INSANITY AND INTEMPERANCE.*

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IN the second half of the year 1871, the Glamorgan County Asylum received only 24 male patients, whereas 47 and 43 were received in the preceding and succeeding half-years. Again, in the first quarter of the year 1873, the same asylum received only 10 male patients, whereas 21 and 18 were received in the preceding and succeeding quarters. While there was thus on two occasions, for periods of six and three months respectively, a sudden fall in the male admissions to half their usual number, the female admissions showed scarcely any disturbance.

During the same periods, a like experience was made at the county prisons, the production of crime as well as of insanity being strikingly diminished.

These two exceptional periods correspond exactly with the last two "strikes" in the coal and iron trades, in which Glamorganshire is extensively engaged; and these results only afford another proof that ignorance and self-indulgence can make prosperity a curse instead of a blessing. The social aspect of these facts, and the remedies they demand, are not within the scope of this paper, but it is impossible to exaggerate their significance and urgency.

The decreased production of insanity during a strike seems mainly due to two causes—the one physical, the other moral;—there is no money to spend in drinking, and there is no time to think of anything but the strike. This moral cause is more potent than might at first appear. The strike excites universal interest, and, in the districts chiefly affected, there is continual discussion of its varying prospects, its certain advantages, and its probable termination. The subject has the deepest personal interest for all, and so engrosses attention, that it gives stability and force to weak and wavering minds—just as a demented patient becomes reasonable and intelligent for a time when his attention is aroused and his scattered faculties are concentrated by an illness or an accident. But the enforced abstinence from drinking and debauchery is beyond doubt the chief cause of the decreased insanity; and this is strongly confirmed by the fact that the diminution is observed only among the men, a large proportion of whom are habitually dissipated.

Intemperance has a threefold relation to insanity; it may be a cause, an early symptom, or a result. These relations are often associated and often confounded. Each claims separate notice.

The temporary insanity produced by a single intoxicating dose of alcohol sufficiently indicates the baneful effects which its frequent and excessive use must entail on mind and brain; and experience too sadly confirms this indication. With the single exception of hereditary predisposition, intemperance is by far the most fruitful of all the causes of brain-disease; and even hereditary predisposition is often but another name for parental intemperance.

The simplest form of the insanity which intemperance produces is—

1. *Delirium Tremens*—the brief, fierce delirium with which the brain resents prolonged alcoholic poisoning, and which is caused more frequently by spirituous drinks than by the slower and less complete alcoholisation induced by beer.

2. *Transient Acute Mania*, distinguished by great violence and excitement—the true *mania a potu*—is the next form. This seems to occur in some persons instead of the more frequent form of delirium tremens. It usually attacks a brain exhausted by a period of general debauchery, and unable longer to maintain it, although spurred incessantly by stimulants. It often very closely resembles the acute mania of commencing general paralysis, but is happily brief and curable.

The next form is that which constitutes—

3. *The Insanity of Intemperance* in Dr. Skae's classification. It has two phases, acute and chronic. The acute form follows the excessive debauch of a habitual drinker. Suspicion, jealousy, and temporary hallucinations are the prominent symptoms. The patient hears robbers coming into the house, and watches behind the door with a pistol; or he sees a man dogging him in the street, and carries a knife to defend himself; or he detects a neighbour making signs to his wife through an imaginary hole in the wall. Deeds of violence are frequently committed under the influence of these delusions, and the insanity which prompted them is often unrecognised or ignored. The prisoner is quickly sobered by abstinence, and by the knowledge of the deed he has committed; he is sane or apparently sane on trial; the prison officials have seen no insanity; the jury are instructed that drunkenness is no palliation of crime, and the prisoner is found guilty. This actually occurred in the case last mentioned, where a man, who

murdered his wife under the influence of this hallucination, was condemned to death, and subsequently reprieved on medical testimony as to his true condition. When this form of insanity occurs before middle life, or early in the career of indulgence, the patient recovers; but, of course, the same cause is too apt to induce subsequent attacks. Ultimately, or in less favourable cases, the disease subsides into the *chronic* condition, presenting the same symptoms, but in a milder or more intermittent form. The patient is habitually moody, self-contained, irritable, and repellent; forms no friendships; shows no interest in anything; does no work, or does it in a grumbling or in a listless fashion; often detects poison in his food; often fancies himself slighted or put upon by others; has hallucinations of the senses, chiefly of hearing, and under their influence often scowls and threatens, or has a brief outburst of noisy abuse. This condition is hopeless, as regards recovery. Phthisis, the result partly of the previous habits, partly of the insanity, is a frequent cause of death; and this class of cases has helped not a little to give suspicion so prominent a place in the descriptions of phthisical insanity.

Another distinguishable type of the insanity caused by intemperance is—

4. *The Insanity which occurs in persons who had previously been much addicted to Drinking, but who had become, and had been, perhaps for years, Abstinents*.—Although the habit has been discontinued, the evil it has wrought lives after it, and some moral cause—a reverse in business, or the death of a relative—upsets the brain, which old excesses had weakened, and induces a melancholia, which too often proves permanent.

5. *Chronic Alcoholism*—the apparently uncomplicated result of long saturation of the brain with alcohol, gradually destroying memory, motion, and life, is the next form.

Lastly in this dire catalogue comes—

6. *General Paralysis*, where the brain-ruin is probably attributable, not to the alcohol alone, but also to the other vices—notably the sexual vice—with which intemperate habits are often associated; at least, this disease is less apt to follow fierce bouts of drinking than those slower forms of habitual dissipation which favour other excesses.

These direct effects of intemperance on the individual constitute unfortunately but a small part of the evil it produces. In numberless cases, it produces insanity indirectly by establishing and transmitting a proclivity to nervous disorder, and by awakening and developing such proclivity where it already exists. The evil thus wrought by intemperance is simply incalculable; at once so secret that it cannot be known, and so great that it cannot be estimated. No vice is more hereditary than intemperance, and none more certainly entails nervous deterioration. The occurrence of idiocy in a non-neurotic family is sometimes directly attributable to the drunkenness of a parent, while the more gradual deterioration shows itself in hereditary intemperance, in mental weakness, and instability, or in any of the various forms of nervous disease. This deterioration, commenced in intemperance and aggravated by the same vice in descendants, runs no uncertain course; a few generations suffice for the extinction of the race in dementia or idiocy, and sterility.

If we add to all this evil the insanity produced by the poverty, disease, and violence which intemperance begets, and the lamentable number of cases where intemperance the vice excites or grows into intemperance the disease, it is surely within the truth to assert that half the existing cases of insanity are due, directly or indirectly, to this social curse.

Not infrequently, however, intemperance is assigned as the cause of mental disorder, when in truth it is only one of its *early symptoms*. In the earliest stages of derangement, and in the emotional disturbance which constantly precedes it, when the patient is unsettled and unlike himself, but when the true nature of his disorder has not even been suspected by his friends, unwonted drinking frequently occurs. It is then only one of the indications that the patient is losing control over himself, and is easily led away by opportunity and temptation. This is especially observed in commencing general paralysis, while the other symptoms of that disease confirm the mistake of the friends, and are attributed by them to the newly acquired habits of dissipation. Little experience is needed to guard against this error; but, on the other hand, there is a large class of cases where no definite line can be easily drawn, and where intemperance, while at once the most frequent cause and the most constant symptom of the insanity, is yet more truly its *result*.

The various forms of insanity already enumerated may be caused by habits of intemperance, without the existence of any predisposition to nervous disorder; the special type of insanity developed in each case apparently depending on individual peculiarities, or on the form of the intemperance. Dipsomania, on the other hand, while sometimes apparently due to the vice alone, is habitually associated with some form of

* Read before the Psychological Section at the Annual Meeting of the British Medical Association in London, August 1873.

inherited neurosis; and this association is so constant that the intemperance must be regarded, at least ultimately, as *the result*, rather than the cause, of the insanity.

Dipsomania has three forms—acute, periodic, and continuous. In the *acute form*, the patient, formerly temperate, takes suddenly to excessive drinking usually after some loss, shock, or disappointment, becomes utterly indifferent to all claims of family, business, or duty, and drinks himself to death as speedily as possible. The history of such a case is almost certain to reveal unstable nervous organisation; and probably suicide in a more sudden form has been a consequence of similar moral causes in some other member of the family.

The *periodic or paroxysmal form* is yet more constantly associated with some hereditary neurosis. The patient is correct and abstemious in habits, irreproachable in character, and, perhaps, of superior attainments; but occasionally, from anxiety, overwork, or casual indulgence, he is seized with a fierce and uncontrollable craving for stimulants. At the same time, his whole nature seems changed, and he becomes in every respect the opposite of his former self; he forgets and sacrifices everything in the gratification of this passionate craving, chooses the vilest associates, frequents the lowest haunts, resorts to cunning lies to conceal himself, lives chiefly on brandy, and is at length discovered, probably in some low pothouse, dirty, haggard, and exhausted, with the brandy by his side, for which he still craves even when the irritated stomach refuses to retain it. The attack is followed by utter loathing of alcohol and of himself for yielding to the temptation; but, after a varying number of months, the wretched experience is only too certain to be repeated.

No form of brain-disorder is more definite than this; and, as already said, it is almost invariably associated with a hereditary tendency to intemperance, or to some form of nervous disease, which may or may not have been awakened by convivial habits, but in which habits the attacks often seem to begin.

The third form—*continuous or constant dipsomania*—is that where the difficulty is usually greatest in drawing the line between the vice and the disease. It is often the outcome and the result of intemperate habits, often associated with other vices, and always associated with an active form of the moral insanity, which is usually negative or merely periodic in the other types of dipsomania. It is distinguished by an amount of acute cunning, plausible hypocrisy, and fearless lying, which it is often difficult to regard as mental weakness, and difficult to describe except as blackguardism—so difficult, indeed, that one who has never seen this form of insanity may be pardoned for doubting its existence; but no such sceptics are ever found among those whose friends or relatives have been its victims.

I believe the mere habit of intemperance in the individual rarely produces this condition, but that it is usually a result and development of the baneful heritage entailed on their descendants by intemperate progenitors; the vice of one generation becoming the weakness of the next, liable to be evoked at any time by the parental vice, and then bringing a double curse.

The inherited tendency to intemperance may itself prompt to the habits which develop the disease; or these habits may be easily acquired in social life, the patient thoughtlessly tempting his fate; or, again, the inherited weakness may be evoked by brain-disturbance from quite other causes, such as injury, sun-stroke, or moral shock. But, however excited, the existence of this predisposition to intemperance or nervous disorder seems the chief and essential fact in connexion with dipsomania.

The limits of this paper allow only a word or two as to its treatment. The absolute withdrawal of alcohol, except in the very rare cases where physical prostration forbids it, and the seclusion of the patient from all temptation and opportunity to indulge his habits, is of course the first and imperative step; the next, restoration of tone, physical and moral; and, lastly, confirmation by time of the amendment thus secured. Unfortunately, while it is easy thus to prescribe the treatment, properly to carry it out is a most difficult and trying task. The proverbial difficulty of reclaiming an inveterate drunkard is enormously increased when the drunkenness is not a habit, but a disease. While the repentance and good resolutions of the drunkard are sadly apt to be evanescent, they are at the time earnest and sincere. The dipsomaniac is scarcely ever sincere, although he can simulate sincerity most perfectly; and scarcely ever earnest, except in accomplishing the gratification of his passion, and hating those who prevent it.

The proper treatment of dipsomania is only possible in an asylum, and seldom successful even there. At the best, it needs years of treatment; and even then a relapse is always to be feared. Unhappily, asylum treatment is often impossible, since an action for damages is an unwelcome form of gratitude, and the medical and legal definitions of insanity are strangely at variance.

If the admirable endeavour to provide asylums for inebriates fortunately prove successful, they will doubtless receive dipsomaniacs as well as habitual drunkards; but it will be almost useless to provide them without power of compulsory detention, and absurd to provide them at all without lessening the needless multitude of public-houses which so liberally supply suitable inmates.

Lastly, upon us, as physicians and alienists, a special duty rests in this matter. We see more than others of the evils of intemperance, and we are bound to tell in earnest words how dire and far-reaching is the curse it brings.

ON THE ACTION OF ALCOHOL.

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As I was prevented from being present when Dr. Edmunds' paper on "The Physiological Action of Alcohol" was read at the late annual meeting of the Association, and at the subsequent discussion which took place, I hope to be allowed to make a few remarks upon the subject. It is a pity that the observations of Professor Binz could not have been reported at greater length; but the simple sentence quoted indicates the general nature of his views. Professor Binz is reported to have classified alcohol physiologically with quinine; and his opinion with regard to the action of quinine upon the white blood-corpuscles is now very generally known. Quinine, alcohol, and other allied agents, check the movements of white blood-corpuscles, and of other minute masses of living protoplasm; and Professor Binz, so far as I can understand his views, believes that the effects produced by these agents upon the higher organisms depend mainly upon their fundamental action upon protoplasm.

The explanation of the action of alcohol which Dr. Rutherford is reported to have given is, that it has a stimulant action upon the circulation; but, although it may be perfectly true that alcohol does, under certain circumstances, stimulate the circulation, yet the recognition of this fact is by no means an adequate explanation of its action. The forces which produce circulation are so manifold, and so complicated in their collocations, that, even if all the other effects of alcohol could be explained from this effect alone, we are almost as far as ever from a true explanation of the action of alcohol upon the higher organisms. We are led to ask, Why does alcohol stimulate the circulation? Does it stimulate the circulation under all circumstances? If not, why not? and under what circumstances does it produce no effect, or, it may be, an opposite effect? If, on the other hand, the main effects of alcohol can be deduced from its action upon simple protoplasm, we are much nearer to a true explanation of the point. The forces which produce the simple movements of protoplasm are so few and little involved, when compared with those which produce the circulation of the higher animals, that, if the effects of alcohol upon the higher organisms could be deduced from the former action, the whole question would be resolved into simpler elements. And, indeed, living protoplasm, as represented by white blood-corpuscles and monera, is so similar to dead proteinaceous compounds, that we may entertain the hope that the action of alcohol and similar agents upon the former may, at no distant date, be resolved into their ordinary chemical action upon albuminous compounds. But, however this may be, it is perfectly certain that, if the main effects produced by alcohol upon the higher organisms can be deduced from its action upon simple protoplasm, this affords a much better explanation than if the effects were deduced from the special action of alcohol upon the circulation or upon the nervous system. Starting from the fact that alcohol checks the movements of white blood-corpuscles, let us see what are the implications. If these movements are checked, it must be because the molecules of the protoplasm have assumed relatively fixed positions—are more near than before to a condition of equilibrium. If the molecules had become very fixed, the protoplasm would be solid; but, although this does not take place, it is clear that, if the molecules are relatively more fixed than before, the protoplasm will be correspondingly more solid. And, if the protoplasm is rendered in any degree more solid, this will retard the exchange of material which ends in growth, and the detachment of material which ends in multiplication. If, then, we carry these conceptions with us into the higher organisms, it is evident that alcohol will tend to check the growth and multiplication of protoplasm over the body, and to promote the comparatively fixed arrangement of material which constitutes structure. I do not mean to assert that alcohol tends to develop a higher degree of structure than the organism has already attained to; but it tends to fix and consolidate the structure as it exists at the time. Briefly expressed, then, the