

Pauperism, crime, and insanity are so largely attributable to the abuse of alcoholic drinks that the statistics of each should be carefully watched during the next few years for any indication of an improvement. It is, of course, possible that this reduction may be due only to the greater moderation from necessity or improved habits of the middle and upper classes only, although it would appear to be too large to be thus explained.

Abuse of alcohol, in the statistics of the causes of insanity, has fluctuated very little for many years past, so that any distinct diminution would be very significant, and should encourage a still more vigorous crusade in favour of true temperance—the use without abuse of the cup that cheers and may inebriate.

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*The Grantham Railway Disaster.*

It is agreed that all statistics require careful reading, but those relating to insanity are more exposed to misreading than are most others. The following abuse of statistics is so grotesque that it would not be worth criticism had it not tended to cause unnecessary alarm and mischief.

At the time of the Grantham railway disaster, the cause of which still remains a mystery, the sudden onset of insanity in one of the two engine-men was put forward as a possible solution. On this question the *Standard* newspaper in its issue of September 13th founded a principal-page disquisition, not without help from the outside. It was stated therein that, as 12·7 in every 10,000 engine-men became insane every year, this calling stood very high (seventh) in liability to mental disease; that, as 40 *per cent.* of all admissions were cases of acute mania, so 40 *per cent.* of the engine-men becoming insane might be taken to suffer from acute mania; that every case of acute mania might become insane without any warning whatever. The conclusion drawn from the foregoing statements as applied to an erroneous estimation of the number of engine-men at 40,000 is that 20 engine-men are liable in each year to become insane suddenly and unexpectedly.

As to the relative liability of engine-men to insanity, no doubt the ratio, correctly taken from the Commissioners' last occupation-liability tables, appears to be high in comparison

with the ratios of some other callings. But it must never be taken as an absolute proportion. It was arrived at by comparing the mean of five years' admissions of engine-men into asylums (1896-1900) with the absolute enumeration of the class in the census of 1891, which latter had perforce to do duty as the standard of comparison till a new census was taken. If the actual number of engine-men in 1898 (the centre year of the five) could have been known and applied to the average admission rate of engine-men for these years, then a reasonably accurate proportion could have been struck. It undoubtedly would have been smaller. The same argument of course could be applied to other callings, but the case of the engine-men stands by itself. They numbered 13,000 in 1871, 40,000 in 1891, and 66,000 in 1901. Few, if any, other callings could have shown an increase of 66 *per cent.* in ten years. Assuming the increase to have occurred regularly through the ten years, the engine-men numbered about 58,200 in 1898, and this compared with the average admission rate centring on that year would show a ratio of 8·7 only.

It is surely ingenious to suggest that the general proportion of acute mania cases in all admissions should apply to engine-men, but it is very awkward, for it would entail a certain proportion of the latter at the time of their falling ill being congenitals, with or without epilepsy, epileptics, senile dements, etc.

Further, the quotation of acute mania as forming 40 *per cent.* of all admissions is ridiculously erroneous. This ratio stands for all sorts of mania, acute, chronic, recurrent, etc.

We think that most who have experience will deny anything like a general liability to an attack of insanity coming on without any prodromata recognisable by wife, friends, officials or doctors. It may occur, of course, but so rarely as to be incapable of statistical consideration. In the case of engine-men the infinitesimal risk is probably more than obviated by the close inspection that each man receives when he goes on duty, and also by the constant observation of his mates and superiors, who must always be thinking how their lives and interests are in the hands of the folk on the footplate.

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