PSYCHIATRIC ASPECTS OF REHABILITATION.

By Major EMANUEL MILLER, M.A., M.R.C.P., D.P.M.
Royal Army Medical Corps.

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IN consequence of a number of visits to a variety of hospitals, training centres and convalescent depots, both military and civil, it is possible to put forward in an interim report a number of observations on the efforts of rehabilitation, which have been made at these establishments, with a view to putting the subject upon both a scientific and humane basis.

At the outset one must ask, are the methods used to-day any different from those of earlier days? Indeed, are they merely dressed up in the new guise of a word which has merely served to cover all principles and practices, making the necessary proviso that to-day's improvements are not due to a new outlook but to the march of time under the banner of scientific advances in technique?

Medicine in the past honestly pursued the goal of cure and physicians and surgeons knew in those days that a "cured or alleviated patient" was better able to return to home or work. They, too, were not oblivious of the art of rehabilitation but they expected the patient to work out his own salvation when his appendix was removed or when his fracture was united. Rehabilitation to-day should be based on an awareness on the part of the doctor that the cure or treatment was carried out in the light of the function or role of the sufferer as a member of a community.

Rehabilitation must, therefore, be defined as *the planned method of treatment designed progressively to mobilize all the available resources of the patient with a view to his most complete adjustment to social and economic needs.*

PHYSICAL MEDICINE.

The following tentative suggestions are put forward regarding the assistance which psychiatry can give in the matter of training of physical therapy workers.

All nurses and physical training instructors attached to neurological, physiotherapy and orthopædic departments, not to mention general medical rehabilitation units, should be given some formal instructions in the mental aspects of their work. The object of such education should be :—

(1) To enable these workers to become aware of the necessity of their interest in their job and to gain insight into the special relationship which exists between themselves and their charges.

(2) To understand the problem of co-operativeness and non-co-operativeness of patients. Psychiatry has much to say and to teach about the unwilling patient and still further to study the incentives or obstacles to recover in soldiers in particular.

(3) To allay a patient's anxiety as to pain, and to recognize retrograde tendencies and their meaning, e.g. desire to rest after exertion, to lean readily upon the therapist and to show resentment or anxiety where a therapy is being stressed or hastened.

(4) To understand the nature of encouragement and criticism, and to realize the effects of the authority role of the therapist.

(5) To recognize when tardiness in recovery is due to :—

(*a*) Physiological sluggishness (malnutrition).

(*b*) Neurotic defences preserving a protective or defensive symptom.

(*c*) Personality traits, e.g. intellectual hypercriticism of the method. Self-centred attitudes. Persecutory or paranoid opposition to another's authority.

(*d*) Malingering-delayed recovery.

(6) To recognize certain characteristic reaction types which may call for special handling, e.g. :—

(*a*) Those who defend themselves against the therapist's judgment and put up a constant barrage of counter suggestions.

(*b*) The dependent discouraged type who always battens on the therapist and has his anxiety aroused over any severe setback.

(*c*) The depressive who feels recovery is doubtful and does not build up on any minor progress made.

(*d*) The self-centred who want the undivided attention of the therapist.

(*e*) Hysterics who unconsciously simulate and create new symptoms to retard recovery.

(*f*) The psychopaths who miss treatment, who lie about their progress, who interfere with bandages, who may show characteristics of any types from (*a*) to (*e*), and finally,

(7) To recognize the fact that most therapies applied to human ills are rituals and arouse in patients unconscious enthusiasm and hostilities regarding the magical and the mysterious. A most important topic inasmuch as patients must be made to realize all the time the reality character of the treatment. Therefore to win them from treatment to vocational activity and then to functional practices and earning power which is the result of therapeutic co-operation.

The role of physical medicine has been given special consideration because by far the largest number of casualties in war are concerned with disorders of the limbs occasioned either by actual gunshot wounds of upper and lower extremity or with disorders of locomotion and dexterity secondary to cerebral injury. In addition the debilities following other surgical conditions and the systemic diseases call for the help of this department. In this sense, therefore, physical medicine serves an important, specific, yet in many respects a very general function. Its importance lies in the fact that its practitioners, making contacts with various fields of medicine, are skilled in the assessment of disabilities calling for restoration of neuro-muscular functions in a general sense and with the varying degrees of malnutrition and lowered vitality which techniques of physiotherapy are designed to meet. But while the physiotherapist himself and his skilled assistants know the scope and limitations of the specific techniques, they need above all to take into account the personality factors which determine willingness to recover and capacity to assume a working role—that is vocation. These latter considerations are the proper study of the industrial psychologist and the psychiatrist. For example, in the early states of recovery the problem of fatiguability is of paramount importance, and its varying manifestations make it a matter of importance to decide to what extent it follows from the specific lesion or in what measure it is a function of a personality factor. For practical purposes the term fatigue is used by most of us to describe our feelings. The most superficial introspection will show that, in fact, the sensations referred to as fatigue are exceedingly different sensations, e.g. fatigue of a short run, a long day's work, a short spell of work on hot moist days. They are different sensations and they correspond to different physiological states, so different that it is entirely correct to say that there is no such thing as fatigue, but rather a great many fatigues. There is no single factor common to the sensations we call fatigue. What we probably need is a word to describe a characteristic of the organisms as a whole—the sensation which appears when, for any reason, the organism is approaching breakdown. The word will be found to include all those factors, including the environmental ones which include a man's attitude to the task, his skill and his consciousness of his ability to carry out the skill in the most productive manner.

In each department of medical and surgical disorder there are rehabilitation limits. Doctors and surgeons, as such, cannot be expected to administer themselves the vocational training that each man may require, but up to the limit of his knowledge of the type of man

he handles, be he soldier or workman, he can say and should be able to say how much residual function is left to enable the man, in a given age group, to work within the frame of his trade or Army craft.

He may not be in a position to say in what particular section of the trade he can work, but he might be able to say what he definitely cannot do.

It is notorious that in the mining industry no one with residual lesions can work at the coal face. Although every doctor has a human right to be a moralist and disciplinarian he cannot arrogate to himself the right to say what a man must do, but merely what he can do.

The strictly non-medical and surgical factors which influence rehabilitation aim at this phase of recovery. They are :—

(1) The level of intelligence and degree of trainability following from the intelligence level.

(2) Personality structure enabling a man to cope with recurrent difficulties due to probable demoting, diminution of pay and interruption of group affiliations, consequent upon his period of sickness.

(3) The man's ability to adjust himself to any new socio-economic setting necessitated by the nature of his disability. This is true particularly of soldiers of the better type who are loath to break with old regimental associations—friends, loyalties.

(4) The extent to which a man can build a new edifice of craft skill above the level of the base line of his former occupation.

Is there a critical point in the ladder of rehabilitation before which it is undesirable to stress the vocational goal? It has been held by some theorists that rehabilitation starts at the moment when a man receives his wound or injury and he is seen by the medical officer. This is true but with an essential qualification. On the battlefield, rehabilitation probably begins with the combatant officer who encourages a man to play some part even with a minor wound or with a transitory degree of emotional shock. But no sooner is a man evacuated as being unsuited for the fighting role than his psychological adjustment is profoundly disturbed. Not only does his physical injury debar him from all participation, but he loses his mobility, he suffers pain and is suddenly separated from his group relationships. He is in a state of suspended animation. In place of a steady lifeline of activity with established vectors of stress, strain and responsiveness, he enters a new phase in which primitive types of response govern the behaviour of both mind and body; from now onward his path to recovery, though a continuous one, assumes a series of oscillations. One phase in this curve of progress is governed by very elemental if not elementary processes of recovery. It is governed by the dominance of self-preservative processes, relief or shame at being removed from dangers, obligations, group demands, etc.

The next phase is the period of restitution of the general powers of the body during which the doctor aids the patient and nature with his special surgical and medical arts. The injured child becomes the recovering man, and thence the recovering man becomes the potential craftsman. H. E. Griffiths, in his Hunterian Lecture (May 5, 1943), specifies the five fears of a workman which may stand in the way of recovery. Fear of pain, financial loss, unemployment, de-grading and litigation. Unfortunately in military life the fears do not correspond. We must painfully admit that fear of recovery to return to the battle zone is not unknown. But, nevertheless, the specific fears of the soldier play their own particular part. Where morale is high, as in the soldier who returns battle-scarred with pride in his achievement, recovery from physical injuries is uneventful in the absence of septic complications. Justifiable relief from the strain of battle engenders a desire to lie back and tacitly to enjoy the lesion as a mark of soldierly experience; but other psychological trends contribute to maintain morale and with it the will to recovery. These are chiefly satisfaction with one's war achievement—" These wounds I did receive upon St. Crispin's Day." This attitude is encouraged by the atmosphere of the military hospital, its doctors and nurses, backed by the social attitude of others who, through the soldiers' sacrifice, enjoy a quasi-mystical participation which helps to alleviate their own non-combatant guilt. But this ill-defined attitude

cannot be long sustained and certainly, in the absence of conscious ideology to support it, the soldier on the way to recovery cannot be continuously bemused by an atmosphere of what is frequently false cheerfulness and well-being. He awaits return to his unit and probably active fighting, and the sooner the regime of rehabilitation is coloured by reality, its obligations and vocational techniques, the better. The days of recovery must be planned and the design must be filled out with a nicely-balanced regime of physical and mental exercises, punctuated by carefully thought-out periods of rest. Rehabilitation technique must be governed by short and long-term policies. At this stage of the war, long-term ideas can be safely entertained because the hopes of returning ultimately to civil occupation are no longer a mirage and, for the community as well as for the soldier, fitness for eventual social usefulness should be used as an incentive to uninterrupted recovery. Indeed, such incentives are not out of keeping with return to duty. It is therefore important that at this stage all therapists involved in rehabilitation should make a study of the psychological character make-up of each soldier on the lines of those laid down in a previous passage. The defiant man almost disassociating himself from his injury must be differentiated from the resentful and the depressed. It needs repeating that recovery depends upon the therapist's appreciation of these factors which may explain, other things being equal, the slow recovery from the otherwise uneventful convalescence to the phase of usefulness.

A vital factor in maintaining a high level of well-being and purposefulness is a sense of group relationship. In Army life the wider community is a living network of inter-personal relationships held together by ties of common loyalties and affections not to mention economic ties and aspirations. The following suggestions with regard to the organizations of the group life of recovering soldiers require perhaps more careful consideration than any that can be put forward in civil situations of an analogous kind. The civilian casualty has never entirely broken with his factory or his work, whatever it may be, and in addition he has the overwhelming incentive to return to wage-earning and to maintain the skill without which he either cannot earn or has his earning powers reduced. He maintains his contact with his employer on whose goodwill he relies and, in addition, if this goes by default, he has the support of the Trades Union, the Friendly Society and the Law which will adjudicate for him in the event of a conflict over claims and sickness maintenance. In the Army, however, he is subject to a system which promises little beyond his daily maintenance, his medical needs and his return to the strains and hazards of service. One's morale must be high when all that can be promised is blood and sweat, the tears of one's family, and the short-lived enthusiasm of one's fellows. Hence the vital need for organizing and maintaining the group life of the soldier at all stages of restitution.

Admitting certain essential differences as exist between neurotic patients and surgical patients, there are certain human problems common to both. Of the neurotic's rehabilitation, some further submissions will be discussed later. Bion rightly says, "a psychiatrist who knows the life of a unit in the battle zone will be spared the blunder of thinking that patients are potential cannon fodder to be returned as such to their units. He will realize that it is his task to produce self-respecting men socially adjusted to the community and therefore willing to accept the responsibilities whether in War or Peace. Only then will he be free from deep feelings of guilt which effectually stultify any efforts he may otherwise make towards treatment."

In a large measure the rehabilitation problem in the early stages of recovery from active lesions and the stage of mobilization solves itself. The patient is not autonomous because the very art of surgery and medicine claims the injury as much as the patient himself. But even this stage should be one of co-operative enterprise as between patient and doctor, otherwise the patient may well say "here is my wound—heal it." But, fortunately, the day is filled up with dressings, exercises and therapies of a kind, evening games, outings, entertainments. Unfortunately, much of this is passive and so fills the day that the patient has, for the time being at least, little time to think and little opportunity for responsibility. Patients should be made to work with the ward sisters in framing treatment programmes and

dovetailing them in with amenities and entertainments. Entertainments should be provided as much by the patients as by visiting theatre companies. Within reasonable limits the men themselves should be free to select cinema films from agreed lists of serious and light programmes. Methods of cure should be openly discussed by the doctors in language suited to every man. By this means, at this early stage, men are accustomed to a co-operative enterprise, free with criticism and with constructive ideas outside the purely medical field. This prepares the patient for the next stage when his mobility allows him to think in terms of his future vocation as a soldier—both as technician and group member. The convalescent depot now, and at this stage, becomes populated with men who can think for themselves and with others. Moreover they are now able to feel more consciously their group membership, its obligations and privileges. One had the opportunity of noting at convalescent depots that while the establishment was legitimately organized on a company basis, the company officer was too prone to become the custodian of his men and not the combatant officer leader he rightly is in the field. This is largely due to the fact that the medical and non-medical officers are working at parallel purposes with rarely more than an occasional tangential point of common interest from time to time. Furthermore, periods of convalescence are brief; officers do not get to know their men and the group spirit is organizational rather than organic, for the men from various disparate units have little more than fleeting and accidental ties and few bonds of technical interest. They have, however, common ties of a negative character which bind all people together in adversity. This should be capitalized. For example, they share resentment, misgivings and have common domestic problems; this is the cement of the band of brothers in league when they have to share a group conception of a bad image of authority.

This can be exorcised by the establishment of a company forum where the men can daily shape at least part of the routine programme, see that they themselves administer the "justice of fatigues," and have an opportunity to voice discontents. Over these group gatherings the company officer and his N.C.O.s can preside as at a joint enterprise. The hierarchy of authority should still reign but only on the parade ground and during para-military and military exercises. Though men come and go—they fall into a working space which is not entirely alien to them because they see already there soldiers like themselves. By this means, the officers of a Convalescent Depot are not spectators of Rehabilitation but its participants.

I.—The Limbless Soldier.

This subject has received the full attention of Major E. Wittkower in the form of characterological studies of men who had amputations of upper or lower limbs of varying severity in the course of battle action or in other fields of military service. Nevertheless it is clear, and Major Wittkower admits the fact, that the vocational problem remains a large one. The amputee has a specific problem. He has lost mobility if he has lost a leg, he has lost manipulative power and dexterity if he has lost an arm or hand. Moreover he has returned with a fraction of his body removed, which must have social repercussions.

In this field, therefore, there is an urgent call for :—

(*a*) Vocational testing with intelligence grading.

(*b*) An industry-wide job analysis in order to facilitate vocation guidance or redirection both in the Services and in industry.

(*c*) A further study of the neuro-psychiatry of the recovery of the body-image and its reconfiguration to meet the amputated state. A man may become bogged in a certain industrial vocational groove, whereas prognosis of body-image recovery may cast a light on his long-term capacity to do work for which in the early stages of recovery he appeared to be unsuited or destined never to be suited.

(*d*) Characterological studies of men who some time after returning to industry have or have not made satisfactory adjustment.

II.—Special Problems of Rehabilitation of the Blind.

(1) Workers with the blind in initial stages might well be themselves chosen from victims with some high degree of visional defect so that they appreciate the handicap and, from their own progress towards readjustment, can give the blind man useful hints and examples of recovery of economic usefulness.

(2) Researches are needed to look into the difficulties of orientation.

(*a*) The problem of Braille reading and what is the minimum time for training men in the use of this novel and, at first, difficult means of acquiring the art of reading.

(*b*) The speed with which different men acquire the " sense of the obstacle " common to blind persons.

(*c*) The acquisition of profitable skills which will enable the man to win back his self-respect through economic usefulness.

(*d*) The education of the family of a blinded victim in the methods of handling and accepting an afflicted relation.

(*e*) The extent to which long and short periods of special institution treatment are better or otherwise than early incorporation in the working life of the community. It is important to ascertain whether men who are blind acquire the ability to work more speedily and skilfully with their fellows in affliction, or in association with normal fellow-workers.

(*f*) Does the knowledge of reaction types help materially in adjusting men in the mass or is it more profitably utilized where individual cases present problems arising from temperamental and personality variations ?

III.—The Cure of the Deaf.

Men with head injuries involving deafness are much more likely to be convalescent from severe medical illness and complicating wounds than are the blind and are usually, in consequence, subject to longer periods of hospitalization.

Rehabilitation for these calls for early study and consideration while in hospital. The effect of deafness on personality has been known for some time to be more profound than blindness. There is no need to stress the call for early diagnosis of the degree of deafness by audiometer tests and tests for spatial orientation, but above all the destructive effects on personality call for very close study. Inasmuch as speech is the essential bond of union between persons, the victim of deafness suffers from seclusiveness consequent upon living in a mental vacuum, and whatever be the varieties of character structure with which the subject is endowed, psychiatrists are in agreement with otologists in appreciating the paranoid trends incubated by this affliction. Every effort should, therefore, be made to acquaint the deaf as soon as diagnosis is confirmed with the nature of his disability and the need for early acquisition of lip reading. Furthermore, the common command of speech itself tends to undergo deterioration, and the presence of a speech therapist cannot be sufficiently stressed for all hospitals having a large number of deaf patients. The fact that deafness is frequently more profound in a general sense, due to emotional problems, makes it equally desirable for a psychiatric opinion to be given in all doubtful cases.

Lastly, it must be noted that human sympathy for the deaf is not so forthcoming as for the blind, and it is therefore necessary that personnel dealing with deaf soldiers should be carefully chosen and/or educated to appreciate the psychological and social problems of the deaf.

Vocational training will call for special criteria of trainability,

(1) The deaf cannot be set to tasks in which the recognition of sounds of machinery and the "ring " of materials is all important. Certain kinds of clerical duties are open to them but others are not. For example, the deaf will be useless for shorthand taking, but adequate as ordinary typists.

(2) Spatial orientation is disturbed if not actually lost, and although human hearing is

not highly geared as it is in animals to appreciation of the exact source of sounds, there is a disturbance of dextrality and sinistrality which rule out certain kinds of work on machinery.

Social training.—This cannot be underestimated in a condition which disturbs inter-personal relations so profoundly, and, as early as possible, the sufferer must be aided in cultivating human contacts by recreative work both in and out of doors and by the provision of adequate occupation therapy designed to discuss what a man can do and not merely to give him something to do.

IV.—Rehabilitation for Pulmonary Tuberculosis.

The recognized chronicity of this condition and the need from time to time to withdraw the patient from his current method of obtaining a livelihood make of it a problem which is never entirely separated from the purely clinical field. That is to say, the tuberculosis specialist might say, with good reason, that a patient cannot be safely viewed in the light of economic capacity as long as exacerbations are from time to time calling for chest inspection and very specialized minor and major surgical attention. Nevertheless there are certain recognized attitudes of the tuberculosis patient which render his management a concern of the first magnitude.

There, again, it would be unwise and perhaps dangerous to ignore the complex ætiology of pulmonary tuberculosis—the nutritional, social and economic factors, and to stress psycho-biological factors is not to ignore these other and probably prepotent factors. Nor does it suggest that recondite analysis of the patient's past must always be resorted to in order to aid recovery. Rehabilitation is admitted by most clinicians to be tied up with mental attitude and therefore a knowledge of the reaction type is necessary in order to make the wisest plan for a patient's future and indeed for his present regime.

It must surely be obvious that the enforced rest may be injurious to a man of active disposition; rather a regime of measured activity for him than a life of enforced idleness which will give rise to mental agitation and the autonomic disturbances which go with it. The old view that the tubercular patients were imbued with hope (spes phthisica) is largely discredited, and the "ardor phthisica" probably conveys a better picture of the urgency, ambition and drive which characterized many before the disease took hold and enforced a slackening of effort. Or perhaps a disappointment or frustration has put a self-imposed brake on activity—a kind of suspended animation of which the other factors of the disease took liberal advantage.

It has been demonstrated how such communal establishments as Papworth Colony meet some of the social requirements of tuberculous patients, i.e. economic activity, continued family life, in short many of the differentia of normal existence.

The sanatorium is by no means such a regime. It is unnatural, unsocial in the strict sense, in that as a "society" it lacks most of the distinguishing features of a social group, i.e., differentiation of function and normal inter-personal relations. Although stays in sanatoria are temporary, they have some of the qualities of permanence. The stay has too much of the quality of a retirement. Occupations are largely diversional and of limited range. It may well be that the sanatorium shows many characteristics of a prisoner-of-war camp—only the best, the most ardent, and the most constructive members come out unscathed and ready to live full social lives again. If sanatorium treatment is, in the very nature of the disease, a necessity, the post-sanatorium treatment becomes a necessary part of rehabilitation. But it is clear that the two stages should be seen together and, for this, the sanatorium regime calls for very radical modification.

V.—Dermatological Conditions.

A visit to an Army Centre for rehabilitating a number of more or less intractable cases of skin afflictions revealed many interesting points.

Much of the progress made in all cases at the Centre was admittedly due to the efforts of

the female staff who helped the men to overcome the feelings of isolation engendered by the complaint. They made the men feel that their trouble did not render them pariahs, and dancing with them at the occasional entertainments confirmed them in the belief that women were not prone to reject them because of their skin trouble.

It would be unwise to dogmatize as to the particular psychological make-up of dermatological patients but anxiety in varying degrees of severity typified some and a pronounced self-centred disposition typified others.

The following recommendations are suggested with regard to necessary researches to substantiate the psychological factors in skin conditions and to strengthen the suggestions with respect to the best possible regime for these conditions :—

(*a*) A study of the psychological factors in occupation dermatoses, i.e. both emotional and intellectual factors. To include khaki dermatitis.

(*b*) A study of the psychological factors both emotional and intellectual in infective dermatoses.

(*c*) A study of the emotional and intellectual factors in infection dermatosis of venereal type.

(*d*) A study of the emotional and intellectual factors in seborrhœac eczema, psoriasis, etc.

(*e*) An investigation of relation of heat regulation and autonomic function in the above groups. To include study of effect of hyperidrosis in these groups.

(*f*) An investigation of social background including a genetic study.

VI.—The Neuroses.

In the handling of the neuroses of civil life, diagnosis, treatment and rehabilitation are inseparable. The earliest diagnostic phase is one during which the doctor realizes the reaction type of his patient and therefore what are his working maxima and minima in the world of work and what are his social potentialities. To a large extent this should be, at least, equally true of Service patients. In fact, in as far as the Medical Officer who sees a patient at an Exhaustion Centre has, or should have, some standards regarding the minimum requirements of a soldier of the basic arms (Infantry, Armoured Corps, R.A.S.C., Recce and Engineers), he should be able to prognosticate whether the man can be eventually rehabilitated after sedation and rest, or whether he will be a likely soldier after a more or less short period of evacuation from the battle zone.

Within the terms of reference of a psychiatric case, there are these groups for rehabilitation.

Group I.—Is there so small a degree of predisposition that immediate rehabilitation is possible after a period of rest and reassurance ?

Group II.—Is there such a degree of predisposition that immediate rehabilitation to the front line or battle zone duties is unlikely for some time ?

Group III.—Is there such a degree of disturbance due to breaking down of mental integrity that a clinical picture has crystallized out ?

(*a*) Is the clinical picture such as to call for individual rehabilitation by analytical psychotherapy ?

(*b*) Is the clinical picture such as to call for largely re-integration into group life rather than individual psychotherapy, i.e. by means of Group Therapy ?

(*c*) Is the case of such a nature that the atmosphere of hospital would be detrimental to rehabilitation, i.e. should such a patient be reconditioned in a convalescent depot or in a para-military rehabilitation centre ?

Clinical acumen of a high order arising from long experience of military and general psychiatry is called for in order to deal adequately with this problem of assignment for the required regime and, furthermore, to decide after due psychological study what that assignment should be.

In the first place capacity for rehabilitation to full duty will depend upon two factors: (*a*) Degree of predisposition; (*b*) degree of structuralization of the precipitated neurosis.

Many test situations are now in use to assess predisposition, and this is not the place to deal with so technical a problem of psychiatry, but it can be asserted that from family history and the presence of definable temperamental deviations and previous neurotic breakdown it should be decided whether the man is likely to have a repeated breakdown even if his present neurotic reactions can be alleviated by any of the instruments of psychiatric treatment of an individual kind (narcosis, narco-analysis, hypnosis, and short-term analytic psychotherapy).

Nevertheless, whatever is revealed by individual approaches does not entirely cover the whole of the man's capacity for normal reactions; his social or group capacities remain to be explored and evaluated. Participation in Army life is, after all, a measure of a man's group capacity. His morale, vested in his enthusiasm, and his emotional ties to others cannot be correctly assessed in the consulting room or at the bedside, and nothing short of observing his interpersonal relations in a military or para-military field of activity will yield the necessary answer. This answer is likely to be obtained through group therapy in the widest meaning of that term.

The chief findings of modern biology indicate that any attempted isolation of the individual from the group, or consideration of the group as independent of the individuals composing it is impossible. Neither psychology nor sociology is an autonomous science.

In short, consideration of a man's capacity for affiliation will be productive not merely of a diagnosis but of a method of drawing out his resources and making use of them for some specific end. This is of the essence of rehabilitation.

How can this be implemented?

It may be achieved by the technique outlined by Bion and Rickman in which the members of a hospital unit are free to establish their own interpersonal relations and thence their own group discipline and purposes. In such a free regime which produced its own social-military structure, the observer psychiatrist acts merely as a catalytic agent or, better, as a lightning conductor in and through which the potential of the group field becomes stabilized or attains a dynamic equilibrium.

From this, group meetings evolve at which the social situation is from time to time reformed, and at which individual idiosyncrasies are aired and reconstituted in the light of group needs. Here the psychiatrist, as therapist, acts as a balancing organ to an organism which is in need of readjustment, but always in a field of activity which is potentially military inasmuch as the group has an essential goal—namely, participation in a military objective. It is no use for the doctor to be a pure culture psychotherapist. He must, in addition, be himself, army-minded and therefore constantly redirecting the individual minds to a group military goal. This is further implemented by the activities being planned along at least para-military lines with a para-military nomenclature. It will be for the individual doctor to decide how rapidly a given group can be boosted up to this level.

To this extent the doctor must use his skill in selecting his group, that is by refraining to admit into the rehabilitation group the bed-ridden and the not yet integrated case. For this a modified regime can be evolved.

It is for this reason that a "blue group" and "khaki group" came into being in at least one neurotic centre. To what extent this rehabilitation group can exist under the same roof as the blue group (or phase) is a moot point. Nevertheless, it can be submitted that when a section of hospital population (a blue group) has reached a certain level of integration, it can be discharged as a body to the rehabilitation centre. This may entail a period of delay but it is worth some sacrifice of time so that the next phase can be entered without the widespread "contaminate" with the half-ready and the partially willing.

It would be an interesting experiment, with prospects of useful results, if at the end of the first phase, some selection technique by group tests were instituted to arrive at some standard assessment of an individual's preparedness to pass on to the next phase of rehabilitation.

A similar technique can apply to officers. A study of a group of officers has revealed that many have lost their feeling of responsibility and capacity for leadership. Both the technique of the free group formation and the selection test would help in assessing an officer's readiness to assume his role again.

It is suggested that where (as at Northfield Psychiatric Hospital) officers and men are considered under one roof, the technique of the War Office Selection Board for officers become an institution. A military testing officer should be attached who would preside over the test situations and the other ranks be used as material upon which the officer patients could exercise their skill in leadership and the improvization of military and para-military schemes. It is idle to rehabilitate officers in a purely officer field of activity. They are destined, in virtue of their function, to operate with men and their capacities can only be mobilized again if their available resources are given the opportunity for exercise with men. Field activities should be carried out with the men patients at the rehabilitation stage.

VII.—Head Injuries.

There are two aspects of the rehabilitation of soldiers with head injuries which call for special attention. The first is strictly neuro-psychiatric, the second largely psychiatric.

(i) It is clear that no one can make the best of his everyday experiences unless the sensory motor apparatus is intact. Analytical neurology has moreover demonstrated that the fields of agnosia and allied disorders are tied up with proprioceptive experience, and furthermore the processes of symbolic thinking as shown in aphasia studies are again tied up with the former. No better illustration of integrative action could be given than from studies of war injuries of the brain, and no better example is available of the high grade requirements of every attempt at rehabilitation in this field.

No man with a head injury can be summarily dismissed to duty, let alone to civil life, without a most careful examination of his capacity for thinking and of environmental analysis.

The easy application of mental tests leads to crude results and shallow insight which does not permit the diagnostician to make accurate recommendations regarding ability to carry out high level linguistic and mechanical tasks. Furthermore, deterioration of intellectual powers could not be assessed by the use of the ordinary batteries of mental tests. For example, it was generally held by both psychiatrist and psychologist at Bangour Head Injury Hospital (Professor Norman Dott) that the Matrix test is not a reliable guide to assessment of intelligence level. Many patients who could only register a "deficiency level" on Matrix came up well on vocabulary tests.

They concluded that these findings cast some doubt on the unitary conception of Intelligence, and rather go to show that capacity to perform the Matrix test is based upon a number of integrated processes while the use of standard tests were of service for the normal range of persons. They may prove misleading in cases of head injury where focal lesions result in the loss of very specialized elements in cognitive behaviour. It became clear to me in watching men both at remedial exercises and in the occupational therapy department that there was much in this contention and that rehabilitation would fall short in its aim and lead to misdirection of men to occupations unless the components of intelligent behaviour were subject to fine analysis and unless paths of compensatory activity were explored in order to make a man useful in new ways and/or by new methods of re-education. It may well be that the neurologists are too conservative and analytic in their approach and that they place the datum line of a man's basic capacity too low. Nevertheless the use made of musical exercises and dancing in the remedial department showed at least an implicit realization of factors that make for recovery. Then the part played by proprioceptive loss in limiting a man's capacity was subject to observation and, from this observation, new integrations were achieved to the advantage of the patient.

(ii) In this department of medicine, perhaps more than in others, the disorders of neurological integrity will be closely bound up with disturbances of personality. Even if disturbances of thalamic function may explain some of the emotional disturbances which run con-

currently with injuries to the cortex, it cannot be denied that the conception of the whole personality, which psychiatry rightly stresses, will help to explain the anxieties felt by head injury victims.

No amount of structural neurology will help us to overcome the psychiatric disturbances which saturate the picture particularly of those with cortical injuries. But here the part played by psychiatry in rehabilitation will be on all fours with its role in general medicine. The neurological aspects of head injuries concern the re-adaptation of men with loss of skill, loss of comprehension and loss of the most subtle endowment of man—speech and language.

That head injuries call for special rehabilitation is obvious, particularly as the complex nature of the disabilities found on neurological analysis must make it difficult to place men in Army life or industry in accordance with their residual skills and their varying degrees of educability.

For this reason it is important that Resettlement Officers should work in very close collaboration with neurologists even, as in Professor Dott's unit, attending case conferences, so that they have a first-hand knowledge of the patient's base-line of capacity. They are thus able, with this information, to relate it to the facilities for training in crafts allied to the man's former occupation and to relate this again with the capacity of the Army and industry to absorb him.

It can be suggested that nothing is more important than that neuro-psychiatrists should visit training establishments in order to watch men in a quasi-industrial setting.

For, after all is said and done, watching a man's achievements in research rooms or in rooms for remedial exercises and occupation gives a mere outline picture compared with what can be learnt by watching a man doing an actual operation in which he sees a profitable goal with all the emotional satisfactions that go with it. In moments of alarm and imperative need, the hemiplegic walks and runs, and the aphasic, too, in crises will produce vocabularies and powers of expression which are rarely seen in the research laboratory.

Here, therefore, is a field for research, where psychiatry, neurology and social welfare can work together to mutual advantage and above all to the advantage of the man for whom such researches are ultimately designed.

VIII.—Occupational Therapy.

Occupational therapy has passed through an interesting history since the days when it was purely concerned with diversional exercises employed in order to give patients and convalescents an opportunity to fill the dull hours of the bedridden and the recovering with such work as would distract them from their immediate troubles and prevent unhealthy introspection. At first, diversional work was a stop-gap which allowed the sympathetic public to provide bed games and crafts to wounded men and to enable the physician and surgeon to fill the gaps between treatments.

With the growing appreciation of the need for functional activities to restore usefulness, occupational therapy called in the aid of the craftsman and the artist to provide *suitable* handicrafts and arts. The mere turning of wheels and the knotting of woollen yarn provides little in the way of a goal which shall direct a recovering patient to the use of limbs which are destined to play the central part in a man's ultimate usefulness.

In all orthopædic and head injury hospitals, an attempt is made to gear these occupations to the scientific procedures designed to aid recovery for vocational ends, and the mere diversional purpose is being gradually and rightly discouraged. It is found that diversions in many early stages of recovery are, as noted above, healthy distracting occupations but they are not purposeful on long term principles.

The nearer a man approaches the horizon of full recovery or such degree of recovery as the lesion allows, the more purposeful it should be, and the more it should approximate to the type of work the man will ultimately be engaged upon whether in the Services or Industry. The following desiderata must be studied in order to incorporate occupational therapy in the total design of Rehabilitation.

(1) The clinician and the O.T. instructors must collaborate in the grading of such crafts

as will give plasticity to a man's movements: (*a*) to keep hand, eye and mind working together in an integrative process so that the effects of disuse should be broken down as early as possible; (*b*) to help the clinician to study the process of recovery in order to see how recovery takes place in a functional situation; (*c*) to guide the clinician in order that he should be in a position to inform the P.S.O. at a unit, or Industrial Welfare Officers, the degree of usefulness the man has acquired.

(2) Collaboration must also be maintained between O.T. instructors and Physical Training instructors in order that both should compare their observations regarding range of movement, appearance of trick movements, neurotic inhibitions and tendencies to simulate disabilities.

(3) It is desirable that a psychiatric adviser should be available in order to help both O.T. and P.T. instructors to interpret the causes for tardy recovery or loss of interest. At this stage, personality studies become desirable in many cases to ascertain social and familial problems which block the path to a man's ability to mobilize all the available powers which the clinician believes the patient to possess.

(4) Occupational therapy has hitherto been too much confined to the arts and crafts, a bias which has naturally arisen from the large numbers of orthopædic and purely neurological disabilities which call for training in motor plasticity. It should include educational and cultural activities. In a citizen Army of democracy, men have been torn from the activities which they value. The healthy mind starved of mental food rapidly falls into a state of apathy and thence to depression unless opportunities are afforded to explore the country of the mind, to exercise current ideas or to cultivate those higher values, social, religious and æsthetic, upon which men rightly place such store.

No hospital is complete unless educational facilities are ready to hand. Morale springs from craft pride and craft efficiency; it also arises from a sense of war purposefulness. "A soldier knows what he fights for and loves what he knows." Rob him of this spiritual impulse and he will wilt and all the engines of Occupational Therapy will be of little avail.

This consideration can be extended to include group activities within the hospital. All rehabilitation, particularly in Military Rehabilitation Centres, should be designed with a social end and wherever possible the O.T. workshop should be designed to stimulate co-operative activities in addition to those individual and solitary activities in which some, but not all, men find satisfaction.

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