A Lecture

ON THE

RE-EDUCATION OF THE BLINDED, WITH SPECIAL REFERENCE TO THE BLINDED SAILOR AND SOLDIER.

Delivered at Moorfields Hospital

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THE problem of educating a child born blind and that of re-educating one blinded after the usual period of education has passed are two totally different matters. The former, broadly speaking, consists in finding some method by which the lack of one sense can be supplemented by extra training of the remaining senses. Thus a child who is born blind and has never seen a bird can be taught to appreciate the shape and characteristics of birds by the demonstration and handling of stuffed birds and models. All the intellectual faculties can be brought into play by side-route methods. Observation and concentration, the two most important desiderata of education, are developed by exercise of hearing, touch, and memory, whilst the expression of ideas by reading and writing after the blind methods are fairly easily acquired by the blind child of average ability when instructed by specially trained masters and mistresses.

For one who has already been educated on the lines of a sighted child, re-education after blinding is a problem of much greater difficulty, and previous to the recent war attempts to deal with it were incoördinated and unsatisfactory. A young adult blinded by accident or disease might ultimately learn to read Braille with facility—probably he did not. There were several most estimable societies devoted to the relief of such cases, but they, for the most part, worked by money grants and pensions, although others did excellent work in the maintenance of workshops, where the blinded could learn the trades of brush, mat, and basket making. It was not always an easy matter to get a person into these workshops, and if the person did not feel inclined to go there no moral pressure was applied. If the blinded boy or girl preferred to sit by the fire most of the day doing nothing, or to be led about the street playing a penny whistle or chanting some doleful ditty or hymn, or perhaps turning the handle of a piano-organ, there were few to say nay or to make any special effort to turn him or her into a useful member of society.

The rapid influx of men blinded in the war from its very commencement brought the problem of the re-education of the blinded very keenly to the fore. St. Dunstan's Hostel, the biggest work of private enterprise that the world has ever seen, has shown what can be done and how it can and should be done, and it is to the methods of training as exemplified by the work of St. Dunstan's Hostel that I intend specially to direct your attention to-day.

But before discussing methods of re-education let us see what are the special difficulties. In the first place the patients have already been educated through and by means of the eyes. Re-education means in fact commencing all over again on different lines at a period when maturity has been reached and the natural receptiveness and plasticity of the childish intellectual response to training is over. The child who is congenitally blind is much better off than the blinded adult. It cannot miss what it has never experienced, and all its faculties are trained easily enough to supplement what it lacks. In the case of the blinded man, the intellectual senses have been, to a very large extent, dominated by the eyes, and subservient to them. It is true that he has gained

a very great deal by the experience won by means of his sight before it was lost; but the losing of it reacts against him in that he can no longer put his experience to the test of the eyes on which he was accustomed to rely. The blind child has never gained this experience of the eyes, but intuitively seeks to gain experience by other methods which come naturally to it, but which are totally unnatural to the sighted child.

DIFFICULTIES OF RE-EDUCATION.

That is the first great difficulty—the having to re-educate on totally new lines—and it becomes of increasing significance according to the patient's age, which is the second difficulty. For as we live and get older each one of us gradually becomes at first fixed in our methods of action and habits of thought, and then gradually less capable of absorbing fresh ideas, and less willing to try to absorb them. Thus we see that the re-education of a blinded person is only possible for a certain period of life. After that time has passed we must be content with an incomplete and increasingly inefficient result from our efforts. As we say at St. Dunstan's, the man is trainable or untrainable, and the former class should theoretically, though, alas, not practically, embrace all cases blinded up to the age of 40. From the age of 40 to about 50 years there may be a certain amount of effective re-education, but the amount gained by the patient is not in proportion to the effort made, and after the age of fifty, with the exception of a few who in the past have been highly intellectual, the re-education resolves itself in most cases to providing the patient with methods by which he may serve to pass the time pleasantly. The learning of Braille is a good instance of this, and it is found practically useless to instruct in this subject when the patient is over 40 years of age, though there are exceptions. The patient may master its technicalities at a much later age than 40, but it is rare to find one, who, commencing after this age, becomes sufficiently conversant with it to read Braille with real facility and with genuine pleasure.

The third difficulty is presented by the patient's individuality, which is a factor of enormous importance. It is very disappointing trying to re-educate a country bumpkin who has successfully resisted efforts to educate him when he had his sight. Such a one has passed the best educational time with his intellectual vision almost entirely subservient to the practical necessities of obtaining sufficient to eat and drink by unskilled labour. Only the simplest forms of re-education are applicable to such a man, although he may have attained manhood but a very short time, and even such simple training as may be applicable to his case may be extremely difficult to instil. On the other hand, a man who has received and proportionately absorbed the benefits of a good education in the past, may, under certain conditions, be capable, after he has been blinded, of resuming his usefulness as a citizen to as great or even greater extent than that to which he attained before blindness overtook him. Of that fact we have had many notable examples in history, and in most recent times the names of Arthur Pearson and Towse will go down to posterity as examples of what a blinded man can achieve. However great these two men were in their sighted life, whatever power of achievement might have been theirs had they retained their sight, the fact remains that their great services to their fellow men followed on their blindness, and that what the world would have called their disablement has proved their glory.

Thus it is seen that the re-education of the blind man must be conducted on individual lines, varying with the person. It is not possible satisfactorily to educate every child, blind or not, on the same individual lines, though it is constantly being attempted and is the one great difficulty of school life, but it is even less possible in re-education because the dominating individual characteristics of a grown man are infinitely more dominating than those of a child, and whereas it is possible to turn a child away from its

natural inclinations, it is generally not so possible in an adult.

The last great difficulty is one which is not constantly present but which may prove a great stumbling block. It is the mental attitude of resistance of some blinded persons towards attempts to re-educate them. I think it exists temporarily in almost every case as a natural sequel to the first losing of the sight. The sudden plunging of the sighted man into darkness by the havoc of a shell-burst or bullet must be, and is, followed by a period of mental depression, often of a most acute character, which persists in many patients for a long period. The shorter this period can be made the happier for the patient, but while it lasts the patient is apt subconsciously to resist any effort to ameliorate his position. The younger the patient the more easily and quickly will he usually react to outside influences to help him, but in the case of people who are blinded in the evening of their lives it is not unusual to find a persistent passive attitude of inability to take interest or to attempt to make the best of circumstances. Of course, when a patient has gradually lost vision by the progress of some insidious disease, the ultimate catastrophe, delayed perhaps for several years, loses the greater part of its horror—the patient has had time to become acclimatised as it were. It is the *sudden* or rapid loss of that upon which the beauty and enjoyment of life seem to hang, which causes the persistent melancholy from which so many old people fail to arouse themselves. Believe me, it is a far better thing to lose the sight in the spring or summertime of youth than in the autumn or winter of life. The natural sympathy of the world is for the blighted prospects of youth; all the might-have-been of life seemingly so utterly destroyed, the future so hopelessly dreary. After all, the elderly or old man has had his time of youth unblasted by blindness—not so many years of life still remain, and though blindness is always hard he cannot win the same intensity of the world's sympathy as the young blinded man. And yet the world is wrong. For one of the great blessings of youth is its inability as a rule to look too far ahead. Foresight is largely a matter of experience won by age, and youth is always ready and usually capable of reclaiming and retying the threads of life which have for a time parted and separated him from most of what makes life lovely and pleasant. An old man generally cannot pick up the threads at all; or if he can find them he cannot tie them correctly—he is confined by his experience and his powers of outlook. He cannot start all over again—it is too late to do so even if he were to try. The old man is in fact, as I have already pointed out, untrainable.

It was this spirit of youth that was the chief asset in the production of that wonderful cheeriness which so pervaded St. Dunstan's during the war, and so astonished all who went there. The society of comrades similarly maimed helped in a very great measure, but neither the society of comrades nor the sympathy and help of all who worked at St. Dunstan's would have brought that laughter and that brightness if St. Dunstan's had been peopled by old men instead of boys, as there they mostly were.

CATEGORIES OF BLINDNESS.

For the purposes of training, a man may be defined as blind when his sight is so bad that he is unable to earn an independent livelihood as a sighted man can do. Thus the blind can be divided into three categories or classes: (a) those who have completely lost their sight; (b) those who still retain fragments of vision but no useful sight, their powers being limited to bare light perception or to some sense of form or movement over the whole or part of their visual fields; and (c) those who still possess some useful sight, vision that enables them to get about without aid and to recognise large objects close at hand, but insufficient to enable them to earn their living as sighted men. This latter class, as we shall see later on, embraces the most difficult cases for training purposes, because it generally happens that a patient cannot be taught to

learn without using the weak sight that is still retained and which is thereby very frequently endangered by the instinctive straining set up. Class (a) is the most satisfactory of the three, for those who have completely lost their sight most quickly become resigned and most easily are taught to do without it, and indeed fragmentary vision is of positive harm to many in that it gives no real comfort but rather tends to confusion and to increase the difficulties. I have often heard patients say that they were worried by the retention of a little sight in one or two corners of the visual field, and similarly have heard others rejoice when they had lost it. It was well recognised at St. Dunstan's that the completely blind were the easiest to train, and our experience there was that these were the most contented of the patients, and that grumbling and discontent and other little troubles, generally present in any community, seemed chiefly to emanate from those who still retained a little sight.

PRELIMINARY RE-EDUCATION OF THE MORAL SENSE.

Now before re-education in the sense of intellectual or manual instruction can be satisfactorily commenced there must be a re-education of the patient's moral sense. When sight is first lost the patient is plunged into an intellectual abyss from which there seems no way of escape. He finds, or fancies, himself completely dependent on others for everything. He cannot walk, eat, or amuse himself, and his every action seems to necessitate an appeal for help. He may at first try to be independent, but probably soon gives up such apparently futile efforts; he tends more and more to lose his sense of individuality and to rely entirely on the sympathetic help of those about him. The very first step in re-education consists in teaching the patient to recover his lost independence and to regard his difficulties not as disabling, but as inconveniences which can largely be discounted. That is one of the great secrets of the success of St. Dunstan's, for there the patient, removed from the environment of sympathising relatives and friends, only too willing to do all for the sufferer, whilst the sufferer gradually becomes entirely willing that all should be done for him, is brought into the midst of a large community where all are experiencing similar difficulties and learning to overcome them. The association of comrades in blindness, all of whom are there for the same purpose—viz., the overcoming of difficulties, combined with the companionship of teachers who help in the overcoming of them, soon begins to react on the patient, who finds out that all is not lost to him. With that feeling of reaction comes the desire to try to do what he can to help himself, and as soon as that advance is made the progress will be rapid. I think the experience of the last six years has shown conclusively that colleges or communities for the blind are the first essentials in re-education. It is not possible satisfactorily to train the blind by private instruction or by directly depositing them in workshops. Prior to everything else must come the learning of independence.

INITIAL TRAINING AT THE HOSTEL.

The patient having arrived and settled down at the hostel soon finds that while all are ready to help him it will be greatly to his advantage to help himself, and practical aids to do so are the next essential preliminary. Thus to enable him to find his way about the building narrow strips of carpet, the edges of which can be detected by the stick with which each blind man is provided, are laid along rooms and corridors, and handrails, where necessary, afford further help, whilst stairs are indicated by patches of rubber or wood which the feet instantly detect. With these aids the man rapidly acquires confidence in walking alone in places and buildings which he has learnt to know, and will soon progress with almost the same ease and confidence as the sighted man.

Feeding neatly has also to be learnt, and the patient will with some practice attain a proficient

use of knife and fork when he finds out that this is expected of him, and that he is not allowed to be spoon-fed like a baby, a habit that the blind rapidly acquire if left to themselves. Of course a certain amount of aid at meals is essential, such as the removal of bones of fish and so forth, but nothing is worse for the patient, and so contrary to the spirit of independence, than hand-feeding by another person.

Then, again, the patient must regain interest in his personal appearance—the neatness and cleanliness of dress and appearance. Both these qualities have to be guarded by outside aid; the blind, if left to themselves, very speedily become indifferent to these points and slovenly in their habits. Shaving is easily taught and the patient quickly learns also to interest himself in the appearance of his clothes, his finger-nails, and the neatness of his general turn-out, especially when he is one of a community where these points receive attention and excite comment.

USES OF SOCIAL INTERCOURSE.

The social intercourse which is one of the great advantages of a community, will soon react on his attitude to outside affairs. He will begin to be less engrossed by his own misfortunes and to take more interest in what is going on round him. He will come in contact with others more advanced in re-education, whose experiences will prove of interest, whilst the knowledge of their difficulties similar to his own, and overcome, will stir in him the spirit of emulation to succeed himself. The old contemptuous proverb about "the blind helping the blind" is one that should be cut out of the wise sayings, for in very truth we know that the blind can and do help the blind, and that nothing is more helpful to the recently blinded man than the experiences of one who has gone through the mill himself and gained the victory. This was one of the special good works of Captain Towse in the war, and often have I heard of the comfort he brought to the bedsides of those who were sunk to the lowest depths of despair by the loss of all that seemed to make life worth living.

The advantages of social life are further exemplified by the relaxations, distractions, and amusements which are possible in a college for the blind. The greatest importance was attached to this side of re-education at St. Dunstan's, and rightly so. Firstly it is difficult for a blind man, especially if he is young, to obtain the physical exercise necessary to good health, unless he is specially taught; and, further, such exercise not only interests and amuses, but it educates as well; for it teaches the blind that many of the pleasures which seemed lost can be regained, and this knowledge has its moral value in bringing out the spirit of independence and in awakening and stimulating the desire to compete once more in the life of the world around.

PHYSICAL EXERCISES.

St. Dunstan's spared no pains to provide the men with all kinds of relaxation and amusement, and it was marvellously interesting to see how soon and with what keenness the inmates interested themselves. Perhaps the most popular of all the amusements was dancing. This was regularly taught and eagerly learned, and it was wonderful to watch the ability displayed by many of the men who were encouraged to compete for prizes given for grace and skill. Singing was another favourite amusement for those who possessed the necessary vocal ability, whilst, similarly, instrumental music found many adherents, and this progressed to the forming of a band of blind musicians. But besides indoor distractions, outdoor sports were in great request, and none more so than rowing and sculling, which furnished splendid exercise, whilst rowing races were eagerly anticipated and keenly contested. These are but examples of the kind of sport and amusement that all the healthy blind can do and do well. There are others, and perhaps some of them would seem utterly impossible. Thus I know of an excellent golfer who stuck to his game even after

he had become completely blind. He found that after practice he could, aided by directions from a good caddie, continue to drive a straight ball and pitch fairly accurately to the green, and when there he would measure the distance from ball to hole and test the green by walking from one to the other, then proceeding to putt guided by the sound made by the caddie striking the tin with an iron club.

INTELLECTUAL AND ECONOMIC ASPECTS OF TRAINING.

Thus it is evident that a short time spent at a place like St. Dunstan's should, and generally does, succeed in revolutionising the outlook of one recently blinded and speedily prepares him for the more serious part of the training. The actual training must be considered from two points of view: (a) that designed to cultivate the intellectual qualities of the blinded man, and (b) that intended to provide him with a means of livelihood. The first chiefly comprises the learning to read Braille and writing by means of the typewriter. Possibly the optophone will eventually supplement Braille, but at present this instrument does not seriously compete with it. It is too expensive for the ordinary person and its difficulties are very great, even to one who is gifted with a musical ear. Braille, too, is disappointing in a very large number of cases. As an intellectual exercise it is excellent, but to read it with sufficient facility much practice and continued exercise of that practice is necessary. The learning of the very numerous contractions is essential, and, even when mastered, proficiency is only retained by constant exercise to prevent the memory from slipping. Thus those who are blinded at a comparatively late stage of life—i.e., after 40 years of age, can rarely acquire the art, and further, the young blinded man of the labouring class, whose education has been completed at the age of 14 years, and who has thereafter spent life in manual labour, has rarely either the intellectual ability required or the necessary delicacy of touch in fingers hardened and blunted by physical toil. Thus it comes about that whilst it is always desirable to include Braille learning as an essential factor in training, the final results of teaching are often disappointing, the pupil very frequently abandoning it when once set free to start life again in the world. One interesting point about Braille is that it seems to appeal very little to those whom one would imagine, at first hand, had most need for it. I mean that those who are busily employed in intellectual work—work requiring much mental concentration—do not seem to use Braille much. It takes too much thought and the man tired from brain work all day cannot, as a rule, be bothered with it at night as a means of relaxation. Typewriting, on the other hand, has not any serious drawbacks of this kind, and the blinded person of average intellect speedily acquires great proficiency. It is an exercise which seems to appeal to every blinded person, and the desire to become expert is stimulated at St. Dunstan's by the present of a typewriter to each man who succeeds in passing what is a very searching test examination of his powers.

Then as to the training the blinded with a view to earning a livelihood. Before the war workshops in which the blind of the labouring classes were taught mat-, brush-, and basket-making, did a great deal of useful work, not only in teaching trades, but in furnishing a market for the wares. There was also a struggling society to train the blind of a higher social standing in the art of massage, which is eminently suitable for the blind; the useful work of this society was much hampered by want of funds. For the comparatively small number of blinded members of the middle and upper classes there was really nothing open, and the teaching of Braille was practically the only effort made on their behalf. The advent of war stranded a number of blinded officers and educated men, and it became as important to provide a sustaining interest in life and often a means of livelihood for these sufferers as for the more numerous patients of lower social rank. A revision of the whole question

of occupations suitable for the blind was necessary, and not one of the very many wonderful gains in knowledge and experience acquired by the war has been greater than the vista of what can be done in the way of training the blind. The question now is not what the blind may be taught but rather what they cannot be taught, for there seem to be but few heights to which a blinded man, under suitable environment, may not rise, provided he is gifted with the necessary grit and determination to make good. Sir Arthur Pearson, himself a man blinded at middle age, endowed with great intellectual capacity and marvellous powers of organisation, has done nothing so great as this, in that he realised in himself that it was still possible for him to carry on after his loss as well and in some ways better than he had done before. His blindness led him to search his powers, and finding out that he was, as he himself expresses it, "not disabled, but only inconvenienced," he opened a home for blinded officers, and living with them himself he imbued them with the same spirit as himself and tried to show them that it was possible for each to make good in some way.

His efforts were crowned with marvellous success in a large number of cases, and I cannot do better than quote a few examples to show what I mean. One blinded officer, who had been manager in a large industrial firm, was taken back on trial by his firm and successfully proved his capacity to carry on his former duties. This gentleman was later sent to Australia to open and organise a fresh branch of the business, and has now returned after a completely successful trip. Two other officers, also totally blinded, started in company with a third sighted partner as insurance agents, and are doing very well. Another officer has resumed work as a barrister, whilst another endowed with an excellent voice was trained as a professional singer. Many others who had no special gifts were taught poultry-farming, whilst others again learned massage, and passed successfully the same examinations for diplomas as sighted candidates. It must be confessed, however, that the training of blinded officers was in some respects more difficult than that of the men. During the war commissions were given to all grades of society and as a result of their disablement a certain number of blinded officers found themselves in possession of an income considerably larger than they had ever had before. In other words, there was a lack of incentive, in some cases due to the feeling that work was not necessary. Others, again, had ample private means before disablement, and this again, but from a different point of view, tended in a few instances to counteract the desire to make good.

SELECTION OF LIVELIHOOD.

Reverting again to the training of the majority, those who belong to the humbler walks in life, the selection of a suitable livelihood for each requires considerable care. For those who have spent their previous life in manual labour the old trades of brush-mat, and basket-making cannot be improved upon, for they are easily acquired, and to these may be added boot-repairing or "snobbing," as it is termed, the latter proving a great favourite at St. Dunstan's. Carpentry and even joinery, which at first sight seems almost impossible for a blind man, are also taught at St. Dunstan's, and I have seen some wonderful work done by men who had never learnt anything about joinery until they had been blinded. A wise provision at St. Dunstan's is the teaching of two trades of the simpler kinds. Thus the boot-repairer would also learn how to make mats or baskets or vice versa. The employment of blind instructors is a sound practice, because no one understands the particular difficulties of the blind pupil so well as one who has himself experienced them, and thus a certain number of pupils who can attain sufficient proficiency and possess the other qualifications necessary for teaching may obtain a good living in the future by becoming instructors themselves.

I have already alluded to massage and poultry-farming. The former is obviously only open to those who possess some social qualifications and refinement, and moreover, on account of the delicacy of touch required, is unsuited to those who have spent many years at manual toil. Further, there are stiff examinations to pass, and on this account those who have only the usual board school education behind them are unlikely to prove good pupils. The massage class at St. Dunstan's may be said to comprise the pick of the men from the point of view of refinement and education, and the success that has attended the classes has been extraordinary. For some time past there has been an Association of Certificated Blind Masseurs, and all recent reports show what an unqualified success the exploitation of massage for the blind has been, and no doubt will always continue to be. Poultry farming is another original and most successful experiment. At the outset this was personally superintended and taught by Captain Webber, himself totally blind for many years. Captain Webber discovered this as an amusement, and by practice attained a quite uncanny power of dealing with poultry, at which a sighted man could only marvel. In the poultry class the men are practically taught by lectures and demonstrations everything that appertains to a poultry farm. A farm was run in the grounds of St. Dunstan's and here the men learned to handle and appreciate the different kinds of fowls, to prepare them for table, the secrets of successful breeding and prolific egg production, and in fact everything that a sighted man might know on the subject. The success of the teaching has been abundantly proved by the number of blind men who are to-day successfully putting their teaching to the practical test of running their own farms.

Then, again, for those gifted with a musical ear, pianoforte tuning has for long been recognised as a suitable calling, but the field of employment is rather limited. Telephony has been a successful experiment for some of the better educated, and expert telephonists have been turned out. I have myself always hoped that cigar and cigarette making would come to be numbered amongst suitable employments, but so far I do not think this trade has been tried. I have no doubt as time goes on fresh fields of work will open out, for the interest of the nation has finally been aroused, as is shown by the formation of a Government Department devoted to the welfare of the blind. It is, indeed, as much to the good of the community at large as to the blind themselves that the latter should become good independent citizens.

DIFFICULTIES EXTRANEEOUS TO LOSS OF SIGHT.

The training of the blind presents certain difficulties beyond those directly connected with loss of sight. Thus, owing to the more intense concentration of mind required, the hours of work must necessarily be much limited, especially at first. Later on as the work becomes more automatic the blind person can gradually extend the hours of continued labour, but if the work involves much mental exercise it is bound to tire and strain much more than would be the case in a sighted person. At St. Dunstan's, where of course a great many men had experienced severe head and face injuries, the inability to concentrate for more than a very limited period was apparent, and the work-time was limited to two hours in the morning and two hours in the afternoon, and even this proved too long for many of the patients. And as the hours of work must be shorter than normal, so the necessity of filling in spare time becomes of great importance. I have already dwelt at some length on the necessity and usefulness of these relaxations, and need say no further beyond that all St. Dunstan's people are taught string-bag making and netting, employments which need but little mental concentration and afford interest, amusement, and, if need be, some profit. Reading aloud is another great pleasure to many blind people, and good readers will always obtain an appreciative audience. Cards marked with Braille notation enable those fond of this amusement to

quickly learn card games, and I have seen more than one good bridge player among the blinded.

The turning out of an expert blind workman must, therefore, be a comparatively long affair. The average stay of a man at St. Dunstan's is about a year; but very many of the wounded took a much longer time than that, and many had to spend long periods of rest at one of the convalescent homes attached to the Hostel.

SPECIAL DIFFICULTIES OF THE BLIND CRAFTSMAN.

When training has been completed the blinded man has to be launched out into the world to earn his living. Very little difficulty has been experienced with regard to those who have been re-educated in special work, such as massage, telephony, &c. These men are able to compete in the world's market on fairly equal terms with the sighted man, especially when there is a substantial pension in the background to help matters along. But in the case of those trained in handicrafts, as most of the St. Dunstan's men have been, the situation is different and bristling with difficulties. The blind handicraftsman cannot possibly compete on equal terms with the sighted. He cannot work so quickly, or continue to do so for such long hours. His work is apt to deteriorate in quality unless periodically supervised. Little mistakes creep into his work and pass unrecognised, so that the occasional fault is apt to become habitual unless there is someone to overlook the work and put matters right again. The purchase of raw material in the best and cheapest market and the disposal of manufactured goods to the best advantage require help. For these reasons the blinded handicraftsman on leaving St. Dunstan's is handed over to the great After-Care Department, which has done and is doing as much for the blinded of the war as the Hostel itself. This department is ably managed by a brilliant young officer, Captain Ian Fraser, who was blinded early in the war and has been specially selected and trained for the work.

AFTER-CARE.

Thinking over the matter, one would naturally say that the most simple way of surmounting the difficulties of the case would be to draft the handicraftsmen into communal workshops dotted over the country at large commercial centres such as London, Liverpool, Manchester, and Birmingham. Without doubt the principle of this arrangement would be ideal, but practically such a course was neither possible nor altogether desirable for blinded soldiers. The expense of starting and maintaining such workshops would have been prodigious. The existing blind workshop accommodation was and still is woefully inadequate for blind civilians, let alone blinded soldiers and sailors, and I believe I am correct in saying that at the present moment room can be found for only about one-third of the blinded civilians. Then, again, supposing the possibility of such workshop accommodation, it is doubtful if the blinded soldier, with his pension of £2 10s. per week, would work in harmony with the blind civilian whose work has specially to be subsidised to give him a living wage. It would not be fair to pay one hand a less wage for a given article than another, and on the one hand the civilian, unless he received special treatment in this respect, would be in a difficult position, and would resent the soldier with his pension being subsidised on equal terms; whilst on the other hand, the soldier in spite of his pension would probably refuse to work when he was paid at a lower scale than others engaged on the same job. Thus, the formation of large workshops for blinded soldiers and sailors being impracticable, it was decided to deal with the matter by settling the men in various localities where they produced their work at home. This arrangement necessitated (a) the formation of a large central depot, which is situated in London, and (b) the division of the United Kingdom into districts, each under the care of a specially trained and paid inspector. At the central depot all the business of the After-Care Department is handled. Raw material is bought and stocked, and manufactured

goods are stored for disposal. It is also the headquarters for the financial side, and the general reference centre for all correspondence, and all work connected with the welfare of the men. The local inspectors have much to do. Each man, when trained, is settled in his native district or as near as possible to any locality that he may choose, and it is the business of the inspector of his district to see to his being comfortably and suitably housed. Once there, he is visited at least once in every six weeks by his inspector, who supervises his work and points out mistakes if necessary. The inspector is also responsible for the supply of material and for the sending of his goods to be disposed of by the central depot.

The work is not directly subsidised, and quite rightly so, for with his pension the trained man can earn a very good living; but indirectly a very great deal is done to help each man. The material is supplied at actual cost price, and all expense connected with handling and storing material is charged to the department and is a direct financial loss to it. Thus, the more a man works the more he costs the after-care department, and so, indirectly, the man who works most gets most. Then, as regards sale of work, the man is paid by return of post at the highest market rate obtainable at the moment, and no charge is made for the carriage of his goods to London and for the storing of them. Very often the actual disposal of the goods is much delayed by overstocking, and in the meantime the price may depreciate, so that the department again stands to lose, sometimes very considerably.

In times of sickness, accidents, or business difficulties the department is ready to help. Special care is taken that the patient is well looked after, and, if necessary, money grants are made to help in tiding over times of trouble. When convalescent the patient is sent free of all expense to himself to one of four convalescent homes attached to St. Dunstan's. These are situated at Hastings, Brighton, Cheltenham, and North Berwick, and the home is prepared to keep him as long as necessary. These homes are also used to provide annual holidays, and every man is entitled to a fortnight's rest yearly at one or other of them.

Thus it is obvious that the work of the after-care department is very great and very expensive. It is reckoned that each man, when trained, costs the department about £17 per annum. Of this sum about £12 is expended indirectly in subsidising his work, whilst the remaining £5 represents the average cost from possible sickness, accidents, business difficulties, and holidays. At the present moment there are about 1200 handicraftsmen thus settled, costing the department roughly about £20,000 per annum. Unfortunately there remain about another 300 men to settle, so that the department has to face a considerable increase in expenditure for some time to come. It must not be thought that the department only looks after the handicraftsmen. It is ready to provide help for all those in special lines of work when required, and especially is its help needed with regard to sickness and holidays, but, as already pointed out, those in special work often earn very good wages indeed, and for the most part need no help except in cases of emergency.

THE UNTRAINABLE BLIND.

Mention must be made, too, of the great class of untrainable blind, those who on account of age, infirmities, mutilation, or some consecutive disease, such as tabes, cannot be trained to earn an independent livelihood. Men of this class need a modified course of re-education. For some a light occupation, such as brush-making or chopping sticks for firewood, may still be possible, whilst string-bag and netting, for them as for others, may help to pass away many weary hours. The Moon system of reading, which is very much simpler than Braille, may be taught to those who are too old to learn the latter, but the amount of available literature is limited, and reading Moon is a slow business and apt to become very tedious.

Quite a number of elderly men past 50 years of age who volunteered for labour work during the war were blinded as the result of their unselfish patriotism, and for a certain number of these, together with some who were mutilated in other ways besides being blinded, a permanent and beautiful home has been found at Ilkley in Yorkshire. Here they are maintained in comfort and everything possible is done to mitigate their lot.

THE PROBLEM OF MARRIAGE.

There is one more point of real importance and much difficulty, and that is the marriage of the blind. Every young blinded adult of the male sex very badly needs a partner who can look after him and supervise the numberless details of life, such as dress, appearance, food, and cooking, &c., who, in fact, can make a home for him. And yet to marry a blind man is a very serious step for any girl to take. She probably has it in her power to make him happy or utterly miserable, and to attain the former she must be content absolutely to give up her life to him. There is no middle way, and, therefore, though marriage is highly desirable, the girl must be of the right sort, and the problem is to find her. Many marriages with blind men have taken place during the war, and though some no doubt are proving idyllic, yet I know of others much the reverse, and then the state of the blind partner, or perhaps of the sighted partner, is indeed desperate. I remember one instance where the girl, who had been engaged to the man before he lost his sight and who had married him from pity, told me that she had come to loathe her husband. She was desperately anxious to conceal the fact from him, and naturally was desperately unhappy; they had only been married 18 months and were both fairly young. For blinded girls the situation is rather different. As a rule there is not the same necessity for them to earn their living independently, and they can generally find a home and shelter.

For the young of both sexes who are unmarried, communal settlements run on the lines of clubs are the ideal thing, if there are no parents or relatives to provide a home. To dwell in dreadful isolation in lodgings is indeed a doom to inspire despair, and I hope that in the near future some attempt will be made to start Blind Clubs to shelter these unfortunates.

THE THIRD CLASS OF UNFORTUNATES.

And, lastly, just a word with regard to the third class of cases of which I made mention—viz., those who still possess some useful sight, but insufficient to enable them to earn their own living. A certain number of these cases are in some ways more unfortunate than those who are completely blinded. Many are the cases to whom I have had to refuse admission to St. Dunstan's simply because training would simply mean total loss of what they still had left. A person who can see cannot be taught to work without using his eyes. It is of no use to tell such a person not to look at the work or to bandage the eyes so that he cannot see. If the eyes are not bandaged they will inevitably be called into play upon every little difficulty—i.e., at just the very time when sight is most needed and when it will be especially strained. Bandaging the eyes makes matters rather worse, for the necessary mental concentration will of necessity produce the reflex physical concentration of the eye behind the bandage, and the ultimate result in a very short time is a headache and aching eyes. Then there are others of the same class who can learn a trade without any special harm to the sight, but whose sight gets quickly exhausted, so that it is impossible for the person to work sufficiently long hours to earn a living wage. One really does not know what is the solution for these cases. St. Dunstan's has in many of them come forward with pensions which provide a sufficiency with external help from other sources, such as friends, or the money that a wife may earn; and, so far as I can see, State pensions are in the future the only way by which many persons of this class can be kept from pauperism.

THE SIGNIFICANCE OF SOME EARLY SYMPTOMS OF NERVOUS DISEASE.*

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THERE is no study more fascinating than that of the early symptoms of disease, no problem more difficult to solve than that of their significance. At first it seemed an easy matter to collect out of my experience a series of cases which would enable me to draw some instructive conclusions, but in thinking over my observations I found that the undertaking was going to be difficult, entailing a reconsideration of the meaning of the terms "functional" and "organic," and of the respective significance of subjective and objective symptoms, and that the experience, largely derived since the year 1914, of a psychical factor and of the alleged rapid cures of many nervous disorders by psycho-therapy must be taken into account.

I will limit my remarks mainly to a consideration of pain, numbness, motor disability, and the plantar reflex.

Pain.

The significance of pain varies greatly, partly according to the situation of the lesion, but chiefly in consequence of the varying susceptibilities of the nervous system in different individuals. The course of an intrathoracic aneurysm or of a pyloric cancer may be unattended by pain, and one has seen cases of cerebral tumour in which headache was but slight and certainly far from constant.

Pain in the head, a prominent feature in many of the war neuroses, has been, in some cases, severe and constant, and in these respects indistinguishable from the typical pain of an intracranial tumour. In both instances there may or may not be tenderness on pressure over the painful area; the diagnosis must therefore be based on other aspects of the case. But it is necessary to remember that the presence of a growth may be expressed for a long time by subjective symptoms only, all objective signs of a nervous lesion being absent. Many years ago I had the opportunity of following from beginning to end a case of endothelioma,¹ growing from the dura mater of the right middle fossa of the skull. During the first 16 months, although repeated examinations of the patient were made, the symptoms were entirely subjective, the chief symptom being severe and almost constant headache, made worse by movement and noise. The patient suffered also from nervousness and giddiness; he slept badly and was troubled with horrible dreams. These symptoms are similar to or identical with those of some of the war neuroses, and it is possible that a psycho-analyst might have felt justified in undertaking the treatment. In the seventeenth month and onwards for the next three months till the patient's death, there were definite signs of an intracranial lesion—namely, of implication of the third, fourth, fifth, sixth, and eighth nerves on the right side, and of the seventh and twelfth on the left side. Vomiting and optic neuritis were absent from first to last. Many similar instances of long duration of subjective symptoms in serious disease without objective signs might be mentioned.

During an interview with a patient who complains of headache or other subjective symptoms, we receive, as a rule, impressions from his facial expression, the manner of speech, general behaviour, attitude and movements which unconsciously influence us to decide in favour of or against the presence of serious disease. It is important to subject such impressions to close scrutiny in the hope that we may discover adequate reasons for them; at the same

* This communication was given at a meeting of the Association of Physicians in Birmingham.