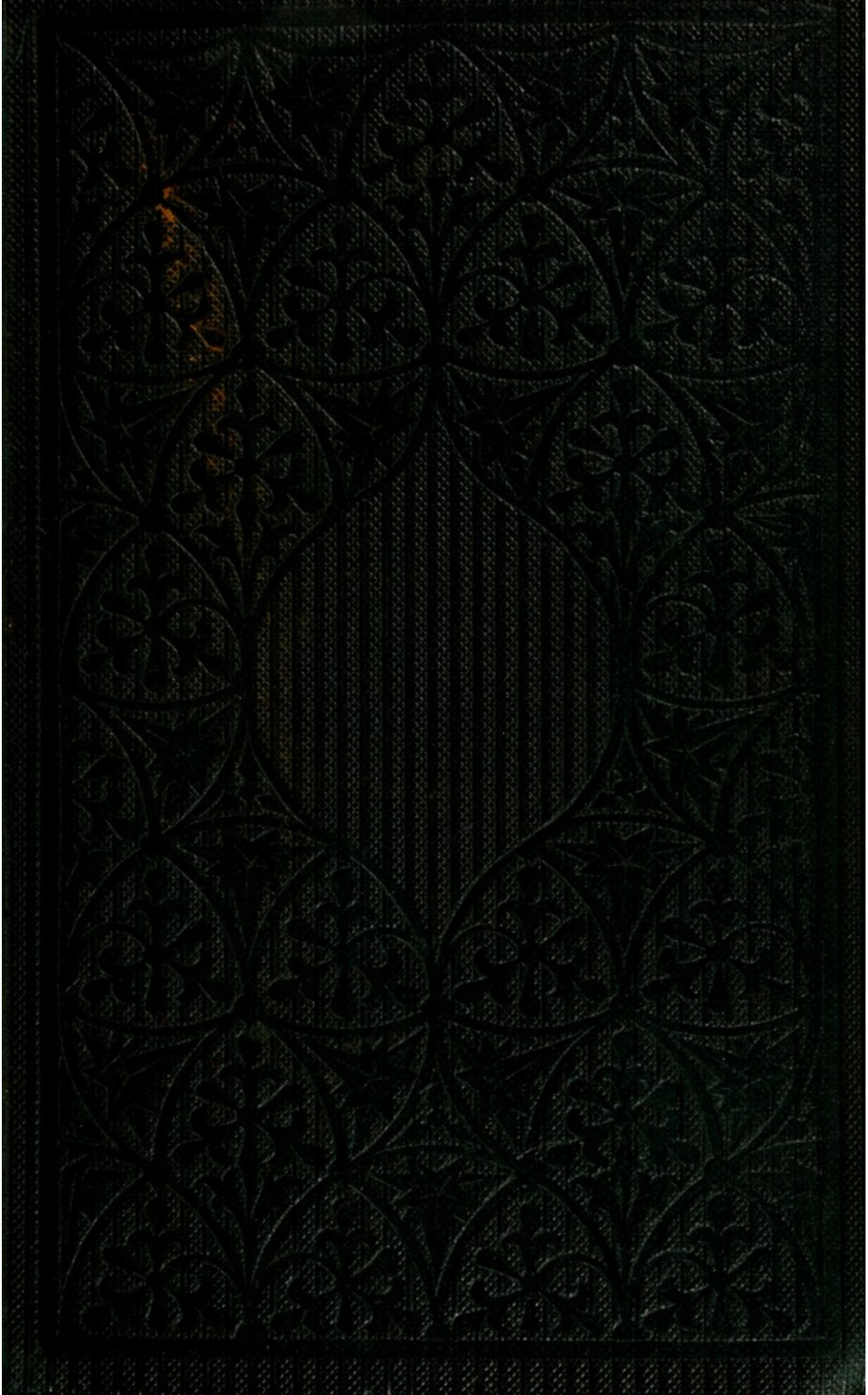
**The anatomy of drunkenness : with a sketch of the author's life / Robert Macnish.**



THE

# ANATOMY

OF

# DRUNKENNESS.

BY

ROBERT MACNISH, LL.D.,

AUTHOR OF "THE PHILOSOPHY OF SLEEP," AND MEMBER OF THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

WITH A

SKETCH OF THE AUTHOR'S LIFE.

New Edition.

GLASGOW AND LONDON: W. R. M'PHUN,

BOOKSELLER AND PUBLISHER TO HIS ROYAL HIGHNESS THE PRINCE CONSORT.

1859.

TO

DAVID M. MOIR, ESQ.,

SURGEON, MUSSELBURGH,

THIS WORK IS INSCRIBED,

WITH EVERY SENTIMENT OF ADMIRATION,

BY HIS SINCERE FRIEND,

ROBERT MACNISH.

# ADVERTISEMENT TO THE FIFTH EDITION.

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In preparing the present edition of the Anatomy of Drunkenness for the press, I have spared no pains to render the work as complete as possible. Some parts have been re-written, some new facts added, and several inaccuracies, which had crept into the former editions, rectified. Altogether I am in hopes that this impression will be considered an improvement upon its predecessors, and that no fact of any importance has been overlooked or treated more slightly than it deserves.

R. M.

20*th Sept.*, 1834.

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## APPENDIX.

# BIOGRAPHICAL SKETCH

OF

# ROBERT MACNISH, ESQ., LL.D.

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SINCE the last edition of *The Anatomy of Drunkenness* and *The Philosophy of Sleep* issued from the press, their gifted author died, in the very prime of life, and when his mental powers were in full and increasing vigour. Had he lived, however, it is not likely that these works would have undergone any material alteration at his hands; for he expended so much labour and care on each succeeding edition, that he considered them at last as perfect as he could make them. As Dr. Macnish enjoyed so large a share of popular favour, we hope that a brief sketch of his life, prefixed to the present edition, will not be unacceptable to the public.

Robert Macnish was born at Glasgow, on the 15th of February, 1802. His father, Mr. John Macnish, is an eminent surgeon in that city, where he has for many years enjoyed a highly respectable practice. Besides the subject of this memoir, he had four sons and four daughters, all of whom are still alive, with the exception of one daughter, who was accidentally drowned in the Clyde many years ago. While Robert, who was the eldest but one of the family, was still in his boyhood, he lost his mother, for whom he ever cherished an affectionate remembrance. She was daughter of a Captain Ker, and was very respectably connected.

After having been a short time in school at Glasgow, he was sent to Hamilton, where, although under the able

tuition of the Rev. Mr. Easton, he made, by his own account, but indifferent progress in the various branches of knowledge taught by that gentleman. While at school he gave but few indications of intellectual superiority. Many years afterwards, in a letter to Mr. Robert Cox, which was published anonymously in *The Phrenological Journal*, he gives some information on this subject. It was written in reference to a cast of his head, which he conveyed through a confidential friend to that gentleman, and another eminent phrenologist in Edinburgh; taking care, of course, that they should not know whose head it represented. In commenting on their analysis of his character—deduced from an examination of the cast—and which astonished himself and his friends by its accuracy, he gives the following description of his schoolboy career:—

"Mr. Simpson is very acute when he says that I would not top my class at Greek and Latin. I was uniformly *dolt*, and was a most wretched scholar. Indeed in every branch, except drawing, I was considered extremely stupid, whether in the Classics, Arithmetic, French, or Geography. He is also very accurate when he alleges that my mind would not be thoroughly developed till later at school. I never was good at anything until I attained the age of sixteen, when I became a tremendously hard working student in medicine and general literature; two subjects which I liked, and which I pursued with an intensity, which I may safely say was never surpassed. In fact I could do nothing till I became my own master. The trammels of school education were most insufferable, and I look back to the floggings, wranglings, fightings, and heart-burnings of my schoolboy days with the greatest loathing. Whenever the tension of scholastic bondage was removed, and I was left to do as I liked, I felt quite another being, and acquired the knowledge I was partial to with readiness and zeal. No boy at school was ever more flogged than I. My teachers I abhorred as insufferable tyrants; and when I became a little older was quite ungovernable, and constantly forming conspiracies against them. Flogging never did me any good, but rendered me much worse. Those only who treated me leniently could make anything of so rebellious a subject."

Although at this period he displayed but little aptitude for learning, he gave occasional evidences of that extraordinary humour, that keen perception of the ridiculous, which formed the most striking feature of his intellectual character. He treasured up to the last many reminiscences of ludicrous scenes enacted while he was at Mr. Easton's academy; thus proving, that although he neglected his classics, he was not a negligent or superficial observer of character. He had a school-fellow nicknamed Long Sam, or Long Jock, of whom he used to recount feats worthy of the Great Gargantua, in language which Rabelais himself might have envied.*

At the age of thirteen he left school, and shortly afterwards commenced the study of medicine. His father and grandfather were at that time partners in an extensive and respectable practice; and he thus enjoyed the advantage of their united experience and superintending care. He devoted himself with great earnestness and assiduity to his profession; but at the same time he did not neglect the study of general literature, to which he became deeply attached. When about seventeen years of age he ventured to send his first literary effort to a periodical then published in Glasgow, and conducted by a student of divinity or probationer, who is now, we believe, a preacher in the east of Scotland. His contribution was, to the great joy of the youthful aspirant after literary fame, gratefully accepted, and he was thus encouraged to cultivate his talent for composition with renewed ardour. He furnished poetical pieces as well as prose tales, and essays, some of them possessing merit of no mean order. He had, indeed, some difficulty in convincing the editor that they were the genuine productions of his own pen. As this periodical, however, like all other works of this description which have been started in Glasgow, soon died a natural death, and was speedily forgotten, notwithstanding the genius occasionally displayed in its pages by Macnish, he considered himself justified, many years afterwards, in rescuing these juvenile effusions from unmerited oblivion, and pro-

* We believe this promising youth lived long enough to be the founder of a system in medicine, much more summary in its operation than the therapeutic nostrums of the Homœopathists, and not less *certain* and *soothing* in its effects than the "*pratique sûre et satisfaisante*" of Dr. Sangrado.

curing their insertion in publications of higher pretensions and greater durability. Some of them, after their resuscitation, adorned the pages of *Blackwood*, and one or two of the *Annuals*.

At the age of eighteen he received the degree of *Magister Chirurgiæ*, and soon after proceeded to Caithness, where he entered upon his professional career as assistant to Dr. Henderson of Clyth. From the physical condition of that rugged, mountainous, and thinly peopled country, as well as from the extent of that gentleman's practice, his duties were necessarily very laborious, and engrossed almost all his time. Nevertheless, he kept up, in some measure, his acquaintance with literature; but his effusions did not yet find a less ephemeral channel of communication to the public than the pages of the *Inverness Courier*.

Although no man ever possessed a more intense love of the humorous, he was not the less subject to occasional fits of desponding gloom and taciturnity, and in his solitary rides through the barren and mountainous districts of that northern county where his lot was now cast, he had ample opportunities of indulging this peculiarity of disposition, which gave his mind a turn for the wild, the mysterious, and the supernatural, and which, in combination with his rich humour and original fancy, afterwards gave birth to those fantastical creations of his imagination which make the reader "join trembling with his mirth," and hold him spell-bound, as it were, by supernatural dread, at the same time that he is absolutely forced to laugh outright at the grotesque images presented to his mind. Although he was

"Fond of each gentle and each dreadful scene,"

his love for the latter predominated—

"In darkness and in storm he took delight."

He had an utter insensibility to danger, which led him, in pursuit of the wild and picturesque, to ascend the most giddy heights, and to attain situations which to others seemed perfectly inaccessible. This recklessness of danger, however, on one occasion, nearly cost him his life. One of his favourite resorts was Duncan's Bay Head, whose frowning cliffs rise perpendicularly to the height of

several hundred feet above the sea. Here he used to sit on the brow of a rock, with his legs hanging over, to enjoy the scene when the angry surges, tossed by the tempest, came lashing the base of the precipice which he had chosen for his perilous seat. Having once neglected to take off his spurs before sitting down, when he attempted to rise, they caught some slender twigs or grass, which grew on the face of the rock, and the next moment would have seen him disappear for ever in the boiling waves, had he not, by an extraordinary exertion of his uncommon muscular strength and activity seized a twisted root on the brow of the precipice, and raised himself to safety from his hazardous position.

While in Caithness he formed several friendships which lasted as long as he lived. With the Gordons of Swiney, and Lieut. Gunn, he was particularly intimate. At this period he was remarked for his sly humour, his shrewd observation of character, and his skill in drawing it out. The hospitable manners of the people of Caithness, gave him frequent opportunities of indulging this turn of mind. Here, also, he began to lay up materials for his *Anatomy of Drunkenness.* His health, meanwhile, began to give way under the fatiguing pressure of his professional duties, and after a residence of a year and a-half in Caithness, he returned to Glasgow. On his way back he visited the mountains of Glencoe, whose silent and dreary solitudes had an inexpressible charm to his imagination. His lonely rambles amid the romantic mist-clad scenery of the Great Glen, made an impression on his mind which was never effaced.

After recruiting his health in some measure, he went to Paris for the purpose of completing his medical studies. He attended the lectures of Broussais, and other eminent physiologists. He also heard a course of lectures by Gall, which, if they did not produce entire conviction of the truth of his doctrines, made him, at least, suspend hostilities until he should receive further evidence. Gall, on one occasion, while treating of the organ of comparison, pointed out Macnish to his fellow-students as an instance of its remarkable development. During his residence in Paris, in the gaieties of which he took but little part, he

formed an acquaintance with all the productions of Art which enrich the galleries of the French capital; and although not profoundly versed in the language of connoisseurship, he was acknowledged by artists to possess a discriminating taste. He had not much partiality for French literature. Indeed, his reading was almost entirely confined to medical works, and although he could get on pretty well in conversation, he never took the trouble of acquiring a critical knowledge of the language.

After a stay of about six months, he returned to his native city in the year 1825, when he received his diploma from the Faculty of Physicians and Surgeons. *The Anatomy of Drunkenness* was presented to this body as his inaugural essay. It was received with well-merited commendation; for, although it was indeed a mere anatomy compared with the goodly form it afterwards assumed, it bore evident marks of original genius in form as well as substance. He was induced by Mr. M'Phun afterwards to give it to the world. It has been so favourably received by the public, has passed in a short time through so many editions, and its merits have been so ably and eloquently scanned by the first critics of the day, that it would be needless for us now to discuss its claims to the wide-spread popularity it has attained.

About this time, he contributed several pieces in prose as well as verse, to various literary publications in Glasgow and Edinburgh, which are now long extinct and almost forgotten; and in the following year, 1826, he was enrolled among the choice spirits, who then shed a lustre on periodical literature, and raised it to a rank it had never before attained, by their contributions to *Blackwood's Magazine*. The reception his first tale, the *Metempsychosis*, met with from the public, was highly encouraging, and amply justified the high opinion of its merits entertained by the editor, who made it the leading article in the No. for May.

An eminent critic in one of the London Magazines, thus characterizes this justly celebrated story:—"It appears to us to be the best fiction of its kind in our language. The humour is exquisite—rich, easy, flowing, and unforced. There is nothing like antithesis, or point,

in the sentences; and so much the better, for such sparkles and tricks of wit, take away very much from the general effect of the whole piece; and to repeat the old maxim, the perfection of style is '*de ne pas en aovri.*' There is a fine faith too about the narrative, which, strange and wild as it is, from the earnest manner in which it is related, has a convincing air, and bears the character of a truth. Hoffman's *Diableries* have this merit in a high degree; and, perhaps, Macnish was a little indebted to him, for his fantastical notions, and his manner of treating his subject." We believe Macnish never read Hoffman till long after his *Metempsychosis* was written; and in our opinion, the similarity is more in the subjects themselves, than in their method of handling them, with exception, perhaps, of that air of truth and reality which pervades the wild and supernatural creations of both. Macnish far surpasses the German in humour, indeed, the latter possesses very little of that quality; but, on the other hand, he displays, perhaps, more skill in exciting supernatural terror, and sustaining it through his narratives, which are much more complicated than those of Macnish.

The following remarks of his amiable biographer, Dr. Moir, contain a fair estimate of the merits of this tale: "The conception is forcible, and the details are brought out with a judgment and discrimination, than which nothing can be better in a tale of *diablerie.* The probable, the possible, the commonplace, the impossible, and the *vraisemblable,* are everywhere dovetailed into each other, with a nicety which reconciles the now and then startled apprehension of the reader, into a willingness to float down the stream of illusion, and yet suppose it the current of life; and while we are convinced that such, logically thinking, never can be the aspect of human existence, yet the boundaries of truth and fiction blend themselves so pleasingly together, that we are spell-bound, and not at all anxious to discriminate where the one terminates and the other begins."

The subject of the *Metempsychosis* suggested the *nom de guerre* of modern Pythagorean, which he subscribed to that tale, and ever afterwards retained. He continued for several years a regular contributor to *Blackwood,* in

which successively appeared, "The Man with the Nose," "The Man with the Mouth," "The Barber of Gottingen," "Colonel O'Shaughnessy," "The Man Mountain," and a variety of others. He dashed off the Barber in one night after coming from an evening party: the idea occurred to him on his way home: he sat up all night, and did not stop till he brought it to a conclusion. He was immediately after attacked with a violent fever, which brought him to the very brink of the grave. All these stories bear the impress of original genius. They abound in passages of great power and poetic beauty. The deep interest they excite, depends so little on the plot or incidents of the story, which are generally very meagre, and so much on the manner in which these are presented, and on the exquisite felicity of humorous expression, alternately grave and sly, or extravagant and grotesque, that they may be read again and again, with as much pleasure as when first perused. The extraordinary vein of humour which runs through them, is different from that of any writer with whom we are acquainted. It is quite *sui generis*. If he has less delicacy and accuracy of touch than Washington Irving, whose "Stout Gentleman" bears some resemblance to Macnish's "Who-can-it-be?" the American's humour does not possess the breadth, boldness, and imaginative power, by which that of the Modern Pythagorean is distinguished. His style is also essentially different from that of Lamb, whose admired Essays, although they exhibit greater depth, and are enlivened by frequent touches of quaint and delicate wit—a quality to which the other has little or no pretensions—are decidedly inferior in vigour, richness, glow of fancy, and variety, to the most successful creations of Macnish. In grotesque exaggeration he was unrivalled; and the blending of this quality with the supernatural, in some of his happiest efforts, constitutes one of the most striking peculiarities of his style.

His connection with *Blackwood's Magazine* soon brought him into contact with Professor Wilson, Moir, De Quincey, Aird, Hogg, and other literary men, whose writings adorned the pages of that justly celebrated periodical. He occasionally joined their carousals at Ambrose's, and now and then figured in the "Noctes." He

became particularly intimate with Moir, towards whom he cherished to the last the most affectionate friendship.

That gentleman thus describes his first interview with him:—"My dear departed friend called on me with a note of introduction from our mutual friend, Mr. Blackwood. Even by this time I knew him, by report, as the author of the *Metempsychosis*, and other admired papers. I remember being much struck not only with the juvenility of his appearance, but with the delightful enthusiasm of his temperament, so totally apart from all worldly selfishness, and with the manly unaffected simplicity of his language, dress, and manner. We had a long, and most gratifying, colloquy together, on a thousand things, equally interesting to both; and being a couple of years his senior in literary matters, he had naturally many questions to ask, and I to answer, as I best could, regarding the current literature of the day. The merits of Professor Wilson, of Mr. Lockhart, of Maginn, of Mr. Galt, of Mr. Hogg, and of sundry others, were discussed with cordial sympathy. In most points our views coincided; we were, in fact, brothers in spirit, at first sight; and, taking him all in all, I found him so much a man after my own heart, so full of generous enthusiasm, so benignant in feeling, so playful in fancy, so correct in principle, so single in purpose, and so ardently bent on intellectual enterprise, that before we parted, the seeds of a friendship were sown, which, during its life-long continuance, never knew an hour's abatement."

Besides these contributions to *Blackwood*, and a few others to the *Annuals*, he did not for several years engage in any literary undertaking of greater magnitude than the enlargement of his *Anatomy of Drunkenness;* the second edition of which appeared in the beginning of the year 1828. Besides other very flattering notices, it was reviewed in *Blackwood's Magazine* by Professor Wilson, from whose admirable critique we shall extract one or two sentences:—"This little book," he says, "is evidently the production of a man of genius. The style is singularly neat, terse, and vigorous, far beyond the reach of an ordinary mind; the strain of sentiment is such, as does infinite honour to the author's heart; and the observation of human life, by which every page is characterized, speaks

a bold, active, and philosophical intellect. As a medical treatise it is excellent,—but its merit is as a moral dissertation on the nature, causes, and effects of one of the most deplorable and pernicious vices that can degrade and afflict the ongoings of social life." "It is perfectly free from all quackery and pretension; the writer does not belong to the solemn and stupid Gold-headed-cane School; he writes with much of the *vivida vis animi* of the late incomparable John Bell; but the character of his style, of his sentiments, and of his opinions, is his own,—and his little entertaining, interesting, and admirable treatise is stamped from beginning to end with the best of all qualities—originality—enough to hide a multitude of defects, but which is here found allied with uniform sound sense, sagacity, and discretion. To those who stand in need of advice and warning, this treatise is worth a hundred sermons."

Having thus got the second edition of his *Anatomy of Drunkenness*, which he dedicated to Mr. Moir, so successfully off his hands, he again relaxed somewhat from his literary pursuits, and devoted himself zealously to his profession. His grandfather had been now dead for some time, and Robert succeeded him as his father's partner. Notwithstanding his youth, his plain, unassuming, even reserved manners, and his utter want of pretension, by the aid of which so many medical men push themselves forward, he gradually gained the confidence of many of his father's patients, and was thus enabled to relieve him to a considerable extent of the harassing duties inseparable from their profession. Occasionally, indeed, when his father was indisposed, the whole weight of their practice fell upon Robert's shoulders. Either in consequence of unavoidable exposure to the weather in the course of his professional labours, or through carelessness about his health, with which he sometimes reproached himself, he suffered severely from repeated attacks of illness. Long before this he had a slight degree of deafness, which, probably, might have worn off, had his health remained unimpaired; but, during a violent inflammatory fever it increased considerably, and although a partial improvement might now and then be observed, his hearing con-

tinued very defective to the last. His eyes also suffered, but not permanently; and his hair assumed prematurely the hue of age. It is probable that his constitution never recovered completely from this attack, which was so serious as to confine him to his room for several months, during which time he was bled and blistered not less than twenty-six times. During his convalescence, he visited various parts of the coast, near the mouth of the Clyde, and derived great benefit from the invigorating sea breezes.

About this time, besides an occasional article in *Blackwood's Magazine*, he contributed several Tales and Poems to the *Forget-Me-Not* and *Friendship's Offering*. Of these we may particularize "The Vision of Robert the Bruce," and "The Covenanters," which are not written in his usual style. They are both, however, exceedingly good, and display versatility as well as power. "The Covenanters" was dramatized several years afterwards, and performed in London at the English Opera House, where it had a pretty long and successful run.

When he had in a great measure recovered his health and strength, he girded himself for a work of greater magnitude and research than any he had yet attempted. This was *The Philosophy of Sleep*, the materials of which he gathered and prepared in 1829, and, in the following year, it was published by Mr. M'Phun. Although the subject of it was much more difficult to handle, and was at the same time less attractive to general readers than that of his previous medical treatise, it was, nevertheless, received with equal favour, and, notwithstanding occasional blemishes of style, the result of too hasty composition, it added not a little to his reputation. His glowing fancy and eloquent diction lent a charm to subjects generally uninviting, and details which commonplace men render dull and tiresome, were invested with life and interest by the vivifying touch of his genius. This work, although on the whole less perfect than its predecessors, contained many passages of at least equal beauty and power. In the subsequent editions, at the same time that he added materially to its bulk, he pruned it of its redundancies, corrected its inaccuracies, and removed a certain degree of obscurity which hung over it,

by openly embracing the Phrenological theory, which he brought more into view than in the first edition, where it was timidly kept in the background. He was convinced that this system alone affords anything like a rational, consistent, and satisfactory explanation of the various phenomena of sleep, and he determined, therefore, boldly to avow his obligations to Phrenology, although by doing so he might encounter hostility from its opponents. The consequence was, that the work being now pervaded by a prominent leading principle, became much more clear and intelligible. This treatise he dedicated to his father, then President of the Faculty of Physicians and Surgeons at Glasgow.

Soon after the publication of *The Philosophy of Sleep*, he became a contributor to *Fraser's Magazine*, and continued to furnish it with articles, both serious and humorous, till within a short period of his death. One of his best stories in that periodical is entitled "Singular Passage in my Own Life." It is full of pathos and interest; and the events are so natural and probable, and narrated in so earnest and unostentatious a manner, that the reader is irresistibly impressed with a conviction of their truth. He also contributed a clever burlesque, which he called "The Philosophy of Burking." The idea is the same as De Quincey's in his "Murder considered as one of the Fine Arts;" but nothing can be more widely different than the style and manner in which they handle their subjects. The "Opium-Eater," in his very clever *jeu d'esprit*, makes an elaborate display of wit and classical learning.

To these qualities Macnish had not much pretension, and, in his "Philosophy of Burking" there is no attempt at either, but a rich vein of grave humour, admirably sustained, runs through it; and in humour he was as much superior to De Quincey as he was inferior to him in erudition. We are thus particular in pointing out the difference, as a touchy critic, whom Macnish good-humouredly quizzed in his burlesque tribute to the memory of Burke, charged him with servile imitation of De Quincey. As well might the "Opium-Eater" be charged with plagiarism, because Dean Swift wrote a "Modest Proposal for Eating Children." We believe it was the same wise-

acre who accused him of borrowing largely in his *Anatomy of Drunkenness* from Burton's *Anatomy of Melancholy*. There is not the most distant resemblance between the two works, except in the name, and, we daresay, that was all the critic knew of either,—"There is a river in Monmouth and a river in Macedon."

He also sent to *Fraser* a great variety of humorous Poems, many of them extremely good. He possessed extraordinary facility in burlesque versification, and could extemporize with great rapidity on any subject that gave scope to his peculiar powers.

Of his other fugitive pieces, we may here mention "The Victims of Susceptibility," "Terence O'Flaherty," "The Red Man," "Death and the Fisherman," and "The Psychological Curiosity." Some of these are admirable specimens of the art of story-telling, and they all show out of what slender materials he could frame a tale of grotesque mirth, or mysterious interest.*

Although extremely fond of travelling, he did not until the year 1834 obtain any lengthened respite from his professional avocations. Previous to this, with the exception of a short tour in the south of Scotland, where he paid a visit to his friend Mr. Robertson of Kelso, and afterwards passed through several of the northern counties of England; and a brief visit to his old friends in Caithness, whither he had journeyed on foot, attended only by a terrier dog, his excursions rarely extended beyond Musselburgh and Rothesay, the respective residences of his two most intimate and confidential friends, Mr. Moir and Mr. Leitch. It was, therefore, with unmingled delight that he set out for the continent in that year, his father, who then enjoyed, as he still does, robust and active health, having taken upon himself the whole weight of their practice till his return. After devoting a few days to the lions of the metropolis, under the guidance of Mr. Leitch, who had then removed to London, he proceeded with a

* The last mentioned of these stories does not appear among Dr. Macnish's collected Tales. It first appeared as a tale of Hogg's, in *The Scottish Annual*, and was afterwards inserted in *Fraser's Magazine* for June, 1839, where it was shown to be a hoax played off by Macnish on the Shepherd. In this tale, as well as in "Death and the Fisherman," his versatile and highly accomplished friend, Mr. Leitch, figures as the hero.

friend to Paris, and, after visiting various parts of France, returned to England through Belgium. He kept notes of his tour, which were shortly after published in *Fraser's Magazine*. Although he passed over a very beaten track, his remarks are nevertheless novel and interesting, and evince powers of observation worthy of a more extended and less hackneyed field for their display.

Early in the year 1834 he published his *Book of Aphorisms*. In the preceding year, a considerable number of them appeared in *Fraser's Magazine*, with an amusing running commentary by Sir Morgan O'Doherty. A *jeu d'esprit* of this nature is, perhaps, better suited to the pages of a magazine than adapted for separate publication. Many of them exhibit great depth, shrewdness, and humour, while others possess but slender claims to the dignified appellation of Aphorism.

In the following year he again visited France and Belgium, extended his tour to Switzerland and Germany, and returned home by Rotterdam.

We have already shown that his theory of Sleep is in a great measure based upon the doctrines of Gall; but, although he was, doubtless, a sincere convert, his mind was sometimes haunted by misgivings, particularly when objections were urged, which, from his limited knowledge of the subject, he did not feel himself capable of refuting. He resolved, therefore, to adopt the most effectual mode of putting Phrenology to the test. He got a cast of his own head taken, and prevailed on several of his friends, whose characters were strongly marked, and at the same time widely different from each other, to follow his example. The casts so taken were forwarded to the most eminent Phrenologists in Edinburgh, the lower part of the face having been previously cut off, and every other precaution having been taken, that nothing should be known of the parties, further than the data usually furnished, viz., the age, temperament, and education of the individuals. The result was, that, in every instance, the most striking peculiarities of each were distinctly pointed out; and sometimes the nicer shades of character, which escape the notice of ordinary observers, were hit off with astonishing accuracy. Every shadow of doubt being now

banished from his mind, he betook himself, with characteristic energy and enthusiasm, to the study of the science; and his success was commensurate to his zeal. He formed the acquaintance of Mr. George Combe, Dr. Andrew Combe, and their talented nephew Mr. Robert Cox, to all of whom he was more or less indebted for the clear insight he so soon obtained into those doctrines, to the exposition of which they have devoted themselves with so much ability, perseverance, and success. We have already adverted to the improvements in his *Philosophy of Sleep*, consequent on his increased knowledge and strengthened belief.

The followers of Gall were glad to welcome so powerful an auxiliary to their ranks, and he was not tardy in showing the value of his assistance. Early in the year 1836, he published an elementary treatise on Phrenology, in the form of question and answer. The whole edition, amounting to two thousand copies, was sold off in a very few months. This seems to us to be the most clear, comprehensive, and satisfactory manual that has yet appeared on the subject; it is admirably written throughout, and the objections which have been so often urged against Phrenology, are refuted with a force of reasoning, and a strength and precision of language, rarely to be met with.

About the same time, he brought out a new edition of Dr. Brigham's able little work on *Mental Cultivation*, to which he added a variety of excellent notes. In a few weeks a very large edition was quite exhausted, and he immediately set about preparing another, which appeared in the month of June.

In the spring of this year, also, he published the third edition of his *Philosophy of Sleep;* and soon after he received from Dr. Sprague of Albany, the unexpected intelligence that the degree of LL.D. had been conferred on him by Hamilton College, United States. In America, his works enjoy a high reputation, and have gone through repeated editions. We may also mention here, that the second edition of *The Philosophy of Sleep* had been translated into German, and published at Leipzig the preceding year.

Having brought this hurried and meagre sketch down

to the middle of the year 1836, we have but little further to record of Dr. Macnish's not very eventful life, which was now, alas! rapidly drawing to a close.

About the end of September, he left Glasgow in high spirits, with his friend Mr. Leitch, in order to bear that gentleman company as far as Leith, on his way to London. They called on Mr. Moir, who thus describes his last meeting with his friend :—

"On returning from my medical visits, on the evening of Friday, the 1st of October, I had the gratification to find that Mr. Macnish, accompanied by Mr. Leitch, had come to pay me a visit. Our mutual friend Mr. Ritchie, the sculptor, shortly after joined us. Never do I remember to have seen the Modern Phythagorean in greater apparent vigour, either of body or mind; and all the passing events that might be conceived to be interesting to any of us, were freely talked over. * * * After a deep dip into our seemingly inexhaustible budget of amusement, which had been amassing during a separation of several months, we parted for the night.

"By a happy chance, there was still a further 'meeting of the waters' of friendship, in the arrival of Mr. Thomas Aird, at breakfast, next morning; shortly after which, I received an unexpected summons to pay a professional visit in Peebles-shire. Our socialities were thus abruptly broken in upon—how little did I think at the time, never more in this world to be renewed, with one of the party, so justly dear to me! The chaise drove to the door—my friends, Macnish in the midst, shook hands with me. I was never to press his hand again."

Towards the end of the year, a new edition of his *Treatise on Phrenology* being called for, he set about the work of preparation, with his usual vigour and activity. He enlarged and improved it very much, devoting great pains, in particular, on the introduction, which is a beautiful specimen of composition, not less distinguished for terseness, perspicuity, and energy of style, than for close, clear, and forcible reasoning, and skilful arrangement of facts. He was engaged in getting this work through the press when arrested by his fatal illness.

Our limits have hitherto prevented us from quoting any

of his correspondence, but as the following letter possesses a melancholy interest from being the last trace of his pen that we can discover, we do not hesitate to give it insertion. It appears from it, that he was labouring under a severe cold, which ushered in the disease by which he was carried off. It is addressed to Mr. Leitch:—

"My Dear Sir,—James leaves Glasgow this day for London, and I send you a few lines with him.

"I hope you are now quite recovered. For the last week I have been on the sick list, with a shocking cold. Indeed the weather has been so wretched that it would require the constitution of a horse to escape its effects.

"Sydney Smith is lecturing here to a very crowded audience. He is a strong headed fellow, and his lectures, although not very fine in texture, contain a vast fund of shrewd sense and sagacity. With regard to yourself, he says that you would make a first-rate phrenologist, from the remarkable quickness you possess in detecting the nicest shades of character. He is immensely taken with your Old Highlandman, which, he says, throws every imitation he ever saw into the shade.

"Your brother was in our house a few days ago. He looks well. He has received a ticket for the Peel banquet. This will be a superb affair, the party consisting of 3,000 persons, the largest dinner, I suppose, ever given in this country. I really think there is a considerable reaction, and that this will be seen at the result of every new election.

"I send you copies of the papers reprinted from *The Phrenological Journal*. You might give a set to Dr. Arnott,* if you like. Mr. N., in one of the papers, is the late Sir Robert Liston, like yourself, a great linguist. In the other, Academicus, is Dr. Alison, Professor of Medicine in the University of Edinburgh; and Consiliarius, Dr. Neill, one of the members of the town council of that city.—I am, my dear Sir, yours truly,

"R. Macnish.

"Glasgow, 17*th Dec.*, 1836."

Mr. Macnish himself had bought a ticket for the Peel banquet, but when he found himself getting worse, he

* Mr. Macnish, who was extremely anxious that a man of Dr. Arnott's high talents, and scientific eminence, should turn his attention to the study of Phrenology, had endeavoured, shortly before the date of this letter, in a correspondence with their mutual friend, Mr. Leitch, to remove an objection started by the Doctor, in conversation with that gentleman, to what he called the over-minute division of the brain by the Phrenologists, who, in his opinion, sometimes split up one faculty into two, and thereby rendered their system unnecessarily complex.

disposed of it. Notwithstanding the severity of the weather he continued to walk about as usual till the 3d of January, when he was obliged to take his bed. Neither his friends nor himself felt any alarm about his illness, as it seemed to be merely an attack of influenza, unaccompanied by any appearances which might excite apprehension. In a few days, however, typhoid symptoms manifested themselves, and he gradually sunk into a state of extreme debility. He was comatose for several days before his death, which took place on the 16th of January, 1837.

Thus died—prematurely—for he had not yet completed his thirty-fifth year—one who, had he lived, was surely destined for high intellectual achievements. The works he has left us, show a steady increase in mental power, and that on which he was employed, when death so suddenly closed his career, gives evidence that his reasoning powers were not surpassed by the fancy and humour displayed in some of his other productions. These qualities present a combination which rarely falls to the lot of one individual.

The untimely death of one so highly gifted must be a source of deep regret to all who have derived amusement or instruction from his writings; but to those who shared his friendship, who experienced the warmth and kindliness of his disposition, who could appreciate the honest worth and manly simplicity of his nature, who could enjoy his buoyant humour, and the fantastic tricks of his playful fancy, his death is an irreparable loss, and by them his memory will be long and affectionately cherished.

In person he was about five feet eight inches high, and although rather slightly formed, he possessed extraordinary muscular strength and activity, which enabled him to excel in gymnastics and in pugilism, which, like Lord Byron, he for some time made his hobby. His head was uncommonly large, and not remarkably symmetrical. In walking, he held it back, and a little to one side. His forehead was high and expansive, his complexion dark, and his large expressive eye indicated shrewdness and benevolence. His temper was naturally violent, but he kept it under very strict control. His friendships were few, but they were ardent, steady, and lasting. In general society he

was silent and reserved, and carefully avoided saying or doing anything that should attract notice. With commonplace men he seldom rose above commonplace, and hence it was usual for such persons to express surprise that he should display so much talent in his writings. With his intimate and congenial friends, on the other hand, he threw off all reserve, and his remarks were, in general, striking and original, whatever might be the topic of conversation. We have already stated that he had sometimes fits of depression. It was not always sunshine with him, as Mr. Moir seems to think. His visits to that gentleman occurred only at pretty long intervals, and then he was naturally in high spirits at finding himself in the society of one whom he admired and esteemed for his genius and worth, and whose friendship he so highly prized. In general, however, he was all life, frolic, and playfulness, and then his imagination gave birth, with extraordinary profusion, to the most ludicrous and original fancies, which he clothed in language singularly felicitous. He was not adroit at repartee, but in humorous description he was without a rival. He had great command of countenance, and the mock gravity and earnestness with which he detailed and expatiated on any ludicrous occurrence, bringing in one laughable illustration after another, was, to those capable of appreciating talent of this kind, perfectly irresistible. When seated beside some lover of the marvellous, whose gullibility bore due proportion to his organ of wonder, it was infinitely amusing to contrast the grotesque exaggerations which he uttered, with the air of solemn conviction which accompanied them, and which completely prevented doubt from entering the mind. Not less diverting was it to see the amazement of his eager listener gradually deepening as the drafts on his credulity was increased

While recalling these traits in the character of our departed friend, his image rises vividly and distinctly before our mind; and we can scarcely reconcile ourselves to the idea, that one, whose every thought, word, and action, was so characterized by life and energy, should be cut off in the very flower of manhood, and now lie in cold obstruction.

His remains were interred in the burial-ground of St. Andrew's Episcopal Chapel, Glasgow.

Shortly after his death the second edition of his Phrenological work appeared.

A considerable number of Dr. Macnish's tales and other fugitive pieces were collected shortly after his death, by Dr. Moir, and published with a copious and very interesting biography.*

* *The Modern Pythagorean:* Wm. Blackwood & Sons, Edin., 2 vols., 1838.

# THE ANATOMY OF DRUNKENNESS.

## CHAPTER I.

### PRELIMINARY OBSERVATIONS.

DRUNKENNESS is not, like some other vices, peculiar to modern times. It is handed down to us from "hoary antiquity;" and, if the records of the antediluvian era were more complete, we should probably find that it was not unknown to the remotest ages of the world. The cases of Noah and Lot, recorded in the sacred writings, are the earliest of which tradition or history has left any record; and both occurred in the infancy of society. Indeed, wherever the grape flourished, inebriation prevailed. The formation of wine from this fruit was among the earliest discoveries of man, and the bad consequences thence resulting seem to have been almost coeval with the discovery. Those regions whose ungenial latitudes indisposed them to yield the vine, gave birth to other products which served as substitutes; and the inhabitants rivalled or surpassed those of the south in all kinds of Bacchanalian indulgence—the pleasures of drinking constituting one of the most fertile themes of their poetry, in the same manner as, in other climates, they give inspiration to the souls of Anacreon and Hafiz.

Drunkenness has varied greatly at different times, and among different nations. There can be no doubt that it prevails more in a rude than in a civilized state of society. This is so much the case, that as men get more refined, the vice will gradually be found to soften down, and assume a less revolting character. Nor can there be a doubt that it prevails to a much greater extent in northern

than in southern latitudes.* The nature of the climate renders this inevitable, and gives to the human frame its capabilities of withstanding liquor: hence, a quantity which scarcely ruffles the frozen current of a Norwegian's blood, would scatter madness and fever into the brain of the Hindoo. Even in Europe, the inhabitants of the south are far less adapted to sustain intoxicating agents than those of the north. Much of this depends upon the coldness of the climate, and much also upon the peculiar physical and moral frame to which that coldness gives rise. The natives of the south are a lively, versatile people; sanguine in their temperaments, and susceptible, to an extraordinary degree, of every impression. Their minds seem to inherit the brilliancy of their climate, and are rich with sparkling thoughts and beautiful imagery. The northern nations are the reverse of all this. With more intensity of purpose, with greater depth of reasoning powers, and superior solidity of judgment, they are in a great measure destitute of that sportive and creative brilliancy which hangs like a rainbow over the spirits of the south, and clothes them in a perpetual sunshine of delight. The one is chiefly led by the heart, the other by the head. The one possesses the beauty of a flower garden, the other the sternness of the rock, mixed with its severe and naked hardihood. Upon constitutions so differently organized, it cannot be expected that a given portion of stimulus will operate with equal power. The airy inflammable nature of the first is easily roused to excitation, and manifests feelings which the second does not experience till he has partaken much more largely of the stimulating cause. On this account, the one may be inebriated, and the other remain comparatively sober upon a similar quantity. In speaking of this subject, it is always to be remembered that a person is not to be considered a drunkard because he consumes a certain portion of liquor;

* In making this observation, I have only in view the countries north of the equator; for as we proceed to the south of that line, the vice increases precisely in the same manner as in the opposite direction. To use the words of Montesquieu: "Go from the equator to our pole, and you will find drunkenness increasing together with the degree of latitude. Go from the same equator to the opposite pole, and you will find drunkenness travelling south, as on this side it travels towards the north."

but because what he does consume produces certain effects upon his system. The Russian, therefore, may take six glasses a-day, and be as temperate as the Italian who takes four, or the Indian who takes two. But even when this is acceded to, the balance of sobriety will be found in favour of the south: the inhabitants there not only drink less, but are, *bona fide*, more seldom intoxicated than the others. Those who have contrasted London and Paris, may easily verify this fact; and those who have done the same to the cities of Moscow and Rome, can bear still stronger testimony. Who ever heard of an Englishman sipping *eau sucrée*, and treating his friends to a glass of lemonade? Yet such things are common in France; and, of all the practices of that country, they are those most thoroughly visited by the contemptuous malisons of John Bull.

It is a common belief that wine was the only inebriating liquor known to antiquity; but this is a mistake. Tacitus mentions the use of ale or beer as common among the Germans of his time. By the Egyptians, likewise, whose country was ill adapted to the cultivation of the grape, it was employed as a substitute for wine. Ale was common in the middle ages; and Mr. Park states that very good beer is made, by the usual process of brewing and malting, in the interior of Africa. The favourite drink of our Saxon ancestors was ale or mead. Those worshippers of Odin were so notoriously addicted to drunkenness, that it was regarded as honourable rather than otherwise; and the man who could withstand the greatest quantity was looked upon with admiration and respect; whence the drunken songs of the Scandinavian scalds: whence the glories of Valhalla, the fancied happiness of whose inhabitants consisted in quaffing draughts from the skulls of their enemies slain in battle. Even ardent spirit, which is generally supposed to be a modern discovery, existed from a very early period. It is said to have been first made by the Arabians in the middle ages, and in all likelihood may lay claim to a still remoter origin. Alcohol was known to the alchemists as early as the middle of the twelfth century, although the process of preparing it was by them, at that time, kept a profound

secret. The spirituous liquor called arrack has been manufactured in the island of Java, as well as in the continent of Hindostan, from time immemorial. Brandy appears to have been known to Galen, who recommends it for the cure of voracious appetite;* and its distillation was common in Sicily at the commencement of the fourteenth century. As to wine, it was so common in ancient times as to have a tutelar god appropriated to it: Bacchus and his companion Silenus are as household words in the mouths of all, and constituted most important features of the heathen mythology. We have all heard of the Falernian and Campanian wines, and of the wines of Cyprus and Shiraz. Indeed, there is reason to believe that the ancients were in no respect inferior to the moderns in the excellence of their vinous liquors, whatever they may have been in the variety. Wine was so common in the Eastern nations, that Mahomet, foreseeing the baleful effects of its propagation, forbade it to his followers, who, to compensate themselves, had recourse to opium. The Gothic or dark ages seem to have been those in which it was least common: in proof of this it may be mentioned, that in 1298 it was vended as a cordial by the English apothecaries. At the present day it is little drunk, except by the upper classes, in those countries which do not naturally furnish the grape. In those that do, it is so cheap as to come within the reach of even the lowest.†

In speaking of drunkenness, it is impossible not to be struck with the physical and moral degradation which it has spread over the world. Wherever intoxicating liquors become general, morality has been found on the decline. They seem to act like the simoon of the desert, and scatter

* Good's *Study of Medicine*, vol. i., p. 113; second edition.

† The quantity of wine raised in France alone is almost incredible. The vineyards in that country are said to occupy five millions of acres, or a twenty-sixth part of the whole territory. Paris alone consumes more than three times the quantity of wine consumed in the British Isles. It is true that much of the wine drank in the French capital is of a weak quality, being used as a substitute for small beer. But after every allowance is made, enough remains to show clearly, if other proofs were wanting, how much the use of wine here is restricted by our exorbitant duties. It would be well for the morals of this country if the people abandoned the use of ardent spirits, and were enabled to resort to such wines as the French are in the habit of drinking.

destruction and misery around their path. The ruin of Rome was owing to luxury, of which indulgence in wine was the principal ingredient. Hannibal's army fell less by the arms of Scipio than by the wines of Capua; and the inebriated hero of Macedon, after slaying his friend Clytus, and burning the palace of Persepolis, expired at last of a fit of intoxication, in his thirty-third year. A volume might be written in illustration of the evil effects of dissipation; but this is unnecessary to those who look carefully around them, and more especially to those who are conversant with the history of mankind. At the same time, when we speak of drunkenness as occurring in antiquity, it is proper to remark, that there were certain countries in which it was viewed in a much more dishonourable light than by any modern nation. The Nervii refused to drink wine, alleging that it made them cowardly and effeminate: these simple people had no idea of what by our seamen is called *Dutch courage:* they did not feel the necessity of elevating their native valour by an artificial excitement. The ancient Spartans held inebriety in such abhorrence, that, with a view to inspire the rising generation with a due contempt of the vice, it was customary to intoxicate the slaves and exhibit them publicly in this degraded condition. By the Indians, drunkenness is looked upon as a species of insanity; and in their language, the word *ramgam,* signifying a drunkard, signifies also a madman. Both the ancients and moderns could jest as well as moralize upon this subject. "There hangs a bottle of wine," was the derisive exclamation of the Roman soldiery, as they pointed to the body of the drunken Bonosus, who, in a fit of despair, suspended himself upon a tree. "If you wish to have a shoe of durable materials," exclaims the facetious Matthew Langsberg, "you should make the upper leather of the mouth of a hard drinker—for that never lets in water."

If we turn from antiquity to our own times, we shall find little cause to congratulate ourselves upon any improvement. The vice has certainly diminished among the higher orders of society, but there is every reason to fear that, of late, it has made fearful strides among the lower. Thirty or forty years ago, a landlord did not

conceive he had done justice to his guests unless he sent them from his table in a state of intoxication. This practice still prevails pretty generally in Ireland and in the Highlands of Scotland, but in other parts of the kingdom it is fast giving way: and it is to be hoped that the day is not far distant when greater temperance will extend to these jovial districts, and render their hospitality a little more consonant with prudence and moderation. The increase of drunkenness among the lower classes may be imputed to various causes, and chiefly to the late abandonment of part of the duty on rum and whisky. This was done with a double motive of benefiting agriculture and commerce, and of driving the "giant smuggler" from the field. The latter object it has in a great measure failed of effecting. The smuggler still plies his trade to a considerable extent, and brings his commodity to the market with nearly the same certainty of acquiring profit as ever. It would be well if the liquor vended to the poor possessed the qualities of that furnished by the contraband dealer; but, instead of this, it is usually a vile compound of everything spurious and pestilent, and seems expressly contrived for the purpose of preying upon the vitals of the unfortunate victims who partake of it. The extent to which adulteration has been carried in all kinds of liquor, is indeed such as to interest every class of society. Wine, for instance, is often impregnated with alum and sugar of lead, the latter dangerous ingredient being resorted to by innkeepers and others, to take away the sour taste so common in bad wines. Even the colour of these liquids is frequently artificial; and the deep rich complexion so greatly admired by persons not in the secrets of the trade, is often caused, or at least heightened, by fictitious additions, such as elder-berries, bilberries, red-woods, &c. Alum and sugar of lead are also common in spirituous liquors; and, in many cases, oil of vitriol, turpentine, and other materials equally abominable, are to be found in combination with them. That detestable liquor called British gin, is literally compounded of these ingredients; nor are malt liquors, with their multifarious narcotic additions, less thoroughly sophisticated or less detrimental to the health. From these circumstances,

two conclusions must naturally be drawn, viz., that inebriating agents often contain elements of disease foreign to themselves: and that all persons purchasing them should endeavour to ascertain the state of their purity, and employ no dealer whose honour and honesty are not known to be unimpeachable. Liquors, even in their purest state, are too often injurious to the constitution without the admixture of poisons.*

The varieties of wine are so numerous as almost to defy calculation. Mr. Brande in his table† gives a list of no less than forty-four different kinds; and there are others which he has not enumerated. Ardent spirits are fewer in number, and may be mostly comprised under the heads of rum, gin, brandy, and whisky. The first is the prevailing drink over the West Indies, North America, and such cities of Great Britain as are intimately connected with these regions by commerce. The second is extensively used in Holland and Switzerland, the countries which principally furnish it, and has found its way pretty generally over the whole of Europe. The third is chiefly produced in Charente and Languedoc, and is the spirit most commonly found in the south. The fourth is confined in a great measure to Ireland and Scotland, in which latter country the best has always been made. Of malt liquors we have many varieties. Britain, especially England, is the country which furnishes them in greatest perfection. They are the natural drinks of Englishmen—the *vinum Anglicorum*, as foreigners have often remarked. Every town of any consequence in the empire has its brewery; and in almost every one is there some difference in the quality of the liquor. Brown stout, London and Scotch porters, Burton, Dorchester, Edinburgh, and Alloa ales, are only a few of the endless varieties of these widely circulated fluids.

Besides wines, ardent spirits, and malt liquors, there are many other agents possessing inebriating properties. Among others, the *Peganum Harmala* or Syrian rue, so often used by the Sultan Solyman; the *Hibiscus Saldarissa*,

* See Accum's *Treatise on the Adulteration of Food*; Child *On Brewing Porter*; and Shannon *On Brewing and Distillation.*

† See Appendix.

which furnishes the Indian bangue, and from which the *Nepenthes* of the ancients is supposed to have been made; the *Balsac* or Turkish bangue, found on the shores of the Levant; the *Penang*, or Indian betle; the *Hyoscyamus Niger;* and the *Atropa Belladonna.* In addition to these, and many more, there are opium, tobacco, *Cocculus Indicus*, and the innumerable tribes of liqueurs and ethers, together with other agents of a less potent nature, such as clary, darnel, and saffron. The variety of agents capable of exciting drunkenness is indeed surprising, and in proportion to their number seems the prevalence of that fatal vice to which an improper use of them gives rise.

## CHAPTER II.

### CAUSES OF DRUNKENNESS.

THE causes of drunkenness are so obvious, that few authors have thought it necessary to point them out: we shall merely say a few words upon the subject. There are some persons who will never be drunkards, and others who will be so in spite of all that can be done to prevent them. Some are drunkards by choice, and others by necessity. The former have an innate and constitutional fondness for liquor, and drink *con amore*. Such men are usually of a sanguineous temperament, of coarse, unintellectual minds, and of low animal propensities. They have, in general, a certain rigidity of fibre, and a flow of animal spirits which other people are without. They delight in the roar and riot of drinking clubs; and with them, in particular, all the miseries of life may be referred to the bottle.

The drunkard by necessity was never meant by nature to be dissipated. He is perhaps a person of amiable dispositions, whom misfortune has overtaken, and who, instead of bearing up manfully against it, endeavours to drown his sorrows in liquor. It is an excess of sensibility, a partial mental weakness, an absolute misery of the heart, which drives him on. Drunkenness with him is a consequence of misfortune: it is a solitary dissipation preying upon him in silence. Such a man frequently dies broken-hearted, even before his excesses have had time to destroy him by their own unassisted agency.

Some become drunkards from excess of indulgence in youth. There are parents who have a common custom of treating their children to wine, punch, and other intoxicating liquors. This, in reality, is regularly bringing them up in an apprenticeship to drunkenness. Others are taught the vice by frequenting drinking clubs and masonic lodges. These are the genuine academies of

tippling. Two-thirds of the drunkards we meet with have been there initiated in that love of intemperance and boisterous irregularity which distinguish their future lives. Men who are good singers are very apt to become drunkards, and, in truth, most of them are so, more or less, especially if they have naturally much joviality or warmth of temperament. A fine voice to such men is a fatal accomplishment.

Ebriety prevails to an alarming degree among the lower orders of society. It exists more in towns than in the country, and more among mechanics than husbandmen. Most of the misery to be observed among the working classes springs from this source. No persons are more addicted to the habit, and all its attendant vices, than the pampered servants of the great. Innkeepers, musicians, actors, and men who lead a rambling and eccentric life, are exposed to a similar hazard. Husbands sometimes teach their wives to be drunkards by indulging them in toddy, and such fluids, every time they themselves sit down to their libations.

Women frequently acquire the vice by drinking porter and ale while nursing. These stimulants are usually recommended to them from well meant but mistaken motives, by their female attendants. Many fine young women are ruined by this pernicious practice. Their persons become gross, their milk unhealthy, and a foundation is too often laid for future indulgence in liquor.

The frequent use of cordials, such as noyau, shrub, kirsch-wasser, curaçoa, and anissette, sometimes leads to the practice. The active principle of these liqueurs is neither more nor less than ardent spirits.*

Among other causes may be mentioned the excessive use of spirituous tinctures for the cure of hypochondria and indigestion. Persons who use strong tea, especially green, run the same risk. The latter species is singularly hurtful to the constitution, producing hysteria, heartburn, and general debility of the chylopoetic viscera. Some of these bad effects are relieved for a time by the use of

* Liqueurs often contain narcotic principles; therefore their use is doubly improper.

spirits; and what was at first employed as a medicine, soon becomes an essential requisite.

Certain occupations have a tendency to induce drunkenness. Innkeepers, recruiting sergeants, pugilists, &c., are all exposed in a great degree to temptation in this respect; and intemperance is a vice which may be very often justly charged against them. Commercial travellers, also, taken as a body, are open to the accusation of indulging too freely in the bottle, although I am not aware that they carry it to such excess as to entitle many of them to be ranked as drunkards. "Well fed, riding from town to town, and walking to the houses of the several tradesmen, they have an employment not only more agreeable, but more conducive to health, than almost any other dependent on traffic. But they destroy their constitutions by intemperance; not generally by drunkenness, but by taking more liquor than nature requires. Dining at the traveller's table, each drinks his pint or bottle of wine; he then takes negus or spirits with several of his customers; and at night he must have a glass or two of brandy and water. Few commercial travellers bear the employ for thirty years, the majority not twenty."*

Some writers allege that unmarried women, especially if advanced in life, are more given to liquor than those who are married. This point I am unable from my own observation to decide. Women who indulge in this way are *solitary* dram-drinkers, and so would men be, had not the arbitrary opinions of the world invested the practice in them with much less moral turpitude than in the opposite sex. Of the two sexes, there can be no doubt that men are much the more addicted to all sorts of intemperance.

Drunkenness appears to be in some measure hereditary. We frequently see it descending from parents to their children. This may undoubtedly often arise from bad example and imitation, but there can be little question that, in many instances at least, it exists as a family predisposition.

Men of genius are often unfortunately addicted to drink-

* Thackrah *On the Effects of the Principal Arts, Trades, and Professions*, p. 83.

ing. Nature, as she has gifted them with greater powers than their fellows, seems also to have mingled with their cup of life more bitterness. There is a melancholy which is apt to come like a cloud over the imaginations of such characters. Their minds possess a susceptibility and a delicacy of structure which unfit them for the gross atmosphere of human nature; wherefore, high talent has ever been distinguished for sadness and gloom.

Genius lives in a world of its own; it is the essence of a superior nature—the loftier imaginings of the mind, clothed with a more spiritual and refined verdure. Few men endowed with such faculties enjoy the ordinary happiness of humanity. The stream of their lives runs harsh and broken. Melancholy thoughts sweep perpetually across their souls; and if these be heightened by misfortune, they are plunged into the deepest misery.

To relieve these feelings, many plans have been adopted. Dr. Johnson fled for years to wine under his habitual gloom. He found that the pangs were removed while its immediate influence lasted; but he also found that they returned with double force when that influence passed away. He saw the dangerous precipice on which he stood, and, by an unusual effort of volition, gave it over. In its stead he substituted tea; and to this milder stimulus had recourse in his melancholy. Voltaire and Fontenelle, for the same purpose, used coffee. The excitement of Newton and Hobbes were the fumes of tobacco, while Demosthenes and Haller were sufficiently stimulated by drinking freely of cold water. Such are the differences of constitution.

"As good be melancholy still, as drunken beasts and beggars." So says old Burton, in his *Anatomy of Melancholy*, and there are few who will not subscribe to his creed. The same author quaintly, but justly remarks—"If a drunken man gets a child, it will never, likely, have a good brain." Dr. Darwin, a great authority on all subjects connected with life, says, that he never knew a glutton affected with the gout, who was not at the same time addicted to liquor. He also observes—"It is remarkable that all the diseases from drinking spirituous or fermented liquors are liable to become hereditary,

even to the third generation, gradually increasing if the cause be continued, till the family becomes extinct."*

We need not endeavour to trace further the remote causes of drunkenness. A drunkard is rarely able to recall the particular circumstances which made him so. The vice creeps upon him insensibly, and he is involved in its fetters before he is aware. It is enough that we know the proximate cause, and also the certain consequences. One thing is certain, that the man who addicts himself to intemperance, can never be said to be sound in mind or body. The former is a state of partial insanity, while the effects of the liquor remain; and the latter is always more or less diseased in its actions.

* *Botanic Garden.*

## CHAPTER III.

### PHENOMENA OF DRUNKENNESS.

THE consequences of drunkenness are dreadful, but the pleasures of getting drunk are certainly ecstatic. While the illusion lasts, happiness is complete; care and melancholy are thrown to the wind: and Elysium, with all its glories, descends upon the dazzled imagination of the drinker.

Some authors have spoken of the pleasure of being completely drunk; this, however, is not the most exquisite period. The time is when a person is neither "drunken nor sober, but neighbour to both," as Bishop Andrews says in his *Ex—ale—tation of Ale.* The moment is when the etherial emanations begin to float around the brain—when the soul is commencing to expand its wings and rise from earth—when the tongue feels itself somewhat loosened in the mouth, and breaks the previous taciturnity, if any such existed.

What are the sensations of incipient drunkenness? First, an unusual serenity prevails over the mind, and the soul of the votary is filled with placid satisfaction. By degrees he is sensible of a soft and not unmusical humming in his ears at every pause of the conversation. He seems to himself to wear his head lighter than usual upon his shoulders. Then a species of obscurity, thinner than the finest mist, passes before his eyes, and makes him see objects rather indistinctly. The lights begin to dance and appear double. A gaiety and warmth are felt at the same time about the heart. The imagination is expanded and filled with a thousand delightful images. He becomes loquacious, and pours forth, in enthusiastic language, the thoughts which are born as it were within him.

Now comes a spirit of universal contentment with himself and all the world. He thinks no more of misery: it is dissolved in the bliss of the moment. This is the acmè

of the fit—the ecstasy is now perfect. As yet the sensorium is in tolerable order: it is only shaken, but the capability of thinking with accuracy still remains. About this time the drunkard pours out all the secrets of his soul. His qualities, good or bad, come forth without reserve; and now, if at any time, the human heart may be seen into. In a short period he is seized with a most inordinate propensity to talk nonsense, though he is perfectly conscious of doing so. He also commits many foolish things, knowing them to be foolish. The power of volition, that faculty which keeps the will subordinate to the judgment, seems totally weakened. The most delightful time seems to be that immediately before becoming very talkative. When this takes place, a man turns ridiculous, and his mirth, though more boisterous, is not so exquisite. At first the intoxication partakes of sentiment, but latterly it becomes merely animal.

After this the scene thickens. The drunkard's imagination gets disordered with the most grotesque conceptions. Instead of moderating his drink, he pours it down more rapidly than ever: glass follows glass with reckless energy. His head becomes perfectly giddy. The candles burn blue, or green, or yellow; and where there are perhaps only three on the table, he sees a dozen. According to his temperament, he is amorous, or musical, or quarrelsome. Many possess a most extraordinary wit; and a great flow of spirits is a general attendant. In the latter stages the speech is thick, and the use of the tongue in a great measure lost. His mouth is half open and idiotic in the expression; while his eyes are glazed, wavering, and watery. He is apt to fancy that he has offended some one of the company, and is ridiculously profuse with his apologies. Frequently he mistakes one person for another, and imagines that some of those before him are individuals who are, in reality, absent or even dead. The muscular powers are, all along, much affected: this indeed happens before any great change takes place in the mind, and goes on progressively increasing. He can no longer walk with steadiness, but totters from side to side. The limbs become powerless, and inadequate to sustain his weight. He is, however, not always sensible of any deficiency in

this respect: and while exciting mirth by his eccentric motions, imagines that he walks with the most perfect steadiness. In attempting to run he conceives that he passes over the ground with astonishing rapidity. To his distorted eyes all men, and even inanimate nature itself, seem to be drunken, while he alone is sober. Houses reel from side to side as if they had lost their balance; trees and steeples nod like tipsy Bacchanals; and the very earth seems to slip from under his feet, and leave him walking and floundering upon the air. The last stage of drunkenness is total insensibility. The man tumbles perhaps beneath the table, and is carried away in a state of stupor to his couch. In this condition he is said to be *dead drunk*.

When the drunkard is put to bed, let us suppose that his faculties are not totally absorbed in apoplectic stupor; let us suppose that he still possesses consciousness and feeling, though these are both disordered; then begins "the tug of war;" then comes the misery which is doomed to succeed his previous raptures. No sooner is his head laid upon the pillow than it is seized with the strongest throbbing. His heart beats quick and hard against the ribs. A noise like the distant fall of a cascade, or rushing of a river, is heard in his ears: sough—sough—sough, goes the sound. His senses now become more drowned and stupified. A dim recollection of his carousals, like a shadowy and indistinct dream, passes before the mind. He still hears, as in echo, the cries and laughter of his companions. Wild fantastic fancies accumulate thickly around the brain. His giddiness is greater than ever; and he feels as if in a ship tossed upon a heaving sea. At last he drops insensibly into a profound slumber.

In the morning he awakes in a high fever. The whole body is parched; the palms of the hands, in particular, are like leather. His head is often violently painful. He feels excessive thirst; while his tongue is white, dry, and stiff. The whole inside of the mouth is likewise hot and constricted, and the throat often sore. Then look at his eyes, how sickly, dull, and languid! The fire which first lighted them up the evening before is all gone. A stupor like that of the last stage of drunkenness still clings about

them, and they are disagreeably affected by the light. The complexion sustains as great a change: it is no longer flushed with the gaiety and excitation, but pale and way-worn, indicating a profound mental and bodily exhaustion. There is probably sickness, and the appetite is totally gone. Even yet the delirium of intoxication has not left him, for his head still rings, his heart still throbs violently; and if he attempt getting up, he stumbles with giddiness. The mind also is sadly depressed, and the proceedings of the previous night are painfully remembered. He is sorry for his conduct, promises solemnly never again so to commit himself, and calls impatiently for something to quench his thirst. Such are the usual phenomena of a fit of drunkenness.

In the beginning of intoxication we are inclined to sleep, especially if we indulge alone. In companies, the noise and opportunity of conversing prevent this; and when a certain quantity has been drunk the drowsy tendency wears away. A person who wishes to stand out well should never talk much. This increases the effect of the liquor, and hurries on intoxication. Hence every experienced drunkard holds it to be a piece of prudence to keep his tongue under restraint.

The giddiness of intoxication is always greater in darkness than in the light. I know of no rational way in which this can be explained; but, certain it is, the drunkard never so well knows his true condition as when alone and in darkness. Possibly the noise and light distracted the mind, and made the bodily sensations be, for the time, in some measure unfelt.

There are some persons who get sick from drinking even a small quantity; and this sickness is, upon the whole, a favourable circumstance, as it proves an effectual curb upon them, however much they may be disposed to intemperance. In such cases it will generally be found that the sickness takes place as soon as vertigo makes its appearance: it seems, in reality, to be produced by this sensation. This, however, is a rare circumstance, for though vertigo from ordinary causes has a strong tendency to produce sickness, that arising from drunkenness has seldom this effect. The nausea and sickness sometimes occurring in intoxication

proceed almost always from the surcharged and disordered state of the stomach, and very seldom from the accompanying giddiness.

Intoxication, before it proceeds too far, has a powerful tendency to increase the appetite. Perhaps it would be more correct to say that inebriating liquors, by stimulating the stomach, have this power. We often see gluttony and drunkenness combined together at the same time. This continues till the last stage, when, from overloading and excess of irritation, the stomach expels its contents by vomiting.

All along the action of the kidneys is much increased, especially at the commencement of intoxication. When a large quantity of intoxicating fluid has been suddenly taken into the stomach, the usual preliminary symptoms of drunkenness do not appear. An instantaneous stupefaction ensues; and the person is at once knocked down. This cannot be imputed to distension of the cerebral vessels, but to a sudden operation on the nervous branches of the stomach. The brain is thrown into a state of collapse, and many of its functions suspended. In such cases the face is not at first tumid and ruddy, but pale and contracted. The pulse is likewise feeble, and the body cold and powerless. When reaction takes place, these symptoms wear off, and those of sanguineous apoplexy succeed; such as turgid countenance, full but slow pulse, and strong stertorious breathing. The vessels of the brain have now become filled, and there is a strong determination to that organ.

Persons of tender or compassionate minds are particularly subject, during intoxication, to be affected to tears at the sight of any distressing object, or even on hearing an affecting tale. Drunkenness in such characters may be said to melt the heart, and open up the fountains of sorrow. Their sympathy is often ridiculous, and aroused by the most trifling causes. Those who have a living imagination, combined with this tenderness of heart, sometimes conceive fictitious causes of distress, and weep bitterly at the woe of their own creating.

There are some persons in whom drunkenness calls forth a spirit of piety, or rather of religious hypocrisy, which is both ludicrous and disgusting. They become sentimental

over their cups; and, while in a state of debasement most offensive to God and man, they will weep at the wickedness of the human heart, entreat you to eschew swearing and profane company, and have a greater regard for the welfare of your immortal soul. These sanctimonious drunkards seem to consider ebriety as the most venial of offences.

During a paroxysm of drunkenness the body is much less sensible to external stimuli than at other times: it is particularly capable of resisting cold. Seamen when absent on shore are prone to get intoxicated; and they will frequently lie for hours on the highway, even in the depth of winter, without any bad consequences. A drunk man seldom shivers from cold. His frame seems steeled against it, and he holds out with an apathy which is astonishing. The body is, in like manner, insensible to injuries, such as cuts, bruises, &c. He frequently receives in fighting the most severe blows, without seemingly feeling them, and without, in fact, being aware of the matter till sobered. Persons in intoxication have been known to chop off their fingers, and otherwise disfigure themselves, laughing all the while at the action. But when the paroxysm is off, and the frame weakened, things are changed. External agents are then withstood with little vigour, with even less than in the natural state of the body. The person shivers on the slightest chill, and is more than usually subject to fevers and all sorts of contagion.

External stimuli frequently break the fit. Men have been instantly sobered by having a bucket of cold water thrown upon them, or by falling into a stream. Strong emotions of the mind produce the same effect, such as the sense of danger, or a piece of good or bad news, suddenly communicated.

There are particular situations and circumstances in which a man can stand liquor better than in others. In the close atmosphere of a large town, he is soon overpowered; and it is here that the genuine drunkard is to be met with in the greatest perfection. In the country, especially in a mountainous district, or on the sea-shore, where the air is cold and piercing, a great quantity may be taken with impunity. The Highlanders drink largely of

ardent spirits, and they are often intoxicated, yet among them there are comparatively few who can be called habitual drunkards. A keen air seems to deaden its effects, and it soon evaporates from their constitutions. Sailors and soldiers who are hard wrought also consume enormous quantities without injury: porters and all sorts of labourers do the same. With these men exercise is a corrective; but in towns, where no counteracting agency is employed, it acts with irresistible power upon the frame, and soon proves destructive.

A great quantity of liquors may also be taken without inebriating, in certain diseases, such as spasm, tetanus, gangrene, and retrocedent gout.

Certain circumstances of constitution make one person naturally more apt to get intoxicated than another. "Mr. Pitt," says a modern writer, "would retire in the midst of a warm debate, and enliven his faculties with a couple of bottles of port. Pitt's constitution enabled him to do this with impunity. He was afflicted with what is called a coldness of stomach; and the quantity of wine that would have closed the oratory of so professed a Bacchanalian as Sheridan, scarcely excited the son of Chatham."*

All kinds of intoxicating agents act much more rapidly and powerfully upon an empty than upon a full stomach. In like manner, when the stomach is disordered, and subject to weakness, heartburn, or disease of any kind, ebriety is more rapidly produced than when this organ is sound and healthy.

The stomach may get accustomed to a strong stimulus, and resist it powerfully, while it yields to one much weaker. I have known people who could drink eight or ten glasses of raw spirits at a sitting, without feeling them much, become perfectly intoxicated by half the quantity made into toddy. In like manner, he who is in the constant habit of using one spirit—rum, for instance—cannot, for the most part, indulge to an equal extent in another, without experiencing more severe effects than if he had partaken of his usual beverage. This hap-

* Reid's *Memoir of the Right Hon. George Canning.*

pens even when the strength of the two liquors is the same.

The mind exercises a considerable effect upon drunkenness, and may often control it powerfully. When in the company of a superior whom we respect, or of a female in whose presence it would be indelicate to get intoxicated, a much greater portion of liquor may be withstood than in societies where no such restraints operate.

Drunkenness has sometimes a curious effect upon the memory. Actions committed during intoxication may be forgotten on a recovery from this state, and remembered distinctly when the person becomes again intoxicated. Drunkenness has thus an analogy to dreaming, in which state circumstances are occasionally brought to mind which had entirely been forgotten. The same thing may also occur in fevers, wherein even languages with which we were familiar in childhood or youth, but had forgotten, are renewed upon the memory, and pass away from it again when the disease which recalled them is removed.

With most people intoxication is a gradual process, and increases progressively as they pour down the liquor; but there are some individuals in whom it takes place suddenly, and without any previous indication of its approach. It is not uncommon to see such persons sit for hours at the bottle without experiencing anything beyond a moderate elevation of spirits, yet assume all at once the outrage and boisterous irregularity of the most decided drunkenness.

Some drunkards retain their senses after the physical powers are quite exhausted. Others, even when the mind is wrought to a pitch leading to the most absurd actions, preserve a degree of cunning and observation which enables them to elude the tricks which their companions are preparing to play upon them. In such cases, they display great address, and take the first opportunity of retaliating; or if such does not occur, of slipping out of the room unobserved, and getting away. Some, while the whole mind seems locked up in the stupor of forgetfulness, hear all that is going on. No one should ever presume on the intoxicated state of another to talk of him detractingly in

his presence. While apparently deprived of all sensation, he may be an active listener; and whatever is said, though unheeded at the moment, is not forgotten afterwards, but treasured carefully up in the memory. Much discord and ill-will frequently arise from such imprudence.

There are persons who are exceedingly profuse, and fond of giving away their money, watches, rings, &c., to the company. This peculiarity will never, I believe, be found in a miser: avarice is a passion strong under every circumstance. Drinking does not loosen the grasp of the covetous man, or open his heart: he is for ever the same.

The generality of people are apt to talk of their private affairs when intoxicated. They then reveal the most deeply-hidden secrets to their companions. Others have their minds so happily constituted, that nothing escapes them. They are, even in their most unguarded moments, secret and close as the grave.

The natural disposition may be better discovered in drunkenness than at any other time. In modern society, life is all a disguise. Almost every man walks in masquerade, and his most intimate friend very often does not know his real character. Many wear smiles constantly on their cheeks, whose hearts are unprincipled and treacherous. Many with violent tempers have all the external calm and softness of charity itself. Some speak always with sympathy, who, at soul are full of gall and bitterness. Intoxication tears off the veil, and sets each in his true light, whatever that may be. The combative man will quarrel, the amorous will love, the detractive will abuse his neighbour. I have known exceptions, but they are few in number. At one time they seemed more numerous, but closer observation convinced me that most of those whom I thought drunkenness had libelled, inherited, at bottom, the genuine dispositions which it brought forth. The exceptions, however, which now and then occur are sufficiently striking, and point out the injustice of always judging of a man's real disposition from his drunken moments. To use the words of Addison, "Not only does this vice betray the hidden faults of a man, and show them in the most odious colours, but often occasions faults

to which he is not naturally subject. Wine throws a man out of himself, and infuses qualities into the mind which she is a stranger to in her sober moments." The well-known maxim, "*in vino veritas*," therefore, though very generally true, is to be received with some restrictions, although these, I am satisfied, are not by any means so numerous as many authors would have us to believe.

## CHAPTER IV.

### DRUNKENNESS MODIFIED BY TEMPERAMENT.

UNDER the last head I have described the usual phenomena of intoxication: but it is neceesary to remark, that these are apt to be modified by the physical and moral frame of the drinker. Great diversity of opinion exists with regard to the doctrine of the temperaments; some authors affirming, and others denying, their existence. Into this controversy it is needless to enter. All I contend for is, that the bodily and mental constitution of every man is not alike, and that on these peculiarities depend certain differences during a paroxysm of drunkenness.

I. *Sanguineous Drunkard.*—The sanguine temperament seems to feel most intensely the excitement of the bottle. Persons of this stamp have usually a ruddy complexion, thick neck, small head, and strong muscular fibre. Their intellect is in general *mediocre,* for great bodily strength and corresponding mental powers are rarely united together. In such people, the animal propensities prevail over the moral and intellectual ones. They are prone to combativeness and sensuality, and are either very good natured or extremely quarrelsome. All their passions are keen: like the Irish women, they will fight for their friends or with them, as occasion requires. They are talkative from the beginning, and, during confirmed intoxication, perfectly obstreperous. It is men of this class who are the heroes of all drunken companies, the patrons of masonic lodges, the presidents and getters-up of jovial meetings. With them, eating and drinking are the grand ends of human life. Look at their eyes how they sparkle at the sight of wine, and how their lips smack and their teeth water in the neighbourhood of a good dinner: they would scent out a banquet in Siberia. When intoxicated, their passions are highly excited: the energies of a hundred minds then

seem concentrated into one focus. Their mirth, their anger, their love, their folly, are all equally intense and unquenchable. Such men cannot conceal their feelings. In drunkenness, the veil is removed from them, and their characters stand revealed, as in a glass, to the eye of the beholder. The Roderick Random of Smollet had much of this temperament, blended, however, with more intellect than usually belongs to it.

II. *Melancholy Drunkard.*—Melancholy, in drunkards, sometimes arises from temperament, but more frequently from habitual intoxication or misfortune. Some men are melancholy by nature, but become highly mirthful when they have drunk a considerable quantity. Men of this tone of mind seem to enjoy the bottle more exquisitely than even the sanguineous class. The joyousness which it excites breaks in upon their gloom like sunshine upon darkness. Above all, the sensations, at the moment when mirth begins with its magic to charm away care, are inexpressible. Pleasure falls in showers of fragrance upon their souls; they are at peace with themselves and all mankind, and enjoy, as it were, a foretaste of paradise. Robert Burns was an example of this variety. His melancholy was constitutional, but heightened by misfortune. The bottle commonly dispelled it, and gave rise to the most delightful images; sometimes, however, it only aggravated the gloom.

III. *Surly Drunkard.*—Some men are not excited to mirth by intoxication: on the contrary, it renders them gloomy and discontented. Even those who in the sober state are sufficiently gay, become occasionally thus altered. A great propensity to take offence is a characteristic among persons of this temperament. They are suspicious, and very often mischievous. If at some former period they have had a difference with any of the company, they are sure to revive it, although probably it has been long ago cemented on both sides, and even forgotten by the other party. People of this description are very unpleasant companions. They are in general so foul tongued, quarrelsome, and indecent in conversation, that established

clubs of drinkers have made it a practice to exclude them from their society.

IV. *Phlegmatic Drunkard.*—Persons of this temperament are heavy rolling machines, and, like the above, are not roused to mirth by liquor. Their vital actions are dull and spiritless—the blood in their veins as sluggish as the river Jordan, and their energies stagnant as the Dead Sea. They are altogether a negative sort of beings, with passions too inert to lead them to anything very good or very bad. They are a species of animated clods, but not thoroughly animated—for the vital fire of feeling has got cooled in penetrating their frozen frames. A new Prometheus would require to breathe into their nostrils, to give them the ordinary glow and warmth of humanity. Look at a phlegmatic man—how dead, passionless, and uninspired is the expression of his clammy lips and vacant eye! Speak to him—how cold, slow, and tame is his conversation! the words come forth as if they were drawn from his mouth with a pair of pincers; and the ideas are as frozen as if concocted in the bowels of Lapland. Liquor produces no effect upon his mental powers; or, if it does, it is a smothering one. The whole energies of the drink fall on his almost impassive frame. From the first his drunkenness is stupefying; he is seized with a kind of lethargy, the white of his eyes turns up, he breathes loud and harshly, and sinks into an apoplectic stupor. Yet all this is perfectly harmless, and wears away without leaving any mark behind it.

Such persons are very apt to be played upon by their companions. There are few men who, in their younger days, have not assisted in shaving the heads and painting the faces of these lethargic drunkards.

V. *Nervous Drunkard.*—This is a very harmless and very tiresome personage. Generally of a weak mind and irritable constitution, he does not become boisterous with mirth, and rarely shows the least glimmering of wit or mental energy. He is talkative and fond of long winded stories, which he tells in a drivelling, silly manner. Never warmed into enthusiasm by liquors, he keeps chatting at

some ridiculous tale, very much in the way of a garrulous old man in his dotage.*

VI. *Choleric Drunkard.*—There are a variety of drunkards whom I can only class under the above title. They seem to possess few of the qualities of the other races, and are chiefly distinguished by an uncommon testiness of disposition. They are quick, irritable, and impatient, but withal good at heart, and, when in humour, very pleasant and generous. They are easily put out of temper, but it returns almost immediately. This disposition is very prevalent among Welshmen and Highland lairds. Mountaineers are usually quick-tempered; but such men are not the worst or most unpleasant. Sterne is undoubtedly right when he says that more virtue is to be found in warm than cold dispositions. Commodore Trunnion is a marked example of this temperament; and Captain Fluellen, who compelled the *heroic* Pistol to eat the leek, is another.

VII. *Periodical Drunkard.*—There are persons whose temperaments are so peculiarly constituted, that they indulge to excess *periodically*, and are, in the intervals of these indulgences, remarkably sober. This is not a very common case, but I have known more than one instance of it; and a gentleman, distinguished by the power of his eloquence in the senate and at the bar, is said to furnish another. In the cases which I have known, the drunken mania, for it can get no other name, came on three or four times a-year. The persons, from a state of complete sobriety, felt the most intense desire for drink; and no power, short of absolute force or confinement, could restrain them from the indulgence. In every case they seemed to be quite aware of the uncontrollable nature of their passion, and proceeded systematically by confining themselves to their room, and procuring a large quantity of ardent spirits. As soon as this was done, they com-

* The old gentleman who is represented as speaking, in Bunbury's admirable caricature of the "Long Story," furnishes one of the best illustrations I have ever seen of this variety. It is worth consulting, both on account of the story-teller and the effect his tedious garrulity produces upon the company.

menced and drank to excess till vomiting ensued, and the stomach absolutely refused to receive another drop of liquor. This state may last a few days or a few weeks, according to constitutional strength, or the rapidity with which the libations are poured down. During the continuance of the attack, the individual exhibits such a state of mind as may be looked for from his peculiar temperament; he may be sanguineous, or melancholy, or surly, or phlegmatic, or nervous, or choleric. So soon as the stomach rejects everything that is swallowed, and severe sickness comes on, the fit ceases. From that moment recovery takes place, and his former fondness for liquor is succeeded by aversion or disgust. This gains such ascendency over him, that he abstains religiously from it for weeks, or months, or even for a year, as the case may be. During this interval he leads a life of the most exemplary temperance, drinking nothing but cold water, and probably shunning every society where he is likely to be exposed to indulgence. So soon as this period of sobriety has expired, the fit again comes on; and he continues playing the same game for perhaps the better part of a long life. This class of persons I would call periodical drunkards.

These different varieties are sometimes found strongly marked: at other times so blended together that it is not easy to say which predominates. The most agreeable drunkard is he whose temperament lies between the sanguineous and the melancholic. The genuine sanguineous is a sad noisy dog, and so common, that every person must have met with him. The naval service furnishes a great many gentlemen of this description. The phlegmatic, I think, is rarer, but both the nervous and the surly are not unusual.

## CHAPTER V.

### DRUNKENNESS MODIFIED BY THE INEBRIATING AGENT.

INTOXICATION is not only influenced by temperament, but by the nature of the agent which produces it. Thus, ebriety from ardent spirits differs in some particulars from that brought on by opium or malt liquors, such as porter and ale.

I. *Modified by Ardent Spirits.*—Alcohol is the principle of intoxication in all liquors. It is this which gives to wine,* ale, and spirits, their characteristic properties. In the natural state, however, it is so pungent that it could not be received into the stomach, even in a moderate quantity, without producing death. It can, therefore, only be used in dilution; and in this state we have it from the strongest ardent spirits, to simple small beer. The first (ardent spirits) being the most concentrated of its combinations, act most rapidly upon the constitution. They are more inflammatory, and intoxicate sooner than any of the others. Swallowed in an overdose, they act almost instantaneously—extinguishing the senses, and overcoming the whole body with a sudden stupor. When spirits are swallowed raw, as in the form of a dram, they excite a glow of heat in the throat and stomach, succeeded, in those who are not much accustomed to their use, by a flushing of the countenance, and a copious discharge of tears. They are strongly diuretic.

Persons who indulge too much in spirits rarely get corpulent, unless their indulgence be coupled with good living. Their bodies become emaciated; they get spindle-shanked; their eyes are glazed and hollow; their cheeks fall in; and a premature old age overtakes them. They do not eat

* Alcohol appears to exist in wines, in a very peculiar state of combination. In the Appendix, I have availed myself of Dr. Paris's valuable remarks on this subject.

so well as their brother drunkards. An insatiable desire for a morning dram makes them early risers, and their breakfast amounts to almost nothing.

The principal varieties of spirits, as already mentioned, are rum, brandy, whisky, and gin. It is needless to enter into any detail of the history of these fluids. Brandy kills soonest; it takes most rapidly to the head, and, more readily than the others, tinges the face to a crimson or livid hue. Rum is probably the next in point of fatality; and, after that, whisky and gin. The superior diuretic qualities of the two latter, and the less luscious sources from which they are procured, may possibly account for such differences. I am at the same time aware that some persons entertain a different idea of the relative danger of these liquors: some, for instance, conceive that gin is more rapidly fatal than any of them; but it is to be remembered, that it, more than other ardent spirits, is liable to adulteration. That, from this circumstance, more lives may be lost by its use, I do not deny. In speaking of gin, however, and comparing its effects with those of the rest of the class to which it belongs, I must be understood to speak of it in its pure condition, and not in that detestable state of sophistication in which such vast quantities of it are drunk in London and elsewhere. When pure, I have no hesitation in affirming, that it is decidedly more wholesome than either brandy or rum; and that the popular belief of its great tendency to produce dropsy, is quite unfounded.

An experiment has lately been made for the purpose of ascertaining the comparative powers of gin, brandy, and rum upon the human body, which is not less remarkable for the inconsequent conclusions deduced from it, than for the ignorance it displays in confounding dead animal matter with the living fibre. It was made as follows:—

A piece of raw liver was put into a glass of gin, another into a glass of rum, and a third into a glass of brandy. That in the gin was, in a given time, partially decomposed; that in the rum, in the same time, not diminished; and that in the brandy quite dissolved. It was concluded from these results, that rum was the most wholesome spirit of the three, and brandy the least. The inferences deduced from these premises are not only erroneous, but

glaringly absurd ; the premises would even afford grounds for drawing results of the very opposite nature : it might be said, for instance, that though brandy be capable of dissolving dead animal matter, there is no evidence that it can do the same to the living stomach, and that it would in reality prove less hurtful than the others, in so far as it would, more effectually than they, dissolve the food contained in that organ. These experiments, in fact, prove nothing; and could only have been suggested by one completely ignorant of the functions of the animal economy. There is a power inherent in the vital principle which resists the laws that operate upon dead matter. This is known to every practitioner, and is the reason why the most plausible and recondite speculations of chemistry have come to nought in their trials upon the living frame. The only way to judge of the respective effects of ardent spirits, is by experience and physiological reasoning, both of which inform us that the spirit most powerfully diuretic must rank highest in the scale of safety. Now and then persons are met with on whose frames both gin and whisky have a much more heating effect than the two other varieties of spirits. This, however, is not common, and when it does occur, can only be referred to some unaccountable idiosyncrasy of constitution.

II. *Modified by Wines.*—Drunkenness from wines closely resembles that from ardent spirits. It is equally airy and volatile, more especially if the light wines, such as Champagne, Claret, Chambertin, or Volnay, be drunk. On the former, a person may get tipsy several times of a night. The fixed air evolved from it produces a feeling analogous to ebriety, independent of the spirit it contains. Port, Sherry, and Madeira are heavier wines, and have a stronger tendency to excite headache and fever.

The winebibber has usually an ominous rotundity of face, and not unfrequently of corporation. His nose is well studded over with carbuncles of the Claret complexion; and the red of his cheeks resembles very closely the hue of that wine. The drunkard from ardent spirits is apt to be a poor, miserable, emaciated figure, broken in mind and in fortune; but the votary of the juice of the

grape may usually boast the "paunch well lined with capon," and calls to recollection the bluff figure of Sir John Falstaff over his potations of sack.*

III. *Modified by Malt Liquors.*—Malt liquors, under which title we include all kinds of porter and ales, produce the worst species of drunkenness; as, in addition to the intoxicating principle, some noxious ingredients are usually added, for the purpose of preserving them and giving them their bitters. The hop of these fluids is highly narcotic, and brewers often add other substances to heighten its effect, such as hyoscyamus, opium, belladonna, cocculus indicus, lauro cerasus, &c. Malt liquors, therefore, act in two ways upon the body, partly by the alcohol they contain, and partly by the narcotic principle. In addition to this, the fermentation which they undergo is much less perfect than that of spirits or wine. After being swallowed, this process is carried on in the stomach, by which fixed air is copiously liberated, and the digestion of delicate stomachs materially impaired. Cider, spruce, ginger, and table beers, in consequence of their imperfect fermentation, often produce the same bad effects, long after their first briskness has vanished.

Persons addicted to malt liquors increase enormously in bulk. They become loaded with fat: their chin gets double or triple, the eye prominent, and the whole face bloated and stupid. Their circulation is clogged, while the pulse feels like a cord, and is full and labouring, but not quick. During sleep, the breathing is stertorous. Everything indicates an excess of blood; and when a pound or two is taken away, immense relief is obtained. The blood, in such cases, is more dark and sizy than in the others. In seven cases out of ten, malt liquor drunkards die of apoplexy or palsy. If they escape this hazard, swelled liver or dropsy carries them off. The abdomen

* There is reason to believe that the sack of Shakspeare was sherry.—"*Falstaff.* You rogue! here's *lime* in this sack too. There is nothing but roguery to be found in villanous man. Yet a coward is worse than a cup of sack with lime in it." Lime, it is well known, is added to the grapes in the manufacture of sherry. This not only gives the wine what is called its dry quality, but probably acts by neutralizing a portion of the malic or tartaric acid.

seldom loses its prominency, but the lower extremities get ultimately emaciated. Profuse bleedings frequently ensue from the nose, and save life, by emptying the blood-vessels of the brain.

The drunkenness in question is peculiarly of British growth. The most noted examples of it are to be found in innkeepers and their wives, recruiting sergeants, guards of stage-coaches, &c. The quantity of malt liquors which such persons will consume in a day is prodigious. Seven English pints is quite a common allowance, and not unfrequently twice that quantity is taken without any perceptible effect. Many of the coal-heavers on the Thames think nothing of drinking daily two gallons of porter, especially in the summer season, when they labour under profuse perspirations. A friend has informed me that he knew an instance of one of them having consumed eighteen pints in one day, and he states that there are many such instances.*

The effects of malt liquors on the body, if not so immediately rapid as those of ardent spirits, are more stupefying, more lasting, and less easily removed. The last are particularly prone to produce levity and mirth, but the first have a stunning influence upon the brain, and, in a short time, render dull and sluggish the gayest disposition. They also produce sickness and vomiting more readily than either spirits or wine.

Both wine and malt liquors have a greater tendency to swell the body than ardent spirits. They form blood with greater rapidity, and are altogether more nourishing. The most dreadful effects, upon the whole, are brought on by spirits, but drunkenness from malt liquors is the most speedily fatal. The former break down the body by degrees; the latter operate by some instantaneous apoplexy or rapid inflammation.

No one has ever given the respective characters of the malt liquor and ardent spirit drunkard with greater truth than Hogarth, in his Beer Alley and Gin Lane. The first is represented as plump, rubicund, and bloated; the second

* "It is recorded of a Welsh squire, William Lewis, who died in 1793, that he drank *eight gallons* of ale *per diem*, and weighed forty stones."—*Wadd's Comments on Corpulency.*

as pale, tottering, and emaciated, and dashed over with the aspect of blank despair.

IV. *Modified by Opium.*—The drunkenness produced by opium has also some characteristics which it is necessary to mention. The drug is principally employed by the Mahometans. By their religion, these people are forbidden the use of wine,* and use opium as a substitute. And a delightful substitute it is while the first excitation continues; for the images it occasions in the mind are more exquisite than any produced even by wine.

There is reason to believe that the use of this medicine has, of late years, gained ground in Great Britain. We are told by the "English Opium-Eater," whose powerful and interesting *Confessions* have excited so deep an interest, that the practice exists among the work people at Manchester. Many of our fashionable ladies have recourse to it when troubled with vapours, or low spirits: some of them even carry it about with them for the purpose. This practice is most pernicious, and no way different from that of drunkards, who swallow wine and other liquors to drive away care. While the first effects continue, the intended purpose is sufficiently gained, but the melancholy which follows is infinitely greater than can be compensated by the previous exhilaration.

Opium acts differently on different constitutions. While it disposes some to calm, it arouses others to fury. Whatever passion predominates at the time, it increases; whether it be love, or hatred, or revenge, or benevolence. Lord Kames, in his *Sketches of Man*, speaks of the fanatical fakirs, who, when excited by this drug, have been known, with poisoned daggers, to assail and butcher every European whom they could overcome. In the century before last, one of this nation attacked a body of Dutch sailors, and murdered seventeen of them in one minute. The Malays are strongly addicted to opium. When

* "The law of Mahomet which prohibits the drinking of wine, is a law fitted to the climate of Arabia; and indeed, before Mahomet's time, water was the common drink of the Arabs. The law which forbade the Carthaginians to drink wine was also a law of the climate."—Montesquieu, book xiv., chap. x.

violently aroused by it, they sometimes perform what is called *Running-a-muck*, which consists in rushing out in a state of frenzied excitement, heightened by fanaticism, and murdering every one who comes in their way. The Turkish commanders are well aware of the powers of this drug in inspiring an artificial courage; and frequently give it to their men when they put them on any enterprise of great danger.

Some minds are rendered melancholy by opium. Its usual effect, however, is to give rise to lively and happy sensations. The late Duchess of Gordon is said to have used it freely previous to appearing in great parties, where she wished to shine by the gaiety of her conversation and brilliancy of her wit. A celebrated pleader at the Scotch bar is reported to do the same thing, and always with a happy effect.

In this country opium is much used, but seldom with the view of producing intoxication. Some indeed deny that it can do so, strictly speaking. If by intoxication is meant a state precisely similar to that from over-indulgence in vinous or spirituous liquors, they are undoubtedly right; but drunkenness merits a wider latitude of signification. The ecstacies of opium are much more entrancing than those of wine. There is more poetry in its visions—more mental aggrandizement — more range of imagination. Wine, in common with it, invigorates the animal powers and propensities, but opium, in a more peculiar manner, strengthens those proper to man, and gives, for a period amounting to hours, a higher tone to the intellectual faculties. It inspires the mind with a thousand delightful images, lifts the soul from earth, and casts a halo of poetic thought and feeling over the spirits of the most unimaginative. Under its influence the mind wears no longer that blank, passionless aspect which even in gifted natures it is apt to assume. On the contrary, it is clothed with beauty as "with a garment," and colours every thought that passes through it with the hues of wonder and romance. Such are the feelings which the luxurious and opulent Mussulman seeks to enjoy. To stir up the languid current of his mind, satiated with excess of pleasure and rendered sluggish by indolence, he has recourse to that

remedy which his own genial climate produces in greatest perfection. Seated perhaps amid the luxuries of Oriental splendour—with fountains bubbling around, and the citron shading him with its canopy, and scattering perfume on all sides—he lets loose the reins of an imagination conversant from infancy with everything gorgeous and magnificent. The veil which shades the world of fancy is withdrawn, and the wonders lying behind it exposed to view; he sees palaces and temples in the clouds; or the Paradise of Mahomet, with its houris and bowers of amaranth, may stand revealed to his excited senses. Everything is steeped in poetic exaggeration. The zephyrs seem converted into aërial music, the trees bear golden fruit, the rose blushes with unaccustomed beauty and perfume. Earth, in a word, is brought nearer to the sky, and becomes one vast Eden of pleasure. Such are the first effects of opium; but in proportion as they are great, so is the depression which succeeds them. Languor and exhaustion invariably come after; to remove which, the drug is again had recourse to, and becomes almost an essential of existence.

Opium retains at all times its power of exciting the imagination, provided sufficient doses are taken. But when it has been continued so long as to bring disease upon the constitution, the pleasurable feelings wear away, and are succeeded by others of a very different kind. Instead of disposing the mind to be happy, it now acts upon it like the spell of a demon, and calls up phantoms of horror and disgust. The fancy is still as powerful as ever, but it is turned in another direction. Formerly it clothed all objects with the light of heaven; now it invests them with the attributes of hell. Goblins, spectres, and every kind of distempered vision haunt the mind, peopling it with dreary and revolting imagery. The sleep is no longer cheered with its former sights of happiness. Frightful dreams usurp their place, till, at last, the person becomes the victim of an almost perpetual misery.* Nor is this

* The following description, by a modern traveller, of a scene witnessed by him in the East, gives a likely picture of the effects of this drug:—

"There is a decoction of the head and seeds of the poppy which they call coquenar, for the sale of which there are taverns in every quarter of the

confined to the mind alone, for the body suffers in an equal degree. Emaciation, loss of appetite, sickness, vomiting, and a total disorganization of the digestive functions, as well as of the mental powers, are sure to ensue, and never fail to terminate in death, if the evil habit which brings them on is continued.

Opium resembles the other agents of intoxication in this, that the fondness for it increases with use, and that at last it becomes nearly essential for bodily comfort and peace of mind. The quantity which may be taken varies exceedingly, and depends wholly upon age, constitution, and habit. A single drop of laudanum has been known to kill a new-born child; and four grains of solid opium have destroyed an adult. Certain diseases, such as fevers, frenzies, &c., facilitate the action of opium upon the system; others, such as diarrhœa, cramp, &c., resist it; and a quantity which would destroy life in the former, would have little perceptible effect in the latter. By habit, enormous quantities of the drug may be taken with comparative impunity. There are many persons in this country who make a practice of swallowing half an ounce of laudanum night and morning, and some will even take from one to two drachms daily of solid opium. The Teriakis, or opium-eaters of Constantinople, will sometimes swallow a hundred grains at a single dose. Nay, it is confidently affirmed that some of them will take at once three drachms in the morning, and repeat the same dose at night, with no other effect than a pleasing exhilaration of spirits. The "English Opium-Eater" himself

town, similar to our coffee-houses. It is extremely amusing to visit these houses, and to observe carefully those who resort there for the purpose of drinking it, both before they have taken the dose, before it begins to operate, and while it is operating. On entering the tavern they are dejected and languishing: soon after they have taken two or three cups of this beverage they are peevish, and, as it were, enraged; everything displeases them. They find fault with everything, and quarrel with one another, but in the course of its operation they make it up again—and, each one giving himself up to his predominant passion, the lover speaks sweet things to his idol—another, half asleep, laughs in his sleeve—a third talks big and blusters—a fourth tells ridiculous stories. In a word, a person would believe himself to be really in a mad-house. A kind of lethargy and stupidity succeed to this disordered gaiety; but the Persians, far from treating it as it deserves, call it an ecstasy, and maintain that there is something exquisite and heavenly in this state."—*Chardin.*

furnishes one of the most extraordinary instances on record of the power of habit in bringing the body to withstand this drug. He took daily *eight thousand drops* of laudanum, containing *three hundred and twenty grains* of opium. This enormous quantity he reduced suddenly, and without any considerable effort, to *one thousand drops, or forty grains.* "Instantaneously," says he, "and as if by magic, the cloud of profoundest melancholy which rested upon my brain, like some black vapours which I have seen roll away from the summits of the mountains, drew off in one day—passed off with its murky banners, as simultaneously as a ship that has been stranded, and is floated off by the spring tide."

The circumstance of the body being brought by degrees to withstand a great quantity of opium is not solitary, but exists as a general rule with regard to all stimulants and narcotics. A person who is in the habit of drinking ale, wine, or spirits, will take much more with impunity than one who is not; and the faculty of withstanding these agents goes on strengthening till it acquires a certain point, after which it becomes weakened. When this takes place, there is either organic disease or general debility. A confirmed drunkard, whose constitution has suffered from indulgence, cannot take so much liquor, without feeling it, as one who is in the habit of taking his glass, but whose strength is yet unimpaired. It is, I suspect, the same, though probably in a less degree, with regard to opium.

Mithridates, king of Pontus, affords an instance of the effects of habit in enabling the body to withstand poisons; and on the same principle, we find that physicians and nurses who are much exposed to infection, are less liable to take it than those persons whose frames are not similarly fortified.

Opium resembles wine, spirit, and ales, in affecting the brain and disposing to apoplexy. Taken in an over-dose, it is fatal in from six to twenty-four hours, according to the quantity swallowed, and the constitution, habits, &c., of the person submitted to its operation. The following are the principal symptoms of poisoning from opium. Giddiness succeeded by stupor: insensibility to light,

while the eyes are closed; and the pupil immovable, and sometimes dilated. The pulse is generally small and feeble, but occasionally slow and full, as in common apoplexy. The breathing at first is scarcely perceptible, but is apt to become stertorus. Foam sometimes issues from the mouth: in other cases there is vomiting. The countenance is cadaverous and pale or livid. A narcotic odour is often perceptible in the breath. The skin is cold, and the body exceedingly relaxed; now and then it is convulsed. By being struck, shaken, or excited any way, the person sometimes recovers for a short period from his stupor, and stares wildly around him, but only to relapse into lethargy. At last death ensues, but shortly before this event, a deceitful show of animation occasionally makes its appearance, and may impose upon superficial observers.

I extract the following interesting case of opium-eating from a London paper:—

"An inquest was held at Walpole, lately, on the body of Rebecca Eason, aged five years, who had been diseased from her birth, was unable to walk or articulate, and from her size, did not appear to be more than *five weeks* old. The mother had for many years been in the habit of taking opium in large quantities (nearly a quarter of an ounce a-day*); and, it is supposed, had entailed a disease on her child which caused its death; it was reduced to a mere skeleton, and had been in that state from birth. Verdict, 'Died by the visitation of God; but from the great quantity of opium taken by the mother during her pregnancy of the said child, and of suckling it, she had greatly injured its health.' It appeared that the mother of the deceased had had five children; that she began to take opium after the birth and weaning of her first child, which was and is remarkably healthy; and that the other children have all lingered and died in the same emaciated state as the child who was the subject of this investigation. The mother is under thirty: she was severely censured by the coroner for indulging in so pernicious a practice."

V. *Modified by Tobacco.*—A variety of drunkenness is

* Equal to nearly three thousand drops of laudanum.

excited by tobacco. This luxury was introduced into Europe from the New World, in 1559, by a Spanish gentleman, named Hernandez de Toledo, who brought a small quantity into Spain and Portugal. From thence, by the agency of the French ambassador at Lisbon, it found its way to Paris, where it was used in the form of powder by Catherine de Medicis, the abandoned instigator of the massacre of the protestants on St. Bartholomew's day. This woman, therefore, may be considered the inventor of snuff, as well as the contriver of that most atrocious transaction. It then came under the patronage of the Cardinal Santa Crocé, the Pope's nuncio, who, returning from his embassy at the Spanish and Portuguese courts, carried the plant to his own country, and thus acquired a fame little inferior to that which, at another period, he had won by piously bringing a portion of the *real* cross from the Holy Land. It was received with general enthusiasm in the Papal States, and hardly less favourably in England, into which it was introduced by Sir Walter Raleigh, in 1585. It was not, however, without opposition that it gained a footing either in this country or in the rest of Europe. Its principal opponents were the priests, the physicians, and the sovereign princes: by the former, its use was declared sinful; and in 1624, Pope Urban VIII. published a bull, excommunicating all persons found guilty of taking snuff when in church. This bull was renewed in 1690 by Pope Innocent; and about twenty-nine years afterwards, the Sultan Amurath IV. made smoking a capital offence, on the ground of its producing infertility. For a long time smoking was forbidden in Russia, under the pain of having the nose cut off: and in some parts of Switzerland, it is likewise made a subject of public procecution—the public regulations of the Canton of Berne, in 1661, placing the prohibition of smoking in the list of the ten commandments, immediately under that against adultery. Nay, that British Solomon, James I., did not think it beneath the royal dignity to take up his pen upon the subject. He accordingly, in 1603, published his famous *Counterblast to Tobacco*, in which the following remarkable passage occurs:—"It is a custom loathsome to the eye, hateful to

the nose, harmful to the braine, dangerous to the lungs, and, in the black stinking fume thereof, nearest resembling the horrible Stygian smoke of the pit that is bottomless."* But, notwithstanding this regal and sacerdotal wrath, the plant extended itself far and wide, and is at this moment the most universal luxury in existence.

The effects of tobacco are considerably different from those of any other inebriating agent. Instead of quickening, it lowers the pulse, and, when used to excess, produces languor, depression of the system, giddiness, confusion of ideas, violent pain in the stomach, vomiting, convulsions, and even death. Its essential oil is so intensely powerful, that two or three drops inserted into a raw wound would prove almost instantly fatal.† Mr. Barrow, in his travels, speaks of the use made by the Hottentots of this plant, for the purpose of destroying snakes. "A Hottentot," says he, "applied some of it from the short end of his wooden tobacco pipe to the mouth of a snake, while darting out his tongue. The effect was as instantaneous as an electric shock; with a convulsive motion that was momentary, the snake half untwisted itself, and never stirred more; and the muscles were so contracted, that the whole animal felt hard and rigid, as if dried in the sun." When used in moderation, tobacco has a soothing effect upon the mind, disposing to placid enjoyment, and mellowing every passion into repose. Its effects, therefore, are inebriating;

* "Tobacco," King James further observes, "is the lively image and pattern of hell, for it hath, by allusion, in it all the parts and vices of the world, whereby hell may be gained; to wit, first, it is a smoke; so are all the vanities of this world. Secondly, it delighteth them that take it; so do all the pleasures of the world delight the men of the world. Thirdly, it maketh men *drunken* and light in the head; so do all the vanities of the world, men are drunken therewith. Fourthly, he that taketh tobacco cannot leave it; it doth bewitch him; even so the pleasures of the world make men loath to leave them; they are, for the most part, enchanted with them. And, further, besides all this, it is like hell in the very substance of it, for it is a stinking loathsome thing, and so is hell." And, moreover, his Majesty declares, that "were he to invite the devil to a dinner, he should have three dishes; first, a pig; second, a poll of ling and mustard; and, third, a pipe of tobacco for digestion."

† It appears from Mr. Brodie's experiments that the essential oil of tobacco operates very differently from the infusion. The former acts instantly on the heart, suspending its action, even when the animal continues to inspire, and destroying life by producing syncope. The latter appears to operate solely on the brain, leaving the circulation unaffected.

and those who habitually indulge in it may with propriety be denominated drunkards. In whatever form it is used, it produces sickness, stupor, bewilderment, and staggering in those unaccustomed to its use. There is no form in which it can be taken that is not decidedly injurious and disgusting. The whole, from snuffing to plugging, are at once so utterly uncleanly and unnatural, that it is incredible in what manner they ever insinuated themselves into civilized society. A vast quantity of valuable time is wasted by the votaries of tobacco, especially by the smokers; and that the devotees of snuff are not greatly behind in this respect, will be shown by the following singular calculation of Lord Stanhope:—

"Every professed, inveterate, and incurable snuff-taker," says his lordship, "at a moderate computation, takes one pinch in ten minutes. Every pinch, with the agreeable ceremony of blowing and wiping the nose, and other incidental circumstances, consumes a minute and a-half. One minute and a-half out of every ten, allowing sixteen hours to a snuff-taking day, amounts to two hours and twenty-four minutes out of every natural day, or one day out of ten. One day out of every ten, amounts to thirty-six days and a-half in a year. Hence, if we suppose the practice to be persisted in forty years, two entire years of the snuff-taker's life will be dedicated to tickling his nose, and two more to blowing it. The expense of snuff, snuff-boxes, and handkerchiefs, will be the subject of a second essay, in which it will appear that this luxury encroaches as much on the income of the snuff-taker as it does on his time; and that by proper application of the time and money thus lost to the public, a fund might be constituted for the discharge of the national debt."

But this is not the worst of snuffing, for though a moderate quantity, taken now and then, may do no harm, yet, in the extent to which habitual snuffers carry it, it is positively pernicious. The membrane which lines the nose gets thickened, the olfactory nerves blunted, and the sense of smell consequently impaired. Nor is this all, for, by the strong inspirations which are made when the powder is drawn up, some of the latter is pretty sure to escape into the stomach. This organ is thence directly

subjected to a powerful medicine, which not only acts as a narcotic, but produces heartburn, and every other symptom of indigestion. It is generally believed that Napoleon owed his death to the morbid state of his stomach, produced by excessive snuffing. Snuffing has also a strong tendency to give a determination to the head, and on this account plethoric subjects should be the very last ever to enter upon the habit. If it were attended with no other inconvenience, the black loathsome discharge from the nose, and swelling and rubicundity of this organ, with other circumstances equally disagreeable, ought to deter every man from becoming a snuffer.

The smoker, while engaged at *his* occupation, is even a happier man than the snuffer. An air of peculiar satisfaction beams upon his countenance; and, as he puffs forth volumes of fragrance, he seems to dwell in an atmosphere of contented happiness. His illusions have not the elevated and magnificent character of those brought on by opium or wine. There is nothing of Raphael or Michael Angelo in their composition—nothing of the Roman or Venetian schools—nothing of Milton's sublimity or Ariosto's dazzling romance; but there is something equally delightful, and in its way equally perfect. His visions stand in the same relation to those of opium or wine, as the Dutch pictures of Ostade to the Italian ones of Paul Veronese—as Washington Irving to Lord Byron—or as Izaak Walton to Froissart. There is an air of delightful homeliness about them. He does not let his imagination run riot in the clouds, but restrains it to the lower sphere of earth, and meditates delightfully in this less elevated region. If his fancy be unusually brilliant, or somewhat heated by previous drinking, he may see thousands of strange forms floating in the tobacco smoke. He may people it, according to his temperament, with agreeable or revolting images—with flowers and gems springing up, as in dreams before him, or with reptiles, serpents, and the whole host of *diablerie*, skimming like motes in the sunshine amid its curling wreaths.

This is all that can be said in favour of smoking, and quite enough to render the habit too common to leave any hope of its suppression, either by the weapons of ridicule

or the more summary plan of the Sultan Amurath. In no sense, except as affording a temporary gratification, can it be justified or defended. It pollutes the breath, blackens the teeth, wastes the saliva which is required for digestion, and injures the complexion. In addition to this, it is apt to produce dyspepsia, and other disorders of the stomach; and, in corpulent subjects, it disposes to apoplexy. At the present moment smoking is fashionable, and crowds of young men are to be seen at all hours walking the streets with cigars in their mouths, annoying the passengers. They seem to consider it manly to be able to smoke a certain number, without reflecting that there is scarcely an old woman in the country who would not beat them to naught with their own weapons, and that they would gain no sort of honour were they able to outsmoke all the burgomasters of Amsterdam. As practice, however, seems more resorted to by these young gentlemen for the sake of effect, and exhibiting a little of the *haut ton*, than for anything else, it is likely soon to die a natural death among them; particularly as jockeys and porters have lately taken the field in the same way, being determined that no class of the community shall enjoy the exclusive monopoly of street smoking!

The observations made upon the effects of snuffing and smoking apply in a still stronger degree to chewing. This is the worst way for the health in which tobacco can be used. The waste of saliva is greater than even in smoking, and the derangements of the digestive organs proportionally severe. All confirmed chewers are more than usually subject to dyspepsia and hypochondriasis; and many of them are afflicted with liver complaint, brought on by their imprudent habit.

The most innocent, and, at the same time most disgusting way of using tobacco, is plugging, which consists in inserting a short roll of the plant in the nostril, and allowing it to remain there so long as the person feels disposed. Fortunately this habit is as rare as it is abominable; and it is to be hoped that it will never become common in Great Britain.

I have observed, that persons who are much addicted to liquor have an inordinate liking to tobacco in all its dif-

ferent forms: and it is remarkable, that in the early stages of ebriety almost every man is desirous of having a pinch of snuff. This last fact is not easy to explain, but the former may be accounted for by that incessant craving after excitement which clings to the system of the confirmed drunkard.

From several of the foregoing circumstances, we are justified in considering tobacco closely allied to intoxicating liquors, and its confirmed votaries as a species of drunkards. At least, it is certain that, when used to excess, it gives birth to many of the corporeal and mental manifestations of ebriety.

VI. *Modified by Nitrous Oxide.*—The drunkenness, if it merit that name, from inhaling nitrous oxide, is likewise of a character widely differing from intoxication in general. This gas was discovered by Dr. Priestley, but its peculiar effects upon the human body were first perceived in 1799, by Sir Humphrey Davy, who, in the following year, published a very elaborate account of its nature and properties, interspersed with details by some of the most eminent literary and scientific characters, of the sensations they experienced on receiving it into their lungs.

According to these statements, on breathing the gas the pulse is accelerated, and a feeling of heat and expansion pervades the chest. The most vivid and highly pleasurable ideas pass, at the same time, through the mind; and the imagination is exalted to a pitch of entrancing ecstasy. The hearing is rendered more acute, the face is flushed, and the body seems so light that the person conceives himself capable of rising up and mounting into the air. Some assume theatrical attitudes; others laugh immoderately, and stamp upon the ground. There is a universal increase of muscular power, attended with the most exquisite delight. In a few cases there are melancholy, giddiness, and indistinct vision; but generally the feelings are those of perfect pleasure. After these strange effects have ceased, no debility ensues, like that which commonly follows high excitement. On the contrary, the mind is strong and collected, and the body unusually vigorous for some hours after the operation.

At the time of the discovery of the effects of nitrous oxide, strong hopes were excited that it might prove useful in various diseases. These, unfortunately, have not been realized. Even the alleged properties of the gas have now fallen into some discredit. That it has produced remarkable effects cannot be denied, but there is much reason for thinking that, in many cases, these were in a great measure brought about by the influence of imagination. Philosophers seem to be divided on this point, and their conflicting testimonies it is not easy to reconcile. Having tried the experiment of inhaling the gas myself, and having seen it tried upon others, I have no doubt that there is much truth in the reports originally published of its properties, although in many cases imagination has made these appear greater than they really are. The intoxication which it produces is entirely one *sui generis*, and differs so much from that produced by other agents, that it can hardly be looked upon as the same thing.

The effects of nitrous oxide upon myself, though considerable, were not so striking as I have seen upon others. The principal feelings produced were giddiness and violent beating in the head, such as occur in the acmé of drunkenness. There was also a strong propensity to laugh: it occurs to me, however, that in my own case, and probably in some others, the risible tendency might be controlled by a strong effort of volition, in the same way as in most cases of drunkenness, were the effort imperatively requisite. Altogether I experienced nearly the sensations of highly excited ebriety. There was the same seeming lightness and expansion of the head, the same mirthfulness of spirit, and the same inordinate propensity to do foolish things, knowing them to be foolish, as occur in drunkenness in general. I was perfectly aware what I was about, and could, I am persuaded, with some effort, have subjected the whimsies of fancy to the soberer dictates of judgment. In a word, the gas produced precisely a temporary paroxysm of drunkenness, and such a determination of blood upwards as rendered the complexion livid, and left behind some degree of headache. Such are the effects upon myself, but with most people there is a total unconsciousness of the part they are acting. They perform the most extravagant

pranks, and on recovering their self-possession are totally ignorant of the circumstance. Sometimes the gas has an opposite effect, and the person instantly drops down insensible, as if struck by lightning: he recovers, however, immediately. Those who wish to know more of this curious subject, should read Sir H. Davy's work, but, above all, they should try the gas upon themselves. In the meantime I shall lay before the reader the details, in their own words, of the sensations experienced by Messrs. Edgeworth and Coleridge, and by Dr. Kinglake.

Mr. Edgeworth's Case.—"My first sensation was a universal and considerable tremor. I then perceived some giddiness in my head, and a violent dizziness in my sight; these sensations by degrees subsided, and I felt a great propensity to bite through the wooden mouthpiece, or the tube of the bag through which I inspired the air. After I had breathed all the air that was in the bag I eagerly wished for more. I then felt a strong propensity to laugh, and did burst into a violent fit of laughter, and capered about the room without having the power of restraining myself. By degrees these feelings subsided, except the tremor, which lasted for an hour after I had breathed the air, and I felt a weakness in my knees. The principal feeling through the whole of the time, or what I should call the characteristical part of the effect, was a total difficulty of restraining my feelings, both corporeal and mental, or, in other words, not having any command of myself."

Mr. Coleridge's Case.—"The first time I inspired the nitrous oxide I felt a highly pleasurable sensation of warmth over my whole frame, resembling that which I once remember to have experienced after returning from a walk in the snow into a warm room. The only motion which I felt inclined to make was that of laughing at those who were looking at me. My eyes felt distended, and, towards the last, my heart beat as if it were leaping up and down. On removing the mouthpiece the whole sensation went off almost instantly.

"The second time I felt the same pleasurable sensation

of warmth, but not, I think, in quite so great a degree. I wished to know what effect it would have on my impressions. I fixed my eye on some trees in the distance, but I did not find any other effect, except that they became dimmer and dimmer, and looked at last as if I had seen them through tears. My heart beat more violently than the first time. This was after a hearty dinner.

"The third time I was more violently acted on than in the two former. Towards the last I could not avoid, nor indeed felt any wish to avoid, beating the ground with my feet; and, after the mouthpiece was removed, I remained for a few seconds motionless, in great ecstasy.

"The fourth time was immediately after breakfast. The first few inspirations affected me so little that I thought Mr. Davy had given me atmospheric air; but soon felt the warmth beginning about my chest, and spreading upward and downward, so that I could feel its progress over my whole frame. My heart did not beat so violently; my sensations were highly pleasurable, not so intense or apparently local, but of more unmingled pleasure than I had ever before experienced."

Dr. Kinglake's Case.—"My first inspiration of it was limited to four quarts, diluted with an equal quantity of atmospheric air. After a few inspirations, a sense of additional freedom and power (call it energy, if you please) agreeably pervaded the region of the lungs; this was quickly succeeded by an almost delirious, but highly pleasurable sensation in the brain, which was soon diffused over the whole frame, imparting to the muscular power at once an increased disposition and tone for action; but the mental effect of the excitement was such as to absorb in a sort of intoxicating placidity and delight, volition, or rather the power of voluntary motion. These effects were in a greater or less degree protracted during about five minutes, when the former state returned, with the difference, however, of feeling more cheerful and alert for several hours after.

"It seemed also to have had the further effect of reviving rheumatic irritations in the shoulders and knee joints, which had not been previously felt for many months. No

perceptible change was induced in the pulse, either at or subsequent to the time of inhaling the gas.

"The effects produced by a second trial of its powers were more extensive and concentrated on the brain. In this instance nearly six quarts undiluted were accurately and fully inhaled. As on the former occasion it immediately proved agreeably respirable, but before the whole quantity was quite exhausted its agency was exerted so strongly on the brain as progressively to suspend the senses of seeing, hearing, feeling, and ultimately the power of volition itself. At this period the pulse was much augmented both in force and frequency; slight convulsive twitches of the muscles of the arms were also induced: no painful sensation, nausea, or languor, however, either preceded, accompanied, or followed this state, nor did a minute elapse before the brain rallied and resumed its wonted faculties, when a sense of glowing warmth extended over the system was speedily succeeded by a reinstatement of the equilibrium of health.

"The more permanent effects were (as in the first experiment) an invigorated feel of vital power, improved spirits, transient irritations in different parts, but not so characteristically rheumatic as in the former instance.

"Among the circumstances most worthy of regard in considering the properties and administration of this powerful aërial agent, may be ranked the fact of its being, contrary to the prevailing opinion, both highly respirable and salutary; that it impresses the brain and system at large with a more or less strong and durable degree of pleasurable sensation; that, unlike the effect of other violently exciting agents, no sensible exhaustion or diminution of vital power accrues from the exertions of its stimulant property; that its most excessive operation even, is neither permanently nor transiently debilitating; and finally, that it fairly promises, under judicious application, to prove an extremely efficient remedy, as well in the vast tribe of diseases originating from deficient irritability and sensibility, as in those proceeding from morbid associations and modifications of those vital principles."*

* The doses in these experiments were from five to seven quarts.

## CHAPTER VI.

### ENUMERATION OF THE LESS COMMON INTOXICATING AGENT.

In this chapter, I shall content myself with the enumeration of a few of the less common intoxicating agents. To detail all the productions of nature which have the power of inebriating, would be an endless and uninteresting topic.

*Hemlock.*—A powerful narcotic, producing giddiness, elevation of spirits, and other symptoms of ebriety. It was by an infusion of the leaf of this plant that Socrates was poisoned.

*Leopard's-bane* (*Arnica montana*).—Properties analogous to those of hemlock and other narcotics.

*Bangue.*—This is the leaf of a species of wild hemp, growing on the shores of Turkey, and of the Grecian Archipelago. It possesses many of the properties of opium, and is used by the poorer classes of Mussulmen as a substitute for this drug. Before being used, it is dried, and the exsiccated leaves are either chewed entire, or reduced into a fine powder, and made into pills. Its effects are to elevate the spirits, dispel melancholy, and give increased energy to the corporeal faculties,—followed by languor both of body and mind.

*Hop.*—Similar in its effects to opium, only inferior in degree. Used in porter brewing.

*Wolf's-bane* (*Aconitum napellus*).—A most deadly narcotic, producing, in small doses, the usual symptoms of ebriety, such as giddiness, elevation of spirits, &c. When taken to excess, it is inevitably fatal.

*Cocculus Indicus.*—The intoxicating powers of this berry are considerable. It is used by the brewers to increase the strength of porter and ales: and is sometimes thrown into ponds for the purpose of intoxicating the fishes, that they may thereby be more easily caught.

*Foxglove* (*Digitalis*).—Likewise a powerful narcotic, and capable of producing many of the symptoms of drunkenness. It has the peculiar effect of lowering, instead of raising the pulse.

*Nightshade* (*Belladonna*).—This is one of the most virulent narcotics we possess. Like opium, hop, and cocculus indicus, it is used by brewers to augment the intoxicating properties of malt liquors. "The Scots," says Buchanan, "mixed a quantity of the juice of the belladonna with the bread and drink with which, by their truce, they were bound to supply the Danes, which so intoxicated them, that the Scots killed the greater part of Sweno's army."

"Some children ate, in a garden, the fruit of the belladonna (*deadly nightshade.*) Shortly after, they had burning fever, with convulsions, and very strong palpitations of the heart: they lost their senses, and became completely delirious: one of them, four years of age, died the next day; the stomach contained some berries of the belladonna crushed, and some seeds; it exhibited three ulcers; the heart was livid, and the pericardium without serosity."*

"One child ate four ripe berries of the belladonna, another ate six. Both one and the other were guilty of extravagances which astonished the mother; their pupils were dilated; their countenances no longer remained the same; they had a cheerful delirium, accompanied with fever. The physician being called in, found them in a state of great agitation, talking at random, running, jumping, laughing sardonically; their countenances purple, and pulses hurried. He administered to each of them half a grain of emetic tartar and a drachm of Glauber salt, in four or five ounces of water; they had copious evacuations during seven or eight hours, and the symptoms disappeared."†

*Henbane* (*Hyoscyamus*).—Similar in its properties to nightshade and opium. The intoxicating properties of hyoscyamus appear to have been known from a very early period. It was with this plant that the Assassin Prince, commonly called the "Old Man of the Mountain," ine-

* *Journal Générale de Médicine*, lix., xxiv., p. 224.
† *Gazette de Santé*, 11 Thermidor, an xv. q. 508.

briated his followers preparatory to installing them into his service. The following eloquent passage from a modern writer will prove interesting:—

"There was at Alamoot, and also at Masiat, in Syria, a delicious garden, encompassed with lofty walls, adorned with trees and flowers of every kind—with murmuring brooks and translucent lakes—with bowers of roses and trelisses of the vine—airy halls and splendid kiosks, furnished with carpets of Persia and silks of Byzantium. Beautiful maidens and blooming boys were the inhabitants of this delicious spot, which resounded with the melody of birds, the murmurs of streams, and the tones and voices of instruments—all respired contentment and pleasure. When the chief had noticed any youth to be distinguished for strength and resolution, he invited him to a banquet, where he placed him beside himself, conversed with him on the happiness reserved for the faithful, and contrived to administer to him an intoxicating draught, prepared from the *hyoscyamus*. While insensible, he was conveyed to the garden of delight, and there awakened by the application of vinegar. On opening his eyes, all Paradise met his view; the black-eyed and blue-robed houris surrounded him, obedient to his wishes; sweet music filled his ears; the richest viands were served up in the most costly vessels, and the choicest wines sparkled in golden cups. The fortunate youth believed himself really in the Paradise of the Prophet, and the language of its attendants confirmed the delusion. When he had had his fill of enjoyment, and nature was yielding to exhaustion, the opiate was again administered, and the sleeper transported back to the side of the chief, to whom he communicated what had passed, and who assured him of the truth and reality of all he had experienced, telling him such was the bliss reserved for the obedient servants of the Imaum, and enjoining, at the same time, the strictest secrecy. Ever after, the rapturous vision possessed the imagination of the deluded enthusiast, and he panted for the hour when death, received in obeying the commands of his superior, should dismiss him to the bowers of Paradise."*

* Von Hammer's *History of the Assassins*.

*Palm Wine.*—This is prepared from the juice which exudes from the palm tree. Its properties are very inebriating; and it is an amusing fact to witness the stupor and giddiness into which the lizards frequenting these trees are thrown, by partaking of the juice which yields it. They exhibit all the usual phenomena of intoxication.

*Camphor.*—The intoxicating properties of camphor are considerable. It elevates the spirits, increases voluntary motion, and gives rise to vertigo; and these effects, as in the case of all narcotics, are succeeded by drowsiness, lassitude, and general depression. In large doses, syncope, convulsions, delirium, and even death, take place. It is sometimes used as a substitute for opium in cases of delirium, where, from particular circumstances, the latter either cannot be taken, or does not produce its usual effects. The common belief, however, of camphor being an antidote to this medicine, is quite unfounded. It neither decomposes opium, nor prevents it from acting poisonously upon the system; but in consequence of its stimulating properties, it may be advantageously given in small doses to remove the stupor and coma produced by opium.

*Saffron.*—This aromatic possesses moderate intoxicating properties. Taken in sufficient doses, it accelerates the pulse, produces giddiness, raises the spirits, and gives rise to paroxysms of laughter. In a word, it exhibits many of the phenomena occasioned by over indulgence in liquors, only in a very inferior degree.

*Darnel.*—Possesses slight intoxicating properties.

*Clery.*—Possesses slight intoxicating properties.

*Carbonic Acid.*—Carbonic acid partially inebriates, as is seen in drinking ginger beer, cider, Champagne, or even soda water, in which no alcoholic principle exists.

*Ethers.*—Ethers, when taken in quantity, give rise to a species of intoxication, which resembles that from ardent spirits in all respects, except in being more fugacious.

*Intense Cold.*—Intense cold produces giddiness, thickness of speech, confusion of ideas, and other symptoms of drunkenness. Captain Parry speaks of the effects so produced

upon two young gentlemen who were exposed to an extremely low temperature. "They looked wild," says he, "spoke thick and indistinctly, and it was impossible to draw from them a rational answer to any of our questions. After being on board for a short time, the mental faculties appeared gradually to return, and it was not till then that a looker-on could easily persuade himself that they had not been drinking too freely."

## CHAPTER VII.

### DIFFERENCES IN THE ACTION OF OPIUM AND ALCOHOL.

THE *modus operandi* of opium upon the body is considerably different from that of alcohol. The latter intoxicates chiefly by acting *directly* upon the nerves, the former by acting *secondarily* upon them, through the medium of absorption. This is easily proved by injecting a quantity of each into the cellular tissue of any animal, and comparing the effects with those produced when either is received into the stomach. M. Orfila* details some interesting experiments which he made upon dogs. In applying the watery extract of opium to them in the first manner (by injection into the cellular tissue), immediate stupor, convulsions, and debility ensued, and proved fatal in an hour or two. When, on the contrary, even a larger quantity was introduced into the stomach of the animal, it survived ten, twelve, or eighteen hours, although the œsophagus was purposely tied to prevent vomiting. The operation of alcohol was the reverse of this; for, when injected into the cellular substance, the effects were slight; but when carried into the stomach, they were powerful and almost instantaneous. This proves that opium acts chiefly by being taken up by the absorbents, as this is done much more rapidly by the drug being directly applied to a raw surface than in the stomach, where the various secretions and processes of digestion retard its absorption. Besides, alcohol taken in quantity produces instant stupefaction. It is no sooner swallowed than the person drops down insensible. Here is no time for absorption; the whole energies of the spirit are exerted against the nervous system. The same rapid privation of power never occurs after swallowing opium. There is always an interval, and generally one of some extent, between the swallowing and the stupor which succeeds. Another proof

* *Toxicologie Générale.*

that opium acts in this manner, is the circumstance of its being much more speedily fatal than alcohol, when injected into the blood-vessels. Three or four grains in solution, forced into the carotid artery of a dog, will kill him in a few minutes. Alcohol, used in the same manner, would not bring on death for several hours.

In addition it may be stated, that a species of drunkenness is produced by inhaling the gas of intoxicating liquors. Those employed in bottling spirits from the cask, feel it frequently with great severity. This proves that there is a close sympathy between the nerves of the nose and lungs, and those of the stomach. From all these circumstances, it is pretty evident that intoxication from spirits is produced more by the direct action of the fluid upon the nerves of the latter organ, than by absorption.

Mr. Brodie supposes that there is no absorption whatever of alcohol, and supports his views with a number of striking facts.* This, however, is a length to which I cannot go. I am inclined to think that though such absorption is not necessary to produce drunkenness, it generally takes place to a greater or lesser degree; nor can I conceive any reason why alcohol may not be taken into the circulation as well as any other fluid. My reasons for supposing that it is absorbed are the following:— 1. The blood, breath, and perspiration of a confirmed drunkard differ from those of a sober man; the former being darker, and the two latter strongly impregnated with a spirituous odour. 2. The perspiration of the wine drinker is often of the hue of his favourite liquor; after a

* The following are the grounds on which he supports his doctrine:— "1. In experiments where animals have been killed by the injection of spirits into the stomach, I have found this organ to bear the marks of great inflammation, but never any preternatural appearances whatever in the brain. 2. The effects of spirits taken into the stomach, in the last experiment, were so instantaneous, that it appears impossible that absorption should have taken place before they were produced. 3. A person who is intoxicated frequently becomes suddenly sober after vomiting. 4. In the experiments which I have just related, I mixed tincture of rhubarb with the spirits, knowing from the experiments of Mr. Home and Mr. William Brande, that this (*rhubarb*) when absorbed into the circulation, was readily separated from the blood by the kidneys, and that very small quantities might be detected in the urine by the addition of potash; but though I never failed to find urine in the bladder, I never detected rhubarb in it."—*Phil. Trans. of the Royal Soc. of Lond.* 1811. Part I., p. 178.

debauch on Port Burgundy, or Claret, it is not uncommon to see the shirt or sheets in which he lies, tinted to a rosy colour by the moisture which exudes from his body. 3. Madder, mercury, and sulphur are received into the circulation unchanged; the former dyeing the bones, and the others exhaling through the pores of the skin, so as to communicate their peculiar odours to the person, and even discolour coins and other metallic substances in his pockets. The first of these reasons is a direct proof of absorption; the second shows, that as wine is received into the circulation, and passes through it, alcohol may do the same; and the third furnishes collateral evidence of other agents exhibiting this phenomenon as well as spirituous liquors. The doctrine of absorption is supported by Dr. Trotter,* who conceives that alcohol deoxygenizes the blood, and causes it to give out an unusual portion of hydrogen gas. The quantity of this gas in the bodies of drunkards is so great, that many have attempted to explain from it the circumstances of *spontaneous combustion*, by which it is alleged the human frame has been sometimes destroyed, by being burned to ashes.

* *Essay on Drunkenness.*

## CHAPTER VIII.

### PHYSIOLOGY OF DRUNKENNESS.

In administering medicines, the practitioner has a natural desire to learn the means by which they produce their effects upon the body. Thus, he is not contented with knowing that squill acts as a diuretic, and that mercury increases the secretion of the bile. He inquires by what process they do so; and understands that the first excites into increased action the secretory arteries of the kidneys, and the last the secretory veins of the liver. In like manner, he does not rest satisfied with the trite knowledge that wines and spirits, and ales, produce intoxication: he extends his researches beyond this point, and is naturally anxious to ascertain by what peculiar action of the system these agents give rise to so extraordinary an effect.

All the agents of which we have spoken, with the exception of tobacco, whose action from the first is decidedly sedative, operate partly by stimulating the frame. They cause the heart to throb more vigorously, and the blood to circulate freer, while, at the same time, they exert a peculiar action upon the nervous system. The nature of this action, it is probable, will never be satisfactorily explained. If mere stimulation was all that was wanted, drunkenness ought to be present in many cases where it is never met with. It, or more properly speaking, its symptoms, ought to exist in inflammatory fever, and after violent exercise, such as running, or hard walking. Inebriating agents, therefore, with few exceptions, have a twofold action. They both act by increasing the circulation, and by influencing the nerves; and the latter operation, there can be no doubt, is the more important of the two. Having stated this general fact, it will be better to consider the cause of each individual symptom in detail.

I. *Vertigo.*—This is partly produced by the ocular

delusions under which the drunkard labours, but it is principally owing to other causes; as it is actually greater when the eyes are shut than when they are open—these causes, by the exclusion of light, being unaccountably increased. Vertigo, from intoxication, is far less liable to produce sickness and vomiting than from any other cause; and when it does produce them, it is to a very inconsiderable degree. These symptoms, in ninety-nine cases out of a hundred, arise from the disordered state of the stomach, and not, as we have elsewhere mentioned, from the accompanying giddiness. There are, indeed, a certain class of subjects who vomit and become pale, as soon as vertigo comes over them, but such are few in number compared with those whose stomachs are unaffected by this sensation. In swinging, smoking, sailing at sea, on turning rapidly round, sickness and vomiting are apt to occur; and there seems no doubt that they proceed in a great measure from the vertigo brought on by these actions. The giddiness of drunkenness, therefore, as it very rarely sickens, must be presumed to have some characters peculiar to itself. In this, as well as in some other affections, it seems to be the consequence of a close sympathy between the brain and nerves of the stomach; and whatever affects the latter organ, or any other viscus strongly sympathizing with it, may bring it on equally with inebriating agents: calculi in the ureters or biliary ducts are illustrations of this fact. In intoxication, the giddiness is more strongly marked, because the powers both of body and mind are temporarily impaired, and the sensorium so disordered as to be unable to regulate the conduct.

A degree of vertigo may be produced by loading the stomach too rapidly and copiously after a long fast. Common food, in this instance, amounts to a strong stimulus in consequence of the state of the stomach, in which there was an unnatural want of excitement. This organ was in a state of torpor; and a stimulus which, in ordinary circumstances, would hardly have been felt, proves, in reality, highly exciting. For the same reason, objects have an unnatural luminousness when a person is suddenly brought from intense darkness to a brilliant light.

II. *Double Vision.*—The double vision which occurs in drunkenness may be readily accounted for by the influence of increased circulation in the brain upon the nerves of sight. In frenzy, and various fevers, the same phenomena occurs. Every nerve is supplied with vessels; and it is conceivable that any unusual impulse of blood into the optics may so far affect that pair as to derange their actions. Whence, they convey false impressions to the brain, which is itself too much thrown off its just equilibrium to remedy, even if that under any circumstances were possible, the distorted images of the retina. The refraction of light in the tears, which are secreted more copiously than usual during intoxication, may also assist in multiplying objects to the eye.

III. *Staggering and Stammering.*—These symptoms are, in like manner, to be explained from the disordered state of the brain and nervous system. When the organ of sensation is affected, it is impossible that parts whose actions depend upon it can perform their functions well. The nervous fluid is probably carried to the muscles in a broken and irregular current, and the filaments which are scattered over the body are themselves directly stunned and paralyzed; hence, the insensibility to pain, and other external impressions. This insensibility extends everywhere, even to the organs of deglutition and speech. The utterance is thick and indistinct, indicating a loss of power in the lingual nerves which give action to the tongue; and the same want of energy seems to prevail in the gustatory branches which give it taste.

IV. *Heat and Flushing.*—These result from the strong determination of blood to the surface of the body. This reddens and tumefies the face and eyes, and excites a universal glow of heat. Blood is the cause of animal heat, and the more it is determined to any part, the greater is the quantity of caloric evolved therefrom.

V. *Ringing in the Ears.*—This is accounted for by the generally increased action within the head, and more particularly by the throbbing of the internal carotid

arteries which run in the immediate neighbourhood of the ears.

VI. *Elevation of Spirits.*—The mental pleasure of intoxication is not easily explained on physiological principles. We feel a delight in being rocked gently, in swinging on a chair, or in being tickled. These undoubtedly act upon the nerves, but in what manner, it would be idle to attempt investigating. Intoxicating agents no doubt do the same thing. The mental manifestations produced by their influence depend almost entirely upon the nerves, and are, unlike the corporeal ones, in a great measure independent of vascular excitement. The power of exciting the feelings inherent in these principles can only be accounted for by supposing a most intimate relation to subsist between the body and the mind. The brain, through the medium of its nervous branches, is the source of all this excitement. These branches receive the impressions and convey them to their fountain-head, whence they are showered like sparkling rain-drops over the mind, in a thousand fantastic varieties. No bodily affection ever influences the mind but through the remote or proximate agency of this organ. It sits enthroned in the citadel of thought, and, though material itself, acts with wizard power both upon matter and spirit. No other texture has the same pervading principle. If the lungs be diseased, we have expectoration and cough; if the liver, jaundice or dropsy; if the stomach, indigestion; but when the brain is affected, we have not merely many bodily symptoms, but severe affections of the mind; nor are such affections ever produced by any organ but through the agency of the brain. It, therefore, acts in a double capacity upon the frame, being both the source of the corporeal feelings, and of the mental manifestations. Admitting this truth, there can be little difficulty in apprehending why intoxication produces so powerful a mental influence. This must proceed from a resistless impulse being given to the brain, by virtue of the peculiar action of inebriating agents upon the nerves. That organ of the mind is suddenly endowed with increased energy. Not only does the blood circulate through it more rapidly,

but an action, *sui generis*, is given to its whole substance. Mere increase of circulation, as we have already stated, is not sufficient: there must be some other principle at work upon its texture; and it is this principle, whatever it may be, which is the main cause of drunkenness. At first, ebriety has a soothing effect, and falls over the spirit like the hum of bees, or the distant murmur of a cascade. Then to these soft dreams of Elysium succeed a state of maddening energy and excitement in the brain. The thoughts which emanate from its prolific tabernacle are more fervid and original than ever—they rush out with augmented copiousness, and sparkle over the understanding like the aurora borealis, or the eccentric scintillations of light upon a summer cloud. In a word, the organ is excited to a high, but not a diseased action, for this is coupled with pain, and, instead of pleasurable, produces afflicting ideas. But its energies, like those of any other part, are apt to be over-excited. When this takes place, the balance is broken; the mind gets tumultuous and disordered, and the ideas inconsistent, wavering, and absurd. Then come the torpor and exhaustion subsequent on such excessive stimulus. The person falls into drowsiness or stupor, and his mind, as well as his body, is followed by languor corresponding to the previous excitation.

Such is a slight and unsatisfactory attempt to elucidate some of the more prominent phenomena of drunkenness. Some are omitted as being too obvious to require explanation, and others have been elsewhere cursorily accounted for in different parts of the work.

## CHAPTER IX.

### METHOD OF CURING THE FIT OF DRUNKENNESS.

I. *From Liquors.*—Generally speaking there is no remedy for drunkenness equal to vomiting. The sooner the stomach is emptied of its contents the better, and this may, in most cases, be accomplished by drinking freely of tepid water, and tickling the fauces. On more obstinate occasions powerful emetics will be necessary. The best for this purpose are ten grains of sulphate of copper, half a drachm of sulphate of zinc, or five grains of tartar emetic. Either of these should be dissolved in a small quantity of tepid water, and instantly swallowed. Should this treatment fail in effecting vomiting, and dangerous symptoms supervene, the stomach pump should be employed. Cold applications to the head are likewise useful. In all cases the head ought to be well elevated, and the neckcloth removed, that there may be no impediment to the circulation. Where there is total insensibility, where the pulse is slow and full, the pupils dilated, the face flushed, and the breathing stertorous, it becomes a question whether bleeding might be useful. Darwin* and Trotter speak discouragingly of the practice. As a general rule, I think it is bad; and that many persons who would have recovered, if left to themselves, have lost their lives by being prematurely bled. In all cases it should be done cautiously, and not for a considerable time. Vomiting and other means should invariably be first had recourse to, and if they fail, and nature is unable of her own power to overcome the stupor, bleeding may be tried. In this respect liquors differ from opium, the insensibility from which is benefited by abstraction of blood.

There is one variety of drunkenness in which both bleeding and cold are inadmissible. This is when a person is struck down, as it were, by drinking suddenly a great

* *Zoonomia.*

quantity of ardent spirits. Here he is overcome by an instantaneous stupor: his countenance is ghastly and pale, his pulse feeble, and his body cold. While these symptoms continue there is no remedy but vomiting. When, however, they wear off, and are succeeded, as they usually are, by flushing, heat, and general excitement, the case is changed, and must be treated as any other where such symptoms exist.

The acetate of ammonia is said to possess singular properties in restoring from intoxication. This fact was ascertained by M. Masurer, a French chemist. According to him, from twenty to thirty drops in a glass of water will, in most cases, relieve the patient from the sense of giddiness and oppression of the brain; or if that quantity should be insufficient, half the same may be again given in eight or ten minutes after. In some cases the remedy will occasion nausea or vomiting, which, however, will be salutary to the patient, as the state of the brain is much aggravated by the load on the stomach and subsequent indigestion. It is also further stated that the value of this medicine is greatly enhanced from its not occasioning that heat of the stomach and subsequent inflammation which are apt to be produced by pure ammonia. Whether it possesses all the virtues attributed to it I cannot say from personal observation, having never had occasion to use it in any case which came under my management: but I think it at least promises to be useful, and is, at all events, worthy of a trial. I must mention, however, that the acetate of ammonia is seldom to be procured in the highly concentrated state in which it is used by M. Masurer. Owing to the great difficulty of crystallizing it it is rarely seen except in the fluid state, in which condition it is recommended by the French chemist. The form in which it is almost always used in this country is that of the Aq. Acet. Ammon. or Spirit of Mindererus, in doses of half an ounce or an ounce, but whether in this shape it would be equally effectual in obviating the effects of drunkenness remains to be seen.

Mr. Broomley of Deptford recommends a draught composed of two drachms of Aq. Ammon. Aromat. in two ounces of water, as an effectual remedy in drunkenness.

The carbonate of ammonia might be used with a good effect. M. Dupuy, director to the Veterinary School at Toulouse, tried a curious experiment with this medicine upon a horse. Having previously intoxicated the animal by injecting a demiletre of alcohol into the jugular vein, he injected five grains of the carbonate of ammonia dissolved in an ounce of water into the same vein, when the effects of the alcohol immediately ceased.

We have already mentioned that the excitement of drunkenness is succeeded by universal languor. In the first stage the drunkard is full of energy and capable of withstanding vigorously all external influences. In the second there is general torpor and exhaustion, and he is more than usually subject to every impression, whether of cold or contagion. Persons are often picked up half dead in this second stage. The stimulus of intoxication had enabled them to endure the chill of the atmosphere, but the succeeding weakness left them more susceptible than before of its severity. In this state the body will not sustain any further abstraction of stimuli; and bleeding and cold would be highly injurious. Vomiting is here equally necessary as in all other instances; but the person must be kept in a warm temperature, and cherished with light and nourishing food—with soups, if such can be procured, and even with negus, should the prostration of strength be very great.

A paroxysm of *periodical* drunkenness may be sometimes shortened by putting such small quantities of tartar emetic into the liquor which the person indulges in, as to bring on nausea. This, however, must be done with secrecy and caution.

It may here be mentioned, though not with a view of recommending the practice, that the vegetable acids have a strong effect both in counteracting and removing drunkenness. To illustrate this fact the following circumstance may be mentioned:—About twenty years ago an English regiment was stationed in Glasgow, the men of which, as is common in all regiments, became enamoured of whisky. This liquor, to which they gave the whimsical denomination of *white ale*, was new to them—being nearly unknown in England: and they soon indulged in it to such an extent

as to attract the censure of their officers. Being obliged to be at quarters by a certain hour they found out the plan of sobering themselves by drinking large quantities of vinegar, perhaps a gill or two at a draught. This, except in very bad cases, had the desired effect, and enabled them to enter the barrack court or appear on parade in a state of tolerable sobriety. The power of the vegetable acids in resisting intoxication is well shown in the case of cold punch—a larger portion of which can be withstood than of either grog or toddy, even when the quantity of spirit is precisely the same.

There is nothing which has so strong a tendency to dispel the effects of a debauch as hard exercise, especially if the air be cold. Aperients and diaphoretics are also extremely useful for the same purpose.

For some days after drinking too much, the food should be light and unirritating, consisting principally of vegetables. Animal food is apt to heat the body, and dispose it to inflammatory complaints.*

II. *From Opium.*—When a dangerous quantity of opium has been taken, the treatment, in the first instance, is the same as with regard to spirits, or any other intoxicating fluid. Immediate vomiting, by the administration of similar emetics, is to be attempted, and when it has taken place, it should be encouraged by warm drinks, till there is reason to believe that the stomach has been freed of the poison. These drinks, however, should not be given before vomiting is produced, for, in the event of their failing to excite it, they remain upon the stomach, and thus dissolve the opium and promote its absorption. But when vomiting occurs from the action of the emetics,

* In speaking of the treatment, it is necessary to guard against confounding other affections with drunkenness:—"There is a species of delirium that often attends the accession of *typhus fever*, from contagion, that I have known to be mistaken for ebriety. Among seamen and soldiers, whose habits of intoxication are common, it will sometimes require nice discernment to decide; for the vacant stare in the countenance, the look of idiotism, incoherent speech, faltering voice, aed tottering walk, are so alike in both cases that the naval and military surgeon ought at all times to be very cautious how he gives up a man to punishment under these suspicious appearances. Nay, the circumstance of his having come from a tavern, with even the effluvium of liquor about him, are signs not always to be trusted; for these haunts of seamen and soldiers are often the sources of infection."—Trotter.

it will in all probability be encouraged by warm drinks, and the stomach thus more effectually cleared of the poison. Large quantities of a strong infusion of coffee ought then to be given, or the vegetable acids, such as vinegar or lemon juice, mixed with water. These serve to mitigate the bad consequences which often follow, even after the opium has been brought completely up. If the person show signs of apoplexy, more especially if he be of a plethoric habit, the jugular vein or temporal artery should be opened, and a considerable quantity of blood taken away. Indeed, it may be laid down as a general rule, that as soon as the poison is rejected, the patient ought to be bled, and the operation should be repeated according to circumstances. Every means must be used to arouse him from stupor. He must be moved about, if possible, from room to room, hartshorn applied to his nostrils, and all plans adopted to prevent him from sinking into lethargy. For this purpose, camphor, asafœtida, or musk, might be administered with advantage. It is also a good practice to sponge the body well with cold water; and the affusion of cold water on the head and over the body, is still more effectual. In cases where vomiting cannot be brought about by the ordinary means, M. Orfila suggests that one or two grains of tartar emetic, dissolved in an ounce or two of water, might be injected into the veins. In desperate cases, the stomach pump must be had recourse to. Purgatives are latterly necessary.

Many practitioners consider vinegar and the other vegetable acids antidotes to opium. This opinion M. Orfila has most satisfactorily shown to be erroneous. In a series of well conducted and conclusive experiments made by him, it appears that the vegetable acids aggravate the symptoms of poisoning by opium, whenever they are not vomited. They hurry them on more rapidly, render them more violent, produce death at an earlier period, and give rise to inflammation of the stomach—an event which hardly ever occurs when they are not employed. These effects, it would appear, are partly produced by their power of dissolving opium, which they do better than the mere unassisted fluids of the stomach;

consequently the absorption is more energetic. The only time when acids can be of use is after the person has brought up the poison by vomiting. They then mitigate the subsequent symptoms, and promote recovery; but if they be swallowed before vomiting takes place, and if this act cannot by any means be brought about, they aggravate the disorder, and death ensues more rapidly than if they had not been taken.

Coffee has likewise a good effect when taken after the opium is got off the stomach; but it differs from the acids in this, that it does not, under any circumstances, increase the danger. While the opium is still unremoved, the coffee may be considered merely inert; and it is therefore a matter of indifference whether at this time it be taken or not. Afterwards, however, it produces the same beneficial effects as lemonade, tartaric acid, or vinegar. According to Orfila, the infusion is more powerful as an antidote than the decoction.

Drunkenness or poisoning from the other narcotics, such as hemlock, belladonna, aconite, hyoscyamus, &c., is treated in precisely the same manner as that from opium.

III. *From Tobacco.*—If a person feel giddy or languid from the use of this luxury, he should lay himself down on his back, exposed to a current of cool air. Should this fail of reviving him, let him either swallow twenty or thirty drops of hartshorn, mixed with a glass of cold water, or an ounce of vinegar moderately diluted. When tobacco has been received into the stomach, so as to produce dangerous symptoms, a powerful emetic must immediately be given, and vomiting encouraged by copious drinks, till the poison is brought up. After this, vinegar ought to be freely exhibited, and lethargy prevented by the external and internal use of stimuli. If apoplectic symptoms appear, bleeding must be had recourse to. The same rule applies here, with regard to acids, as in the case of opium. They should nver be given till the stomach is thoroughly liberated of its contents by previous vomiting.

Accidents happen oftener with tobacco than is commonly supposed. Severe languor, retching, and convulsive attacks sometimes ensue from the application of ointment, made with this plant, for the cure of the ring-

worm; and Santeuil, the celebrated French poet, lost his life in consequence of having unknowingly drank a glass of wine, into which had been put some Spanish snuff.

IV. *From Nitrous Oxide.*—Though the inhalation of this gas is seldom attended with any risk, yet, in very plethoric habits, there might be a determination of blood to the head, sufficient to produce apoplexy. If a person, therefore, becomes, after the experiment, convulsed, stupefied, and livid in the countenance, and if these symptoms do not soon wear away, some means must be adopted for their removal. In general, a free exposure to fresh air, and dashing cold water over the face, will be quite sufficient; but if the affection is so obstinate as to resist this plan, it will then be necessary to draw some blood from the arm, or, what is still better, from the jugular vein. When, in delicate subjects, hysteria and other nervous symptoms are produced, bleeding is not necessary; all that is requisite to be done being the application of cold water to the brow or temples, and of hartshorn to the nostrils. In obstinate cases, twenty or thirty drops of the latter, in a glass of water, may be administered with advantage.

## CHAPTER X.

### PATHOLOGY OF DRUNKENNESS.

THE evil consequences of drinking, both in a physical and moral point of view, seem to have been known from the most remote antiquity. They are expressly mentioned in Scripture; nor can there be a doubt that the Homeric fiction of the companions of Ulysses being turned into swine by the enchanted cup of Circe, plainly implied the bestial degradation into which men bring themselves by coming under the dominion of so detestable a habit. Having mentioned these circumstances in favour of the accuracy of ancient knowledge, we shall simply proceed to detail the effects of drunkenness, so far as the medical practitioner is professionally interested in knowing them. The moral consequences belong more properly to the legislator and divine, and do not require to be here particularly considered.

I. *State of the Liver.*—One of the most common consequences of drunkenness is acute inflammation. This may affect any organ, but its attacks are principally confined to the brain, the stomach, and the liver. It is unnecessary to enter into any detail of its nature and treatment. These are precisely the same as when it proceeds from any other cause. The inflammation of drunkenness is, in a great majority of cases, chronic; and the viscus which, in nine cases out of ten, suffers, is the liver.

Liquors, from the earliest ages, have been known to affect this organ. Probably the story of Prometheus stealing fire from heaven and animating clay, alluded to the effects of wine upon the human body; and the punishment of having his liver devoured by a vulture may be supposed to refer to the consequences which men draw upon themselves by over-indulgence—this organ becoming thereby highly diseased. Man is not the only animal so affected. Swine who are fed on the refuse of breweries, have their

livers enlarged in the same manner. Their other viscera become also indurated, and their flesh so tough, that unless killed early, they are unfit to be eaten. Some fowl dealers in London are said to mix gin with the food of the birds, by which means they are fattened, and their livers swelled to a great size. The French manage to enlarge this organ in geese, by piercing it shortly after the creatures are fledged.*

Neither malt liquors nor wine have so rapid and decided an affect upon the liver as ardent spirits. Indeed, it is alleged, although I cannot go this length, that the wine that is *perfectly pure* does not affect the liver: and the fact of our continental neighbours being much less troubled with hepatic complaints than the wine drinkers among ourselves, gives some countenance to the allegation; for it is well known that to suit the British market, the vinous liquors used in this country are sophisticated with brandy. In wine that is perfectly pure, the alcohol exists in such a state of chemical combination, as greatly to modify its effects upon the system. In the wine generally to be met with, much of it exists mechanically or uncombined, and all this portion of spirits acts precisely in the same manner as if separately used.†

The liver is a viscus which, in confirmed topers, never escapes; and it withstands disease better than any other vital part, except, perhaps, the spleen. Sometimes, by a slow chronic action, it is enlarged to double its usual size, and totally disorganized, and yet the person suffers comparatively little. The disease frequently arises in tropical climates, from warmth and other natural causes, but an excess in spirituous liquors is more frequently the cause than is generally imagined.

The consequences which follow chronic inflammation of the liver, are very extensive. The bile, in general, is not secreted in due quantity or quality, consequently digestion is defective, the bowels, from want of their usual stimulus, become torpid. The person gets jaundiced, his skin be-

* "They have a custom of fostering a liver complaint in their geese, which encourages its growth to the enormous weight of some *pounds;* and this diseased viscus is considered a great delicacy."—Matthew's *Diary of an Invalid.*

† *Vide* Appendix, No. 1.

coming yellow, dry, and rough, and the white of his eyes discoloured. As the enlargement goes on, the free passage of blood in the veins is impeded, and their extremities throw out lymph: this accumulating, forms dropsy, a disease with which a great proportion of drunkards are ultimately more or less affected.

The jaundice of drunkenness is not an original disease, but merely a symptom of the one under consideration. A very slight cause will often bring it on; it is, consequently, not always dangerous. Dropsy is, for the most part, also symptomatic of diseased liver, but sometimes, more especially in dram-drinkers, it arises from general debility of the system. In the former case, effusion always takes place in the cavity of the abdomen. In the latter, there is general anasarca throughout the body, usually coupled with more or less topical affection. In every instance, dropsy, whether general or local, is a very dangerous disease.

II. *State of the Stomach*, &c.—Like the liver, the stomach is more subject to chronic than acute inflammation. It is also apt to get indurated, from long continued, slow action going on within its substance. This disease is extremely insidious, frequently proceeding great lengths before it is discovered. The organ is often thickened to half an inch, or even an inch; and its different tunics so matted together that they cannot be separated. The pyloric orifice becomes, in many cases, contracted. The cardiac may suffer the same disorganization, and so may the œsophagus; but these are less common, and, it must be admitted, more rapidly fatal. When the stomach is much thickened, it may sometimes be felt like a hard ball below the left ribs. At this point there is also a dull uneasy pain, which is augmented upon pressure.

Indigestion or spasm may arise from a mere imperfect action of this organ, without any disease of its structure; but when organic derangement takes place, they are constant attendants. In the latter case it is extremely difficult for any food to remain on the stomach; it is speedily vomited. What little is retained undergoes a painful fermentation, which produces sickness and heartburn. There

is, at the same time, much obstinacy in the bowels, and the body becomes emaciated.

This disease, though generally produced by dissipation, originates sometimes from other causes, and affects the soberest people. Whenever the stomach is neglected, when acidity is allowed to become habitual, or indigestible food too much made use of, the foundation may be laid for slow inflammation, terminating in schirrus and all its bad consequences.

Vomiting of bilious matter in the mornings is a very common circumstance among all classes of drunkards. But there is another kind of vomiting, much more dangerous, to which they are subject; and that is when inflammation of the villous coat of the stomach takes place. In such a state there is not much acute pain, but rather a dull feeling of uneasiness over the abdomen, attended with the throwing up of a dark, crude matter, resembling coffee grounds. I have seen two cases in which the vomiting stopped suddenly, in consequence of metastasis to the head. In these, the affection soon proved fatal, the persons being seized with indistinctness of vision, low delirium, and general want of muscular power: the action of the kidneys was also totally suspended for three days before death. On examination, *post mortem*, there was effusion in the ventricles of the brain, besides extensive inflammation along the inner surface of the upper portion of the alimentary canal.

Bilious complaints, which were formerly in a great measure unknown to the common people, are now exceedingly common among them, and proceed in a great measure from the indulgence in ardent spirits to which that class of society is so much addicted.

There is nothing more indicative of health than a good appetite for breakfast; but confirmed topers, from the depraved state of their stomachs, lose all relish for this meal.

Persons of this description are generally of a costive habit of body, but a debauch, with those who are constitutionally sober, is, for the most part, followed by more or less diarrhœa.

In the latter stages of a drunkard's life, though he has still the relish for liquor as strongly as ever, he no longer

enjoys his former power of withstanding it. This proceeds from general weakness of the system, and more particularly of the stomach. This organ gets debilitated, and soon gives way, while the person is intoxicated much easier, and often vomits what he had swallowed. His appetite likewise fails; and, to restore it, he has recourse to various bitters, which only aggravate the matter, especially as they are in most cases taken under the medium of ardent spirits. Bitters are often dangerous remedies. When used moderately, and in cases of weak digestion from natural causes, they frequently produce the best effects; but a long continuance of them is invariably injurious. There is a narcotic principle residing in most bitters which physicians have too much overlooked. It destroys the sensibility of the stomach, determines to the head, and predisposes to apoplexy and palsy. This was the effects of the famous Portland Powder,* so celebrated many years ago for the cure of gout; and similar consequences will, in the long run, follow bitters as they are commonly administered. Persons addicted to intemperance have an inordinate liking for these substances: let them be ever so nauseous they are swallowed greedily, especially if dissolved in spirits. Their fondness for purl, herb ale, and other pernicious morning drinks is equally striking.

There is nothing more characteristic of a tippler than an indifference to tea, and beverages of a like nature. When a woman exhibits this quality we may reasonably suspect her of indulging in liquor. If drunkards partake of tea they usually saturate it largely with ardent spirits. The unadulterated fluid is too weak a stimulus for their unnatural appetites.

III. *State of the Brain.*—Inflammation of this organ is often a consequence of intemperance. It may follow immediately after a debauch, or it may arise secondarily from an excess of irritation being applied to the body

* The Portland Powder consisted of equal parts of the roots of round birthwort and gentian, of the leaves of germander and ground pine, and of the tops of the lesser centaury, all dried. Drs. Cullen, Darwin, and Murray of Gottingen, with many other eminent physicians, bear testimony to the pernicious effects of this compound.

during the stage of debility. Even an abstraction of stimulus, as by applying too much cold to the head, may bring it on in this latter state.

Dr. Armstrong, in his lectures, speaks of a chronic inflammation of the brain and its membranes, proceeding, among other causes, from the free use of strong wines and liquors. According to him it is much more common after, than before, forty years of age, although he has seen several instances occurring in young persons. The brain gets diseased, the diameter of the vessels being diminished, while their coats are thickened and less transparent than usual. In some places they swell out and assume a varicose appearance. The organ itself has no longer the same delicate and elastic texture, becoming either unnaturally hard, or of a morbid softness. Slight effusions in the various cavities are apt to take place. Under these circumstances there is a strong risk of apoplexy. To this structure is to be ascribed the mental debasement, the loss of memory, and gradual extinction of the intellectual powers. I believe that the brains of all confirmed drunkards exhibit more or less of the above appearances.

IV. *State of the Kidneys.* — During intoxication the action of the kidneys is always much increased; and this is a favourable circumstance, as, more than anything else, it carries off the bad effects of drinking. The kidney, however, in confirmed drunkards, is apt to become permanently diseased, and secretes its accustomed fluid with unusual activity, not only in the moments of drunkenness, when such an increase is useful, but at all periods, even when the person abstains from every sort of indulgence. The disease called diabetes is thus produced, which consists in a morbid increase of the secretion, accompanied with a diseased state of the texture of the kidneys. This affection is mostly fatal.

V. *State of the Bladder.*—Drunkenness affects this organ in common with almost every other; hence it is subject to paralysis, spasm, induration, &c., and to all bad consequences thence resulting—such as pain, incontinence, and retention of urine.

VI. *State of the Blood and Breath.*—The blood of a professed drunkard, as already stated, differs from that of a sober man. It is more dark, and approaches to the character of venous. The ruddy tint of those carbuncles which are apt to form upon the face is no proof to the contrary, as the blood which supplies them is crimsoned by exposure to the air, on the same principle as that by which the blood in the pulmonary arteries receives purification by the process of breathing. The blood of a malt liquor drinker is not merely darker, but also more thick and sizy than in other cases, owing, no doubt, to the very nutritious nature of his habitual beverage.

The breath of a drunkard is disgustingly bad, and has always a spirituous odour. This is partly owing to the state of the stomach, which communicates the flavour of its customary contents to respiration; and partly, also, there can be little doubt, to the absorption of the liquor by the blood, through the medium of the lacteals.

VII. *State of the Perspiration.*—The perspiration of a confirmed drunkard is as offensive as his breath, and has often a strong spirituous odour. I have met with two instances, the one in a Claret, the other in a Port drinker, in which the moisture which exuded from their bodies had a ruddy complexion, similar to that of the wine on which they had committed their debauch.

VIII. *State of the Eyes*, &c.—The eyes may be affected with acute or chronic inflammation. Almost all drunkards have the latter more or less. Their eyes are red and watery, and have an expression so peculiar that the cause can never be mistaken. This, and a certain want of firmness about the lips, which are loose, gross, and sensual, betray at once the toper. Drunkenness impairs vision. The delicacy of the retina is probably affected; and it is evident that, from long continued inflammation, the tunica adnata which covers the cornea must lose its original clearness and transparency.

Most drunkards have a constant tenderness and redness of the nostrils. This, I conceive, arises from the state of the stomach and œsophagus. The same membrane which

lines them is prolonged upwards to the nose and mouth and carries thus far its irritability.

There is no organ which so rapidly betrays the Bacchanalian propensities of its owner as the nose. It not only becomes red and fiery like that of Bardolph,* but acquires a general increase of size—displaying upon its surface various small pimples, either wholly of a deep crimson hue, or tipt with yellow, in consequence of an accumulation of viscid matter within them. The rest of the face often presents the same carbuncled appearances.

I have remarked that drunkards who have a foul, livid, and pimpled face, are less subject to liver complaint than those who are free from such eruptions. In this case the determination of blood to the surface of the body seems to prevent that fluid from being directed so forcibly to the viscera as it otherwise would be. The same fact is sometimes observed in sober persons who are troubled with hepatic affection. While there is a copious rush upon the face or body, they are comparatively well, but no sooner does it go in than they are annoyed by the liver getting into disorder.

IX. *State of the Skin.*—The skin of a drunkard, especially if he be advanced in life, has seldom the appearance of health. It is apt to become either livid or jaundiced in its complexion, and feels rough and scaly. There is a disease spoken of by Dr. Darwin, under the title of *Psora Ebriorum*, which is peculiar to people of this description. "Elderly people," says he, "who have been much addicted to spirituous drinks, as beer, wine, or alcohol, are liable to an eruption all over their bodies, which is attended

* "*Falstaff.* Thou art our admiral; thou bearest the lanthorn in the poop; but 'tis in the *nose* of thee: thou art the knight of the burning lamp.

"*Bardolph.* Why, Sir John, my face does you no harm.

"*Falstaff.* No, I'll be sworn! I make as good use of it as many a man doth of a death's head or a *memento mori.* I never see thy face but I think of hell fire."——"When thou rann'st up Gadshill in the night to catch my horse, if I did not think thou hadst been an *ignis fatuus* or a ball of wild fire, there's no purchase in money. O! thou art a perpetual triumph—an everlasting bonfire light: thou hast saved me a thousand marks in links and torches, walking with me in the night betwixt tavern and tavern; but the sack thou hast drunk me would have bought me lights as good, cheap, at the dearest chandler's in Europe. I have maintained that salamander of yours with fire any time this two and thirty years—heaven reward me for it!"

with very afflicting itching, and which they probably propagate from one part of their bodies to another with their own nails by scratching themselves." I have met with several cases of this disease, which is only one of the many forms of morbid action which the skin is apt to assume in drunkards.

X. *State of the Hair.*—The hair of drunkards is generally dry, slow of growth, and liable to come out; they are consequently more subject to baldness than other people. At the same time, it would be exceedingly unjust to suspect any one, whose hair was of this description, of indulgence in liquors, for we frequently find in the soberest persons that the hairs are arid, few in number, and prone to decay. Baldness with such persons is merely a local affection, but in drunkards it is constitutional, and proceeds from that general defect of vital energy which pervades their whole system.

XI. *Inflammations.*—Drunkards are exceedingly subject to all kinds of inflammation, both from the direct excitement of the liquor, and from their often remaining out in a state of intoxication, exposed to cold and damp. Hence inflammatory affections of the lungs, intestines, bladder, kidneys, brain, &c., arising from these sources. Rheumatism is often traced to the neglect and exposure of a fit of drunkenness.

XII. *Gout.*—Gout is the offspring of gluttony, drunkenness, or sensuality, or of them all put together. It occurs most frequently with the winebibber. A very slight cause may bring it on when hereditary predisposition exists; but in other circumstances considerable excess will be required before it makes its appearance. It is one of the most afflicting consequences of intemperance, and seems to have been known as such from an early age—mention being made of it by Hippocrates, Aretæus, and Galen. Among the Roman ladies gout was very prevalent during the latter times of the empire; and, at the present day, there are few noblemen who have it not to hand down to their offspring as a portion of their heritage.

XIII. *Tremors.*—A general tremor is an attendant upon almost all drunkards. This proceeds from nervous irritability. Even those who are habitually temperate, have a quivering in their hands next morning, if they indulge overnight in a debauch. While it lasts, a person cannot hold anything without shaking, neither can he write steadily. Among those who have long devoted themselves to the mysteries of Silenus, this amounts to a species of palsy, affecting the whole body, and even the lips, with a sort of paralytic trembling. On awaking from sleep, they frequently feel it so strongly, as to seem in the cold fit of an ague, being neither able to walk steadily, nor articulate distinctly. It is singular that the very cause of this distemper should be employed for its cure. When the confirmed drunkard awakes with tremor, he immediately swallows a dram: the most violent shaking is quieted by this means. The opium-eater has recourse to the same method: to remove the agitation produced by one dose of opium he takes another. This, in both cases, is only adding fuel to the fire—the tremors coming on at shorter intervals, and larger doses being required for their removal.

Drunkards are more subject than any other class of people to apoplexy and palsy.

XIV. *Palpitation of the Heart.*—This is a very distressing consequence of drunkenness, producing difficult breathing, and such a determination to the head as often brings on giddiness. Drunkards are apt to feel it as they step out of bed, and the vertigo is frequently so great as to make them stumble. There are some sober persons who are much annoyed by this affection. In them it may arise from spasmodic action of the fibres of the heart, nervous irritability, or organic disease, such as aneurism, or angina pectoris.

XV. *Hysteria.*—Female drunkards are very subject to hysterical affections. There is a delicacy of fibre in women, and a susceptibility of mind, which make them feel more acutely than the other sex all external influences. Hence their whole system is often violently affected with hysterics and other varieties of nervous weakness. These affections

are not always traced to their true cause, which is often neither more nor less than dram-drinking. When a woman's nose becomes crimsoned at the point, her eyes somewhat red, and more watery than before, and her lips fuller and less firm and intellectual in their expression, we may suspect that something wrong is going on.

XVI. *Epilepsy.*—Drunkenness may bring on epilepsy, or falling sickness, and may excite it into action in those who have the disease from other causes. Many persons cannot get slightly intoxicated without having an epileptic or other convulsive attack. These fits generally arise in the early stages, before drunkenness has got to a height. If they do not occur early, the individual will probably escape them altogether for the time.

XVII. *Sterility.*—This is a state to which confirmed drunkards are very subject. The children of such persons are, in general, neither numerous nor healthy. From the general defect of vital power in the parental system, they are apt to be puny and emaciated, and more than ordinarily liable to inherit all the diseases of those from whom they are sprung. On this account, the chances of long life are much diminished among the children of such parents. In proof of this, it is only necessary to remark, that according to the London bills of mortality, one-half of the children born in the metropolis die before attaining their third year; while, of the children of the Society of Friends—a class remarkable for sobriety and regularity of all kinds—one-half actually attain the age of forty-seven years. Much of this difference, doubtless, originates in the superior degree of comfort, and correct general habits of the Quakers, which incline them to bestow every care in the rearing of their offspring, and put it in their power to obtain the means of combating disease; but the mainspring of this superior comfort and regularity is doubtless temperance—a virtue which this class of people possess in an eminent degree.

XVIII. *Emaciation.*—Emaciation is peculiarly characteristic of the spirit drinker. He wears away before his

time, into the "lean and slippered pantaloon" spoken of by Shakspeare in his "Stages of Human Life." All drunkards, however, if they live long enough, become emaciated. The eyes get hollow, the cheeks fall in, and wrinkles soon furrow the countenance with the marks of age. The fat is absorbed from every part, and the rounded plumpness which formerly characterized the body soon wears away. The whole form gets lank and debilitated. There is a want of due warmth, and the hand is usually covered with a chill clammy perspiration.

The occurrence of emaciation is not to be wondered at in persons who are much addicted to ardent spirits, for alcohol, besides being possessed of no nutritive properties, prevents the due chymification of the food, and consequently deteriorates the quality, besides diminishing the quantity of chyle. The principle of nutrition being thus affected, the person becomes emaciated as a natural consequence.

XIX. *Corpulency.*—Malt liquor and wine drinkers are, for the most part, corpulent, a state of body which rarely attends the spirit drinker, unless he be, at the same time, a *bon vivant.* Both wines and malt liquors are more nourishing than spirits. Under their use, the blood becomes, as it were, enriched, and an universal deposition of fat takes place throughout the system. The omentum and muscles of the belly are, in a particular manner, loaded with this secretion; whence the abdominal protuberance so remarkable in persons who indulge themselves in wines and ales. As the abdomen is the part which becomes most enlarged, so is it that which longest retains its enlargement. It seldom parts with it, indeed, even in the last stages, when the rest of the body is in a state of emaciation. There can be no doubt that the parts which first lose their corpulency are the lower extremities. Nothing is more common than to see a pair of spindle-shanks tottering under the weight of an enormous corporation, to which they seem attached more like artificial appendages than natural members. The next parts which give way are the shoulders. They fall flat, and lose their former firmness and rotundity of organization. After

this, the whole body becomes loose, flabby, and inelastic; and five years do as much to the constitution as fifteen would have done under a system of strict temperance and sobriety. The worst symptom that can befall a corpulent man, is the decline of his lower extremities.* So long as they continue firm, and correspond with the rest of the body, it is a proof that there is still vigour remaining; but when they gradually get attenuated, while other parts retain their original fullness, there can be no sign more sure that his constitution is breaking down, and that he will never again enjoy his wonted strength.

XX. *Premature Old Age.*—Drunkenness has a dreadful effect in anticipating the effects of age. It causes time to pace on with giant strides—chases youth from the constitution of its victims and clothes them prematurely with the gray garniture of years. How often do we see the sunken eye, the shrivelled cheek, the feeble, tottering step, and hoary head, in men who have scarcely entered into the autumn of their existence. To witness this distressing picture, we have only to walk out early in the mornings, and see those gaunt, melancholy shadows of mortality, betaking themselves to the gin shops, as to the altar of some dreadful demon, and quaffing the poisoned cup to his honour, as the Carthaginians propitiated the deity of their worship, by flinging their children into the fire which burned within his brazen image. Most of these unhappy persons are young or middle aged men; and though some drunkards attain a green old age, they are few in number compared with those who sink untimely into the grave ere the days of their youth have well passed by.† Nothing is more common than to see a man

* This circumstance has not escaped the observation of Shakspeare.—"*Chief Justice.* Do you set down your name in the scroll of youth, that are written down old, with all the characters of age? Have you not a moist eye, a dry hand, a yellow cheek, a white beard, a *decreasing* leg, an increasing belly? Is not your voice broken, your wind short, your chin double, your wit single, and every part about you blasted with antiquity; and will you yet call yourself young? Fie, fie, fie, Sir John!"

† "Let nobody tell me that there are numbers who, though they live most irregularly, attain, in health and spirits, those remote periods of life attained by the most sober; for this argument being grounded on a case full of

of fifty as hoary, emaciated, and wrinkled, as if he stood on the borders of fourscore.

The effect of intemperance in shortening life is strikingly exemplified in the contrast afforded by other classes of society to the Quakers, a set of people of whom I must again speak favourably. It appears from accurate calculation, that in London only one person in forty attains the age of fourscore, while among the Quakers, whose sobriety is proverbial, and who have long set themselves against the use of ardent spirits, not less than one in ten reaches that age—a most striking difference, and one which carries its own inference along with it.

It is remarked by an eminent practitioner, that of more than a hundred men in a glass manufactory, three drank nothing but water, and these three appeared to be of their proper age, while the rest who indulged in strong drinks seemed ten or twelve years older than they proved to be. This is conclusive.*

XXI. *Ulcers.*—Ulcers often break out on the bodies of drunkards. Sometimes they are fiery and irritable, but in general they possess an indolent character. Of whatever kind they may be, they are always aggravated in such constitutions. A slight cause gives rise to them; and a cut or bruise which, in health, would have healed in a few days, frequently degenerates into a foul sloughy sore. When drunkards are affected with scrofula, scurvy, or any cutaneous disease whatever, they always, *cæteris paribus*, suffer more than other people.

uncertainty and hazard, and which besides, so seldom occurs as to look more like a miracle than the work of nature, men should not suffer themselves to be thereby persuaded to live irregularly, nature having been too liberal to those who did so without suffering by it; a favour which very few have any right to expect."—Carnaro *On Health.*

* "The workmen in provision stores have large allowances of whisky bound to them in their engagements. These are served out to them daily *by their employers*, for the purpose of urging them, by excitement, to extraordinary exertion. And what is the effect of this murderous system? The men are ruined, scarcely one of them being capable of work beyond fifty years of age, though none but the most able bodied men can enter such employment."—Beecher's *Sermons on Intemperance, with an Introductory Essay by John Edgar.* This is an excellent little work, which I cordially recommend to the perusal of the reader.

XXII. *Melancholy.*—Though drunkards over their cups are the happiest of mankind, yet, in their solitary hours, they are the most wretched. Gnawing care, heightened perhaps by remorse, preys upon their conscience. While sober they are distressed both in body and mind, and fly to the bowl to drown their misery in oblivion. Those, especially, whom hard fate drove to this desperate remedy, feel the pangs of low spirits with sevenfold force. The weapon they employ to drive away care is turned upon themselves. Every time it is used, it becomes less capable of scaring the fiend of melancholy, and more effectual in wounding him that uses it.

All drunkards are apt to become peevish and discontented with the world. They turn enemies to the established order of things, and, instead of looking to themselves, absurdly blame the government as the origin of their misfortunes.

XXIII. *Madness.*—This terrible infliction often proceeds from drunkenness. When there is hereditary predisposition, indulgence in liquor is more apt to call it into action than when there is none. The mind and body act reciprocally upon one another; and when the one is injured the other must suffer more or less. In intemperance, the structure of the brain is no longer the same as in health; and the mind, that immortal part of man, whose manifestations depend upon this organ, suffers a corresponding injury.

Intoxication may affect the mind in two ways. A person, after excessive indulgence of liquor, may be seized with delirium, and run into a state of violent outrage and madness. In this case the disease comes suddenly on: the man is fierce and intractable, and requires a strait jacket to keep him in order. Some never get drunk without being insanely outrageous; they attack, without distinction, all who come in their way, foam at the mouth, and lose all sense of danger. This fit either goes off in a few hours, or degenerates into a confirmed attack of lunacy. More, generally, however, the madness of intoxication is of another character, partaking of the nature of idiotism, into which state the mind resolves itself, in

consequence of a long continued falling off in the intellectual powers.

Drunkenness, according to the reports of Bethlehem Hospital, and other similar institutions for the insane, is one of the most common causes of lunacy. In support of this fact, it may be mentioned that of two hundred and eighty-six lunatics now in the Richmond Asylum, Dublin, one-half owe their madness to drinking; and there are few but must have witnessed the wreck of the most powerful minds, by this destructive habit. It has a more deplorable effect upon posterity than any other practice, for it entails not only bodily disease upon the innocent offspring, but also the more afflicting diseases of the mind. Madness of late years has been greatly on the increase among the lower classes, and can only be referred to the alarming progress of drunkenness, which prevails now to a much greater extent among the poor than ever it did at any former period.*

XXIV. *Delirium Tremens.*—Both the symptoms and treatment of this affection require to be mentioned, because, unlike the diseases already enumerated, it invariably originates in the abuse of stimuli, and is cured in a manner peculiar to itself.

Those who indulge in spirits, especially raw, are most subject to delirium tremens, although wine, malt liquor, opium, and even ether, may give rise to it, if used in immoderate quantities. The sudden cessation of drinking in a confirmed toper, or a course of violent or long protracted intemperance may equally occasion the disease. A man, for instance, of the former description, breaks his leg or is seized with some complaint, which compels him to abandon his potations. This man in consequence of such abstinence is attacked with delirium tremens. In another man, it is

* It has been considered unnecessary to enter into any detail of the nature and treatment of the foregoing diseases, because they may originate from many other causes besides drunkenness; and when they do arise from this source, they acquire no peculiarity of character. Their treatment is also precisely the same as in ordinary cases—it being always understood, that the bad habit which brought them on, must be abandoned before any good can result from medicine. The disease, however, which follows is different, and requires particular consideration.

induced by a long course of tippling, or by a hard drinking-bout of several days' continuance.

The disease generally comes on with lassitude, loss of appetite, and frequent exacerbations of cold. The pulse is weak and quick, and the body covered with a chilly moisture. The countenance is pale, there are usually tremors of the limbs, anxiety, and a total disrelish for the common amusements of life. Then succeed retching, vomiting, and much oppression at the pit of the stomach, with sometimes slimy stools. When the person sleeps, which is but seldom, he frequently starts in the utmost terror, having his imagination haunted by frightful dreams. To the first coldness, glows of heat succeed, and the slightest renewed agitation of body or mind sends out a profuse perspiration. The tongue is dry and furred. Every object appears unnatural and hideous. There is a constant dread of being haunted by spectres. Black or luminous bodies seem to float before the person: he conceives that vermin and all sorts of impure things are crawling upon him, and is constantly endeavouring to pick them off. His ideas are wholly confined to himself and his own affairs, of which he entertains the most disordered notions. He imagines that he is away from home, forgets those who are around him, frequently abuses his attendants, and is irritated beyond measure by the slightest contradiction. Calculations, buildings, and other fantastic schemes often occupy his mind; and a belief that every person is confederated to ruin him, is commonly entertained. Towards morning there is often much sickness and sometimes vomiting. This state generally lasts from four to ten days, and goes after a refreshing sleep; but sometimes, either from the original violence of the disease, or from improper treatment, it proves fatal.

Such, in nine cases out of ten, is the character of delirium tremens. Sometimes, however, the symptoms vary, and instead of a weak there is a full pulse; instead of the face being pallid, it is flushed and the eyes fiery; instead of a cold clammy skin, the surface is hot and dry. This state only occurs in vigorous plethoric subjects. A habitually sober man who has thoughtlessly rushed into a debauch, is more likely to be attacked in this manner than a professed

drunkard. Indeed, I never met with an instance of the latter having this modification of the disease.

When the patient perishes from delirium tremens he is generally carried off in convulsions. There is another termination which the disease sometimes assumes: it may run into madness or confirmed idiotism. Indeed, when it continues much beyond the time mentioned, there is danger of the mind becoming permanently alienated.

Subsultus, low delirium, very cold skin, short disturbed sleep, contracted pupil, strabismus, rapid intermittent pulse, and frequent vomiting, are indications of great danger. When the patient is affected with subsultus from which he recovers in terror, the danger is extreme.

In treating delirium tremens, particular attention must be paid to the nature of the disease, and constitution of the patient. In the first mentioned, and by far the most frequent variety, bleeding, which some physicians foolishly recommend, is most pernicious. I have known more than one instance where life was destroyed by this practice. As there is generally much gastric irritation, as is indicated by the foul tongue, black and viscid evacuations and irritable state of the stomach, I commence the treatment by administering a smart dose of calomel. As soon as this has operated, I direct tepid water strongly impregnated with salt to be dashed over the body, and the patient immediately thereafter to be well dried and put to bed. I then administer laudanum in doses of from forty to sixty drops, according to circumstances, combining with each dose from six to twelve grains of the carbonate of ammonia: this I repeat every now and then till sleep is procured. It may sometimes be necessary to give such doses every two hours, or even every hour, for twelve or twenty successive hours, before the effect is produced. The black drop in doses proportioned to its strength, which is more than three times that of laudanum, may be used as a substitute for the latter; the acetate or muriate of morphia in doses of a quarter or half a grain, is also a good medicine, having less tendency to produce stupor or headache than laudanum, and therefore preferable in cases where the patient is of a plethoric habit of body. It must be admitted, however, that their effects are less to be de-

pended upon than those of laudanum, which, in all common cases will, I believe, be found the best remedy. The great object of the treatment is to soothe the apprehensions of the patient, and procure him rest. So soon as a sound sleep takes place there is generally a crisis, and the disease begins to give way; but till this occurs it is impossible to arrest its progress and effect a cure. A moderate quantity of wine will be necessary, especially if he has been a confirmed drinker, and labours under much weakness. Perhaps the best way of administering wine is along with the laudanum, the latter being dropped into the wine. Where wine cannot be had, porter may be advantageously given in combination with laudanum. The principal means, indeed, after the first purging, are opium, wine, ammonia, and tepid effusion: the latter may be tried two, three, or four times in the twenty-four hours, as occasion requires. The mind is, at the same time, to be soothed in the gentlest manner, the whimsical ideas of the patient to be humoured, and his fancies indulged as far as possible. All kinds of restraint or contradiction are most hurtful. Some recommend blisters to the head, but these are, in every case injurious. So soon as all the symptoms of the disease have disappeared some purgative should be administered, but during its progress we must rely almost wholly upon stimulants. To cure by means of stimuli a complaint which arose from an over-indulgence in such agents, is apparently paradoxical; but experience confirms the propriety of the practice where, *à priori*, we might expect the contrary.

In the second variety of the disease, the same objections do not apply to bloodletting as in the first, but even there great caution is necessary, especially if the disease has gone on for any length of time, if the pulse is quick and feeble, or the tongue foul. At first general bleeding will often have an excellent effect; but should we not be called till after this stage, it will prove a hazardous experiment. Local bleeding will then sometimes be serviceable, where general bleeding could not be safely attempted. The patient should be purged well with calomel, have his head shaved, and kept cool with wet cloths, and sinapisms applied to his feet. When the bowels are well evacuated,

and no symptoms of coma exist, opiates must be given as in the first variety, but in smaller and less frequently repeated doses.

Much yet remains to be known with regard to the pathology of delirium tremens. I believe that physicians have committed a dangerous error in considering these two varieties as modifications of the same disease. In my opinion they are distinct affections, and ought to be known under different names. This cannot be better shown than in the conflicting opinions with regard to the real nature of the disease. Dr. Clutterbuck, having apparently the second variety in his eye, conceives that delirium tremens arises from congestion or inflammation of the brain; while Dr. Ryan, referring to the first, considers it a nervous affection, originating in that species of excitement often accompanying debility. It is very evident, that such different conditions require different curative means. The genuine delirium tremens is that described under the first variety, and I agree with Dr. Ryan in the view he takes of the character of this singular disease.

General Remarks.—Such are the principal diseases brought on by drunkenness. There are still several others which have not been enumerated—nor is there any affection incident to either the body or the mind which the vice does not aggravate into double activity. The number of persons who die in consequence of complaints so produced is much greater than unprofessional people imagine. This fact is well known to medical men, who are aware that many of the cases they are called upon to attend originate in liquor, although very often the circumstance is totally unknown either to the patient or his friends. This is particularly the case with regard to affections of the liver, stomach, and other viscera concerned in digestion. Dr. Willan, in his reports of the diseases of London, states his conviction, that considerably more than one-eighth of all the deaths which take place in persons above twenty years old, happen prematurely through excess in drinking spirits. Nor are the moral consequences less striking: Mr. Poynter, for three years Under-Sheriff of London and Westminster, made the following declaration

before a Committee of the House of Commons:—"I have long been in the habit of hearing criminals refer all their misery to drinking, so that I now almost cease to ask them the cause of their ruin. This evil lies at the root of all other evils of this city and elsewhere. Nearly all the convicts for murder, with whom I have conversed, have admitted themselves to have been under the influence of liquor at the time of the act." "By due observation for nearly twenty years," says the great Judge Hales, "I have found that if the murders and manslaughters, the burglaries and robberies, and riots and tumults, the adulteries, fornications, rapes, and other great enormities, that have happened in that time, were divided into five parts, four of them have been the issues and product of excessive drinking—of tavern and ale-house meetings." According to the *Caledonian Mercury* of October 26, 1829, no fewer than ninety males, and one hundred and thirty *females*, in a state of intoxication, were brought to the different police watchhouses of Edinburgh in the course of the previous week—being the greatest number for many years. Nor is Glasgow, in this respect, a whit better than Edinburgh. On March 1, 1830, of forty-five cases brought before the police magistrate in Glasgow, forty were for drunkenness; and it is correctly ascertained that more than nine thousand cases of drunkenness are annually brought before the police, from this city and suburbs—a frightful picture of vice. In the ingenious Introductory Essay attached to the Rev. Dr. Beecher's *Sermons on Intemperance*, the following passage occurs, and I think, instead of exaggerating, it rather underrates the number of drunkards in the quarter alluded to:—"Supposing that one-half of the eighteen hundred licensed houses for the sale of spirits which are in that city, send forth each a drunken man every day, there are in Glasgow nine hundred drunken men, day after day, spreading around them beggary, and wretchedness, and crime!" Had the author given to each licensed house one drunkard on an average, I do not think he would have overstepped the bounds of truth. As it is, what a picture of demoralization and wretchedness does it not exhibit!

## CHAPTER XI.

### SLEEP OF DRUNKARDS.

To enter at large upon the subject of sleep would require a volume. At present I shall only consider it so far as it is modified by drunkenness.

The drunkard seldom knows the delicious and refreshing slumbers of the temperate man. He is restless, and tosses in bed for an hour or two before falling asleep. Even then his rest is not comfortable. He awakes frequently during night, and each time his mouth is dry, his skin parched, and his head, for the most part, painful and throbbing. These symptoms, from the irritable state of his constitution, occur even when he goes soberly to bed; but if he lie down heated with liquor, he feels them with double force. Most persons who fall asleep in a state of intoxication have much headache, exhaustion, and general fever, on awaking. Some constitutions are lulled to rest by liquors, and others rendered excessively restless; but the first are no gainers by the difference, as they suffer abundantly afterwards. Phlegmatic drunkards drop into slumber more readily than the others; their sleep is, in reality, a sort of apoplectic stupor.

I. *Dreams.*—Dreams may be readily supposed to be common, from the deranged manifestations of the stomach and brain which occur in intoxication. They are usually of a painful nature, and leave a gloomy impression upon the mind. In general, they are less palpable to the understanding than those which occur in soberness. They come like painful grotesque conceptions across the imagination; and though this faculty can embody nothing into shape, meaning, or consistence, it is yet haunted with melancholy ideas. These visions depend much on the mental constitution of the person, and are modified by his habitual tone of thinking. It is, however, to be remarked, that while

the waking thoughts of the drunkard are full of sprightly images, those of his sleep are usually tinged with a shade of perplexing melancholy.

II. *Nightmare.*—Drunkards are more afflicted than other people with this disorder, in so far as they are equally subject to all the ordinary causes, and liable to others, from which sober people are exempted. Intoxication is fertile in producing reveries and dreams, those playthings of the fancy; and it may also give rise to such a distortion of idea as to call up incubus and all its frightful accompaniments.

III. *Sleep-walking.*—Somnambulism is another affection to which drunkards are more liable than their neighbours. I apprehend that the slumber is never profound when this takes place, and that, in drunkenness in particular, it may occur in a state of very imperfect sleep. Drunkards, even when consciousness is not quite abolished, frequently leave their beds and walk about the room. They know perfectly well what they are about, and recollect it afterwards, but if questioned, either at the moment or at any future period, they are totally unable to give any reason for their conduct. Sometimes after getting up, they stand a little time and endeavour to account for rising, then go again deliberately to bed. There is often, in the behaviour of these individuals, a strange mixture of folly and rationality. Persons half tipsy have been known to arise and go out of doors in their night-dress, being all the while sensible of what they were doing, and aware of its absurdity. The drunken somnambulism has not always this character. Sometimes the reflecting faculties are so absorbed in slumber, that the person has no consciousness of what he does. From drinking, the affection is always more dangerous than from any other cause, as the muscles have no longer their former strength, and are unable to support the person in his hazardous expeditions. If he gets upon a house-top, he does not balance himself properly, from giddiness; he is consequently liable to falls and accidents of every kind. It is considered, with justice, dangerous to awaken a sleep-walker. In a drunken fit,

there is less risk than under other circumstances, the mind being so far confused by intoxication as to be, in some measure, insensible to the shock.

IV. *Sleep-talking.*—For the same reason that drunkards are peculiarly prone to somnambulism are they subject to sleep-talking, which is merely a modification of the other. The imagination, being vehemently excited by the drunken dream, embodies itself often in speech, which, however, is in almost every case extremely incoherent, and wants the rationality sometimes possessed by the conversation of sleep-talkers under other circumstances.

## CHAPTER XII.

### SPONTANEOUS COMBUSTION OF DRUNKARDS.

WHETHER such a quantity of hydrogen may accumulate in the bodies of drunkards as to sustain combustion is not easy to determine. This subject is, indeed, one which has never been satisfactorily investigated; and, notwithstanding the cases brought forward in support of the doctrine, the general opinion seems to be that the whole is a fable, or at least so much involved in obscurity as to afford no just grounds for belief. The principal information on this point is in the *Journal de Physique*, in an article by Piérre Aime Lair, a copy of which was published in the sixth volume of *The Philosophical Transactions*, by Mr. Alexander Tilloch. A number of cases are there given; and it is not a little singular that the whole of them are those of women in advanced life. When we consider that writers like Vicq d'Azyr, Le Cat, Maffei, Jacobæus, Rolli, Bianchini, and Mason Good, have given their testimony in support of such facts, it requires some effort to believe them unfounded in truth. At the same time, in perusing the cases themselves, it is difficult to divest the mind of an idea that some misstatement or other exists, either as to their alleged cause or their actual nature—and that their relaters have been led into an unintentional misrepresentation. The most curious fact connected with this subject is, that the combustion appears seldom to be sufficiently strong to inflame combustible substances with which it comes in contact, such as woollen or cotton, while it destroys the body, which in other circumstances is hardly combustible at all.* Sometimes the body is con-

* "At a period when criminals were condemned to expiate their crimes in the flames, it is well known what a large quantity of combustible materials was required for burning their bodies. A baker's boy named Renaud, being several years ago condemned to be burned at Caen, two large cartloads of faggots were required to consume the body; and at the end of more than ten hours some remains were still visible. In this country, the extreme incom-

sumed by an open flame flickering over it—at other times there is merely a smothered heat or fire, without any visible flame. It is further alleged that water, instead of allaying, aggravates the combustion. This species of burning, indeed, is perfectly *sui generis*, and bears no resemblance to any species of combustion with which we are acquainted. In most cases it breaks out spontaneously, although it may be occasioned by a candle, a fire, or a stroke of lightning; but in every case it is wholly peculiar to itself. M. Foderé remarks, that hydrogen gas is developed in certain cases of disease, even in the living body; and he seems inclined to join with M. Mere in attributing what is called spontaneous combustion to the united action of hydrogen and electricity in the first instance, favoured by the accumulation of animal oil, and the impregnation of spirituous liquors. In the present state of our knowledge, it is needless to hazard any conjectures upon this mysterious subject. The best way is to give a case or two, and let the reader judge for himself.

Case of Mary Clues.—"This woman, aged fifty, was much addicted to intoxication. Her propensity to this vice had increased after the death of her husband, which happened a year and a-half before: for about a year scarcely a day had passed in the course of which she did not drink at least half a pint of rum or aniseed water. Her health gradually declined, and about the beginning of February she was attacked by the jaundice, and confined to her bed. Though she was incapable of much action, and not in a condition to work, she still continued her old habit of drinking every day, and smoking a pipe of tobacco. The bed in which she lay stood parallel to the chimney of the apartment, at the distance from it of about three feet. On Saturday morning, the 1st of March, she fell on the floor, and her extreme weakness having prevented her from getting up, she remained in that state till some one

bustibility of the human body was exemplified in the case of Mrs. King, who, having been murdered by a foreigner, was afterwards burned by him; but in the execution of this plan he was engaged for several weeks, and after all, did not succeed in its completion."—Paris and Fonblanque's *Medical Jurisprudence*.

entered and put her to bed. The following night she wished to be left alone: a woman quitted her at half-past eleven, and, according to custom, shut the door and locked it. She had put on the fire two large pieces of coal, and placed a light in a candlestick on a chair at the head of the bed. At half-past five in the morning smoke was seen issuing through the window, and the door being speedily broke open, some flames which were in the room were soon extinguished. Between the bed and the chimney were found the remains of the unfortunate Clues; one leg and a thigh were still entire, but there remained nothing of the skin, the muscles, and the viscera. The bones of the cranium, the breast, the spine, and the upper extremities were entirely calcined, and covered with a whitish efflorescence. The people were much surprised that the furniture had sustained so little injury. The side of the bed which was next the chimney had suffered most; the wood of it was slightly burned, but the feather bed, the clothes, and covering were safe. I entered the apartment about two hours after it had been opened, and observed that the walls and everything in it were blackened; that it was filled with a very disagreeable vapour; but that nothing except the body exhibited any strong traces of fire."

This case first appeared in the *Annual Register* for 1773, and is a fair specimen of the cases collected in the *Journal de Physique.* There is no evidence that the combustion was spontaneous, as it may have been occasioned either by lightning or by contact with the fire. The only circumstances which militates against the latter supposition is the very trifling degree of burning that was found in the apartment.

Case of Grace Pitt.—"Grace Pitt, the wife of a fishmonger in the parish of St. Clement, Ipswich, aged about sixty, had contracted a habit, which she continued for several years, of coming down every night from her bedroom, half dressed, to smoke a pipe. On the night of the 9th of April, 1744, she got up from her bed as usual. Her daughter, who slept with her, did not perceive she was absent till next morning when she awoke, soon after which she put on her clothes, and going down into the kitchen

found her mother stretched out on the right side, with her head near the grate; the body extended on the hearth, with the legs on the floor, which was of deal, having the appearance of a log of wood consumed by a fire without apparent flame. On beholding this spectacle the girl ran in great haste and poured over her mother's body some water contained in two large vessels in order to extinguish the fire; while the fetid odour and smoke which exhaled from the body almost suffocated some of the neighbours who had hastened to the girl's assistance. The trunk was in some measure incinerated, and resembled a heap of coals covered with white ashes. The head, the arms, the legs, and the thighs, had also participated in the burning. This woman, it is said, had drunk a large quantity of spirituous liquors in consequence of being overjoyed to hear that one of her daughters had returned from Gibraltar. There was no fire in the grate, and the candle had burned entirely out in the socket of the candlestick which was close to her. Besides, there were found near the consumed body the clothes of a child and a paper screen, which had sustained no injury by the fire. The dress of this woman consisted of a cotton gown."

This case is to be found in *The Transactions of the Royal Society of London*, and is one of the most decided and least equivocal instances of this species of combustion to be met with. It was mentioned at the same time in all the journals, and was the subject of much speculation and remark. The reality of its occurrence was attested by many witnesses, and three several accounts of it, by different hands, all nearly coincide.

Case of Don Gio Maria Bertholi.—"Having spent the day in travelling about the country, he arrived in the evening at the house of his brother-in-law. He immediately requested to be shown to his destined apartment, where he had a handkerchief placed between his shirt and shoulders; and, being left alone, betook himself to his devotions. A few minutes had scarcely elapsed when an extraordinary noise was heard in the chamber, and the cries of the unfortunate man were particularly distinguished: the people of the house, hastily entering the room, found

him extended on the floor, and surrounded by a light flame, which receded (*à mesure*) as they approached and finally vanished. On the following morning the patient was examined by M. Battlaglia, who found the integuments of the right arm almost entirely detached, and pendent from the flesh; from the shoulders to the thighs the integuments were equally injured; and on the right hand, the part most injured, mortification had already commenced, which, notwithstanding immediate scarification, rapidly extended itself. The patient complained of burning thirst, was horribly convulsed, and was exhausted by continual vomiting, accompanied by fever and delirium. On the fourth day, after two hours of comatose insensibility, he expired. During the whole period of his sufferings it was impossible to trace any symptomatic affection. A short time previous to his death M. Battlaglia observed with astonishment that putrefaction had made so much progress; the body already exhaled an insufferable odour; worms crawled from it on the bed, and the nails had become detached from the left hand.

"The account given by the unhappy patient was that he felt a stroke like the blow of a cudgel on the right hand, and at the same time he saw a lambent flame attach itself to his shirt, which was immediately reduced to ashes, his wristbands at the same time being utterly untouched. The handkerchief which was before mentioned, was placed between his shoulders and his shirt, was entire, and free from any trace of burning; his breeches were equally uninjured, but though not a hair of his head was burned, his coif was totally consumed. The weather on the night of the accident was calm, and the air very pure, no empyreumatic or bituminous odour was perceived in the room, which was also free from smoke; there was no vestige of fire except that the lamp which had been full of oil, was found dry and the wick reduced to a cinder."

This case is from the work of Foderé, and is given as abridged by Paris and Fonblanque, in their excellent treatise on *Medical Jurisprudence*. It occurred in 1776, and is one of the best authenticated to be met with. I am not aware that the subject of it was a drunkard: if he

were not, and if the facts be really true, we must conclude that spontaneous combustion may occur in sober persons as well as in the dissipated.

Case of Madame Millet.—"Having," says Le Cat, "spent several months at Rheims, in the years 1724 and 1725, I lodged at the house of Sieur Millet, whose wife got intoxicated every day. The domestic economy of the family was managed by a pretty young girl, which I must not omit to remark, in order that all the circumstances which accompanied the fact I am about to relate may be better understood. This woman was found consumed on the 20th of February, 1725, at the distance of a foot and a-half from the hearth in her kitchen. A part of the head only, with a portion of the lower extremities, and a few of the vertebræ, had escaped combustion. A foot and a-half of the flooring under the body had been consumed, but a kneading trough and powdering tub which were very near the body, sustained no injury. M. Chriteen, a surgeon, examined the remains of the body with every judicial formality. Jean Millet, the husband, being interrogated by the judges who instituted the inquiry into the affair, declared, that about eight in the evening, on the 9th of February, he had retired to rest with his wife, who not being able to sleep, went into the kitchen, where he thought she was warming herself; that, having fallen asleep, he was awakened about two o'clock by an infectious odour, and that, having run to the kitchen, he found the remains of his wife in the state described in the report of the physicians and surgeons. The judges, having no suspicion of the real cause of this event, prosecuted the affair with the utmost diligence. It was very unfortunate for Millet that he had a handsome servant-maid, for neither his probity nor innocence were able to save him from the suspicion of having got rid of his wife by a concerted plot, and of having arranged the rest of the circumstances in such a manner as to give it the appearance of an accident. He experienced, therefore, the whole severity of the law; and though, by an appeal to a superior and very enlightened court, which discovered the cause of the combustion, he came off victorious, he suffered

so much from uneasiness of mind, that he was obliged to pass the remainder of his days in an hospital."

The above case has a peculiar importance attached to it, for it shows that, in consequence of combustion, possibly spontaneous, persons have been accused of murder. Foderé, in his work, alludes to several cases of this kind.

Some chemists have attempted to account for this kind of combustion, by the formation of phosphuretted hydrogen in the body. This gas, as is well known, inflames on exposure to the air; nor can there be a doubt that if a sufficient quantity were generated, the body might be easily enough consumed. If such an accumulation can be proved ever to take place, there is an end to conjecture; and we have before us a cause sufficiently potent to account for the burning. Altogether I am inclined to think, that although most of the related cases rest on vague report, and are unsupported by such proofs as would warrant us in placing much reliance upon them, yet sufficient evidence nevertheless exists, to show such a phenomenon as spontaneous combustion has actually taken place, although doubtless the number of cases has been much exaggerated. Dr. Mason Good justly observes—"There may be some difficulty in giving credit to so marvellous a diathesis: yet, examples of its existence, and of its leading to a migratory and fatal combustion are so numerous and so well authenticated, and press upon us from so many different countries and eras, that it would be absurd to withhold our assent." "It can no longer be doubted," says Dr. Gordon Smith, "that persons have retired to their chambers in the usual manner, and in place of the individual, a few cinders, and perhaps part of his bones, were found." Inflammable eructations are said to occur occasionally in northern latitudes, when the body has been exposed to intense cold after excessive indulgence in spirituous liquors; and the case of a Bohemian peasant is narrated, who lost his life in consequence of a column of ignited inflammable air issuing from his mouth, and baffling extinction. This case, as well as others of the same kind, is alleged to have arisen from phosphuretted hydrogen, generated by some chemical combination of alcohol and animal substances in the stomach. What

truth there may be in these relations I do not pretend to say. They wear unquestionably the aspect of a fiction; and are, notwithstanding, repeated from so many quarters, that it is nearly as difficult to doubt them altogether as to give them our entire belief. There is one thing, however, which may be safely denied; and that is the fact of drunkards having been blown up in consequence of their breath or eructations catching fire from the application of a lighted candle. These tales are principally of American extraction; and seem elaborated by that propensity for the marvellous for which our transatlantic brethren have, of late years, been distinguished.

Upon the whole, this subject is extremely obscure, and has never been satisfactorily treated by any writer. Sufficient evidence appears to me to exist in support of the occurrence, but any information as to the remote or proximate cause of this singular malady is, as yet, exceedingly defective and unsatisfactory.

In a memoir lately read before the Académie des Sciences, the following are stated to be the chief circumstances connected with spontaneous combustion:—

"1. The greater part of the persons who have fallen victims to it, have made an immoderate use of alcoholic liquors. 2. The combustion is almost always general, but sometimes is only partial. 3. It is much rarer among men than among women, and they are principally old women. There is but one case of the combustion of a girl seventeen years of age, and that was only partial. 4. The body and the viscera are invariably burnt, while the feet, the hands, and the top of the skull almost always escape combustion. 5. Although it requires several fagots to burn a common corpse, incineration takes place in these spontaneous combustions without any effect on the most combustible matters in the neighbourhood. In an extraordinary instance of a double combustion operating upon two persons in one room, neither the apartment nor the furniture was burnt. 6. It has not been at all proved that the presence of an inflamed body is necessary to develop spontaneous human combustions. 7. Water, so far from extinguishing the flame, seems to give it more activity; and when the flame has disappeared, secret

combustion goes on. 8. Spontaneous combustions are more frequent in winter than in summer. 9. General combustions are not susceptible of cure, only partial. 10. Those who undergo spontaneous combustion are the prey of a very strong internal heat. 11. The combustion bursts out all at once, and consumes the body in a few hours. 12. The parts of the body not attacked, are struck with mortification. 13. In persons who have been attacked with spontaneous combustion, a putrid degeneracy takes place, which soon leads to gangrene."

In this singular malady medicine is of no avail. The combustion is kept up by causes apparently beyond the reach of remedy, and in almost every case, life is extinct before the phenomenon is perceived.

## CHAPTER XIII.

### DRUNKENNESS JUDICIALLY CONSIDERED.

Not only does the drunkard draw down upon himself many diseases, both of body and mind, but if, in his intoxication, he commit any crime or disdemeanour, he becomes, like other subjects, amenable to the pains of law. In this respect indeed he is worse off than sober persons, for drunkenness, far from palliating, is held to aggravate every offence; the law does not regard it as any extenuation of crime. "A drunkard," says Sir Edward Coke, "who is *voluntarius demon*, hath no privilege thereby; but what hurt or ill soever he doth, his drunkenness doth aggravate it." In the case of the King *versus* Maclauchlin, March, 1737, the plea of drunkenness, set up in mitigation of punishment, was not allowed by the court. Sir George Mackenzie says he never found it sustained, and that in a case of murder it was repelled—Spott *versus* Douglas, 1667. Sir Matthew Hale, c. 4, is clear against the validity of the defence, and all agree that "*levis et modica ebrietas non excusat nec minuit delictum.*" It is a maxim in legal practice, that "those who presume to commit crimes when drunk, must submit to punishment when sober." This state of the law is not peculiar to modern times. In ancient Greece it was decreed by Pittacus, that "he who committed a crime when intoxicated, should receive a double punishment," viz., one for the crime itself, and the other for the ebriety which prompted him to commit it. The Athenians not only punished offences done in drunkenness with increased severity, but, by an enactment of Solon, inebriation in a magistrate was made capital. The Roman law was, in some measure, an exception, and admitted ebriety as a plea for any misdeeds committed under its influence: *per vinum delapsis capitalis pœna remittitur.* Notwithstanding this tenderness to offences by drunkards, the Romans, at

one period were inconsistent enough to punish the vice itself with death, if found occurring in a woman. By two acts passed in the reign of James I., drunkenness was punishable with fine, and, failing payment, with sitting publicly for six hours in the stocks; 4 Jac. I., c. 5, and 21 Jac. I., c. 7. By the first of these acts, Justices of the Peace may proceed against drunkards at the Sessions, by way of indictment; and this act remained in operation till the 10th of October, 1828, at which time, by the act of the 9th Geo. IV. c. 61, § 35, the law for the suppression of drunkenness was repealed, without providing any punishment for offenders in this respect. Previous to this period, the ecclesiastical courts could take cognizance of the offence, and punish it accordingly. As the law stands at present, therefore, drunkenness, *per se*, is not punishable, but acts of violence committed under its influence are held to be aggravated rather than otherwise; nor can the person bring it forward as an extenuation of any folly or misdemeanour which he may chance to commit. In proof of this, it may be stated, that a bond signed in a fit of intoxication holds in law, and is perfectly binding, unless it can be shown that the person who signed it was inebriated by the collusion or contrivance of those to whom the bond was given. A judge or magistrate found drunk *upon the bench*, is liable to removal from his office; and decisions pronounced by him in that state are held to be null and void. Such persons cannot, while acting *ex officio*, claim the benefit of the repeal in the ancient law—their offence being in itself an outrage on justice, and, therefore a misdemeanour. Even in blasphemy, uttered in a state of ebriety, the defence goes for nothing, as is manifest from the following case, given in Maclaurin's *Arguments and Decisions*, p. 731:—

"Nov. 22, 1697.—Patrick Kinninmouth, of that Ilk, was brought to trial for blasphemy and adultery. The last charge was passed from. The indictment alleged, He had affirmed Christ was a bastard, and that he had said, 'If any woman had God on one side, and Christ on the other, he would stow [cut] the lugs [ears] out of her head in spite of them both.' He pleaded chiefly that he was drunk or mad when he uttered these expressions, if

he did utter them. The court found the libel relevant to infer the pains libelled, *i. e.*, death; and found the defence, That the panel was furious or distracted in his wits, relevant; but repelled the allegiance of fury or distraction arising *from drunkenness.*"

It thus appears that the laws both of Scotland and England agree in considering drunkenness no palliation of crime, but rather the reverse; and it is well that it is so, seeing that ebriety could be easily counterfeited, and made a cloak for the commission of atrocious offences. By the laws, drunkenness is looked upon as criminal, and this being the case they could not consistently allow one crime to mitigate the penalties due to another.

There is only one case where drunkenness can ever be alleged in mitigation of punishment—that is, where it has induced "a state of mind perfectly akin to insanity." It is, in fact, one of the common causes of that disease. The partition line between intoxication and insanity may hence become a subject of discussion.

"William M'Donough was indicted and tried for the murder of his wife, before the Supreme Court of the State of Massachusetts, in November, 1817. It appeared in testimony, that several years previous he had received a severe injury of the head; that although relieved of this, yet its effects were such as occasionally to render him insane. At these periods he complained greatly of his head. The use of spirituous liquors immediately induced a return of the paroxysms, and in one of them, thus induced, he murdered his wife. He was with great propriety found guilty. The *voluntary use* of a stimulus which, he was fully aware, would disorder his mind, fully placed him under the power of the law."*

"In the State of New York, we have a statute which places the property of habitual drunkards under the care of the chancellor, in the same manner as that of lunatics. The overseers of the poor in each town may, when they discover a person to be an habitual drunkard, apply to the chancellor for the exercise of his power and jurisdiction. And in certain cases, when the person considers himself aggrieved, it may be investigated by six free-

* Beck *On Medical Jurisprudence.*

holders, whether he is actually what he is described to be, and their declaration is *primâ facie* evidence of the fact." * [This act was passed March 16, 1821.]

"In Ridgway *v.* Darwin, Lord Eldon cites a case where a commission of lunacy was supported against a person, who, when sober, was a very sensible man, but being in a constant state of intoxication, he was incapable of managing his property." †

* Beck *On Medical Jurisprudence.*

† Collison *On Lunacy.*

"The laws against intoxication are enforced with great rigour in Sweden. Whoever is seen drunk, is fined, for the first offence, three dollars; for the second, six, for the third and fourth, a still larger sum, and is also deprived of the right of voting at elections, and of being appointed a representative. He is, besides, publicly exposed in the parish church on the following Sunday. If the same individual is found committing the same offence a fifth time, he is shut up in a house of correction, and condemned to six months' hard labour; and if he is again guilty, to a twelvemonth's punishment of a similar description. If the offence has been committed in public, such as at a fair, an auction, &c., the fine is doubled; and if the offender has made his appearance in a church, the punishment is still more severe. Whoever is convicted of having induced another to intoxicate himself, is fined three dollars, which sum is doubled if the person is a minor. An ecclesiastic who falls into this offence loses his benefice: if it is a layman who occupies any considerable post, his functions are suspended, and perhaps he is dismissed. Drunkenness is never admitted as an excuse for any crime; and whoever dies when drunk is buried ignominiously, and deprived of the prayers of the church. It is forbidden to give, and more explicitly to sell, any spirituous liquors to students, workmen, servants, apprentices, and private soldiers. Whoever is observed drunk in the streets, or making a noise in a tavern, is sure to be taken to prison and detained till sober, without, however, being on that account exempted from fines. Half of these fines go to the informers (who are generally police officers), the other half to the poor. If the delinquent has no money, he is kept in prison until some one pays for him, or until he has worked out his enlargement. Twice a-year these ordinances are read aloud from the pulpit by the clergy; and every tavern-keeper is bound, under the penalty of a heavy fine, to have a copy of them hung up in the principal rooms of his house."—Schuberts' *Travels in Sweden.*

## CHAPTER XIV.

### METHOD OF CURING THE HABIT OF DRUNKENNESS.

To remove the habit of drunkenness from any one in whom it has been long established, is a task of peculiar difficulty. We have not only to contend against the cravings of the body, but against those of the mind; and in struggling with both, we are in reality carrying on a combat with nature herself. The system no longer performs its functions in the usual manner; and to restore these functions to their previous tone of action, is more difficult than it would be to give them an action altogether the reverse of nature and of health.

The first step to be adopted, is the discontinuance of all liquors or substances which have the power of intoxicating. The only question is—Should they be dropped at once, or by degrees? Dr. Trotter, in his *Essay on Drunkenness*, has entered into a long train of argument, to prove that in all cases they ought to be given up *instanter*. He contends that, being in themselves injurious, their sudden discontinuance cannot possibly be attended with harm. But his reasonings on this point, though ingenious, are not conclusive. A dark unwholesome dungeon is a bad thing, but it has been remarked that those who have been long confined to such a place, have become sick if suddenly exposed to the light and pure air, on recovering their liberty: had this been done by degrees, no evil effects would have ensued. A removal from an unhealthy climate (to which years had habituated a man) to a healthy one, has sometimes been attended with similar consequences. Even old ulcers cannot always be quickly healed up with safety. Inebriation becomes, as it were, a second nature, and is not to be rapidly changed with impunity, more than other natures. Spurzheim* advances the same opinion. "Drunkards," says he, "cannot leave off their

* *View of the Elementary Principles of Education.*

bad habits suddenly without injuring their health." Dr. Darwin speaks in like terms of the injurious effects of too sudden a change ; and for these, and other reasons about to be detailed, I am disposed, upon the whole, to coincide with them.

If we consider attentively the system of man, we will be satisfied that it accommodates itself to various states of action. It will perform a healthy action, of which there is only one state, or a diseased action, of which there are a hundred. The former is uniform, and homogeneous. It may be raised or lowered, according to the state of the circulation, but its nature is ever the same : when that changes—when it assumes new characters—it is no longer the action of health, but of disease. The latter may be multiplied to infinity, and varies with a thousand circumstances—such as the organ which is affected, and the substance which is taken. Now, drunkenness in the long run is one of those diseased actions. The system no longer acts with its original purity: it is operated upon by a fictitious excitement, and, in the course of time, assumes a state quite foreign to its original constitution—an action which, however unhealthy, becomes ultimately in some measure natural. When we use opium for a long time, we cannot immediately get rid of it, because it has given rise to a false action in the system, which would suffer a sudden disorder if deprived of its accustomed stimulus. To illustrate this, it may be mentioned, that when Abbas the Great published an edict to prohibit the use of coquenar (the juice of boiled poppies) on account of its dismal effects on the constitution, a great mortality followed, which was only stopped at last by restoring the use of the prohibited beverage. Disease, under such circumstances, triumphs over health, and has established so strong a hold upon the body, that it is dislodged with difficulty by its lawful possessor. When we wish to get rid of opium, or any other narcotic to which we are accustomed, we must do so by degrees, and let the healthy action gradually expel the diseased one. Place spirits or wine in the situation of opium, and the results will be the same. For these reasons, I am inclined to think that, in many cases at least, it would be improper and danger-

ous to remove intoxicating liquors all at once from the drunkard. Such a proceeding seems at variance with the established actions of the human body, and as injudicious as unphilosophical.

I do not, however, mean to say, that there are no cases in which it would be necessary to drop liquors all at once. When much bodily vigour remains—when the morning cravings for the bottle are not irresistible, nor the appetite altogether broken, the person should give over his bad habits instantly. This is a state of incipient drunkenness. He has not yet acquired the constitution of a confirmed sot, and the sooner he ceases the better. The immediate abandonment of drinking may also, in general, take place when there is any organic disease, such as enlarged liver, dropsy, or schirrus stomach. Under these circumstances, the sacrifice is much less than at a previous period, as the frame has, in a great measure, lost its powers of withstanding liquors, and the relish for them is also considerably lessened. But even then, the sudden deprivation of the accustomed stimulus has been known to produce dangerous exhaustion; and it has been found necessary to give it again, though in more moderate quantities. Those drunkards who have no particular disease, unless a tremor and loss of appetite be so denominated, require to be deprived of the bottle by degrees. Their system would be apt to fall into a state of torpor if it were suddenly taken away, and various mental diseases, such as melancholy, madness, and delirium tremens, might even be the result. With such persons, however, it must be acknowledged that there is very great difficulty in getting their potations diminished. Few have fortitude to submit to any reduction. There is, as the period of the accustomed indulgence arrives, an oppression and faintness at the *præcordia*, which human nature can scarcely endure, together with a gnawing desire, infinitely more insatiable than the longings of a pregnant woman.

To prove the intensity of the desire for the bottle, and the difficulty, often insurmountable, of overcoming it, I extract the following interesting and highly characteristic anecdote from a recent publication:—"A gentleman of very amiable dispositions, and justly popular, contracted

habits of intemperance: his friends argued, implored, remonstrated; at last he put an end to all importunity in this manner:—To a friend who was addressing him in the following strain—'Dear Sir George, your family are in the utmost distress on account of this unfortunate habit; they perceive that business is neglected; your moral influence is gone; your health is ruined; and, depend upon it, the coats of your stomach will soon give way, and then a change will come too late'—the poor victim, deeply convinced of the hopelessness of his case, replied thus—'My good friend, your remarks are just; they are, indeed, too true; but I can no longer resist temptation: if a bottle of brandy stood at one hand, and the pit of hell yawned at the other, and if I were convinced I would be pushed in as sure as I took one glass, I could not refrain. You are very kind. I ought to be grateful for so many kind good friends, but you may spare yourselves the trouble of trying to reform me: the thing is impossible.'"

The observation of almost every man must have furnished him with cases not less striking than the above. I could relate many such which have occurred in my own practice, but shall at present content myself with one.—I was lately consulted by a young gentleman of fortune from the north of England. He was aged twenty-six, and was one of the most lamentable instances of the resistless tyranny of this wretched habit that can possibly be imagined. Every morning before breakfast he drank a bottle of brandy; another he consumed between breakfast and dinner; and a third shortly before going to bed. Independently of this, he indulged in wine and whatever liquor came within his reach. Even during the hours usually appropriated to sleep, the same system was pursued—brandy being placed at the bedside for his use in the nighttime. To this destructive vice he had been addicted since his sixteenth year; and it had gone on increasing from day to day, till it had acquired its then alarming and almost incredible magnitude. In vain did he try to resist the insidious poison. With the perfect consciousness that he was rapidly destroying himself, and with every desire to struggle against the insatiable crav-

ings of his diseased appetite, he found it utterly impossible to offer the slightest opposition to them. Intolerable sickness, faintings, and tremors, followed every attempt to abandon his potations; and had they been taken suddenly away from him, it cannot be doubted that delirium tremens and death would have been the result.

There are many persons that cannot be called drunkards who, nevertheless, indulge pretty freely in the bottle, though after reasonable intervals. Such persons usually possess abundance of health, and resist intoxication powerfully. Here the stomach and system in general lose their irritability, in the same way as in confirmed topers; but this is more from torpor than from weakness. The springs of life become less delicate; the pivots on which they move get, as it were, clogged; and, though existence goes on with vigour, it is not the bounding and elastic vigour of perfect health. This proceeds, not from debility, but from torpor; the muscular fibre becoming, like the hands of a labouring man, hardened and blunted in its sensibilities. Such are the effects brought on by *frequent* use of inebriating agents, but an *excessive* use in every case gives rise to weakness. This the system can only escape by a proper interval being allowed to elapse between our indulgences. But if dose be heaped on dose, before it has time to rally from former exhaustion, it becomes more and more debilitated; the blood ceases to circulate with its wonted force; the secretions get defective, and the tone of the living fibre daily enfeebled. A debauch fevers the system, and no man can stand a perpetual succession of fevers without injuring himself, and at last destroying life.

Drunkenness, in the long run, changes its character. The sensations of the confirmed tippler, when intoxicated, are nothing, in point of pleasure, to those of the habitually temperate man, in the same condition. We drink at first for the serenity which is diffused over the mind, and not from any positive love we bear to the liquor. But, in the course of time, the influence of the latter, in producing gay images, is deadened. It is then chiefly a mere animal fondness for drink which actuates us. We like the taste of it, as a child likes sweetmeats; and the stomach, for a

series of years, has been so accustomed to an unnatural stimulus, that it cannot perform its functions properly without it. In such a case, it may readily be believed that liquor could not be suddenly removed with safety.

The habit will sometimes be checked by operating skilfully upon the mind. If the person has a feeling heart, much may be done by representing to him the state of misery into which he will plunge himself, his family, and his friends. Some men, by a strong effort, have given up liquors at once in consequence of such representations.

Some drunkards have attempted to cure themselves by the assumption of voluntary oaths. They go before a magistrate and swear that for a certain period they shall not taste liquors of any kind; and it is but just to state that these oaths are sometimes strictly enough kept. They are, however, much oftener broken—the physical cravings for the bottle prevailing over whatever religious obligation may have been entered into. Such a proceeding is as absurd as it is immoral, and never answers the purpose of effecting anything like a radical cure; for, although the person abides by his solemn engagement, it is only to resume his old habits more inveterately than ever the moment it expires.

Many men become drunkards from family broils. They find no comfort at home, and gladly seek for it out of doors. In such cases it will be almost impossible to break the habit. The domestic sympathies and affections which oppose a barrier to dissipation, and wean away the mind from the bottle, have here no room to act. When the mother of a family becomes addicted to liquor the case is very afflicting. Home, instead of being the seat of comfort and order, becomes a species of Pandemonium: the social circle is broken up, and all its happiness destroyed. In this case there is no remedy but the removal of the drunkard. A feeling of perversity has been known to effect a cure among the fair sex. A man of Philadelphia, who was afflicted with a drunken wife, put a cask of rum in her way, in the charitable hope that she would drink herself to death. She suspected the scheme, and, from a mere principle of contradiction, abstained in all time coming from any sort of indulgence in the bottle. I may

mention another American anecdote of a person reclaimed from drunkenness by means not less singular. A man in Maryland, notoriously addicted to this vice, hearing an uproar in his kitchen one evening, felt the curiosity to step without noise to the door, to know what was the matter, when he beheld his servants indulging in the most unbounded roar of laughter at a couple of his negro boys who were mimicking himself in his drunken fits, showing how he reeled and staggered—how he looked and nodded, and hiccuped and tumbled. The picture which these children of nature drew of him, and which had filled the rest with so much merriment, struck him so forcibly that he became a perfectly sober man, to the unspeakable joy of his wife and children.

Man is very much the creature of habit. By drinking regularly at certain times he feels the longing for liquor at the stated return of those periods—as after dinner, or immediately before going to bed, or whatever the period may be. He even feels it in certain companies, or in a particular tavern at which he is in the habit of taking his libations. We have all heard the story of the man who could never pass an inn on the roadside without entering it and taking a glass, and who, when after a violent effort he succeeded in getting beyond the spot, straightway returned to reward himself with a bumper for his resolution. It is a good rule for drunkards to break all such habits. Let the frequenter of drinking clubs, masonic lodges, and other Bacchanalian assemblages, leave off attending these places; and if he must drink, let him do so at home, where there is every likelihood his potations will be less liberal. Let him also forswear the society of boon companions, either in his own habitation or in theirs. Let him, if he can manage it, remove from the place of his usual residence, and go somewhere else. Let him also take abundance of exercise, court the society of intellectual and sober persons, and turn his attention to reading, or gardening, or sailing, or whatever other amusement he has a fancy for. By following this advice rigidly he will get rid of that baleful habit which haunts him like his shadow, and intrudes itself by day and by night into the sanctuary of his thoughts. And if he refuses to lay aside

the Circean cup, let him reflect that Disease waits upon his steps—that Dropsy, Palsy, Emaciation, Poverty, and Idiotism, followed by the pale phantom Death, pursue him like attendant spirits, and claim him as their prey.

Sometimes an attack of disease has the effect of sobering drunkards for the rest of their lives. I knew a gentleman who had apoplexy in consequence of dissipation. He fortunately recovered, but the danger which he had escaped made such an impression upon his mind that he never, till his dying day, tasted any liquor stronger than simple water. Many persons after such changes become remarkably lean; but this is not an unhealthy emaciation. Their mental powers also suffer a very material improvement—the intellect becoming more powerful, and the moral feelings more soft and refined.

In a small treatise on *Naval Discipline*, lately published, the following whimsical and ingenious mode of punishing drunken seamen is recommended:—"Separate for one month every man who was found drunk from the rest of the crew: mark his clothes 'drunkard;' give him six water grog, or if beer mixed one-half water; let them dine when the crew had finished; employ them in every dirty and disgraceful work, &c. This had such a salutary effect that in less than six months not a drunken man was to be found in the ship. The same system was introduced by the writer into every ship on board which he subsequently served. When first-lieutenant of the 'Victory' and 'Diomede,' the beneficial consequences were acknowledged —the culprits were heard to say that they would rather receive six dozen lashes at the gangway, and be done with it, than be put into the 'drunken mess' (for so it was named) for a month."

Those persons who have been for many years in the habit of indulging largely in drink, and to whom it has become an *elixir vitæ* indispensable to their happiness, cannot be suddenly deprived of it. This should be done by degrees, and must be the slow result of conviction. If the quantity be forcibly diminished against the person's will no good can be done; he will only seize the first opportunity to remunerate himself for what he has been deprived of, and proceed to greater excesses than before.

If his mind can be brought by calm reflection to submit to the decrease, much may be accomplished in the way of reformation. Many difficulties undoubtedly attend this gradual process, and no ordinary strength of mind is required for its completion. It is, however, less dangerous than the method recommended by Dr. Trotter, and ultimately much more effectual. Even although his plan were free of hazard, its effects are not likely to be lasting. The unnatural action to which long intemperance had given rise clings to the system with pertinacious adherence. The remembrance of liquor, like a delightful vision, still attaches itself to the drunkard's mind; and he longs with insufferable ardour to feel once more the ecstasies to which it gave birth. This is the consequence of a too rapid separation. Had the sympathies of nature been gradually operated upon there would have been less violence, and the longings had a better chance of wearing insensibly away.

Among the great authorities for acting in this manner may be mentioned the celebrated Dr. Pitcairn. In attempting to break the habit in a Highland chieftain, one of his patients, he exacted a promise that the latter would every day drop as much sealing wax into his glass as would receive the impression of his seal. He did so, and as the wax accumulated the capacity of the glass diminished, and, consequently, the quantity of whisky it was capable of containing. By this plan he was cured of his bad habit altogether. In mentioning such a whimsical proceeding, I do not mean particularly to recommend it for adoption; although I am satisfied that the principle on which its eccentric contriver proceeded was substantially correct.

A strong argument against too sudden a change is afforded in the case of food. I have remarked that persons who are in the daily habit of eating animal food feel a sense of weakness about the stomach if they suddenly discontinue it, and live for a few days entirely upon vegetables. This I have experienced personally in various trials made for the purpose; and every person in health, and accustomed to good living, will, I am persuaded, feel the same thing. The stomach, from want of stimulus, loses its tone; the craving for animal food is strong and incessant; and, if it be resisted, heartburn, water brash,

and other forms of indigestion, are sure to ensue. In such a case vegetables are loathed as intolerably insipid, and even bread is looked upon with disrelish and aversion. It is precisely the same with liquors. Their sudden discontinuance, where they have been long made use of, is almost sure to produce the same, and even worse consequences to the individual.

I cannot give any directions with regard to the regimen of a reformed drunkard. This will depend upon different circumstances, such as age, constitution, diseases, and manner of living. It may be laid down as a general rule that it ought to be as little heating as possible. A milk or vegetable diet will commonly be preferable to every other. But there are cases in which food of a richer quality is requisite, as when there is much emaciation and debility. Here it may even be necessary to give a moderate quantity of wine. In gout, likewise, too great a change of living is not always salutary, more especially in advanced years, where there is weakness of the digestive organs brought on by the disease. In old age wine is often useful to sustain the system, more especially when sinking by the process of natural decay. The older a person is, the greater the inconvenience of abstaining all at once from liquors, and the more slowly ought they to be taken away. I cannot bring myself to believe that a man who for half a century has drunk freely can suddenly discontinue this ancient habit without a certain degree of risk: the idea is opposed to all that we know of the bodily and mental functions.

In attempting to cure the habit of drunkenness opium may sometimes be used with advantage. By giving it in moderate quantities, the liquor which the person is in the habit of taking may be diminished to a considerable extent, and he may thus be enabled to leave them off altogether. There is only one risk, and it is this—that he may become as confirmed a votary of opium as he was before of strong liquors. Of two evils, however, we should always choose the least: and it is certain, that however perniciously opium may act upon the system, its moral effects and its power of injuring reputation are decidedly less formidable than those of the ordinary intoxicating agents.

The following anecdote has been communicated to me by the late Mr. Alexander Balfour (Author of *Contemplation, Weeds and Wildflowers*, and other ingenious works), and exhibits a mode of curing dram-drinking equally novel and effective:—

"About the middle of last century, in a provincial town on the east of Scotland where smuggling was common, it was the practice for two respectable merchants to gratify themselves with a social glass of good Hollands, for which purpose they regularly adjourned at a certain hour to a neighbouring gin shop. It happened one morning that something prevented one of them from calling on his neighbour at the usual time. Many a wistful and longing look was cast for the friend so unaccountably absent, but he came not. His disappointed companion would not go to the dram shop alone; but he afterwards acknowledged that the want of his accustomed cordial rendered him uneasy the whole day. However, this feeling induced him to reflect upon the bad habit he was acquiring, and the consequences which were likely to follow. He therefore resolved to discontinue dram-drinking entirely, but found it difficult to put his resolution into practice, until, after some deliberation, he hit upon the following expedient:—Filling a bottle with excellent Hollands he lodged it in his back shop, and the first morning taking his dram, he replaced it with simple water. Next morning he took a second dram, replacing it with water; and in this manner he went on replacing the fluid subtracted from the bottle with water, till at last the mixture became insipid and ultimately nauseous, which had such an effect upon his palate that he was completely cured of his bad habit, and continued to live in exemplary soberness till his death, which happened in extreme old age."

Dr. Kain, an American physician, recommends tartar emetic for the cure of habitual drunkenness. "Possessing," he observes, "no positive taste itself, it communicates a disgusting quality to those fluids in which it is dissolved. I have often seen persons who, from taking a medicine in the form of antimonial wine, could never afterwards drink wine. Nothing, therefore, seems better calculated to form our indication of breaking up the association in the

patient's feelings between his disease and the relief to be obtained from stimulating liquors. These liquors, with the addition of a very small quantity of emetic tartar, instead of relieving, increase the sensation of loathing of food, and quickly produce in the patient an indomitable repugnance to the vehicle of its administration." "My method of prescribing it has varied according to the habits, age, and constitution of the patient. I give it only in alterative and slightly nauseating doses. A convenient preparation of the medicine is eight grains dissolved in four ounces of boiling water—half an ounce of the solution to be put into a half pint, pint, or quart of the patient's favourite liquor, and to be taken daily in divided portions. If severe vomiting and purging ensue, I should direct laudanum to allay the irritation, and diminish the dose. In every patient it should be varied according to its effects. In one instance in a patient who lived ten miles from me, severe vomiting was produced, more, I think, from excessive drinking, than the use of the remedy. He recovered from it, however, without any bad effects. In some cases the change suddenly produced in the patient's habits has brought on considerable lassitude and debility, which were of but short duration. In a majority of cases no other effect has been perceptible than slight nausea, some diarrhœa, and a gradual but very uniform distaste to the menstruum."*

Having tried tartar emetic in several instances, I can bear testimony to its good effects in habitual drunkenness. The active ingredient in Chambers's celebrated nostrum for the cure of ebriety, was this medicine. Tartar emetic, however, must always be used with caution, and never except under the eye of a medical man, as the worst consequences might ensue from the indiscreet employment of so active an agent.

It seems probable that, in plethoric subjects, the habit of drunkenness might be attacked with some success by the application of leeches, cold application and blisters to the head, accompanied by purgatives and nauseating doses of tartar emetic. Dr. Caldwell of Lexington conceives drunkenness to be entirely a disease of the brain, espe-

* *American Journal of the Medical Sciences*, No. IV.

cially of the animal compartments of this viscus, and more especially of that portion called by phrenologists the organ of *alimentiveness*, on which the appetite for food and drink is supposed mainly to depend. Should his views be correct, the above treatment seems eligible, at least in drunkards of a full habit of body, and in such cases it is certainly worthy of a full trial. I refer the reader to Dr. Caldwell's Essay, in which both the above doctrine and the practice founded upon it are very ably discussed. It is, indeed, one of the ablest papers which has hitherto appeared upon the subject of drunkenness.*

It very often happens, after a long course of dissipation, that the stomach loses its tone, and rejects almost everything that is swallowed. The remedy, in this case, is opium, which should be given in the solid form in preference to any other. Small quantities of negus are also beneficial; and the carbonate of ammonia, combined with some aromatic, is frequently attended with the best effects. When there is much prostration of strength, wine should always be given. In such a case, the entire removal of the long accustomed stimulus would be attended with the worst effects. This must be done gradually.

Enervated drunkards will reap much benefit by removing to the country, if their usual residence is in town. The free air and exercise renovate their enfeebled frames; new scenes are presented to occupy their attention; and, the mind being withdrawn from former scenes, the chain of past associations is broken in two.

Warm and cold bathing will occasionally be useful, according to circumstances. Bitters are not to be recommended, especially if employed under the medium of spirits. When there is much debility, chalybeates will prove serviceable. A visit to places where there are mineral springs is of use, not only from the waters, but from the agreeable society to be met with at such quarters. The great art of breaking the habit consists in managing the drunkard with kindness and address. This management must, of course, be modified by the events which present themselves, and which will vary in different cases.

* See *Transylvania Journal of Medicine and the Associate Sciences* for July, August, and September, 1832.

Persons residing in tropical climates ought, more than others, to avoid intoxicating liquors. It is too much the practice in the West Indies to allay thirst by copious draughts of rum punch. In the East Indies, the natives with greater propriety principally use rice-water (congee); while the Europeans residing there are in the habit of indulging in Champagne, Madeira, and other rich wines, which may in a great measure account for the mortality prevailing among them in that region. A fearful demoralization, as well as loss of life, is occasioned among the British troops in the East and West Indies, from the cheapness of spirituous liquors, which enables them to indulge in them to excess. "Since the institution of the Recorder's and Supreme Courts at Madras," says Sir Thomas Hislop, "no less than thirty-four British soldiers have forfeited their lives for murder, and most of them were committed in their intoxicated moments." Dr. Rollo relates, that the 45th regiment, while in Grenada, lost, within a very few weeks, twenty-six men out of ninety-six; at a time, too, when the island was remarkably healthy. On inquiry, it was found that the common breakfast of the men was raw spirits and pork. It is remarked by Desgenettes, in his *Medical History of the French Army in Egypt*, that "daily experience demonstrates that almost all the soldiers who indulge in intemperate habits, and are attacked with fevers, never recover." In countries where the solar influence is felt with such force, we cannot be too temperate. The food should be chiefly vegetable, and the drink as unirritating as possible. It may be laid down as an axiom, that in these regions wine and ardent spirits are invariably hurtful; not only in immediately heating the body, but in exposing it to the influence of other diseases.* A great portion of the deaths which occur among Europeans in the tropics are brought on by excess. Instead of suiting their regimen to the climate, they persist in the habits of

* "In warm countries, the aqueous part of the blood loses itself greatly by perspiration; it must therefore be supplied by a like liquid. Water is there of admirable use; strong liquors would coagulate the globules of blood that remain after the transuding of the aqueous humour."—Montesquieu, book xiv., chap. x.

their own country, without reflecting that what is comparatively harmless in one region, is most destructive in another. There cannot be a stronger proof of this than the French troops in the West Indies having almost always suffered less, in proportion to their numbers, than the British, who are unquestionably more addicted to intemperance. "I aver, from my own knowledge and custom," observes Dr. Mosely, "as well as from the custom and observation of others, that those who drink *nothing but water* are but little affected by the climate, and can undergo the greatest fatigue without inconvenience."*

It is a common practice in the West of Scotland to send persons who are excessively addicted to drunkenness to rusticate and learn sobriety on the Islands of Loch Lomond. There are, I believe, two islands appropriated for the purpose, where the convicts meet with due attention, and whatever indulgences their friends choose to extend towards them. Whether such a proceeding is consistent with law, or well adapted to answer the end in view, may be reasonably doubted; but of its severity as a punishment there can be no question. It is, indeed, impossible to inflict any penalty upon drunkards so great as that of absolutely debarring them from indulging in liquor.

In the next chapter I shall consider the method of curing and preventing drunkenness by means of Temperance Societies.

* *Tropical Diseases.*

## CHAPTER XV.

### TEMPERANCE SOCIETIES.

MUCH has been said and written of late concerning Temperance Societies. They have been represented by their friends as powerful engines for effecting a total reformation from drunkenness, and improving the whole face of society, by introducing a purer morality, and banishing the hundred-headed monster, intemperance, and all its accompanying vices from the world. By their opponents they have been ridiculed as visionary and impracticable—as, at best, but temporary in their influence—as erroneous in many of their leading views—as tyrannical, unsocial, and hypocritical. Their members are represented as enthusiasts and fanatics; and the more active portion of them—those who lecture on the subject, and go about founding Societies—traduced as fools or impostors. Such are the various views entertained by different minds of Temperance Societies; but, leaving it to others to argue the point, for or against, according to their inclinations, I shall simply state what I think myself of these institutions—how far they do good or harm—and under what circumstances they ought to be thought favourable of, or the reverse. Truth generally lies *in mediis rebus*, and I suspect they will not form an exception to the rule.

Temperance Societies proceed upon the belief that ardent spirits are, *under all circumstances*, injurious to people in health, and that, therefore, they ought to be altogether abandoned. I am anxious to think favourably of any plan which has for its object the eradication of drunkenness; and shall therefore simply express my belief that those Societies have done good, and ought therefore to be regarded with a favourable eye. That they have succeeded, or ever will succeed, in reclaiming any considerable number of drunkards, I have great doubts; but that they may have the effect of preventing many indi-

viduals from becoming drunkards, is exceedingly probable. If this can be proved—which I think it may be without much difficulty—it follows that they are beneficial in their nature, and, consequently, deserving of encouragement. That they are wrong in supposing ardent spirits *invariably* hurtful in health, and they are also in error in advocating the instant abandonment, in *all cases*, of intoxicating liquors, I have little doubt; but that they are correct in their great leading views of the pernicious effects of spirits to mankind in general, and that their principles, if carried into effect, will produce good, is self-evident. Spirits, when used in moderation, cannot be looked upon as pernicious; nay, in certain cases, even in health, they are beneficial and necessary. In countries subject to intermittents, it is very well known that those who indulge moderately in spirits are much less subject to these diseases than the strictly abstinent. "At Walcheren it was remarked that those officers and soldiers who took schnaps, *alias* drams, in the morning, and smoked, escaped the fever which was so destructive to the British troops; and the natives generally insisted upon doing so before going out in the morning."* The following anecdote is equally in point. It took place on the Niagara frontier of Upper Canada, in the year 1813. "A British regiment, from some accident, was prevented from receiving the usual supply of spirits, and in a very short time more than two-thirds of the men were on the sick list from ague or dysentery; while, the very next year, on the same ground, and in almost every respect under the same circumstances, except that the men had their usual allowance of spirits, the sickness was extremely trifling. Every person acquainted with the circumstances, believed that the diminution of the sick, during the latter period, was attributable to the men having received the quantity of spirits to which they had been habituated."† Indeed, I am persuaded that while, in the tropics, stimulating liquors are highly prejudicial, and often occasion, while they never prevent, disease, they are frequently of great service in accomplishing the latter object in damp foggy countries, especially when fatigue, poor diet, agues, dysenteries, and other diseases of debility are to be con-

* *Glasgow Medical Journal*, No. XV. † Ibid.

tended against. It has been stated, and, I believe with much truth, that the dysentery which has prevailed so much of late among the poorer classes in this country, has been in many cases occasioned, and in others aggravated, in consequence of the want of spirits, which, from the depressed state of trade, the working classes are unable to procure; and should this assertion turn out to be correct, it follows, that Temperance Societies, by the rigid abstinence urged upon their members, have contributed to increase the evil. The system is fortified against this disorder, as well as various others, by a proper use of stimuli; while excess in the indulgence of these agents exposes it to the attack of every disease, and invariably aggravates the danger. Water is unquestionably the natural drink of man, but in the existing condition of things we are no longer in a state of nature, and cases consequently often occur wherein we must depart from her original principles. There are many persons who find a moderate use of spirits necessary to the enjoyment of health. In these cases it would be idle to abandon them. They ought only to be given up when their use is not required by the system. That such is the case in a great majority of instances, must be fully admitted; and it is to these that the principles of Temperance Societies can be applied with advantage. Considering the matter in this light, the conclusion we must come to is simply, that ardent spirits sometimes do good, but much oftener mischief. By abandoning them altogether, we escape the mischief and lose the good. Such is the inevitable effect, supposing Temperance Societies to come into general operation. It remains, therefore, with people themselves to determine whether they are capable of using spirits only when they are beneficial, and then with a due regard to moderation. If they have so little self-command, the sooner they connect themselves with Temperance Societies the better. I believe that by a moderate indulgence in spirits no man can be injured and that many will often be benefited. It is their abuse which renders them a curse rather than a blessing to mankind; and it is with this abuse alone I find fault, in the same way as I would object to excess in eating, or any other excess. People, therefore, would do

well to draw a distinction between the proper use and the abuse of these stimulants, and regulate themselves accordingly.

Temperance Societies, however, though erroneous in some of their principles, and injurious as applied to particular cases, may be of great use towards society in general. Proceeding upon the well known fact that ardent spirits are peculiarly apt to be abused, and habitual drunkenness to ensue, they place these agents under the ban of total interdiction, and thus arrest the march of that baneful evil occasioned by their excessive use. So far, therefore, as the individual members of these institutions are concerned, a great good is effected at the sacrifice of comparatively little. On such grounds I fully admit their beneficial effects, and wish them all success. At the same time, many sober persons would not wish to connect themselves with them, for the plain reason—that having never felt any bad effects from the small quantity of ardent spirits they are in the habit of taking, but, on the contrary, sometimes been the better for it—they would feel averse to come under any obligation to abstain from these liquors altogether. Such, I confess, are my own feelings on this subject; and in stating them, I am fully aware that the advocates of the Societies will answer—that a man's private inclinations should be sacrificed to public good, and that, for the sake of a general example, he should abandon that which, though harmless to him, in the limited extent to which he indulges in it, is pernicious to the mass of mankind. This argument is not without point, and upon many will tell with good effect, though, I believe, people in general will either not acknowledge its force, or at least refuse to act up to it.

Temperance Societies have had one effect; they have lessened the consumpt of spirituous liquors to a vast extent, and have left that of wines and malt liquors undiminished, or rather increased it; for although the more strict members avoid even them, their use is not interdicted by the rules of the Societies. By thus diminishing the consumption of spirits, they have been the means of shutting up many small public houses; of keeping numerous tradesmen and labourers from the tavern; of encouraging such persons

to sober habits, by recommending coffee instead of strong liquor; and, generally speaking, of promoting industry and temperance.

If a person were disposed to be very censorious, he might object to some other things connected with them, such as the inconsistency of allowing their members to drink wine and malt liquors, while they debar them from ardent spirits. They do this on the ground that on the two first a man is much less likely to become a drunkard than upon spirits—a fact which may be fairly admitted, but which, I believe, arises, in some measure, from its requiring more money to get drunk upon malt liquors and wine than upon spirits. In abandoning the latter, however, and having recourse to the others, it is proper to state, that the person often practises a delusion upon himself; for in drinking wine, such at least as is procured in this country, he in reality consumes a large proportion of pure spirits; and malt liquors contain not only the alcoholic principle of intoxication, but are often sophisticated, as we have already seen, with narcotics. I believe that, though not in the majority of cases, yet in some, spirits in moderation are better for the system than malt liquors: this is especially the case in plethoric and dyspeptic subjects. Independently of this, it is much more difficult to get rid of the effects of the latter. Much exercise is required for this purpose; and if such is neglected, and the person is of full habit of body, it would have been better if he had stuck by his toddy than run the risk of getting overloaded with fat, and dropping down in a fit of apoplexy.

I know several members of the Temperance Society who are practising upon themselves the delusion in question. They shun spirits, but indulge largely in porter—to the extent perhaps of a bottle a-day. Nobody can deny that by this practice they will suffer a great deal more than if they took a tumbler or so of toddy daily; and the consequences are the most pernicious, because, while indulging in these libations, they imagine themselves to be all the while paragons of sobriety. Rather than have permitted such a license to their members, Temperance Societies should have proscribed malt liquors as they have done spirits. As it is, a person may be a member, and

follow the rules of the Societies, while he is all the time habituating himself to drunkenness. These facts, with all my respect for Temperance Societies, and firm belief in their utility, I am compelled to mention: and I do so the more readily, as there is a large balance of good in their favour, to overweigh whatever bad may be brought against them.

But notwithstanding this, the fact that a habit of drunkenness is far more likely to be caused by indulging habitually in spirits than in anything else, is undeniable; and Temperance Societies, in lessening the consumpt of spirits, have accomplished a certain good, in so far as they have thus been the means of diminishing, to a considerable extent, the vice of drunkenness, of reclaiming a few topers, and preventing many from becoming so who would certainly have fallen into the snare, had they not been timeously checked by their influence and example.

In conclusion, I have to repeat that I do not agree with the Societies in considering ardent spirits always hurtful in health, or in recommending the instant disuse of liquor in all cases of drunkenness.* The reasons for entertaining

* The following account of Temperance Societies is by Professor Edgar, one of their most enthusiastic advocates:—

"Temperance Societies direct their chief exertions against the use of distilled spirits, conceiving them to be the great bane of the community; but they do not exclude these to introduce other intoxicating liquors in their room. Their object is to disabuse the public mind respecting the erroneous opinions and evil practices which produce and perpetuate intemperance; and though they do not hold it to be sinful to drink wine, yet they are cheerfully willing to accord with the sentiment of inspiration,—'It is good neither to drink wine nor anything whereby thy brother stumbleth, or is offended, or is made weak.' Were the wine spoken of in Scripture alone used in these countries, they do not believe that there would be a necessity for Temperance Societies; yet even from such wine, so different from that commonly in use, the Scriptures give them the fullest liberty to refrain. Avoiding, however, all appearance of rigorous abstinence, they leave to every man's judgment and conscience, how far he shall feel himself warranted in the use of fermented liquors, and only insist, as their fundamental principle, on an abstinence from distilled spirits, and a discountenancing of the causes and practices of intemperance. Their regulations respect persons in health alone; with the prescriptions of physicians they do not interfere. Even the moderate use of distilled spirits they consider to be injurious; and they call upon their brethren, for their own sake to renounce it. The great mass of excellences attributed to intoxicating liquors, they believe to be fictitious; and though all the virtues attributed to them were real, they are cheerfully willing to

my own opinions on these points are given in the work, and they are satisfactory to myself, whatever they may be to others. At the same time, I fully admit that these institutions may often prove eminently useful, and that the cases wherein they may be injurious to those connected with them, are not many, compared to the mass of good which they are capable of effecting. The man, therefore, who feels the appetite for liquor stealing upon him, cannot adopt a wiser plan than to connect himself with a body,

sacrifice them, while they have the remotest hope of thus cutting off even one of the sources of drunkenness, or arresting one friend or neighbour on the road to ruin. They do not look on the use of intoxicating liquors as necessary either to their health or happiness; they do not love them, and therefore they do not wish to represent an abstinence from them as, on their part, a great sacrifice; and they trust that they only require to be convinced that the good of their brother demands it, to induce them to do much more than they have yet done. They know that the only prospect of reformation for the intemperate is immediate and complete abstinence, and they joyfully contribute their influence and example to save him. They know that the present customs and practices of the temperate, are now preparing a generation for occupying the room of those who shall soon sleep in drunkards' graves, and it is their earnest wish to exercise such a redeeming influence on the public mind, that, should the present race of drunkards refuse to be saved, there may be none to fill their place when they are no more. The abstinence of the temperate, they are convinced, will accomplish this, and that abstinence it is their business to promote by those means with which the God of truth has furnished them. They believe that such abstinence, instead of being productive of any injury to the community, will greatly benefit it; and already there are the fairest prospects of the great objects of such voluntary abstinence being effected, by associations sustaining one another in new habits, to make them reputable and common. They require no oaths, no vows; their bond of obligation is a sense of duty, and subscription to their fundamental principle is merely an expression of present conviction and determination. The law of Temperance Societies, like the Gospel, is the law of liberty—the law which binds to do that which is considered a delight and a privilege. They look forward to the time as not far distant, when the temperate, having withdrawn their support from the trade in ardent spirits, it shall be deserted by all respectable men, and shall gradually die away, as premature death thins the ranks of drunkards: they trust that the falsehoods by which temperate men have been cheated into the ordinary use of ardent spirits, will soon be completely exposed; and that full information and proper feeling being extended, respecting the nature and effects of intoxicating liquors, they will occupy their proper place, and the unnumbered blessings of temperance on individuals and families, and the whole community, will universally prevail. Not only will Temperance Societies cut off the resources of drunkenness, but to the reformed drunkard they will open a refuge from the tyranny of evil customs, and they will support and encourage him in his new habits. To promote these invaluable objects, they call for the united efforts of all temperate men; they earnestly solicit the assistance of physicians, of clergymen, of the

the members of which will keep him in countenance in sobriety, and, by their example, perhaps wean him away from the bottle, and thus arrest him on the road to ruin.

conductors of public journals, of all men possessing authority and influence; and by everything sacred and good, they beseech drunkards to turn from the wickedness of their ways and live."

## CHAPTER XVI.

### ADVICE TO INVETERATE DRUNKARDS.

If a man is resolved to continue a drunkard, it may here be proper to mention in what manner he can do so with least risk to himself. One of the principal rules to be observed, not only by him, but by habitually sober people, is never to take any inebriating liquor, especially spirits, upon an empty stomach. There is no habit more common or more destructive than this: it not only intoxicates readier than when food has been previously taken, but it has a much greater tendency to impair the functions of the digestive organs. In addition, drunkards should shun raw spirits, which more rapidly bring on disease of the stomach, than when used in a diluted state. These fluids are safe in proportion to the state of their dilution; but to this general rule there is one exception, viz., punch. This, though the most diluted form in which they are used, is, I suspect, nearly the very worst—not from the weakness of the mixture, but from the acid which is combined with it. This acid, although for the time being it braces the stomach, and enables it to withstand a greater portion of liquor than it would otherwise do, has ultimately the most pernicious effect upon this organ—giving rise to thickening of its coats, heartburn, and all the usual distressing phenomena of indigestion. Other organs, such as the kidneys, also suffer, and gravelly complaints are apt to be induced. A common belief prevails that punch is more salubrious than any other spirituous compound, but this is grounded on erroneous premises. When people sit down to drink punch, they are not so apt—owing to the great length of time which elapses ere such a weak fluid produces intoxication—to be betrayed into excess as when indulging in toddy. In this point of view it may be said to be less injurious; but let the same quantity of spirits be taken in the form of punch, as in that of grog or toddy,

and there can be no doubt that in the long run the consequences will be far more fatal to the constitution. If we commit a debauch on punch, the bad consequences cling much longer to the system than those proceeding from a similar debauch upon any other combination of ardent spirits. In my opinion, the safest way of using those liquids is in the shape of grog.* Cold toddy, or a mixture of spirits, cold water, and sugar, ranks next in the scale of safety; then warm toddy, then cold punch—and raw spirit is the most pernicious of all.

The malt liquor drunkard should, as a general rule, prefer porter to strong ale. Herb ale and purl are very pernicious, but the lighter varieties, such as small beer and home-brewed, are not only harmless, but even useful. The person who indulges in malt liquor should take much exercise. If he neglects this, and yields to the indolence apt to be induced by these fluids, he becomes fat and stupid, and has a strong tendency to apoplexy, and other diseases of plethora.

As to the winebibber, no directions can be given which will prove very satisfactory. The varieties of wines are so numerous, that any complete estimate of their respective powers is here impossible. It may, however, be laid down as a general rule, that those which are most diuretic and excite least headache and fever are the safest for the constitution. The light dry wines, such as Hock, Claret, Burgundy, Bucellas, Rhenish, and Hermitage, are, generally speaking, more salubrious than the stronger varieties, such as Port, Sherry, or Madeira. Claret, in particular, is the most wholesome wine that is known. Tokay,† Frontignac, Malmsey, Vino Tinto, Montifiascone, Canary, and other sweet wines, are apt, in consequence of their imperfect fermentation, to produce acid upon weak stomachs;

* The origin of the term "grog" is curious. Before the time of Admiral Vernon, rum was given in its raw state to the seamen; but he ordered it to be diluted, previous to delivery, with a certain quantity of water. So incensed were the tars at this watering of their favourite liquor, that they nicknamed the Admiral *Old Grog*, in allusion to a grogram coat which he was in the habit of wearing: hence the name.

† Catherine I. of Russia was intemperately addicted to the use of Tokay. She died of dropsy, which complaint was probably brought on by such indulgence.

but in other cases they are delightful drinks; and when there is no tendency to acidity in the system, they may be taken with comparative safety to a considerable extent. Whenever there is disease, attention must be paid to the wines best adapted to its particular nature. For instance, in gout, the acescent wines, such as Hock and Claret, must be avoided, and Sherry or Madeira substituted in their room; and should even this run into the acetous fermentation, it must be laid aside, and replaced by weak brandy and water. Champagne, except in cases of weak digestion, is one of the safest wines that can be drunk. Its intoxicating effects are rapid, but exceedingly transient, and depend partly upon the carbonic acid which is evolved from it, and partly upon the alcohol which is suspended in this gas, being applied rapidly and extensively to a large surface of the stomach.

Drunkards will do well to follow the maxim of the facetious Morgan O'Doherty, and never mix their wines. Whatever wine they commence with, to that let them adhere throughout the evening. If there be any case where this rule may be transgressed with safety, it is perhaps in favour of Claret, a moderate quantity of which is both pleasant and refreshing after a course of Port or Madeira. Nor is the advice of the same eccentric authority, with regard to malt liquors, less just or less worthy of observance—the toper being recommended to abstain scrupulously from such fluids when he means beforehand to "make an evening of it," and sit long at the bottle. The mixture, unquestionably, not only disorders the stomach, but effectually weakens the ability of the person to withstand the forthcoming debauch.

## CHAPTER XVII.

### EFFECTS OF INTOXICATING AGENTS ON NURSES AND CHILDREN.

WOMEN, especially in a low station, who act as nurses, are strongly addicted to the practice of drinking porter and ales, for the purpose of augmenting their milk. This very common custom cannot be sufficiently deprecated. It is often pernicious to both parties, and may lay the foundation of a multitude of diseases in the infant. The milk, which ought to be bland and unirritating, acquires certain heating qualities, and becomes deteriorated to a degree of which those unaccustomed to investigate such matters have little conception. The child nursed by a drunkard is hardly ever healthy. It is, in a particular manner, subject to derangements of the digestive organs and convulsive affections. With regard to the latter, Dr. North* remarks, that he has seen them almost instantly removed by the child being transferred to a temperate woman. I have observed the same thing, not only in convulsive cases, but in many others. Nor are liquors the only agents whose properties are communicable to the nursling. It is the same with regard to opium, tobacco, and other narcotics. Purgatives transmit their powers in a similar manner, so much so, that nothing is more common than for the child suckled by a woman who has taken physic, to be affected with bowel complaint. No woman is qualified to be a nurse, unless strictly sober; and though stout children are sometimes reared by persons who indulge to a considerable extent in liquor, there can be no doubt that they are thereby exposed to risk, and that they would have had a much better chance of doing well, if the same quantity of milk had been furnished by natural means. If a woman cannot afford the necessary supply without these indulgences, she should give over the infant to some one who can, and

* *Practical Observations on the Convulsions of Infants.*

drop nursing altogether. The only cases in which a moderate portion of malt liquor is justifiable, are when the milk is deficient, and the nurse averse or unable to put another in her place. Here, of two evils, we choose the least, and rather give the infant milk of an inferior quality, than endanger its health, by weaning it prematurely, or stinting it of its accustomed nourishment.

Connected with this subject is the practice of administering stimulating liquors to children. This habit is so common in some parts of Scotland, that infants of a few days old are often forced to swallow raw whisky. In like manner, great injury is often inflicted upon children by the frequent administration of laudanum, paregoric, Godfrey's Cordial, and other preparations of opium. The child in a short time becomes pallid, emaciated, and fretful, and is subject to convulsive attacks, and every variety of disorder in the stomach and bowels. Vomiting, diarrhœa, and other affections of the digestive system ensue, and atrophy, followed by death, is too often the consequence.

An experiment made by Dr. Hunter upon two of his children, illustrates in a striking manner the pernicious effects of even a small portion of intoxicating liquors, in persons of that tender age. To one of the children he gave, every day after dinner, a full glass of sherry: the child was five years of age, and unaccustomed to the use of wine. To the other child, of nearly the same age, and equally unused to wine, he gave an orange. In the course of a week, a very marked difference was perceptible in the pulse, urine, and evacuations from the bowels of the two children. The pulse of the first child was raised, the urine high coloured, and the evacuations destitute of their usual quantity of bile. In the other child, no change whatever was produced. He then reversed the experiment, giving to the first the orange, and to the second the wine, and the results corresponded: the child who had the orange continued well, and the system of the other got straightway into disorder, as in the first experiment. Parents should therefore be careful not to allow their youthful offspring stimulating liquors of any kind, except in cases of disease, and then only under the guidance of a medical attendant. The earlier persons are initiated in

the use of liquor, the more completely does it gain dominion over them, and the more difficult is the passion for it to be eradicated. Children naturally dislike liquors—a pretty convincing proof that in early life they are totally uncalled for, and that they only become agreeable by habit. It is, in general, long before the palate is reconciled to malt liquors; and most young persons prefer the sweet home-made wines of their own country, to the richer varieties imported from abroad. This shows that the love of such stimulants is in a great measure acquired, and also points out the necessity of guarding youth as much as possible from the acquisition of so unnatural a taste.

## CHAPTER XVIII.

### LIQUORS NOT ALWAYS HURTFUL.

THOUGH drunkenness is always injurious, it does not follow that a moderate and proper use of those agents which produce it is so. These facts have been so fully illustrated that it is unnecessary to dwell longer upon them; and I only allude to them at present for the purpose of showing more fully a few circumstances in which all kinds of liquors may be indulged in, not only without injury, but with absolute benefit. It is impossible to deny that in particular situations, as in those of hard-wrought sailors and soldiers, a moderate allowance is proper. The body, in such cases, would often sink under the accumulation of fatigue and cold, if not recruited by some artificial excitement. In both the naval and mercantile service the men are allowed a certain quantity of grog, experience having shown the necessity of this stimulus in such situations. When Captain Bligh and his unfortunate companions were exposed to those dreadful privations consequent to their being set adrift, in an open boat, by the mutineers of the Bounty, the few drops of rum which were occasionally doled out to each individual, proved of such incalculable service, that, without this providential aid, every one must have perished of absolute cold and exhaustion.* The utility of spirits in enabling the frame to resist severe cold, I can still further illustrate by a circumstance per-

* "At daybreak," says Captain Bligh, "I served to every person a tea-spoonful of rum, our limbs being so much cramped that we could scarcely move them."

"Being unusually wet and cold, I served to the people a tea-spoonful of rum each, to enable them to bear with their distressing situation."

"Our situation was miserable; always wet, and suffering extreme cold in the night, without the least shelter from the weather. The little rum we had was of the *greatest service;* when our nights were particularly distressing I generally served a tea-spoonful or two to each person, and it was always joyful tidings when they heard of my intention."—*Family Library*, vol. xxv. *Mutiny of the Bounty.*

sonal to myself; and there can be no doubt that the experience of every one must have furnished him with similar examples. I was travelling on the top of the Caledonian coach, during an intensely cold day, towards the end of November, 1821. We left Inverness at five in the morning, when it was nearly pitch dark, and when the thermometer probably stood at 18° of Fahr. I was disappointed of an inside seat, and was obliged to take one on the top, where there were nine outside passengers beside myself, mostly sportsmen returning from their campaigns in the moors. From being obliged to get up so early, and without having taken any refreshment, the cold was truly dreadful, and set fearnoughts, fur caps, and hosiery, alike at defiance. So situated, and whirling along at the rate of nearly nine miles an hour, with a keen east wind blowing upon us from the snow-covered hills, I do not exaggerate when I say, that some of us at least owed our lives to ardent spirits. The cold was so insufferable, that, on arriving at the first stage, we were nearly frozen to death. Our feet were perfectly benumbed, and our hands, fortified as they were with warm gloves, little better. Under such circumstances, we all instinctively called for spirits, and took a glass each of raw whisky, and a little bread. The effect was perfectly magical; heat diffused itself over the system, and we continued comparatively warm and comfortable till our arrival at Aviemore Inn, where we breakfasted. This practice was repeated several times during the journey, and always with the same good effect. When at any time the cold became excessive, we had recourse to our dram, which insured us warmth and comfort for the next twelve or fourteen miles, without, on any occasion, producing the slightest feeling of intoxication. Nor had the spirits which we took any bad effects either upon the other passengers or myself. On the contrary, we were all, so far as I could learn, much the better of it; nor can there be a doubt, that without spirits, or some other stimulating liquor, the consequences of such severe weather would have been highly prejudicial to most of us. Some persons deny that spirits possess the property of enabling the body to resist cold, but, in the face of such evidence, I

can never agree with them. That, under these circumstances, they steel the system, at least for a considerable time, against the effects of a low temperature, I am perfectly satisfied. Analogy is in favour of this assertion, and the experience of every man must prove its accuracy. At the same time, I do not mean to deny that wine or ale might have done the same thing equally well, and perhaps with less risk of ulterior consequences. We had no opportunity of trying their efficacy in these respects, and were compelled, in self-defence, to have recourse to what, in common cases, ought to be shunned, viz., raw spirits. The case was an extreme one, and required an extreme remedy; such, however, as I would advise no one to have recourse to without a similar plea of strong necessity to go upon.

It follows, then, that if spirits are often perverted to the worst purposes, and capable of producing the greatest calamities, they are also, on particular occasions, of unquestionable benefit. In many affections, both they and wine are of more use than any medicine the physician can administer. Wine is indicated in various diseases of debility. Whenever there is a deficiency of the vital powers, as in the low stages of typhus fever, in gangrene, putrid sore throat, and, generally speaking, whenever weakness, unaccompanied by acute inflammation, prevails, it is capable of rendering the most important services. Used in moderation, it enables the system to resist the attack of malignant and intermittent fevers. It is a promoter of digestion, but sometimes produces acidity, in which case spirits are preferable. To assist the digestive process in weak stomachs, I sometimes prescribe a tumbler of negus or toddy to be taken after dinner, especially if the person be of a studious habit, or otherwise employed in a sedentary occupation. Such individuals are often benefited by the stimulus communicated to the frame by these cordials. In diarrhœa, dysentery, cholera, cramps, tremors, and many other diseases, both spirits and wine often tell with admirable effect, while they are contra-indicated in all inflammatory affections. Malt liquors also, when used in moderation, are often beneficial. Though the drunkenness produced by their excessive use is of the

most stupefying and disgusting kind, yet, when under temperate management, and accompanied by sufficient exercise, they are more wholesome than either spirits or wine. They abound in nourishment, and are well adapted to the labouring man, whose food is usually not of a very nutritive character. The only regret is, that they are so much adulterated by narcotics. This renders them peculiarly improper for persons of a plethoric habit, and also prevents them from being employed in other cases where they might be useful. Persons of a spare habit of body are those likely to derive most benefit from malt liquors. I often recommend them to delicate youths and young girls who are just shooting into maturity, and often with the best effect. Lusty, full-bodied, plethoric people, should abstain from them, at least from porter and strong ale, which are much too fattening and nutritious for persons of this description. They are also, generally speaking, injurious in indigestion and bowel complaints, owing to their tendency to produce flatulence. In such cases they yield the palm to wine and spirits. It is to be regretted that the system of making home-brewed ale, common among the English, has made so little progress in Scotland. This excellent beverage is free from those dangerous combinations employed by the brewers, and to the labouring classes in particular, is a most nourishing and salubrious drink. I fully agree with Sir John Sinclair in thinking, that in no respect is the alteration in diet more injurious than in substituting ardent spirits for ale—the ancient drink of the common people. Though an occasional and moderate allowance of spirits will often benefit a working man, still, the tendency of people to drink these fluids to excess renders even their moderate indulgence often hazardous; and hence, in one respect, the superiority possessed over them by malt liquors.

In higher circles, where there is good living and little work, liquors of any kind are far less necessary; and, till a man gets into the decline of life, they are, except under such circumstances as have been detailed, absolutely useless. When he attains that age, he will be the better of a moderate allowance, to recruit the vigour which approaching years steal from the frame. For young and

middle-aged men, in good circumstances and vigorous health, water is the best drink; the food they eat being sufficiently nutritious and stimulating, without any assistance from liquor. For young people, in particular, liquors of all kinds are, under common circumstances, not only unnecessary in health, but exceedingly pernicious, even in what the world denominates *moderate* quantities. This is especially the case when the habit is daily indulged in. One of the first physicians in Ireland has published his conviction on the result of twenty years' observation—"That were ten young men, on their twenty-first birth-day, to begin to drink one glass (equal to two ounces) of ardent spirits, or a pint of Port wine or Sherry, and were they to drink this *supposed moderate quantity* of strong liquor daily, the lives of eight out of the ten would be abridged by twelve or fifteen years." "An American clergyman," says Professor Edgar, "lately told me that one of his parishioners was in the habit of sending to his son at school a daily allowance of brandy and water, before the boy was twelve years of age. The consequence was, that his son, before the age of seventeen, was a confirmed drunkard, and he is now confined in a public hospital." The force of this anecdote must come home to every one. Nothing is more common, even in the best society, than the practice of administering wine, punch, &c., even to children—thus not only injuring their health, and predisposing them to disease, but laying the foundation for intemperance in their maturer years.

Having stated thus much, it is not to be inferred that I advocate the banishment of liquors of any kind from society. Though I believe mankind would be benefited, upon the whole, were such stimulants to be utterly proscribed, yet in the present state of things, and knowing the fruitlessness of any such recommendation, I do not go the length of urging their total disuse. I only would wish to inculcate moderation, and that in its proper meaning, and not in the sense too often applied to it; for, in the practice of many, moderation (so called) is intemperance, and perhaps of the most dangerous species, in so far as it becomes a daily practice, and insinuates itself under a false character into the habits of life. Men thus indulge habi-

tually, day by day, not perhaps to the extent of producing any evident effect either upon the body or mind at the time, and fancy themselves all the while strictly temperate, while they are, in reality, undermining their constitution by slow degrees—killing themselves by inches, and shortening their existence several years. The quantity such persons take at a time is perhaps moderate and beneficial, if only occasionally indulged in; but, being habitually taken, it injures the health, and thus amounts to actual intemperance. "It is," says Dr. Beecher, and I fully concur with him, "a matter of unwonted certainty, that habitual tippling is worse than periodical drunkenness. The poor Indian who, once a-month, drinks himself *dead*, all but simple breathing, will outlive for years the man who drinks little and often, and is not, perhaps, suspected of intemperance. The use of ardent spirits *daily*, as ministering to cheerfulness or bodily vigour, ought to be regarded as intemperance. No person, probably, ever did, or ever will receive ardent spirits into his system once a-day, and fortify his constitution against its deleterious effects, or exercise such discretion and self-government, as that the quantity will not be increased, and bodily infirmities and mental imbecility be the result; and, in more than half the instances, inebriation. Nature may hold out long against this sapping and mining of the constitution, which daily tippling is carrying on; but, first or last, this foe of life will bring to the assault enemies of its own formation, before whose power the feeble and the mighty will be alike unable to stand."

Let those, therefore, who will not abandon liquors use them in moderation, and not *habitually or day by day*, unless the health should require it, for cases of this kind we sometimes do meet with, though by no means so often as many would believe. Abstractly considered, liquors are not injurious. It is their abuse that makes them so, in the same manner as the most wholesome food becomes pernicious when taken to an improper excess.

# APPENDIX.

## No. I.

*Excerpt from Paris's Pharmacologia.*

"THE characteristic ingredient of all wines is *alcohol*, and the quantity of this, and the condition or state of combination in which it exists, are the circumstances that include all the interesting and disputed points of medical inquiry. Daily experience convinces us that the same quantity of alcohol, applied to the stomach under the form of natural wine, and in a state of mixture with water, will produce very different effects upon the body, and to an extent which it is difficult to comprehend: it has, for instance, been demonstrated that port, madeira, and sherry contain from one-fourth to one-fifth of their bulk of alcohol, so that a person who takes a bottle of either of them, will thus take nearly half a pint of alcohol, or almost a pint of pure brandy! and moreover, that different wines, although of the same specific gravity, and consequently containing the same absolute proportion of spirit, will be found to vary very considerably in their intoxicating powers; no wonder, then, that such results should stagger the philosopher, who is naturally unwilling to accept any tests of difference from the nervous system, which elude the ordinary resources of analytical chemistry; the conclusion was therefore drawn, that alcohol must necessarily exist in wine, in a far different condition from that in which we know it in a separate state, or, in other words, that its elements only could exist in the vinous liquor, and that their union was determined, and, consequently, alcohol produced by the action of distillation. That it was the *product* and not the *educt* of distillation, was an opinion which originated with Rouelle, who asserted that

alcohol was not completely formed until the temperature was raised to the point of distillation: more lately, the same doctrine was revived and promulgated by Fabbronni, in the *Memoirs* of the Florentine Academy. Gay-Lussac has, however, silenced the clamorous partizans of this theory, by separating the alcohol by distillation at the temperature of 66° Fah., and by the aid of a vacuum, it has since been effected at 56°; besides, it has been shown that by precipitating the colouring matter, and some of the other elements of the wine, by *sub-acetate of lead* and then saturating the clear liquor with *sub-carbonate of potass*, the alcohol may be completely separated without any elevation of temperature; and by this ingenious expedient, Mr. Brande has been enabled to construct a table, exhibiting the proportions of combined alcohol which exist in the several kinds of wine: no doubt, therefore, can remain upon this subject, and the fact of the difference of effect, produced by the same bulk of alcohol, when presented to the stomach in different states of combination, adds another striking and instructive illustration to those already enumerated in the course of this work, of the extraordinary powers of chemical combination in modifying the activity of substances upon the living system. In the present instance, the alcohol is so combined with the extractive matter of the wine, that it is probably incapable of exerting its full specific effects upon the stomach, before it becomes altered in its properties, or, in other words, *digested;* and this view of the subject may be fairly urged in explanation of the reason why the intoxicating effects of the same wine are so liable to vary, in degree, in the same individual, from the peculiar state of his digestive organs at the time of his potation. Hitherto we have only spoken of pure wine, but it is essential to state, that the stronger wines of Spain, Portugal, and Sicily, are rendered remarkable in this country by the addition of brandy, and must consequently contain *uncombined* alcohol, the proportion of which, however, will not necessarily bear a ratio to the quantity added, because, at the period of its admixture, a renewed fermentation is produced by the scientific vintner, which will assimilate and combine a certain portion of the foreign spirit with the wine: this manipulation, in

technical language, is called *fretting-in.* The free alcohol may, according to the experiments of Fabbronni, be immediately separated by saturating the vinous fluid with *sub-carbonate of potass*, while the combined portion will remain undisturbed: in ascertaining the fabrication and salubrity of a wine, this circumstance ought always to constitute a leading feature in the inquiry; and the tables of Mr. Brande would have been greatly enhanced in practical value, had the relative proportions of *uncombined* spirit been appreciated in his experiments, since it is to this, and not to the *combined* alcohol, that the injurious effects of wine are to be attributed. 'It is well known,' observes Dr. MacCulloch, 'that diseases of the liver are the most common, and the most formidable of those produced by the use of *ardent* spirits; it is equally certain that no such disorders follow the intemperate use of *pure* wine, however long indulged in: to the concealed and unwitting consumption of spirit, therefore, as contained in the wines commonly drunk in this country, is to be attributed the excessive prevalence of those hepatic affections, which are comparatively little known to our continental neighbours.' Thus much is certain, that their ordinary wines contain no alcohol but what is disarmed of its virulence by the prophylactic energies of combination."

## No. II.

*Mr. Brande's Table of the Alcoholic Strength of Liquors.*

| | Proportion of pure Spirit per cent. by Measure. |
|---|---|
| 1. Lissa, | 26·47 |
| Ditto, | 24·35 |
| Average, | 25·41 |
| 2. Raisin wine, | 26·40 |
| Ditto, | 25·77 |
| Ditto, | 23·20 |
| Average, | 25·12 |
| 3. Marsala, | 26·03 |
| Ditto, | 25·09 |
| Average, | 25·06 |
| 4. Madeira, | 24·42 |
| Ditto, | 23·93 |
| Ditto (Sircial), | 21·40 |
| Ditto, | 19·41 |
| Average, | 22·27 |
| 5. Currant wine, | 20·55 |
| 6. Sherry, | 19·81 |
| Ditto, | 19·83 |
| Ditto, | 18·79 |
| Ditto, | 18·25 |
| Average, | 19·17 |
| 7. Teneriffe, | 19·79 |
| 8. Colares, | 19·75 |
| 9. Lachrima Christi, | 19·70 |
| 10. Constantia (white), | 19·75 |
| 11. Ditto (red), | 18·92 |
| 12. Lisbon, | 18·94 |
| 13. Malaga (1666), | 18·94 |
| 14. Bucellas, | 18·49 |
| 15. Red Madeira, | 22·30 |
| Ditto, | 18·40 |
| Average, | 20·35 |

| | Proportion of pure Spirit per cent. by Measure. |
|---|---|
| 16. Cape Muschat, | 18·25 |
| 17. Cape Madeira, | 22·94 |
| Ditto, | 20·50 |
| Ditto, | 18·11 |
| Average, | 20·51 |
| 18. Grape wine, | 18·11 |
| 19. Calcavella, | 19·20 |
| Ditto, | 18·10 |
| Average, | 18·65 |
| 20. Vidonia, | 19·25 |
| 21. Alba Flora, | 17·26 |
| 22. Malaga, | 17·26 |
| 23. White Hermitage, | 17·43 |
| 24. Rousillon, | 19·00 |
| Ditto, | 17·26 |
| Average, | 18·13 |
| 25. Claret, | 17·11 |
| Ditto, | 16·32 |
| Ditto, | 14·08 |
| Ditto, | 12·91 |
| Average, | 15·10 |
| 26. Malmsey Madeira, | 16·40 |
| 27. Lunal, | 15·52 |
| 28. Shiraz, | 15·52 |
| 29. Syracuse, | 15·28 |
| 30. Sauterne, | 14·22 |
| 31. Burgundy, | 16·60 |
| Ditto, | 15·22 |
| Ditto, | 14·53 |
| Ditto, | 11·95 |
| Average, | 14·57 |
| 32. Hock, | 14·37 |
| Ditto, | 13·00 |
| Ditto (old in cask), | 8·88 |
| Average, | 12·08 |
| 33. Nice, | 14·63 |
| 34. Barsac, | 13·86 |
| 35. Tent, | 13·30 |

| | Proportion of pure Spirit per cent. by Measure. |
|---|---|
| 36. Champagne (still), | 13·80 |
| Ditto (sparkling), | 12·80 |
| Ditto (red), | 12·56 |
| Ditto (ditto), | 11·30 |
| Average, | 12·61 |
| 37. Red Hermitage, | 12·32 |
| 38. Vin de Grave, | 13·94 |
| Ditto, | 12·80 |
| Average, | 13·37 |
| 39. Frontignac, | 12·79 |
| 40. Cote Rotie, | 12·32 |
| 41. Gooseberry wine, | 11·84 |
| 42. Orange wine—average of six samples made by a London Manufacturer, | 11·26 |
| 43. Tokay, | 9·88 |
| 44. Elder wine, | 9·87 |
| 45. Cider, highest average, | 9·87 |
| Ditto, lowest average, | 5·21 |
| 46. Perry, average of four samples, | 7·26 |
| 47. Mead, | 7·32 |
| 48. Ale (Burton), | 8·88 |
| Ditto (Edinburgh), | 6·20 |
| Ditto (Dorchester), | 5·56 |
| Average, | 6·87 |
| 49. Brown Stout, | 6·80 |
| 50. London Porter, average, | 4·20 |
| 51. London Small Beer, average, | 1·28 |
| 52. Brandy, | 53·39 |
| 53. Rum, | 53·68 |
| 54. Gin, | 51·60 |
| 55. Scotch Whisky, | 54·32 |
| 56. Irish ditto, | 53·90 |

# INDEX.

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