it existed anywhere else, it must have been in the upper portion of the duodenum. Wherever situate it would appear that the intestine was quite obstructed; the stools consisted of mere mucus and bile, with a minute quantity of fæces,—the latter, probably, produced by the action of the intestine on its own mucus. Tiedeman has proved that this takes place. The woman herself expressed a conviction that no food passed. We should observe the torture inflicted by solid food and wine, and the relief afforded by cold water,—all showing that an inflammatory action was going on in the stomach. This stimulation being continued for some days, observe the result. A high fever sets in; the face is flushed; notwithstanding the anæmic state of the system, the skin is hot, the pulse is quick and wiry, the thirst is more urgent, and there is delirium. In addition there are, a red tongue, and much tenderness of the epigastrium. The physiological observer has little difficulty in reading the language of suffering nature; he can perceive, as the source of all these alarming symptoms, an acute inflammation of the stomach. At this time another remarkable symptom occurs, the fluids cease to pass through the fistula, no doubt can exist as to the cause;—the swelling induced by the inflammation has closed it internally. The inflammation subsides, as is shown by the symptoms, and the fistula re-opens. Soon after this the patient sinks rapidly. The vital principle, already exhausted by long suffering, is unable to bear this new excitement, and the patient dies.

The conclusions to be drawn from this case are probably these:—

First. That a scirrhus of the stomach or intestine may present externally, and, having ulcerated, may cause a communication between those organs and the exterior of the body.

Secondly. That in the treatment of such cases we should be cautious of stimulating the stomach; for (as in this case) an acute gastritis may supervene, giving rise to the symptoms peculiar to that disease, and hastening the death of the patient.

Thirdly. That the fistula formed, may be closed by inflammation for a time; and hence, by analogy, we may conclude, that where the intestine is nearly obstructed, though no fistula exists, it also may become entirely closed by inflammation, and prevent the passage of food, but that on the subsidence of that inflammation the passage may be restored.

ON THE
EFFECTS OF OPIUM-EATING
ON
HEALTH AND LONGEVITY.

By R. CHRISTISON, M.D., *Prof. of Med. Jurisprudence and Police in the Univ. of Edin., &c.*

(Condensed from the *Edin. Med. and Surg. Jour.*, Jan. 1832.)

It is singular how very little is known by the medical profession of the effects of the practice of eating opium or drinking laudanum on health and longevity. Yet the habit really prevails to a very considerable extent both among the lower orders and better ranks of society. Those in the better ranks however who are addicted to the use of opium in general, conceal it from their medical attendants, while in the lower orders an opportunity is seldom afforded for observing its effects with accuracy, as it is often united with the practice of excessive drinking.

But insurance companies ought to make up their minds on the question,—whether the practice of using opium tends materially to shorten life. For if it be resolved to hold the opium-eater's life uninsurable, which I apprehend most will be inclined to do, then medical referees generally ought to be aware, that the habit may exist where it is not all suspected, and that it is by no means in general to be detected by the phenomena to which, according to popular belief, it usually gives rise.

In Sept. 1826 the late Earl of Mar insured his life with various companies, and among the rest with the Edinburgh Life Assurance Company for 3000*l.* The policy was held by Sir W. Forbes and Company in Edinburgh, as security for money lent to the Earl. In Sept. 1828, Lord Mardie died of jaundice and dropsy, aged 57, and his insurances were claimed by his creditors. But the company then received information that he had for many years used laudanum to excess, and regularly did so at the time of the insurance; likewise that he drank freely; and lived a very sedentary life. Yet no hint was given to them of the important circumstance, that his Lordship was addicted to the use of opium. The company therefore refused to pay the 3000*l.*, and Forbes and Co. raised an action to recover payment.

It appeared from the evidence, that in reply to queries put to the Earl at the time of effecting the insurance, he stated that he was “in perfect health,” and had never been afflicted with “any disorder tending to shorten life.” It likewise appeared that, on reference to a private friend, no reason

was known why an insurance on his life would be more than usually hazardous. Dr. George Wood, the medical officer of the company, and likewise the Earl's acquaintance, testified also to the same effect, but it seems that in filling in replies to the queries contained in the company's schedule, this gentleman neglected replying to the general question, "Can you give any and what information respecting his habits?"

Sir W. Forbes and Co. maintained, that even admitting, which however they did not,—that the Earl was addicted to the vice of opium-eating in a degree calculated to shorten life,—nevertheless the Insurance Company having accepted the life without the general question as to habits having been answered, must be understood as having accepted the life, as it stood, at a venture.

This plea was considered by the presiding judge an important one. The evidence of several domestics and other witnesses also tended to prove that the Earl was temperate, and never appeared as if under the influence of narcotic drugs. A medical gentleman, and one of the Earl's private friends, Mr. Stein, who knew him familiarly in 1812, stated, that they observed no material change in him up to the close of 1826 and beginning of 1827, when however they were all sensible of a change in his habits. On succeeding his father, he conceived his estate would leave him a clear income of 2000*l*. But in the course of 1827, he discovered he was not worth a farthing. He then gradually secluded himself, was little out of doors, lay long in bed, and even went seven days without being shaved; yet till within two months of his death, his health and appearance did not seem to these gentlemen to suffer.

No person in fact ever perceived the slightest sign of excitement or depression or stupor, as if from the use of narcotic drugs, but all observed his increasing gloom as the true state of his affairs was opened.

Sir W. Forbes and Co. therefore concluded, that his health was broken up, not before the insurances were effected and from opium-eating, but at a later period, and simply by the gloomy state of his affairs: and they denied that he was addicted to the use of laudanum, or if it was so, that his health suffered in consequence. Thus easy is it for a man in the better ranks, effectually to conceal confirmed habits of opium-eating. Yet that the Earl was much addicted to this habit was perfectly substantiated by the following evidence for the defendants, on whose behalf it was proved, that he had confessed to his housekeeper his having been in the practice of taking laudanum for thirty years; that about the close of 1825 and the early part of 1826, he had purchased at the rate of forty-nine grains of solid opium and one ounce of laudanum daily; and that dur-

ing the rest of 1826, as well as the two subsequent years, he purchased opium, chiefly in the form of laudanum, at the rate of two, two and a-half, and three ounces daily. The pursuers maintained that he might have used part of it as an embrocation, but there was no evidence whatever of any having been used externally, and by the evidence of his housekeepers, for twelve years before his death he was in the habit of swallowing some always before he went out to walk or ride, and when he went to bed; indeed, one of his housekeepers used occasionally to give it herself when he went to bed, and gave a table-spoonful at a time. Witness also proved that he was seldom free from severe rheumatism, had a bad appetite, and low spirits, and he became not unfrequently intoxicated. Dr. Abercrombie also deposed, that in 1825 he found him with a broken constitution.

It appears to me then, that Lord Mar was infirm in health at the time of effecting the insurances in 1826. The apparently contradictory evidence of the pursuers will be easily reconciled with this conclusion, when attention is paid to the effects of opium-eating.

On the trial, several physicians in Edinburgh, namely, Drs. Abercrombie, Duncan, Alison, MacLagan, and myself, and also Mr. Macfarlan, a surgeon and apothecary, were examined on the part of the insurance company as to the influence of opium-eating on the health. All agreed that it must tend to injure and shorten life; one witness even considered that it would render a life more than "doubly hazardous;" but all admitted, that they had scarcely any direct experience in the matter. Mr. Macfarlan alone knew one person, a female, who used laudanum to the extent of about two ounces daily for many years, and who died about the age of sixty,—of what disease he could not remember. In my evidence, I stated several cases, communicated to me by a friend, which rather tended to show that opium-eaters may reach a fair age; but, at the same time, I gave my opinion, founded on its operation in disordering digestion in moderate doses, that it must generally injure the health and shorten life.

The Lord Chief-Commissioner summed up in favour of the pursuers. He stated that the case involved no question of law, but points of common sense; he thought it very material that the company made the insurance without an answer to a question, which is material in making an insurance; the jury should consider whether an individual who is going to insure is bound in honour and honesty to disclose a secret habit, if the insurance company act in such a manner as to make it appear that they do not look upon it as material. The evidence,

he continued, went to show the Earl took opium, and that its effects were apparent in his constitutional health. But was this *satisfactorily* proved? One of the witnesses had mentioned instances of opium-eaters who had lived to a good old age. Did Lord Mar also take it in so great quantity as to constitute a pernicious habit of which the Insurance Company should have known, and which he was bound to reveal? The question on the whole for the jury to decide was, whether the state of health into which he subsequently fell was occasioned in any considerable degree by the use of the drug, or by the condition of his affairs, or by both.

The jury decided that the Insurance Company was liable.

Observations.—I was consulted by both parties, and in the first instance by Sir W. Forbes' House.

On a dispassionate view of the whole facts, I must say I cannot find in them any reason sufficient to bear out the judge in his charge, or the jury in their decision; and I learn there has not been found in this city a single individual who considers the verdict to have been founded in reason or supported by the evidence.

The first question in the case is,—whether the company were guilty of negligence. In my judgment they were not so to such an extent as to render them liable. The health of his Lordship had undoubtedly at the time the insurance was effected, long been in an infirm state; Dr. Abercrombie, is the only physician who visited him recently, by whom it was stated that his constitution was broken down. This did not particularly strike the attention of other witnesses, because most of them saw him so very seldom. The second question is—Did the habit of taking opium exist to such an extent as to make it important that the Company should know it, and obligatory on Lord Mar to reveal it? The presiding judge doubted whether there was any evidence of its having been really taken internally in great quantities, or that the habit had reached a pernicious height, because no ill effects were obvious. But the presiding judge must have overlooked the importance of the fact, that one of the house-keepers gave it in the dose of a table-spoonful, that is half an ounce, which he swallowed at once. No one could safely swallow this quantity, which is six times the largest, and twelve times the ordinary, medicinal dose for unaccustomed persons, without the long practice of using it in gradually increasing doses. And as this appeared to be not an unusual dose with him several times in the course of the day, the whole quantity purchased amounting sometimes to 3 ounces daily, would seem to have been swallowed, in

the absence of any proof of its external use. Had the Court too been made aware of the peculiar effects of the opium-eater's dose (which is in general widely different from what unprofessional persons, as well as even most medical men, have been led by the vague statement of eastern travellers to believe), it would not have thought the absence of narcotic symptoms strange. In this country the usual effect of the opium-eater's dose is simply to remove dulness and depression,—to make him alert in his occupations, and conversable in his intercourse with others,—to occasion, in short, a state of mind and body which no one would suppose, at all events no one not aware of the habit, indicated anything unusual in his condition at the time. Now would not Lord Mar, who rarely saw friends, take care to resort on these occasions to the customary means of tranquillizing himself, and making him fit for the intercourse of society?

The third question is,—whether the habit of opium-eating is detrimental to health and longevity. I shall consider this question independently of the trial, because some facts have come under my notice since it took place which it will be convenient to embody here.

It does not necessarily follow that the habitual use of narcotics tends to shorten life. Snuffing, smoking, or chewing tobacco, is not believed to have any such effect. It is true that the much more injurious and more permanent effects which every repetition of a dose of opium produces on the digestive organs and nervous system, afford a stronger presumption of ultimate injury to life. Yet it is well known that some disturbed states of the nervous system, such as hysteria, may exist for a long time, and that the functions of digestion may often be long and seriously disturbed without life being materially shortened. It is necessary then to appeal to special facts.

I have not been able to find any facts of the least value on the subject in medical records. The following cases, however, have been communicated to me by friends on whom I can rely,

1. A young lady of 25 has taken it largely for 15 years. It was first administered secretly by her nurse to keep her quiet, and the unhappy lady was subsequently compelled to keep up the practice for her comfort. She enjoys good health.

2. A patient of mine in the Infirmary, a martyr to rheumatism, took a drachm daily of solid opium, for ten years, before she was 40. She then gave it up. Six months afterwards she was attacked with jaundice; subsequently she was several times severely ill of rheumatism; and she died, aged 43, of consumption. This woman, however, led a licentious life from an early period.

3. A well-known literary gentleman who has taken laudanum, with some intermissions, for 20 years, occasionally to the extent of nine or ten ounces daily, has now attained his forty-fifth year. He is spare in form, looks older than he is, but is capable of undergoing a good deal of bodily fatigue, and enjoys tolerably good health so long as he takes sufficient exercise. His allowance when I had last an opportunity of conversing with him was about nine drachms of laudanum daily.

4. A lady in this city, after drinking laudanum to excess for upwards of 20 years, died about the age of 50. No information of the disease.

5. A lady of the same age takes about three ounces daily, and has used it for many years. She appears to enjoy good health.

6. A lady about 60 years of age, has taken it about twenty years, and is in good health.

7. A charwoman who had been in the daily practice of drinking two ounces of laudanum for many years, died at the age of 60. The disease not remembered.

8. An eminent literary gentleman, I am informed, has been in the habit of taking laudanum since he was 15; and his daily allowance has sometimes been a quart bottle (twenty-six ounces) consisting of three parts of laudanum and one of alcohol. Enormous as this dose may appear, I am assured the fact is well known to his acquaintances. He is about 60 years of age, and enjoys good health.*

9. A lady of 70, now alive, has taken about half an ounce of laudanum daily for nearly 40 years. She enjoys tolerable health, and every year travels great distances to visit her friends.

10. An old woman of 80 died a few years ago at Leith, after having taken about half an ounce of laudanum daily for nearly 40 years, and she enjoyed tolerable health all the time.

These cases undoubtedly show that a certain number of opium-eaters may attain a good old age. But so sometimes do drunkards, and the probability is, that many persons die at an early age of the effects of opium-eating whose habits are never heard of. The above cases are given rather with the hope of inciting others to make farther inquiries. And I fully anticipate that this habit will be found not less destructive than the vice of drinking spirits. I cannot bring myself to think that the habitual use of a drug which produces such permanent effects as opium, which greatly disorders the digestive functions, leaves those who use it habitually in

so miserable a state during the intervals of using it, and leads to an early worn-out appearance, can be consistent in general with the enjoyment of health, and the prolongation of life.

It is in general supposed that much excitement is in the first instance produced by opium, in the midst of which individuals yield to extraordinary acts and expressions. But I am convinced from inquiries that such effects are extremely rare in this country, and that the state of the opium-eater, while under his dose, is often not at all different from that of an ordinary person of active habits, cheerful disposition, and liveliness of ideas. From what I have myself witnessed, I am quite prepared to believe that, in many instances, when the opium-eater is under the influence of the drug, no one could suspect the fact. In case 6, the lady's medical attendant was so completely ignorant of the habit, that during an attack of diarrhoea, he ordered her an ordinary dose of opium, and was first warned of the true state of matters by the apothecary, who had supplied the drug for her daily use. In case 9, some of the lady's most intimate friends are not at all aware of the habit. In case 3, I can state from personal observation, that even after being told of the habit existing, no one could discover it. I am farther inclined to think, that in many persons unaccustomed to use opium, this drug, when it does not induce sleep, or produce disagreeable idiosyncratic effects, occasions tranquillity and brilliancy of ideas; and that such effects will be often experienced when its soporific influence is resisted by the will. In all such instances, and notoriously in all opium-eaters, the elevation is followed by gloom, depression, and loss of appetite. But the opium-eater usually takes care not to be seen at that time; and if he is compelled to appear in society, he alters the face of matters by renewing his dose.

From further inquiries it appears to me, that a considerable proportion of persons addicted to the use of opium (contrary to what would be expected, from its well-known influence on the intestines) require little laxative medicine, and some scarcely any at all. The subject of case 3 merely requires a little rhubarb on an average once a week, as he finds that exercise counteracts any constipating effect the opium may have. The subject of case 5 requires no laxatives. The charwoman, case 7, got no laxatives in the shop where she got her laudanum. Case 9, on the contrary, is an instance of the necessity of constant laxatives; and probably this is the more general rule, although it is obvious there must be many exceptions.

* We presume this case is that of Mr. De Quincy the "logician."