THE PROBLEM OF THE EPILEPTIC IN INDUSTRY.*

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In this short paper I hope to present to you some of the problems attendant on the employment of the epileptic. In so doing I shall rely as far as possible on my personal experience of the problem as it has presented itself in my routine work as medical officer for the London district of the L.M.S. Railway, which covers a large area of our system, with some 44,000 workers employed on a wide variety of occupations.

You will appreciate that on a railway, with its special hazards, it is very desirable that epileptics should not enter the service, and from the small numbers appearing in the past six years, I think that, appreciating the risks, or conscious that their disability would soon be manifest, many epileptics do not seek such employment. Those so doing are either adolescents, or epileptics who have most of their fits at night, and therefore run a smaller risk of discovery, and these cases, therefore, represent only a small group of epileptics of the milder types.

All candidates entering the service sign a declaration that they are not subject to fits, and are further questioned on this point at their medical examination. If a man has a fit while in the service he is sent for examination to the medical officer.

New entrants are made up of members of both sexes; the males may be of any age from 15–40 years, the majority of the females from 15–19 years, entering the service as clerks and typists. When inquiry is made whether the candidate has ever had a fit or faint, in the overwhelming majority the answer is negative. I am only able to give you an approximate figure, but out of 26,000 examinations during the past five years, less than 10 admitted to being subject to fits. I think that this is a sufficiently remarkable fact to merit a closer consideration of its significance.

Of the adolescents the majority are under 19, and even if potential epileptics, it is possible that fits have not appeared, or, if they have, that their significance has not been appreciated, and no medical advice has been sought. Possibly a history is given of fits in infancy which is so remote and so vague that it is

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'nsufficient reason for penalizing the candidate. There is the additional possibility that the fits are nocturnal and mild, and therefore have not been recognized as such by the parents, who also may have suppressed the knowledge.

The adult epileptic is tempted to suppress the fact. He knows from his his past experience that he will probably be discharged if he has a fit, but if his fits are infrequent and the work for which he is applying is temporary, he is tempted to take a chance.

You will therefore appreciate the extreme difficulty of excluding the epileptic at a medical examination, since we must rely entirely on the candidate's statement, except in those cases with gross stigmata or having a fit during examination.

We now come to a consideration of the reasons for the exclusion of the epileptic from so many activities. It is unnecessary to consider these in great detail, but if we consider the desiderata of the ideal work for the epileptic, it immediately becomes obvious that wide fields of employment are barred to him unless he can be provided with remunerative work specially adapted to his limitations. Such work must be on the level, removed from machinery or moving traffic, guarded from contact with fire, water or electricity. In short, it must be so arranged that occurrence of a fit will not be attended by any risk to fellow workers, and that all sources of potential risk to the epileptic during the fit are eliminated.

You see the difficulties facing the employer who retains an epileptic. His work must be specially arranged, and even if it is, there is no guarantee that he and his workmates will strictly observe the restrictions imposed. He cannot be allowed to work alone, and should the fits be frequent, they represent a substantial financial loss to the employer in time lost, not only by the epileptic, but by the fellow workers who go to his assistance. This dislocation of work may last from twenty minutes to an hour.

In clerical duties the difficulties of providing suitable work are not so great, but there are certain factors that militate against the epileptic obtaining settled employment. In a large firm whose clerical staff are pensionable under a superannuation scheme, they will not be admissible to the scheme owing to the uncertainty in prognosis, with the risk of breakdown before the normal age of retirement. The liability to fits may also militate against their efficiency, by making them bad time-keepers and liable to an unduly high total of sick absence from one- or two-day absences.

With the manual as well as the clerical worker, the question of dislocation of work and loss of time of fellow-workers as the result of a fit is one of practical importance.

In addition to the foregoing considerations, the employer of the epileptic must always be conscious of the risk he is running, in the event of an epileptic meeting with an accident in such circumstances that the resulting injuries can be held due to an accident arising out of the man's employment. If we

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consider some of the classical cases which have been decided on this issue under the Workmen's Compensation Act the difficulties become apparent.

The first of these is that of Wright & Greig, Ltd. *v.* M'Kendry, *Butterworth's Workman's Compensation Cases*, vol. xi, p. 402. The details of this case were, in brief, that this man, employed in a bonded store, fell as a result of an uræmic fit and died from head injuries. The Sheriff's Court held that death was due to an accident, and this judgment was upheld on appeal.

The principal interest of this case lies in the dissenting judgment of Lord Salvesen, which was later preferred by the Court of Appeal in subsequent cases, and which deals at great length with the problem of the epileptic injured at work. In brief, Lord Salvesen held that there could be no claim under the Workmen's Compensation Act unless the death was due to an accident arising out of the employment, and in this particular case it was agreed that the fatal fall was due to an uræmic fit. On this point he expresses himself as follows :

> " That when a man falls down in a fit due entirely to the state of his health, and in no way accelerated by the nature of his employment or in the environment in which he worked, I have some difficulty in understanding how it can be regarded as an accident. It is the inevitable result of his diseased condition."

and later :

> " I venture to doubt accordingly whether the man met with an ' accident ', as that word is popularly understood. I do not think that the man in the street would so describe it ; I think he would say that this man fell in a fit, and that the injury which he sustained was the direct, though not necessary, result of his fall."

There is, therefore, some difference of opinion on what actually constitutes an accident in the circumstances.

Secondly, Hunter *v.* Simner, *Butterworth's Workman's Compensation Cases*, vol. xiv, p. 327. The facts were, briefly, that a boy, aged 17, was turning round to pick up a sack when he slipped and fell, fractured his skull and died from his injuries. There was some suspicion of fits, and the County Court judge found in favour of the employers on the ground that there was no accident. The Court of Appeal, however, held that the fall was the more probable cause, and referred the case back to the County Court for re-trial.

The third case is that of Lander *v.* British United Shoe Machinery Co., Ltd., *Butterworth's Workman's Compensation Cases*, vol. xxvi, p. 411. In this case a clerk, known to be an epileptic, fell in a urinal, fractured his skull and died from the effects. The County Court found that the accident arose in the course of his employment, but the Court of Appeal held that as the workman had fallen down from a cause peculiar to himself at a place which was not dangerous as a place, the accident did not arise out of his employment.

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In this case Lord Justice Lawrence expresses the following opinion in the Court of Appeal:

> "In the present case I am clearly of opinion that the accident was entirely due to the workman's state of health and had no relation to his employment. The only evidence here is that the accident happened in the lavatory, but there is no evidence that it resulted in any danger connected with the lavatory as a lavatory. I confess that I am glad to be able to come to this conclusion, as a contrary decision would have the effect of preventing men liable to this disease from getting any employment."

The fourth case is that of Martin *v.* Finch, *Butterworth's Workman's Compensation Cases*, vol. xxx, p. 99. The facts were briefly as follows. A farm labourer, who was known to be an epileptic, was carrying tools on his cycle on his employer's instructions. He was found dead on the road as a result of head injuries, having, presumably, fallen from his cycle in a fit. Here the County Court judge found for the widow, and this judgment was upheld by the Court of Appeal on the ground that this man was exposed to this particular risk by the direct instructions of his employer, although he was a known epileptic, and had had falls from his cycle before, and had been warned by his doctor not to ride a bicycle.

The next case is of Wicks *v.* Dowdall & Co. Here a workman, working at the edge of a ship's hold, had a fit, fell into the hold and sustained fatal injuries. In this case it was held that the accident arose out of the employment, since the employment led the man into a dangerous position, as it were to the edge of a precipice.

A consideration of these cases shows us that the employer's liability is by no means absolutely defined, and that each case must be considered and judged on its own merits, the question of liability turning on the point whether the accident did or did not arise out of the employment, and, as we see from the foregoing cases, to establish this point it may be necessary to go to the Court of Appeal. Even then the decisions may vary, as in the last case of the man falling down the hold. Although the accident is more dramatic, it is arguable that, as the fall was due to a fit, it was not an accident arising out of the employment. Here we see the difficulty that, unless the man was actually under observation at the time he fell, it would be impossible to establish whether his fall was due to a fit or to some other agency, causing him to lose his balance.

All the cases quoted are those which had fatal results. I have been unable to trace a judgment in a case where an epileptic sustained a trivial head injury and subsequently claimed aggravation of his fits, but this is a combination of circumstances which may always lead to a claim.

It is not to be wondered at, therefore, that employers are unwilling to employ epileptics, who have to be placed on selected work, who may not be satisfactory employees, and who, in the event of an accident, are a heavy

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potential liability, involving the employer in great expense, no matter what the outcome of the litigation, since it will probably be impossible to recover any costs against the employee.

I will now consider the small group of cases which have come under my notice. All have not been seen by me personally, but they are all cases that have come under notice by reason of fits or faints while at work. The difficulty in dealing with such cases lies largely in the difficulty of establishing a diagnosis, and I must ask your indulgence for any deficiencies which appear.

In 30 cases which I have considered, 20 appear to be suffering from idiopathic epilepsy with *grand mal*, 2 to be epileptics with *petit mal*, 2 to be epileptics with a possibility of traumatic origin, 4 to have fits, probably with a hysterical or psychoneurotic basis, and 2 to be doubtful and to be almost certainly due to other causes. These 30 cases represent those coming under notice for fits at work during the past six years, and while the number is small, these cases must constitute an ever present problem for any industrial medical officer.

The 30 cases fall roughly into two age-groups, (*a*) under 25, and (*b*) over 40. In the former the appearance of fits soon after entering the service left the diagnosis in little doubt, but in the latter the diagnosis was, naturally, more difficult. Of the 11 cases under 25, 10 appeared to have true idiopathic epilepsy and 1 was probably hysterical in origin.

An interesting case was that of a man, aged 27, who worked as a linesman on the electrified line. He finally went off ill and was in hospital with *status epilepticus*, being unconscious eight days. He admitted to being subject to nocturnal fits for years, but in spite of the fact that he was an epileptic, he was certified by his doctor as being fit for his work as a linesman on an electrified line, obviously a particularly hazardous employment for one with his disability.

Of the second group of 19 patients, 12 were epileptics of long standing, 2 were epileptics, possibly of traumatic origin, 3 were psychoneurotic, although in one of these there was a strong suspicion of epilepsy, 2 were possibly cardiovascular.

The practical difficulties in establishing a diagnosis of these cases is very great, as it is of rare occurrence to see a patient in a fit, although one of my colleagues has twice seen patients in fits while undergoing medical examination as new entrants. The principal evidence, therefore, must consist of the report of the actual occurrence as described by eye witnesses, if any, and these reports are of great value when confined to an actual record of fact and not embroidered by an over-zealous ambulance man. Apart from this report diagnosis has to be based on the history and physical examination of the patient. Too much reliance can be placed on the history, although my impression is that the middle-aged epileptic realizes his disability and its risks, and is therefore prepared to admit his disability with a view to being placed on some suitable work. Physical examination, especially in the younger, is all too often negative,

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while in the middle-aged physical examination may be suggestive, but without further investigation, is rarely sufficiently positive to establish a diagnosis.

To illustrate the difficulties I will quote the case of a guard, aged 60, who was found unconscious three times in four years. He was suffering from chronic bronchitis and arterio-sclerosis, his blood-pressure was 180/110, and he had albuminuria. His family history showed eleven brothers free from fits, and one sister who developed fits after her sixtieth year. The balance of probability seemed to indicate a cardiovascular or renal cause for his attacks and loss of consciousness, though he was certified by his own doctor as suffering from epilepsy. The history may also give a clue to a possible psychoneurotic basis for the fits, but it is obviously impossible to establish such a diagnosis satisfactorily on a single examination.

In these cases each must be considered on its merits, but, in general, any man subject to fits, whatever the cause, can only be employed on work on the level and away from machinery or moving traffic, or any other source of potential danger. Men who join the service and exhibit fits soon after so doing are usually discharged owing to the difficulties of providing them with suitable work. But with the older men who have been employed for years, every effort is made to place them on work where they will not be exposed to risk.

A short résumé of the history of these cases may be of interest.

Lengthman, aged 27: Working on electrified lines, and so employed for several years. Removed from home to hospital. Unconscious 8 days. Diagnosis *status epilepticus*. Admitted nocturnal fits, after which he sometimes urinated. Headache the following morning. Certified fit for work by his own doctor, who completely ignores the risk of dangerous employment.

Porter, aged 23: Fell on his face in a fit. Unconscious 15 to 20 minutes. Denied previous attacks, and no evidence of other attacks.

Porter, aged 24: Employed 3½ months. Had a fit and was subsequently unconscious for 7 hours. Certified by doctor as "liver attack" and fit for work.

Junior labourer, aged 19: Two fits while at work. Denied previous fits. Stated that his fits "started in the left foot, travelling up left side, singing in the head, and remembers no more until he came to with someone bending over him". Witness states he was lying on his back, flushed face, convulsed, clenched teeth, slight forth at the mouth, pulse feeble, unconscious 20 minutes.

Junior clerk, aged 17: When first examined for the service gave suspicious history of faints, and a decision on his admission to the superannuation fund was deferred. Two years later he was admitted to the fund, as he denied fits during the two years, and there was no evidence he had had fits. Two months later he was away ill with fainting attacks, and a month later he had a typical epileptic fit while playing cards.

Van-guard, aged 16: In November, 1935, slipped and fell while dismounting from a motor lorry, and struck the back of his head on the pavement. Injury appeared slight and he was not incapacitated. In June and July, 1936, had two fits at work. Medical examination negative, and X-ray of skull negative. Transferred to messenger's duties July, 1936. March, 1937, applied to resume van-guard's duties. Denied any further fits, and was allowed to resume. In December, 1937, had a typical fit at work. Referred to consulting neurologist, who considered him a case of idiopathic epilepsy. In view, however, of the possibility of a claim

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that the fits were traumatic in origin, and due to the original accident, he was retained on special duties, and in April, 1938, he had a further fit at work while engaged on these duties.

I have quoted this case at length as it illustrates the difficulties of dealing with the adolescent epileptic when there is a history of trivial head injury. Had any claim arisen out of this case it is very possible that the fits would be held to have been traumatic in origin.

Porter, aged 24: Found in porters' room in a fit. History of previous fits, and sister epileptic.

Junior messenger, aged 17: Fit at work, and admitted a previous fit at home. This was confirmed by his own doctor.

Porter, aged 23: Found unconscious after dinner. History of family worries and the recent death of a sister, and I considered that this upset was probably hysterical.

Fitter, aged 23: Alleged injury to head at work in May. No witness of accident, but ambulance man stated he had the appearance of a man recovering from a fit. Witness described him lying under an engine, his tongue between his teeth, head on one side and face pale. In December he had another fit, and was certified as epilepsy by his own doctor. On examination he denied that he had had any fits prior to the incident of May, 1937. Was referred to a consulting neurologist, who confirmed the diagnosis of idiopathic epilepsy, although this diagnosis might be difficult to establish in court.

Signal lineman, aged 28: This man was found wandering in London, having cycled from the Midlands. Denied recollection of events over 72 hours. Past history of concussion at 7 and 13, following cycling accidents. Diagnosis was hysterical fugue, induced by family worries and friction with workmate over a period of several weeks.

Girl typist, aged 19: Had a typical fit at work. History of fits at infrequent intervals. Owing to the length of the interval between attacks she had been taken off luminal.

Motor-driver, aged 41: Fit at work, admitted to occasional dizzy spells in front of the fire. Witness described that while at dinner patient had sudden working of his face, which became yellow. His eyes went all white, and he foamed at the mouth. Taken off motor-driving and found other work. Has had further fit while working as checker.

Labourer, ex-blacksmith, aged 62: Stated he felt giddy and fell down unconscious. Never had anything like it before. Did not urinate or bite tongue, and no headache on recovery. He admitted occasional giddy turns, and there was history of accident 10 years previously, when he lost the sight of an eye following its destruction by a piece of hot metal. Medical examination negative, apart from a slightly high diastolic blood-pressure. ? Epileptic, ? traumatic or cardio-vascular.

Lengthman, aged 41: Had fits while at work in December, 1929, and May, 1930. Fell down unconscious for about a minute. Did not bite tongue or urinate. Following this he was given special duties. Physical examination was negative except for a small shrapnel wound over the left eye. August, 1934, denied any further fits and was allowed to revert to his full duties. Seen again in 1936, when he denied any further fits, and stated he had been free from fits for 7 years.

Charwoman, aged 50: Employed for 5½ years. Found lying in an office in a dazed condition, with a scalp wound. Stated that while rising after picking up a spoon, she struck her occiput on a table. It was, however, ascertained that she was subject to fits and had previously fallen in the street.

Clerk, aged 52: Known epileptic. General deterioration in physical and mental condition. Retired on grounds of ill health.

Wagon repairer, aged 49: Worked for the Company for 33 years. Complained of attacks in which "he loses himself" and is forgetful. Clocks out from work twice, etc. Had an old fracture of the jaw and ankle. Was witnessed in an epileptic fit by a Company's medical officer.

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Clerk, aged 36: Fits for many years, in addition to asthma and bronchitis, leading to progressive physical deterioration. Retired from the service on medical grounds.

Labourer, aged 59: Referred for examination as he had applied for special work, and produced a medical certificate of epilepsy. Stated that he had had fits for 14 years, although previously he had seen 13 years service in the Navy and was discharged fit. No doctor had ever seen him in a fit, although he alleged he remained unconscious for half an hour.

Guard, aged 60: History of being found unconscious on three occasions, but denied fits, and on examination had arterio-sclerosis and blood-pressure 180/110. Attacks thought to be vaso-vagal.

Draughtsman, aged 44: Two fits at work. Diagnosed as epileptic by doctor who saw him, but epilepsy denied by his regular practitioner. Investigation showed psychoneurosis.

Motor vanman, aged 40: In November, 1938, collapsed on his round, was taken unconscious to hospital. Stated to have been kicking, clenching hands and foaming at the mouth. Medical record since 1921 showed no history of previous fits. In view of unsatisfactory history was transferred to other duties.

Fitter, aged 35: A known epileptic and employed as apprentice and fitter for 19 years. Became so quarrelsome and violent towards his mates that he was finally discharged on disciplinary grounds after an unprovoked assault. In this case it is interesting to note that it was the custom of his mates to check his fits by administering a severe shock, such as a kick.

Fitter, aged 55: Employed for many years. Found recovering from a fit with a fractured patella. No witness of the actual occurrence, but the presumption was that he had a fit, and the patella was fractured by muscular spasm. I had him in hospital under observation following an operation on the fractured patella, when he had another fit and fractured the other patella. The fact that this man had fits had been known to his workmates for years, but the fact had not been officially notified.

Fitter, aged 39: Observed at work in a typical epileptic fit which he alleged was due to a blow on the head at work 12 years previously. Was examined by a consulting neurologist, who stated that the fits were not traumatic, and the case was most probably one of idiopathic epilepsy. He was found suitable employment, and has been seen recently following a further fit at work.

Fireman, aged 33: Had a convulsive seizure at work. Said to have been unconscious 20 minutes. Suffering from tachycardia, pulse 120, and tremor of hands. His condition was considered to be most probably hysterical in origin. He had been discharged from the Army suffering from shell-shock, but had worked satisfactorily for 10 years without any history of fits.

Carter, aged 62: Fell from dickey of van, possibly thrown off by a jolt or fell in a fit. Taken unconscious to hospital. Complained of headache. One epileptic fit at night. After discharge, fit of unconsciousness and fell from chair. Readmitted, but no further fits in hospital. Examination negative except for raised diastolic pressure. Blood-pressure 160/100. Denied previous fits. ? Epilepsy, ? traumatic.

Porter, aged 21: Fell in a fit at work. Admitted fits since 10 years, but infrequent, and usually occurring on rising. Under hospital observation and regular medication.

Signal lineman, aged 31: Fell from a signal. No eye witness. Stated that he remembered slipping, trying to save himself, and hitting the ground. Unconscious 24 hours. Three fits while in hospital in early hours of the morning. Physical examination negative. Army 3 years, 9 years reserve, and still serving. Complains of headaches on rising in morning. Own doctor now admits treating him for years for mild epilepsy. Fits mostly at night and infrequent. Two years earlier he collapsed in train. Said to be recovering from influenza. Had worked as look-out man all day. Medical certificate of debility. On examination denied fits, and medical examination negative. ? Fit cause of fall.

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I must apologize to you for this rather scrappy clinical material, but, as I have already indicated, the circumstances in which I see these cases preclude comprehensive investigation. I hope, however, that a consideration of the cases will serve as a practical illustration of some of the particular difficulties attendant on the employment of the epileptic. I would emphasize especially those cases in which the epileptic meets with a trivial injury and claiming that the fits are a direct result thereof.

I have been unable to find reference to a case in the Law Reports in which epliepsy was held to have been aggravated by an injury, but in Parry and Codrington's book on *War Pensions* (p. 40) there is reference to the case of an epileptic who successfully claimed that his disease had been aggravated by his war service, the medical view in this case apparently being that the responsibilities and mental stress of military life as opposed to civil occupation had been sufficient to aggravate the epilepsy and make the fits more numerous.

It is obvious that the epileptic is seriously handicapped in the open labour market. This is confirmed by the various incapacity ratings for epilepsy. In France under the Workers' Invalidity Insurance Scheme, idiopathic epilepsy is rated from 10 to 100%, and traumatic epilepsy from 50 to 80%. By this scheme the worker is eligible for benefit while his working capacity is less than 50%. In Germany the rating under Workmen's Compensation Schedules for traumatic epilepsy is 50 to 100%, but all these schedules recognize the serious potential loss of earning capacity.

In spite of this there is no doubt that numerous epileptics successfully hold their own. Paskind analysed a group of 304 cases who had been under observation for from 6 to 40 years, epileptics engaged in all kinds of occupations, from miners to physician and bank president. The explanation seems to lie in the time of incidence of fits. Gowers states that 42% are nocturnal only, and 24% diurnal only, the latter occurring generally in the hour following waking. With this fit incidence the epileptic who is under regular medication has a reasonable chance of following his daily round without detection, and I suspect that those cases in which diurnal fits appear in middle age are nocturnal epileptics of old standing.

How, then, can the epileptic be best helped to adjust his earning capacity to his disability ? The problem is a very difficult one, but I think an important point is that the diagnosis should be established early, so that the disability can be taken into account in making plans for the future. There is an unfortunate, though natural, tendency for parents to shrink from the diagnosis of fits when they first appear, with the result that the young epileptic drifts into unselected and unsuitable employment.

If an advance is to be made in the rationalization of employment for epileptics, I think it essential that some method should be devised for their control which would guarantee co-ordinated and competent medical and social supervision. There would probably be great opposition to any scheme for

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compulsory notification of epilepsy owing to the wide variation in individual cases, but some plan on the lines of that at present operating in tuberculosis might be suitable. At the outset any such scheme would have to be voluntary, as I think it improbable that mild epileptics who are successfully earning their living would willingly associate themselves with any such scheme and the possible implied stigma. Any scheme which offered security of employment to the working-class epileptic should win through on its own merits if it could be shown that they could be economically employed in recognized groups on selected employment, and if the problem were examined in association with those industrial concerns whose normal activities include work suitable for epileptics I feel that it might be solved, at least in part, in the large centres of population.

In conclusion, I must offer my apologies for the paucity of the material which I have been able to present, but I hope that I have done something to illustrate the practical difficulties arising out of the employment of the epileptic, and that in the discussion some light will be shed on the best method of tackling the problem in a rational manner.

References.

Brousseau, A., Caron, S., and Desrochers, G.—" Du danger que font courir les personnes atteintes d'affections neuro-psychiatriques, et qui exercent des fonctions où la sécurité du public est en jeu," *Bull. Soc. Med. Hop. Univ. Quebec*, 1933, pp. 71–86.

Ceillier, A., and Vervaeck, P.—" L'assistance par le travail aux épileptiques ; nécessité et urgence de la réaliser," *L'Hygiène Mentale*, 1927, xxii, pp. 45–53.

Fox, J. T.—"After-care of Epileptic Children : Survey of Children who have attended Residential School for Epileptics," *Lancet*, 1928, ii, pp. 545–547.

Gilula, I. O.—" Professional and Working Capacity of the Epileptic," *Sovetsk. psikhonevrol.*, 1932, pp. 36–41 (in Russian).

Herschmann, H.—" Sind epileptische Anfälle nach der österreichischen Eisenbahndienstordnung als Gebrechen oder als Krankheit anzusehen ? " (Gerichtsarztliches Gutachten), *Wien. klin. Wochenschr.*, 1930, xliii, pp. 1199–1201.

Ladd, D. J.—" Social and Economic Aspects of Epilepsy," *Nation's Health*, 1922, iv, pp. 336–337.

Nippe.—" Uber die Beschäftigung von Epileptikern in Maschinenbetrieben," *Arch. Psychiat. Nervenkr.*, 1931, xciv, pp. 234–236.

Paskind, H. A.—" Extramural Patients with Epilepsy, with Special Reference to the Frequent Absence of Deterioration," *Arch. of Neur. and Psychiat.*, August, 1932, pp. 370–385.

Rabinovich, Y. S., Galperin, G. M., and Rabinovich, V. Y.—" Working Capacity of Epileptics," *Sovetsk. psikhonevrol.*, 1935, pp. 70–84 (in Russian).

Ryther, M., and Ordway, M.—" Economic Efficiency of Epileptic Patients," *Journ. Nerv. and Ment. Dis.*, pp. 321–342.

Stauder, K. H.—" Epilepsie," *Fortschr. Neur. Psychiat.*, 1934, vi pp. 439–468 (454,455).

Von der Hdydt, A.—" Epilepsie und Invalidität," *Deutsch. med. Wochenschr.*, 1936, xlii, pp. 1429, 1467.

Warner, A.—" Post-school Career of Epileptics," *Med. Officer*, 1936, lvi, pp. 135–136.

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Discussion.

Dr. GROENVELD (Holland) thought all would agree that in epilepsy psychotherapy was one part of the co-ordination of therapy as a whole, but he thought they must bear in mind one difficulty in the psychic diagnosis of epilepsy—that the epileptic patient gave an impression of not being in need of psychotherapy. If an epileptic patient was examined psychically the psychiatrist soon came to the conclusion that the patient had no conflicts, and the speaker thought it was a compensatory aspect of epilepsy, the immense discharge of energy which the epileptic patient demonstrated. The patient seemed to have no conflicts, but rather an aspect of vagueness, of being a kind of Sphinx. But Dr. Groenveld thought this condition was due to the three stages of epilepsy. The patient had a very strong disposition to absorb energy from his environment; secondly he had a tendency to store energy, emotions, feelings, thoughts and fantasies; and thirdly, as far as the discharge side was concerned, the patient tended to intensify these reactions.

Therefore it had to be remembered that this aspect of no conflicts was a false impression; by means of deeper examination it was found that there were sharp and intensive conflicts. Psycho-analytically and psychologically speaking, the epileptic patient had the conflict that he could not distribute his resources of energy in an ordinary way. As psycho-analysis and psychotherapy were methods of establishing better distribution of energies he thought psychotherapy would help these patients.

He wished not only to draw attention to that practical fact, but to the experimental aspect. It was essential to carry out therapeutic experiments among epileptic patients. They should be given systematic psychotherapy. The cases should be worked out in a fundamental way in order to disclose the very intensive conflicts, although they might not be apparent, and, on the other side, to see that the absorbtive or receptive tendency of the epileptic patient was in accordance with the expressive side.

The PRESIDENT said she was at first horrified to hear Dr. Groenveld say that the epileptic had no conflicts, but he soon added that one had to go deeper to find them, and that seemed to be true. She wondered whether other members found that. There were epileptic cases which were undistinguishable clinically from the idiopathic type who recovered when their cases were faithfully dealt with.

Dr. AIDAN THOMPSON (Board of Control, Scotland) said that he was very interested in the problem of the after-care of the epileptic. There was a certain division of opinion in the north as to the relative values of trained social service workers and voluntary workers. He would be very glad if Dr. Tylor Fox would express his views, if he had been able to come to any conclusion, as to the desirability of the full-time, fully-trained social worker, or the voluntary worker, or a combination of both, or whether it depended on local circumstances, such as how much money could be obtained from a local authority.

Dr. TYLOR FOX replied, amid laughter, that he had not found any local authority who would give money for the after-care of epileptics. With regard to the question of trained or untrained social workers, it was better to have untrained social workers rather than no workers at all, but it was better to have social workers trained in mental ill-health. The psychiatric social worker was the person they should aim at having.

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Dr. J. R. MURRAY (Cane Hill) was surprised that no one had mentioned the most important social unit of all—the family. What advice could be given to an epileptic who wanted to get married, and what percentage of epileptics gave rise to epileptic children ? He thought this question had been evaded because it was difficult.

Dr. TYLOR FOX replied with regard to the probability of the children of epileptics being affected, that the statistics varied extremely widely. There was no kind of agreement on the point, which had been investigated time after time. On the question of epileptics getting married there were many considerations, the main question being the family history and the convulsive tendencies.

Dr. J. H. MACDONALD (Hawkhead) said that no mention had been made of psychic epilepsy. They had been dealing with motor phenomena, and he would like to suggest that in dealing with the problems of epilepsy from the physiological point of view they should keep in mind the important fact that the human brain was not merely a receiver of energy from without, but a storehouse, and one had to consider the transmission of potentials from one end of the cerebrum to the other. He was once in a cinema where there was an alarm of fire, and in two minutes there was a " most awful turmoil ", everybody trying to get out, and the amount of energy which was let loose was terrific, much more than that let loose in an epileptic fit. In dealing with the fundamental basis of epilepsy one was apt to forget that every moment the system was receiving energy, but was not always giving it back, and that was worth while keeping in view in discussing motor or mental storms.

Dr. E. J. FITZGERALD (Colchester) said an aspect which had not been touched on was the incidence of epilepsy in crime. In practically every case of murder the defence of epilepsy was employed. What was the position ? Was it true that epileptics were especially liable to commit crime ?

Dr. TYLOR FOX replied that some years ago Dr. Norwood East published some figures showing that an extraordinarily small proportion of epileptics was found among prisoners. The connection of epilepsy with crime was a very complex one. The claim of epilepsy as a defence was so often set up in murder cases as to make the public think there was a close connection, but it was not nearly so close as was generally thought. A good deal of the delinquency and crime which did occur among epileptics was the result of the failure of society to provide them with a proper environment; they were often turned out of school, and could not get work ; at home they were subject to special restrictions, and there was built up an outlook towards society which was one of resentment, and the transition to crime was not very great. Every opportunity should be taken to point out that the relation between epilepsy and murder was very much exaggerated.

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