

WAR NEUROSES.

150 CASES IN H. M. NAVY.

Thesis presented for the degree of M.D.

by

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I N T R O D U C T I O N .

As Temporary Surgeon Lieutenant during the War, I spent the year 1918 at an Auxiliary Naval Hospital, which during that time was practically given over to the treatment of Neuro-psychological cases occurring in N.C.O.s and men of the Navy. Of all such patients, who were treated in this hospital, I have chosen 150 of those who were under my care, and it is from notes on these cases taken at the time, that I propose to discuss the causation, types, duration and treatment of War Neuroses in the Navy.

The men received in this hospital never came to it direct from their ships, but were sent on from one or other of the main base hospitals in England or Scotland. This was a disadvantage in some ways, as one did not see them on their first admission to treatment, but an advantage in that patients were admitted from many and varied fields of action, and from every class of ship - battleship, destroyer, submarine, "Q" Boat, down to Armed Trawler doing convoy work. The men were from all denominations of the war-time service - Regular Service ratings and/

and "Hostilities Only", Royal Fleet Reserve, R.N.R., R.N.V.R.. R.N.D.. R.N.A.S.. R.N. Reserve Trawlers, Royal Marine Submarine Miners, and Merchant Marine Reserve.

A feature noticeable was the relatively small percentage of Regular Service men received. This is perhaps explainable from the fact that many of these men were recruited before the war, when medical examination of recruits could afford greater discrimination, and they, along with those R.S. men joining during the war for terms of years longer in all probability than hostilities were expected to last, demonstrated thereby their willing choice of sea-life in fighting ships as their vocation. One would expect them therefore to be both mentally and physically robust, unfavourable material for the development of psycho-neuroses. In contra distinction the greatest number treated were amongst those called up late in the war by conscription. Towards the end of 1917 and during 1918, the National Recruiting Boards were, I believe, authorised to encourage the men of best physique among them forthcoming to join the Army, on account of the relatively harder physical work to be endured. Anyway at this time many men of/

of poor physique and stamina entered the Naval Service. As the cry then was for more and more men, it was inevitable that many passed their medical examination, who would not have done so in normal times. Most of the men of this category, that I came across as hospital patients, were not from the labouring and artisan classes, but men in small ways of business, shop-assistants and clerks.

Had the war been a short one, these men would not have been combatants of their own free will, therefore one can state with truth that war-service was not attractive to them - a very important factor in their ultimate breakdown. These men, by reason of their civilian callings, their more advanced education and town-dwelling habits, develop a more individualistic frame of mind, and appear to have for that reason, greater difficulty in submerging their private feelings and becoming a mere unit in the fighting forces, whereas raw recruits doing and not thinking is the chief desideratum. Hence it follows, should the work be found uncongenial the individual will soon rebel against it. Refusal being out of the question, the mind is thrown back upon itself and becomes an excellent breeding place for a psychic state incompatible with active service.

Definition of Terms used.

Both before and during the war such cases were entered by Naval Medical Officers under the heading Neurasthenia. When during hostilities greater facilities for the study and differentiation of functional nervous disorders was available, the general term "Neurasthenia" persisted in its wide sense, chiefly as it simplified the various periodical paper medical returns. This to the Neurologist however was unsatisfactory as so many cases not of true Neurasthenia were grouped under that heading. Neurasthenia as a term thereby lost its true significance as a type of neuro-psychological disorder and was debased to being merely an umbrella-term for many functional nervous conditions.

It will be opportune here, therefore, to give some of the most generally accepted definitions of terms used in the study of the War Neuroses.

McCurdy's definition of war-neuroses is that,

"they are those functional nervous conditions arising in soldiers, which are immediately determined by the conditions of modern warfare, and have a symptomatology whose content is directly related to war."

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This equally applies to sailors. He then employs a simple classification of two headings - "Anxiety States" and "Conversion Hysterias". The former is practically similar to Neurasthenia in its true sense of which Dejerine's definition is as follows.-

"Neurasthenia is constituted by the ensemble of phenomena which results from the non-adaptation of the individual to a continuous emotive cause, and struggle of the individual for this adaptation."

The term "Anxiety States" however gives shelter to those cases, which, although scarcely constituting a true Neurosis, show the effects of a marked anxiety strain in incapacitating the individual.

"Conversion hysterias" McCurdy defines as "Neuroses in which there is an alteration or dissociation of consciousness regarding some physical function." The term is used he says as "an idea is carried over into a physical symptom."

Babinski's definition of Hysteria is worth quoting.- "Hysteria is a pathological state manifested by symptoms, which it is possible to reproduce by suggestion in certain subjects with a perfect exactitude, and which are susceptible of disappearing under the influence of persuasion."

Very common are those cases conforming neither wholly to one or other type, but in which both an anxiety state and an hysteria are combined.

I N C I D E N C E.

It was commonly observed during the war by Neurologists working in the Army Hospitals, that anxiety states were found to occur chiefly among officers and the higher ranks of men. I had not the opportunity of observing any Naval Officer, but of the men under my care, those who had developed the most marked anxiety states were very frequently higher ratings with considerable responsibilities, as Chief Petty Officers, Chief Electricians, and advanced ratings in other specialized branches.

They did not however develop the symptoms - the wish for death - described in the literature as frequently occurring in officers. This fact doubtless being due to the responsibilities being relatively less heavy, their ideals acquired from training and education less exacting, the need for personal leadership absent. But in contradistinction to the Army, where/

where officers were the chief sufferers from Anxiety States, and privates the subjects most often of hysterical manifestations; in the Navy on the other hand among all lower-deck ratings the proportion of anxiety states was much greater than that of hysterias.

My explanation of this difference in the Services is that a sailor in any class of warship was not subjected to nearly so many sea-fights as a soldier in the Army was to land battles. Therefore there were fewer occasions for bombardments, explosions, shell-wounds, bloodshed and such like precipitating causes of a conversion hysteria in a man whose adaptation was breaking down. The opportunity of gratifying the conscious or unconscious desire for an incapacitating disablement was less frequently offered.

It commonly occurs also in a Naval fight when a ship is blown up, that nearly all the ship's complement are lost, as happened in the case of several ships in the Jutland Battle. Therefore to speak crudely there is less opportunity for the development of an hysterical functional disorder in the Navy than the Army.

The sailor, however, in a ship doing much sea-time has to endure prolonged strain from dangers both above/
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above and below water, and incidental to the fickleness of the sea itself. Even in harbour - behind the lines - the strain is not wholly relaxed, as beyond routine duties the forced inactivity of life on board ship in harbour does not often provide that change of surroundings and mental occupation, which act as invaluable mental tonics.

In 150 cases of War Neuroses, only 25 were cases of Hysterias, the remainder being all Anxiety States.

Notes on Mentality in respect to Warfare.

The ideal requirements for a man taking part in active hostilities are good bodily health and mental stability. By the latter I mean a mind healthily free from introspection, phobias and adaptable to new conditions. It is most important in every case examined to enquire diligently into the personal history. The ascertaining of previous nervous breakdowns is an extremely important point, as the subject who has once given way to a Neurosis is the more likely to give way again. All history of psychic abnormalities or neurotic tendencies are important - the various phobias, as fear of the dark, fear of the water, /

water, fear of great speed, fear of thunder storms, uneasiness in a dense throng of people, or overcrowded badly ventilated room. In a ship at sea a common fear in a man who has begun to worry is the dread of going down below to the lower flats for any time.

Much information is gained by questioning the patient concerning his childhood; whether he was subject to nightmares, or any of the fears mentioned above; whether he was happy at school, socially inclined or preferred to keep to himself, was shy or introspective. Sociability is an excellent quality. A good "grouse" on the mess-deck acts as an outlet for pent-up feelings. The man who hugs his troubles to himself is storing up poison for his own undoing.

One should enquire regarding a patient's sex adaptation in adult life; whether he is shy of the other sex, is married or not. Marriage often helps to cure the neurotic tendencies of some men, in others it makes no improvement. Any neurotic tendency in regard to sex belongs more to the commonest class of peace time neuroses, but is important here also, as the man with such a tendency is more apt to succumb to a War Neurosis.

Men/

Men more easily affected by street accidents than the majority, or unduly sensitive to suffering and pain, have more to repress in warfare and consequently greater difficulties of adaptation.

McCurdy in his "Psychology of War" points out that a civilian becoming a belligerent undergoes a "sublimation" of his inherited and acquired ideas, as regards repugnance in doing harm to others, and inhibiting his instincts of self-preservation, aided by the hope of forwarding the cause of the party he belongs to, is capable of enduring greater personal sacrifices, fatigues, thinking less of himself, and even face death easier, than he was able in times of peace. As a type of man whose adaptation to warfare was relatively simple, one can take the R.S. rating, having excluded abnormalities in mental make-up, who has joined before the war. He is inured to the ways of the sea and ships, and prolonged subjection to discipline has schooled his mind to place reliance in those above him, to take his orders and execute them without questioning.

Among those, who entered for the war, most were entirely ignorant of sea-life, unaccustomed to discipline, /

discipline, and in civilian life used to much greater individual freedom and self-assertion. They had therefore for their adaptation more to repress. Those of them mentally normal soon adapted themselves to active service requirements, and had every chance of retaining that adaptation, provided not subjected to an exceptional stress of adverse circumstances, under which even the soundest disposition may give way. While those with abnormal tendencies would have a more arduous task in repressing their feelings, and find their adaptation more difficult to acquire and retain. When a neurosis starts, the greater repression there has been, the quicker and more severe is its course. It must be noted, however, that many with neurotic tendencies acknowledge improvement in their wellbeing from the training in depots and methodical life in a ship. It is specially in those cases, where the reaction is not in the proper direction, that the possibilities of a neurosis developing are great.

Causes tending to produce a Neurosis, and how they act.

The principal factors influencing the production of Neuroses in warfare are Fatigue, shock, and hereditary and acquired neurotic tendencies.

Fatigue.

This sign is present to a greater or less degree in every psychoneurosis. There is both physical and mental fatigue, but of the two the mental is by far the most important. It is induced by a multiplicity of influences. These are the prolonged strain on the mind of sea-going, often worse in the night-watches as in squadrons of ships steering without lights; of waiting for an action with the enemy. In some cases there is the mental fatigue of having to perform uncongenial work. Other adverse environmental influences add to the strain - being unhappy with ones messmates, or under the orders of a superior antagonistic to the individual's temperament. Once the mind starts to worry, influence after influence may tack itself on.

Fear is one of the most potent influences; the very repression of it giving it twofold effect in producing/

producing mental fatigue.

All these things try the strength of a man's adaptation to warfare, and where that is not strong and the influences continue, a psychoneurosis will develop sooner or later.

Often subconsciously at first, then with full consciousness the individual becomes aware of his difficulties. He recognises he is losing his adaptation and begins to think much more of himself.

Almost everyone makes a struggle to overcome these feelings. The feelings and the resistance to them greatly augment the fatigue. An ominous sign is the encroachment on a man's sleep by his mental worries. Bad dreams of his occupation and dangers appear. Cumulative fatigue of this sort is in itself capable of producing an Anxiety State or Neurasthenic condition. Very commonly other factors precipitate its occurrence. A good example of such progressive fatigue is seen in the effect that is produced on a man's mind - gunlayer, helmsman or outlook - by doing months on end in a destroyer convoying, where he has with only short breaks to be constantly on the alert. Mental worry once started gradually encroaches on the man's/

man's sleep, thereby denying even his physical fatigue a respite. Then either spontaneously or by some external accident, such as a collision in the dark, the breaking point of his mental endurance may be reached and the man incapacitated for a time from further activities.

Physical fatigue is produced by frequency of watches at sea, rough weather, and want of sleep. Physical disabilities also aggravate both mental and physical fatigue.

Shock.

For simplification shock may be divided under two headings, emotional and commotional shock.

Emotional shock is the type which chiefly concerns us here. It is produced by the sudden subjection of the individual to some terrifying sight, a participation in some disaster.

The most usual examples of such in the Navy were seeing ships blown up at close quarters, many men drowning, seeing men blown to pieces round one by enemy shell fire, being torpedoed or mined and the ship/

ship sinking, or being in a ship in collision, or in action.

The strain placed on the individual's mind at such a time is excessive. Here in the space of a few seconds or minutes may be realised the thoughts, which previously he has successfully or unsuccessfully inhibited, according to whether his adaptation was weakened or not.

Emotional shock may of itself cause unconsciousness. This phenomenon, Mott says, "can only be explained by a sudden fall of blood pressure, by arrest of function of the vaso-motor centre."

Such a shock happening to a man already entered on the prodromal stages of a psychoneurosis is often the culminating point for his breakdown: contrariwise it may form the starting point.

Commotional shock. "Commotion is a transmitted concussion" - Leri. It is produced by a fall on or being struck on the head, in which case it is direct commotion. This happens when a man falls on his head in the sea, or hits his head on the deck, after being blown up, or is struck on the head by shell/

shell or deck splinters.

An important addition to the above forms of causation is commotion by "windage", where a shell explodes in the close vicinity of the man with or without wounding him.

Indirect commotion is where the concussion is transmitted primarily from other parts of the body. Cases in which there is cerebral contusion form a different class, for here besides a generalized commotion there is a more localized and grosser injury to some part of the brain, producing probably definite impairment of function in that part of the body which it governs.

In very severe commotional shock unconsciousness may be quickly followed by death, due probably to inhibition of the respiratory and cardiac mechanisms. In cases of the kind that recover signs of organic nervous disease are usually not made out on clinical examination.

It is almost certain, however, that commotional shock does produce organic changes. In cases which have died, Mott in the B.M.J. Nov. 10th, 1917, has described microscopical intracranial haemorrhages and oedema.

Besides/

Besides the frequency of unconsciousness after commotional shock, such cases afterwards nearly always display marked muscular tremors of a coarse type.

In all the cases, which I had an opportunity of examining, and in which from the history commotional shock had occurred, muscular tremors were present.

It is impossible to state that cases have been purely the subjects of commotional shock, as there will have been almost certainly a co-incidental emotional shock. In these mixed cases of emotional and commotional shock, the latter of itself invariably augments the severity of the symptoms produced.

The unconsciousness from emotional shock is usually quicker and more fully recovered from, than that after shock by concussion, where partial recovery with relapses are commonly seen, and the patient partially conscious is very difficult to arouse. In the latter form, amnesia, low mental tension and delirium are common.

Hysterical disablements are frequently the resultants of an emotional shock. For instance the man to whom his task has become distasteful, consciously or unconsciously looks for a means of escape, and by auto-suggestion/

auto-suggestion acquires some disablement, that may have been present to his previous thoughts, or has one suggested to him by the immediate effects say of an explosion.

In the production of hysterical mutism and deafness it may be true, as those who favour a more physical instrumentality assert, that the derangements are primarily brought about by a temporary cortical sensory dissociation of the centres of speech and hearing, then followed by a prolongation of the disorder by means of auto-suggestion.

Hysterical manifestations are also often grafted on to the paralyses due to concussion and due to lesions of peripheral nerves in the form of prolongation of the symptoms after organic repair, and the production of various contractures.

In the paralysis due to local nerve lesions, an hysterical emotivity may superadd over-extensive areas of anaesthesia, analgesia or hyperaesthesia. The form of distribution usually gives an indication of hysterical origin, i.e. stocking and gauntlet anaesthesias.

Hereditary and Acquired Neurotic Tendencies.

These may be stated to be the most important predisposing causes towards a neurosis.

In a majority of cases examined the discovery was made either of an inherited nervous disposition, or of an acquired one, or, where the patient's history appeared fairly normal, of a neuropathic temperament as shown in the family history. Possessed of such a handicap, a man is weakened in his assistance to the abnormal strain of war, and predisposed to react abnormally when subjected to shock, and strain.

Various stigmata of a nervous disposition were mentioned under notes on mentality. An acquired nervous disposition may have been produced by excessive worries, drink, sexual abuse and excessive smoking. In the family histories with neurotic taint, the following manifestations were found: "Nerves" or "Nervous Breakdowns", "fainting fits", insanity, epilepsy, chorea, suicide, enuresis, and pronounced irritability of temper. As regards the prevalence of epilepsy, from statistics from different countries it is put by Aldren Turner and Grainger Stewart as 2 in/

in every 1000 of the population.

From a patient's description it is very difficult to decide whether "fainting fits" are epileptic or hysterical. I had a few men who stated, that they themselves had had "fainting fits" in childhood, but of these none had epileptic fits occurring in the war.

Men with a history of previous mental breakdowns are markedly predisposed to develop a Neurosis in war-time, as are also mental defectives.

Previous head injuries appear to form a predisposing factor. I had three such cases, who developed Anxiety States.

Symptoms and Signs noticed in Anxiety States and cases
showing Hysterical manifestations.

Fatigability which played so important a role in the production of the Neurosis, is a marked feature of an anxiety state. Bodily weakness is usually very evident. When first admitted to hospital the patient generally shows no inclination for any form of bodily activity, preferring to sit still or lie on his bed. When encouraged to some mild form of activity he rapidly becomes exhausted. Those in the stages of recovery are surprised at their lack of energy and weakness.

After an initial period of rest I distinguished two types of cases, - those in whom the bodily lethargy persisted, though to a diminishing degree, engrossed in a morbid introspective survey of the ego - and those in whom bodily restlessness became apparent. Cases of the latter type were fidgetty, quickly tiring of being in one place or doing one thing. Their very fatigability seemed to increase their restlessness and discontent, as was natural comparing their present state with previous health.

In both types of cases, the mind is never at rest.

Sleeplessness was a feature almost constantly present, except in the Hysterical cases, who sleep well, excluding the Heart Neuroses.

The patient complains of great difficulty in getting to sleep, and sleeps only for a short time and in snatches.

Bad dreams are almost invariable accompaniments of these brief periods of sleep. In the more severe cases nightmare is common, from which the patient awakens suddenly with a start or with a cry, and in terror. These dreams almost exclusively deal with the war-time occupation of the man. He feels himself out at sea, acting under the most adverse circumstances in dangerous exploits and quite incapable of effective retaliation. The torpedoed sailor relives the terrifying experience of his ship being blown up.

This occupational type of dream is exactly similar to the occupational dreams of peace time, where the mind, daily absorbed in one subject, revisualises in sleep its chief interest.

Some patients also experience day dreams, and hallucinations of war just before going to sleep, where they say they remain aware of their unreality but/

but unable to inhibit them. In these the powers of reason, the cumulative experience of the brain stored up in cells, have not been suspended as they are in sleep.

All these cases sleep very lightly, and are extremely sensitive to external and internal stimuli to awaken them, such as externally lights and noises, and internally harassing dreams. The worry of their diurnal brooding over anxieties prevents a deep sleep, where probably dreams are non-existent, and bodily and mental rest renewed, so that in a vicious circle light sleep with disturbing dreams is their nightly portion, the dreams by their nature causing night the time for rest to be apprehended with fear.

This is explanatory of the fact that mild cases, and those where the most severe symptoms have passed, invariably complain of having slept little and poorly. A fact which is often contrary to the reports of the hospital night staff. The reason being that they have benefitted very little by their repose. Such cases feel dull and heavy in the morning, improve a little in the middle of the day, then by evening with the addition of another day's mental worry, feel tired, depressed and apprehensive of another night's poor rest.

The Countenance in these Anxiety States is very expressive; worry and depression are marked thereon. Very frequently there is considerable pallor of the skin. Some wear an apathetic expression, the eyes dark ringed, whose gaze seems as if turned in on the gloomy thoughts of the mind. The mouth droops. It would tax the ingenuity of our best comedians to make these men smile. The bearing of the man is dejected; he stands limp and weak-looking, and walks with bent shoulders. I have drawn the picture for a severe case, but it is more or less descriptive of any of the anxiety cases.

Headache is an almost invariable complaint. As regards situation, one gets every possible kind of description, but pain behind the eyes was perhaps the commonest. Sometimes the pain affecting the head also "shoots down the spine". As regards daily incidence, it is often present in the morning or soon after waking, less frequent in the middle of the day, and usually progressively bad in the evening. These headaches are often very severe, the patient visibly suffering greatly.

Cerebration in many is often slowed. The patient speaks slowly in a dull monotonous voice. Others, specially with a marked neurotic previous history, show an excess of mental activity.

Poor Memory in severe cases is frequently complained of, both for the remote and immediate past. Remembering dates and days of the week often shows the patient to have some confusion. They are emotional and often lachrymose. There is loss of concentration and common interest. The patients however are easily excitable and show a lack of self-control. These patients never, until improved in condition, evinced any desire to read a book or a newspaper, and took no interest whatever in the fortunes of war. I had one patient who having decided to write a letter, wondered some time afterwards if he had written it, and once sent his wife a sheet of notepaper with no writing on it. There was no history of concussion in his case.

Their thoughts are almost purely introspective, and many seem to harbour a personal grievance against the service, the government or the country, evidently thinking they had been badly done by.

Another point, worth noticing, was how little interest/

interest these patients took in any home news, and those who could have their relatives visit them, showed little pleasure anticipating their arrival or in seeing them.

I found in some cases a tendency to a weakening of the moral character - the performance of mean little acts, such as telling lies and evading duties. Granted these may not have had the highest moral standards previously, yet they seemed to impose less restraint upon themselves in regard to such actions.

Invariably a great disinclination, even dread, is shown of returning to sea.

Many cases complain of frequent nocturnal emissions, by which they are distressed. This they look upon as a sign of great bodily weakness, and are quite devoid of any erotic feeling. Syphilophobia was present in one case, who gave an indefinite history of venereal disease.

Tremors and Tics are very common, and also

Hypersensitiveness to stimuli.

All the cases showing anxiety states were very jumpy, starting at sudden noises, as doors banging
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or objects being dropped, or at the carrying of a light into a room at night. One patient requested to be put into a ward where the night nurse with her light would not come on her nightly rounds, as it always gave him such a start when awake.

Those especially, who had been the subjects of torpedoeing and similar accidents, showed this jumpiness. In severe cases, especially those where besides emotional shock there has probably been some commotio cerebri, bodily tremors were very frequently present. The patient may be very shaky and unable to stand still, but holds on to something, the rail of his bed or a chair. When sitting his heels keep tapping on the floor.

Some show marked tremor of the legs, exerting much muscular energy without effect to keep them still. Generally these tremors are absent when in bed, but in a few cases persist and cause the whole bed to shake.

Motor tics, as carrying the hand up to the side of the head, as if to shut out some noise, are common, also twitching of the eyelids. Facial twitchings are frequently seen, such as raising of the eyebrows, flickering of the eyelids, screwing up the nose, and twisting/

twisting of the mouth. The face depicts the aspect of one on experiencing a sudden fright. The facial contortions occur mostly when the patient is being spoken to. A pseudo-intention tremor was noted in some cases.

The skin sometimes is very hyper-sensitive to touch. In a few cases on making a physical examination, say of the chest, when touching lightly on percussing, the patient jumped away. Muscular twitchings could be seen beneath the skin.

In the majority of cases I examined, the Blood Pressure was low, pulse easily compressible, and frequently a little accelerated. Cyanosis of the hands was very common, often accompanied by a clammy sweating.

The Reflexes were variable, changeable and never conforming to any one type found in disease. In those patients who were tremulous a pseudo-ankle-clonus was frequently easy to elicit. The plantar reflex was sometimes flexor and at other times absent, or flexor in one foot and absent in the other. Knee jerks were usually exaggerated but not invariably. Demonstration of/
of/

of the knee-jerk in Neurasthenic cases is often impeded by an inability of the patient to allow the limb to become relaxed. Many patients become quite excited when the patella tendon is tapped, and jump up, pushing the chair backwards, and breathing fast and deeply. The superficial reflexes were usually obtainable: the abdominal and epigastric often markedly exaggerated. Very commonly the patient had some vertigo, and as often slight apparent incoordination of the hands due mostly to shaking.

Tremors of the fingers were commonly present and exacerbated by the patient being made conscious of them on being examined.

Neurasthenic patients seem particularly susceptible to suggestion during physical examination, the mere act of complying with the examiner's request, say of holding out the hands, provoking a greater unsteadiness than that which is present when the patient's attention is not drawn to it. The tremor in Hysterical cases is as a rule coarser than that found in a pure case of Neurasthenia.

The Appetite in the initial stages was always very poor, the patient often refusing his meals and slowly/

slowly losing weight. Some bad cases of Anxiety States showed great distaste for food, and when coaxed to eat a little custard or milk, would often vomit it almost immediately. This nervous irritability of the stomach was due, I think, to the mental state of the patient, having convinced himself, that he could not eat anything, and therefore hysterical in origin.

On the other hand, in that class of restless patient, which I described, in convalescence the appetite was often voracious. In a few their hunger was insatiable; though this was perhaps relative, being at a time when rationing was very strict, and the daily ration per man by no means bulky.

In patients the subjects purely of hysterical manifestations, the signs and symptoms were much simpler, as all their peculiarities, so to speak, were condensed in one functional derangement.

Among those admitted were cases of hysterical mutism and aphonia, hysterical paralysis of one or both legs or an arm, hysterical wry-neck, curvature of the spine and gastritis, and hysterical fits.

On/

On the whole these patients enjoy a much more cheerful disposition during their incapacitation, and are largely free from introspection, sleeplessness and headaches, and other worries common to the Anxiety State. They share in common however the great disinclination of returning to sea.

An interesting point in their mentality being the absolutely convinced frame of mind they assume that the (paralysed) part is incapable of voluntary movement. Nor do they seem to be greatly concerned at the loss of its usefulness.

Malingering.

To decide of the genuine character of a Neurosis often presents great difficulty. In a Hospital there is more leisure, but in a ship the immediate decision often required of the Naval Surgeon either commits the man to severe punishment or results in his being sent ashore for treatment. Malingerers prefer to simulate the condition of Neurasthenia, rather than ape the disabilities of an hysteria. In the latter form blindness in one eye or deafness are/

are the favourites. Nothing being discovered to account for the disablement the physician must use his ingenuity to exclude malingering if suspected.

When the symptoms of Neurasthenia are complained of and suspicions aroused of malingering, careful enquiry as to its onset and course are necessary. The malingerer, unlike the Neurasthenic, is very cautious and dislikes to tell his story. For there are few men such skilful actors, or sufficiently well informed, to play the part well. The facial expression too of the Neurasthenic would be very difficult to simulate.

Notes on Heart Neuroses.

In a few cases, along with the Anxiety Symptoms, symptoms related to the heart were complained of. Usually in such cases, the Anxiety Symptoms were not very severe. Judging by the history sheets in some, the Surgeon on board the man's ship has hesitated whether to label the man Neurasthenia or "Disordered Action of the Heart".

The symptoms complained of appertaining to the heart were, palpitation, dizziness and shortness of/

of breath. Physical examination however revealed no indications of valvular disease, or noticeable increase in the cardiac dullness. The pulse rate was noted as being more rapid than usual.

To decide in such cases, whether they be neurotic and really hysterical in character, or toxic, or whether they are produced by changes in the myocardium, or in the ductless glands, presents great difficulty. The fact that one sees in peace time cases, who after emotional shock, show abnormalities of the Thyroid gland and heart's action, with low blood pressure, probably due to adrenalin insufficiency, seems to indicate that a large percentage of these "D.A.H." cases are properly speaking organic in type.

But some I think are purely neurotic. A man in a moment of great fear may notice the violent beating of his heart, and subsequently focus his thoughts on the idea of his having some heart trouble, fear of which may produce the symptoms. The condition may therefore be produced by autosuggestion and be hysterical.

Any prolonged history of short windedness, rather tends to favour the assumption of an organic causation.

I made such cases with cardiac symptoms perform a simple exercise test. With upstretched arms, bending and straightening himself rapidly from the waist 10 to 15 times, he then ran along a corridor and back. If the increased pulse rate from exertion did not fall to or near the initial rate after a rest of from 2 to 3 minutes, but fell very slowly, then I judged the case probably due to some organic abnormality.

The pulse rate in Neurasthenia is very commonly accelerated. This was consistently found to be the case in those where an organic causation was probable. The rate at rest varied from 90 - 100 per minute in different cases.

The Thyroid.

In four cases out of the 150 there was increase in size of the Thyroid gland, accompanied in one by slight prominence of the eyes. This man had his attention called to this point by his relatives, although he had never been aware of it himself. These cases had all been subjected to considerable emotional shock. The actual causation of the changes in the gland do not yet seem to have been explained.

Treatment and Prognosis.

On admission to hospital, before commencing definite treatment of the psychic symptoms, it is well to decide by the degree of fatigability of the patient, whether a short period of complete rest in bed would not be beneficial to him. In severe cases this is usually a sound course to adopt, acquainting the patient of the reason of his staying in bed - namely to rest. The period is better short than long, say from 4 - 6 days. Otherwise the very fact of staying in bed will encourage the patient to believe in his condition being a serious one.

In a pronounced case of "anxiety" with jumpiness and tremors, putting the patient in a room by himself is often useful - in fact following out a modified form of Weir-Mitchell treatment.

Next comes the most important point for the proper treatment of Anxiety States - a complete understanding between patient and physician. To gain the patient's confidence is imperative, and infinite patience is required of the physician in charge of the case. He must show sympathy towards the patient himself /

himself; but beyond ascertaining the actual symptoms complained of, not put stress upon them, as being in any way peculiar to the man concerned.

To follow out the strict routine of a Naval Hospital with such cases is disadvantageous. It all reminds the patient of a life, for which he has temporarily lost all liking. The ways of the hospital should be as like those of a civilian hospital as possible.

A certain amount of routine, as in making ward visits, etc., is of course necessary, but each patient for a complete understanding of his case must be seen privately, and again at subsequent periods as occasion arises.

In examining a patient it is best to begin by learning his history both past and present. Then pass on to a rapid survey of his physical condition to exclude organic causes. And if such organs as the heart, or any the patient shows concern about are normal, it is no waste of time to tell him so.

Then begin the principal part in the treatment, making the patient understand as much as possible the causation of his present malady, showing him the progressive/

progressive stages he has passed to arrive at a breakdown. An intelligent man will perceive the course of mental events, and is naturally easier to deal with, and responds to treatment quicker. Suggestion is the potent factor employed. Reasons for the patient's incapacitation and sure prognostication of his recovery are suggested to the patient's mind. It is surprising how much mental energy is required of the suggestor in this process, and how tiring it may be. I have noticed this fact both in others and in myself. When terrifying dreams are the chief complaint, dream analysis is useful; pointing out the association of dreams with occupation and emotional shocks.

I have from time to time seen cases of Conversion Hysterias, on whom hypnotism had been practised. The results at the time may be very gratifying, but on the whole the concensus of opinion seems against its employment. It tends to produce in the patient's mind a belief in a magic cure, and the chances of relapse seem greater than when cure is effected by simpler measures, understood by the patient himself. In cases of functional paralysis of an arm or a leg, every/

every effort should be made to make the patient use the limb himself. He should not be kept in bed, and crutches, sticks, removed the earliest possible. The lower limbs seem more commonly affected than the upper. In a monoplegia of the lower extremities, the spastic type is the commonest. In paraplegia both spastic and flaccid occur. In spastic cases passive movements are employed to overcome all resistance, and demonstrate to the patient that there is no joint impairment. Then passive and active together, the passive becoming less and less, until the patient's attention is called to the fact that any movement is being produced by himself. Progressive treatment of this kind is usually sufficient to effect a cure.

In the flaccid cases, the patient may really require to be re-educated in the use of his limbs or limb. If examined lying down, say in a case of functional flaccid paraplegia of the lower extremities, some muscular contractions during the passive movements can usually be seen, and are generally more apparent when the patient drags himself along on crutches.

Cases of functional paralyses occurring in war-time are usually fairly easy to cure, as the motivation for/

for the disability is a simple one, an unconscious protective measure to make the subject incapable of active service. We now come to the treatment of Hysterical Aphonia, Mutism and Stammering.

Stammering occurs chiefly in people with a neuro-pathic inheritance, and often started in the war in men, recovering from mutism and aphonia, but in the cases I witnessed was not usually so severe or obstinate as stammering occurring in children.

The act of stammering is produced by an incoordination of the laryngeal and oral mechanism of speech. It usually occurs at the beginning of a word, but may happen in the middle of a long word as well. It happens at the production of the voiceless consonants, as P, K, T, G, S, etc., where the vocal cords are apart to permit the passage of air for the oral scunding of the letter. The patient supplies such an excess of motor energy to make the oral movements correct for the voiceless letter, that he forgets about the laryngeal mechanism - larynx, laryngeal muscles and the wind supplying lungs - so that the next part of the word, the vocal part, lags behind.

The/

The nerve centres for the oral mechanism become overloaded with energy and often overflow into the other centres near, producing facial spasm and contortions. Very often stammerers forget to take sufficient breath and try to speak with almost empty lungs.

I had one bad stammerer, who had stammered as a child, who showed "Drawback Phonation" - speaking during inspiration, very rapidly and just after overcoming the check.

With these cases I found it very useful to read aloud with the patient, both together at first to give him confidence, then he alone. It is best to read very slowly, punctuating each syllable, accentuating the vowel sounds and all in one tone of voice. By changing the pitch occasionally the patient gains confidence. These patients can often sing, because then they take plenty breath. Singing is also a useful exercise.

In aphonia the oral mechanism is again unimpaired but the laryngeal not fully under control.

In "Disorder of Speech" by Wyllie, he says.-
"laryngoscopic examination of a case of hysterical aphonia shows that the adductor muscles of the arythenoids/

arythenoids and vocal cords are in a state of paresis, though not of complete paralysis." The cords are not brought sufficiently close together to produce vocal tones. The patient can however usually cough or laugh, both acts producing full voice sounds.

Having made him cough, the patient's attention is called to the amount of voice sound produced, and it is explained to him, that he could not have produced that sound, unless the vocal cords were capable of full movement.

From the cough one leads him on to take a deep breath and say "ah" loudly, then similar noises with the other vowels. Then he proceeds to monosyllabic words. The best to employ are those commencing with vowels. A suggestive and quicker method, which is often successful, is to employ the laryngoscope and while doing so command the patient to say "ah", etc. In this manner some patients regain their voices at once. In mutism no sound is made at all, not even on coughing. The commonest form is where the laryngeal mechanism is again at fault, but this time there is no approximation of the adductors whatever. Other types are described where it is the oral mechanism/

mechanism that is powerless, and others again where both are at fault. The laryngoscopic method for cure is employed here, or an electrical current. Many patients on some slight emotion regain their voices without aid. I had not the opportunity of treating any cases, until at least some progress had been made in the regaining of their voices.

Apart from its uses in curing mutism, electricity need not be employed curatively, as its therapeutic usefulness is rather empirical, and merely forms a concrete manifestation of suggestion.

For the sleeplessness of severe Anxiety Cases an hypnotic is usually required. Some give the sleeping draught the first night of the patient's stay in hospital. I think however it is preferable to withhold it for the first night, or at any rate until one is assured that he is not going to have any sleep otherwise, so that one may form some idea of the severity of his symptoms. Of all the hypnotics used, Paraldehyde, I found, gave the best results. Given in two dram doses at about 8.30, the patient being in bed at that hour, it usually procured in the worst cases/

cases from four to six hours sleep without dreams, or a fairly good night's rest with occasional wakings. After effects such as heaviness, were less complained of, than was the case with the other hypnotics. Then in a bad case the dose was reduced to 1 or $1\frac{1}{2}$ drams the following night, or left out if the patient had had a good night with the first dose. Subsequent doses varied from 1 - 2 drams with intervals of one or two nights between, and discontinued when the patient's sleep without a draught had improved.

Trional was not so satisfactory in cases with nightmare, and almost always left feelings of heavy headedness and dullness in the morning. Sulphonal, which is said to be less depressing in its after effects, had about the same effect as Trional.

Chloral grs. XX with Pot. Brom. grs. XXX was more potent than the last two, but not so efficacious as Paraldehyde.

Draughts containing Tinct. Opii η XV were useful where all others failed, but depressing.

I think it is advisable to change the choice of drug occasionally, so as to prevent the patient, by his own suggestion, placing too much faith in any one.

In/

In milder cases of Insomnia, other simple measures were conducive to sleep, such as taking a warm bath before "turning in".

The headaches usually lessened as the sleep improved, but for their alleviation during the day, Phenacetin grs. X with Caffein grs II often gave some relief.

With the exception of Bromide of Potassium, other medication was avoided, as no special drug seemed to have much effect. On the other hand the patient naturally associates a bottle of medicine with some disease curable by the same, and makes less effort to aid in his recovery.

Pot. Brom. however in small doses seemed to help those cases with restless symptoms, and in cases of hysteria.

When improvement commences it is necessary to get the patient to interest himself in doing something, to keep his mind occupied and give him confidence in his own powers. Fortunately the hospital was equipped with a work-shop, where those mechanically inclined could be employed, and a large garden where
all/

all degrees of manual labour could be indulged in. These recreations must be supervised, however, else nothing is so common as the patient making a start and then vanishing, or by overtiring himself he may be greatly discouraged.

For those well on the road to recovery a recreation room was provided, where games and theatricals were organised by the staff.

The best place to treat these psycho-neuroses is in a hospital in the country, and away from the sea. To retain them in a large Naval Base hospital, where rumours of sea-actions grow like mushrooms, and where hostile air raids occurred, as in the south of England, always delayed recovery. Another retarding cause in recovery was changing the patients from one hospital to another, usually necessitating long railway journeys. This was frequently done to clear a hospital for possible casualties in an expected naval engagement for ships at whose base the hospital was situated. I was struck by how much these patients fell back after a long railway journey, symptoms recovered from often returning and greatly discouraging the patient. Also if his/

his confidence has been gained and his recovery progressing in one hospital, it is a severe trial for him to start again in another with a new physician and possibly different methods.

During convalescence it is advantageous to give the patient as much freedom as possible, allowing him to visit people in the neighbourhood, and have weekend leave provided his people live fairly near, for he will be thrown on his own resources, and thereby acquire confidence in himself.

The prognosis for all cases is good. All will eventually recover, but with treatment as described methodically carried out, the duration of the symptoms can be greatly curtailed. The case with marked anxiety states take the longest time to get well. It was interesting to watch the effects produced by the declaration of Armistice. It undoubtedly greatly eased the minds of those, whose loss of adaptation was solely due to war time conditions.

General Remarks.

Out of 150 cases, 80 were discharged to duty. In some of these, when thought advisable, the man was recommended either for 1 - 3 months "shore service", or a similar period of light duty ashore.

Of the Regular Service ratings 14 were sent to Survey Boards for Invaliding.

Of all ratings joined for the "Duration only", 21 were sent to Survey Boards for Invaliding before the Armistice, 35 after the Armistice; but of the latter several might have been retained, as probably fit for duty in a relatively short time, only the necessity for keeping them had passed with the cessation of hostilities.

It is obvious that the war neuroses are very similar to the neuroses of peace time. But on the whole they have a simpler causation and show greater tendency towards recovery. A great many peace time neuroses are complicated by the sex quality, while the unmixed war cases are due to the simpler primitive instinct of self preservation.

It is as well, therefore, to speak of them separately, on account of their great importance from/

from a service point of view. The percentage of men admitted into the service, but who spent very little time at sea and months in hospitals, must have been very high.

The deduction is that the medical examination of recruits should include a more vigorous inquiry as to the mental aspect, and those considered unlikely to withstand the strain of warfare could be much more profitably employed in civilian war work.

Notes on various cases are given overleaf:.

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I wish here to acknowledge my gratitude to
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of individual cases.

Cases of Anxiety States.

Fifty-six out of the 150 cases with collected notes arose from, or owed their final incapacitation, the anxiety symptoms having previously started, to severe emotional shock.

The various forms of emotional shock were:- ships torpedoed, 9 cases: ships blown up by mines, 3: accidental magazine explosions, 4: ships in collision or run aground, 9: ships in action and hit by enemy shell fire, 14: minor wounds in action, 5: various other causes, as explosion of oil fuel, premature shell bursts, air raids, etc.

1. A.B. R.N. Age 22.

On admission patient very nervous and depressed. slept badly and troubled with nightmare. Severe headaches, often lasting all day. Felt very weak.

In appearance a well developed man, but showed pallor of face, and skin round eyes puffy and dark.

Family History. Quite good.

Previous History. Patient had always been healthy./

healthy, and gave no history of neurotic tendencies in childhood.

War Service. Was torpedoed July 1918 in a convoy sloop at night. When leaving the ship in a small boat, the ship's boiler burst, the small boat being overturned, the patient receiving a slight crush of the chest and several minute pieces of steel in the skin of the back. Symptoms first noticed after being rescued, and grew rapidly worse.

Remarks. On admission he had great difficulty in getting to sleep, had nightmare from which he awoke with a shriek, and evidently imagining the light of the gas as the flash occasioned by the boiler bursting, continued in a very highly excited state, shouting, holding his hands over his eyes, tossing from side to side, sweating profusely and muscles of the whole body tense. In the day time had severe headaches, and complained of pain over the back where the particles of steel could be seen imbedded in the skin. The skin over the area was hypersensitive. Very lachrymose, tremulous, and nervous when spoken to. Improvement very slow.

II. Assistant Cook. M.M.R. aged 27.

On admission patient was extremely nervous, weak, and had very severe headaches, always worse at night, Great difficulty in getting to sleep, and had nightmare which woke him repeatedly.

In appearance patient rather thin and poorly developed. Face very pale, eyes dark, very depressed.

Family History. Father had had a nervous breakdown. Patient always of a retiring timid disposition. Was in a grocer's shop prewar.

War Service. Was for two years in an Auxiliary Cruiser in the Atlantic. Sometimes felt nervous at sea. Ship was torpedoed. Patient was unconscious and remembers nothing until finding himself in a place of safety. Patient lost several teeth, and had a small burn in popliteal space of right leg. Symptoms immediate in onset.

In C.N.S. no signs of organic disease found.

Hands showed a coarse tremor, reflexes exaggerated.

Remarks./

Remarks. Patient extremely depressed and quiet and bodily very weak. Said "he would never get well again". The nightmare was always of the ship being struck, from which he woke in great fear. Scarcely slept more than an hour a night on admission even with hypnotic. Headache was very severe. Any excitement upset him and made his head much worse. Recovery very slow.

III. Armourer's Mechanic I. (Engineer H.O.)

Age 28.

On admission patient had marked bodily tremor and facial contortions. Suffered from sleeplessness, nightmare and headaches.

In appearance a well developed man, but pallid, eyes haggard, bodily very weak.

Family History. Very good.

Previous History. Mental make-up seemed fairly normal. Was in civil life a mechanic.

War Service. Joined 1916. First at Crystal Palace, then at two air stations underwent several air raids, which frightened him very much. Was employed in 1917 in experimenting with explosives. In July of that year after an explosion had all his clothes

cn/

on fire. Got a severe shock but carried on. In Sept. the camp was set alight by an explosion, which threw the patient several yards, but he did not lose consciousness. After this he still tried to carry on. At the time of the air raids the patient began to have sleeplessness, headaches and a feeling in the daytime as of dread. He became worse after the first explosion in July and dreamt of it, waking on seeing the flash. After the second explosion he felt very weak, had uncontrollable trembling, and says he sometimes fell in a faint. He was sent to a base hospital in the south of England, over which there were some aid raids which caused him to break down completely.

Remarks. Patient had tremors of both legs and shaking of the whole body. Hands so shaky he could not attempt to shave himself. Face constantly twitching, but specially when spoken to - eyelids twitched, mouth became twisted, and nose screwed up. Severe headaches. Dreaded nighttime on account of fear of sleeplessness and nightmare, "wished to take anything to make him sleep". Great depression and weakness, grasp feeble.

Reflexes exaggerated, pseudo ankle-clonus. Skin hypersensitive, when touched on chest whole body twitched. On grasping firmly an arm or a leg, the

muscles beneath contract and relax.

Patient was isolated at first, which seemed to quieten him a bit.

Recovery, requiring several months.

IV. Gunner R.M.A. (H.O.) Age 27.

Admitted with uncontrollable fits of trembling, during which the patient had to lie down, (the whole bed shaking), accompanied by severe headaches.

In appearance a tall well developed man, did not show any pallor, but aspect depressed and weary.

Family History. Good.

Previous History. Mental make-up very normal.

Occupation a municipal constable.

War Service. Joined early in 1915. Went to France with heavy guns in April 1916. Soon accustomed to bombardments. In June same year a 15 inch premature explosion in his gun shook him up considerably and he began to have fear of shells. Several members of the gun's crew were blown to pieces round him. Carried on till May 1917, when after the battle of Messines he was so shaky and nervous, he was sent to hospital for twelve months. Returned to duty, but felt so nervous and tremulous he was sent home.

Remarks. At intervals of 3 - 6 days the patient had a violent attack of bodily trembling. This was proceeded and accompanied by a headache of increasing severity. Patient lay on his bed. The legs shook chiefly, back stiff but not curved, hands usually clutching his hair. Patient ground his teeth and said the pain in his head was unbearable. In the attacks he was always fully conscious. Pupils slightly dilated. Attacks lasted from ten minutes to an hour, but usually he had slight trembling in the intervals. Was very weak and easily exhausted. Patient much depressed by these attacks and very irritable. Usually slept well when free from headache, had bad dreams but not very severe. Knee jerks slightly exaggerated. Tremor of hands and tongue. Amyl Nitrite helped to diminish the first attacks but had less effect later, and did not ease the headache. Attacks grew fewer and fewer. Full recovery in three and a half months.

V. Stoker. P.O. R.N. Age 27.

Admitted with poor sleep, nightmare, bodily weakness and great depression, starting at the slightest noise. In appearance patient showed marked pallor, and darkened eyes. Very apathetic expression and looked/

looked very ill.

Family History. Seemed normal as a child. Joined the service 9½ years ago, being a baker before.

War Service. In 1914 and 1915 was in a ship bombarding the Belgian Coast, but felt in good health. Next at Dardanelles, where he was knocked down by the explosion of a shell, but did not lose consciousness. He then began to have headaches, and to worry about himself. In next ship he was regaining his self confidence, when the ship had a collision in Jan. 1918. Patient began to sleep badly and headaches grew worse. Carried on for several months, until he felt so weak and ill he had to go sick.

Remarks. On admission scarcely any sleep, and very interrupted. Leaps up in bed in a fright at the slightest noise. Has nightmare of seeing ship in collision in a battle, when shells rain upon it. Feels dull and heavy in the morning. Headache bad in the evening. Patient very depressed, and slow in speaking. Memory for recent events rather vague, cannot concentrate. Had a peculiar obsession that all the ornaments on the mantleshelf must be equidistant./

equidistant. If they were moved, the patient had to put them to his liking again. Appetite poor, feels faint and tired on a little exertion.

This man was the only case where Paraldehyde produced a bad result. In his case it produced a state very similar to Delirium Tremens. The patient required to be restrained.

Very slow improvement.

VI. Example of a case due to both Emotional and Commotional Shock.

Corporal Mechanic . R.N.A.S. (Airships) H.O.

Age 37.

On admission. Nightmare and insomnia, and bodily weakness.

In appearance. Well nourished and developed man. Looked ill and pale. Skin beneath eyes very puffy. (Patient was an exceptionally intelligent, well educated man.)

Family History. Nothing to relate.

Previous History. As a child rather sensitive and shy, but otherwise normal. Was a clerk in a railway company's office.

War/

War Service. Joined the R.N.A.S. 1915. said he felt forced to do something, as so many women were doing war work. Soon began to enjoy his new life immensely, did well, and became an observer and wireless operator in airships.

Did a great many hours flying. In 1917 noticed he was becoming nervous. Was sent sick for five weeks, and discouraged from flying. On returning to duty he carried on and did in all 1000 hours up, although never with a mind at rest as before. He was in three rather bad crashes at the end of 1917, and began to feel more nervous, said he seemed to lose control of himself, and wished to jump over when up in the air. Also dreamt of flying. In May 1918 in a gale had a crash on a forced landing, and had to be carried to hospital. Said he did not remember much about that time, as he was "more or less out of his mind", and was told he was very excitable and restless, and had been delirious and given Morphia. He was in three other hospitals before I saw him.

Remarks. Patient at bedtime on lying down always experienced unnatural mental activity and imagined flying episodes with startling clarity. Great difficulty in going to sleep. Sleep very light, accompanied/

accompanied by brilliant but disastrous dreams of flying from which he woke terrified. Patient extremely anxious to get well and fly again. Bodily very weak, shaky and nervous in manner. Sweated very easily. Often had a feeling of faintness and suffocation in his chest. Reflexes exaggerated. Plantar response flexor. Paraldehyde suited this patient admirably. Dreams became less terrifying and more jumbled with other affairs. Improvement steady, but was not returned to R.N.A.S.

Cases of Anxiety States arising from prolonged strain, in men employed in ships convoying, patrolling, mine laying, mine sweeping, Submarines and "Mystery Ships", and other ships doing much sea-time, but without any history of severe emotional shock from being in action, ship hit by enemy gun-fire or torpedoed or mined.

Out of 150 cases there were 24 of this kind.

I. Chief Engineerroom Artificer. R.N. Aged 43.

Admitted in a nervous state, tremulous, and had insomnia and bad dreams. Severe headaches.

In appearance a tall well developed man, showed no pallor. Anxious expression and in manner of speaking.

Family History. Good.

Previous History. Had been very normal as a child. Had joined the Navy several years before the war and liked the life.

War Service. Spent all the war in destroyers, holding a very responsible position as head of the engineerroom department. In autumn 1917 he began to think that he was becoming inefficient at his/

his work, noticed he was forgetful, and worried about himself. He slept poorly at this time and had headaches. In January 1918 his sleep became worse, and he had dreams of his work, in which he forgot to do the proper thing at important moments. He became nervous, tremulous, afraid, and easily upset, sometimes dropping anything that was in his hand if startled by a sudden noise. In April 1918 he felt quite unable to carry on.

Remarks. The headaches were peculiar - a sudden shooting pain up the spine with bursting sensation in the head. Great difficulty in getting to sleep, from a hyperactive state of mind, in which he felt unaccountably afraid. Was frequently awakened by violent muscular twitchings in his arms and legs, and woke breathing quickly and in a state of alarm. This man was easily made to realise fully the nature of his disability, and made a fairly rapid recovery in two months.

II. Stoker R.N.R. H.O. Age 32.

Admitted in a very nervous depressed state, with a fear of losing his reason. Poor memory. Insomnia and nightmare. Severe headaches and bodily weakness. In appearance rather a delicate looking man, showed pallor/

pallor and great lassitude.

Family History. Patient vague on the subject.

Previous History. Had been nervous as a child.

Was in steel works before the war.

War Service. Was at the Dardanelles, but not in action and said he felt quite fit. Next two years and eight months in one mine sweeper. Onset of complaint very gradual, but felt himself becoming more and more nervous and afraid of the sea, until unable to carry on.

Remarks. Patient shunned all society. Was very depressed and always sat quietly alone holding his head in his hands. Showed small obsessions, in having to shut a door several times before it was done to his satisfaction, and in counting up to even numbers. Sleep very poor and broken by bad dreams of occupational character. Headaches frequent and severe. Was slow in answering questions, seemed preoccupied and memory impaired.

Reflexes slightly exaggerated. Pupils normal.

Fine tremor of the hands.

Improvement very slow to start with.

III. Engineman R.N.R.T. Age 49.

Admitted tremulous and weak, with poor sleep, disturbing dreams and headaches.

In appearance a well developed man. No pallor, but greatly depressed.

Family History. Good.

Previous History. Always of rather a timid nature but had no special phobia. Was in fishing trawler before the war.

War Service. Mind sweeping and patrolling in the North Sea since opening of hostilities. Was never in action. Patient felt perfectly content until three months before going sick; the onset of symptoms being very rapid. He began to experience a feeling of fear and dazedness when in the engine-room, and lost confidence in himself. Then began to be sleepless, and had depression and headaches in the day time. Came to dread being at sea, and towards the end of Jan. 1918 felt he could not carry on and reported sick.

Remarks. Very shaky when spoken to, highly nervous and easily excited.

Remarks. Reflexes showed some exaggeration.

Plantar reflex flexor. Recovery in three months.

IV. Ordinary Seaman. H.O. Age 27.

Admitted complaining of nervousness and fear of the sea. Very poor sleep and broken by bad dreams.

Felt very tired and weak.

In appearance a well developed man, no pallor, expression anxious.

Family History. Nothing to relate.

Previous History. Nervous as a child, never was very sociable. Was a butcher, being partner in several small shops.

War Service. Very short period at sea, never took to the life and was always nervous. Thought a great deal about himself and began to sleep badly, and have disquieting dreams, and suffer from headaches. Got into trouble for doing his work badly, which increased his dispondency and introspection.

Remarks. Patient very lachrymose and depressed.

It was interesting in this man's case that home worries apart from giving up his business had rendered his adaptation more difficult. This seemed to modify his dreams also, as they were not altogether occupational, but mixed with home affairs. Showed rather a coarse tremor of hands, and had some muscular/

muscular tremors. Reflexes dulled but variable.

Patient recovered from actual symptoms but openly
dreaded to go back to sea.

Cases of Anxiety States arising in (A) men, in whose Family History there was marked evidence of a neuro- or psychopathic taint. In their previous history these men may or may not have shown signs of neurotic tendencies. (B) Men, with histories of previous nervous breakdowns.

Out of 150 cases, there were 28 of Class A., and 5 of Class B. In Class A. there were 16 with history of "Nerves" or Nervous Breakdowns in one or more near relations (also 1 chorea, 1 enuresis, and 1 myxoedema): 3 epilepsy, 2 "fainting fits", 4 insanity and 3 suicide.

A. 1. Chief electrician R.N. Age 39.

Admitted in a very Neurasthenic state, with loss of confidence, genuinely fearing responsibility and marked depression. Bodily weakness. For last twelve months has been sleeping poorly, having headaches and feeling giddy. In appearance a tall thin man, very anxious troubled expression, pale countenance.

Family History. One sister used to have epileptic fits./

fits. An uncle died of epilepsy. Patient married. One daughter, healthy.

Previous History. As a child had "fainting attacks", uncertain as to nature of seizures. Headaches began at adolescence.

Service. 17½ years in the service, rising to very responsible position in large ships. Not in any actions during the war. At sea often troubled with sick headaches.

Remarks. Very nervous and easily excited, very introspective. Beads of sweat came out on brow when waiting for a medical interview. Patient was very lachrymose. Worried chiefly about his own supposed shortcomings. Sleep very poor and broken. Dreamt of accidents in his ship, caused by his own actions. Reflexes variable but usually increased. Hands fine tremor, spasm of eyelids when closed. There were some signs of early lung disease. Heart normal.

Dreaded to go back to sea, as he was sure he would be disgraced as being incapable. Improved generally but was considered unfit to return to sea, as probability of relapse very great.

II. Deckhand R.N.R.T. Age 25.

Admitted extremely nervous, with great weakness, tremulousness, insomnia and nightmare. Memory slightly impaired, and headaches severe.

In appearance, a tall thin delicate looking man, with pale face.

Family History. Mother a very nervous subject.

Patient married, one child.

Previous History. Patient nervous as a child, but improved; took up athletics keenly. Was a good swimmer. An architect's drawer by profession.

War Service. Joined in June 1916, but did not go to sea until April 1918; going to Hospital August same year. Twice his trawler was in action with U boats without being hit. On both occasions he said he was a "bundle of nerves". Had first become nervous at Lowestoft in August 1917 on occasions of air raids, which caused sleeplessness and starting on sudden noises, and he said his memory was not so good. On going to sea he never felt at ease.

Remarks. Patient was very easily exhausted, and very shaky. Great despondency and easily irritable, /

irritable, as he thought "doctors suspected him of swinging the lead". Slept very poorly and had nightmare. Talked in a subdued tone, kept entirely to himself, restless habit of pacing up and down any secluded passage, hands behind his back, and head bent. Patient was in several hospitals, and upset by being shifted, had lost faith and felt sure he would never be well again. There was great difficulty in regaining this man's confidence. Made very slow improvement, and was not considered suitable for further service.

III. Driver R.A.F. H.O. Age 27.

Admitted with nervousness, insomnia and nightmare.

In appearance a tall thin nervous looking man, pallid countenance, and puffy eyes.

Family History. Very neurotic. One sister had chorea badly. Previous History.

Previous History. Never very robust, unsociable.

Previous to war was a motor agent for an Automobile firm.

War Service. Joined mid year 1915 as Ambulance driver for Red Cross in France for a year. Then joined/

joined 1916 as Sub-Lieut. In R.N.A.S. in Airships. He crashed badly, was unhurt but greatly upset in mind. Was discharged from R.N.A.S. after 21 months. Next joined R.A.F. as a driver of water transport (motor boats). Nervousness very quickly returned, went sick Sept. 1918. When in Airships and motor boats felt inclined to throw himself overboard. Remarks. Sleep very poor and broken by startling dreams. Looked utterly exhausted in the morning. Intellectual, nervous and shaky. Had lost all confidence in himself. Reflexes markedly exaggerated and had some vertigo. Required long rest.

IV. Engineman R.N.R.T. Age 29.

Admitted extremely nervous and lachrymose. Very depressed and uncommunicative. Sleep very poor. Headaches. In appearance a well developed tough looking man, no pallor. Wore earrings for his eyesight.

Family History. One sister a nervous invalid.

Patient married, one child died of fits.

Previous History. As a child gave a history of "falling sickness". Seemed normal as a youth.

Prewar was a fisher man, "unaware he had nerves".

War/

War Service. Spent 2½ years in a harbour drifter.

There was no gun on board. Next in an armed trawler. Said he could not stand the noise of guns and depth charges firing, and was so nervous he was sent to hospital.

Remarks. Patient was extremely nervous and depressed. Preoccupied manner, talked slowly and very little. Very frequently wept. Was very superstitious, had hallucinations at night "of a green evil eye watching over him". At other times he felt light headed, as if "his soul was leaving his body". Often wished he were dead and took to reading his Bible frequently. (Second sight was a family characteristic). Rather an alcoholic history. Hands showed rather a coarse tremor. Reflexes variable but usually slightly exaggerated.

Improved greatly and was recommended for a period of shore service.

B. I. E.R.A. (Acting) H.O. Age 23.

Admitted very nervous, tremulous, easily startled and was very weak. Nightmare and insomnia, and also complained of bad headaches and dizziness.

In/

In appearance. In build a tall lean man with stooping figure. Face ashy grey with dark lines beneath the eyes, and looks very ill.

Family History. One sister very delicate and nervous. Patient married, no family.

Previous History. As a child had enuresis and "a shock when young lasting some time (cause not ascertained). Was in an engineering firm until 1918. In 1912 he felt dizzy one day when driving a car (not an unusual occurrence with him) and had a smash and believes he killed a man. This preyed upon his mind, and for a time he was ill with a nervous breakdown.

War Service. Joined 1918. Even during training at a depot he felt nervous and easily upset. When drafted to a destroyer he became much worse, and only could last out three months. When coxing a picket-boat he felt hypnotised by the rushing water and as if impelled to rush into obstacles, also to jump overboard.

Remarks. Very tremulous when standing, fingers always twitching, jumps at sudden noises. Scarcely slept on admission. Nightmare always the same of wrecking some boat. Very anxious and depressed, had/

had a dread of company. Could concentrate on nothing external to himself. Tongue and fingers showed a coarse tremor. All reflexes over-active. Had vertigo with eyes closed. No disease of heart or ears discovered.

Patient was singularly intelligent and made every effort towards recovery with considerable success, but was not a fit subject for active service.

II. O.S. R.N.V.R. Age 34.

Admitted in great depression, very tremulous and weak. Insomnia. Lachrymose and extremely nervous and excitable. Severe headaches.

In appearance. Thin, pallid and of poor physique. Looked utterly miserable, engrossed in introspection. Family History. One brother and one sister died in childhood of convulsions. Father and mother nervous invalids. Patient married (wife a nervous wreck.)

Previous History. States he was very easily frightened as a child. Had a nervous shock when 6 years old, on finding his grandfather dead in bed of an apoplectic seizure. Since then fits of depression have seized upon him. Was in grocery trade./

trade. Used not to turn up to business when he felt depression. Spent much time in consulting doctors and in buying "Nerve tonics". Now has "no faith in cure". Shortly after joining his brother was killed in an accident, which fact greatly upset him.

War Service. Joined March 1917, and was never afloat. Hated the service life and constantly attended the sick bay.

Remarks. Intelligent, well educated man.

Disliked to leave his bedside, where he sat, head in hands, and often weeping. Very tremulous and when spoken to kept twirling the buttons of his coat with fingers of his right hand, a nervous habit, which he at first was quite unable to withstand. Nervous staccato style of speaking, as if on verge of tears. Spoke rapidly, punctuated with a nervous cough. He would not look at anyone straight. When very excited made extravagant remarks of wishing he were dead, and "getting nearer Heaven every day". On venturing out for the first time, a small bird happened to rise from near his feet, whereupon he got such a fright he fell flat on his back. Appetite very poor, great distaste/

distaste for food, sometimes a nervous difficulty in swallowing. When sitting his legs are held rigid to quieten them and his heels keep tapping on the floor. Reflexes all much exaggerated. Plantar reflex flexor response. Pupils looked large but reacted normally. When having an arm or leg examined he at first held it absolutely rigid. Sensation - nothing to note.

This patient's dreams were not purely occupational but mixed. Patient worried incessantly about home affairs, was anxious to work again at home, otherwise his people would have no money.

He improved very slowly but got much better. Was not sent back to duty.

Cases of Anxiety Neuroses occurring in men,
giving a previous history of head injuries.
There were three such cases out of 150.

I. Stcker I. R.N. H.O. Age 31.

Admitted complaining of severe headaches, occipital
in region, most frequent at night. Poor memory.
Sleeplessness and very weak. Felt giddy on
stooping and slightly when walking. In appearance
well developed man, very nervous, colour pale,
baggy eyes, and expression vacant and staring.
Family History. Not relevant.

Previous History. Very normal in make-up. Worked
for a firm of house painters and decorators.

In 1912 he fell off a ladder on to the back of his
head, losing consciousness. Returned to his work
on recovery but was given office work. Twelve
months later he began to have occipital headaches.
Both before and since the accident he was a keen
boxer and took great pride in his muscular develop-
ment.

War Service. Joined Feb. 1915. Had Typhoid at
the Dardanelles, after which the headaches became
more frequent. Since then was several times under
fire/

fire and felt increasingly nervous each time. Became irritable, easily excited and very depressed. Remarks. Patient very nervous, starting on sudden noises. Very easily excited, irritable and emotional. When excited whole body shock. Wished to be alone and frequently wept by himself. With the hospital staff patient thirsted for sympathy. Slept very poorly owing to headaches, becoming very restless and excited, when 2 or 3 times in the night he would have violent shaking of the whole body, staring frightened eyes, stating the pain in his head to be unbearable, ground his teeth, tore at his hair, and once banged both his head and his hands against the bed rails. In these displays he was always fully conscious, answered questions though resisting interrogations, wept. Was never vocally noisy. They seemed simply the outcome of bad temper and loss of self-control, as when told he was waking others, he always controlled himself for a time, and was quite afraid of fellow patients complaining of him. With very firm handling he desisted from these displays. There was no similarity to an epileptic or an hysterical fit. Towards the end/

end of the first fortnight for three days he had ~~uncontrollable~~ ^{unaccountable} rises of temperature, varying from 100° F. in the morning to 99° F in the evening.

The patient's condition was unaffected by the temperature. Hands showed tremor. There was some vertigo when eyes closed. Knee jerks exaggerated. Plantar reflex flexor. Pupils reacted normally.

Patient improved very slowly at start but after second month more rapidly. Was sent for survey finally, having become quite cheerful.

Cases of Anxiety Neuroses, not so severe, arising in men, who are not in good health, as after Typhoid Fever, Dysentery, Malaria, Heat Stroke and Influenza. There were 9 such cases in the series.

I. Petty Officer I R.N. Age 37.

Admitted rather shaky, nervous quick manner. Slept poorly and had rather disturbing dreams of occupational type. Felt weak. No headaches.

Family History. Good.

Previous History. Nothing important.

Service. 10 years as Petty Officer. Was in Persian Gulf from 1914 to 1917 during which time he had Malaria, Typhoid and Heat Stroke. He dates his symptoms from the time of these illnesses but as being most felt in the last three months before being sent to hospital. He noticed he was becoming very nervous when on duty, specially when acting as coxswain, and began to sleep badly.

Remarks. He was mildly introspective but anxious to get well. The sleep rapidly improved and bad dreams ceased. He was concerned about his heart, which was found somewhat enlarged, first sound accentuated over/

over aortic valve. He had attacks of palpitations with tachycardia. Pulse rate 100° to 120°.

The cardiac condition greatly improved, the palpitations quite disappearing. He was returned to duty after two and a half months.

Cases of "Conversion Hysterias" and Hysteria. Out of 150 cases there were 25 of these.

"Conversion Hysterias":-

I. Private R.M.L.I. (H.O.) Age 20.

Admitted with a bad stammer. Was very nervous and excitable when spoken to. Complained of headaches and insomnia, but without bad dreams.

Family History. No history of neurotic tendencies.

Previous History. Very normal temperament.

Occupation - a grocer's assistant.

War Service. In service two years, first 12 months after training almost constantly in trenches in France and Belgium. Was twice buried by shell explosions. Felt shaken but soon recovered after first. After second sent to hospital in London with mutism, soon regained his voice but stammered very badly.

Remarks. When admitted after long railway journey stated his stammering was much worse again. Patient Palpebral tremor when held up in speech. Pharyngeal reflex absent. Patient could sing and did so without defects at concerts. Pulse rate between 90 and 100. Improved steadily.

II. A.B. M.M.R. Age 20.

Previous History. Quite a normal history in childhood. Prewar was in the Merchant Service.

Family History. Nothing to note.

War Service. Joined the Army 1916 and was blown up in an undermined trench, was seven months in a hospital, the first three a deaf-mute. States voice and hearing came back suddenly. Next went to sea in Merchant Service and was torpedoed off the Italian coast, and suffered from aphonia for a time. Afterwards joined the M.M.R. and was in a mooring lighter - a quiet job, but noises as cables running out or excitement always upset him, and at times his voice became very weak.

Remarks. Patient very nervous and restless on admission; troubled about his throat. Laryngoscopic inspection revealed no defect. Recovered and was sent to duty after Armistice.

III. Armourer's Mechanic I. ... R.A.F. Age 35.

Previous History. Gave evidence of a normal make-up. Was an agricultural labourer in the colonies.

Family History. All relations dead of various maladies.

War Service. Joined the Army 16th Lancers in August 1914. At the end of two years was blown up in an undermined trench after which he states he was unconscious for several hours, and was invalided from the Army with Shell Shock. Spent next twelve months in England, "spending much money on medicines and electricity". Bought an electrical outfit for himself. In April 1917 joined the R.A.F. naval section, as a driver. States that in France he was given "navvy's work at an air station which he found far too hard, and thought he was being badly treated." In June 1918 he lost his voice completely, (cause not ascertained). Voice gradually returned in hospital. Went back to duty as a driver this time. A tyre burst explosively, and he lost his voice again. (By notes he was mute). Was sent to a hospital, where he regained his voice by hypnctism.

Remarks. On admission patient thin, nervous looking, had lost weight, and was suffering from anxiety symptoms. Very quarrelsome in disposition, easily excited, when he became very tremulous and had to lie down. The tremors lasting an hour or more. When interviewed was always very nervous, and sweated on the face. No return of speech defects.

Two cases of Aphonia:-

I. Shipwright R.N. (H.O.) Age 25.

Complaint. "Loss of voice".

Previous History. Was easily frightened and nervous in childhood. In civil life was a boat-builder.

Family History. Mother a very nervous subject.

War Service. Two years in one ship in the service.

Was in Heligoland Bight action Nov. 1917; felt very frightened and four hours afterwards discovered he could only speak in a whisper.

Remarks. Speaking voice returned fairly quickly but was husky and weak. On three occasions in hospital after some excitement in the ward due to other patients' nightmare, his voice was again reduced to a whisper. On these occasions he also complained of a choking sensation as of a lump in the throat, which was due I think to his gulping air. He also had rather marked anxiety symptoms, headache, slept poorly and troubled with bad dreams of sea fights. Looked depressed. Hands, eyelids and tongue showed tremor of a fine type. Excitable reflexes. Voice completely recovered, otherwise improved slowly.

II. O.S. R.N.V.R. Age 28.

Complaint. "Loss of voice".

Previous History. This patient gave a very abnormal make-up. Very nervous as a child, terrified of thunder storms. In childhood at times when excited was unable to speak even to his own parents. He improved as he got older but would lose his voice occasionally. Was able to become a member of a Welsh choir.

Family History. One brother and one cousin he states were similarly affected. Patient married.

War Service. Joined late and was only in one ship for a few months. He developed an antipathy to his petty officer, who he thought nagged him. On these occasions he became excited and was unable to speak. When brought before the C.O. as a defaulter, he could not utter a word in self defence, though bursting to explain himself, only made slight noises in his throat.

Remarks. On admission when interviewed came armed with paper and pencil. Showed great nervousness before anyone with gold braid on their sleeves, and wrote that he could not speak to them. This form of/

of intercourse being forbidden, on trying to speak he showed great stress, his body becoming rigid and only gusts of breath being expelled with faint sounds of the beginnings of words at the start of each expiration. Beads of sweat came out on his forehead, and his face flushed. He even wept. The vocal mechanism here seemed slightly different, than in ordinary cases of hysterical aphonia. At first there was feeble adduction of the cords then a position of complete abduction on attempting speech. The lungs were not kept properly filled. He did however speak occasionally to other patients, but was very sensitive and kept to himself. He was made to cough easily with full explosive sound, and say "ah" loudly, but beyond single syllable words I could not induce him to proceed. The patient was really a high grade mental defective.

A case of stammering.

I. Deckhand R.N.R.T. Age 38.

Complaint. Stammering and nervousness.

Previous History shows a very neurotic make-up.

When eight years old on having a tooth drawn, he states "the forceps slipped and cut his tongue".

After/

After this he stammered very badly. This defect lessened as he grew older, but he always stammered a little when excited, except to relatives and intimates.

Family History. Fairly normal.

War Service. Joined R.N.R.T. in 1917 and was stationed at Hull at time of several air raids, which terrified him. He found he began to stammer more frequently and more pronouncedly. Next in channel trawlers, where he was extremely nervous and stammered always on speaking. Afterwards surveyed for shore duties but felt unable to carry on.

Remarks. On admission stammered very badly. Oral mechanism showed excess of activity, facial muscles became involved and spasmodic, always put his hand up to the side of his head, sometimes stamped with his right foot, and had spasm of his eyelids. Grew very excited and sweated. After a time he could read perfectly in an intoning and slow voice, and speak also in the same manner. Was encouraged to stress the vocal vowel sounds and slur the consonants.

I felt sure great improvement could have been made in his speech but unfortunately patient was discharged after the Armistice on the hospital's closing down. Properly speaking this was really a case of a civilian neurosis exacerbated by war time conditions.

A case of hysterical monoplegia (spastic).

I. A.B. R.N. (H.O.) Age 20.

Previous History. Very timid as a child.

Family History. Mother suffered from "Nerves".

War Service. One year before going sick patient got a small flesh wound, not in action, on the outer side of the right knee, which he thought had affected his knee joint, but did not go sick. Two months before admission he fell on deck, striking right knee against an iron ring. Two days later he developed anaesthesia of the right leg from 3 inches above knee joint downwards to "stocking" distribution, and could not move the limb. While in sick bay on board ship in a rough sea he fell from his hammock again hurting the same knee.

Remarks. On admission the right leg was perfectly stiff. When lying down and told to move his leg, he put his hands on the bed-sides and exerted every muscle in his body, drawing up the sound leg to get a purchase on it. The affected limb was spastic, some muscular movements were visible and it was raised from the hip about one inch from the bed, the knee being fixed extended and the toes pointed. The plantar/

plantar reflex was flexor in response.

By forcibly overcoming resistance with passive movements, passive and active were then attempted. The passive were slowly diminished until any movements were entirely due to the patient. The patient was then encouraged to walk without assistance, and though he fell once or twice, never hurt himself, and soon recovered full use of his leg. The stocking anaesthesia disappeared early.

A case of hysterical paraplegia (flaccid).

I. Stoker. R.N. Age 25.

Previous History. Had always been rather delicate and nervous. Was an only child. Unmarried.

Family History. Nothing definite.

Service. Patient joined the service two years before the War. During the war he felt nervous when at sea. In 1916 after being inoculated for Typhoid he was very neurotic and stated he had never felt well since. The paralysis did not have a sudden onset but after being nervous and shaky for a time he felt the use of his limbs leaving him.

Remarks. Patient was carried into hospital and could only stand with aid of crutches. On pulling himself/

himself along on his crutches, the legs were limp, the feet tending to drag and toes turned out. But some voluntary power was apparent. In bed the limbs were flaccid, toes pointed and passive movements easy in all directions. There was slight diminution of sensation to light touch right up both legs. Knee jerks not obtained. Plantar reflex flexor. After massage and passive movements, the patient was encouraged to walk with sticks. On one occasion he fell but without hurting himself. He made rather a slow recovery, but finally was able to walk quite a long distance. He always displayed great eagerness for sympathy, although he appeared perfectly contented as regards the condition of his legs. He dreaded returning to sea, and therefore almost certain to have a relapse. Was discharged from hospital after Armistice to a survey board.

A case of hysterical weakness in one leg.

I. Private R.M.L.I. (H.O.) Age 22.

Complaint. Weakness of right leg with stiff knee-joint.

Previous History. A fairly normal make-up. Was employed in a textile factory.

Family History. Nothing found.

War Service. Joined in 1916 and went to France.

Was in action on three occasions and felt very shaky and nervous after the second and third occasions.

In August 1917 went sick with pain in right knee, and underwent an operation for loose semilunar cartilage.

Has been in hospital since.

Remarks. On admission patient walked with a bad limp and used a stick. Was convinced his right knee joint had been permanently damaged. On examination leg found held very stiff (primarily a protective measure). There was no muscular wasting and on overcoming resistance movements were free in all directions. Patient made a fairly rapid recovery.

A case of contracture of the trunk. (Cramptoncormic)

I. Pte. R.M.L.I. (H.O.) Age 38.

Complaint. A stiff back and being unable to straighten it.

Previous History. Patient gave a fairly normal history. By trade a bricklayer. Gave a history of various injuries, mostly minor, to his back. On one occasion having fallen, was rendered unconscious, many years ago.

War Service. Joined the service November 1917. Served in/

in the trenches in France for a short time but began to complain of pain in his back and sent sick. Remarks. He held himself bent forward. The spinal muscles were rigid. The curvature was in the lower dorsal and lumbar regions. In sleep the back seemed straighter. No signs of any organic disease were discovered. The condition appeared to be the continuance of a protective measure against pain. With exercises the back became almost straight and the patient quite active.

A mixed case of an Anxiety State with an hysterical condition of the jaw.

I. Shipwright. R.N. Age 40.

Admitted complaining of nervousness and being very shaky, and of having stiffness and difficulty in moving lower jaw.

Family History. Good.

Service. Many years in the service. 18 months in last ship convoying across the Atlantic.

Remarks. He stated his "jaw became cramped and sometimes fixed in the night, on waking required to move it with his hands". As regards the jaw condition, there was no sign of disease or swelling at either joint/

joint or in the muscles or tissues surrounding. He held it stiff however and spoke jerkily as if the jaw were partially ankylosed. He remembered no injury nor toothache. (possibly neuralgia was the initial motivation). This condition was easily cured by contra suggestion.

The onset of Anxiety Symptoms was slow, and slow to disappear. Patient was very nervous and irritable on admission, very tremulous, and had some vertigo when eyes closed. Memory rather poor. Tremor of hands, tongue and eyelids. Pupils normal. Plantar response flexor. Knee jerks increased. Wassermann negative (9.VIII.18).

A case of hysterical wry-neck.

I. Stoker R.N. (H.O.) Age 25.

Admitted with head held over to right side, and jerking of head.

Previous History. Nervous as a child. Never played games.

Family History. Nothing definite.

War Service. Was in action at Dardanelles and Dogger Bank. Then in Jutland Battle in an advanced battle cruiser which did much firing. Said he was very nervous/

nervous of the guns firing and his head began to shake. This grew worse until it assumed the position of wry neck. Always very jerky when spoken to. Deformity not apparent in sleep. Was in Hospital 1916 for three months with this condition but had relapse on returning to sea.

The muscles on the side of the neck towards which head was bent were spastic. On passively overcoming the spasticity the head movements were quite free. The jerking soon ceased and patient had a fairly rapid recovery.

There were five cases of Hysterical Fits.

I. O.S. R.N. (H.O.) Age 21.

Previous History. Very nervous and delicate as a child, had "fainting fits" which grew rarer but had occasional fits in adolescence when excited. Was a dentist's workman.

Family History. One brother had epilepsy when a child. War Service. Three years in service. Was for ten months in a ship at Boulogne and Dunkirk laying cables. Many air raids at that time, which terrified him, and he had several hysterical seizures.

Remarks. In hospital patient showed an easily excited/
 cited/

excited disposition, and a strong desire for sympathy. On occasions of a new influx of patients, or as happened once on attending a concert, he usually had a fit afterwards. Four in all in three months. These fits were typically hysterical, and only once occurred before the patient had lain down. He threw his arms and legs about, rolled his head and was violent to anyone restraining him. Eyelids held tightly closed. The corneal reflex was always partially present and the light reflex always. On having screens put round him and left alone the excitability quickly subsided and consciousness returned. Beyond a headache, there were no after effects. In my opinion the man did not completely lose consciousness during the seizure. Knee jerks and other reflexes usually exaggerated. Plantar response flexor. Physically patient was a poorly developed, anaemic looking youth. Adenoid expression. He was also a wind gulper when nervous, as when being spoken to.

II. O.S. R.N. (H.O.) Age 20.

Previous History. Very neurotic make-up. Had a "fainting fit" when 11 years old' and at long intervals afterwards, always after excitement as going to
a/

a theatre. Was a salesman in the basement of a large drapery firm.

Family History. Father nervous invalid. One sister had "fainting fits".

War Service. Attested for Army three times but always refused for poor physique. Joined Navy in 1918, caught influenza soon afterwards and had a fit while in hospital. Was sent to sea in a convoy vessel, but sighting U boats or depth charges exploding excited him greatly and he had nine fits in two months at sea.

Remarks. Very poor physique, high palate, nasopharynx exudative. High pitched voice, almost screamed when excited. Had one typical hysterical fit while in hospital.

The other three cases were similar. One a signalman R.N.V.R.. aged 18, was torpedoed in 1918 and (from Medical History sheet) in hospital suffered from tremors, giddiness, headaches and had two hysterical fits.

Another gave the history of a "fit" when five years old. He was only six months at sea, all the time terribly afraid and had one hysterical fit seen by the/

the ship's surgeon. The third, aged 22, joined in 1915 and was always in mine sweepers. In June 1918 he stated he had a fit while on the bridge, and several afterwards. Fits not witnessed, as no doctor on board. In first hospital was in a very excited state of mind, climbed through the window on to the roof, although fully conscious of his movements. Had a fit in the train when coming north, and four hysterical fits after admission at irregular periods. Light reflex remained. He resisted his eyes being opened. Plantar response flexor after a fit. There was no history given of hysterical fits in youth or childhood.

Cardiac Neuroses.

I. Leading Stoker R.N. Age 26.

Complaint of throbbing pain in left side of chest, with dizziness.

Previous History. Good. Had always been healthy.

Service. Spent four years in one ship. the last two being in war time, and was in Heligoland and Dogger Bank actions, after which he began to complain of throbbing and a sense of discomfort in the left breast. Went sick for a time, but was soon discharged to duty. Spent two years in his next ship. The same symptoms appeared but with more intensity. He also began to dream at nights, often waking with a shout, same dream always of falling down. On waking he felt his heart beating tumultously.

Remarks. Patient was depressed and quiet, and nervous about his heart. Cardiac physical signs normal.

He responded well to exercise test. Blood examination normal. The dreams soon ceased. He made a good recovery in a little over one month and asked to be returned to duty.

II. Stcker R.N.R. Age 33.

Complaint. Palpitations, shortness of breath and dizziness. Sleep poor and disturbed by had dreams.

Previous History. Rather nervous as a child, but had improved in adolescence.

War Service. Joined August 1914 for the duration. When employed in a dockyard was caught between a mine and a mine sinker. The accident was not serious but patient got a fright. Cardiac symptoms commenced. Afterwards twice in hospital treated for M.C.F. Next given a period of light duty ashore, without symptoms. Next sent to sea, where after a short time the symptoms recommenced, and his sleep became poor and troubled with dreams.

Remarks. Patient admitted very nervous, speech a little tremulous, slight fine tremor of hands.

Memory slow. Pulse rate at rest 90. Objectively no abnormality was made out. Heart reacted well to exercise test. General condition improved slowly, the heart symptoms about which he worried greatly, being the last to disappear.

The next case is of a mixed type, both functional and organic.

III. A.B. R.N.V.R. Age 31.

Complaint. Palpitations, usually worse at night, causing a feeling of suffocation.

Previous History. Said he had always been short of wind and never took part in games. Was also very neurotic. Gave a history of a nervous breakdown five years previously from overwork.

War Service. Joined late. Felt fairly well during five months training at Crystal Palace beyond some shortness of breath. On going to sea, the palpitations commenced and he felt very nervous. Was in action once and felt terrified.

Remarks. Admitted very depressed and nervous about his heart. Was easily exhausted and suffered from headaches. He had a fear of nighttime as he usually had palpitations, and often a sense as of going to suffocate, when he had to sit up. Slept very poorly and had bad dreams.

Objectively there was no bruit to indicate valvular disease, but there was a slight increase in cardiac dullness./

dullness. Pulse at rest 100. Bad reaction to exercise test, rising to 142 and falling only very slowly. Reflexes were exaggerated.

This patient's condition was not aided by his parents solicitude, who prevailed upon an M.P. to write ascertaining his progress.

In these cases there were anxiety symptoms added to the cardiac neurosis: