Points of Similarity between Epileptic and Alcoholic Insanity.

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Points of similarity between alcoholic and epileptic insanity are referred to by many writers on psychology. These short notes, which I bring before you to-day, refer to cases of criminal acts of violence committed by epileptic and alcoholic maniacs, and, I think, exemplify in a very striking manner the similarity above referred to—a similarity in the mental phenomena which preceded and which led up to the specific acts of violence in a series of cases.

Although such similarity is noticeable between cases of epileptic and alcoholic insanity in both their acute and chronic forms, I confine myself to-day to the acute forms, by which I mean the state of acute alcoholism or acute alcoholic mania on the one hand, and the paroxysmal period of epileptic insanity—the period in immediate relation to the "fits"—on the other; and I hope to be able to bring forward evidence which suggests that there often occurs, in cases of acute alcoholic mania, a condition identical with the so-called condition of mental automatism which is so characteristic of the post-epileptic state, a period during which, though "consciousness" may be entirely lost, the most complicated and purposive acts may be performed, of the circumstances of which the patient has no trace of recollection after the attack has passed over. In other cases the acts committed by such patients are acts of ungovernable violence, uncalculating and aimless.

The following short notes refer to a few fairly typical cases of acts of violence committed by persons while in a state of epileptic or acute alcoholic mania.

One preliminary remark I must make as regards the subsequent loss of memory of acts committed during the attack. It is obvious that there is in such cases a strong motive for such absence of memory being assumed, and it is equally obvious that it is impossible to tell with *absolute certainty* whether such loss of memory is assumed or real. In the cases that I am about to refer to, it is certain, so far as it is possible to say so, that the loss of memory was not assumed. I draw particular attention to this, because not

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only is it an interesting point in considering these cases, but also it is one of considerable medico-legal importance.

W. G—, a lad of 18 years of age, who was a cook on board a fishing smack, killed his uncle, who was skipper of the vessel, by stabbing him in the neck with a clasp-knife. He had suffered from fits for many years. He had never been known to have any quarrel with the man he killed, and the latter had never been known to be unkind to him in any way.

One afternoon, when at sea, about an hour after having a fit, W. G— rushed at the skipper, and stabbed him in the neck. He was immediately secured by one of the other hands on board, and in answer to a question as to why he had done it, he said "He wants to make away with the ship and all hands; he's Jack the Ripper." The following day he had two fits, and was very maniacal. On recovering from the attack he had no recollection of what had occurred on the afternoon in question.

L. M— was employed on a farm to scare birds with a shot-gun. Across some of the fields in which he was employed there were footpaths. In the early part of a certain afternoon he had a fit, and shortly afterwards two ladies, who were quite unknown to him, walked across the field in which he was. He shot at one of them—over sixty shots entering her face—and fractured the skull of the other with the butt end of the gun. In the evening he was taken to the police station, where he had several fits. On recovery he had no recollection of what had occurred on that afternoon. He still maintains that he is innocent of the crime, and that he knows nothing about it.

W. B— murdered a fellow inmate of a workhouse. On the day in question he had several fits, and was put to bed early on that account, in the infirmary, the only other occupant of which was an old imbecile, bed-ridden patient. The male nurse, who visited the room from time to time, was attracted by a knocking at the door, and went to see what was the matter. Immediately he entered the room W. B— rushed at him and struck him violently with a heavy piece of wood, which he had taken from the foot of a spare bed in the room. The patient was secured, and it was then found that the other occupant of the room was lying insensible in bed, bleeding from a severe wound on the head. W. B— was extremely maniacal for several days, and had to be kept under restraint during that time. On recovery he remembered nothing of what had occurred.

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E. C—, a married woman, cut her child's hand off under the following circumstances. She had her four months old infant in her arms, and being asked for some bread and butter by another child, she proceeded to cut some. While doing so she was seized with a fit, after which she cut the infant's hand off at the wrist. On recovering she recollected nothing about the infliction of the injury, and was found by some neighbours hugging the infant's hand, which she had wrapped up in a handkerchief.

The next case is one of probable "masked epilepsy." J. A—, a patient in Winson Green Asylum, on the night of his admission there, killed two of his fellow-patients and injured a third. One of his victims, W. B—, who subsequently succumbed to his injuries, gave the following account of what happened. J. A— suddenly jumped out of bed, picked up a crockery chamber utensil, and savagely attacked another patient, smashing it over his head, and beating him about with the broken pieces. He then rushed at W. B—, and with the pieces of crockery beat him about the head until he became unconscious. He subsequently attacked a third patient, but was secured before he inflicted much injury. A few days afterwards he was removed to Broadmoor Asylum. On admission he could recollect nothing of what had occurred on the evening in question. To quote his own words, he said, "I remember going to bed in a dormitory where there were other patients, and when I woke the next morning I found myself in a different place." This case was reported in the *Journal of Mental Science* for January, 1894. As a rule he was a quiet and well-conducted patient, with exalted ideas and delusions of extreme wealth. At times he destroyed his bedding, but on every occasion, when questioned about it, he said that he "had slept all night, and someone must have come into the room and done it." After these attacks he had delusions of suspicion and persecution, which always disappeared in a few days. After one of these attacks he developed meningitis, his temperature going up to 108·4° F. He was practically in a state corresponding to the *status epilepticus—minus* the convulsions,—which terminated fatally.

The following notes refer to cases of acute alcoholic mania.

A. D— killed a woman aged 73 by striking her on the head with a chair. He was living with his mother at the time, and deceased lodged with them. Some years previously some bricks had fallen on his head, and from that time a very little alcohol would upset him. At the time of

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the committal of the crime he had been drinking heavily for some days. On the previous day he had gone to a neighbour's house, had thrown a poker at one of the occupants, and smashed a table with the kitchen fender. He then went into the garden and beat the wall with a piece of the table. On the day on which the crime was committed he again went to this house, and smashed more of the furniture. He then returned to his own house, went upstairs to a room occupied by the deceased, and hit her on the head several times with a chair. That evening, when at the police station, he was very maniacal, and had to be restrained. He continued in this state for several days. On recovery he could remember nothing of what had occurred during the whole of this time.

C. S— killed his child, aged six months, by smashing her head against the fender. He had usually been a quiet, steady, and temperate man; but for about ten days previous to the committal of the crime he had been drinking heavily with his brother-in-law, who had come to stay with him. C. S— became so ill and strange in his manner that his wife sought medical advice. In spite of strict injunctions to take no stimulants, he continued to drink heavily, and on the evening before the crime was committed he was very excited and restless. He accused his wife of poisoning him, and threatened to kill his brother-in-law. After a time he went to sleep on a sofa. Early in the morning he again became very excited, and his wife and brother-in-law went out for assistance. While they were away he went upstairs and broke all the windows; he then took the child from her bed (a boy aged ten was sleeping in the same room), and smashed her head against the fender. He then went out without hat, boots, or coat, and wandered about until he met a policeman, to whom he said, "I am —— ——, I live in Porter Street; I have murdered my child by dashing its head against the wall; you will find it all right if you go and look." For some days afterwards he was very maniacal, and had to be kept in a padded room. On recovery he could remember nothing whatever of the crime. He subsequently passed into a state of chronic mania.

T. L— killed a man in a police cell by cutting his throat with a knife. He had been taken to the police station for being drunk and disorderly, and was confined in a cell by himself. Shortly afterwards another man, who was helplessly drunk, was brought in and placed in the same cell. They were visited regularly during the night by the constable on

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duty. On each occasion the deceased was found to be sleeping heavily, and T. L— was standing by the fireplace. At one of the visits in the early morning the constable on duty found the deceased lying on the floor with his throat cut, and about twenty cuts on the face. On being asked what he had being doing to the deceased, T. L— said, "I thought he was going to kill me, so I knifed him." He was very maniacal for several days afterwards, but on recovery remembered nothing of what occurred in the police cell, nor could he remember being taken there.

H. H—, a publican, shot a girl in his employment under the following circumstances. He had been drinking heavily for some time, and had appeared strange in his manner. On the day in question his son saw him wandering about the house with a gun in his hand. He seemed to think there was a man hiding in the house, and his son heard him say, "Sam, come out; Sam, don't shoot me in front of my son." His son tried to get the gun from him, but he would not give it up, and said, "Don't take it away or somebody will shoot me." He then left the room, and shortly afterwards his son heard two shots, and going upstairs found the deceased lying on the floor, having been shot through the chest. On recovery he had no recollection of the crime, or of what had occurred for some hours previously to it.

G. M— killed his mother in a most brutal manner, and before a third person, a domestic servant. He had on a previous occasion had an attack of "delirium tremens." He had been drinking heavily for several days. His mother owned a public-house in which they lived, and on the evening in question the house was shut up at ten o'clock as usual. G. M— then went upstairs to a room in which his mother and the servant were. He locked the door, and said, "You will have to stop up all night." He then loaded a revolver, rushed at his mother, and said that "she was not his mother, and that they were both at the same game." The servant took up the poker to defend herself and the deceased, but G. M— took it from her, and pointing the pistol at her, he said, "It will be your turn next, if you move you will not live long." He then kicked his mother in a most brutal manner, and continued to do so for several hours. About three o'clock in the morning he tore off all her clothes and roasted her body in front of the fire. From time to time he threatened the girl in the room that he would shoot her if she moved or screamed. He was subsequently secured and

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taken to the police station. On recovery he could remember nothing that had happened on the day the crime was committed. There was an interesting medico-legal point about the case, as there was a possible motive for the crime. The deceased had saved a considerable amount of money, and G. M— was wishing to get married, and had asked his mother to help him by advancing him some money. She had refused, saying that she was going to be mistress in her own house while she lived.

Gentlemen, I must ask you to kindly pardon the elementary nature of the following few remarks. Reference will often be made to the writings of Hughlings Jackson on epileptic insanities.

The first suggestion I wish to make is this: May we not look upon acute alcoholic mania as the outcome or result of a "discharging lesion," very similar to that which is the cause of epilepsy and its allied insanities. That the epileptic fit itself is the result of a "discharging lesion" in the highest centres of the brain seems to be generally acknowledged. As regards the post-epileptic mania, some look upon it as a continued result of the initial "discharge," which has spread to other nervous tracts; while others, and Hughlings Jackson among them, look upon it as a result not of a direct "discharge" in the nervous tracts concerned, but of an abnormal physiological "letting go" in these tracts, due to their being cut off from the inhibitory control of the highest centres, this "letting go" being due to the paralysis of the highest centres, caused by the initial "discharge"—a similar phenomenon, as Hughlings Jackson suggests, as the increased rate of cardiac action after section of the vagus. I would rather look upon it as a result of both these conditions, viz. an abnormal instability or irritability of the nervous tracts concerned, and their isolation from the protective control of higher centres.

The condition into which the highest nerve-centres are brought by the consumption of an extreme and poisonous amount of alcohol, and which results in the sudden, violent, and often transitory mania as seen in the cases I have quoted, occasions mental phenomena very analogous to those observed in epileptic mania. May we not look upon these phenomena as due to a "discharging lesion," a sudden liberation of nerve energy which, commencing in the *highest centres* (the "anatomical substrata of consciousness") may be either expended in these centres, or may spread to lower

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levels, resulting in movements the less organised, specialised, and automatic, or the more organised, specialised, and automatic, according to the level to which the discharge spreads.

Before going further I must refer to the loss of "consciousness" accompanying the acts performed by acute alcoholic and epileptic maniacs, whether those acts are of a complex purposive character, or of an aimless wildly destructive character. In some cases, as in those above quoted, the "loss of consciousness" is complete; in other cases it is only partial; that is to say, the acts performed are subsequently faintly remembered as if they had happened in a dream. As regards the relation of "consciousness" to activities of the highest nerve-centres, the above and similar cases illustrate very definitely, I think, the opinion of Hughlings Jackson and others on the subject, viz. the doctrine of "concomitance," which is stated by Hughlings Jackson in these words: "that (1) states of consciousness (or synonymously states of mind) are utterly different from nervous states of the highest centres; (2) that the two things occur together, for every mental state there being a correlative nervous state; (3) that although the two things occur in parallelism, there is no interference of one with the other."

I now pass on to refer briefly to some points of resemblance between these two classes of cases. Clinical observation shows, I think, that, speaking generally, the slighter fits of epilepsy are more liable to be followed by mania than the more severe fits.

Both in epileptic and acute alcoholic mania we find different intensities and different depths of dissolution, resulting in correspondingly different nervous manifestations. In some cases the initial discharge is entirely expended in the area in which it takes place; in other cases it "overflows" into other nervous tracts. For example, in some cases of epilepsy the initial "discharge" in the highest centres (the "anatomical substrata of consciousness, and the re-representation of lowest levels) results in profound coma of short duration, a temporary complete dementia. Correspondingly, in some cases of acute alcoholism a profound coma, a temporary complete dementia, results. It may be said that the coma in these cases cannot be allied to the coma resulting from a severe epileptic fit because it is of so much longer duration, and because in the case of epilepsy it is accompanied by more or less severe convulsions. My sug-

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gestion is that in acute alcoholism the "discharge" is entirely expended in the nervous tracts which subserve "consciousness," and does not overflow, as in epilepsy, to the nervous tracts in the highest centres, which are the re-representation of the lowest levels. In this relation, however, it is important to remember that in some cases of acute alcoholism general convulsions of an epileptiform nature occur.

In some cases, both of acute alcoholic and epileptic mania, the middle level and the lower tracts of the highest level being cut off from the protective control of the highest centres, and being in a high state of nervous instability, there result those blind uncalculating destructive acts of which some of the cases I have quoted are examples. In other cases both of epileptic and acute alcoholic mania, the acts are of a complex and purposive character, indicating activities of the highest sensori-motor centres. Sometimes "consciousness" is entirely lost; in other cases "partial consciousness," if I may use the term, is present, but not in such degree of activity as would enable reflection and judgment to give their "protection" to the activities of the correlated sensori-motor tracts. In relation to this "loss of consciousness" accompanying elaborate acts, Hughlings Jackson says "it may be that in dissolution the activities on the lower level of evolution have attendant states of consciousness which in normal conditions they had not, or that their normal slight states of consciousness become more vivid. (The condition which I have referred to here as "partial consciousness" is by many designated "double consciousness.")

In some cases the individual will *at the time* give expression to delusions, hallucinations, or illusions, of which the act is the ultimate outcome. In the study of these cases, however, in which the highest nervous activities are concerned independently of consciousness, one is confronted with this difficulty—that while motor activities are open to objective study, sensory activities being entirely subjective, one is dependent upon information given by the patient regarding them.

Whether expression is given to delusions, &c., or not, there are often strong indications that the sensory nervous activities present are correlated to the emotion of "fear."

Both in alcoholic and epileptic mania relief is often experienced on the accomplishment of the act, due, as one must

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suppose, to the relief of tension in the nerve tracts concerned, and a consequent resolution to normal stability.

The following clinical facts are also suggestive. Epilepsy is sometimes the result of severe injury to the head, and also of sunstroke. Injuries to the head and sunstroke may also cause a great predisposition to extreme effects of alcohol, and also a predisposition to the maniacal type of acute alcoholism.

In conclusion I would draw particular attention to the great medico-legal interest and importance of the insanities which I have brought to your notice to-day.

Discussion.

The HON. SECRETARY said he wished to thank Dr. Nootт for his able and instructive paper, which, he was quite sure, would be read with interest by every member of the Association. It was difficult to discuss an intricate subject of this kind against time, for every point required to be carefully considered before venturing on an expression of opinion, whether for or against the views formulated by the reader of the paper. He might mention that he had recently seen a case where the clinical symptoms were attributed to epilepsy, but it was clearly proved that alcoholism was the cause, and not epilepsy. The man had manifested suicidal propensities, and generally the case supports the views of Dr. Nootт. If it can be proved that in these states of alcoholism there is a discharge similar to the Jacksonian discharge in epilepsy, then a very valuable link will have been added to the chain of nerve pathology.

Analysis of the Causes of Insanity in One thousand Patients.

By J. V. BLACHFORD, M.B., B.S., Senior Assistant Medical Officer, Bristol Asylum.*

I HAVE investigated as far as possible the causes of *insanity* in the last 1014 patients admitted to the Bristol Lunatic Asylum, 507 being males and a like number females. My purpose has been to ascertain in what proportion of insanity *heredity* was the prominent factor in causation, and what influence was exercised by alcohol, traumatism, and certain other agencies, where no taint of bad heredity could be found.

The present investigation has been undertaken to seek confirmation, if any, of my opinion, that the causes of insanity may be grouped under very few heads, as well as to try and afford some explanation for the apparently rapid increase of psychoses during recent years.

Special care has been exercised to avoid accepting insufficient evidence as to hereditary predisposition, drink,

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