CHAPTER II
MORAL AND MENTAL DISORDERS IN THE WAR OF 1914-18

I

THE HISTORICAL BACKGROUND: THE REDISCOVERY OF MIND

Psychology, though the youngest of the sciences is one of the most ancient of human interests. It is older than Aristotle, who first christened it; and from his day onwards it remained, for nearly ten centuries, a department of philosophy rather than a branch of science.1

The war of 1914-18 coincided broadly with the birth of a new era of philosophic thought on the nature, content and working of man's mind (psychology) and of its aberrations (psycho-pathology). The essential feature of this new era was, and is, the application to the problems of the mind of the methods of inductive science. It is essential to the proper understanding of the psychiatric history of the "Great" War that any account of it should be preceded by a résumé of the change in thought which had brought about this vast readjustment in the philosophic and the professional outlook of Medicine—a readjustment which (it is hardly an exaggeration to say) has "turned the medical world upside down".

An impediment. Unfortunately, even for the purposes of this history the clarification of this subject, so closely affecting both the welfare of the soldier and people and the economy of the nation, is clouded by the looseness of psychiatric terminology. The identification of causal relations between any series of phenomena, and the discrimination therein of a new morbid syndrome, necessitate the creation of an appropriate language. Psychological medicine has suffered from the curse of Babel, and will continue to suffer until two things happen—till (a) the observation and identification of the relevant phenomena are sufficiently

exact and complete to become stable, and (b) the etymology rendered possible by this stability shall be scientific—that is, shall employ its word-roots consistently with their accepted meanings.

Some such prologue is essential even to a study as simple and straightforward as the present one—the more so because simplicity requires that the words used have a definite meaning. The character of this work precludes any attempt to make a “break-away” in this matter—for which task, indeed, the writer is unequipped. All that may be attempted is to use words that will convey “the greatest meaning to the greatest number”.

One of the most widely quoted, and misquoted, aphorisms concerning grave mental disorder and disease—and one even more applicable to the less definitely organised forms of disorder—is that of Charles Mercier, which stated that “insanity is a disease of conduct, not of intellect”. Apart from its legal application the significance of this “hard saying” will vary with the standpoint, biological, pathological, or sociological, from which the relevant disorders of conduct are examined. The weakness of it from a scientific point of view is evident. Mental “disease” can only be studied “scientifically” as a biological and physiological not a behaviouristic phenomenon. Yet in view of the limitations imposed by our present ignorance of the basic structure of “mind” and of mental disease and disorder it is the most convenient description of those morbid states of being and becoming with which this chapter is concerned.

On this basis, from the point of view of military “behaviour” the conduct-disorders of the war fall broadly in three groups, which may be discriminated as

(1) Delinquent conduct brought about by “wilful” disregard by the person of the social rules (military or civil) which are accepted as binding on the community of which he is an individual element.

Postulates of the present discussion

2 Quoted from Wood Jones and Porteus (*Matrix of the Mind*, p. 288) Devine (*Recent Advances in Psychiatry*, p. 1) gives “disorder” for “disease” The original reference is not available to the author.
(2) The "psycho-neuroses", in which the patient is in a greater or less degree aware of his condition and the disorder may be dealt with, and its underlying cause treated with the free and voluntary co-operation of the patient.

(3) The "psychoses", in which the person is not, or is imperfectly, aware of his state, and in which the conduct-disorder is usually so grave as to call for compulsory segregation while the disorder continues: in everyday language, "insanity".

Distinct in their social significance and in their medical involvements and probably also, in some degree, in their pathogenesis, nevertheless these three major groups of conduct-disorder overlap, more or less widely, at their clinical and administrative boundaries. The importance of this overlap can hardly be too greatly stressed; we may recall that, frequently enough to constitute a major tragedy, the question whether a soldier should be "shot at dawn" as a military criminal, or be discharged possibly as a battle casualty with a "wound stripe" and war-pension, was determined by the opinion of a medical officer as to which side of this clinical overlap the soldier's behaviour should consign him.

Psycho-somatic disorders or diseases. The relation between psychical and physiological factors in the creation of morbid states of mind and body is so vast and controversial a matter

---

3 Recent Advances in Psychiatry by Henry Devine, 1929, pp. 14, 15, and 290
4 Similar "conundrums" in discrimination provide highlights in the history of the mental traumata of the war. For example the embittered debate in the British House of Commons in 1915, whereby by request of the House, "cases of actual insanity... were humanely indicated by the noncommittal designation, 'nerve strain'" (Maj A. W. Campbell, Medical Journal of Australia, 15 Apr. 1916); and the disputes between the Australian Returned Soldiers' League and the Departments of Defence and "Repatriation" regarding the relation between "shell-shock" and "insanity", may be instanced as having their origin in the clinical and social overlap between the "psycho-neuroses" and the "psychoses". At the other end of the series comes the problem of the line between "cowardice"—a military crime—and "nervous breakdown": between "malingering" and "hysteria" (the "unconscious malingering" of Babinski)
that little more can here be attempted than to summarise the
most significant features of this branch of psychiatry. In the
war of 1914-18 the subject centred chiefly round the problem
of "D.A.H."—"disordered action of the heart". Inasmuch as
there lies in its study the hope of an understanding of the
interaction of mind and body in disease, the vista opened up is
extensive and still extending.

Accordingly with certain additions, this chapter will examine
the "moral" and "mental" casualties of the war under the
headings set out above. For convenience—and it may be con-
tended that this is the proper order—it will begin not, as
usually, with the more or less organised diseases and disorders
of the organ of mind (the "psycho-neuroses" and "psychoses"),
and their reflection in the somatic life (the visceral somatic
"neuroses"), but with an examination of the medical aspect of
the moral delinquencies most prevalent or characteristic in Aus-
tralian experience in the war.

"Determinism" and "free-will". However necessary to

5 All concepts of mental disorder revolve around this question. Thus, J. B. Watson's "behaviourism"—the popular system of social psychology in America—is based on a rigid concept of physiological determinism, the "conditioned reflex". Bernard Hart more logically—if with a bias only less intransigent toward a rigidly "psychic" concept—defines the principle in general terms as follows.

"Before we endeavour to discover the causes underlying morbid psychological phenomena we must be convinced that our quest is reasonable, we must firmly believe that such causes exist. This belief involves the adoption of psychological determinism—the doctrine that in the psychical world, as in the world of matter, every event must have a cause. Provided that the necessary antecedents are present, then the result will inevitably follow; and if we see the result, then we know that certain definite causes must have combined in order to produce it. Chance has no more part in psychology than it has in physics... Whatever our private philosophy may be, so long as we are thinking psychologically and scientifically, we must subscribe to all the implications of the law of causation." (The Psychology of Insanity, pp 59-60).

Of the relation between mind and body this has been said with authority (The Neuropsis in War, Edited by Emanuel Miller, p 86)—"Still, we do consider the patient more than his disease and we realise that, in his reactions, mind and body both play a part, and that often the same symptoms and signs may result in one patient from physical causes and in another from psychical causes. We talk now of psycho-somatic medicine, bodily illness brought about by emotional disturbances, and so we do not expect quite such precision in the distinction of organic from functional disease, recognising that functional illness can and does pass into organic disease.

"Rather are we concerned with reversible and irreversible tissue change, for the recent advances in micro-chemical knowledge make it probable, if not certain, that the most transient psychogenic change does involve tissue alteration of some sort or another.

"However, it is necessary to be able to recognise the difference between reversible 'functional' illness and irreversible 'organic' disease, since only so can an intelligent prognosis be given and adequate treatment be undertaken."

And the most convincing summary of the problem of the "unconscious" will is thus given by Henry Devine (Recent Advances in Psychiatry, 1929, pp. 279-280).

"Consciousness guides the activities of the individual rather than originates it, and the sources of activity are mainly determined by unconscious processes. When the psychiatrist turns the light of his own consciousness upon the psychotic subject,
the creation of a science of mental medicine it may be to accept the principle of psychic determinism, in the study of disordered conduct in war it seems inevitable, as a practical basis for theories of pathogenicity and principles of treatment, to postulate some degree of "free will" as being the ultimate determinant in intelligent and "normal" conduct.

On this hypothesis some morbid derogation or distortion of "will", whether for exhibition or inhibition, is associated with all disorders of conduct that come within the scope of psychiatry; and this is apparently true whether the defect or distortion of will will be wholly or chiefly psychogenic, as in hysteria and other manifestations of psycho-neurosis and in some forms of insanity, or physiogenic, as in Parkinsonism following encephalitis lethargica, in general paralysis ("G.P.I."), or in injury to the frontal lobes of the brain, and as was for a time supposed to, be the case in "shell-shock". As discerned by the ordinary processes of observation and induction, defects of self-control, of purpose, of will—in brief of "character"—as well as of "temperament", "disposition", and "constitution" have a part in determining, not only the standard of military achievement, but also the genesis and efflorescence of moral and psychic, and even of psycho-somatic, breakdown. A man's "captaincy of his soul" has a scientific and clinical relevance in the psychic problems of modern warfare even greater than in the unseen and but partly "conscious" battle with the "slings and arrows of outrageous fortune" in the peaceful struggle for existence.

Hence, as will be indicated later in this chapter, the importance of training, discipline and purposefully ordered habituation. And hence the greater virtue of positive efforts for promotion of moral health, rather than the negative effort for the prevention and treatment of psychotic disorder.

It would be of the greatest interest to know whether the

he sees things hidden from the patient himself. The things he sees are what constitute the 'psychopathic unconscious'. He discovers much more than what is directly perceptible. . . . He sees the psychosis as the culmination of a series of events and processes, recent and remote, individual and racial, that have left indelible impressions upon the organism. Briefly stated it becomes evident to him that the psychosis can only be interpreted and understood as a historical process . . . Thus to the psychiatrist the 'unconscious' is . . . not an entity, and not a point of view. It is the primary quality of a collection of facts, gathered together by objective methods of investigation . . . For the psychiatrist the 'unconscious' includes all the morbid processes and changes revealed by objective methods of study, whether these be biochemical, histological, or psychological."
Peloponnesian and Punic Wars, or the Crusades, the Thirty Years War, or even the campaigns of Marlborough, Wellington, and Napoleon, were associated with an experience in any way comparable with the episode of "shell-shock" in 1914-18, and its post-war reflection in the less dramatic but even more remarkable experiences of the neuroses of the aftermath.

But scientific medicine has little to say good or bad on the matter of "medical" disorders of the mind, in peace or war, until a period which is contained well within the past century; to understand the situation into which the medical service was plunged in this war it is necessary to emphasise how very modern the present science of psychology is.

It is true that Ancient Greece initiated movement in the same direction. The concept of the brain as the central organ of mind dates back at least to Pythagoras (circa. 582-500 B.C.). Aristotle (384-322 B.C.) brought the attributes of mind within the field of objective rational enquiry. The medical school of Cos concerned itself with the maintenance of mental and physical balance rather than with the discrimination of specific aberrations from the norm of health. To Hippocrates, mind and body reacted as a single unit of organic life. But thereafter, rational medicine abandoned the soul to the priest and the metaphysician, and set itself to discover the phenomenal attributes of the nervous system. It is to Galen, "the first experimental neurologist", that we trace the effective severance of physiological from mental phenomena. He experimented with animals, and mind may not be discerned through anatomy and physiology. Thereafter to the psychologist in the "Dark" and "Middle" Ages mind was soul and the soul belonged not to man but to God or the Devil.

It was the peculiar disservice of Descartes (1596-1650) to the progress of humankind in the intellectual sphere that at

---

6 Sir Andrew Macphail, the erudite author of the Canadian Medical History of the War, speaking of "the term—Shell-shock . . ." says "the condition was well known to the Duke of Wellington and he had a routine method of treatment".

7 Sir Thomas Browne (1605-82) having dissected large numbers of human brains and failing to discover an authentic seat for the soul decided that it did not reside there. Descartes conceived the human body as a material machine directed by a rational soul located in the pineal gland at the base of the brain. According to Garrison (An Introduction to the History of Medicine, p 258) Descartes first described "reflex action", the basis of "behaviourism" (cf. Mott's investigations on "shell-shock" described later in this chapter).
The renaissance
—Descartes

that stage of the Renaissance, so hopeful and fruitful in other branches of science and free thought, he created for metaphysics and psychology a profound system on the sterile base of deductive logic buttressed on the shifting sands of unconfirmed hypothesis. It was his tragic and disastrous bequest to man's cultural progress that he carried into the intellectual sphere, as between "mind" and body, the discrimination which in the "spiritual" sphere—as between "soul" and body—had come to be accepted as a postulate of Christian dogmatics. Between man and the other animals (by this hypothesis) is a gulf fixed—a separation not merely of degree but of essential nature and being. By the teaching of Holy Church, on pain of impiety, the "likeness of God" was held to place the impulses and emotions which motivated the soulless animal world outside the sphere of comparison with those which operated in man. Descartes applied this to the motives and mechanism of the mind.

The effects of this mode of thought were twofold. First, that the study of the ordered and the disordered mind was placed "out of bounds" for scientific medicine, and psychology became the happy hunting ground of metaphysical speculation. The second was one of the most terrible in the history of medicine. The existing Christian doctrine of "possession" by the Devil was firmly fixed as a theory of pathogenesis applicable to disorders of the mind. Not only the more bizarre and unpleasant manifestations of the insane mind—the manic-depressive syndrome, the delusional insanities, mental deficiency—but the protean manifestations of hysteria—as the "Devil's claw" (anaesthetic patch), and the manifold phenomena of "mass suggestion"—were drawn in to reinforce this dreadful diagnosis of "possession" and "witchcraft".

But pari passu the right to think, to experiment, and to draw rational conclusions therefrom had been won; and it fell chiefly to Englishmen—Bacon, Harvey, Gilbert, Boyle,*

*It may be recalled that besides being the creator of scientific chemistry, Robert Boyle was the first to declare that the reflex phenomena seen in decerebrate animals were entirely material and mechanical. In 1811 the English surgeon Sir Charles Bell exposed by animal experiment its precise mechanism, in the "afferent" nerves. And it was just before the Great War that the Russian physiologist Pavlov laid bare the extraordinary phenomenon of the "conditioned reflex", and thereby established the foundation for the "behaviouristic" psychology of J. B. Watson and (a matter of real importance) for a scientific integration of psychology and psychiatry with physiology and neurology.
Newton—to exploit this freedom, and to create the structure of modern science, based on the inductive method of logic. And it was this same insight and courage that led yet another Englishman, Charles Darwin, to prove to a world hardly less tied and bound by authority that, while man may be made in the image of God, his mind and emotions not less than his physical form reflect also the long trail that leads up from the beasts that perish.

It is not necessary here to follow in detail the gradual encroachment of medicine on to the domain of the mind. With the unfortunate identification of "mind" with "soul", and the dissociation of both from the laws of physical life, the problem of cerebral functioning, both physiological and psychic, and of the disorders of these, had diverged along three lines. The Church had retained so much of the "soul" as could be saved from the Devil, the remainder being handed over to hell-fire or to bonfires; the study of mind went to the metaphysicians, and such art as was concerned with it became the field of the quack—whose rich harvest from that source even yet scarcely shows signs of diminution. Scientific medicine had to toil up the long and difficult road that led first to an understanding of "the wisdom of the body", and when this had been mastered, to enter, with the new freedom gained for scientific thought by Charles Darwin, upon the conquest of the mystery of mind and of its disorders. For that task, however, it was at last equipped with a full mastery of the "scientific" technique.

None of the broad divisions that to-day comprise moral and mental medicine—criminology, "neurology" and psychiatry—an attained to the stage of an applied science and art until within the memory of men who had part in the Great War.

For the medical profession and for medical history, both civil and military, the evolution of the concept "crime", and in particular military crime, is a subject of great interest and importance. Until the modern era "crime" was crime and that was
all there was to it. But by the middle of the 19th century a few thinkers had so far followed Francis Bacon’s advice as to grope toward an objective study of human beings in their social relationships.11

Quetelet (1796-1874) exploited the science of statistics and proved that human conduct varies fundamentally in response to environmental conditions. Darwin (1809-1882), Wallace, and Spencer demonstrated the identity of human with animal emotions and passions. Cesare Lombroso (1836-1909), an Italian physician, set out the idea that the criminal is born not made, and postulated a congenital “criminal type”. Goring in Britain, in an extensive but imperfectly designed series of investigations, decided that there is no criminal type but that generally defective physique and defective intelligence were the only constant factors ascertainable. The British school headed by Mercier (1852-1919) and Maudsley (1835-1918) developed the idea of a “moral insanity” and postulated an intermediate area between disease and crime. A fundamental scientific advance was made in 1905 when Binet (1857-1911) and Simon developed the now universally employed series of mental tests, and in the “intelligence quotient” gave to social science, and thus to medical psychology, or psychiatry, and to criminology, a “yard stick for measuring intelligence”. This was applied in the examination of recruits for the American Expeditionary Force with extraordinary and disconcerting results (to which reference is made later) and which led both to a reorientation of the social outlook and to a revision of the tests.12

The cardinal event in the modern history of psychiatry is the inspiration (derived from thought and work of many pioneers) that led Sigmund Freud (1856-1939) to create a pseudo-scientific field of research into the nature of mental syndromes by the device of identifying with phenomena certain concepts derived from exact observation and analysis of mental behaviour. Such concepts—for example those of the unconscious mind, the libido, and the process of sublimation—

11 See Prof. A. Morris, Criminology (Longmans Green: 1934).

12 As will later be seen the line of approach taken by the Australian Government in the problem of elimination of “moral and mental” unfit was entirely different. See Chap. xv.
were then used by him as the facts for an inductive inquiry into the nature of mental disorder and incidentally of mind itself. The importance of this achievement to the subject of the present chapter is not diminished by the fact that neither the Freudian system of treatment—psycho-analysis—published in 1909, nor any of its variants, was deliberately applied on any significant scale by either side during the war; or by the fact that the problem had been approached on other lines by men whose contribution to the corpus of knowledge concerning the functions of the brain as the organ of mind surpassed in importance those of Freud himself or of his disciples.

With this beacon in view we must now briefly review these other lines of approach with which, in the account of the actual events of the war, we shall be more directly concerned. Those approaches were through neurology, through psychology, and through the study of insanity.

Both Willis (1621-75), anatomist and neurologist and Sydenham (1624-89) a pure clinician, wrote on hysteria. But thereafter neurology evolves along more and more clearly defined lines, its objective the elucidation of cerebral and neural functioning, normal and abnormal. Through the 17th, 18th and 19th centuries a stately line of physicians and, in later years, of surgeons, with British medicine well represented, worked out, first, the place of the brain, spinal cord and nerves in the hierarchy of the somatic systems; next, its internal structure, mode of functioning, and diseases. One by one through the centuries the mysterious and bizarre morbid syndromes that are the outward sign of neural injury or degeneration were identified and brought within a nosological scheme that became the most extensive in systemic medicine. This nomenclature was based strictly on anatomical, physiological and pathological concepts.

"Functional" nervous disorders. But it included also a group of disorders which, because they had no demonstrable basis of pathological anatomy, were termed "functional". The group included a variety of ill-defined syndromes—such as "hysteria", "neurasthenia", "hypochondria"—whose names betray their highly fanciful attributions. Professionally they lay in a vague no-man's land between neurology and general
medicine. They are with us to-day in text-books which are by no means out-of-date, and the official moral and mental medicine of the war was based on these concepts. And, as broad syndromes vaguely distinguishing two groups of clinical phenomena—the various types of "hysteria", and of morbid "anxiety-state" (both of which are indicative of disordered "functioning") they were of some administrative, if not of any special therapeutic service in the war.

As will later be clearly seen, in the matter of strictly mental disorder neurology and the neurologists in a measure failed the profession and the army in this crisis of 1914-18; and the reason for this is definite and now well recognised—that in their study of "functional" disorder they had been content to stage a Hamlet without the Prince. The phenomena of "mind" had not been discerned as the chief element in this "functioning". Physiology and the physiological outlook dominated aetiology, diagnosis, and therapy. Neurologists sought not less earnestly than did Sir Thomas Browne to identify the mind among the brain-cells and neurons, and as Professor R. J. A. Berry\textsuperscript{13} has very well said "if the ideas are not in the brain-cells, where are they?" In this research the British school of neurology had led the way. Yet in 1933 Professor Sir C. S. Sherrington, one of the very great men in neurology, after a lifetime spent in research aimed at the integrating of mind and brain, confessed that the search had led to little more than a vague concept of synaptic inhibition:\textsuperscript{14}

Speculations . . . can have no root for want of intelligible link between nerve-process and mind-process. Pragmatic commonsense may disregard that difficulty; but analytically we cannot disregard the starting point for all analysis. . . . We have to regard the relation of mind to brain as still not merely unsolved but still devoid of a basis for its very beginning.\textsuperscript{15}

\textsuperscript{13} Late Professor of Anatomy, University of Melbourne, and Director of Medical Services, Stoke Park Colony, Stapleton, Bristol. (\textit{Brain and Mind} See review in \textit{British Medical Journal}, 29 Sept. 1928, p. 571.)

\textsuperscript{14} \textit{The Brain and its Mechanism}, by Sir Charles Sherrington, F R S., Waynflete Professor of Physiology in the University of Oxford. (The Rede Lecture delivered before the University of Cambridge, 5 Dec. 1933, p. 32).

\textsuperscript{15} That a physiological-psychological integration is the final aim of both neurology and psychology is expressly asserted by Sigmund Freud himself: "The edifice of psycho-analytic doctrine which we have erected is in reality but a superstructure which will have to be set on its organic foundation at some time or other; but this foundation is still unknown to us" (\textit{Introductory Lectures on Psychoanalysis}, 1922, quoted by Prof. W. S. Dawson in "Psychiatry and Medicine", \textit{Medical Journal of Australia}, 25 Apr. 1931.)
But to prove that preoccupation in neurology did not preclude original and creative insight into psychiatric problems it is only necessary to instance the well known conception by Hughlings Jackson (1834-1911) of the dissolution of functional levels in nervous diseases and the application of this to the question of the nature of insanity. Moreover, it was in 1916 that Mr. Wilfred Trotter published his *Instincts of the Herd in Peace and War*.

And medicine owes to neurology two other developments that had a profound importance in connection with the psychic medicine of the war of 1914-18.

*The somatic (visceral) neuroses and the autonomic nervous system.* Military interest in the visceral neuroses begins with the historic account of the incidence of “the soldiers’ heart” in the American Civil War by Da Costa. The scientific history of this condition is part and parcel with that of the autonomic nervous system and the “internal secretions” and runs in close parallel as do those physiological factors themselves in their relevance to mental disorder. At the end of the 19th century the concept of the “visceral neuroses” proposed by Clifford Allbutt was being assimilated to neurology.

*The traumatic neuroses, “railway spine”.* The second development is contained in the birth of a theory of psychopathogeny (as we may now denominate it), of which Professor Millais Culpin has affirmed that if it had been followed up with the vigour it deserved it might have changed the history of neuro-psychiatry and of the medicine of the war. This was postulated, first in 1891 by Mr. Herbert Page of St. Mary’s Hospital, London as “traumatic neurosis” as an explanation

1800-1900] MORAL AND MENTAL DISORDERS 67

---

16 Prof. W. S. Dawson (loc. cit.), relates this concept to views put forward in 1851 by the asylum physician Henry Munro, to whom he attributes “the foundations of modern psychiatry”. Jackson (Prof. Dawson contends) “stressed four factors in the causation of the insanities” to which “we may still look as the ‘law and the prophets’ in the aetiology and symptomatology of mental disorders”. Prof. Dawson cites these in up-to-date terms as follows: “(i) the degree of failure of adaptation or of regression to more primitive, inferior functional levels (dissolution); (ii) the personality of the patient, his inherited and acquired psycho-physical dispositions; (iii) the rapidity with which the dissolution occurs, and (iv) the influence of the vegetative mechanisms of the body and of the environment upon the nervous system.”

17 Shortly before the war of 1914-18 these principles were reasserted by Sir Henry Head in his monumental work on aphasia.

18 Professor of Medical-Industrial Psychology, University of London

19 Prof. Hermann Oppenheim of Berlin published his important treatise on the traumatic neuroses in 1889.
of "railway spine", a term applied to certain mysterious symptoms following on the "shock" of railway accidents, in particular those wherein the question of compensation arose. Page claimed that these symptoms were chiefly or sometimes wholly "mental" in origin. He compelled a grudging acceptance to his views, but there, chiefly for lack of material, the matter rested—until the "shell"-shocks of the Great War.

"Railway spine" stands to "shell-shock" in much the same relation as the "effort syndrome" to the "soldier's heart" inasmuch as, with a dominant pathogenic element of psyche, each has close relations with the soma.

But with all this it may be stated that, in a general way, the war of 1914-18 began with neurologists thinking along physiological rather than psychological lines, and with a definite clinical and philosophic gap apparent between the specialties of neurology and psychiatry.

The abstract science (as it may be called) of modern "psychiatry" includes the study and practice in the "neuroses" and the "psychoses" or "major" psychoses. It has derived along three lines of research—the study of normal psychology—the "mental" counterpart of physiology; the study of morbid psychology (psycho-pathology); and the study of the alienated mind, that is, of insanity ("psychiatry" in its original sense). For convenience we have assigned to the last a special place in this retrospect and among the conduct disorders of the war.

(a) Normal psychology. The study of the psyche (as it must now be termed) had moved along three lines, which may be defined as the introspective, the experimental, and the comparative or biological.

(i) Introspection. "Until comparatively recent times," says Devine,19 "the academic psychologist concerned himself mainly with introspective studies of the content of consciousness—images, perceptions, and feelings—and interested himself but little in the hidden sources of action." It was upon this method that neurologists before the First World War chiefly relied for the approach to the problem of the link between brain

19 Recent Advances in Psychiatry, p. 261.
and mind—or between neurology and metaphysics. Since then it has been generally discarded in favour of more objective methods—*experimental psychology, comparative psychology* and *morbid psychology*.

(ii) *Experiment*. Experimental psychology began in 1846 in E. H. Weber’s laboratory in Leipzig. He was the first to show that common sensation can be analysed into visceral and muscular components, and that these can be separated from tactile sensations. The rudiments of analytic psychology can be traced in his studies of “pathologic lying” and of infantile behaviour. The discrimination of epicritic, protopathic and deep sensibility by Head, Rivers and Sherren (1905-8) are in the same line. But it led to a “bag’s end” until in 1900 the great Russian physiologist, Pavlov, discovered the phenomenon of the “conditioned reflex” on which Dr. J. B. Watson, Professor of Psychology at Johns Hopkins University, built his system of “behaviourism”, an exposition of which was first published in 1914. Watson’s reaction to the search for the *psyche* is to deny its existence. Like that of Freud his teaching did not influence materially the outlook or practice in the war.

(iii) *The biological approach: comparative psychology*. Aristotle has been called the first comparative psychologist. Charles Darwin may well be acclaimed as the first of the modern ones. His *Expression of the emotions in man and animals* (1873) was the forerunner of attempts at the end of the 19th century to define and categorise the primitive motives and mechanisms which lay behind behaviour and conduct in man and animals. In Australia the works of William James, William McDougall, and Jacques Loeb largely moulded the “psychological” outlook of the wartime generation of medical practitioners. The comparative line of approach was also followed by Professor W. H. R. Rivers.

(b) *Morbid psychology: Janet, Charcot, Freud*. But the most useful knowledge hitherto attained concerning the mind had come from study of *its disorders*. The most important studies of the minor types of mental disorder are those which

---

20 The post-war studies of Profs. Wood Jones and Porteus in their *Matrix of the Mind* prove that this method is no more outmoded than are the fundamental principles of evolution itself (Wood Jones was sometime Professor of Anatomy in the Universities of London, Adelaide, and Melbourne; and S. D. Porteus lecturer on Experimental Education, University of Melbourne.)
derived directly or indirectly from the French school of neurologists and psychiatrists in the last part of the 19th century. The pioneer work of Janet and of Charcot on hysteria, and of the Nancy school (1880-90), was the direct inspiration of Freud, and so of Jung, Adler and the whole of the psychoanalytic school.21

And so the track of research comes up to that beacon light to which reference was made above. Despite the modern belief in the method of "mass approach" in scientific investigation, the world owes the two greatest discoveries in psycho-pathology to studies that were concentrated on two individual minds—those of "Irene" and "Dora". By contemplation of the conduct of "Irene", Janet in 1907 conceived the concept of mental dissociation. Exploitation of this concept in the mental exploration of "Dora" by the method of "psycho-analysis" led Freud and Breuer to formulate the concept of "the unconscious" domain of the mind and of its "censor" as a means of access to the mysteries of the levels of mental and vital activity below the plane of pallial consciousness as formulated by Hughlings Jackson; and to work out the technique for a new approach to the "mystery" of the mind by "psycho-analysis".

(c) The alienated mind: insanity. The terrible past history of the treatment of the sickness comprised under the "major psychoses" must be understood if the admirable record of Australia in the repatriation of "mentals" is to be appreciated, and lessons of immediate and permanent value drawn from it.

In the classic era of Greece the attitude toward the insane was eminently "sane".

To Hippocrates must be ascribed the honour of being the first to establish insanity and epilepsy as natural diseases due to disorders of the brain, and requiring the skill of physicians rather than that of priests.22

Following Hippocrates, Asclepiades was a pioneer in the

21 It should be recalled that these in themselves, and also the modern system of treatment by hypnotism and suggestion, emerged from the work of Mesmer (1734-1815) and the explorations in that field by the Anglo-Indian Esdaile (1808-59), who in 1843 amputated limbs under hypnotism, and of James Braid (1795-1861).

In much the same way the science of cranial topography was founded on the pioneer work of the "phrenologists" Gall and Spurzheim.

humane treatment of mental disorders, and employed occupation therapy, exercises in promoting memory and fixing attention, and music and wine to promote sleep.\textsuperscript{23} But with the superstition that blighted thought throughout the Middle Ages we enter upon one of the most terrible chapters not only of medicine but of mankind. Save for a few enlightened minds, "possession" by the Devil replaced the idea of disordered brain. In the 17th century Thomas Willis (1621-1675) and after him Morgagni (1682-1771) sought to revive the doctrine of the close relation between mind and the brain, but they were as voices speaking in a wilderness of superstition and theology; and after them there came a period barren of both science and humanity.\textsuperscript{24}

The revolt by science and humanity against fear and fetish dates from the end of the 18th century, when Pinel, first of the clinical alienists, backed by the new free-thought of France "struck off the chains from insane patients at the Bicêtre". Though his classification of insanity is now obsolete, it opened the way to a progressive application of the scientific method. This culminated in the great work of Esquirol (1838), and led through the Tukes in Britain to Emil Kraepelin (1856-1927). Kraepelin, the pioneer of experimental psychiatry, created the first scientific "system" of mental disease. With him we abut on modern psychiatry as applied to the study of the disordered mind, which was its original concern.

This humane and scientific advance was in progress when the First World War broke out. But superstition and fetish die hard. One of the major medical problems of recruiting was the universal suppression of a "tainted" family history, and it is probable that this attitude was partly due to the outlook of the medical profession itself. It is not long since the mental element in mental disease and disorder was the least understood and the least studied of all the pathogenic factors concerned. Up to the outbreak of the war psychiatry had found itself very fully occupied in the discrimination of clinical syndromes by the observation of behaviour, while neurology was concerned with the endeavour to relate these with

\textsuperscript{23} Garrison, \textit{loc cit}, p 106

\textsuperscript{24} The philosopher Kant maintained that insanity was the province not of the physician but of the philosopher. \textit{Ibid}, p 401.
anatomical or physiological degradation or disorder. "Delusional" and "adolescent" insanity had been analysed, and the concepts "paranoia", "dementia praecox", and even the schizophrenic state, had been discriminated. The association of specific cerebral degeneration with certain forms or stages of these various syndromes had been observed; a causal relation between syphilis and general paralysis had been proved by the Wassermann test. Psychiatry and neurology were collaborating closely enough to produce a Journal of Neurology and Psychiatry, under the editorship of Frederick Mott; and many famous names prove the existence at that time of this connection.

Within the psychiatric specialty itself "the motives and mechanisms of the mind" were being given the attention they deserved. The first edition of Hart's Psychology of Insanity, in which the work of Janet, Freud, Jung, and McDougall has chief place, was published in 1912. In a favoured work on Mental Diseases (by R. H. Cole), published in 1913, "the latest developments in the Psychology and Pathology of Insanity" received "attention". "Hysteria", "neurasthenia", and "psychasthenia" (obsession) were described, chiefly in their relation to insanity.

Nevertheless the most important historical fact relating to the mental medicine of the First World War is that, speaking broadly, the study of "mind" was in 1914 philosophic and introspective rather than scientific; the medicine of the minor forms of mentally disordered conduct was not regarded as a matter worthy the serious attention of the scientific physician, neurologist, or psychiatrist. In practice "functional" disorders (i.e. those of conduct) were relegated to the general physician—with effective reversion to the quack!

To summarise—at the outbreak of the war the medical profession expected, and was fully equipped to meet, the problems of war surgery in the specialty of neurology, that is, the science relating to the diseases and injuries of the central nervous system. The topography of the brain was well advanced wanting only (as Professors Wood Jones and Porteus have observed)\(^{25}\) the opportunity for verification on human

\(^{25}\) Matrix of the Mind, p. 82
subjects. Surgical giants such as Harvey Cushing, Sir Victor Horsley and Sir Percy Sargent were its exponents in the war.

In the clinical study of insanity and in the principles applied in its treatment the standards were not greatly inferior to those obtaining in other branches of scientific medicine. Nevertheless, in spite of a vigorous and growing movement towards a study of the "mental" component, the outlook of the profession was still predominantly behaviouristic and material.

In the matter of those disorders of conduct which, as the "psycho-neuroses", became one of the chief problems of medicine in the war—and the one with which this chapter is almost wholly concerned, the situation of current medical practice and teaching has been summed up with authority as follows:

Though the Russo-Japanese war might have led physicians to expect psycho-neurosis on an extensive scale, the medical administration of our own and other armies was wholly unprepared for the vast extent and varied forms in which modern warfare is able to upset the higher functions of the nervous system and the mental activity of those called upon to take part in it. Moreover, before the war, the psycho-neuroses had interested few practitioners of medicine. Common as these disorders are in civil life, they are left almost without notice in medical education, while those who had paid special attention to the subject were torn asunder by fierce differences of opinion, not only concerning the nature of these disturbances of nervous and mental function, but also in regard to the practical measures by which they might be treated or prevented. The outbreak of the war found the medical profession with no such common body of principles and measures as those which enabled Medicine and Surgery to deal so successfully with the more material effects of warfare upon the human organism.

THE SITUATION IN AUSTRALIA 1914

The situation in Australia did not differ materially from that in the most highly cultured nations of the Eastern and Western world. In social matters, however, this nation possessed a particular outlook, the effect of which was strongly seen in the attitude towards both civil and military law and the treatment of "offenders". It is true that "law and order" was recognised as the foundation of society as firmly and jealously as in Great Britain and throughout the British Commonwealth. The "liberty of the subject", trial by jury,

---

From Introduction to *Instinct and the Unconscious* by W.H.R. Rivers, F.R.S., Fellow and Praelector in Natural Sciences, St John's College, Cambridge, p. 2 (Cambridge At the University Press, 1920).
and a judiciary independent of political influence are the foundation of the Australian legal system as Christian principles are of the ethical.

There was, however, a definite though subtle difference between the Australian outlook and that of, at least, the governing classes in Great Britain. The social injustices of the early history of Australia had bitten deeply into the national feelings and tradition, and subsequent history had not tended to lessen this. This was reflected in a demand for a more definitely moral perspective in the adjustment of punishment to crime. With this went a definite leaning towards prevention as against penalty—for constructive as against negative handling of human problems. The Australian system of industrial arbitration—for example—was the most exact attempt hitherto made to adjust relations between capital and labour on scientific and constructive lines. In a word Australia was constructively “democratic”.

This outlook was reflected in the system of Military Law contained in the Commonwealth Defence Act and Regulations—the analogue of the British Army Act and King’s Regulations. It was responsible for the fact that the A.I.F. managed to get through the war without the introduction of a death penalty for most offences so punishable in other armies, and there were many other differences, especially in the application of the law.

In the Australian medical schools the teaching of neurology and psychiatry was in line with that elsewhere; neither had much concern with the “mental” and “psychological” attributions of their specialty. In the State of New South Wales, however, two factors tended to modify this limitation. The first was the teaching and practice of two neurological specialists of quite outstanding ability and insight, Dr. George E. Rennie and Dr. A. W. Campbell.

Campbell was one of the great minds in Australian medicine, and his work is part and parcel with the history of the A.I.F. Of Rennie it is to be said that at a very early date he recognised the value of psycho-therapy in the treatment of nervous and mental disorders, and endeavoured—though without great success—to assimilate the new advances in psycho-path-
ogeny with the general teaching and practice of medicine in Australia.  

The second factor was the establishment under the enlightened direction of Dr. Eric Sinclair, head of the Lunacy Department of New South Wales, of a special Research Laboratory, situated in the University of Sydney. It was directed by Dr. J. Froude Flashman, with the co-operation of Dr. Oliver Latham, two men with definite qualities of genius. This laboratory was, and has since been, a source of scientific inspiration not only to its Department but to the medical profession of Australia.

In Victoria two clinicians not less worthy of note, though in less exactly specialised spheres are prominent throughout this history. These were Henry Maudsley and Richard Stawell.

II

THE EXPERIENCE OF THE A I.F. 1914-18

Such being, in outline, the development of knowledge and practice in this field of medicine at the time of the First World War, what (we now have to ask) was the experience of the Australian Imperial Force?

In the first place, the "moral and mental", as well as the physical standard of "normality", of the force was unquestionably high. In a great measure the Australian Imperial Force selected itself and both internal and external factors in the brief history of the Australian nation favoured the creation of a race of men attuned to a high standard of psychic health. Of the causes that elsewhere have tended to affect the race adversely competitive industrialisation had, until this present century, barely influenced the Australian people. Even the excessive urbanisation of which much had been said and

19141 MORAL AND MENTAL DISORDERS

27 Dr Rennie was for many years Editor of the Australasian Medical Gazette. At the Australasian Medical Congress in Auckland, 1914, a paper on "Psycho-Analytic Treatment" was read for Prof. Ernest Jones, of London. (Transactions, Tenth Session, pp. 754-9.)

28 For the treatment of the insane in Australia see Chaps. xv and xvi.

29 In Social Psychology (13th Edn, p 297) Prof Wm McDougall places Australia as the most gross example of the tendency. He failed to observe that at the time this was largely offset by the opportunities afforded by climate, standard of living and so forth.

But there can be no question whatever but that Australia stands to-day in this matter at a crucial parting of ways.
written was very fully counter-balanced by the nearness of the city people to the open country, the prevalence of sport, the—then—comparatively large areas of open space in the cities themselves, and, by no means least, the high wage level.

Social if not economic equality existed and even in the largely urbanised States of New South Wales and Victoria a comparatively large proportion of youths actively participated in sports.

Nothing in the nature of a systematic and deliberate elimination of recruits "morally and mentally" unfit took place in Australian recruiting. The degree of mental fitness is not to be determined without special measures therefor, and certainly nothing was done even remotely approaching the mass-survey, physical and mental, of manhood undertaken by the U.S.A. It is probable indeed that the most effective weeding out of mental unfit from the A.I.F. took place in the camps of training, where temperamental unsuitability for army life is often revealed. Indeed, though the assistance of psychiatrists in recruiting is undoubtedly essential, probably more may be learned by close observation in camps of training than by such mass campaigns of psychic and intellectual analysis as are possible amid the urgencies of a desperate war. And, as will be seen later, the effects of any failure of the recruiting system to eliminate mental unfit were not prominent in the field; when all is said the history of the A.I.F. seems to show that its chief troubles in the "mental" sphere were in general due to other causes.

The proportion of moral and mental causes of rejection or discharge from camps in Australia and the number of men invalided "without service" because of these disorders are shown in the statistical chapter. It is true that when recruiting fell very low General Howse had cause to complain of serious laxness in the acceptance of mentally unfit men.30

30 In a letter of 28 Aug 1917, Lt.-Col. G. S. Miles, R.A.M.C., mental specialist of the British Southern Command, called the attention of the British D.D.M.S. in that area to the fact that he had since April 12 recommended the sending back to Australia of 16 reinforcements whom he regarded as mentally unfit to serve.

"I am of opinion," he added, "that in all these cases had they been carefully inspected previously to embarkation the mental defects should have been detected and the cost of transportation both to Europe and return might have been saved as well as the trouble of attempting to give them military instruction."
Australian records throw little light on the problems presented by the several groups of potential unfits and misfits.

But one of the most definite "lessons" of this war is the importance of the family and personal history in determining moral and mental breakdown in war. Here by far the chief cause of difficulty lay in mis-statement or suppression by the recruits in the matter of personal and family history; and this was almost equally significant in both major psychosis and neurosis, and in epilepsy.31

THE GALLIPOLI CAMPAIGN

The medical experiences of the A.I.F. at the front fell into three main periods:

Moral and mental problems

(1) The Gallipoli Campaign (1915), (2) The Sinai and Palestine Campaign (1916-18), and (3) The Western Front (1916-18).

In the domain of physical disease medical events differed very greatly in these several theatres by reason chiefly of fundamental differences in the environment.32 This aetiological particularity is much less evident in the domain of mental experience, yet the "moral and mental" history of the Gallipoli Campaign has features which in view of current doctrines are of interest as suggesting—though the evidence does not warrant more than suggestion—that some specific influence was exercised by environment on the incidence of these disorders.

As an experience in psycho-pathogeny the Gallipoli Campaign has this important feature that it was self-contained, and was of a duration and an extent adequate to comprise a complete experience. Unfortunately the records available for study are very defective by reason chiefly of the fact that:

(a) The campaign belongs to a stage of the war when the idea of a psychiatric problem had simply not entered into the minds of the medical service.

(b) That psychiatric nomenclature reflected with an unpleasant accuracy the confusion that still existed in medical teaching on the subject.

---

31 This peculiarly mean and unpatriotic deception has been condemned not only by the public press but by returned soldiers. When it is clearly deliberate the Government should ensure that appropriate penalty be enforced for this form of perjury.

(c) That the system of recording the causes for which soldiers were evacuated and which constituted the raw material for medical statistics was still crude.

To offset these are three facts of interest for the history of the A.I.F.

First that for this first year of the war it is possible to present a complete statement of the causes for which men were evacuated so far as they were recorded in the Admission and Discharge Books of medical units.

Second that general medical events of the campaign have been fully and exactly studied and recorded. In this way nervous diseases and disorders can be observed in their complete aetiological environment.

Third that the diagnosis "D.A.H." being official, exact information is available in Australian records of certain experiences which seem to bear on the military significance, at least, of this syndrome.

Before the force sailed for Gallipoli the medical service was required to co-operate in weeding out a considerable number of men whose services were no longer required or who were "unlikely to prove efficient soldiers" who were sent back to Australia.

In discussing the psychic experience of the A.I.F. in Gallipoli, as elsewhere, this narrative will adopt the division already laid down—into delinquent conduct, psycho- and somatic-neuroses, and psychoses—and the same will be done as far as possible in marshalling the relevant figures for each campaign.

Of delinquent conduct (over and above the contraction of venereal disease) two types came into the medical picture of this extraordinary episode—namely malingering and self-wounding.

Gallipoli: 1. Delinquency

Malingering. The nature of the medical problem involved in this crime was brought home to the Australian Medical Service in this campaign in a peculiarly interesting fashion.

Of conscious and deliberate malingering there was very

---

88 As will be seen later, at No. 2 A.G.H. a very exact clinical study of cases which returned to Egypt was made by one of the most eminent of Australia's psychiatrists, Maj. A. W. Campbell.

89 Under these two formulas a large number of men were returned to Australia throughout the war who for various reasons were believed to be unserviceable. Among them were a considerable number who had got into the force by concealing disease, knowing they could compel discharge at any time by disclosing it.
little—partly perhaps for the good reason that no purpose could be served! Until the end of the campaign, as has been elsewhere recorded, the “stern purpose of Gallipoli” decreed that to qualify for evacuation a soldier must be definitely and obviously unfit to “carry on”. On the other hand medical officers were brought abruptly face to face with the extraordinary moral and mental problems involved in the phenomena of the hysterical syndrome, in particular their relation to the conscious “will”. It is not contended that Regimental Medical Officers apprehended the significance of the tremors, stammerings, mutisms, paralyses and so forth, for which they sent men to the Base. But the problems of psycho-neurosis as presented in the war were observed and recorded in this campaign by Australian medical officers with a grasp of essentials that was hardly exceeded in later years. And this study included in its purview the psychic no-man’s land that separates malingering from hysteria, and which links free-will with determinism.

It is probable that a “moral” condition—not yet “hysteria”—constrained not a few men, whose descent to the limbo of a fully-developed neurosis began with a conscious, or semi-conscious, failure to act as his soldier’s “conscience” dictated that he should. Nevertheless it is the sustainment of stresses, “moral and mental”, quite as much as the demonstration of fighting qualities that so amply justifies the selection of Anzac Day as the Australian national commemoration.

Self-inflicted wounds. The conditions of Gallipoli precluded in a great measure the relief to unbearable tension afforded to “weaker vessels” by wine, women and “A.W.L.” Nor—except for rare leave in Lemnos and Imbros—were amenities such as rest and recreation provided as a respite from intolerable strain. Such measures as on the Western Front were found by far the most effective prophylaxis to avoidable nervous breakdown were probably impossible on Gallipoli.

This had two results. First, a large evacuation from psycho-physical and psycho-somatic breakdown, “debility”, indigestion, and functional disorders. Second, repeated short epidemics of

---

35 See Vol. I, Chap. xvi.
36 The reader may be commended in this connection to the closing paragraph of the Australian Official History, Vol. I, The Landing at Anzac.
self-inflicted wounds. These outbreaks were not so much sophisticated and deliberate attempts to shirk, as a crude and instinctive reaction against a psychic impasse which in less determined and morally-poised men would manifest itself as hysteria—the “flight into disease”. So far as records show, the outbreaks took the form entirely of personal maiming by rifle, or by exposure to enemy fire.

Though not unique this episode is the only important one in the history of the A.I.F.

The records show that from an early stage of the campaign the problem of self-maiming caused concern to the military authorities. Beginning on May 26th special cautions and instructions for dealing with outbreaks are recorded in July, August, September, October and November. As well as conveying a warning of the prevalence of the crime either in particular units or in the division these prescribed the military and medical procedure to be adopted.

It may be noted that the recorded details of such “epidemics” at once suggest a relation between the occurrence of such injuries and the morale of the units in which they happened. The interest of this observation will be appreciated later in the chapter.

The history of the psycho-neuroses and somatic neuroses of Gallipoli relates to two fields of experience—that of the R.M.O.'s and field ambulances at the front, and that of the Base Hospitals in Egypt. Unfortunately little record of the former exists; no special instructions were issued for dealing with the minor mental (or “functional”) disorders, and medical officers faced the “mental”

---

At the end of May 1915 owing to the number of cases of suspected self-mutilation the 1st Australian Division advised all units as to the wording of the charge to be laid for this class of offence. In July one brigadier of the 1st Division issued a special instruction to one of his battalions owing to the number of self-inflicted injuries in that battalion. In August G.H.Q., M.E.F. ordered the retention of suspected cases of S.I.I. until a court of enquiry had been held. At end of October the G.O.C. 2nd Division stressed the necessity of exhaustive investigation in suspected cases. “During the past month,” he said, “there have been 20 cases of self-inflicted injuries.”

On November 1 the D.A.G., Mediterranean Expeditionary Force issued an order that, owing to the large increase in cases of self-maiming in the force, men convicted or under arrest on such a charge should not be evacuated but medically treated locally until fit for return to duty; if it was imperative to remove the patient he must not be evacuated beyond Mudros. On November 12 a brigadier of the 2nd Division brought to the notice of his battalion commanders the recent increase in the number of cases.
surprises that met them with the ordinary equipment of a general practitioner. The experience of the R.M.O's can justly be termed surprise—they were called on to diagnose the condition and decide the disposal of men who, as the result (as it often seemed) of some “shocking” physical experience, were unable to control tremblings, or were “struck” paralytic, blind or speechless; or they were faced with the problem of men who had hitherto deported themselves after the manner of men, but now became unable to face the situation, relapsing into a condition of mental anguish, and impotence. The lack of a scientific chart for steering diagnosis was presently made up for—apparently as the result of a general consensus of soldiers’ feelings rather than through any instruction from the medical directors—by the acceptance of “shock” (or in the later months of the campaign “shell-shock”, a term that certainly came to Gallipoli from France) as a major element in the aetiology of these cases. In any event evacuation was commonly found necessary. But it was observed consciously or instinctively that, here too, the incidence of such “breakdown” was in a great measure determined by individual and unit morale. Gallipoli was a highly intense and individualistic school of conduct, and the factors governing this medical situation were found to be identical with those which influenced the fighting qualities of individuals or of units.

This point had been reached when the campaign ended. The A.I.F. was left conscious of the importance of the moral more than of the physical factors in the maintenance of mental and moral balance. It remained for the Western Front to reverse this attitude.

Meanwhile observations of much interest were being made by Australian officers at the Base. It happened that the staff of the Australian General Hospitals included one of the most scientific, broad-minded, and able neurological specialists that the country has produced, Major A. W. Campbell, of No. 2 A.G.H. It will be recalled that No. 2 A.G.H. in Cairo received a large proportion of the medical flotsam and

---

88 After his war service Maj. Campbell was appointed to the Military Hospital, Randwick—other honorary positions were: Consulting Neurologist to the Royal Alexandra Hospital for Children, Coast Hospital, and Department of Repatriation. (From Obituary, MJA 1937) He died in Nov 1937.
jetsam of Gallipoli among whom were a fair proportion of the cases of "functional" disorder occurring at this time in the A.I.F. On this experience Major Campbell based the most exact, original, and scholarly study of "nervous breakdown" undertaken by Australian clinicians in the war. His observations were embodied in an article published in the Medical Journal of Australia on 15th April 1916. With only minor alterations of phraseology, his appreciation of the medical, military and national problems presented by these cases may be read to-day with interest and advantage, and the episode will here be described by giving a précis of his article, which also furnishes an illuminating parallel with the neurological history of this year in the B.E.F.

The observations were based on a study of 176 patients out of a total of 7,152 admissions for non-battle casualty—the percentage rate being 2.4. The diagnoses in the hospital records were—Nervous 93, D.A.H. 43, Mental 27, Alcoholism 13. No figures are available which disclose the composition of the "nervous" group.

During a year of service with No. 2 Australian General Hospital, comprising the time that operations were proceeding at the Dardanelles (he says) it was vividly demonstrated to my fellow-officers and myself that neuroses and psychoses contributed to modern war casualty lists more heavily than we had previously supposed... It was manifest that these conditions among Australian troops were frequent.

He classifies his cases "for convenience" under the following headings—"Neuroses" (distinguishing "neuroses involving the motor apparatus and common sensibility" and those "involving the special senses and the faculty of speech"); "Neurasthenia and other conditions, including 'trench spine'"; and "Psychoses" ("minor", "mental stupor", "insanity"). Traversing his experience with each of these categories, Major Campbell disclosed what may be termed a system of military psychiatry that might well have served as the foundation for Australian policy and practice. Under the first sub-heading (embracing "cases of hemiplegia and other paralyses and pareses, and contractures and spasms, with or without disturbance of common sensibility") he found:

The conditions were often reminiscent of what the civil practitioner

---

39 It may be noted that of the 7,152 admissions debility accounted for 199, N.A.D. (No Appreciable Disease) 19.
knows so well as resulting from railway and tramway accidents, and would present as much difficulty in diagnosis and treatment; some few cases would have passed as candidates for the "litigious neurosis".

In "two instructive cases of hemiplegia with hemianaesthesia the responsible cause was a shell-burst close at hand; one man lost consciousness, the other did not". (A "neuropathic spasm, contracture or paralysis" might be "grafted on a wound".) Of "neuroses affecting the special senses and speech" numerous examples presented themselves:

Almost without exception the subjects were young and obviously neurotic. . . . In most the cause was a severe shock, such as a shell explosion close at hand, lifting them in the air and burying them with debris, and perhaps, but not necessarily, rendering them unconscious.

Cases of speech affection, aphonia, anarthria, mutism, or stammering, were most frequent.

Though the duration of the disability varied, perfect recovery as regards the proximal affection was the rule. All the recognised tactics of approach to these cases seem to have been employed.

Commonly, after allowing them a day or two in which to settle down, we would suggest that at our next visit they would be able to whisper; the suggestion usually took effect, and ordinary speech soon followed. The kink in the mechanism was occasionally undone by a sudden and unexpected surprise.40

Of the "blindness" due to psychic shock (and inaptly called "shell blindness") he records a case—a man who had been "struck blind" within a few minutes of the landing at Anzac. He "made a rapid recovery and returned to the front, where the first exploding shell brought a recurrence of the affection".

The usual congeries of inhibitions and exhibitions was met with.

The immediate causal factor in all was alike; emotional shock contributed to in varying measure by physical fatigue and mental strain.

In treatment suggestion was the chief instrumentality.

In this group appear the cases that obviously correspond with the "anxiety neuroses" of to-day.

Psychoses

Under "minor" conditions he classified a considerable group of

40 Compare Hughlings Jackson's well known story of the jibbing bus-horse, which refused to budge under punishment or cajolery, but started off automatically when the conductor banged the door, the usual prelude to starting.
men unable to withstand fire. These were not necessarily wanting in courage, many of them possibly self-goaded continued on duty for weeks before parading sick. Some were finally knocked out, but not wounded, by an explosion of some kind. . . . Such cases would be admitted with various benign diagnoses, "mental or nervous shock or strain", "shell-shock", "stupor", "loss of memory", etc., and on admission the patients might appear to be in normal health. Further observation however always showed signs of psychic disturbance, such as a restless nervous demeanour, easy excitation, insomnia and disturbing dreams. Those acquainted with and willing to give their family history might reveal a psychopathic tendency. Others might refer their failing to an incident of boyhood. . . . Others again had the seeds of their collapse sown during the period of training.

All these men could give a harrowing account of their mental suffering with a paralysing effect of battle incidents. Their statements were instructive in showing that the fundamental process was one of psychic shock, exhibited by a temporary paralysis of action, or a confusional fugue, or transitory obsessions and fears. . . . In this state an officer would be as incapable of giving orders as a man would be of obeying them.

To these might be added the group of men given to psychasthenia, hypochondriasis, and introspection. . . . Such cases swelled the admission list and were a source of trouble to medical boards. Commonly they were credited with malingering, perhaps unjustly, because the inherent psychopathic basis was the true cause. Be this as it may, from the service point of view they were a useless load.

Cases of mental stupor, or acute dementia of all degrees were admitted and recovered in the restful environment and with the "attentive nursing and abundant diet of hospital life".

Neurasthenia, etc. Of the syndrome related to the group of disabilities comprised in neurasthenia and such conditions as "trench spine" no very clear idea can be drawn from Major Campbell's study. He says:

Among other neuroses brought out by the strain of firing-line conditions we observed various degrees of what is denominated neurasthenia, but this was not so frequent as we anticipated. Prolongation of the strain, however, may add to the number.

He describes a case of hemichorea "the outcome of trench fighting"

with movements of face, trunk and limbs on one side so violent that the subject was unable to walk, use a bed-pan or take food unassisted; his speech also was jerky.

This patient, and as well his mother and sister, had suffered in a similar way before the war. Another "remarkable case" was one of "acute and most severe exophthalmic goitre developing almost immediately after a period of unconsciousness due
to a shell explosion". He had also "coarse tremor of the hands, incoordination of the arms, tremor of the tongue, ataxic speech and profound cardiac arhythmia, causing critical fainting attacks".

As to the cause of the neuroses, Major Campbell says:

They commonly followed on periods of unconsciousness, or on emotional shock, and phases of intervening meditation, and the effects of physical fatigue and mental strain have been alluded to, but, as a causal factor standing over and above all these, we wish to emphasise the importance of predisposition. Time after time, on going into the family and personal histories of such cases, we found evidence of neuropathic or psychopathic infirmity, and this was the fundamental cause of their downfall.

This is not to say that they had not, at the front, been capable of fighting service of the highest quality. It will be seen later that records from some British units on the Western Front showed that men admitted for "nervous breakdown" had won as large a proportion of "honours and rewards" as the general body of soldiers. But Major Campbell makes it clear, and his views are borne out by the general experience, that men of this kind who reached the Base Hospitals were useless for further fighting service.

Recovery from the proximal and immediate disability could be expected, and many subjects later might prove useful and efficient on lines of communication, or at a base depot; but, as regards further fighting, all, with one stroke of the pen, might be crossed out as "permanently unfit"; and, in doing this, a pang of regret would be felt that their primal weakness was such as to defy detection prior to enlistment.

As to treatment he states that this,

as in all ideo-obsessive states, called for care and judgment. To gain the confidence of the patient and place him under tactful nurses were essential preliminaries, prior to attack with all the psycho-therapeutic measures under command.41 . . . Without being malingerers, these men generally exaggerated their disability, and, as carriers of psychic contagion were a source of danger in a ward; therefore we always endeavoured as far as possible to isolate them. From each other they received no sympathy.

Major Campbell's final summary deserves the closest attention of all concerned with the future of the Returned Soldier, as a soldier, a man, and a citizen:

41 He adds, "For affections of the motor apparatus, massage proved very useful."
It should be recognised that to save resistive cases from acquiring the invalid habit, the shorter their stay in hospital and the sooner they resume civilian garb the better. Also, it cannot be too plainly indicated regarding men who have to be returned to Australia that stringent measures should be formulated and forewarnings given for dealing with them on the transport, and on disembarkation and prior to discharge. This is a continuous critical period, during which they must be guarded with the utmost tact and circumspection against themselves and their friends and a grateful country.

The clinical condition which later in the war was officially known as “The Effort Syndrome”, was in 1915 still known under the official designation (introduced some years before the war) of “Disordered Action of the Heart”. The history of this important form of mental sickness is examined later but there must here be recorded certain experiences in Gallipoli that seem to illuminate to some extent the question of its aetiology.

During the nine months of the campaign 287 cases diagnosed “D.A.H.” were evacuated from Gallipoli, a rate of 13.2 per thousand per annum of mean “ration” strength. The only comparable figure for the Western Front is that of the rate per thousand per annum (of mean “ration” strength) of admissions to the Expeditionary Base Hospitals, which was 8.6.

This striking difference might of course be accounted for in various ways, the most obvious being different practice in diagnosis and recording. But there is another explanation which, though it also has elements of uncertainty, cannot but be regarded as worthy of note. In the study made of sickness on Gallipoli in Volume I an account was given of observations of great interest made by Colonel Sir J. Purves-Stewart on men in the front-line trenches at Anzac in September. Confining his attention to troops “not reported sick” but actually in the firing trenches he found that 77 per cent. were emaciated and anaemic.

“Most striking of all” was the rapidity and feebleness of the heart’s action. Tachycardia “not due to sudden exertion or emotion” was

---

42 A total of 287 out of 63,932 evacuations for non-battle casualties. This represents a proportion of 0.45 per cent. The corresponding figure for the B.E.F. cannot accurately be ascertained. On account of the different methods of recording the appropriate comparison (with the admissions to British field ambulances, namely, 0.572 per cent.) cannot be made. It should however be noted that calculated on the admissions to hospitals in the United Kingdom the proportion for the Western Front was 1.55 per cent.

43 Maj. Campbell gives no help here as he does not consider D.A.H. in his report.
found in 50 per cent., and 74 per cent. suffered from shortness of
breath.\textsuperscript{44}

It was suggested in the \textit{Australian Official History} (as it was
certainly accepted at the time by Colonel Stewart and by the
medical staff at Anzac) that the condition found was brought
about by the conditions of life on Gallipoli. In particular,
besides debilitating disease, the nature of the diet (which was
proved to be greatly deficient in the "B" and "C" vitamins)
and the prolonged and gross hardship and overwork and loss
of sleep were held to be adequate to account for the symptoms.\textsuperscript{45}

The factor of \textit{nervous strain} however was only less striking
than those noted above; and must be presumed to be held to
justify the claim made in a recent writing that very many
of the cases evacuated from Gallipoli for "heart trouble" were
in fact suffering from the "effort syndrome".\textsuperscript{46}

But, when all is said, while acknowledging that many of
the factors necessary for an exact interpretation are lacking, it
seems difficult to escape the conclusion that the physical factors
on Gallipoli, or at least the environment, were as much a
"cause" of "D.A.H." there as the neurotic predisposition
postulated to-day by psychiatrists.

With regard to insanity, information as to the Gallipoli
Campaign again comes mainly from Major Campbell. Cases
"humanely indicated by the non-committal
designation 'nerve-strain'" were admitted to
No. 2 A.G.H. in Egypt in small numbers.

We received the impression, contrary to expectation, that attacks
of definite insanity were little if at all more frequent among our troops
than they would be in a similar body of men under peace conditions.

While delirium, delusions and hallucinations had "a war
colouring", taken as a whole the types of insanity did not
differ from those seen in civil practice, and forced the con-
clusion that active service produced no special nosological
disorder of mind.

\textsuperscript{44} Quoted from \textit{Vol. I}, p. 352. The statement is taken from the report of the
Advisory Committee, M.E.F.

\textsuperscript{45} It is perhaps hardly necessary to recall that a characteristic symptom of
"vitamin 'B'" deficiency is weakness of the heart's action. It was recorded by
General Howse that "men frequently faint at their post".

\textsuperscript{46} The source of the statement cannot be verified exactly, but was probably an
article in the \textit{British Medical Journal}. It is probably generally accepted by most—
if not, nowadays, by all—psychological experts.
It was not till the end of this campaign that it was found necessary to make special arrangements in Egypt for the disposal of the cases of "notifiable" mental disorder. In November the D.M.S. there (Surgeon-General R. W. Ford) issued the following instruction:

A "Military Mental Hospital" has been established in the house of the Sub-director of the Hospital for the Insane at Abbassia and will be ready to receive cases from this date inclusive. Accommodation will be available for 20 patients.

In future, British, Australian, and New Zealand soldiers developing mental symptoms and requiring treatment in a mental ward, may be sent to hospital without certification. Cases of delirium tremens should not be sent. Indian soldiers who become insane, will be sent after due certification, to the Hospital for the Insane as heretofore. . . .

Statistics for Gallipoli

The statistics for the Gallipoli Campaign are as follows:

Admissions of A.I.F. soldiers to Mediterranean Expeditionary Force hospital during the year 1915.

<table>
<thead>
<tr>
<th>Nature of sickness</th>
<th>Admission and Discharge Book entries</th>
<th>No. of cases</th>
<th>Percentage of total sickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Delinquent Conduct</td>
<td>&quot;Traumatic neurasthenia, shock and shell-shock&quot;</td>
<td>126</td>
<td>0.19</td>
</tr>
<tr>
<td>2. Neuroses (Psycho-neuroses and somatic neuroses)</td>
<td>&quot;Neurasthenic hysteria, mental instability, hysterical joint&quot; [sic]</td>
<td>576</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>&quot;Disordered action of the heart&quot; (D.A.H.)</td>
<td>510</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>287</td>
<td>0.45</td>
</tr>
<tr>
<td>3. Psychoses</td>
<td></td>
<td>141</td>
<td>0.22</td>
</tr>
</tbody>
</table>

The test of a clinical nosology is the pragmatic. Does it serve its purpose and contain all the facts relevant to the particular experiences? There are of course "boundary" disputes on borderline cases, but these may serve to remind the clinician that each "individual" functions as an organic whole, and not as a congeries of "normal" or "abnormal" organs and systems. A caveat must be entered against accepting the misleading etymology still endured by the scientific psychologists. The writer feels that, with these warnings, the division here accepted may be sufficient for the present purpose.

Suicide, "N.A.D." and "malingering". Self-inflicted wounds are not included.

Melancholia, dementias, acute delirium, delusional insanity, myxodem.a insanity, moral insanity, impulsive insanity, exhaustion psychosis, psychasthenia, mental stupor, imbecility, idiocy, feeble-mindedness, alcoholism, tobacco poisoning, morphinism, cocaism.

The figures are from the analysis made by the Medical Research Committee of the figures for the Gallipoli Campaign. (See statement Chap. xvi—Statistics of the War.)
Representing as they do with a high degree of accuracy the experience of the A.I.F. in the Mediterranean Expeditionary Force, the figures are of no little interest. The proportion of moral and mental disorder to the total non-battle casualties and their rate per thousand on ration strength is closely in parallel with Australian experience in the campaign on the Western Front. On Gallipoli they amounted to 2.3 per cent. out of a total of 63,932 of non-battle casualties.\(^\text{51}\)

The uniformity of the total figures for Gallipoli and the Western Front might suggest that the "seed" rather than the "soil"—the nervous and moral constitution of the force and of the individuals comprising it rather than the particular kind of strain to which they were subjected—was the essential element in determining the total amount of nervous "breakdown"—a conclusion which would take us into the very heart of the problem of "war neurosis", and which will be discussed when the experience of the Western Front comes to be dealt with. Figures for the major psychoses do not call for comment.

The reorganisation of the force. After the evacuation of Gallipoli the Australian Light Horse remained in Egypt from which base it played an important and distinctive part in the Sinai, Palestine and Syrian Campaigns. The psychic history of the Light Horse, however, must go by default for lack of material, a fact to be regretted since the experience in this war of movement would have provided an interesting comparison with that of attrition warfare. The infantry, ultimately increased to five divisions, together with most of the special services, moved in March-June 1916 to the Western Front and

\(^\text{51}\) It must be noted that the figures cover the whole A.I.F. in the East during the year 1915. No figures sufficiently authentic are available for summarising and analysing the experience of the Gallipoli force itself. Thus the experience of the reinforcements and Base units in Egypt are included.

This, however, is not a serious matter since (1) by far the greater proportion of casualties from this type of disorder are known to have occurred on Gallipoli. (2) The reinforcements and 2nd Division were in Egypt a comparatively short time and the number of men in the Base units was negligible. (3) Rates are calculated on a basis of strength figures of the Gallipoli force. Quantitatively, however, they may with reasonable accuracy be compared with the figures for the Western Front. As representing a "type", within the meaning of the classification adopted in the present work, they are remarkably in parallel with these.

The imperfection of diagnostic discrimination prevents exact qualitative comparison.
their experience in the "mental" field there must now be recorded.62

**THE WESTERN FRONT**

When the A.I.F. arrived in France it found itself part of a military organisation far removed from that of the Eastern theatre. At Gallipoli the A.P.M. had so little to do that for a time he was made chief sanitary officer for the Beach. And though in Egypt the Provost Marshal's Department was much in evidence, its duties mainly concerned the peacetime misdemeanours, such as those of "leave", rather than the graver military "crimes". In the army in France both the opportunity and the occasion for military crime were much more general.63

The Australian force came under the *Army Act and King's Regulations* except where this conflicted with the Australian *Defence Act and Regulations*. If an Australian was convicted under the *Army Act* of a crime punishable by death, the death penalty was passed and recorded, but it could not be carried out without the consent of the Australian Government and this was never given. The medical service was responsible for giving evidence at the Court Martial if called upon to do so, but the gravity of its responsibility was greatly lessened by this policy.

*Self-inflicted wounds*. The motive that caused this at Gallipoli was largely absent on the Western Front. Statistics for the A.I.F. are not available, but—though special medical

---

62 In connection with this transfer an occurrence of some interest is recorded. In the reorganisation of the force a considerable body of men was weeded out from the 1st, 2nd, 3rd and 5th Divisions on account of physical or (especially) some "moral" defect. These men were by chance ultimately transferred *en bloc* to units of the 4th Division. The general results, so far as observed, are recorded in the *Australian Official History*, Vol III, pp. 291-2

63 During the war sentences of death passed by Courts Martial in all white troops serving under the British flag (August 1914-March 1920), and carried out were:

<table>
<thead>
<tr>
<th>Offence</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutiny</td>
<td>3</td>
</tr>
<tr>
<td>Cowardice</td>
<td>18</td>
</tr>
<tr>
<td>Desertion</td>
<td>267</td>
</tr>
<tr>
<td>Murder</td>
<td>19</td>
</tr>
<tr>
<td>Striking or violence</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Offence</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disobedience</td>
<td>5</td>
</tr>
<tr>
<td>Sleeping at post</td>
<td>2</td>
</tr>
<tr>
<td>Quitting post</td>
<td>7</td>
</tr>
<tr>
<td>Casting away arms</td>
<td>1</td>
</tr>
<tr>
<td>Absence</td>
<td>37,019</td>
</tr>
<tr>
<td>Drunkenness</td>
<td>35,136</td>
</tr>
<tr>
<td>Insubordination and disobedience</td>
<td>22,891</td>
</tr>
<tr>
<td>Miscellaneous Military Offences</td>
<td>30,147</td>
</tr>
<tr>
<td>Self-Inflicted Wounds</td>
<td>3,894</td>
</tr>
<tr>
<td>Desertion</td>
<td>7,361</td>
</tr>
<tr>
<td>Cowardice</td>
<td>551</td>
</tr>
</tbody>
</table>

The total number of death sentences passed was 2,719; total carried out 337 (12 per cent.). For offences in general the greatest numbers of convictions were for Absence (37,034), Drunkenness (35,313); Insubordination and disobedience (22,891), Miscellaneous Military Offences (30,147); Self-Inflicted Wounds (3,894); Desertion (7,361), Cowardice (551).

Corresponding figures relating to the A.I.F. alone cannot be obtained. It is understood that the main records of the Provost Marshal's Department in Australia were destroyed after the war and the official conviction forms have not been consolidated.
provision had to be made for such patients—the practice was not common. The unconscious escape into disease (hysteria), the conscious escape into disease (malingering), the escape into wounds (self-inflicted wounds) and the escape into death (suicide), compose a series as to which, though the interest of the subject is very great, no Australian statistics have been compiled. The same must be said for "illegal absence" (A.W.L.).

"Malingering." Figures for "malingering" in the Australian force are practically non-existent, owing to the absence of any exact study of the experiences in the War of the Department of the Judge Advocate General. The official medical diagnosis in a case of feigned disease was "N.A.D." ("no appreciable disease"). The medical figures for this, as presented in Chapter XVII, are negligible, but they do not fully present the situation; for, in order to have his case recorded in the Admission and Discharge Books of a field ambulance, the malingerer must have passed the Regimental Medical Officer, and the R.M.O. as a rule let him off with a caution, and marked him "To duty".54

The methods of malingering in the war were not sufficiently distinctive from those of peace to call for special comment. The chief interest of the matter is the intimate relation of the phenomenon on the one hand to the subject of self-inflicted wounds and suicide, which belong to the science of "criminology", and on the other to that form of "flight into disease" in which "conscious" and "unconscious" forms of self-discipline—reasoning and emotion, character and disease—are so mixed up as to have compelled the creation of a self-sufficient branch of medicine—"psychiatry", or psycho-neurology. By no means always—not perhaps so often as has been implied in many studies of the "war neuroses"—this defeat and flight was the result of defective "mental" material. The severity of the trauma, and the fact that its repetition naturally resulted in a temporary breakdown of resistance, have perhaps, for the Western Front at least, been minimised—just as the ultimate effects of such breakdown have been over-stressed.

54 Which carried the implication "no appreciable disease"

The R.M.O. kept no official records of his work. His trials and his reactions to his "try out" in his first sick parades are matters of comment in the previous volumes. The best men reacted not with suspicion but with sympathy and co-operated in a common trial. But the R.M.O. must have his full share of the "Wisdom of the Serpent"—of Aesculapius, and other
From fear, many men, not depraved or psychopathic, fled into disease, into wounds, even into death itself.

PSYCHO-NEUROSSES ON THE WESTERN FRONT

The British Official Medical History states

During 1914 several men were evacuated from France to England owing to having been "broken by their experiences in the retreat from Mons". . . . At the base hospitals, during the late autumn of 1914, Lieut.-Colonel Gordon Holmes saw frequent examples of gross hysterical conditions. . . . At the battle of Neuve Chapelle, in the spring of 1915, there was no appearance of such cases to any great extent. However, in the autumn of the same year, at the battle of Loos, something more serious was observed . . . patients sent from the battle line with definite hysterical manifestations (mutism and tremors). . . . During the winter of 1915-16 it was rare to see or hear of a case of psycho-neurosis in the forward area. But the occurrence of such cases in the armies of other nations during 1915 had compelled their authorities to take steps to deal with the problem. The French early sent medical experts to investigate the cases. . . . The problem in the British Expeditionary Force did not become acute until July 1916, during the battle of the Somme.

The statistical record of these disorders in the British Army is stated by the official medical historian to be very defective, but the experience of 1914-1915 is summarised in the following table:

<table>
<thead>
<tr>
<th>functional nervous diseases amongst imperial troops, Aug. to Dec., 1914</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>Officers</td>
</tr>
<tr>
<td>Officers</td>
</tr>
<tr>
<td>Neurasthenia</td>
</tr>
<tr>
<td>Traumatic neurasthenia</td>
</tr>
<tr>
<td>Hysteresis</td>
</tr>
<tr>
<td>Shock</td>
</tr>
<tr>
<td>Shell-shock</td>
</tr>
</tbody>
</table>

| Totals | 20 | 396 | 90 | 430 |

Yet Freud has said: "The old ego protects itself from the danger to life by flight into the traumatic neurosis in defending itself against the new ego which it recognises as threatening its life. The National Army was therefore the condition, and fruitful soil, for the appearance of war neuroses; they could not occur in professional soldiers or mercenaries" (Prof. Sigmund Freud in Introduction to Psycho-Analysis and the War Neuroses by Drs. S. Ferenczi, Karl Abraham, Ernst Simmel, and Ernest Jones, p. 3 Vienna: The International Psycho-Analytical Press, 1921.) (Italics not in the original.) The matter seems to merit exact enquiry.

67 From British Official History of the War, Medical Services Diseases of the War, Vol II, pp 1-20 (London: H.M.S.O. 1923)
In addition to the above the following cases were associated with gunshot wounds:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurasthenia</td>
<td>94</td>
</tr>
<tr>
<td>Traumatic neurasthenia</td>
<td>21</td>
</tr>
<tr>
<td>Hysteria</td>
<td>3</td>
</tr>
<tr>
<td>Shell-shock</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
</tr>
</tbody>
</table>

The British history adds however:

In an official report written in December 1914 it is stated that 7 to 10 per cent. of all officers, and 3 to 4 per cent. of men admitted to hospitals in Boulogne were sent home suffering from the effects of nervous and mental shock, due to strain, stress and exhaustion.

The most obvious fact that emerges from a study of relevant records is the lack of co-operation, amounting to actual antagonism, between military policy and medical progress; and in the latter the clash between the different schools of scientific thought. The consequence is seen in the inability of the medical service and profession to check the spread of a concept of war neurosis—the idea and the name of “shell-shock”—which, though propounded in good faith as a helpful medical hypothesis, became—through military and social exploitation and mass-suggestion—a devastating menace.

The administrative history of the mental disorders in the B.E.F. reflects very exactly that of the specialties concerned. Hitherto living in amicable co-operative symbiosis, “neurologists” fought what was ultimately a losing battle with the psychiatrists for the no-man’s land between neurology, the medicine of the brain, and psychiatry, the medicine of the mind. The importance of this domain was not at first realised by either party, and only became evident as the “shell-shocked” casualties grew from a trickle in 1914 to a strong spate in 1915, rising to a flood in 1916—the year of the First Somme Battle. The conflict was confused by the fact that neither side understood exactly what it was fighting for, nor yet the confines or content of the contested territory. It was not the least significant element in the contest that the “rank and file” of medical (executive) officers understood little or nothing (and perhaps cared less) of the issues; but only that they had
to "do something" and do it very urgently. Above it all, intellectually remote from the scientific and professional battle, loomed the Military Command and Medical Directorate, themselves at war for control of the same domain, but concerned with the urgent disciplinary problems involved in any failure of the soldier to face danger. The whole history of medical and military practice and policy in the matter of mental disorder on the Western Front reads indeed like the Battle of the Cards in *Alice in Wonderland*.

In effect, the contested domain was in a great part "grabbed" by an outsider—the general community; which now largely sets the policy to which, in practice at least, the medical service and profession have to conform.

In August 1914 the British Army Medical Service was quite unskilled and inexperienced in dealing with cases of "nervous" breakdown. Lieut.-Colonel C. S. Myers, later The Consulting Psychologist has recorded:

The first appointments, 1914–15

In the Royal Army Medical Corps there were officers with special knowledge of surgery, pathology, etc., some of whom had achieved a world-wide reputation; but I never met with a regular officer who had any specialist's training and experience in mental or nervous diseases and disorders . . .

Nor is this surprising. "Nervous" disorder was not expected in a soldier and Army regulations provided for the prompt discharge (or evacuation from the field) of "mental" cases, a term which definitely connoted some form of mental alienation or insanity. That in minor disorders of conduct—in other words the functional disorders of the brain—"mind" might be an aetiological factor, calling for exact investigation, was a quite unfamiliar idea.

Within a month of the outbreak of war a well known neurologist, Aldren Turner, was commissioned by the War

---

58 That this is not a fanciful picture can readily be verified from many sources—from the omissions in the otherwise admirable articles dealing with the subject in the *British Official Medical History*, from the successive administrative orders issued by G.H.Q. which reflect this triple conflict, and the record of the reaction to these of the medical units, and from the flood of medical literature, in books and journals which (as men of weight—such as Fielding Garrison—have pointed out) have confused the issues and events.

59 A list selected from the books and articles studied for the purpose of this chapter is given at the end of it. As immediately bearing on the above, *The British Official Medical History, Diseases of the War, Vol II*, may be cited.

60 *Shell Shock in France 1914-18*, pp. 16-17.
Office and appointed Consulting Neurologist to the B.E.F. and soon afterwards neurological specialists, Lieut.-Colonels Gordon Holmes and Percy Sargent, were appointed to the Expeditionary Base. The prime purpose in these appointments was to meet the problems presented by wounds of the nervous system. No consultant or specialist in psychiatry was appointed. The increasing incidence of cases of "functional" disorder of the brain and the chance presence in a British Voluntary Hospital, of a trained psychologist, Captain C. S. Myers, who was not, however, a psychiatrist and had "no asylum experience", led Colonel Gordon Holmes to suggest the appointment by the D.G., A.M.S. of Myers as "Specialist in nerve shock". His title was changed in 1916 to "Consulting Psychologist", a position he held till the end of the war.

On Colonel Myers it fell to meet the storm of "shell-shock"—a term which (as he has himself very candidly acknowledged) was in some degree of his own creating. The source of his troubles was the battle of interests and ideologies referred to above, and especially the failure of the medical directorate of the B.E.F. to appreciate the fact that, in the "current theory" of mental disorders, neurology and psychiatry lay poles apart, and that mental medicine, including psycho-pathology, more properly belonged to the latter. "Mental and moral" casualties and delinquents of all shades of mentality and grades of seriousness were assembled at the medical Bases in France—in particular, Boulogne—with little or no provision for expert discrimination. As Colonel Myers has recorded:

Those of Lieut-Colonel Turner's duties which I took over on 28th March 1915 were officially described as follows: "to select suitable cases of nervous and mental shock and neurasthenia for transference to the appropriate institutions in England for treatment." But in the course of time they became much more numerous and far-reaching. They were gradually extended (a) to advising on and visiting wards provided for all cases of mental disorder and disease, including cases of insanity; (b) to supervising and assisting in the treatment of such cases; (c) to advising in cases of suspected malingering; (d) to examining, and giving court-martial evidence on, soldiers charged with desertion, suicide, drunkenness, or other crimes; (e) to sitting on numerous Medical

---

92 Sir Alfred Keogh. Throughout this episode and the whole war there is ample evidence of the broad and enlightened outlook of this great soldier and scientist.

Boards; (f) to examining and diagnosing purely neurological cases (organic lesions in the brain and spinal cord); (g) to differentiating cases of "functional" from those of "organic" disorder, etc.93

The most urgent problem lay in ensuring that at the Expeditionary Bases these cases should be discriminated and treated by men trained to the task. This was not accomplished till well into 1916.

The problem then furnished by the psycho-neuroses and psychoses respectively is described by Colonel Myers as follows:

In the middle of August 1916 the title previously given me of "Specialist in Nerve Shock" was changed to "Consulting Psychologist". By the end of that year expert mental specialists had been appointed to the various Bases provided with Mental Wards, and 80 per cent. of my visits were being paid to Front Areas. Receiving "centres" were now, at length, being appointed at the rear of the latter, which treated the readily curable cases of "shell-shock", most of those evacuated to the Bases being henceforth sent to England. In these altered circumstances, I was about to suggest to the Director of Medical Services, Lines of Communication, that my headquarters should be moved nearer to the Front, when, to my surprise, he announced to me a new arrangement, that I should have control of "shell-shock", "mental", and "neurological" cases occurring within the Fourth and Fifth Army Areas and at Dieppe, Le Tréport, Rouen and Havre, leaving the remaining Areas and Bases to Lieut.-Colonel Gordon Holmes who, having recently relinquished his neurological partnership with the surgeon, Colonel Percy Sargent, was seeking other specialist work. Colonel Holmes had previously asked me whether, under the altered conditions of his work, I had any objection to his undertaking the treatment of "functional" cases at the Base; but I did not foresee that my immediate consent would entail such a radical change and restriction in my work.

The proper course would have been for him to be employed in diagnosing and advising on the treatment of strictly neurological cases throughout all hospitals and for me to continue my "shell-shock" and "mental" work as before, each calling in the other in doubtful cases, when the use of his special experience was desirable. But Colonel Holmes informed me that he had been also induced to approach General Headquarters because, having been appointed Consulting Neurologist at the same time as I was appointed Consulting Psychologist, he felt himself responsible for the "shell-shock" cases, although, he confessed, he felt quite incompetent to examine "mental" cases.

Thus it came about that the Director-General bisected the King Solomon's baby claimed by two "mothers"; Colonel Holmes had pre-

93 Ibid., pp. 15-16. He continues: "I vainly pointed out that no expert could be found who would claim special knowledge in all of these kinds of work. For my part, I had had no special 'Asylum' experience, nor had I a specialist's knowledge of neurological diseases. But an Army Medical Officer has to obey commands. They arose in my case partly from ignorance on the part of those who issued them, and partly from the fact that at the time when I began to work on cases of insanity there was no one else available in France."
viously told me that functional "nervous" disorders always formed a very large part of the civilian neurologist's practice. Naturally, therefore, he was little disposed to relinquish in Army life what was so important a source of income in time of peace, although he confessed that (like most "pure" neurologists) he took little interest in such cases. During the past twenty-five years, however, thanks to the work of Janet, Prince, Freud, Jung, Adler, Hart, Rows, Jones and many others, the position has now changed: the neurologist's methods of treating the psycho-neuroses have been very largely superseded by those of the psycho-therapist. These are fundamentally opposed, the former, usually ignorant of normal and abnormal psychology, being content to treat patent symptoms and signs by persuasion or force, the latter aiming primarily at the discovery and abolition of their underlying conscious and unconscious mental origins and maintaining that it is useless to deal with the results and to neglect their causes, if a permanent cure is to be expected. . . .

Ultimately, the situation was stabilised by the tacit, if not explicit, differentiation of psychiatry from neurology. Colonel Myers resumed for a time his original status, and at the beginning of 1918 was transferred to England, whither the centre of movement of the scientific, professional, and administrative maelstrom had shifted, and the problem of the discrimination of types and their appropriate treatment and disposal, and especially the ultimate national issues of the problem were assuming dimensions and a gravity even greater than those which had caused so violent a storm in the Army at the front.

Colonel Gordon Holmes undertook the consultant and organising responsibilities of Colonel Myers' previous position and his own; but the need for special training in psychiatry and in particular in psycho-pathology as well as in neurology, was accepted. It was given effect to in the staffing of the "special" hospitals now being established.

The tables given above reflect accurately the position as at the beginning of the war. "Hysteria" and "neurasthenia" stood for broad lines of differentiation of the functional disorders; this, though vaguely apprehended, did reflect some clinical significance.

The concept "neurasthenia". It is not easy to translate the mental concepts of to-day—"anxiety", "conflict", "suppression", "repression", "conversion", the "unconscious" and so forth—in
terms of the simple conceptions of 1915-16. The situation may perhaps best be illuminated, not by trying to describe the "system" of diagnosis, treatment and disposal—which in fact at this stage simply did not exist—but by attempting a glance into the general development of conceptions in this matter among the soldiers, administrators, and medical officers then on the Western Front.

*Uncovering the "neurotic".* The vague concept "neurasthenia" had in effect in the past covered a multitude of neuropathic sins—both of fathers and of children. The resolution of this syndrome had already been undertaken by Janet and the French school, by the school of "psycho-analysis" founded by Freud, and (as is often forgotten) by certain English psychiatrists—such as Ross, Rows, and Mapother—who had found "busy common-sense" (the term is John Keats') a useful aid to intellectual balance. This teaching, however, had not been accepted by the body of British medicine and was wholly alien and repugnant to the military mind. Neither the concepts themselves nor the diagnostic therapeutic structure built on them, still less the nomenclature, was permitted any place in the developing organisation of Army mental medicine. At this time indeed neurology itself was largely occupied in the endeavour to elucidate, in the case of "shell-shocked" men, the mystery of the assorted "nervous" symptoms, obvious and occult—confusion, stupor, amnesia, fugues, tremors, paralyses, anxieties, disablements—by the accredited methods of neuropathology. In particular it attempted this by following—if on more refined lines—the researches of old Sir Thomas Browne in the 17th century—by dissecting the brain in search of the soul.

The French Army, with the tradition of the Salpetrière and Nancy, was already well advanced in the military adjustment to the problem—far ahead, indeed, of the British, and, it would seem, also of the Germans.

But it is clear that in the early months of the war much of the sickness, both nervous and not obviously so, was recognised by the neurological specialists as being of an "hysterical" or "functional" nature. It was only slowly, however, that there arrived in the B.E.F. a general recognition of the fact that the
congeries of physical, psycho-physical, and obviously psychotic causes of illness and "breakdown" included a very considerable element of true "hysteria" of the type more or less familiar to practitioners, as being not uncommon in women. Yet the first small cloud—"shell-shock"—had appeared on the military horizon at the end of 1914.64

Whether the term or the concept, "shell-shock" came first from the medical service or from the soldiers themselves will probably never be known—possibly medical officers adopted almost unconsciously a soldiers' phrase which fitted the novel phenomena.

For in spite of "traumatic neurosis", novel it assuredly was. However clearly we may to-day recognise the essentially "nervous" nature and the usually gradual onset of the phenomena of traumatic neurosis, this was not at first self-evident. Rather the onus of proof seemed to rest on anyone who would question the belief that the mental phenomena, which followed immediately on an observed or supposed physical "shock" to the brain, were due to macro-, micro-, or ultra-microscopic lesions of the brain tissue. "Proof" of this negation was arrived at only after long and difficult clinical and pathological research the course of which will be examined later. On the other hand the concept of "shell-shock" was immediately and enthusiastically accepted.

What was the conscious or unconscious motive for this acceptance? It may be suggested that the motive is to be found, not as is commonly held, in fear of the "unknown" but chiefly in the emotions and impulses underlying what McDougall calls the "self-regarding sentiment" in man's character which, to crude common sense, seems in effect identical with the Freudian

64 It has been claimed (in Recent Advances in the Study of the Psychoneuroses, p 16) by Millais Culpin, then an operating surgeon at a C.C.S that the prevalence of hysteria was first disclosed in an article by himself and the late E. G. Fearn-sides, in the British Medical Journal of 6 Jan 1915 on the anaesthesia often found to supervene on "trench foot". Col Myers on the other hand (Shell Shock, pp 11-12) states that in November 1914 he himself "saw for the first time one of those cases of 'functional' mental and nervous disorder, which afterwards proved so plentiful and came to receive the name of 'Shell-Shock'. . . Immediately after [a shell] had burst in front of him, his sight, he said, became blurred . . . This man was found to be suffering from 'functionally' contracted fields of vision and slight impairment of visual acuity. . . . I published these cases in the Lancet of 13th February 1915. . . I must have been one of the first to use the term 'Shell-Shock' which has since deservedly received adverse criticism. But I was careful to point out the 'close relations of these cases to those of hysteria'."
"ego-ideal", and may broadly be identified in everyday thought and speech as "self-respect". "Shell-shock" provided for the over-wrought soldier a more or less unconscious escape from the stigma of the essentially feminine failing "hysteria" which itself is an unconscious "escape into disease" from an emotional tension and conflict that has become unbearable. So "shell-shock" became a respectable way of escape from the conflict between "fear" and "duty"—the "old ego" and the "new". In each the motivating impulse, conscious or unconscious, is advantage. It meant the attainment of "peace with honour" and—at one period of the war—a wound-stripe!

However originating, in the British Army by the end of 1915 the idea of a direct and causative connection between the "shock" from the "windage" (later called "blast") of a shell-burst, or, illogically enough, the effect of being buried by the earth or debris of a shell explosion, reached a stage that required recognition. Though the idea was reflected in the A. and D. books (and so in statistics) it was not officially recognised till the beginning of 1916 when, in accordance with an army order, these cases when associated with "enemy action" were returned as "wounded", not "sick". The definition of wound was made officially to include cases where nervous symptoms developed "in consequence of enemy action". In June 1916 procedure was formalised by an order of which the following is a summary:

As the term "shell-shock" has come to be vague, and loosely applied to conditions which ought not to be returned as battle casualties, it has been decided to classify cases now returned "shell-shock" as follows:

(a) Suffering from Shock, Shell
(b) Suffering from Concussion, Shell
(c) Suffering from Burns

The letter "W" is to be affixed by the medical officer of the unit to reports of all cases due to battle casualties, and "S" to those due

---

66 There was no exactly corresponding term in the French Army, nor, so far as can be ascertained in the German. The French used the concept "Syndrome comotionné", the Germans the idea of "traumatic neurosis", introduced by Oppenheim in 1889. The French position is admirably summarised in the volume on *Shell Shock or the Psychoneuroses of War* by Dr. G. Roussy and J. Lhermitte in the series of translations edited by Sir Alfred Keogh (contained in the Australian War Memorial Library). See also Jones and others, *Psycho-Analysis and the War Neuroses* with introduction by Freud.

66 Issued by D.M.S. Second Army to II Anzac Corps 14 June 1916, but coming from the D.G.M.S., B.E.F.
to accidents other than battle casualties, i.e. "W" = Wound class; "S" = Sick class.

This lettering will invariably be entered on the medical cards of all such cases sent back by M.O's of units, field ambulances and casualty clearing stations.

This was the stage reached in the B.E.F. when in March of 1916 the A.I.F., having reorganised after Gallipoli, was brought to the Western Front with the definite task in view of furnishing part of the reserve necessitated by the plan for a vast Allied offensive on the Somme. The medical events of the three months spent in the "nursery" area of Armentières contain nothing of special psychic interest, the mental strain there not being great. Australian R.M.O's—many of them new to their job—were informed on the official procedure for dealing with cases of "shell-shock 'W'", but most had had little chance of acquainting themselves at first hand with the clinical features of this, or of the less dramatic forms of "nervous breakdown". Nor could much written information be obtained.

The subjoined table adopted from the British Official Medical History undoubtedly shows the effect of the First Somme Battle (July-Dec. 1916) on the incidence of the acute type of nervous breakdown in the B.E.F.

Record of "shell-shock" cases reported as battle casualties in France, excluding dominions.

<table>
<thead>
<tr>
<th>1914</th>
<th>1915</th>
<th>1916</th>
<th>1917</th>
<th>1914-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. to Dec.</td>
<td>1st half</td>
<td>2nd half</td>
<td>1st half</td>
<td>2nd half</td>
</tr>
<tr>
<td>9</td>
<td>141</td>
<td>1,246</td>
<td>3,951</td>
<td>16,138</td>
</tr>
</tbody>
</table>

Note. It is believed the British figures summarise the primary admissions (to field ambulances or C.C.S.) and represent "battle casualties". The variations in the orders relating to the diagnosis and disposal of cases of acute nervous breakdown make it, however, impossible to establish any precise relation between the figures and the causes of the casualty.

The figures from the five Australian Divisions are shown in a table on the following page.

The official manual Injuries and Diseases in War, contained no helpful reference to these conditions until its final edition in 1918.
The figures for cases classified as "Shell-shock—Wounds" for the A.I.F. on the Western Front are given in a statistical summary made at 3rd Echelon (A.I.F. Section) of G.H.Q.:

Shell-shock "W" by years by Divisions

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Div.</th>
<th>2nd Div.</th>
<th>3rd Div.</th>
<th>4th Div.</th>
<th>5th Div.</th>
<th>Corps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1916</td>
<td>83</td>
<td>170</td>
<td>3</td>
<td>236</td>
<td>116</td>
<td>5</td>
<td>613</td>
</tr>
<tr>
<td>1917</td>
<td>105</td>
<td>125</td>
<td>165</td>
<td>104</td>
<td>357</td>
<td>39</td>
<td>805</td>
</tr>
<tr>
<td>1918</td>
<td>14</td>
<td>27</td>
<td>21</td>
<td>13</td>
<td>39</td>
<td>2</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>202</td>
<td>322</td>
<td>189</td>
<td>353</td>
<td>512</td>
<td>46</td>
<td>1,624</td>
</tr>
</tbody>
</table>

The conditions under which the Battle of the Somme was fought have been described in a general way in Volume II of this work and very fully in the Official History, Volume III. Three elements in the psychical environment stand out as dominant:

Apotheosis of "shell-shock": "First Somme"

(1) The "shocking" character of the offensive agents employed, the current tactics allowing a huge amount of high explosive shelling to be concentrated by both sides on certain sectors from which there was no means of escape.69

(2) The largely passive and impersonal nature of the battle-experience; after each minor advance the troops must sit tight in sectors of the front system which the enemy then pounded to dust. With this went lack of sleep—the most potent psycho-physical factor in nervous breakdown; also gross discomfort, and poor food. The tension was relieved by only brief "rests", in which exhausting work was often done, before another tour in the front line.

(3) The degeneration of the offensive into a crude contest in attrition devoid of "surprise" or tactical refinement. It became difficult for the soldier to regard his tasks as part of an intelligent plan. Lacking thus the firm "shield of faith" the troops in the later stages of the offensive (in which the A.I.F. took part) were thrown into the inferno morally disarmed save for the traditions of their race and army and the strength of their own character.

The nature of the conditions and the reaction thereto of the Australian soldier are admirably told in the Australian Official History, from which the following descriptions are quoted:70

---

69 Rightly or wrongly the British command deliberately discouraged the construction of deep dugouts in the front line as tending to reduce the "offensive spirit". Ludendorff and Hindenburg also found it necessary to follow this policy, but the Germans usually dug much more energetically in the rear lines than their opponents, at any rate until the last stages of the war.

The experiences to which the infantry were at this stage subjected ripped away in a few moments all those conventions behind which civilised men shelter their true souls even from the milder breezes of life, and left them facing the storm with no other protection than the naked framework of their character. The strain eventually became so great that what is rightly known as courage—the will to persist—would not suffice, since, however keen his will, the machinery of a man’s self-control might become deranged.

Of the area in which the infantry lived, Lieut. J. A. Raws, 23rd Battalion, wrote that it was shelled till there remained nothing but a churned mass of debris with bricks, stones and girders, and bodies pounded to nothing. And forests! There are not even tree trunks left, not a leaf or a twig. All is buried, and churned up again, and buried again. The sad part is that one can see no end of this. If we live to-night, we have to go through to-morrow night, and next week, and next month. Poor wounded devils you meet on the stretchers are laughing with glee. One cannot blame them—they are getting out of this. . . .

. . . We are lousy, stinking, ragged, unshaven, sleepless. . . . I have one puttee, a dead man’s helmet, another dead man’s gas protector, a dead man’s bayonet. My tunic is rotten with other men’s blood, and partly spattered with a comrade’s brains. . . .

I have had much luck and kept my nerve so far. The awful difficulty is to keep it. The bravest of all often lose it—one becomes a gibbering maniac. The noise of our own guns, the enemy’s shells, and the getting lost in the darkness. . . .

Only the men you would have trusted and believed in before proved equal to it. One or two of my friends stood splendidly, like granite rocks round which the seas stormed in vain. They were all junior officers; but many other fine men broke to pieces. Everyone called it shell-shock, but shell-shock is very rare. What 90 per cent. get is justifiable funk, due to the collapse of the helm—of self-control.

The Official Historian comments:

The shelling at Pozières did not merely probe character and nerve; it laid them stark naked as no other experience of the A.I.F. ever did. In a single tour of this battle divisions were subjected to greater stress than in the whole Gallipoli campaign. The shell-fire was infinitely worse than that subsequently experienced in the Third Battle of Ypres.

From the point of view of the medical officer the effect of these conditions may broadly be classified as twofold. Among the main division of casualties two broad types became differentiated—(1) A smaller number who ab initio were mentally and morally neuropathic (or psychopathic) and whose psychic make-up pre-disposed or even pre-ordained them to “nervous breakdown”; and (2) those
men whose character was sufficiently resistant or resilient to ensure that, with suitable treatment, they would recover from any save the most severe mental strains and shock. But the question what was the right treatment had not then been officially laid down; indeed a decision was only then crystallising out from the various conflicting theories, cults and interests.

The differentiation between the two types here mentioned is certainly not hard and fast; in the writer's view, indeed, the evidence points strongly to gradations in mental and moral health. Yet such a discrimination is justified by the fact that common sense and science approve the concept of a broad *norm* of "resistance" to psychic traumata of all kinds as distinct from an "abnormal" liability to succumb to psychic strains and stresses, "shocks" and suggestion.

There was available only meagre information regarding the problem. Indeed "nervous breakdown" was regarded from the military more than from the medical standpoint; medical officers of the A.I.F., executive and administrative, were left to "work out their own salvation"—and that of the soldiers for whom they were responsible. The response, as may be expected, varied with ability, insight, and native character. The character of the R.M.O. was only less accurately reflected in the battalion than that of the O.C. In the first amazement of this new experience, with its flood of casualties, some R.M.O's naturally lost their heads but most of them quickly regained their balance and used them. The reaction of such R.M.O's, for example, to the results of the worst bombardment that ever fell on Australian troops—at Pozières, from 5th to 7th August 1916—was as follows:

On 7th August (wrote Captain J. T. Jones, R.M.O. 47th Battalion) the Battalion relieved the 48th Battalion [Major Woollard] in the line to the N.E. of Pozières... No dugout was available for an aid-post and wounded had to be attended in a trench. There was a continuous stream of wounded passing through night and day, nearly all due to high explosive shells...

There was a great number of so-called "shell-shock" cases. Most of these were in reality due to exhaustion. Owing to the intensity of the bombardment and the pulverised nature of the soil men were continually being buried and dug out by their companions. After one such experience a man was bruised and exhausted, and they were

71 The reader will find it interesting and useful to compare this experience with that of the "black ships" at Gallipoli. See *Vol. I*, p. 177.
fortunate who did not have that unpleasant experience. When it was repeated, as it often was several times, even the strongest collapsed and had to be evacuated. There were many who reported as suffering from shell-shock which was plainly of the emotional type. Many also made their way to dressing stations further back who were not for the most part genuine cases. *No true commotional cases of shell-shock were seen.*

The special interest of this note is in the last sentence. The fact that this officer was familiar with the current theory of causation gives his note a definite scientific value. It provides, from clinical observation, convincing proof of the fact, subsequently arrived at by analysts and now, of course, universally accepted, that *"without prejudice" to the belief in the unity of mind and body,* «shell-shock» as a «wound», in the physical sense and apart from concussion of the brain, is a figment, and that the prohibition against its use should be strictly observed. Yet the need for some term is evident in the writings of even ultra-psychic psychologists. Perhaps «battle shock» provides a useful substitute.

At Pozières (says a very gallant medical officer) I had been very close to 'shell-shock' and I carried on under an intense strain ever afterwards. Loss of sleep was, in my opinion, one of the worst contributing factors which precipitate a breakdown under shell-fire, and this should be prevented if it is humanly possible to do so. Short terms of service in the line is the best way to counter it, of course, but this may not be practicable.

This officer records a successful attempt to short-circuit evacuation by providing temporary rest and recuperation. It was put into practice on organised lines by the A front-line experiment R.M.O. of the 48th Battalion, a distinguished Australian, Major H. H. Woollard. His report on it, made at the request of the then A.D.M.S. 4th Division, Colonel Barber, stated:

> It was only during our second turn in the trenches that I had the opportunity of giving individual attention to these "shell-shock" cases; and the bombardment they were subjected to was, save for one afternoon, not so intense as we had previously experienced. Still, the men had been badly mauled and had suffered heavy losses so that they were less fit to endure.

> With our reduced numbers we had the same extent of ground

---

72 The italics are the present writer's
73 Capt R C. Winn, now a practising psychologist.
74 Maj Woollard, it will be recalled, achieved later a world-wide reputation as an anatomist and anthropologist. *See Vol. II.*
to defend and the question of evacuating for shell-shock became of paramount importance. I decided to treat each case, and only in the last extremity to evacuate them and then not to the ambulance but to Major Imlay of 48th Bn., who was in charge of the Dump. There they could get rest and food, be worked and returned to the line.

When men reported to me saying they were shocked, I made a comfortable rest for them and endeavoured to reassure them.

Spt. ammon. arom. 3 i
Morphia grs. ½

I repeated this in half an hour. At about the end of three-quarters of an hour I was able to rouse them, and the men would volunteer they felt better and would return to the line. I have no accurate figures, but as far as my memory serves some fifteen odd were returned to the line. Personally I think no more than three or five were sent on and these were sent to Major Imlay who employed them and thus they were not off the Battalion strength.

I am sorry that I have not figures to quote, but I am definitely of the opinion that the line of treatment was most useful and of great service to the Battalion.

(Sgd.) H. Woollard, Major, A.A.M.C.
M.O. 48 Bn.

22.8.16.

There is no doubt that in the Australian as in other forces, the general impression of the soldier was that in “shell-shock” he was confronted with a new and mysterious form of injury. This was a powerful factor in determining the course of events in many a man who experienced the psycho-physical confusion which (described as “unconsciousness”, “stupor”, “delirium”, “excitement” and so forth) was the most striking feature of violent psycho-physical shock, and the outcome of which, together with that of the subsequent amnesia, coloured at least the immediate future of the patient. But it is equally certain that a very great proportion of the men who sought refuge under the Geneva Cross from the intolerable strains and shocks of this warfare were suffering from exhaustion, a breakdown of the power of resistance, physical and “moral”, and not, as in Colonel Campbell’s Gallipoli cases, from the culmination of some grave, long-standing disorder of personality, inherited or otherwise and wholly different in origin from the causes that seemed at the time so obvious and convincing.

Treatment and disposal of cases. The stream of cases from the bombardment at Pozières moved on two lines of evacuation.
—the more severe to Warloy (M.D.S.) and thence to C.C.S.,

Disposal

the slight—which were by far the more numer-
ous—to the “Field Ambulance for Walking
Wounded and Sick” at Vadencourt.76 The exact numbers and
distribution of the Vadencourt cases are fortunately recorded
with the Australian war diaries and the reports of the field
ambulance commander upon them is also appended.

Lieut.-Colonel W. W. Hearne of the 2nd Field Ambulance
reported on the Vadencourt cases as follows.

During the period 22.7.16 to 16.8.16, excluding 112 cases of
sickness, 7,183 casualties passed through this field ambulance, officers
79, other ranks 7,104. Of the 79 officer casualties 10 were “shell-shocks”,
or about 12 per cent of the whole. Of the 10 shell-shocks 4 were sent
to C.C.S. and 6 to Corps Rest Station. All were “shell-shock 'W'”.

Of the 7,104 casualties among other ranks 1,610 were “shell-shocks”
or about 22 per cent. of the whole. Of these only 4 are classified as
“sick” and were ticketed “Shell Neurasthenia S”. All the remainder
were classified as “Wounded”, viz:—

Shell Shock “W”       ...       ...       ...       1,581
Concussion Shell       ...       ...       ...       9       } TOTAL 1,606
Shell Neurasthenia “W” ...       ...       ...       16

Of these, 900 were sent to Corps Rest Station [7th Field Ambulance]
and 616 to C.C.S. The proportion of slight to severe cases, and of
each as compared with “Other Casualties”, will be best seen by
reference to attached table showing numbers of each for each date,
the percentage of the total casualties for each day, represented by
shell-shock cases, being indicated in the last line. The Corps Rest
Station was established on 28.7.16 and from this date onward 171 cases
were sent to C.C.S. and would be classed as severe, while 900 were
sent to Corps Rest Station and would be classed as “slight”.

It would be noticed that the proportion of slight cases as compared
with those sent to C.C.S. is very high after 6.8.16. Also that the
shell-shocks constitute a high percentage of the total casualties from
August 7 to 13 inclusive.

Also that the percentage of shell-shock cases bears roughly an
inverse ratio to the number of other casualties, being highest when
the latter are low and vice versa.

It would appear to me that very many of these cases would be
more appropriately described as physical or nervous exhaustion and
that they should be classed as Sick rather than as Wounded.

At the end of the Anzac Corps’ tour of service in this
offensive (22nd July—3rd September) the D.D.M.S. I Anzac
Corps, Colonel C. C. Manifold, summed up the experiences
in Notes on ‘Shell Shock’ cases which have passed through

76 See Vol. II, pp 57, 72. The table on pp. 108-9 shows that most were held.
### Disposal of Shell-Shock Cases Admitted to

<table>
<thead>
<tr>
<th></th>
<th>JULY, 1916</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22 23 24 25 26 27 28 29 30 31</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td><strong>To C.C.S.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell-shock &quot;W&quot;</td>
<td>10 31 71 202 57 72 23 17 11 13</td>
<td>15 2 5 - 14</td>
</tr>
<tr>
<td>Concussion Shell &quot;W&quot;</td>
<td>3 1 2</td>
<td></td>
</tr>
<tr>
<td>Burns Shell &quot;W&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurasthenia Shell &quot;W&quot;</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11 31 72 205 57 72 24 19 12 13</td>
<td>15 3 5 - 14</td>
</tr>
<tr>
<td><strong>To C.R.S.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell-shock &quot;W&quot;</td>
<td>10 31 29 16</td>
<td>9 7 6 6 40</td>
</tr>
<tr>
<td>Concussion Shell &quot;W&quot;</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Burns Shell &quot;W&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurasthenia Shell &quot;W&quot;</td>
<td>1 6</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total of all Classes</strong></td>
<td>10 33 29 22</td>
<td>9 7 6 7 40</td>
</tr>
<tr>
<td><strong>Total other casualties</strong></td>
<td>43 687 180 730 184 297 120 341 43 61</td>
<td>84 72 84 116 826</td>
</tr>
<tr>
<td><strong>Percentage of Shell-shocks</strong></td>
<td>20.37 4.31 28.57 20.85 22.89 19.51 22.07 18.15 49.28 36.45</td>
<td>22.22 12.10 11.57 5.69 6.13</td>
</tr>
</tbody>
</table>
2nd Field Ambulance at Vadencourt 22.7.16—22.8.16.

### AUGUST, 1916

<table>
<thead>
<tr>
<th></th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>14</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>626</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>26</td>
<td>14</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td></td>
<td>3</td>
<td>8</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>687</td>
</tr>
<tr>
<td>51</td>
<td>133</td>
<td>77</td>
<td>137</td>
<td>113</td>
<td>80</td>
<td>76</td>
<td>97</td>
<td>45</td>
<td>69</td>
<td>10</td>
<td>36</td>
<td>41</td>
<td>48</td>
<td>18</td>
<td>38</td>
<td>29</td>
<td>1192</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>51</td>
<td>134</td>
<td>77</td>
<td>137</td>
<td>113</td>
<td>84</td>
<td>76</td>
<td>97</td>
<td>45</td>
<td>69</td>
<td>10</td>
<td>36</td>
<td>42</td>
<td>48</td>
<td>19</td>
<td>39</td>
<td>29</td>
<td>1209</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>148</td>
<td>78</td>
<td>146</td>
<td>115</td>
<td>86</td>
<td>79</td>
<td>40</td>
<td>49</td>
<td>72</td>
<td>10</td>
<td>39</td>
<td>50</td>
<td>54</td>
<td>19</td>
<td>39</td>
<td>29</td>
<td>1846</td>
<td></td>
</tr>
<tr>
<td>395</td>
<td>296</td>
<td>99</td>
<td>187</td>
<td>111</td>
<td>79</td>
<td>79</td>
<td>91</td>
<td>138</td>
<td>199</td>
<td>81</td>
<td>101</td>
<td>120</td>
<td>300</td>
<td>68</td>
<td>80</td>
<td>95</td>
<td>6827</td>
<td></td>
</tr>
<tr>
<td>16.81</td>
<td>28.54</td>
<td>44.06</td>
<td>48.84</td>
<td>50.88</td>
<td>52.30</td>
<td>50</td>
<td>30.53</td>
<td>26.20</td>
<td>26.19</td>
<td>10.98</td>
<td>37.85</td>
<td>39.41</td>
<td>15.25</td>
<td>21.83</td>
<td>32.77</td>
<td>23.38</td>
<td>22.58</td>
<td></td>
</tr>
</tbody>
</table>
some Australian Field Ambulances. This report was made for the D.M.S. Fourth Army and in a later one on 1st February 1918, he re-traversed the ground and recorded the subsequent experiences of the Corps with mental disorder.

In the first report he said:

The period reviewed was from 22nd July to 16th August. The first fact to be noted is that during this time about 283 officers and 10,155 other ranks, wounded, passed through all the field ambulances of this Corps. It may be accepted that probably 1,000 passed through field ambulances of other Corps, but these are not taken into account in any calculation made. Of this number, officers 79 and other ranks 7,183 passed through 2nd Australian Field Ambulance, Vadencourt; and of these 10 and 1,610 respectively had been diagnosed as "shell-shock 'W'" (or 12 per cent. officers and 22 per cent. other ranks of the lightly wounded were ascribed to shock)—

Shell-shock "W" ... ... ... 1,581
Concussion shell "W" ... ... ... 9
Shell neurasthenia "W" ... ... ... 16

In addition to this there were passed through the Officers' Rest Station between 29th July and 18th August 64 officers admitted as wounded, of whom 28 were diagnosed as "shell-shock 'W'" and (eliminating seven in which injury or disease complicated shell-shock) the percentage is 32.7.

There was yet a third main dressing station which took in severely wounded only, and to which 7 officers and 83 other ranks were admitted during a somewhat similar period. These cases may be looked upon as being the more severe class, as they were cases it was considered necessary to send lying down, and of these 91 per cent. were evacuated to casualty clearing station, the remainder to rest station, whereas, of those sent to the lightly wounded station only 17 per cent. went to casualty clearing stations, and the remainder to the Corps Rest Station, once the latter was open to receive.

The O's.C. Field Ambulances concerned are all in agreement that many men are sent down from the firing line diagnosed "shell-shock 'W'" who are not suffering from shell-shock, but from physical and nervous prostration which for the time incapacitates them in much the same way, and which in many cases, particularly in that of officers, is due very largely to the complete absence of sleep, night after night, and who eventually break down with symptoms similar to veritable minor shell-shock cases. One such, was brought to my notice. This officer disclaimed indignantly that he had been suffering from shell-shock, and said his condition was entirely due to not having closed his eyes for one moment during four consecutive nights in the trenches.

Colonel Manifold added:

Another point I would like to make, is that many men who are suffering from simple strain and lack of sleep will see things out for another 12 or 24 hours at perhaps a most critical period when their
services are indispensable, and will do this, buoyed up by a high sense of duty and the instinctive desire to stick it out and to set an example, as well as the sense of shame at failing to do so; if, on the other hand, to this man is offered, as is under present condition of classification, an easy and honourable quittance by withdrawing as "wounded", it is quite likely that he may accept this solution, the failing condition of his own physical and nervous system also abetting him in yielding to it, when he never would have done so had he not been ensuring his appearance on the list of those honourably wounded in battle by quitting. There are also men to whom the accompanying factor of a gold stripe will forcibly appeal. Were it known that the classification of wounded would only hold after searching examination later on, it might be quite possible that the man in question would continue to hold out until relieved in the ordinary way, and not yield to the temptation to quit . . .

In his memorandum of February 1918 Colonel Manifold endeavoured to identify the cause of the extraordinary episode:

This was the first occasion upon which the divisions of this Corps had ever undergone this incessant continuous downpour of heavy projectiles. On the Peninsula they had received a severe baptism of fire on many occasions, but mostly when either in the heat of our advance or when occupying deep well-constructed shell proof dugouts. On the Somme there was nothing of this sort . . .

Under these circumstances of such incessant strain, the fact that manifestations of nervous shock should have appeared in varying degrees was only to have been expected; and during the first three weeks of fighting a very large number of men came back with the diagnosis of shell-shock. But there were other factors to be considered besides those of the men being under new and severe conditions of fire. These were:

1. That shell-shock had been written up greatly both in the lay and medical press, and there was almost a tendency to regard it as a society doctor's patients might a new fashionable complaint. There was a readiness to place all sorts of manifestations due to fatigue and other conditions, such as nervous apprehension, not uncommon in nature, down to shell-shock both on the part of the sufferers and of the medical officers; and so it became a ready diagnosis to make and to accept.

2. The above vogue was undoubtedly augmented by the encouragement given to it by what has since been recognised as a mistaken policy, which was of permitting every man diagnosed as shell-shock in the trenches to be returned as wounded and to wear a wound stripe for life. Whilst this would have no effect on men of the greatest tenacity and grip, yet there must be many weaker vessels in a regiment who, whilst undoubtedly shaken somewhat in nerve, might have made the effort to pull themselves together, had it not been for the attraction which it had to a man—who really felt he had been shaken somewhat by a falling parapet consequent upon the burst of a shell a few feet off—that he earns this distinction for life.

3. Medical officers were not, in all Battalions, men with experience of warfare or of a disciplinary control of men in bulk; and there were
instances in which in consequence of this they were over soft hearted towards a man who perhaps suffered more from a sense of a chill apprehension of what might come, than from any actual definite impression inflicted upon his nervous system more than what should have been momentary; and, once men are allowed to go back easily, the habit becomes infectious, as any panic may in a very large collection of men where necessary disciplinary firmness is not promptly exercised by the medical officer. There was certainly one glaring instance of this in a battalion in which the O.C., to stop the rot caused by such mistaken weakness, had to ask that the R.M.O. might be removed. This, of course, was a very exceptional case. . . .

The rapid return of men to duty was then possible, as no special procedure had been laid down then as to transfer to C.C.S. The 4th Australian Division, who were a newer formation than the 1st and 2nd Divisions, presented the greater number of cases during those early days (mostly of the nature of the man who in civil life, being thrown out of a dog cart and shaken violently, is made by sympathetic friends to lie down on a sofa for an hour and have a whisky and soda or perhaps several according to the responsive attitude of his friends' minds). In this case the sympathetic platoon commander or R.M.O. sent him back to where these luxuries could be obtained. A couple of weeks however soon gave a true perspective, enabling the adoption of a correct diagnosis and treatment; and very quickly the numbers being returned under shell-shock came down to a much truer proportion. . . .

It is clear from indirect evidence that a big proportion of "shell-shock" cases sent on at this time to casualty clearing station were evacuated thence to the Base and from there to Great Britain. It is true that, as with wounds, an attempt was being made to create a system of treatment centres at the Expeditionary Bases. But neither then—nor, it would seem, at any time—was the system that was built up to meet the problem of "neurosis" really brought to completion; and by the time these cases reached the Base their condition had so degraded that only a completely organised campaign of treatment had prospect of success.

The Australian Official records suggest—and personal recollections fully support the belief—that the action of Colonel Manifold in establishing an attractive and comfortable "Corps Rest Station" in close proximity to the "Dressing Station for Walking Wounded" was a tactical move of the highest merit.77 It served indeed as an effective counter to the mass-suggestion "epidemic" of potential neurosis; for, as was now being realised, this was a stage when, in a

---

77 Col. Manifold was unsurpassed in the B.E.F. in his flair for and assiduity in arranging rest and amenities for troops at the front. There is no doubt that his work in this direction was of great value to the Australian force.
large proportion of cases, an incubating "neurosis" might be stopped before it developed.

Everything depended, indeed, on what happened now in the mind of the soldier, sick with the anguish of mental conflict. His "soul's dark cottage" freed from urgent fears, lay empty, swept and garnished; ready for the spirit of courage, faith and self-confidence, or, on the other hand, of defeat and dependence. Lastly—and here lay and lies the crux—the moral and mental *vis medicatrix naturae*\(^\text{78}\) often proves incapable of resisting the insidious motivation—first conscious then semi-conscious, finally unconscious—that impels to the choice of the "broad and easy" way leading to moral and mental destruction.

It is fairly widely known in these days that all the manifestations of acute disorders of mental state and conduct that were seen in the war might occur without the patient's having been in action or even in the front lines. But men to whom this kind of nervous breakdown occurred belonged to the frankly psychopathic order of nervous constitution, and, as we have noted, the larger proportion of nervous breakdown that actually occurred was in more or less "normal" men and was brought about by excessive strain. It should be remembered by the reader of the following pages that the troops whose experiences are described had entered the battle or other tests apparently normal.

It is universally accepted—and was indeed being somewhat vaguely recognised at the end of 1916—that nervous breakdown in a soldier, as in civil life, was the culmination of a more or less prolonged complex of factors. These combined to produce a state of mental and moral tension which, on the occurrence of some terrifying and "shocking" experience, resulted in a condition that was conceived as being identical with "shock". On the other hand

---

\(^{78}\) It may be suggested that the *positus* factor in mental and moral, as in physical, recovery still receives inadequate study at the hands of medical psychiatrists. It is true that the objective in psycho-analysis is the localising and removal of a moral "foreign body" from the "unconscious" mind, thus permitting the attainment of mental "health". But the infinite excellence of the way of "prevention" suggests that, as a subject for study, the content of the *mens sana* should have precedence over that of the *mens in-sana*. It seems that here lies the chief weakness of the Freudian system, which is based on abnormal, not on normal, psychology.
there was another stage, probably more often consequent simply upon long continued strain—but into which, with inept treatment, men in the former stage also only too easily lapsed—associated with different manifestations and very much more intractable. We have, therefore, two conditions which to appearance, and in some degree actually, were distinct—which may be called the acute and the chronic neuroses. These will be separately described, but it should be borne in mind that they were part and parcel in the same war experience and the same "disease" process.

The acute stage of neurosis, being usually the immediate sequel of some terrifying experience, was naturally abundantly illustrated in the casualties from the bombardments at Pozières. From a body of apparently normal men subjected to the Pozières bombardments (and similar experiences later) there arrived at the aid posts and ambulances men suffering from confusion, ranging from transient obfuscation to deep stupor, men with signs of mental and physical exhaustion, acute fears, phobias, amnesia, tremor, and a wide field of nascent conscious, semi-conscious or unconscious inhibitions resulting in deafness, speechlessness, visual defects and so forth. The dominant elements in this syndrome were perhaps confusion, exhaustion, depression, fear and amnesia. The diary of Sergeant J. R. Edwards, medical detail attached to the 27th Battalion, gives a good illustration of a mild experience—himself being the patient:

The 2nd Division's task was to capture Pozières ridge. Telfer and I missed the battle, as we were buried at la Boisselle, a night or two before the attack. We were lying together in a recess, cut in a trench running alongside the la Boisselle-Pozières Road. The Hun was shelling the road between la Boisselle and Albert almost continuously, but at 7 a.m. he shortened his range, and began to scatter them round the relics of la Boisselle. One came pretty close, then a 5.9 landed fair on the parapet above our "possie". It broke down the 3 or 4 feet of earth above the recess, and buried us. I could just hear Telfer calling out—I believe his head was free.

I tried to raise a cry but the earth was over my face, and my hands were pinned across my chest by the weight, as I was lying on my back. I struggled like hell but could do nothing. All of a sudden the pressure became heavier; it was irresistible, and I was blotted out. I recollect thinking "I'm gone", and knew nothing more until coming to in the Colonel's dugout some time later. One could not ask for an easier death.

Bert and Jim were the rescuers. They were at us with shovels
in a tick. What luck to strike shovels in a trench at that dark hour. I believe they battled on with shells falling all around—taking every chance—and at last got Telfer out. To get him they had to pull out a wooden strut which had been holding up the ground. It was the fall of earth consequent upon the removal of this stick that finished me. Jim dug my feet clear, and they yanked me out. The doctor thought I was gone, but I soon revived when water was thrown on my face, and it took four swaddies to hold me on the stretcher. I believe I yelled and screeched like mad. Evidently resurrection is a tougher ordeal than death. They got a light to examine me, and according to Bert, when I saw the light I “went limp, and was as mild as mother’s milk”.

However, something had been jarred inside my tough old nut, and my memory was affected. For instance, I would recognise the boys, but for the life of me could not recall their names. It was a couple of hours before I got a bit of sense, and then they took Telf and myself to an A.D.S. at Bécourt.

Edwards was admitted to hospital on 30th July 1916 with “shell-shock and concussion”. On August 5th he was discharged and rejoined his battalion, and he served until the end of the war. And there was ample evidence that, wisely treated, men affected with the acute form of “shell-shock” could normally return quickly to duty as fit for it as their comrades.

The “nervous” casualties from such a battle as the Somme first appear as a congeries of mentally broken men, largely undifferentiated. From this there will separate out the various types and special syndromes that will make up the ultimate psychopathic picture. But one of the most important medical “lessons” was this, that a large proportion will not have developed and need not necessarily develop, any definite and established symptom-complex indicative of one or other of the recognised neuropathic types—hysteria, anxiety, phobias and obsession indicative of what has been designated above as the “chronic” stage; it is indeed the prime purpose of this chapter to indicate and illustrate this fact.

The psychic events of the Somme bombardments focussed attention on what has been called in these pages the acute form of war neurosis—what now may perhaps legitimately be termed “battle shock”. The causation of the other or “chronic” manifestations of neurotic disorder in the A.I.F. is perhaps better illustrated by reference to the next period of warfare experienced by the Australian divisions in France, that is, the period known in the A.I.F. as the “Somme Winter”,

The chronic form: war neurosis
and the long wearing down offensive that followed in 1917. To illustrate one of the conditions—a form of fear—that might begin the descent of a less resistant man into this type of neurosis, the writer will draw, as he has previously done, on the descriptive genius of Captain G. D. Mitchell. Writing of the beginning of the 1916 winter he says:

To the right of us was the steep bank. . . . Nearby ran a deserted sap into Fritzland. There lay my pal James with his rifle ready. I visualised a helmeted Fritz at the other end in just such an attitude.

Darkness ushered in a still, menacing night. On such a night as this could dead men walk, and speak to us who were out beyond the ways of life only waiting the reaper. Dread and foreboding possessed me as I went on listening duty. The night seemed to be full of warning voices that made no sound, but formed their messages in the brain. As Godfrey wrote in the _Anzac Book_:

> “This is indeed a false, false night;  
> There’s not a soldier sleeps,  
> But like a ghost stands to his post,  
> While Death through the long sap creeps.”

In that hour was born in me a fear that lasted throughout the whole winter. It was the dread of dying in the mud, going down into that stinking morass and though dead being conscious throughout the ages. It was probably a form of claustrophobia.

Waves of fear at times threatened to overwhelm me but that I kept a tight rein on myself. A little weakness, a little slackening of control at times and I might have gone over the border line. In the light of the sun, on firm ground I could laugh at Fate. But where the churned mud half hid and half revealed bodies, where dead hands reached out of the morass, seeming to implore aid—there I had to hold tight.

The one supreme psychopathic element in the war-environment was the emotion of Fear (the affective element in the primitive instinct to flight from overpowering danger); in particular in its nascent state of “apprehension”, the fear of the unknown. Of this excitant of fear McDougall says:

Fear, whether its impulse be to flight or to concealment, is characterised by the fact that its excitement, more than that of any other instinct, tends to bring to an end at once all other mental activity, riveting the attention upon its object to the exclusion of all others; owing, probably, to this extreme concentration of attention, as well

---


80 Compare the influence of apprehension in the creation of the gas effect syndrome

81 _Social Psychology_, pp. 54-55.
as the violence of the emotion, the excitement of this instinct makes a deep and lasting impression on the mind.

Fear, once roused, haunts the mind; it comes back alike in dreams and in waking life, bringing with it vivid memories of the terrifying impression. It is thus the great inhibitor of action, both present action and future.

The environmental element in chronic breakdown. It is a common and fundamental error—attesting the impropriety of the term—to conceive of "shell-shock" as essentially a sudden affair, of the nature of a "wound"—whence the official diagnosis "shell-shock 'W'". There can be no doubt whatever that in the vast majority of cases when a soldier suffered a nervous breakdown he was himself aware, often without acknowledging it to himself, that he was becoming "unhinged"—that his resisting powers were losing the battle.82

The Shell Shock Committee83 reporting in 1922 identified the following as primary syndromes:

(a) Fatigue cases.
(b) Exhaustion and confusional states.
(c) Conversion hysteria.
(d) Anxiety states.
(e) Obsessional states.

The Committee accepted the principle that each of these states might require certain special forms of psychiatric treatment as well as the general ones. Without entering upon a description or discussion of these the following points may be noted:

Psychogenic factors. Following all psychologists save the confirmed Freudians,84 the present writer would identify as the fundamental element in the motivation of war neurosis the urge of self-preservation, as distinct from the other primal biological urge of race preservation, or "sex". It is, however, fully accepted that a pre-existing neurotic constitution may have been created by the latter. In the immediate impulse the escape or advantage motive is probably dominant; but with it

82 This has nowhere been better described than by Robt. Graves (Good-bye to all that) to whom medicine at least owes a debt for a courageous and most intelligent self-analysis by a fine soldier and a gifted writer.
83 Report of the War Office Committee of Enquiry into 'Shell Shock' 1922.
84 For the claims of the Freudian concept of war neuroses the reader is referred to the admirably balanced and scientific presentation of the subject in the small work edited by Ernest Jones—Psycho-Analysys and the War Neuroses (The International Psycho-Analytical Library, No. 2) with Introduction by Dr. Freud.
the writer would associate the *positive* emotion or instinct of *nostalgia*—the power of which is often under-estimated.

No attempt will be made in these pages to distinguish the special pets of the several schools of psychogenesis. After all, the outlook and teaching of all the schools—of Freud, of Jung, of Adler, of Watson and of the British school of applied common sense which seeks to "try all things and hold fast that which is good"—merely identify certain elements of truth.

The hereditary element in psychogenesis has already been referred to. Probably, with Ross, the reader might wisely accept the principle that the most important point in this connection is that a bad "heredity" only makes a good "education" the more imperative. Of specific immediate factors it may suffice to enumerate—fear and nostalgia, advantage, patriotism, duty, conscience, anxiety, conflict; and so "dissociation" and the "unconscious" suppressions and "conversions".

Out of the welter of opposing doctrines that controlled the disposal and treatment of the minor psychotic disorders of conduct, there appears one unifying concept—that of a mental "conflict"; or a true civil war of impulses within the man himself, seriously upsetting the mental equilibrium so hardly achieved in the educative years and so precariously maintained through the strains of social adaptation, economic and sexual. This conflict has already been examined in describing the experience of the A.I.F. on Gallipoli.

*The chief war neuroses.* (I) *Hysteria.* The unconscious "flight into disease" is proverbial for its protean manifestations, and in war these were even more diverse and bizarre than in the feminine type in peace. They have been conveniently listed as follows:

*Conversion Hysteria—traumatic or post-traumatic.*

I. Massive Dissociated States—
(i) Fugues and wandering with some amnesia.
(ii) Twilight states with automatic movements.
(iii) Convulsive attacks, sometimes with mimetic actions.
(iv) Cataleptic and catatonic rigidity and states of immobility.

II. States of Partial Dissociation—
(i) Hysterical paralysis and fixations.
(ii) Hysterical sensory disturbances, somatic and visceral, including such syndromes as "left infra-mammary pain".

---

65 In *The Neuroses in War* by Emanuel Miller, Appendix C.
(2) Anxiety phobia (in everyday language, "worry"). It is believed that if the "somatic neuroses" are excluded, less than fifty per cent. of the total of chronic neuroses belonged to this group. It contained those men who continued to live over again the horrors of the war and remained anguished and terrified—contrasting strongly with the peaceful and happy men whose unconscious mind had converted their fears into the simulacrum of disease—"hysteria". A misunderstanding of this type led Sir Philip Gibbs to his unwarranted reproach to the Ministry of Pensions concerning men who had done their duty with the best of them, but now in the time of forgetfulness were forgotten, and the busy joyous selfish world passed them by, not guessing at the tragedy of these wounded souls, these nervous wrecks, these sad-eyed stammering, wan-looking fellows, who wept sometimes in their lonely rooms and dared not apply for jobs which they knew they could not hold, even if luck gave them a chance. . . . Tragedies pitiable beyond all words, because they have been suffered in loneliness, in the agony of long-waking nights with secret fears hidden even from wives and mothers.

While, mutatis mutandis, this description conveys, accurately enough, the early stage of chronic anxiety and the final result of a few cases, it cannot be too strongly emphasised that in the great majority the condition could be cured and the permanent and irreversible disorder could be avoided. But in a large proportion also "prevention" and preventive treatment were the only "cure".

On these premises there may be suggested—as consonant with the teaching that by the end of the war had become familiar among both neurologists and psychiatrists—the following sequence of the neurotic constitution as developed in the warfare of 1914-18.

Mental conflict—fear (the instinct of self-preservation) fighting against "conscience" (the sentiment of self-regard and social sacrifice, discipline, esprit de corps and so forth).

The "anxiety state" ("worry")—leading to increasing inefficiency and engrossment in self-feeling, fantasies, dreams, phobias.

---

86 From Overseas, Jan. 1927.
87 This may or may not be associated with a definite "personal" or "family" history. Dr. Campbell (it will be recalled) found this usual.
Moral and mental and perhaps a physical shock—the "last straw".

Stupor—with or without physical cause (as from "commotion" through "windage" or "blast").

Confusion and amnesia—the nascent stage of neurosis.

Psycho-neuroses of types appropriate to the mental and moral temperament, disposition and character of the individual. Officers for example were most often overcome by anxiety and gave way to psychopathic phobias, but other ranks to hysteria. The unconscious motivating factor in both cases was the same—escape from conflict.

The conception of "shell-shock" that was still general at the end of 1916 is indicated by the fact that in the report of proceedings of the Interallied Conference of February 1917, a French delegate, Inspector General Simonin, adopted classification into "emotional" and "commotional" syndromes, "the second being much the graver and probably in many instances being associated with actual trauma of the nerve centres". The crude concept of "cerebral commotion" was afterwards relegated—perhaps with too abject a concession to the claims of abstract concepts—to the position of an occasional and unessential factor in a morbid process that was predominantly "mental".

By 1917 there had occurred in every army a reaction against the bare materialism of so-called "shell-shock". This reaction tended to emphasise the essential distinction between the frail body of man, and his unconquerable spirit and, clinically if not philosophically, to interpret disordered conduct by divorcing nervous from psychic activity—in other words divorcing brain from "mind". Yet scientific study of the phenomenon of "shock" has since disclosed relations that seem to permit the rudiments of a re-synthesis.

We return now to the "rough and tumble" of attrition.

These interesting reports are held by the Australian War Memorial. Certainly, the physical and the "nervous" shock from explosion were closely related Crile's definition of wound shock may be recalled—"a state of exhaustion which has been rapidly developed by psychic, traumatic, toxic or thermal stimuli". See also B M J., 8 Sept 1934, p. 4887, and cf. The Neuroses in War, Edited by Emanuel Miller, p. 102.
warfare in 1916. The task of diagnosing psycho-neurosis is (in order of importance) negative and positive—negative by exclusion of "organic" disease, for which task a neurological training is required; positive, by recognition of the "neurotic" nature of the condition, and by the discrimination of it from "true" or major psychoses. For this a psychiatric training is required.

By the end of 1916 this had been recognised in the British Army, and by the middle of 1917 the decision had been satisfactorily implemented. The most important step was the selection and training of a body of officers qualified by both training and experience to meet the special problems of war psychology. This important development calls now for notice.

It would be difficult to over-estimate the importance of the desire by G.H.Q., B.E.F. to bring neurotic casualties into line with "disease", and to control disposal and treatment by exact diagnosis. There is no need to attempt to allocate the credit for this innovation; from what has already been said it will be clear that it was an obvious and urgent necessity. The Somme battle provided not only a flood of mentally disordered conduct but a spate of delinquency. By this time also the problem of insanity, as a cause of disordered conduct, was proving difficult, and was recognised as part and parcel with those of "shell-shock 'W'", of the military crimes of cowardice, malingerering, and S.I.W., and of the "neuroses". Here was an assortment of syndromes for which neither diagnostic "physical signs" nor scientific pathological findings were available on which to base an ordered system of scientific discrimination. It is, however, characteristic of this episode of the war that the most pressing demand for diagnostic stations arose from the recognised necessity for discriminating "shell-shock 'W'" from "nervous" disorders of other kinds. This was met by (1) a direction that all cases in which doubt existed as to the nature—and especially the cause—of nervous breakdown were to be marked N.Y.D.N. ("Not Yet Diagnosed—Nervous") and sent to special

---

90 Through clinical insight, or by "therapeutic" test.
units,\textsuperscript{91} and (2) the allocation of special casualty clearing stations or stationary hospitals for this purpose—with selected staffs.\textsuperscript{92}

This experiment completely changed the administrative aspect of these problems at the front and opened up a new and wide vista of scientific advance in discrimination and treatment. The chief effects of the new system were, first, to identify the acute and chronic syndromes as essentially aspects of one and the same problem—a problem strictly within the province of psycho-therapy; and, second, to make uniform the problem of discrimination, and thus of treatment, as between the various forms in which "minor" mental disorder became manifest.

The following interesting account of the organisation of these centres and of the lines of treatment is taken from the \textit{British Official Medical History},\textsuperscript{93} as also is the diagram of the layout of the centres:

\textbf{Practical problems of "N.Y.D.N."}

\textsuperscript{91} The very practical principles and reasons on which these actions were based are given in a letter of 14 October 1916 from Lieut.-Gen. G. H. Fowke, Haig's adjutant general. He says.

"Those who when engaged with the enemy fail to maintain mental equilibrium do so either—(1) Because they are lacking in the nerve stability which must be assumed to be inherent in all soldiers, or (2) Because they have been subjected to some extraordinary exposure not incidental to all military operations.

"Those who have committed themselves for the first of the above reasons cannot be allowed to escape disciplinary action on the ground of a medical diagnosis of 'shell-shock' or 'neurasthenia' or 'inability to stand shell-fire'.

"It has too often happened that officers and men who have failed in their duty have used such expressions to describe their state of non-effectiveness, and medical officers, without due consideration of the military issues at stake, have accepted such cases as being in the same category as ordinary illness. The undesirability of disposing of such cases in this way should be brought to the notice of Administrative Medical Officers, between whom and the 'A' Branch of the staff of the formation concerned should be close co-operation in dealing with each case on its merits.

"It should be for a Court Martial to decide whether the evidence as to the existence of actual disease is such as to justify absolving an offender from penal consequences.

"The Commander-in-Chief considers it desirable that all cases of nerve failure should be retained in the Army area until they have been carefully investigated and have been found to involve no disciplinary aspect. If the medical condition necessitates early transfer to the Base, all possible particulars that may be required for future disciplinary action should be obtained before the transfer is carried out.

"Nerve failure believed to belong to the second class of cases, those due to extraordinary exposure, should not be classified as a wound on medical authority alone. The diagnosis 'shell-shock wound' should in no case be made until the evidence of the Commanding Officer or soldier affected has been obtained that his condition originated immediately upon his being exposed to the effects of a specific explosion".\textsuperscript{92}

\textsuperscript{92} These were (at the end of 1916) First and Second Armies—No 4 S.H., Arques; Third Army—No. 6, Frévent, Fifth Army—No. 3 Canadian, Doullens, Fourth Army—No. 21 C.C.S., Corbie. In July 1917 No. 62 C.C.S. was added, for the Third Battle of Ypres.

\textsuperscript{93} \textit{Diseases of the War, Vol II, pp. 10-12.}
These centres soon proved their usefulness, and in July 1917 a new centre for the Fifth Army was opened at No. 62 Casualty Clearing Station at Harnege. Each special centre was under the command of a lieutenant-colonel of the Royal Army Medical Corps, who was responsible for all administration. Treatment was entrusted to the specialist officers attached to the units; but it was essential that the medical officers dealing with these patients should themselves possess the power of maintaining discipline... The state of the majority of patients in the forward area required very little to turn the balance on the one hand to a rapid improvement, or on the other hand to a state of confirmed psycho-neurosis. Those troops especially who had had but short periods of training were deficient in that moral conviction which it is the aim of discipline to establish... All cases on arrival were sent to an admission block, which varied in accommodation according to requirements. Here they were sorted out at the earliest possible moment into the following groups: (1) Simple exhaustion; (2) neurasthenia; (3) hysteria; (4) confusional and mental states; (5) miscellaneous medical conditions. Each group was kept distinct in separate wards. As recovery took place patients were passed into a convalescent block, which was divided into two portions—early convalescence and final convalescence. Those who did not improve within ten days, together with those who became worse, were evacuated to the Base.

TREATMENT OF THE WAR NEUROSES

It is not proposed to enter upon a complete account of the treatment of the war neurosis. In the first place, mainly through the "six months' policy" and its various outcomes it did not enter into the medical experience of the A.I.F. overseas, or only sporadically and incidentally. Moreover the neuroses

---

94 See Vol II, Chap. xvi, also Chaps xvi and xv of the present volume
of the war were fundamentally identical with those of peace differing only in their external features, in the acuteness of their onset and, usually, in their recent origin and superficial nature, and the obvious content of “advantage” in the great majority. But the special features of the problem of treatment have already been mentioned in considering the measures taken to meet the occurrence of “shell-shock” in mass at the front.

It is happily possible to lay down a vital principle, arrived at during the war by the hard road of experience—that the paramount necessity in the treatment of acute war neurosis is discrimination and prophylaxis.\textsuperscript{95}

By early detection of the first signs of mental conflict the good R.M.O. could greatly augment his positive influence in preventing acute breakdown in battle strain. Discrimination and prophylaxis are essentially complementary. The first and most important factor in prophylaxis was to distinguish those men in whom the breakdown was due, not or not chiefly to some deep-seated “neurotic” tendency, inherited or acquired, in which the acute strain of battle was merely the final factor, but to unbearable tension on a “normal” individual. This having been done, it was possible to employ methods of disposal and of treatment that would permit the cure and the return to duty of large numbers of men who would otherwise be evacuated to the Base with a grave possibility of themselves developing—through introspection or through infection by suggestion—a neuropathic “complex”.

The British Shell Shock Committee after the war was emphatic on this point, and its conclusions accord entirely with the experience of the A.I.F. The principle of treatment recommended may perhaps be summed up in the phrase “informed common sense”. The following may be endorsed with a warning that the “forcefulness” advocated involves its own dangers.

Realising that prompt application of the correct psychological

\textsuperscript{95} All the elemental factors—the “constants”—in the problem of the treatment of war wounds and wounded men (see Vol. II, Chap. xi) have their exact parallel in the treatment of acute nervous breakdown. In particular, the time-element in the psychogenic process is of the same order of importance with (and is curiously close in actual time-limit to) that which obtains in the pathogenic processes of wound-shock and wound infection.
influence can undoubtedly save a great number of these cases from becoming "casualties", it is recommended that treatment should begin at the Regimental Aid Post. Here the patient will be in the hands of the Regimental Medical Officer and his assistants, who probably know the patient. After a brief period of rest, strong moral suasion and energetic persuasive methods should be adopted following an attempt to reassure the patient as to the facts of his disability. . . . Without, perhaps, going to the extent of regarding every case as a possible malingerer, . . . yet the measures taken must be determinedly stringent and forceful. . . . By this means a great majority of cases may be restored at once to duty and will be saved from a further development and fixation of their disorders. Such cases recoverable by these means would include cases of Fatigue, mild Exhaustion and mild Confusional states, early Hysterical Dissociations and Amnesias, and many of the Conversion Hysterias. The Anxiety states, the Obsessional states, and severer Exhaustion and Confusional conditions would not respond, nor would a number of the Conversion Hysterias in whom the personality was of a low grade and strongly anti-moral.

It should be noted that very little harm could be done at this stage even by misapplied forceful persuasion to a non-responsive case; in comparison to the stress of actual battle, which has caused the disability which is intractable to early treatment, the most forceful methods of persuasion or suggestion are negligible as regards their capacity for producing any deleterious results.

Cases in which the condition is refractory to this early and elementary treatment, or cases which, owing to pressure of circumstance, cannot be dealt with at once, should be evacuated, sorted out at the field ambulance, and sent straight away to the Special Neurological Receiving Centre.96

Sir William Osler has written: "What the pathologist thinks to-day the physician does to-morrow."97 The acknowledged defects in the treatment and disposal of men suffering from war neuroses in the first three years of the war were largely due to the confusion at the outset of the war in the theory and teaching in the subject. These were accentuated to the nth degree by delay in accepting the psychogenic origin of war neuroses. This delay was mainly due to the dominance of the concept of "shell-shock", which prevented a scientific comprehension and discrimination of the various morbid syndromes, and in particular of their largely psychogenic nature.

Treatment of the chronic or established stage of war neurosis comprised: (a) The removal of symptoms and (b) the treatment of the underlying neurotic constitution and/or neuropathic state. Gradually these several types of case were

96 War Office Committee, Enquiry into Shell Shock, p 133.
discriminated and treated on lines that assimilated more and more definitely all that could be found useful in all the systems and schools of psychotherapy. Besides the basic principles of rest, sleep, food, quiet and so forth, hypnotism, suggestion, persuasion, stimulation, and discipline were applied by experts. Deep analysis was not used at the front. In this as in other matters the war situation required results. Scientific knowledge and research had to be applied on a strictly pragmatic basis for the purpose of winning the war.

In both France and England, two schools of theory and practice developed, representing two aspects both of the scientific theory and of the military requirements. The one aimed at removing obvious manifestations of moral defeat in "neurosis" or anxiety phobias and relied on the vis medicatrix naturae to effect at least a mental restitutio ad integrum. Amazing results were found possible in hysteria by quite simple methods applied with technical skill. The other school taught that the removal of "conversions" and phobias was useless without some attempt to deal with the deeper personality-structure which underlay them.

In 1918 came a further change, with the realisation that "shell-shock" and "N.Y.D.N." were only an incident, though a deeply disturbing one, in the medical history of psychiatry and neurology in the war. The primary reason for establishing the classification N.Y.D.N. had been—not to assist in the diagnosis, treatment, and proper disposal of sufferers from

---

88 Followers of Freud have complained that the bigotry of the neurologists refused to them any place in the war-effort. (cf. Jones, Culpin.) It seems to be quite true that the methods and the philosophy of Freud did not receive official recognition or place; but there were faults on both sides—"Freudian" psycho-analysis was a "closed" cult. Quite apart from the early crudities of the philosophy, which evoked emotional and intellectual reaction, the methods of psychological medicine, as revealed by the Freudian method of psycho-analysis and as interpreted in terms of the Freudian philosophy, were quite unsuited to war needs. But there is full evidence that before the end of the war the essential principles and concepts of the Freudian system (of the "unconscious" causes of behaviour, the nature of hysteria, the place of "anxiety", "conflict", and the gain motive) in the genesis of the war neuroses, were well recognised. They were indeed an essential part of the stock-in-trade of the officers who from early in 1917 were responsible for the treatment of the cases admitted to the special hospitals for psychiatric casualties—at the front, at the Bases in France, and in England.

89 The French reduced the treatment to a mass-routine. Dr. Yealland's dramatic results in hysteria were based on an exact technique applied with confidence.
psycho-neurosis, but to regulate the allocation of the wound-stripe for "shell-shock 'W'". But in the light of exact research at the special hospitals "shell-shock" was soon revealed for what it was—a physical explanation of a moral and mental disorder; no justification for it could be gained by any of the methods of research known to science. Instead, it was made clear that, whatever physiological processes might underlie them, the only identifiable factors in the production of "shell-shock" were psychic—moral and mental. Accordingly, first the diagnosis "shell-shock 'W'", and then the term "shell-shock" itself were generally forbidden. Thereupon the classification N.Y.D.N. became unnecessary; it had indeed proved undesirable.100

By the middle of 1918 the classification "N.Y.D.N." had so well served its incidental purpose of education, that it was now shunned as a diagnosis, and at the forward stations men were dealt with and evacuated under their correct diagnostic titles. By this time as the British Official History records1

There existed one such forward centre for each army area. Any cases which these centres had to send down the line were evacuated to special neurological hospitals at the base, and in this way the whole subject remained under control

The report of Colonel Manifold already quoted gives an excellent account of the developments in the A.I.F. subsequent to the Somme:

100 Lieut.-Col. Gordon Holmes, Consulting Neurologist, wrote to the D.M.S., Second Army on 30 May 1918.

In continuation of my conversation with you yesterday with reference to cases evacuated from Front Line Areas marked N.Y.D.N., I beg to point out that a very large proportion of all these patients present no nervous symptoms. Those cases which are wrongly diagnosed fall chiefly into the following groups:

1. P.U.O., and especially recurrent Trench Fever.
2. Men who had been shaken up by the explosion of a shell or buried; the majority of these require no treatment and are fit for duty after a few days' rest.
3. Cases of temporary fatigue and exhaustion.

"It is for several reasons undesirable that men who suffer with no pronounced nervous disorders should be labelled N.Y.D.N., or sent to special N.Y.D.N. Centres. In the first place the fact that A.F.W. 3436 must be rendered and filled up throws a considerable amount of work on the Centres, and frequently delays for considerable periods the return of fit men to their units. Secondly, if the men are suggestible or anxious to avoid service they readily assume or assimilate symptoms which they observe in other patients. Finally, if again admitted to hospital with nervous symptoms they are likely to be evacuated to England or recommended for employment on the L. of C as unsuitable for front line service, if they can produce evidence that they had been previously in an N.Y.D.N. Centre."

1 Diseases of the War, Vol. II, p. 11.
The rule that all cases marked by an R.M.O. "N.Y.D.N." had to be sent to this special hospital told detrimentally, and later on the rule was modified from G.H.Q., and field ambulances were allowed to change the diagnosis; but in the meantime, in this Corps, R.M.O's were instructed—when they were uncertain as to a case being due to anything more than fatigue and an active apprehension—to put on the field medical cards "N.Y.D. (fatigue?)" which gave the Field Ambulance Commander a freer hand. . . .

It has been found that nearly all cases of N.Y.D.N. have occurred during a large offensive operation, and that it has been a rare occurrence to get these cases from the casual promiscuous shellings which go on in the firing line in what are termed normal times. During the Passchendaele operations the inconvenience and delay of sending all cases diagnosed by the R.M.O. as N.Y.D.N. back to a special casualty clearing station was pointed out, and a ruling was given that the diagnosis could be altered in the field ambulance when the man was only temporarily shaken. Cases became much fewer as the Passchendaele operations continued, although the shell-fire never slackened. This is what we may invariably look for and though these slighter cases may be genuine enough up to a certain point, yet the rapid decrease in numbers shows that, except in the gravest form (which is very rare) the whole matter rests upon a power of inhibition and control being fully exercised.

With the severe gas-shellings that increased in 1918 there came into prominence a "gas effect" complex and neurosis. This had to be met by establishing "N.Y.D. Gas" diagnostic centres; and an organisation for dealing with the cases so denoted. The creation of a mass-neurosis in relation to supposed "gassing" was especially noted by Australian observers when the American troops, who had been constantly warned about gas and hastily drilled in meeting it but who had no experience of it in action, were brought suddenly into the field in 1918 in front of Amiens and at the Hindenburg Line. The war diaries of Australian units repeatedly comment on the large number of inexperienced American soldiers who passed through the Australian posts complaining, with obvious sincerity, of having been "gassed", but who presented no symptoms or physical signs suggesting that they had actually inhaled any form of poison-gas in amount sufficient to be harmful.

The post-war history of the A.E.F. provides the final sequel to such episodes in recording that the number of pension
claims for "gassing" far exceeded the number of American soldiers who could have been gassed.2

The intervening phase is supplied by the following quotation from Professor Lorenz,3 which illustrates well the psychic "rake's progress" from a fear to a fantasy, and thence to a mental habit. As the "advantage" motive is renewed in post-war competition, this progresses to a mentally organised conviction, which reaches, first to the “suppressed”, and ultimately to the “repressed” domains of the “unconscious” mind.

So much time was given over to the preparation of defence from gas attack that the soldier was deeply impressed with the potency of this weapon. Horrors were deliberately created that we now all know were entirely unjustified. While such may be warranted to promote application in training, it also, unfortunately, planted in the soldier's mind certain fears that I believe far out-weighted the usefulness of this training. The very means adopted to train the troops made them mentally less able to meet the conditions of modern warfare. I believe that easily 50 per cent. of the psycho-neuroses that developed amongst the soldiers near or at the front were due to what can be termed "gas hysteria". I saw many cases of psycho-neuroses develop during a so-called gas alarm . . . .

Among the medical problems of the ex-service man that still confront the Government one finds expression of this popular belief. Any lung condition, and no matter how remote from service connection, is still regarded by the layman as the result of gas.

2 Thus Vedder (Medical Aspects of Chemical Warfare, p 245), states that by 1925 300,000 American ex-soldiers had applied for war relief alleging "gas disability". The total American battle casualties were 224,089, of whom 70,552 (31.5 per cent) were from "warfare gas". (British Official Medical History, Vol. II, Diseases, p. 497).

The figures for pension claims actually accepted were hardly less extraordinary.

In a paper on neuro-psychiatry in military medicine read before the Sixth International Congress on Military Medicine and Pharmacy June 1931, Professor Lorenz of Wisconsin University, U.S.A., said:

"45% of all the disabled veterans in the United States are cases of neuro-psychiatric disability . . . .

"The present annual cost of veterans' relief in the United States is over Five Hundred Million Dollars per year. Easily 50% of this huge load is due to neuro-psychiatric disabilities that are connected or related, by legislation, if not in fact, to military service"

And in a paper at the same Congress Dr. P. S. Matz stated that:

"From 1917 to 1919 inclusive 78,930 men and women were discharged from the military service on account of some neuro-psychiatric disease; the latter constituted 25% of the total number of all of the men discharged from the service (313,200)."

All the papers presented at this Congress and the whole discussion on the subject are of the highest value and among the most weighty since the war.

In Great Britain whereas the "total of casualties from nervous disorder" on the Western Front is estimated at "about 80,000, which would include many recurring admissions" and the numbers from other theatres of war would be small, yet "even at the beginning of 1921 65,000 men were receiving pensions for 'neurasthenic disablement' . . . attributed to 'shell-shock'".

3 Extract from article by W. F. Lorenz, Professor of Neuro-psychiatry, University of Wisconsin, U.S.A., Col., M.C., U.S.R.—Published in the report of the Sixth International Congress of Medicine, held at The Hague, in 1931. See in this connection also Chap. XVI.
In an earlier part of this chapter there was given an account of the incidence at Gallipoli of the syndrome known first as Disordered Action of the Heart ("D.A.H.") and later as the "Effort Syndrome". It is not proposed to examine the origin and incidence of this condition in the A.I.F. at the front. Neither "D.A.H." itself nor other forms of neurosis associated with disorder of the neuro-chemical mechanism of the body—hyper-thyroidism, visceral neuroses (as peptic ulcer and so forth) are prominent in front-line records. But at the Intermediate Base (Command Depots) Disordered Action of the Heart presents itself as one of the most difficult administrative problems, and a brief note on it will be found later in this chapter.

A definite syndrome present at this phase of the war was that of "war weariness". The following gives the situation in France:

The Australian records do not contain material for a technical examination of the problem of major psychoses in the war—partly because the Australian Medical Service had no responsibility in this matter except that of repatriating the patients. Of this process a com-
plete account is given later. But a few aspects of the problem of the major psychoses must be briefly mentioned.

_Psychosis or psycho-neurosis?_ The burning question—whether the distinction between psychosis and neurosis is one of _kind_ or only of _degree_—was "in the air" even during the war. Yet despite the existence of undoubted "border-line" cases the distinction is as definite as—for example—that between "disease" and "wound". For practical purposes some such distinction as that already made in this chapter—based on the presence or absence of insight or "awareness" seems adequate; it is not claimed that the discrimination is "scientific".

It is useful to recall that the diagnosis between "true psychosis" and the accepted antithesis "psycho-neurosis" may cause diagnostic difficulties by reason both of a degree of psychopathic identity and of clinical similarity. The therapeutic test may be of help in diagnosis, as it is in discrimination from organic disease.\(^6\)

Further, Australian psychiatrists noted the frequency with which states of mental confusion were met with in the field. Thus Lieut.-Colonel J. K. Adey (late superintendent at Royal Park Asylum, Melbourne, and formerly commander of the 5th Field Ambulance) wrote:

Insanity in any of its manifestations, with the exception of one form, was rarely met with during the war forward of the casualty clearing stations. The Psychotic as a general rule is not a good mixer. He does not willingly submit to discipline and his companions, particularly in camp life where men's peculiarities are more obvious than in civil occupations, soon discern that his mental state is abnormal. He is then relegated to the base or lines of communication until his conduct makes his return to Australia imperative.

The one exception is a temporary condition known to psychiatrists as Confusional Insanity and is due to extreme stress—as a heavy bombardment, long privation, or great emotional disturbance as in men who were buried by a shell blowing in their dugout. A patient in this condition of _Confusional Insanity_ would show loss of attention, he would be unable to give a coherent account of himself, he would be unable to say what had happened, where he came from and sometimes was unable to state even his name and unit.

All degrees of this condition, from a mild temporary amnesia to complete disorientation, could be observed. The man would recover from temporary Confusional Insanity in 24 to 48 hours provided he was given some rest and food, and the majority of such cases would

---

\(^6\) Reference may be made to an article by Prof. W. S. Dawson, in the _Medical Journal of Australia_, 25 Apr 1931, and by Prof. Bostock, _M.J.A._, 14 June, 1941.
never get beyond the casualty clearing stations. At Le Sars, in February 1917 the 5th Field Ambulance had a deep dugout free from noise and all external stimuli, where cases of this type were kept for 48 hours and then returned to their units.

It is not proposed—and is indeed denied by psychiatrists—that in “confusion” we have a pathogenic missing link between the two states, but the phenomenon seems worthy of attention.

THE AUSTRALIAN INTERMEDIATE BASE IN GREAT BRITAIN

The primary treatment of all A.I.F. casualties arriving in Great Britain depended on the British hospital system. This included the special treatment of all “psychic” cases.

From the excellent account by Lieut.-Colonel R. G. Rows7 in the British Official History it is evident that the neurological hospital system (which at first formed the basis of the organisation for the treatment of psycho-neuroses) was quickly mobilised. The provisions made were found, however, to be not only inadequate but unsuitable. Under stress of war and of unique and urgent problems a broad outlook was gained—not, it is clear from records, without much “dust and heat” of debate, professional and military—and a new organisation created. In effect, the system instituted by G.H.Q. France was carried through to Great Britain. “Neurological clearing and distributing hospitals” (such as the “Maudsley” and its dependent and Auxiliary Hospitals) were established in 1917-18, whence the various types of “psycho-neurotics” and “psychotics” were distributed to appropriate treatment centres. For psycho-neurotics the two centres best known to Australians were the “Red Cross Military Hospital” at Maghull, and the “Seale Hayne” Neurological Hospital at Newton Abbott.8 The outlook and methods in the various special hospitals differed considerably. Thus Seale Hayne (under Lieut.-Colonel Arthur Hurst) specialised in treatment at a

---

7 Col Rows was regarded by the Australian Medical Service with the highest admiration. He commanded the Maghull Hospital throughout the war. This officer, Col. A. Hurst, who was in charge of Seale Hayne, and Col. Thos. Lewis were “guide, philosopher and friend” to the Australian Medical Service in England.

8 At the time of the Armistice there were available 1,000 beds for officers and 5,000 for other ranks. From the Maudsley a total of 12,438 cases—“battle casualties” or “sick”—had been distributed.
more "superficial" level than was considered necessary at Maghull (Lieut.-Colonel Rows). 9

A small proportion of Australian patients found their way to these. But even at the end of the war the system for discriminating the "neurotic" case (the psychotics were very exactly handled) and for shunting him to a special hospital was, almost inevitably, imperfect. Certainly almost all Australian patients went to ordinary General Hospitals from which they were later collected—"the last state (commonly) worse than the first"—with all possible speed to the Australian Auxiliary Hospital and Command Depot system, from which again, if not likely to be fit for return to duty within six months, they were despatched to Australia at the earliest possible opportunity by hospital ship or transport.

A complete account of the system built up for dealing with Australian casualties in England who were "returned to duty" in France has been given in Chapter XVI of Volume II; and the course of the "invalids" who were boarded for "return to Australia" will be described in Chapter XIII of the present volume. But a brief note on the problem presented by the special cases that are discussed in this chapter may be most conveniently given here.

**The Australian Auxiliaries.** Practice in the Australian Auxiliaries largely followed Maghull; in the Command Depots it followed chiefly Seale Hayne—in particular in rapid removal of symptoms by suggestion, light hypnosis, and so forth. But the "six months' policy" above referred to precluded any attempt to organise an Australian system for the treatment of the neuroses or of the psychoses in England. It may be conjectured that this had a—possibly material—effect on the final result, and thus on the pension commitments of Australia; for by the time such patients reached home they had, as Major Campbell in 1915 foresaw, been well and truly "hospitalised". Partly in an endeavour to remedy this, in 1918 Colonel J. W. Springthorpe was permitted by the D.M.S., A.I.F., to build up a small "neuroses clinic" at No. 3 Auxiliary, for the treatment

---

9 An admirable report to the D.M.S., A.I.F., by the Australian Consulting Physician, Col. Sir Henry Maudsley, on the work at Seale Hayne, is held in the Australian War Memorial.
of men awaiting embarkation, but it cannot be said that the results achieved were striking. The atmosphere in which the treatment was carried out precluded any hope of success.

In the Command Depots. It was found that a great many men who should be fit for, at least, "B" class service did not get to the special hospitals, but were passed from the British General Hospitals, either direct or through Australian Auxiliaries, to the Command Depots for repatriation. In 1918 an effort was made by the A.D.M.S., A.I.F. Depots in U.K., Colonel McWhae, to do something more positive for the "neurotic" patients than merely let them await embarkation, and to supplement the treatment in British hospitals in the effort to "fit" a great proportion for "return to duty", as "A" or "B" class. To this end, on direction from him (and with the co-operation of General Howse and Colonel Hurst), an Australian medical officer with some specialist experience was posted for instruction at Seale Hayne, and applied the methods to cases in the Command Depots. The record of his results is of great interest, as almost invariably, in an impressive proportion of cases a "cure" is recorded. The ultimate result must be held problematical.

No single feature of psychiatric practice appeals to the intelligent philistine observer as being more worthy of thought than the ease with which, with appropriate technique, such results could apparently be obtained.

The important work done in the Depots was in the treatment of "D.A.H."; this has been referred to in Volume II, and the technical aspect of the subject is examined presently. It cannot be said that, for the "moral and mental" disorders, the Depot system worked well. It did not. It may, indeed, be conjectured that this type of case—the moral and mental derelicts

10 Summary of 188 cases treated by Maj. J. B. Lewis in Monte Video Camp, No. 2 Australian Command Depot, Weymouth, between 11 Feb 1919 and 30 Apr. 1919, a period of 2½ months. Nearly all these cases were improved, and the vast majority cured:

Psychasthenia 49, Anaesthesia 1, Neuralgia 2, Hemiplegia 2, Insomnia 1, Neuritis 1, Tremor 1, FIts 1, Bell's paralysis 1, Tinnitus 1, St. Vitus' Dance 1, Rheumatism 34, Flaccid paralysis 3, Functional gastritis 2, Functional cough 1, Contractures of lower extremities 10, Contractures of upper extremities 27, Hysterical pain 15, Deafness 3, Aphonia 15, Speech defect 1, Stammerers 12, Diplopia 1, Spastic flat foot 1, Frequency of micturation 2, Functional writer's paralysis 1.

11 Chap. xvi. An account of the results of observations by Col. H. Maudsley (Consulting Physician, A.I.F.) on the boarding of officers and men invalided to Australia is given in Chap. xvi of the present volume and in Appendix 4
—shared with the derelicts from physical battle—the "orthopaedics"—the worst results of the "six months' policy". Effective treatment was delayed—and in the type of case with which this chapter is concerned delay might be, morally, "fatal".

But the reader's judgment should be reserved till he has had opportunity to "hear the other side"; and this he will find in Chapters XIII—XV of the present volume.

The disposal and treatment in England of insane soldiers of the A.I.F. was chiefly determined by the British arrangements. The "insane" went to the asylums taken over by the War Office and staffed by British alienists drawn chiefly from officers of the Metropolitan Asylums Board. They were visited by officers of General Howse's staff and of the Australian Red Cross Society, in the same way as other Australian patients in British hospitals.

Repatriation of insane soldiers. The repatriation of the mentally afflicted Australian soldier was a matter of great importance and yet of difficulty. It was obviously undesirable in the interests of the soldiers, their relatives, and the nation, that he should be retained indefinitely in England. In particular in the interests of his recovery it was greatly to be desired that his surroundings should be to him "normal", which meant Australian. Yet the social difficulties inherent in the state of serious mental aberration, from whatever cause arising, made the problem a peculiarly complicated one. The way in which it was ultimately solved makes this episode one of the most admirable in the medical history of the A.I.F.

There were two factors in this successful achievement. The first was the decision by Surgeon-General Howse\(^ 12 \) that the "six months' policy" should be applied strictly to these cases. He decided that it was undesirable to establish an Australian hospital for mental cases but that every effort should be made to get them home as quickly as was compatible with safety. In this last proviso, however, lay a problem which can be appreciated fully only by the initiated. It was solved through the genius of the officer selected by General Howse and en-

---

\(^{12}\) See Vol. II, Chap. xxvi.
trusted with the arrangements for the repatriation of "mentals"—Major Pym (of the Lunacy Department of New South Wales). The details of the procedure are given later in the chapters dealing with the transport and repatriation of invalids. Here it is only necessary to note that the policy was implemented by:

(1) extending Howse's general policy by concentrating mental patients in one or two British hospitals;

(2) creating, within the machinery for the repatriation of these invalids, an exact system whereby mental patients (and other special types of cases such as "tubercular" and orthopaedic) were embarked on transports specially fitted and staffed for their accommodation and care. For mental cases these special arrangements were designed by Major Pym, who also selected and directed the special staff.

III

SOME PARTICULAR PSYCHIATRIC AND NEUROLOGICAL PROBLEMS

The past decade has seen a renewed rapprochement between physiology and psychology—even between neurology and psychiatry—as striking as was the clinical and scientific reaction in the second decade of the 20th century against the mechanistic outlook on mental disorder of the 19th, which had culminated in the neurological absurdity of "shell-shock". Speaking broadly, while the neurologists cry "forward!" and the psycho-analysts cry "back!" psychiatry, and the British school of psychiatry in particular (inspired as it is by the tradition of British medicine that the proper study of mankind is man, rather than artificially abstracted elements in his make-up) seems to be moving in the direction of a scientific integration of clinically identifiable syndromes in terms of both philosophies. It is a movement which (as has been noted elsewhere) Freud himself foresaw as inevitable. As Professor Carroll C. Pratt says:  

---

13 Chaps. xii and xxi.

14 The Logic of Modern Psychology, p. 134. At p. 164 he adds: "Investigations that only a few years ago were regarded as pioneer efforts have already gone a long way toward moving a whole field of psychology over into physiology, or rather, fusing two relatively disparate fields into an indistinguishable whole."
4. The Main Building

Photo from the Repatriation Commission
Aust War Memorial Collection No H12896.

5. Concert Hall Moving Pictures are Given Twice Weekly. A Billiard Room for the Patients is also Attached

Photo from Director of Mental Hygiene, Victoria
Aust War Memorial Collection No H19421

"Bundoora", Hospital for the Care and Treatment of A.I.F. Mental Patients

To face p 136
6. THE AUSTRALIAN "DERMATOLOGICAL" HOSPITAL AT BULFORD, ENGLAND

The view shows the main hutsments

*Aust War Memorial Official Photo. No D459*

---

7. THE VENERAL DISEASES HOSPITAL AT LANGWARRIN CAMP, IN VICTORIA

The entrance, and a section of the huts.

*Photo lent by Department of Defence.*
*Aust. War Memorial Collection No A3662*
In proportion as the experimental work of psychology becomes exact, it will inevitably be absorbed into the more basic discipline of physiology. . . .

The lines of research that reach out toward this “far off divine event” are opening up in directions which the generation that was middle-aged in the First World War finds it difficult to apprehend.

The domain of medicine with which this chapter is concerned has become vast and specialised, and its boundaries are extending so rapidly that justice could only have been done to the subject by a team of specialists. Even within the restricted sphere which the writer has attempted to cover in a straightforward and “unsophisticated” narrative of a limited experience it has been necessary to restrict the subject matter within major spheres of military interest. It is, however, desirable here to complete the clinical picture by a brief reference to a few matters of less obvious military significance, though from the medical point of view they compose the actual “growing-point” of scientific advance. These comprise (1) genetically determined defects of conduct, the “abnormal” and the “subnormal” mind; (2) some “organic” and “functional” linkages; (3) the “visceral” or “somatic neuroses”.

1. Genetically determined Conduct Disorders.

“Moral” perversions. The experience of the A.I.F. in these very important matters was slight, so far at least as records reveal. There is no evidence pointing to any significant homosexuality in the force, and this is on a par with Australian experience in general. The records of the A.I.F. therefore provide no contribution to the place of the homosexual in a total war effort.15

The moron in war. Nor has the Australian Imperial Force any positive contribution to make on the general problem of the wartime place of men with imperfectly-formed minds, or even of the scientific methods for their detection. The reason for this is the fact that the majority of men of inferior intellect either did not

---

15 As to this problem in other armies the reader may be referred to the Sexual History of the War edited by Magnus Hirschfeld. Though it contains some gross errors the authors of this unpleasant book seem to know what they are talking about.
present themselves for examination or were eliminated before or soon after enlistment. The conditions of social life in Australia made the detection of these men almost automatic. No attempt was made at a mental survey of the kind that caused the raising of the American Expeditionary Force to be an event in recruiting history. Whether the Australian force was worse off through the omission is doubtful; it seems improbable that, under the conditions of these examinations in Australia at least, any figures obtained could have been accurate, and the result might therefore have been misleading. Indeed it is acknowledged—somewhat naively—in the American statistical information as to “defects in drafted men” that as regards neurasthenia, psychasthenia, and psycho-neuroses there is reason for thinking that most medical examiners did not sharply distinguish between these three diagnostic terms.16

2. Some organic and functional linkages.

Carbon-monoxide poisoning. The history of carbon-monoxide gas in the war is one of the most extraordinary in the whole gamut of war-medicine. Apart from its peculiar interest in connection with “tunnelling” and “mining” (already referred to in the chapter on chemical warfare) and as an unsolved problem in gas-defence, the symptoms caused by it—mental confusion; paresis and paralysis; par-aesthesia and anaesthesia; and amnesia, sometimes with sudden recovery of memory—seriously compete, according to Professor Frederick Mott and others, with blast from shell-burst as an explanation of the “cause” of “shell-shock”.

Drug addiction. True “drug addiction” was definitely rare in the A.I.F. Alcohol and, in some degree, tobacco were, like sex, some men’s only means of “flight from reality”. Without some such “hobby” not a few men would fall into fear and neurosis. But it is certain that they were bad substitutes for the creation of character (“sublimation”); and only too often created a “vicious circle”.17

16 From Defects found in Drafted Men, 1920, Department of Surgeon General, United States Army. The question would however, be materially elucidated by exact analysis, on comparative lines, of the men discharged from the army for all causes.

17 It is to be confessed that, curious to say in view of the potency of the drug, there is no evidence known to the writer to prove that any serious toxic effects were produced by the stupendous consumption of tobacco. Australian records throw no light on the question, which would seem worthy of more exact enquiry than it has received.
"Idiopathic" epilepsy. The medical records of the A.I.F. do not throw any readily discernible light on this still "mysterious" subject. "Fits" had a considerable "nuisance-value" in connection with recruiting and the elimination of "unfits". Their exclusion was found to be largely a matter of detecting "previous history" and of regimental action during training.

Later, as a problem of pensioning, this matter brought most difficult questions. These cannot be entered into here beyond saying (1) that A.I.F. experience points definitely to the desirability of excluding from the Army any man who is known to "throw fits" of any kind; (2) that pensions experience suggests the importance of a close liaison between the Pensions department and whatever department is concerned with recruiting.

General paralysis of the insane. The discovery just before the war in the "spirochaeta pallida" of a parasitic "cause" for a sickness, which was at once a clearly defined source of "mental disorder" and an organic disease of the brain identifiable at autopsy, gives this condition a place in psychiatry along with those of the epileptic, "concussion", and "Parkinson's syndrome", and with laceration of the frontal lobes. Australian records do not throw light on the pensioning aspect—the problem of attribution to or aggravation by war.

At the Interallied Sanitary Conference (1918)

While all agreed on the syphilitic origin of G.P.I. it was held debatable how far its onset might be influenced and perhaps its progress accelerated by "shell-shock", or by some injury of the head.18

Encephalitis lethargica. The psychogenic rationale of this dreadful sequel to infective disease of the brain, whereby, through some physical changes in the cerebral cortex, a saint may be transformed to a sinner, has yet to be elucidated. Its war-interest is contained in the fact that it was during the war years that the disease was first identified, and that cases occurred in the A.I.F. The rationale of the correlation between the "disease" and the "Parkinson syndrome" does not appear to have progressed since the British Official Medical History (Pathology, p. 567) said in 1922:

18 From the report of the Australian representative to the D.M.S, A.I.F.
in the wider view (the) disease results from the interaction of several factors of which changes in the vital and chemical properties of the tissue cells, on the one hand, and in the provoking stimulus or pathogenic agent, on the other, are the chief.

A.I.F. records show only 6 cases actually recorded, with 3 deaths. But in 1934 21 men were receiving pensions for *encephalitis lethargica*, 18 for "Parkinsonism" and 9 for "Parkinson's disease". It seems possible that even more cases occurred on service than is represented in this list. The condition is, indeed, a cogent argument for the principle of giving the sufferer "the benefit of the doubt" in pensioning.

3. *The somatic (visceral) neuroses.*

The concept contained in the term "somatic" (or "visceral") neurosis appears to have been first defined in British medicine by Professor Clifford Allbutt (1836-1925). It must be accredited as a major element in the progress of psychiatry—indeed of scientific medicine itself. It creates an intellectual link between "psychology" and "pathology", as do the disorders and diseases themselves between psyche and soma. The scientific vista which opens up can be viewed from either direction.

The importance of the war of 1914-18 in the evolution of this scientific concept derives chiefly from the prevalence of the clinical syndrome which for almost a century has had a place in military medicine as "The Soldier's Heart" and later "D.A.H." It is unnecessary to do more than fit the war of 1914-18 into the history of the "syndrome".

It may be recalled that functional disorder of the heart was prevalent in the Crimean War, and that it formed the subject of a classical study by Da Costa (1871) on the "irritable heart of the soldier" in the American Civil War. The condition officially diagnosed as "disordered action of the heart" was prevalent in the South African War of 1900-1902. It was described by Lieut.-Colonel R. J. S. Simpson (*Epidemiological Study*) as associated with a general condition of increased irritability... of the vasometer system.... Their nervous system generally seemed out of order and they could not stand long without shaking all over.... In some patients the affection was constant though always increased by exertion, others were all right when at rest.
In the Great War of 1914-18 the condition came at once into prominence on the Western Front. Its place in the clinical picture of Gallipoli has been recorded. The "suggestive" content of the diagnosis "D.A.H." became a matter of military, as of medical, concern; and in May 1918 the term "effort syndrome" took its place—without any obvious benefit.

The scientific history of the "syndrome" in this war is contained in the well known studies of Thomas Lewis. The following statement of his own concept of "the effort syndrome" seems to give his views a scientific detachment not always accorded them:

The picture which I have here attempted, no final picture let me say at once, is in many ways a picture without a central motive to fix the attention; it is perhaps better that it should be painted so; for if the "effort syndrome" is regarded as due to a specific form of disease, the right attitude toward the individual patient is at once lost. That attitude is one of deferred judgment, an attitude of enquiry. . . . As time goes by the group begins to fall to pieces and the patients to rearrange themselves for diagnostic purposes.19

The clinical analysis of this "condition" by Lewis and recognition of the fact that the autonomic nervous system is a prime element in its pathogeny, links the First World War studies with those accepted to-day.20

Apart from the Gallipoli experience recorded elsewhere the condition is not especially prominent in the medical or military history of the A.I.F. It was most in evidence in the Command Depots, where (as recorded in Volume II, p. 463) a clear-cut attitude and system of treatment were adopted, which is commended as an authentic contribution to the study of the practical military problem.

An important field for prophylactic action at recruitment may perhaps also be indicated by recent observations that the recruit has often a suggestive personal history.

19 The Soldier’s Heart and the Effort Syndrome, p. 8, 1918 Edn.
20 Dr Paul Wood (Physician to Effort Syndrome unit, E.M.S., London, Proc Royal Soc. of Med., June, 1941) has urged, in a study of outstanding merit, "the rejection of all these" [various terms—such as Effort Syndrome], adding "nor do I feel morally bound to suggest a substitute, for I believe that the recognition of this syndrome as such will die". His summary and conclusion that "the symptoms and signs of Da Costa’s Syndrome more closely resemble those of emotion, especially fear, than those of effort in the normal subject", coincide with views expressed by Maj. S. F. McDonald in 1920 ("The Neurotic Factors in D.A.H", Trans. Australasian Med Congress, p 413).
THE WAR AND THE AFTERMATH

The history of the problems of the moral and mental disorders of conduct as they appeared in Australia itself during the war and in the post-war period are examined—so far as possible—in the final chapters of this volume. But it is desirable that the war experience be linked with both the past and the future in a brief “appreciation” of its most important “lessons”.

The sum total of medical observation on the “mental” phenomena of the war, and the consensus of informed medical opinion based upon it, appear strongly to favour the conviction that (1) the moral and mental disorders of behaviour met with in war are not *sui generis* but in their essential pathogeny and nature are identical with those met with in peace; but (2) that nevertheless, in their superficial and less fundamental attributes such disorders, and in particular those in which loss of “awareness” or “insight” is not a characteristic feature (*i.e.* the “psycho-neuroses”21), *do* exhibit a degree of specificity, both in their clinical syndromes, and also in their immediate pathogeny and course.

The recognition of these two facts, by the military command, the medical service, and the civil community, is essential to success in dealing with the problem presented by so-called “shell-shock” and other disorders of behaviour in and arising from war—which is indeed a vast problem both for the soldier and for the nation.

It would probably be no exaggeration to affirm that the medical “problem” of nervous breakdown—at least as seen in the Great War—is only 20 per cent. a war problem and 80 per cent. a problem of war’s aftermath. The figures show this, but there are also more general grounds for the statement. In an army at war, given a reasonably effective use of the methods of prophylaxis developed from the experience of 1914-18, the place of the neuroses is not one of major importance. In 1914-18 the irreducible minimum of hopeless cases constituted certainly not

21 Prof Millais Culpin (*Recent Advances in the Study of the Psychoneuroses*) has very rightly protested against the usage which associates the more clearly psychogenic disorders with the neuron (“neuroses”), and those diseases whose ultimate neurogenic origin is most obvious with the psyche (“psychoses”).
more than 1 per cent. of the total non-battle casualties. Thus, despite its undoubted importance as a cause of casualties, nervous breakdown was infinitely less so than infection, and much less than physical "hardship".22

When, however, we come to examine the incidence of "nervous" influences in the problems of pensioning we meet a startling—indeed a terrible—situation, and one that deeply concerns the medical service. The proportion of pensions for this type of disorder greatly exceeds the total sum of the disorder actually seen in war. And the gravity of the matter lies in this, that here no effective method has been evolved of preventing the degradation of potential neurosis into actual neurosis. It is not difficult to visualise the insidious onset of "unconscious malingering" in the conditions into which the existing social economy precipitated the civilised world in the "depression" of 1930. This development, which will be studied more exactly later emphasises the supreme need of prevention which takes the shape of the creation of "character", individual and national.

The British Commission on Shell Shock laid down some broad principles which, in the opinion of the eminent soldiers, clinicians and scientists who composed it, were of first importance in the creation of a character capable of retaining the psyche unconquerable under the moral and mental strains of modern war. They rely largely on military and national traditions, together with the possibility of physical and moral ameliorations of the soldier's lot—in other words, on esprit de corps, discipline and organisation.

In Australia the counterpart of British Army tradition is what has been known since 1914-18 as the "Anzac" or "A.I.F. spirit". The following summary of it by a Queensland officer describes—in the case of the men he eulogises—a morale likely to be proof against most of the shocks of war and peace:

I was one of a mob. . . . When one gets close to rough chaps as some of these men were, one finds hidden qualities. All these men were wicked in the church sense. All had a keen sense of humour. A few reeled home drunk.

One was particularly impressed with the fact that those of Irish descent loved most to scrap. . . .

In sober moments all were friendly.

22 See statistical analysis in Chap. xvii
The conversation at times was disgusting in the extreme. I learnt in course of time that the vilest men were the poorest soldiers.

One standard of honour was demanded. Each should do his fair share. All should play the game, one with the other.

There were many men in their early twenties and the average age ranged from 25 to 30 years. All sects, creeds and types were represented. Men came from Hobart, Launceston, Devonport and Burnie. They came from the coastal cities and towns between Lismore and Cairns, from the Darling Downs and from towns further west. Men came from Springsure, Emerald, Clermont, Barcaldine, Longreach, Winton, Cloncurry, Richmond, Hughenden and Charters Towers. Every trade, pursuit and profession was represented. There were farmers and farm labourers, graziers and their stockmen. Men from the outback came with us.

We lived together, learned each other's opinion and studied lives and types. Through years of campaigning we slept, dined, marched, fought, suffered together and spent holidays with one another.

Men of different habits and thought saw much in each other to love.

What could make men see eye to eye and work together harmoniously? It was every individual's desire to serve. As a volunteer he enlisted because he believed in the cause. He took care not to do or say anything that would cause offence to the sensibilities of others. He was tolerant. As a soldier he had determined to give of his best.

Nearly all the men had fine qualities, and I cannot imagine any body of men looking less like cut-throats. It was instinctive with most that they should help each other. Rarely did one meet men who would not work amicably with others.

There were men who deliberately avoided their obligations to their mates and who schemed so that they could shirk their duty. In wartime, men cannot hide their true character for long, and, fortunately, very few "pointers" were discovered. Then they were known throughout the company. Real soldiers were tolerant. They regarded pettiness as a big crime. Opinions were respected, tolerated, accepted for education, or rejected. Provided a man did his job to the best of his ability, he could express himself in the manner he pleased...23

Captain Toft headed that description "Playing a Man's Game", and in this connection, while fully recognising the importance of the scientific approach—through psychological research and tests—the present writer would also urge the traditional British method of natural and constructive observation and common sense—exemplified in the practice of field games in and after school life and in the objectives of the Physical Fitness Councils and "Playgrounds", "Recreation", "Leadership" and similar movements in all the States—always

---

23 Queensland Digger, 1 Nov 1935, "Playing a Man's Game" by Capt. J. G. Toft, M.C., 15th Bn., A.I.F.
realising that the goal of social medicine is “the equalisation of all classes, rich and poor, in respect of health.”

In the army the prevention of psychic breakdown in the normally constituted man is obviously far more important than the patching up of psychic misfits. From the military point of view the “ninety and nine just persons who need no repentance” are at least 99 times as important as the one who, by great expenditure of medical energy, may perhaps be rescued for some “B” or “C” class job behind the front.

Further, as mass-suggestion is discerned by most psychologists as an important element in the actual production of neurosis, it may be surmised that—with a definite and reasonably assessable residue of human material that is irrevocably psychopathic—the significance, speaking broadly, of psychic instability is just what we make it. This is true of any social circumstances or episode wherein men are subject in mass to special strains and stresses. It is emphatically true of war.

In concluding this account of moral and mental conduct in the Australians in the First World War it must be said that the outstanding, and amazing, feature of modern warfare is the illustration it affords of the resilience, the power, the majesty of the human mind. This is not to say that abnormal mental factors did not enter profoundly into the war picture. But that no-man’s land of conduct and behaviour that is called “unusual” or “anti-social” or “undisciplined”—with all the mental, physiological, and physical commotions and changes that underlie it—which both divides and links the “normal” and the “abnormal” in mental order, was, in the First World War, a very wide one. Though, in the last resort, it was the task of the medical service to distinguish those “syndromes” of conduct and behaviour that would qualify or unfit a man for military service, yet—at least in the Australian force—it was not chiefly in the domain of disease, but on the plane of ordinary “soldierly conduct”, of “playing the game”, and of “self-help” in the daily rough-and-tumble of life, that mind and body fought with Apollyon in the Valley of the Shadow of

---

Death, both during the war and in its hardly less terrible aftermath of economic struggle.25

STATISTICS OF MENTAL DISORDERS IN THE A.I.F.

The records of the A.I.F. do not permit the presentation of an exact and complete analysis of the “moral and mental” disorders that caused men of the A.I.F. to become “casualties” on the Western Front or in the war as a whole. An endeavour is however made in Chapter XVII to trace the incidence of these disorders, in a systematic fashion, from the recruiting centres in Australia, through the vicissitudes of active service to the aftermath of repatriation and pensioning.

A SELECTION OF BOOKS


BROWN, Prof. Wm. Suggestion and Mental Analysis. University of London Press. 1922.


COLE, R. H., Mental Diseases. University of London Press. 1919.


25 This truth has been most brilliantly stated by the artist and poet Will Dyson in the dedication (“To the Men of the A.I.F.”) to his book Australia at War—a winter record made by Will Dyson on the Somme and at Ypres during the campaigns of 1916 and 1917. (London: Cecil Palmer and Hayward. First Edition 1918)
MORAL AND MENTAL DISORDERS


LEWIS, Prof. Sir Thomas. The Soldier's Heart and the Effort Syndrome. London: Arnold. 1918.


MITCHELL, G. D. Soldier in Battle. Sydney: Angus and Robertson. 1940.


OFFICIAL MEDICAL HISTORIES OF THE WAR—British (Diseases, Vol. II); Canadian (Prof. Sir Andrew Macphail); New Zealand (A. D. Carbery); American (Defects found in Drafted Men, Statistical Information; and Vol. X—Neuropsychiatry); German (Sanitätsbericht, Band III).


ROSS, T. A. Lectures on War Neuroses. London: Arnold. 1941.


SHERRINGTON, Prof. Sir Charles. The Brain and Its Mechanism. Cambridge University Press. 1933.


YEALLAND, L. R. Hysterical Disorders of Warfare. London: Macmillan. 1918.