotaler. He joined the army in July, 1915, and went to France the following month. On August 9th, 1916, about 2 p.m., he asked a lance-corporal of the Military Foot Police if he could assist him in getting to England; as he appeared strange in his manner he was detained by the police and taken to hospital. Here he is described as "an idiot," and could not account for how he got there. He said that "Flo came to him yesterday and told him to go home." He was eventually evacuated to the base and transferred to England.

When admitted to the Lord Derby War Hospital, early in September, 1916, he appeared quite rational, but stated that he did not know what had happened to him, and thought he had had shell shock, but that he now felt quite fit except for occasional feelings of nervousness. He remembered going to sleep in a cellar near the firing line when some shelling was going on in the neighbourhood, but could recall nothing more till he "woke up" and found himself coming over to England. Before this he had on one or two occasions felt as if a rifle had gone off between his two ears, which had startled him very much and made him very dizzy. He had had no leave since he had been in France, and had felt considerably exhausted. Intellectually he was well up to the average standard, and his memory, apart from the above described period of amnesia, was quite good, and his power of retention unaffected. Physically he presented fine tremors of his outstretched hands, but no other marked neurological signs. He progressed satisfactorily, and on October 3rd, 1916, was considered fit to be discharged to duty for home service.

CASE XVII.

Cpl. B., aged 23, gave no family history of any nervous or mental trouble. Was up to the average standard at school, and employed helping his father as a confectioner up to the time of his enlistment. He went to France about July, 1916; in August he was blown up by shell and evacuated to England and admitted to the medical division of the Lord Derby War Hospital as a case of "shell shock." He was discharged to duty in May, 1917. On his arrival at his unit he appears to have been considered unfit for duty and immediately sent to hospital again. While under treatment there he appears to have been subject to attacks of excitement, during which he was described as a danger to bystanders, and it was on this account that he was sent back to the Lord Derby War Hospital on September 17th, 1917, and admitted to the mental division.

He was a somewhat pale, apprehensive-looking youth, who replied to all questions in a whisper. He stated that he had been dumb for several months, and that his voice had returned

of its own accord, though never more audible than it was then. He said he could not sleep owing to noises in his head, and he appeared to be in a very highly strung, nervous condition and easily upset. He admitted having attacks in which he had lost his self-control, and said that at times he seemed to have lost consciousness. At the time of examination no evidence could be obtained of visual or auditory hallucinations. He stated that during his attacks of excitement he seemed to visualize that he was out in the trenches fighting again. Physical examination revealed tremors in the upper extremity, increased deep reflexes and somewhat dilated pupils, which, however, were active to light and accommodation. On laryngeal examination no evidence of any paralysis could be found, and the aphonia was considered to be purely functional.

After three weeks' active treatment by suggestion his voice returned to normal for the first time for twelve months, and he said he slept better and felt improved in every way. The improvement was maintained, his tremors passed off, and on August 29th, 1917, he was discharged from hospital to his home to resume his former occupation.

CASE XVIII.

Pte. J. gave no history of any nervous or mental trouble in the family. He left school at the age of 15, well up to the average standard, and had since been employed in clerical work. He had also devoted a good deal of time to gymnastics, besides being an assistant scoutmaster two years and a half prior to enlistment. He joined the army in August, 1914, and went to France in 1915. Towards the end of June, 1916, up to which time he had been subjected to considerable shell and trench experience, he was reported as strange, and wandering about aimlessly, frequently speaking of spies, and wishing to search for them. It was on this account that he was admitted to hospital, where he is described as being in a continuous state of tremor, and to walk about like an old man. He asked to be allowed to make an expedition into the woods to find spies he knew to be hiding there. He was evacuated to the base, and transferred to England. When admitted to the Lord Derby Hospital about the middle of July, 1916, he was conscious, and aware of his position and surroundings, but stated that he could not recall leaving the trenches; that during the whole of his passage through the different hospitals he seems to have been in a confused condition, and not able to explain himself. He still felt that he had not the same control over himself as formerly, but said that he was feeling better and stronger. He had a difficulty in concentrating his attention, and when people were talking to him he often found that he had to ask them what they were saying; his mind was continually wandering to the sights he had seen in the trenches; on one or two occasions he had found himself crying, and did not know what he was crying for. The apex beat was heaving, and the heart sounds were very much accentuated. He complained of a throbbing sensation over the precordia. There were marked tremors in the tongue and upper extremity, and the deep reflexes were all increased; the pupils were dilated, though normal in reaction. The case progressed favourably, and on November 18th, 1916, he was well enough to be returned to duty for home service.

Many more cases could be quoted, but the above seem to be fairly characteristic examples. Before concluding I should like to emphasize the present-day importance of the differential diagnosis between all shell-shock cases and general paralysis of the insane. I have met with quite a number of cases in which the latter was diagnosed as shell shock, and vice versa, and have been particularly struck with the remarkable similarity of symptoms in many cases. In quite a number in which there was a definite history of being blown up by shell patients have presented confusional states with considerable loss of memory associated with tremors of tongue, facial muscles, tremors in the outstretched hands, increased deep reflexes, syllabic stumbling in the speech, and even delusions of grandeur. Careful examination of the pupil reactions, together with ophthalmoscopic examination of the fundi and Wassermann reaction of the blood and cerebro-spinal fluid, however, has corroborated or negated the diagnosis.

I have seen a few remarkable cases in which shell shock and general paralysis were associated in the same patient.*

Hyperthyroidism is another condition which requires to be carefully excluded in the diagnosis of "shell shock."

In reviewing the family histories of cases it was found that the number in which there was definite admission of any nervous or mental trouble in the patient's family history was comparatively small. On going through the histories of fifteen cases, one showed that the patient's maternal cousin and maternal grandmother had been inmates of an asylum; another that his paternal uncle had

* Since recording these opinions a summary of Dr. Ramsay Hunt's observations whilst employed in the routine neurological examination of 1,500 men in an American officers' training camp has been published in the *Medical Review* of March, 1918, to which I must refer the reader.

been in an asylum; a third that his brother was a ne'er-do-well, and that his mother died of a "stroke"; and in a fourth case the patient's mother was a doubtful epileptic. In the remaining eleven cases the family was free from nervous or mental trouble. In dealing with the question, however, one has a feeling that these histories are by no means always reliable, and in dealing with men coming from all parts of the world it is impossible to corroborate them.

In conclusion, I should like to state my agreement with other writers on the subject that the predisposing causes of these conditions has no doubt been "fear." The fear of being afraid is now commonly recognized as a very important factor in the production of all functional conditions, but want of sleep, cold, wet, and the appalling sights at the front have all no doubt contributed their share to the climax which has been brought about by the shell explosion, when each individual reacts to emotions according to his personality.

THE EARLY STAGE OF HYSTERIA.

BY

CAPTAIN M. GULPIN, M.B., F.R.C.S.,
R.A.M.C. (TEMP.).

For three years I have been interested in the diagnosis of functional nervous disorders, and I have observed certain facts which seem to me of fundamental importance.

Three classes come up for consideration:

A. The *malingeringer*, who has determined to attain a definite end by the simulation of disease. This is not a large group and does not call for special attention here.

B. The man who goes sick with *feigned* or *exaggerated* symptoms without any more definite object in view than, say, to avoid a route march or an unpleasant fatigue. A patient of this class at the time when he reports sick may be suffering from that feeling of tiredness which at times comes to all of us, and which is called by the French soldier "*le cafard*." This word was rendered into English by an official interpreter as "the hump." "To swing the lead" is a well-known phrase, and, like all successful slang, expresses a *nuance* which no other set of words conveys. It is of nautical origin, and when used by a soldier signifies "to plumb the stream of consciousness of the medical officer." The man who "swings it" is not a pure malingeringer and has not set out deliberately to carry a deception through to an end; he is only "trying it on," and if he fails he returns to duty with but a small grievance against his medical officer.

C. The *hysteric*, who differs from the members of Groups A and B in that he has a belief in the reality of his disability. In addition to this belief there may be other manifestations showing that the disability is associated with a change in the personality of the patient.

Between these three groups, members of which when typical are easily distinguished, intermediate and doubtful cases occur, and although in theory Groups B and C should be quite distinct, yet I have seen many cases in which I could not make the distinction.

Of cases falling within Group B numberless examples are admitted to hospital with the most varied diagnoses—"cerebro-spinal fever," "appendicitis," "peritonitis," "laryngitis," "tabes," "internal derangement of the knee," "pleurisy," "myalgia," "rheumatism," "gastritis," "D.A.H.," etc., have all within my knowledge been credited to patients who were suffering only from "*le cafard*," and the men have gone back to duty after a single interview, satisfied to be given the chance of escape from a false position without undue loss of self-respect.

The importance of Group C is realized by few. With the single exception described below, I have never watched the development of hysteria *ab initio*, nor apart from so-called "shell shock" can I find such a case described in the literature; nor have I met a medical man who has watched a case from the beginning. Neurologists, as such, never see one until it is fully developed. So far every case of hysteria I have seen in the army, again excluding examples of "shell shock," had been diagnosed and treated as organic disease. This, with the fact that I have seen from its origin only a single example of hysteria, though I have been watching for cases for three years, explains why

we never find them described. The officer who is able to diagnose and describe such a case never allows it to progress.

In my wards a man recovering from a wound has always been encouraged to use his limbs as soon as possible, but many patients are seen in whom a hysterical paralysis or contracture has followed a more or less trivial injury.

The history of my one case is as follows: A soldier sustained a fall and was admitted to hospital with a bruise over the ilium. He complained of severe pains, increased by pressing apart the iliac spines. I suspected a fracture of the pelvis, put on a tight binder, and had the bones radiographed. Then he began to complain of pains down one leg, where I found alterations in sensibility and a loss of power which puzzled me considerably, I being for the time off my guard. Ten days later the foot on the affected side began to assume a varus position, which I recognized as hysterical. Energetic treatment removed all the manifestations. He returned to duty, and was seen by me some months later, when he was quite fit. Looking back upon this case, I have no doubt that if I had applied those tests for superficial hyperaesthesia which I have described in a previous article,¹ I should have found that the original pains were largely of mental (psychical) origin, and I should have missed a valuable but unintentional experiment.

I have returned to duty scores of men diagnosed as "myalgia," "synovitis," "arthritis," and what not, whose symptoms I have proved to my own satisfaction to be not of organic origin. "What can be the result if such patients are solemnly treated as if they were suffering from real disease? The answer is given in the introduction by Colonel Aldren Turner, C.B., to the translation of *Les Psychoneuroses de Guerre*, by Roussy and Lhermitte, where he writes, "It is not exceptional to find paralyses and contractures preceded by more or less vague pains in the joints of limbs which have been bruised."

The conclusion is forced upon me that Group C is largely derived from Group B; in other words, the "lead-swinger" diagnosed as suffering from organic disease becomes, frequently at any rate, a hysteric.

This conception, which makes the phenomenon of disability precede the hysteria, is a reversal of that usually held; but it is based upon observations which have been inaccessible to pure neurologists. The only investigations I have been able to discover upon early cases were those carried out by Babinski and his co-workers, and they resulted in the overthrow of the classical description of hysteria, and the relegation of stigmata into the background.² If we go still nearer the fountain-head, and work for a while in the duty room of a home hospital to which the local sick are brought, a series of cases will be found there in which all manner of paraesthesias can be elicited and demonstrated.

It is often possible before examining a patient of this class to prophesy what the findings will be. Thus, in a patient who knows his complaint is diagnosed "arthritis of the knee" one can practically always demonstrate "pain" to pressure upon the adductor tubercle when this is approached by the examining hand from above downwards; a light touch with the point of a pin will be said to be painful over an area corresponding to the adductor tubercle, and similar reactions may perhaps be obtained over the head of the fibula. The reason for this is, as I believe, that the patient does not know what are the symptoms of the disease, and therefore watches for what the examining doctor is seeking, and takes care that the doctor is not disappointed.

When I first saw the patient whose case is related above I searched for evidence of pain on separating the iliac crests, and naturally therefore I found it; but when at a later date I examined the leg my mind was open as to what I might find, with the result that I only succeeded in puzzling myself. Had I examined for a stocking anaesthesia I might, and probably would, have found it.

In another case I looked only for the ordinary symptoms of a chronic appendicitis, found them, and removed the appendix. Disability persisting for a long time, I looked for extraordinary and absurd symptoms, found them, and returned the man to duty.

It is not uncommon to prick a "weak" or "paralysed" upper extremity and see the patient flinch. Then, if one asks the question, "Did you feel that?" he answers "No,"