

Medicina simplex : or, The pilgrims waybook : being an enquiry into the moral and physical conditions of a health life and happy old age, with household prescriptions / by A physician.

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MEDICINA SIMPLEX;

OR, THE

PILGRIMS WAYBOOK.

*Sir M. F. Tyrell Bart
From the Author.
1832.*

Medicina Simplex;

OR, THE

PILGRIMS WAYBOOK,

BEING AN ENQUIRY INTO THE

MORAL AND PHYSICAL CONDITIONS

OF A

HEALTHY LIFE

AND

HAPPY OLD AGE.

WITH HOUSEHOLD PRESCRIPTIONS.

BY

A PHYSICIAN.

LONDON :

SOLD BY KEATING AND BROWN ;

HADDON AND FENTON, COLCHESTER; AND BY J. MARSDEN,
HIGH-STREET, CHELMSFORD.

1832.

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INTRODUCTORY ANALYSIS.

IN every age of the world, the love of life has prompted philosophers to seek the means of its prolongation and the best remedies against its premature decay, and has led to those various systems of physiology by which it is pretended to explain the source of the vital principle, the structure and uses of its organs, and the nature of the mysterious relation between the percipient mind and the material world, of which the living sensorium is the medium.

The solicitude about the security of life, so natural to man, is increased by civilization, owing to the number of new accidents and diseases that arise out of the circumstances of artificial society. And the science of medicine, promising relief from the sudden effects of casualty, and remedies against the ravages of disease, has at all times been considered as in the highest degree fit for the study of the learned, and worthy of the patronage and protection of government.

By what various accidents the primeval professors of the healing art were led to the knowledge of the medicinal properties of plants, it would be fruitless now to inquire. The origin of these simple remedies, which laid the foundation of the pharmacopœias of more advanced stages of society, can be traced back into the very infancy of science, and are lost in the night of time. But through all the various changes which medicine, and its sanatory rules, have undergone, in different ages and countries, we can trace the same leading principle, the same anxiety to obtain relief from pain which renders life less pleasurable, and to put off death to the longest period to which it can be deferred. Various plans of diet, and courses of medicine, have been adopted for this purpose, which will be found described below; and in a great measure, man has succeeded, by the constant exertion of his ingenuity, in counteracting those disorders of his frame, which his own irregularities have created. But after all, the common lot of mortality cannot be averted; for no remedy hitherto discovered is capable of rendering human nature an exception to the final

process of dissolution, which is the general doom of all animated beings. From this consideration has arisen another evil of still greater magnitude, in the progress of society; for the love of life, which is the more intense when sensations are the more delightful, renders the certain forecast of death, at that very time, the most painful drawback to positive pleasure, and tinges with a melancholy, often amounting to disease, some of the brightest conceptions of earthly happiness. It may easily be imagined that, meditating on this short and uncertain condition of life, men of profound and reflecting minds would extend their quest after happiness into regions more remote, and proceeding from physical to metaphysical researches, would inquire whether an individual being, possessed of the consciousness of sensation, when once created, could ever cease; or in other words, whether the mind might not retain its personal identity and capacity for sensation, in another state of existence, after the extinction of the living principle should have severed it from its earthly connexions? For as life would seem to be a distinct property, conferred on

the corporeal fabric of the body, so the mind should seem to be something superadded to vitality. The continued identity, then, of the mind after the body be dissolved, has been called the soul. The desire to live, and the aversion to death, may account for the eagerness with which this doctrine may have been embraced, and for its almost universal adoption, under some form or other, among all the nations of the world. The very recollection, too, that what has been may be again, and that therefore the life of every individual, having once been, may by the concourse of atoms, in the lapse of ages, be restored, proves that the anticipations of future life are not divested of the support of natural probability. This probability is increased rather than diminished, in proportion as we extend our metaphysical researches into the proofs of a Final Cause, as the aboriginal and uncreated source of all that diversified catenation of reciprocal causes and effects which the surrounding universe presents to our senses. But after all, it seems to be more probable that knowledge of a future state was originally impressed on the mind of man by God ; nor does this no-

tion detract, as shortsighted philosophers pretend, from the beautiful harmony which seems to reign through the creation. All animals are endowed with propensities adapted, by means of organs, for their peculiar wants and the rank which they are destined to hold in the scale of animated beings. That man, therefore, should not be wanting in the knowledge of that which will fit him also for his peculiar functions, duties, and destination, seems necessary to the consistency and harmony of the creation. All power and all knowledge imparted to creatures must emanate from the Creator ; and what may only be called instinct, in the animal, may be designated by the word revelation, when applied to the more sublime conceptions of the human understanding.

Phrenology has proved that the brain of man, and of other animals, is composed of a plurality of organs, each having a separate function. When any of these organs are of great size and activity, the consequence is that the animal possesses the instinctive genius which belongs thereto, in a high degree. But man has a superior order of organs, and consequently of sentiments,

superadded to those that belong to his animal nature; such as Veneration, Hope, Supernaturality, and Ideality, which, by their combined action, constitute a more perfect mind. And it seems possible that, in the minds of highly gifted individuals possessing these faculties in an inordinate degree, the great truths which we call religious dogmas may have been revealed. On this supposition, it would have been impossible to have imparted these dogmas to ordinary men, otherwise than by the help of those symbols which make up the metaphorical language of the ancient prophets, saints, and oriental writers in general. Some of the most learned of the Jewish rabbi have supposed, and with great probability, that from the degenerate nature of modern minds, the same comprehensive conceptions cannot now be entertained, which were possible to the Patriarchs; and that therefore the symbolical language of religion has become as necessary to express the great mysteries of divinity, as the signs in algebra are to represent the powers of mechanics. The sensorium of man, as a theatre of knowledge, may be operated on in various ways, mediately or

immediately, as the Deity may think fit. And the available truths so conveyed would have the same value, whatever mode of hieroglyphic might be adopted to transmit them to the vulgar. Such reflections as these enable us to assert, without fear of contradiction, that the fundamental principle of all religions is in harmony with the best natural analogies, and is supported by the highest functions of the reasoning powers in man.

The manner in which the subject connects itself with that of this enquiry consists in the necessity, which is found to exist, that man should carry his hopes of happiness beyond the grave, in order to enjoy felicity, and consequently health also, in this present state of existence. For the brain and the stomach having a reciprocal action on each other, the emotions of the mind and the bodily sensations must necessarily correspond. Sudden grief will destroy appetite; anxiety will vitiate the bile; and fear can stop the action of the heart: conversely, a bad stomach will render the spirits irritable; a torpid liver produce melancholy; and an irritable circulation enhance a startlish and timid state of

the mind. On the contrary, the pleasurable sensations conduce to health, which, in its turn, helps to confer feelings of pleasure. Hence we see that when Medicine has done her best, something is yet wanting to complete the well being of man; and we find the succedaneum for all the imperfections of nosology to lie deep in the metaphysical science of mind.

The great theological doctrines, and all the subordinate duties of social life, were originally shaped into regular and definite articles of faith, with a view to direct the native impulses of the human mind to their proper objects, and thus to produce satisfaction and unanimity, and to prevent the horrible mental disorders and aberrations which the weak judgment of individuals would otherwise entail on themselves and on the unthinking multitude. This consideration, without rendering the philanthropist either bigotted or uncharitable, or derogating from the researches of the philosopher, would justify the preference given to ancient extensive and uncompromising systems of religion. The subject became so closely connected with the object of this enquiry, that I felt,

on consideration, that I could not omit its frequent introduction into a work in which I proposed to discuss all the means at present known, of producing a sound state of the animal machine, and a happy longevity; in short, of conferring mirthfulness and health on youth, strength and wisdom on manhood, on old age ease and tranquillity, and in the end a dissolution without pain.

That which vitiates the mind of man, soon corrupts his body, and injures his estate; and it is probable that the most perfect system of government would be one which, in its paternal solicitude for the people, should provide wholesome laws for the regulation of all the wants of society in this threefold capacity. A paternal monarchy may be likened to a pyramid of adamant, at the vertex of whose gradations sat the king with his triple crown, holding out the sceptre, as it were a divining rod, to catch the electric irradiations of heaven.

In the present state of society, moral, medicinal, and forensic rules have their separate sources.

Those learned wights, who have the talent

and inclination to unravel the mysterious scroll of ancient history, will find in the explanation of symbols some curious illustrations of the foregoing remarks, which it is not necessary here to introduce. The spirit of ancient philosophy, when it breathes on the harvest of modern inventions, is like the mystic fan of Bacchus which wafts away the chaff from the grain on the area of life.

In considering the effects of the different systems of morality and of religion on the health of mankind, in the ensuing enquiry, it has never been intended to cast any unjust reflection, or fix a stigma on any race, or description of men, or sect of worshippers. But an inherent love of the truth, and the conscious duty to impart it to mankind, prompted me to enter widely into the comparative merits of cosmopolitan and of local systems, as far as their medical and moral influence may be concerned. The wild Indian, who sees the Deity in clouds and hears him in the wind, is as good a man, in his way, as the vestal who sits to meditate on the divine attributes in a temple. And if any one feel that the remarks made in these pages can be perverted to the selfish purposes of narrow

fanaticism; let him seek for his remedy in the wide expanse of animated nature, or under the lofty canopy of the starry sky when bespangled with millions of suns and of systems bigger than our own, and probably inhabited; and he will find it impossible to entertain limited and uncharitable notions of the Creator. Meanwhile, let us not be deterred from inquiring what system is best adapted to the nature and imperfections of man; and when we have found it, let us not discard it, merely because the hieroglyphics of its ritual are unintelligible to those who have neither the knowledge nor the industry requisite to unfold them.

I believe the ancient sanatory and salutary rules of the catholic religion to be the best adapted for this purpose, and to be an improvement both on the laws of the ancient Jews and on the works of the Grecian philosophers in this respect; but in submitting this opinion to the public, I profess myself open to arguments which may be brought against it, and ready always to abide by the best testimony we can get to the truth. I can have no prejudice on the subject, for I was neither born nor bred a

catholic ; nor had I, up to my thirtieth year, any predilection for any religion whatever. A romantic fondness for Nature, and a deep rooted love of discovering truth, led me from the beauties of physical to the depths of metaphysical study, and it was then that, ruminating on the great questions which divided the moral world, respecting the validity of authority, I perceived the wonderful adaptation of the catholic church to the wants and imperfections of man, and to the hopes and restless inquisitiveness of the human mind. The first thing that struck me was its originality, its universality, and its charities—its magnificent foundations, cathedrals, abbeys, hospitals, libraries—its patronage of all the arts and sciences of life ; and above all, its concentration, being thereby the basis of civilization, and the conservative strength of the social compact. To deny the authenticity of a church that possessed all these marks of genuineness would be to engender very wholesale doubts of the truth of all religion whatever. But yet so wide away from my natural bent was all religious restraint, that I have frequently quoted Voltaire's lines—

“ Je ne suis né pour célébrer les saints,
Ma voix est faible et un peu profane,”

whenever my friends tried to induce me, in my writings on the subject of the phenomena of the universe, to make the least allusion to its Author, or to touch on the hackneyed story of the advantages which sanctity confers on Nature.

In the beginning of our pilgrimage, young life is viewed like a boundless panorama, in which the diversified objects of sensation which arise in succession, like new stars from its horizon, engage our almost exclusive attention, and fill all the intervals of time which are left unoccupied by the indulgence of animal appetites. But there is a period which arrives, in minds organized to reflect as well as to observe, when we are no longer satisfied with the comparison of natural effects, but proceed to examine their necessary causes, and from that we get on to the consideration of the Final Cause. The transition from the physique to the metaphysique occurs in the progress which the understanding makes towards perfection; but even as the asymptote never comes up to the hyperbole, so neither does the sentient capacity of man ever comprehend the original power that generates sensation; and physi-

ological enquiry coming to a *ne plus ultra*, reaches, in the end, the point where a child begins its catechism. And we find at last, that after mounting up and wading through all the mazes of Nature, and the proofs of particular truths, till the very end of our lives, we are thrown back, in pursuing the chain of causes, on the proofless, if not self evident, axioms on which the whole superstructure of human knowledge is built. Thus do we look for a competent authority for those great foundation truths which constitute the basis of all available instruction. In this manner did I become convinced that the elements of knowledge were either intuitive, or were first made in childhood, as the groundwork of future enquiries. Now these truths were the same that are given to us on the authority of religion; and I remember it became with me a very grave enquiry, seeing that the wisdom of antiquity was involved in it, whether, firstly, the doctrines of any religion could be shewn to be in accordance with natural appearances; and secondly, if so, what religion, amidst the conflicting schisms of the world, could be shown to be the genuine source of truth? For while the necessity for

faith in things unseen was admitted by philosophers as the foundation of all knowledge, yet the contradictory dogmas of the schools seemed to preclude that comprehensive unanimity, on the strength of which alone any creed could lay claims to the rational assent of mankind. I need hardly, in this place, go through all the enquiries by which I was made at length to see that the catholic doctrine of Christianity alone possessed this requisite character, while all the forms of heretical disunion were without it. For it will be sufficient to state the rule by which I judged between them, when I determined that, since every thing respecting the creative providence of God, and our future destiny in life hereafter, must be matter of faith, the only safe way to judge of the validity of the authority that imposed it, would be to examine the question—what religion is best suited to the life present? For God is truth, and must be in harmony throughout nature! And if we can find out which faith supplies best the deficiencies of reason, which is the best adapted to our nature, the most fitted to improve civilization, to stimulate us to useful energies, to direct

human government, to console human misery, to consolidate social virtues, to warrant rational hopes, to give a tone, a vigour, a spring to life, and to afford a permanent motive for taking care of its interests and maintaining its health; if, in short, we can find what comprehensive scheme, coming from authority, and backed up by the wisdom of ages, is capable of doing this for man on earth, we are warranted in accepting it as the best, and adopting it as our rule of conduct. Now all other religions besides the Catholic have their particular defects, which render them incapable of general application and use: the Jewish wants fulfilment; the Mahometan, though unanimous, is sensual, and wants the more social virtues; the Hindoo, though kind, is superstitious and debasing; the ancient Polytheism is a corrupted fragment of the Jewish and Christian; similarly we may say of all the heresies from catholicism, that, springing from defective private judgment, they each want some essential virtue, and labour under some particular error, of such a nature as is destructive of cosmopolitan virtue and the maintenance of general order. One preaches the

dangerous folly of "justification by faith" without works; another works without faith; a third wages war against music and the fine arts; a fourth teaches predestination, and so on of all of them. They are enemies of the arts of civilization, in direct proportion as they deviate from the mother church; and each hating every other, in all their endless subdivisions, and using emblems and language proper to itself, there is no consent among them, and all is discord and confusion of tongues: for as those of old, who would fain get to the skies by a novel road, and built up a Tower of Babel with mortal brick and mortar, were confounded, and could not understand each other; so those of our days, who would go up to Heaven their own way, are divided in and know not the meaning of each other's language; and thus, when the protestant heresy broke out, a thousand dis-united sects abused and derided each other's pretensions, till at last the atheist laughed at them all! Now, how went on health and the arts of social life all this time? The madhouses and jails, the poverty and degradation, and the diseases of modern voluptuous times, will answer this question. But

we will turn to the catholic church, which had tamed the barbarians of gothic ages, reigned over the wild sallies of animal cupidity, and made the arts flourish in regenerated Europe, and which is now regaining its empire over the heart and reason of man in every country of the world, in proportion as prejudice and interest is done away, and the mind left free to judge of what is best. To sum up this apology for the statement that catholicity comprehends the whole *Medicina Simplex* for the disorders of mind, body, and estate, and is the source of all the arts of social life and improving civilization, I will remind the reader that in religion it produced unanimity; * in morality it tends to perfection; in moral philosophy, it gives fortitude; under affliction, it affords solace; in pleasure, it tempers enjoyment; and in medicine, it gives rules of health of unparalleled utility; while in all the arts and

* Superstition is unauthorised religion, or the ideology of private rules of faith. The essential sentiments are mysticism, veneration, hope, fear, ideality, and so on, and have appropriate organs fitted for being directed in their objects by authority; but without authority they go wrong in their actions.

sciences, it excites excellence. In this last respect its efforts have been so wonderful, that nothing but the stupidity of intellect which gluttony and sensuality produce, will account for any man, of the least pretension to taste, being unconscious of it. Was it not catholicism that ripened the poetic genius of Tasso, of Ariosto, of Chaucer—which formed the subjects for the mind of Milton—which, in short, raised up new Homers, and Virgils, and Horaces, from among Gothic, and Saxon, and Celtic barbarians? Was it not catholicism that directed the pencil of Raphael and of Michael Angelo, that shone in the pictures of Rubens, that excited all the wild nature of Salvator Rosa; that produced the “Christs,” the “Madonnas,” the saintly forms, and the angelical paintings of Dominichino, of Guercino—in short, of the whole school of painting? For protestantism has produced none but what are copies from catholic models. And the reason is obvious: catholic churches afford, to the painter, fine examples of all the attitudes of real devotion, which he would seek in vain among the deformed gesticulations found in the dull, ugly edifices of fanaticism, much less among the hypocrites

of trafficking theology ! Has not catholicism directed the draughtsman's pencil and the scribe's quill—harmonised the lute of the minstrel and the harp of the psalmist—tuned the bells of the steeple,—in short, given music, solemnity, and effect ? Has it not invented the gamut, the printing press, the architecture of the cathedral, the emblematical vane, the monitory clock, the saintly calendar, the astronomical almanac ; in short, all the arts and improvements of life ? * And if I can shew also that this fountain of humanity, of letters, and the arts, has likewise been the great patroness of physic, and of that simple medicine which it has been the express object of this enquiry

* It is worthy remark, that the only edition of Newton's *PRINCIPIA* which is intelligible to modern readers, is the one corrected and explained by a Jesuit. And it is equally remarkable that the Religious Orders originally erected the best Observatories for Astronomy in Europe. Indeed I am inclined to attribute the innumerable inventions, for which we are indebted to the monks, to the energy produced by religious and well ordered celibacy. For the animal spirits which would in mixed life be consumed in sensuality, were in the minds of the ascetic concentrated, as it were, in the intellectual organs of the brain.

to point out, then may I at least lay claim, on my part as physician, to be heard in her defence. And so indeed it has turned out, that after examining Hippocrates, Pliny, Plutarch, Galen, Celsus, and all the medici downwards, I find that they have severally recommended the same particular maxims, as it were by piecemeal, whereof the catholic calendar contains the purified and well ordered compendium. This, then, is my apology for introducing the subject into a medical treatise.

All knowledge fluctuates, and is tossed on the billows of fortune, but it is to be hoped that in the main it advances. The wonderful protection which the catholic religion is capable of giving to real science, and the manner in which it might be made serviceable in the promotion of all the useful arts and the moral improvement of civilized life, has been much abridged by the spirit of persecution manifested by parties, and the disorganizing tendency of faction. And thus it has happened that the wide spread of the social principle has been curtailed. But it is now to be hoped, since principles of CIVIL AND RELIGIOUS LIBERTY are beginning

to be everywhere acknowledged, that the system which is best will at length be adopted, and that Catholic Religion, deprived both of the will and the power to persecute, will recommend itself on its own intrinsic merits, as a truly philosophical and useful system; particularly as it can be proved to have obtained the unanimous consent of all the early sages, the saints and patrons of the church, the literati, the artisans and men of science of every age of Christianity, to support it. Let our maxim be, FIAT JUSTITIA—our motto, VINCAT VERITAS.

Let us now reflect on Use and Abuse, considered as antagonist powers. For as a fair garden may be obscured by a morning fog, or defaced by the ravages of a stormy night, so may a beautiful system of morals be tarnished by the tempests of human passions. The best medicine, given in wanton overdoses, instead of usefully stimulating the animal machine, doth turn the body to fever and the mind to madness. Father Southwell, in an excellent poem on the Real Presence, observes well, that the most excellent things often work the most mischief on depraved stomachs.

“ The best unto the bad doth work the worst;
Things bred to bless do make them more accurst.”

Thus it has been with religion. For it cannot be denied that in modern times Christianity fell into two grievous errors: superstition, on one hand, exposed it to ridicule; persecution, on the other, to obloquy! A counsellor once compared it in this respect to its Divine Founder, who was crucified between two thieves. Now while the spurious offspring were not a whit behind the parent, in what has been called bigotry, as the history of the protestant church, its persecutions, and its foolish sectarianism, have proved—for they retained all the severities of the abused mother without her charities—the vices of protestantism are moreover of so odious a kind, they place christianity in so questionable a light, and tend so much to raise the mild religions of Indostan above it, that some explanation seemed necessary.

Of the unparalleled uses of catholicity this whole book is a philosophical eulogium and proof; of the abuses, we must blush to acknowledge that they were manifold. They arose from two causes, which the progress of learning in this age will at length counteract.

1stly. Superstition arose among the vulgar, who mistook the beautiful emblems and metaphorical representations of religion, for the great metaphysical truths which were veiled under them. 2dly. Persecution was engendered of the unhallowed alliance between the church and the civil power; hence the meddling of interested kings and tyrants, and the mixture of the base passions of our nature with the sublime principles of christianity: both were evils which men fell into in ages of ignorance, and both will be dispelled by the progress of science.

Of the emblematical externals of religion it may be said, that their use is indispensable, and human nature can never do without them. For though the vulgar, and those destined to live by manual labour, cannot perceive the hidden truths which lie beneath the surface; yet they can use the emblems of a language which appeals to the senses, just as an ordinary calculator can work problems in algebra and come at useful results, without having any deep thoughts or comprehensive notions of mathematics and the spirit of philosophy. But be it here observed, that there is the

closest analogy between the signs and the things signified, so that all the results shall be true. The etymology of every language, and every hieroglyphic from India to America, from the Poles to the Equator, confirm the leading doctrines of religion, a fact which is highly consolatory. With regard to persecution, it may be lamented that it ever got connected with charity; but it is the necessary defect of all institutions which have a great power over the minds of ignorant men, that designing persons can make them the tools of mischief. We live in an age in which a great struggle is going on all over the world: energies are exerted in quest of the truth on one hand; while interests prejudicial to public liberty are at work on the other! What the immediate result will be it is impossible to calculate; but when we consider the perfect manner in which catholicity is adapted to the numerous wants and imperfections of man in all his various ranks and conditions, we may feel assured that, purified from secular alliances, and adapted to the state of philosophy, it will regain its ascendancy over the hearts and heads of men, without tyranny or restraint of their persons.

For the genius of a system of religious obligation which shall rein in and direct the horses of Minerva's car, without breaking their speed, and shall set the spirit of Wisdom free from the carnal yoke of Venus, must surely cut the Gordian knot, and become the Guardian Angel of society—the centre of unity—the nursing mother of nations—the mistress of the civilized world!—and when the darkened glasses of this speculum of life shall be about to be broken up, will point out, to us, a new order of things, in which we may possess more perfect views, and may see the great enigma solved. Catholicism has been opposed by various sectarians and philosophers, and by all on different grounds; but these, like butterflies, have winged their way along the flowery fields of science in their little day, and were soon forgotten—while we have on the side of truth the wisest and the best, the most holy men in every age in Christendom, making up a great constellation of sanctity, whose names are honoured in the dedication of every church, and in every country, who have mocked at persecution, laughed at pain, and mastered the world. Their deeds

also stand recorded in the calendar as the inventors of every useful art, and as persons who lived in peace with God and in charity to all men. They present, amidst the vacillating opinions of philosophers, a successive company of sages who, in every age, have maintained unanimity on that side of the great question which is most dear to mortal man; they are the supporters of a system which improves our Mind, Body, and Estate, in conferring power, intellect, and serenity; in giving health, strength, and durability; and in providing for the temporary wants of every class and every variety of society, in the various foundations of churches, monasteries, hospitals, and literary institutions. At length, when the sinews of strength decay, when the Fates are ready to snap the strings of life, and all this vast scene is about to change, Hope, trampling on the head of the serpent who brought death into the world, stretches out her white hands, and invites us to new and incorruptible alliances with a higher order of the objects of sensation—

O supernæ civitatis mansio beatissima! O dies æternitatis clarissima, quam nox non obscurat, sed summa veritas semper irradiat!

ON PESTILENCE.

At the time I am now writing, a pestilence of no ordinary character is spreading widely over the civilized world: it may be proper therefore to take this opportunity of saying something of the nature of these disorders. Whether the term Cholera Morbus be properly applied to it I will not stop now to enquire; but it is evidently a complaint very similar to that which scourged Europe in the middle of the fourteenth century, during the reign of Edward III., and which visited Europe about 1345, and continued to shift its quarters, and to attack successively almost every country of the world for nearly twenty years: in 1348 it assumed in Denmark symptoms very like the present Cholera. The true doctrine to be entertained respecting these direful visitations is as follows.

Epidemics have their origin or exciting cause in the air, which, vitiated either by terrestrial exhalations, by modifications of electricity, or by changes at present imperfectly understood, assumes at times morbid qualities, capable of exciting in predisposed persons those reigning or popular ma-

ladies, which when slight we call Colds, Coughs, and Influenzas, but which, when they exist to a greater extent and with more severe symptoms, are designated as plague, pestilence, or epidemic; and the times in which they occur are called epidemic periods. During such periods, which happen at uncertain intervals of time, animals also are liable to be affected, and their maladies are consequently called epizooty. The vegetable kingdom does not escape, and epibotanic disorders also accompany those of the animals and of man: hence plague, the murrain of beasts, and famine, often happen near together.

A disturbed state of the terraqueous globe and its atmosphere, and the appearance of unwonted meteors, earthquakes, waterspouts, hurricanes, volcanic eruptions, aurora borealis, and other prodigies, accompany these epidemic periods.* And it is believed by

* See my larger work, entitled "Facts and Enquiries respecting Epidemia, with an Historical Catalogue of Plagues, Pestilence, and Famine, &c. Third Edition, London, 8vo. 1832." In this work I have shewn what prodigies the last three years have produced.

some philosophers that comets are signs of such visitations, of which opinion was Kepler the astronomer. Insects, fishes, and reptiles, often increase during such periods, so as to occasion scarcity and to breed disease : hence we read of the Plague of Flies, and so on.

All persons, during such malaria, do not take the disorder which prevails, and hence, in addition to the exciting cause, which is in the air, there must be a predisponent in the constitution of the body. Confinement in close apartments, with an infected person, exposes the attendant to a greater chance of catching the disorder, and hence the popular notion of contagion.

Our business is principally to guard against the effects of these diseases rather than to speculate on their causes ; and this is best done by temperance, morality, and active and wholesome habits of life, under the direction of those sanitary rules which it is the express purpose of this book to point out.

MEDICINA SIMPLEX.

CHAPTER I.

§ 1.—Preliminary Argument that the Temperate and the Healthy are not much affected by prevalent Diseases—Power of the Human Constitution to adapt itself to various Changes, when fortified by Temperance.

PREVIOUS to laying down the rules of health, it may be as well to show in what manner they are available in the prevention of diseases. Now disorders may be considered as having a twofold origin, the various external influences which act on the body being the exciting causes; while the unhealthy state of the constitution may be called the predisposing cause of diseases. Among the causes which forecast, as it were, the most unmanageable diseases may be reckoned an original disposition to their formation, which lie hid among the hereditary varieties of the human body, and is roused into action at different periods of life by numerous bad habits and external causes of excitement. Among exciting causes, the

most powerful are those unhealthy conditions of the atmosphere, which, when very malignant, are called Epidemic Constitutions of the Air, but, when mild, are merely considered as Unwholesome Weather; in either case their effects on the human body are violent, or otherwise, according as the individual has followed healthy or unhealthy habits of life. To direct persons in the choice of the former is the object of the rules herein laid down. History proves that not only in less virulent epidemics, but even in the plague, when the epidemic constitution of the air has been at its height, certain persons have totally escaped its attacks; and these have been the temperate and regular, who have that sort of secure and tranquil health in store, which is called stamina, from its being capable of bearing up against the incursions of disease. This sort of real soundness of constitution, which is improved by due temperance, exercise, and regularity, is essentially different, both from the high florid, but uncertain and artificial health, which comes of repletion, on the one hand; and the weakness and debility of an impoverished habit of body, resulting from debauchery, neglect, and bad food, on the other.

The persons whose health enables them best to resist the effects of disease, are those *who have been temperate for a length of time.*

In times of certain sorts of pestilence, a little additional stimulus may be necessary, but it cannot be too often repeated, that it is the *previous* habits of the patient which lay the foundation of the power of the constitution to repel diseases. Numerous instances of what I have been stating have occurred during the spread of pestilential fevers in every quarter of the world. In the greatest pestilences, even in those wherein cattle have suffered, some temperate individuals, who lived by rule, have remained quite free from the disease. I shall close this section with the relation of a fact, which is disgraceful to our profession; it has happened in times of plague, that the physicians, impressed with an unnecessary dread of infection, have refused to attend on the patients, and their place has been supplied by catholic priests, who took compassion on the sufferers at the risk of their own lives; but it turned out that they entirely escaped the disease. Now this exemption, making all allowances for the power of mind over body in the consciousness of good actions, must be, in a great measure, attributed to those abstemious rules which the church enjoins, and which were more strictly observed in the early ages of Christianity.

I am persuaded that a careful examination of facts, in almost every part of the world, would prove the truth of the doctrine which

I have advanced. In all climates animal life obeys the same general laws, however circumstances of temperature, of seasons, and of hereditary varieties of constitution, may vary their particular application. Temperance, modified according to the climate and the habits of the people, is every where the tenure on which man holds his health.

It seems almost necessary that those, before whom the luxuries of the table are daily spread out, should live in a manner by rule, or at least that they should practise abstemiousness occasionally; there being always a tendency to eat more than the system really wants. It is remarkable that S. Ignatius of Loyola, whose mind was so perpetually intent on the spiritual welfare of his followers, and on plans of reforming the moral world, should have also laid down some of the best physical rules for the regulation of health. He is said, when he founded his Institute, to have called together a council of physicians, and to have examined them carefully before he formed his rules for the regulation of diet, as well as of hours of rest; it is from this circumstance that the rules are so calculated to promote health of body as well as tranquility and power of mind. Man is calculated to live by rule; and health, as well as mental labor, is beneficially economized by the periodical employment of our fleeting hours, and a judicial regulation of times and seasons.

People fall into an error respecting diet in fever, which is natural, but at the same time so dangerous, that it deserves particular consideration;—when the constitution has been debilitated by the disease, or exhausted by fatigue, I have known people actually persuade the sufferer to take nutritive and stimulating things, and that too even against his appetite, under a false notion of keeping up the strength. Such practice greatly aggravates the disorder, and produce further weakness, by exhausting the remaining excitability. The practice ought, in fact, to be to give but little food, and that by degrees, and at regular intervals of six hours at least, so as to allow the enfeebled stomach to recover its digestive power between each meal, which it can only do by rest. Good air, and the excitement of cheerful ideas after eating, are also highly useful. It is also desirable that such food should be selected as agrees best with the individual.

§ 2.—Summary View of the apparent Symptoms of Disorders of the Digestive Organs.

Although we soon become acquainted with the disordered state of our digestive organs in some cases, by the pain and uneasiness which they occasion, as for instance in stoppages, in colic, and in inflammation; yet there are less obvious disorders of those

organs, which frequently escape the notice of the patient, till they have gone on long enough to occasion great mischief in the animal economy. For this reason I shall here endeavour to point out to the notice of the reader, certain signs of disorder in the stomach, bowels, and liver, by attending to which, in time, we may often prevent the occurrence of diseases of greater magnitude.

When the tongue be white or furrowed on its upper surface, or when there be a bitter or otherwise unnatural taste in the mouth in the morning before breakfast, we may rest assured, however well we may think ourselves, that the stomach, either from indigestion or some other cause, is irritable and out of condition. I know of no more certain sign of a disordered stomach than this. Persons who have the care of a family should observe the surface of the tongues of the children the first thing in the morning, particularly when they are in the least degree indisposed, as some trifling indigestion, always indicated by the state of the tongue, is frequently the beginning of very serious disorders. By remedying this incipient evil, in its early stages, by small doses of opening medicine, I believe many children might be saved from tedious and often fatal diseases.

The next symptom of disorder to which it will be proper to allude, is that feeling of

uneasiness in the stomach after eating, which really arises from indigested food. This symptom usually, but not always, accompanies the one before described. When the meal has been too copious, or the food of a quality which does not agree with the patient's particular constitution, this sensation is generally experienced, and is often followed by nausea. We ought to take notice whether all food produce it, or whether the sensation only occur after eating particular kinds of aliment, in order that in the latter case the obnoxious article of diet may be avoided.

When simple indigestion of the above described kind occurs, unattended by any particular symptoms of disease, it may generally be removed by small doses of rhubarb, which should be given soon after the indigestion be perceived. By lessening the quantity of our food, and by adopting the several salutary habits described in the ensuing section, it may, however, generally be avoided. Some persons find great benefit from taking a pill of rhubarb and ginger before dinner, to prepare for digestion.

It may be observed here, that, generally speaking, a person to be in health ought to go to stool at least once every day. And it is not only dangerous to resist the natural inclination to do so; but we should, moreover, contrive to induce a habit of regularity

in this respect, by taking gentle opening medicines at night, till the desired regularity be brought about.

When the stools are not of a natural colour and consistency, it indicates the defective performance of the subsidiary processes of digestion; the most important, perhaps, of all these is the function of the liver. If the excrements be not duly coloured of a deep yellowish brown, we should regard some defect in the bile as the cause of the discolouration, and should have recourse to small doses of mercury, or of calomel and aloes. For it is by the bile that the feces are coloured: colourless or pale feces, therefore, show that the secretion of bile is deficient, while green, black, and other discoloured stools, indicate an unnatural secretion of that fluid. In either case, the state of the liver becomes the object of attention, and, as the most distressing nervous symptoms frequently arise from a disordered liver, so may we often, by the timely application of simple remedies for the disorders of that organ, avert calamities of the most important nature, both mental and bodily. All this is more fully treated of in my larger work, on the Origin of Diseases, but the extreme importance of a healthy liver rendered it advisable to admonish the reader, herein, to pay the most scrupulous attention to the signs of disorder in that viscus.

When any of the above mentioned signs of defective or vitiated bile appear, *five grains of the blue pill* may be taken every alternate night, and a draught, next day, of *one ounce of infusion of gentian, two drachms of infusion of senna, and one drachm of tincture of cardamom*. This is an excellent stomachic in most cases of indigestion. In case of this draught not agreeing with the patient, any substitute may be employed which custom has reconciled to the constitution; as cascarrilla, and so on. In many cases vegetable diet drinks, even the simple infusion of balm, of sage, horehound, and other herb teas, will prove beneficial, by tranquillizing the irritability of the stomach.

Before I close this section I feel disposed to repeat, that medical practitioners, hospitaliers, or parents of families, cannot be too particular in the examination of their patients, or children, as to the state of the digestive organs. Persons have frequently come to me, complaining of various disorders of health, telling me, at the same time, that their stomach and bowels were right enough; when on subsequent examination, I have found almost every symptom of disordered digestive organs. And I have been repeatedly successful in removing, by simple remedies which act chiefly on those organs, many local diseases that have resisted all the ordinary means of cure derived from

topical specific remedies, which, nevertheless, appeared to be sanctioned by the long established custom of the profession. It is almost incalculable what a number of ills may be prevented by timely attention to the digestion, when combined with temperance.

Various pills are vended by patent, the principal ingredients whereof are aloes, rhubarb, and other purgative substances, combined with a little calomel. Many of these pills are very useful, inasmuch as by keeping the bowels open, they carry off the ill effects of habitual intemperance, and prevent dangerous accumulations of feces in the bowels; but we should do better to avoid than to correct evils; for, after all, it is on healthy habits, superinduced by rules of conduct with respect to diet, air, and exercise, that we must depend for the permanent maintenance of health.

Habit has been called second Nature, and we are reconciled by custom to many practices that would at first be felt as injurious. Man seems to have a much greater power of adapting his constitution by degrees to various and dissimilar circumstances, than most other animals possess: nevertheless there are certain rules of conduct, which in almost all constitutions are found to conduce to health, while the neglect of them predisposes, more or less, to disorders. The mode in which new predispositions to disorder are

usually produced, consists in the power of bad habits to derange the actions of the digestive viscera, and to irritate and debilitate the nervous system. It is then that various diseases will arise, even in the absence of specific pestilence, according to the hereditary tendencies of different constitutions, as soon as any exciting cause be brought into action. It is proposed in the sequel to point out what rules of diet are most conducive to health; in order that those who have weak and irritable constitutions may avail themselves of them: at the same time the most healthy may adopt them with additional advantage and security.

§ 2. RULE 1.—Of the Quantity of Food.

The first rule of health is that which prescribes moderation in diet. It is essential that the patient guard against eating more than the animal system requires for its daily support: the surplus of food does not well digest, but generally remains imperfectly acted on by the juices of the stomach and bowels, and becomes a source of irritation. In other cases, where the digestion is very powerful, too much food acts injuriously in another way, by overloading the system, and thereby aggravating all the predispositions to disease, and often leading to actions of the blood vessels, so violent, as to occasion

immediate death, of which apoplexy is one striking example.

People form very erroneous notions of the quantity of food requisite, and too often imagine themselves safe from a full diet, merely because it does not immediately exhibit its baneful effects. Mr. Hunter used to say, that most people lived above par, which rendered the generality of diseases and of accidents the more difficult of cure.

Children are very erroneously treated with respect to diet; those who are brought up to do with a little are sure to feel the benefit of it, the whole of their lives; and in cases of weakly and irritable young people it is particularly injurious to endeavour to force their already enfeebled stomachs by too much nourishment, and particularly by such as is of a heavy or of a stimulating nature: the jelly of arrow root, sago, and other vegetable cordials, often succeed in cases where the ordinary food is found to be injurious.

We may often illustrate opinions, by examples drawn from extreme cases; in the case of diet, examples of such extreme moderation might be adduced, together with its salutary effects, as would astonish most well fed citizens.

The Carmelites, and some other Monastic Orders, for example, afford wonderful examples of the beneficial effects of abstinence.

Hermits and Anchorites, in despite of their sedentary and other austere habits, have attained to a great age, in consequence, as it would seem, of their simple and scanty food. Where such simple diet has been combined with the other wholesome habits, described below, the consequences have sometimes been prodigious longevity. Old Parr is said to have been very abstemious, and old Jenkins, as we are told by the writer of his epitaph, was a remarkable proof that health and length of days are blessings entailed on temperance, a life of labor, and a mind at ease.

§ 3. RULE 2.—Of the Quality of Food.

Next to the quantity of food, we ought to consider its quality. Some aliments are generally wholesome, as fresh meats, farinaceous vegetables, fruits, and pulse of all kinds; while fatty and oily substances, grease, and swine's flesh are commonly injurious. Independently of the general wholesomeness of some, and the unwholesomeness of other articles of diet, there are particular persons who, from peculiarity of constitution, cannot eat certain sorts of food without being almost immediately seized with illness. Many people cannot eat honey; others are injured by butter. Dr. Gall, the celebrated anatomist, could never digest

mutton. I knew a man who could eat anything but beef; and it is well known that numerous persons cannot eat pork, under any modification of cookery whatever. The smell of a cut cucumber is, to some, the most offensive odour in the world, while to other persons it is refreshing and delightful. I knew a lady in whom honey produced violent convulsions as soon as it was swallowed; and there are instances of persons who cannot sit in the room with cheese without being ill. There are persons who know immediately of the presence of a cat in the room by some acute power of smelling, and who feel immediately unwell. All these and many other peculiarities are referred to what is called idiosyncrasy. Those who are conscious of any such peculiarities should scrupulously abstain from articles of food which disagree with them, and avoid substances whose smell is offensive, in defiance of the foolish solicitations of ignorant people to overcome them, who would feign persuade all who differ from them in taste to accommodate themselves, by force, to circumstances which nature shows to be discordant to their constitutional feelings.

But though morbid aversions should be yielded to, it is a question how far, on the other hand, morbid appetites should be indulged: no one should be indulged in a craving to eat hard and indigestible

substances. Nevertheless, in particular cases of this kind, Nature seems to point out an extraordinary remedy for some extraordinary state of disorder. Instances have been known where the indulgence of unhealthy pregnant women, as well as of other patients, in the gratification of a peculiar appetite, has been attended with singular advantage.

In the generality of persons, who are not the subjects of those irregular desires, a salutary choice of aliments may be made, and laid down as a rule. A small quantity of the more wholesome meats, if well dressed, as beef, mutton, game, and the domestic fowls; of farinaceous vegetables, and of puddings, with most sorts of ripe fruits, may be said to form the best ingredients of diet. People err very much now a days, in giving children too much animal food. It may appear to agree well with them for a time, but it is undoubtedly bad in the end; and I am convinced that for young people, and especially those of sanguine temperaments, a very small proportion of animal food is necessary, and that the least habitual excess in this particular will increase the liability to disease, and enhance the danger from the occurrence of any of those epidemics to which they are subject.

There are persons, who to avoid too much meat, give their children, and even take themselves, too large a quantity of vege-

tables. Now all this is a great mistake; a heavy dinner of vegetables will produce more temporary, though less permanent inconvenience, than an overcharge of meat. The rule should be a moderate quantity of each; and it would be well if young folks in general were brought up to abstain from animal food two days in every week, for the sake of health. Meat can never be eaten by children more than once in the same day with advantage; and it would be better if grown up people also would confine themselves to it at dinner alone, on those days on which it is allowed.

§ 4. RULE 3.—Of the Periods of Meals.

Our attention ought now to be directed to the times of taking food. The custom of society has appointed regular hours of meals, and this seems quite conformable to the nature of the human constitution. The stomach digests a meal at the usual hour, owing to a kind of preparatory expectancy, which is created by habit, much better than it would do if we were to eat at irregular times; and persons with weak health find, when they are obliged, by circumstances, to eat at unusual hours, that imperfect digestion is the consequence.

Three meals in a day are quite enough for anybody, and for the laboring class it is

the usual number; many grown persons, however, find two to be amply sufficient, not considering tea as a meal any more than coffee, but rather making it a pleasant diluent after dinner.

Breakfast at nine o'clock, dinner at five or thereabouts, with coffee and tea afterwards, which, with variations, is the practice now of the opulent throughout the country, is a very good division of time: the labour and occupation of the day being got through before dinner, and rest and leisure following it.

One should be careful not to drink much at dinner, even of pure water. Mr. Abernethy used to recommend not drinking with meals at all, and called hunger and thirst incompatible sensations. This is, perhaps, carrying the notion too far, but I have always remarked that persons in the best health require little or no drink at dinner—a cup of coffee and a small glass of liqueur after dinner is enough—and I am persuaded that wines, beer, and spirituous liquors, in general, at dinner, are injurious, except in a very moderate quantity. Indeed, at all times, the use of such fermented and spirituous liquors ought to be avoided: it is a fertile source of disorder, in consequence of its violent stimulus, though in persons habituated to such practices, the evil being rather gradual than sudden, its operation is apt to be overlooked. Good wines are found to be less

injurious than bad, and the light French and Rhenish wines are, perhaps, the most wholesome, whenever they will agree with the stomach. All eating and drinking between meals is excessively bad, as it disqualifies the stomach for digestion; and luncheons and suppers are hurtful superfluities.

After meals, particularly after dinner, a state of rest is advisable; those who are forced to stir about, and walk much, soon after dinner, often hurt their stomachs by so doing. All the carnivorous animals lie down and rest after a full meal; and Nature soon convinces those persons, who try the experiment, of the great comfort and advantage of yielding to our inclination to rest quiet during the process of digestion. Exercise, so beneficial, and indeed so necessary to health, when taken at seasonable hours, becomes a source of indigestion, and, consequently, of numberless diseases, if taken when the stomach be full. To prove this fact, Morgagni fed two dogs, after which he hunted one, and let the other lie at rest. At night the brute dissected them both: in the stomach of the former the food was still to be seen undigested, while from the stomach of the latter the natural process of digestion had removed the whole of its contents. Indulgence in any of the more violent passions, after meals, is also very injurious, and has often been followed by sudden death.

It ought to be laid down as a rule of conduct for all persons who are in any degree out of health, and particularly the dyspeptic, to sit quiet, at least two hours after dinner, and, if possible, in cheerful society; since agreeable affections of the mind, at or after the time of eating, promote good digestion. The custom of company at meals, and the conviviality of the wassaile bowl have, perhaps, had their foundation, ages ago, in the knowledge of this fact. If, however, a disposition to sleep after dinner be felt, there is no reason why it should not be indulged in: neither is coffee nor the smoking of an afternoon pipe of tobacco the least injurious, as some persons have vainly imagined. As pleasant sedatives, where they agree with the patient, they are rather to be recommended than condemned.

Scholars, particularly children, should be allowed two hours of play, out of doors, *before* dinner, and one of quiet recreation *after* it: labour would then come easier the rest of the day. Children often suffer dreadfully at schools, from the want of due exercise *before* dinner. It is my duty here to caution parents against the unwise, cruel and tyrannical conduct of many schools, with respect to children, who, in fact, suffer more, and lay the foundation for worse diseases at the critical time of their life when barbarous customs oblige them to stifle

their natural love of motion and of the open air, in the pedantic dungeon of a school-room, than at any other period of their existence. It is then, if ever that the animal machine proves the power of accommodating Nature to bear up under the worst of habit; and that children, whose youthful hours ought to be spent in exercise,—the true promoter of health—are found to carry an external, but false, appearance of strength, under the pressure of customs which seem calculated to injure the best constitutions. But the effects are, in reality, felt later in life; and the seeds of dangerous disorders, being once sown, are destined to develope themselves; so that to this cause we may ascribe many of the ills attendant on the higher classes of society. Children should be used to the open air in all weathers; should have at least five hours for play every day; and should have their time so cut out as to have their principal exercise, out of doors, before dinner; and should have at least an hour allowed them, after dinner, to sit still, converse, or amuse themselves with some quiet game that required very little exertion of body or mind.

Another destructive hardship imposed on young people by the indiscriminating stupidity of many of those who aspire to become teachers, is the exaction of their customary tasks, at times when the mind is indisposed

for study : such periods of incapacity occur to all, but particularly to the most talented children, from fullness of blood, and other physical cases. Under these circumstances the plan should be to give the child relaxation and amusement abroad, and not to force the unwilling mind. Sir Isaac Newton used to say, that he never worked well when he laboured with difficulty ; and that when he grew weary at study he always left off. Now what might only be injurious to the calculations of the grown man would be destructive of the health of the child. A little opening medicine, or a larger proportion of fruit, with air and exercise, would do more than the rod of the schoolmistress, or the surly reproof of the pedagogue, in chastening the wit of the overworked scholar. Children should be allowed to eat plenty of ripe fruit, such as currants, strawberries, peaches, grapes, and pears, at dinner. The custom of denying them fruit, and giving them meat every day, is one among the lamentable instances where medical prejudice, and an interest in the employment of drugs, for which fruit is a substitute, has prevailed over good sense, and the dictates of Nature. Agreeable fruit is too good a succedaneum for nasty physic, ever to be much in vogue among those who carry on a trade in writing prescriptions.

§ 5. RULE 4.—Of Exercise, Air, and Sleep.

Exercise and good air come next to be considered, comprehending the salutary habit of early rising, and taking the fresh air of the morning. The old proverb, which recommends getting up with the lark, is founded on good sense, and has received the sanction of a long experience in its favor. Whether it be that certain active persons, constructed, at all events, to be long lived, have got up early from the native activity of their constitutions; or whether early rising actually possesses the healthy influence that is ascribed to it, facts are wanting to determine; but certain it is, that of an enormous catalogue of persons who have attained to a great age, of very dissimilar habits in other respects, a very large proportion have been early risers. Both explanations are, in my opinion, rational; and, at all events, to persons who desire a long life and a cheerful mind, I should say, let the cock be your morning larum, let the Angelus be also the dinner bell, and prepare for bed when you hear the curfew.

Those who would be well, should never omit exercise; few people employ it sufficiently as a medical agent. In cases of nervous and dyspeptic disorders, a degree of exercise, which, at other times, would produce lassitude, has been known to restore the patient to health.

If few persons know the advantage of exercise, still fewer understand the benefit of fresh air. Ventilation of rooms, too, is apt to be neglected, particularly in winter. The flywheels, called Ventilators, are good things for close apartments. The diseases of manufactories and gaols are, in a great measure, produced by foul and stagnating air.

Many persons suffer from lying in close bed rooms, and I have often recommended a small portion of the upper part of the window to be kept open, with great advantage, to those who are weak, or are liable to headaches in the morning. Seven hours sleep will be sufficient for grown persons: nine for children; and for infants and invalids as much as inclination may direct. After long and tiresome complaints, the first sound and tranquil slumbers are often the forerunners of health.

§ 6. RULE 5.—Of Quietude and Ease of Mind.

The subject which would next present itself, in the natural order in which I have been considering the sources of health and disorder, comprises the various effects of the mind on the constitution. Mental anxiety, sorrow, and grief, originating in external causes, have a tendency to disorder the brain and nervous system, and the most calamitous states of general bad health often arise from

such as are called mental causes. I shall content myself with advising that, whenever the digestive functions and general health be disordered, a more than ordinary attention should be paid to the state of the patient's mind: all causes of trouble and vexation should be removed as much as possible, while those which produce mirth, or conduce to ease of mind, are strongly to be recommended. On the other hand, when, from business or other causes, perplexity or depression of mind become unavoidable, the greatest care should then be taken of digestion, the food should be light and scanty, all strong drinks avoided, and the sedatives resorted to; for when once anxiety and indigestion begin to operate on each other reciprocally, constitutional melancholy and hypochondriasis are apt to be the consequences.

§ 7.—Of Fasting and Abstinence—intended for the use of those who desire to observe the Fasts of the Christian Church.

I come now to the consideration of practices which operate both on the body and on the mind, fitting us, in a high degree, for corporeal and intellectual exertion, and preparing us for meditation on the most profound subjects of human speculation. I do not mean to detract from the religious

merit of penitential fasting and austerity, when I assert that these salutary observances may be rendered as useful to the bodies of those who are desirous to be strong, as they are to the minds of those who are devoted to the altar. For I can see no reason why both objects should not be blended together; since one great effect of abstinence and fasting is to set the body free from temptations to indulgence, and to relieve the organs of sense from oppression, thereby rendering the mind of the penitent more fit for intellectual exercise. Nor can I help thinking that this double object was originally contemplated in the institution of fasting; since it is a custom which has prevailed, more or less, in almost every country, not being confined to Christianity, but being found, combined with ablutions and other wholesome practices, among Arabians, Jews, Indians, and, indeed, almost every nation of antiquity.

Old Cornaro the well known Venetian is a wonderful example of the health that may be maintained on scanty food. He, in fact, by abstinence, repaired a constitution enfeebled by excess, at forty years' old, and afterwards lived to be above one hundred.

The proper employment of Exercise is a great assistant to abstinence, for by walking before dinner we prepare the stomach for our meals, and digestion is better performed. It is a wise regulation of some of the reformed

Orders of St. Benedict to enforce a daily portion of bodily labour: it is on this account that the Trappist is generally more healthy than the Carthusian; and that wandering Pilgrims and the travelling Friars are more robust than cloistered Virgins and Monks. It is a remarkable fact that severe fasting is attended by less inconvenience to those who are in motion all day long.

The bath, too, is always a useful and cleanly habit: nor do we use warm baths often enough in these latitudes. Warm and tepid baths keep the pores of the skin in a healthy state, and may prevent many cutaneous obstructions. Bathing in the sea, and in warm baths of salt water is very wholesome. The ablutions of the Turks add greatly to the use of fasting.

I am convinced by the most elaborate researches into the subject, that there is a very close connexion between corporeal austerities, and power of mind: both have flourished, and both have declined together; they have gone hand in hand in past times, which were signalised by the most stupendous energies of science, learning, and sanctity; and the frivolous age in which our lot is cast, affords a melancholy example of their cotemporary destruction. But I shall confine myself here to the medicinal utility of such practices.

I would observe in the first place, that if our fasts had been ordained by a council of physiologists, they could not have been better timed, and adapted to the necessities of the case, than they are at present.

The two Days of Abstinence prescribed by the Christian church, in each week, will by all be admitted to be wholesome: occasional abstinence is known to be better than habitual low feeding; it affords to the stomach a useful alterative from our customary heavy food. This periodical restorative is a great improvement on ordinary temperance; and it is best done where it is done in the completest manner, by making a very light tea meal instead of a dinner. Baron Maseres, who lived to be near ninety, and who never employed a physician, used to go one day in every week without dinner, eating only a round of dry toast at tea. This may not suit everybody, but it is well adapted for those who might otherwise be tempted to risk the indigestion of a full watery dinner of fish and vegetables. Others might take the light sort of puddings with advantage, but I am persuaded that people in general, who complain that they cannot abstain, are beguiled into this belief, by mistaking the means: they should diminish the quantity as well as change the quality of their food, and then even the less digestible sorts would have a greater chance of being overcome by

the powers of the stomach. Another important fact may be mentioned with respect to abstinence—that where the vegetable diet seems to disagree, the popular *pills of rhubarb and ginger*, now kept prepared by every druggist, may be taken with great advantage an hour before dinner. Where the bowels become costive, a pill composed of *three grains of rhubarb and two grains of aloes* may be substituted. Persons who have weak stomachs, or particular antipathies, should try a variety of things till they find what agrees with them best. A change in diet is better than living too much on one thing; and thus we see why if a constant diet of vegetables were injurious, such a diet occurring periodically, would be a salutary alterative, even if its imaginary inconvenience were really greater than it is.

Fasting is a greater trial than abstinence, and therefore it has been recommended not to fast on one meal a day, nor to go twenty-four hours without food as the Jews do, but to eat a small quantity of bread, biscuit, or something solid for breakfast, and if wanted, the same again at tea, having had a satisfactory repast at dinner. I believe the combination of fasting with abstinence to be a very good thing, and to be very useful to those whose affluence enables them, on ordinary occasions, to live well. I shall now say a few words on the periods of the fasts;

for they seem to me to have been judiciously selected and fixed for those times of year when they would be the most beneficial. And first of all, the Lenten Fast occurs at a time when depletion has always been reckoned desirable, and, for many persons, necessary. After this fast got into disuse in the sixteenth century, the habit of bleeding, in the spring and fall of the year, became more general. But surely this unnatural mode of lowering the system, by draining away the fluid of life, cannot be so salutary as the milder method of diminishing the quantity and lightening the quality of our food, accompanied, as it ought occasionally to be, by mild opening medicines, taken at intervals, or according as necessity may require.

Some few persons, from habit, cannot fast without inconvenience; but I will venture to say, from past experience, that I could enable ninety nine out of every hundred to do it, if they really wished it, not only with safety, but with advantage, by examining first their constitution, and then modifying their food and medicines accordingly.

As the fast of Lent is a useful alterative in spring, so is the little fast of Advent a good substitute for the old silly custom of bloodletting again in autumn. It prepares us likewise for the feasts of Christmas and the New Year, just as Lent does for those

of Easter and Whitsuntide; and we enjoy the return to the festive circle round the wassail bowl, ten times more than the puritan does, whose gloomy and imaginationless mind exhibits, in its never varying dullness and density, the effects of the gross food which he lives on, all the year round. The fasting days too, which occur on the vigils of feasts, are useful preparations; they not only produce great power of watchfulness and mental exertion during the vigil, but prepare for the festive enjoyment of the next day.

The fasts on the Ember Days likewise, and the abstinence during the Rogations, all occur at periods very conveniently placed, so as to act medicinally as alteratives. When Sir Isaac Newton was writing his *Principia*, he lived on a scanty allowance of bread and water; otherwise he would not have achieved his undertaking. What are the literary productions of the present day, compared with those of our ancestors, who practised fasting and austerity? Our boasted march of intellect is become rather the fandango of frivolity. Literature and science are now less intensified, though more expanded than formerly, and I ween, that one sheet, to use the poet's phrase, of sterling midæval metal, fused out into modern brass, would fill volumes of trifling tracts and pennyworths of learning. It was the absti-

nence, fasts, and rigorous discipline of our ancestors, that rendered the native genius of those great men an available fountain of knowledge. S. Jerome, S. Basil, Tertullian, Porphyry, and other writers, have therefore been justly eloquent on the subject of these healthful practices.

The high average longevity of the Poor Clares, the Barefooted Carmelites, the Teresians, and some other religious orders, who observe the more severe fasts and abstinences, show that such practices conduce to permanent strength, free us from that premature decrepitude and loss of sense, so much dreaded in the approach of death, and insure us, *volente Deo*, all those delights, even to the last, which Cicero seems, by his book *De Senectute*, to have been so nervously anxious to believe in. Some false reasoners adduce the case of old drunkards, to prove that debauchery is not the cause of disease. But these are rare instances, and a closer enquiry will convince any one, that redundant stimulus and repletion in youth, is the cause why so few people live to the natural term of life. Cornaro, who only began a course of temperance at forty years old, reached a prodigious age by perseverance in it. And it may be observed in proof of the use of temperance, that the poor who work hard on a moderate supply, where they can get enough to satisfy hunger, are much more healthy than their rich neighbours.

§ 8.—Further Observations of the Medical and Moral
Utility of Fasts and Festivals.

As I have called this work a Guide to a happy Old Age, as well as to a healthy life, it may naturally be expected that I should shew, independently of the natural sympathy between body and mind, in what manner the rules I have laid down may be proved to be the connecting bond of health and of happiness. This I think I can easily do, inasmuch as the periodical festivals, which I have already alluded to, as being so productive of strength of body in youth, must, from the nature of their ulterior object, be the means of conferring peace of mind on declining senectitude. For they have immediate reference to a future state; and though abundantly wholesome at the same time, seem instituted, nevertheless, with a view to lighten the labour of a Christian life, and interrupt, by agreeable amusements, the lengthened sameness of our earthly pilgrimage.

The Creator, whose works, if rightly understood, would all appear in harmony, and who cannot contradict himself, seems so to have ordered the affairs of his creatures, in laying down rules of conduct, that what is best for their spiritual good, is also adapted to their bodily improvement; in other words, that practices which tend to invigorate the

understanding and elevate the mind of man, have the most decided power over the disorders of the animal machine, and when conducted on rational principles, will lead to a sound state of the constitution.

While investigating this subject, and comparing the practices alluded to with the medicinal effects of abstemiousness, I was led to the knowledge of one great principle in the animal economy, which is so important that no apology will be deemed necessary for detaining the reader while I endeavour to explain it. I allude to the principle of alteratives, or the salutary influence of change on the human constitution. I have already explained the benefit of abstinence, and the utility of living in a manner which, to ordinary minds, would be regarded as too low; nevertheless, it seems that this habitual abstemiousness alone falls far short of that *medicina simplex* which, in the absence of drugs, Nature points out to the student of physiology, as being conducive to the well being of man. The constitution actually requires seasonable vicissitudes, and is relieved thereby, in a manner very like what the mind experiences from the pleasing changes of scene, so often recommended to invalids. The benefit of change of air and of place is one great illustration of this principle; the sudden relief from diseases of long standing on a change of weather is

another; and it is probable that the vicissitudes of the several seasons of the year have been wisely contrived for similar purposes, and that, for this reason, Almighty God has, by inclining the pole of the earth towards its orbit, produced all that variety of spring and autumn, winter and summer, which both delight the mind and refresh the body, and which take off the *ennui* that might result from a life of atmospherical sameness, which would diminish the pleasure of being out of doors. Sir Anthony Carlyle, in his very sensible book on Old Age, justly regards these changes as tending to break in upon the bad habits of the constitution, and thereby to prevent the formation of chronic diseases: and he questions, on this principle, the expediency of adopting too much artificial warmth and clothing, and other habits tending to neutralize the alternate dominion of heat and cold, moisture and drought on the human frame.

It is in perfect accordance with these sound physiological views of nature that periodical fasts, feasts, and changes of diet, have been prescribed by the founders of all great and influential religions, and have been confirmed and rendered binding by the irrefragible policy of the great councils of the Catholic Church. For though abstemiousness may clear the mind, keep pure the humours of the body, and prepare the

soul for spiritual exercises; experience shews that man wants variety; his nature requires a periodical stimulus, and, as it were, a lift forward; and the body demands an adaptation of sanatory changes to the varying seasons of the year. If a man were always to live low, his powers would sink; if, on the contrary, he were always to live high, superfluity would soon lead to grossness and inaptitude for action. In short, it is with the body as with the mind; for in both a judicious interchange of hilarity and severity, of feasting and abstinence, is found by experience to be best for the actual condition of the human species. Having said enough, I trust, to impress this great principle on the minds of my readers, I shall proceed to show its application to Christian practices, and to point out how much health and genius, as well as religion and public morals, have suffered by the revolution produced in the affairs of the Church by what is ridiculously enough called the Reformation.

Of late years, since the light of Science has burst with fresh vigour upon society, and enquiry has been resumed as a right, unshackled by tyranny, many deep thinking persons have written much on the moral depravity, wretchedness, and poverty, which, like a judgment from Heaven, have followed the change of religion, and kept pace with the progress of heresy. They have bid us

look back on the once flourishing condition of our country, and of Europe generally, when, in spite of all that can be urged against the pretended arbitrary character of our gothic ancestors, the universal church kept her children united in harmony of mind; abolished domestic feuds by timely restrictions on schism; obliged persons to repair the injuries committed against their neighbours, by means of the confessional; and bound the hearts of men together in concord. They have thus depicted a state of society in which there were very few gaols, no workhouses, and little or no pauperism in Britain; and when the laborious and unmarried priest was the guardian and companion of the poor of his flock; to whom he was in reality both spiritual adviser and physician. For modern writers have at length divested catholic times of the libels, which the enemies of truth found it necessary to tarnish them with, in order to propagate falsehood. And, having shewn, in their true colours, the beauty of unanimity, and the national prosperity which resulted from consent of doctrine and singleness of purpose on the part of a loyal and happy population; they have sarcastically pointed to the gaols, houses of correction, and pauperism of modern England; and adverting to the beggarly and discontented state of the lower orders, to the frightful increase of crime, to

the complaint of juvenile delinquency, to the prostitutes that fill our streets, and the sickly gloom that pervades the conventicle, to the hypocrisy that cants abroad, and to the vices that prey on the comforts of home; they have exclaimed, behold how wretched Heresy has made her children !!!

It is not my intention, however, to enter into the the religious and political part of this enquiry. I shall merely depict the counterpart, and while theology, to which sublime science I can hardly aspire, points out what are the use of religious ordinances to the eternal welfare of man in heaven, I shall show on the part of philosophy, that the same practises tend to his moral and physical improvement on earth.

That these observances tend also to lessen the burthen of age, by affording periodical seasons of festivity, considering that each festival has reference to a future state, and is connected with some of the duties of life, cannot be denied. The feasts are mementos of the great facts which history has recorded of the life of Christ, as the Passion, the Resurrection, the Ascension, and so on: and the very recollection of all these, assumed as proofs of another world, must sooth the cares of age; take off the gloom which would otherwise forestall the approaching end of all earthly objects of solicitude; and cheer up the heart, by letting in the bright rays of

hope on the prospect before us. All this gives a buoyance to thoughts, even to the last, which produces activity in the constitution, and thus makes the most of waning life: so that the proverb, "*Omne tulit punctum qui miscuit utile dulci*" applies most strictly to the sound policy of our ancestors, who contrived to connect the periodical hilarity of wakes and festive days with duties and ideas in which the old as well as the young could participate, to their respective advantage both corporal and spiritual. But this will be more amply treated of in the calendar at the end of the book. At present I shall proceed to the second part of this work, namely, the consideration of some particular disorders of an ordinary, but, if not corrected, troublesome and dangerous kind; and shall endeavour to lay down such plain rules for treating them as cannot fail to be understood by the reader.

CHAPTER II.

How to Treat various Common Complaints.

Considering that the calamitous termination of the most common disorders may be prevented by timely remedies, and that by the same simple measures great relief is often afforded in other complaints which are not dangerous; I have subjoined rules for the

alleviation and cure of the most ordinary diseases to which all persons are, more or less, subject. When peculiar or desperate diseases occur, it would be better to consult some experienced surgeon and physiologist, than to undertake the cure, by the mere directions given in a popular work like the present; and therefore I have omitted the consideration of such disorders in this book.

§ 1.—Of Bowel Complaints.

By this term we understand costiveness, cholic, nausea, looseness, and all the various disordered states of the stomach and bowels which do not as yet affect other organs by sympathy. It may be necessary merely to observe the following rules.

When costiveness alone occur, remove it by gentle doses of medicine given at intervals, till the bowels be brought into regular play: for example, take Pil. No. 20 to begin with, and afterwards Pil. No. 16 every other night till the object be accomplished; or choose some aperient that best agrees with you; but avoid salts, as they are bad and uncertain purgatives.

Colic, if attended with purging, is frequently owing to an epidemic inflammation of the coats of the bowels; as often occurs in Autumn; this, as well as slight degrees of cholera morbus, should be treated with warm

diluting drink, low and scanty diet, and then after the disorder shall have nearly exhausted itself, the bowels should be kept regular with Pil. No. 14, or 16 as may be: if the purgative action be violent, it may after ten or fifteen motions, but not before, be checked by solutions of chalk and water.

Colic, without looseness, should be instantly removed by Pil. No. 20 and a draught of castor oil, or of the senna and rhubarb mixture taken three hours after the pill.

For nausea, sickness at stomach, and vomiting, either habitual or occasional, I recommend, after first clearing the stomach with a purge, of Pil. No. 14, and a dose of rhubarb, to use for some time the draught No. 1, an hour or two before dinner every day.—In all cases observe with strictness the foregoing rules of diet.

§ 2.—Of Headaches.

I treat rather at large of headaches, from their frequency and the distress which they occasion; from the necessity of distinguishing their varieties, and the consequent treatment; and because they are so often found accompanying other disorders.

When symptomatic of fevers, which they usually accompany, they are generally more continuous than when idiopathic, or in other words, when they are themselves the primary

disorder. It is the latter, or ordinary headaches which I am now going to describe, and which may be divided into three principal sorts.

The worst form of headache is, perhaps, the one which more immediately shews the rapid effect of irritation of the stomach on the brain, in consequence of indigestion: it occurs chiefly in young persons; for by degrees, its attacks becoming less and less frequent, it wears out. The usual symptoms of this form of headache are as follows:—Soon after breakfast, or some other meal which is not digested from some disagreement with the stomach, the patient finds his sight suddenly obscured, objects are in part unseen, and there seems a wavy motion in every thing: sometimes one eye is affected before the other. This partial blindness lasts less than an hour, and is succeeded by a headache in the frontal parts, accompanied by shivering, nausea, and disturbed functions of the digestive organs, after which the whole goes off. Persons have softened the attack by medicines, but they cannot always keep it away. It has been justly attributed to indigestion.

Prescription.—The best plan is to take a dose of opening physic, just as the dizziness above described is going off, and before the headache shall have become violent: take, for instance, a couple of the Pil. No. 14, or

in case of not having them at hand, a dose of ten grains of rhubarb, and the pill at night.

Persons liable to this form of headache will do well to take the gentian mixture, No. 1. an hour before breakfast and dinner; and they ought to observe the Rules of Health most rigidly.

Another sort of headache takes place at a longer interval of time after an indigested meal, and may therefore, with propriety, I think, be ascribed to irritation occurring in the small intestines. After an indigested dinner, or a meal later in the day, taken in unusual quantity, and particularly after excess in wine and fermented liquors, the patient rises next morning with a headache, occupying the forehead which is exasperated by the slightest motion: it generally gets worse and worse till towards the afternoon, and then begins to go off, and by seven or eight in the evening is often gone.

Prescription.—Pil. No. 14, taken at night. In the morning plenty of tea or some other diluting drink: spare diet and exercise.

Another species of headache remains to be described, which may be called nervous, and to which some persons are terribly subject. The patient feels over night more or less of a dullness of thought, and an inaptitude for the slightest exertion, and sometimes a sense of thirst; on waking in the morning, he yawns, feels indisposed all

over, and complains of pain in the forehead, greatly aggravated by motion: the tongue is found to be furred, and the appetite is faulty: the symptoms get worse towards the middle of the day, and usually begin to subside before six in the evening, and are often gone by seven, going off with rigor and slight fever. The pulse, however, remains little disturbed, or is perhaps only quickened when the patient moves. This electric sort of headache is not to be evaded by any means at present known, nor, while it lasts, can it be much alleviated by medical aid: the strongest purges given over night, when it is expected, have no sensible effect on it: and I have known cases where the customary operation of a cathartic, taken by the patient, was postponed, as it were, by the constitution, till after the headache had run its course: in other cases the operation of the medicine did not much assuage its dreadful violence. I have tried pressing the temporal arteries without success. Patience, rest in bed if possible, and the abstraction, of noise are found to constitute the most available practice in this variety; which occurs often periodically once or twice in a month; its visits often happen near the periods of the new or full moon, and the first occurrence of east wind, in persons subject to it, seldom fails to bring it on, in its more violent forms. If east wind suddenly

occur about the new or full moon, or at the patient's accustomed periods of irritability and if indigestion, from excess, is greater at those times, a still more fearful visitation of this pain may be apprehended, from the conjoint influence of several causes occurring together. That electricity is, somehow or other, the cause of this headache is beyond a doubt, though the particular manner of its action is unknown. That the disease begins on the evening preceding the pain is evident, from the sensations that I have described as its forerunners: exposure to damp night air in unwholesome countries, cold feet, and mental anxiety after dinner, the day before, concur to aggravate the symptoms.

Prescription.—Abstinence and Pil. No. 14 at intervals, or after the fit be over at night.

Slighter degrees of this sort of nervous headache occur before and after thunder storms, and other changes of weather, as I have elsewhere noticed, and they are relieved by the actual fall of rain.

Other sorts of headaches occur which it will be hardly necessary to particularize. Indigestion will sometimes produce an affection of only one side of the head. There are also headaches which attend fevers, and other local diseases. Every variety, in the present imperfect state of our knowledge, ought to be noticed, but all taken collectively have not as yet been able to do much to-

wards a tolerably decent knowledge of the pathology of the head. There are some warm climates in which headaches are unknown: they are more common among women than among men, and among the rich and luxurious than among the poor and abstemious. Like some other bad pains they are happily lessened in frequency and violence towards the decline of life, and are best guarded against by good air, exercise, and those habits of temperance and regularity which give permanent strength to the constitution.

§ 3.—On the Causes, Varieties, and Treatment of Toothache.

Although so many and such able treatises have been written on the structure and physiology of the teeth, yet I have seen no account of their pathology, and particularly as relates to the symptoms, nature, and treatment of the varieties of toothache, which quite satisfies my mind. It is my intention herein to put down such observations as I have been enabled to make on this subject.

The pathology of the teeth is simple and easily to be understood, when considered with reference to their structure and mode of decay, and to the known phenomenon of nervous diseases.

The decayed state of a tooth may rather be called an occasion of toothache than a

cause : at least it is not a sufficient cause, for this reason, that toothache is not a necessary consequence ; for some people have their teeth decay, and lose them all without pain. For this reason I do not consider the cause of caries as the cause of toothache any further than this, that it gives occasion to the occurrence of the disease, where there be a predisposition to it ; and when accidents of cold, of climate, or something in the state of the air which is favourable to the disease, shall concur.

To say a few words at first of the disposition of many persons' teeth to decay prematurely, I may observe, that it prevails in families, being an hereditary defect : and though by care, which I shall proceed to describe, it may be diminished, or put off till a much later period ; yet, the original structure of different peoples' teeth being different, some will always be found more prone to premature decay than others. Unequal pressure, from irregular teeth ; the lodgement of particles of food in the cavities and interstices ; and in general want of care in cleaning, may be reckoned among the existing, and if I may so say, the hastening causes of their decay. To prevent this, the teeth should always be picked after eating, and brushed clean at least once a day : the gums, too, are liable, particularly when the general health is not good, to a

variety of disorders, which, cleansing them and causing them frequently to bleed, with a hard brush, will greatly relieve. Tooth-powders will be found recommended in the prescriptions, at the end of this treatise, which will also have a good effect. But I shall now pass over to the consideration of toothache.

The first sort of toothache which I shall describe, is that which is frequently the first violent symptom of the approaching destruction of a tooth: it may, therefore, be called the first stage of it. A tooth which has been for some time imperfect, suddenly begins to ache on drinking anything either hot, or very cold: by degrees the paroxysms get more severe, and are brought on by warmth in bed, or occur at particular hours of the night; they are, for a time, relieved by cold, or by jumping out of bed and walking about; but return again and again till the patient, worn out at last, gets a little imperfect sleep: this I also call the neuralgic stage of toothache; because it is in its symptoms much allied to other forms of inflammation in the nerves: it is likewise the stage most likely, if injudiciously treated, to end in other nervous affections. Before I speak of the second stage, to which it gives place in time, it may be proper to observe that the local and stimulating applications recommended for another sort of toothache, hereafter to be

described, seem to me to do harm in this kind: it is, in fact, occasioned by the exposure of some portion of the nerve in the carious cavity of the tooth however small: and from the evident connection of its paroxysms with the state of the constitution, it requires medical as well as surgical treatment. As far as local applications are concerned, I believe Mr. I. P. Clarke's Anodyne Cement will often allay the irritability of the irritated nervous cavity. But where the paroxysms are periodical, I propose to break in upon the regular attacks of the fit, by giving a large dose of bark, or quinine an hour before its expected return. But we must be sure to open the bowels the night previously, by a cathartic. The best for this purpose is the Pil. No. 20, given at night; and then, on the next night, eight or ten grains of quinine. By this means the painful paroxysms will be often put a stop to; and sometimes the whole disease ceases: at others the toothache becomes continuous instead of periodical, and the excruciating paroxysms being destroyed, the patient feels better: the periosteum and fang of the tooth, however, will sometimes go on aching: but they lead at length to the second stage, which consists in the inflammation of the socket. The tooth becomes now, apparently, so tender to the touch, that the patient can scarcely eat. It is in this stage that I

recommend fomentations, and the holding of warm water in the mouth, in order to hasten the inflammatory process, by promoting the expansion of the vessels. The patient should now keep the face warm; apply the footbath; and take some aperient medicine: say Pil. No. 14 or No. 20, and a draught of the Infus. Rosæ, No. 1.

As this stage subsides, the gum often becomes inflamed, and at length is relieved by swelling, with which the cheek and contiguous parts sympathize; and then the whole goes off, leaving the tooth a dead stump, liable, on catching cold, or before certain changes of weather, to irritate its socket, in which it becomes loose, and is liable to occasion that gnawing pain so often spoken of as a forerunner of rain and of thunderstorms. It will strike the reader that I have treated the first or more violent sort of toothaches as neuralgia; and I believe it is so: for it is liable to occur as an epidemic; and I have observed that numbers of persons in one neighbourhood will have it at one time: but it is an affection which, it seems, would not fall into a tooth, if caries did not give occasion to it: and therefore the practise of stopping up the first carious cavity with a plug is a good one. Extraction, too, generally, puts an end to the pain; but not always: for when once neuralgia is established, it will shift its quarters sometimes, and effect the side of the head,

or the fascial branches of the fifth pair of nerves; and must, therefore, be treated with purgatives and the quinine, bracing habits, and afterwards change of air.

There are great varieties in this disease, sometimes the inflammation will begin steadily and observe no paroxysms; at others, teeth long decayed, will suddenly begin to ache: sometimes one or more of the above described stages of the disease will be passed over, and so on. But the history I have given is the more general outline, and particular cases will usually shew a tendency to observe the general type, under modifications dependant on climate, on constitution, and on the various habits and accidents of life.

The above are the acute and inflammatory sorts of toothache: but there are other slighter but very tormenting pains, which occur in old decayed teeth, in which a want of stimulus has been considered the cause, and for these the various toothache nostrums seem to afford temporary relief. See my Catalogue of them at the end.

The above are the more common varieties of toothache: and the destructive process with which they are connected may generally be averted or kept off, by observing strictly the Rules of Health, as far as the state of the body be concerned: and then, with regard to local treatment, we must

strictly observe and enforce in children the habit of cleaning and picking them. Tooth-picks are now kept by all the dentists, which are made of quills, and do not injure the enamel of the teeth.

The custom of picking, and then brushing the teeth immediately after meals, when it can be done conveniently, is a wonderful preservative of the teeth. The use of a weak solution of camphor, in the water, is also very useful; and it also prevents the foul breath, of persons with bad teeth, from being very offensive.

For the common sort of toothache, unattended by intermitting fits, I should think many of the ordinary remedies had their use, and ought to be tried, such as lancing the inflamed gums; washing the mouth with camphorated spirit of wine; and, above all, a dose of opening medicine to cool the blood. If connected with pain of the face and rheumatism, take Pil. No. 20 at night, and draught No. 1 in the morning. Violent exercise and change of air will also cure some cases of toothache. I have found that aching and hollow teeth are sometimes made easy by stuffing their cavities with a paste made of opium moistened with muriatic acid. The stuffing of the teeth, as Mr. J. P. Clark does, also is a frequent cure. In short, toothache is a disorder of great varieties, and I should not disdain to try a variety of remedies till

the right one should be hit upon. But I would never have recourse to drawing out the tooth, till many experiments for its cure had been tried.

§ 4.—Of Earache and Deafness.

Inflammatory earache should be treated as follows:—Give the patient Pil. No. 20 immediately, and at night, on going to bed, an opening draught; but first put the feet in warm water, and then, when in bed, give some warm diluting drink, as tea, or weak lemonade. When violent, local fomentations, with camomile leaves, are good to be applied.

Deafness arises from a variety of causes; but the most common are inflammation of some sort. The temporary deafness attendant on colds is frequently caused by inflammation of the tubes between the tympanum and the mouth, and other parts of the ear; for which the common remedies for cold are advisable, namely, warm and diluting drink, as lemonade, Pil. No. 20, and some opening physic, as draught No. 1. But as colds in the ears are apt to lead to a gathering and hardening of the wax, which causes a very great deafness of another kind, from obstructing the passage; so, in cases of deafness not soon going off, I recommend the patient to go and get their ears syringed. Sometimes, however, merely dropping some sweet oil

into the ear at night, and at the same time taking a grain of calomel will be sufficient to dissolve the wax, and likewise to improve its future secretion; and thus the disorder will be cured. The long standing deafness of old persons, so common in this part of the world, is also of two sorts, and often the causes of both work together; firstly, a slow kind of inflammation arises from frequent exposure to our climate, which obstructs, by degrees, the passages of this delicate organ; the other cause is the heaping up of hardened wax. The latter cause may be removed, but the former, after a certain time of life, is hard to be cured; as a change of structure has probably taken place. A nervous deafness, from a decay of the auditory nerve, is another sort, for which no cure is known; but repeated doses of calomel, and then of quinine, alternately, might be tried, with strong exercise and change of air.

There is another deafness accompanying the sudden rising of the barometer; it is also felt on descending from high mountains, or from the air in balloons: it depends on the rapid change of atmospherical pressure, which being soon adjusted, the disorder lasts but a short time.

I recommend that all cases of deafness, however trifling, be immediately attended to; in order to avoid their assuming a more lasting character. I would always give a

dose or two of physic at the very onset, and would try strong walking or horse exercise. I have known this cure some cases. But after all, the disorders of the ear are less known than those of other parts; and, in many instances, baffle the skill of the surgeon. The singing in the ears, called tinnitus, as well as the more deepseated roaring, depend on sudden movements of the blood about the parts, and a nervous action connected therewith; and they are only to be got rid of by those general means described above, and by improving the health and the state of the digestive organs.*

§ 5.—Of Inflammation of the Eyes.

This disorder, which is generally inflammation of the outside parts and membranes of the eyes and eyelids, is like other disorders of that organ, much dependant on the state of the weather: and is more particularly common during the raw easterly winds of spring: but it is owing to some epidemic influence, no doubt, which attends such winds; to which, however, it is not confined; coming sometimes with damp westerly gales. The

* Deafness will be found treated of more at length, with various cases thereof, in "Illustration of the Origin of Diseases," by T. Forster, F. L. S. &c. London, 1829. This book, with the rest of my works, may be had at No. 63, Paternoster Row.

practise is to give a dose of Pil. No. 20 ; and to bathe the eyes with hot water, live low, and avoid strong light. The numerous and complex diseases of the eyes cannot be treated of here ; but it may in general be observed, that, notwithstanding the hereditary disposition which there evidently is to these diseases, they may be much softened, put off, or wholly avoided, by following those rules of temperance, which I have laid down in this book, and by taking small doses of mercurial medicine whenever the bowels be not open. Strong light, and working much by candlelight is bad, and leads to premature decay of the eyes ; and, consequently, brings on amaurosis or nervous blindness, if only the adjunct constitutional causes be also in action. Infusions of *Rue Ruta graveolens* have been recommended of old, as being good for the eyes. Hence the verse ascribed to those excellent physicians the monks, *Nobilis est ruta, quia lumina reddit acuta*. In general, I believe, vegetable infusions are good for the sight ; and, certainly, high living of all kinds leads to their diseases and to their early decay.

§ 6.—Of the various Disorders of Parts which have a continuity of Surface with the Alimentary Canal, Colds, Sore Throats, &c. &c.

Mr. Abernethy has spoken of diseases of surfaces continuous with the alimentary

canal, as depending on disorders of the digestive organs, such, for example, as inflammations and local diseases of the mouth and fauces, the eyes, ears, and so on. Now though I admit the truth of his observations, and the importance of alterative medicines, as remedies in cases of such disorders; yet I am not the less mindful, that during certain unwholesome states of the atmosphere, numberless disorders in the membranes will occur, in many persons, as if in consequence of specific epidemical excitement; and that while the epidemic lasts, it is scarcely possible by medicine and diet alone to maintain that healthy action of the digestive organs, on which the cure would seem to depend. Change of air will, however, frequently put a stop to both the local and the general disorder; which proves its greater efficacy, than any of the numberless long tried medicinal agents. I have had so many cases in point which prove this fact, that I consider it placed beyond the reach of any future doubts on the subject.

A change of wind will often put an end to a prevalent ophthalmia, which for a long time resisted all attempts to cure it effectually. I have seen more trifling inflammations of the conjunctiva resist local and general depletion, but yield to an alteration in the weather; nevertheless, as far as practise goes, we must give alterative physic, and enforce the *Medicina Simplex* rigidly.

I could also relate instances of ranula, of swelled tongue, ulcers on the lips and gums, and various other forms of inflammatory action about the mouth and throat, that gave way to change of weather in some instances, and to change of place in others,—after the usual alterative remedies had been long tried without success. The same might truly be said of irritation in the glottis, coughs, sore throats, and catarrhs in general, as has been related in a former chapter. Indeed I have been inclined of late to regard the sore lips, so common in parts of England in certain winters, as effects of an obscure epidemic; as they appear in numbers at once, and are, in equally numerous cases, cured at once by a change of weather.

But again I repeat that our practise must be to enforce the rules of low diet; and to give opening medicine. *Common Colds* are to be treated first with an opening Pil. No. 20 for instance, and then merely with weak diluents, as tea, lemonade, balm, or sage tea, and so on; if violent, give the powder, No. 11, at night: put the feet in warm water: keep from cold air, indoors; but let the room be well ventilated: and above all, be careful not to eat much, *for if you stuff a cold, you will have to starve a fever!!!*

§ 7.—*Of Asthma.*—Asthma is one of those complaints that tend more than any other to show the capricious susceptibility of the

lungs to the varieties of the air. Not only do changes of weather affect asthmatic subjects in the most extraordinary manner; but there is also a difficulty of finding a local habitation that will agree with them. Some patients are incapable of breathing freely in London; others cannot bear the country air; some can only breathe well in certain spots in the country, or at particular elevations. These idiosyncrasies vary even in the same subject.

An Irish gentleman once consulted me, who could not live in his house at the bottom of a hill, but who could breathe like other people at the top of it. His asthma came on in a sort of fits at uncertain intervals. Stramonium and all sorts of things were tried with little effect. Change of air alone relieved him.

Smoking not only the stramonium, but tobacco, has afforded relief in other cases; but still I hardly recollect a case in which all other remedies did not fall far short of change of air, in permanent efficacy.

Horses have sometimes an asthmatic disease of the lungs, mistaken for common broken wind, but which is really of a nervous character, and has been known to go off on a change of country. And it is, probable, from facts that I have collected, that animals in general suffer, in distant changes of climate, from the effects of an unwonted atmosphere on their lungs.

Asthmatic people should live sparingly, and keep the bowels open. Sudden and acute fits of asthma may often be cured by gentle bleeding, a dose of Pil. No. 20 at night, and a change of air.

§ 8.—*Diseases of the Lungs* in general, including Consumption, though dependant, in a great measure, on a predisposition of the constitution, which is generally hereditary, are yet much aggravated by all high feeding; and may often be kept off, or altogether avoided, by that strict attention to regularity and abstemiousness which it has been my object in this book to recommend. The observations of Dr. Lambe, on this disease, are worthy of more examination than has been given to them. He has found great success to attend a diet of vegetable food alone.

§ 9.—*Of the Ague and Intermittent Fevers in general.*—So numerous have been the real or pretended cures for the ague, that it would be difficult to count them all up; nor shall I take the trouble; since a good remedy for these kind of complaints is now known. As soon as you perceive that you have got an ague, by the intermitting fits of shivering, of heat, and of sweating, which are the successive stages of each fit; take, immediately, one or two pills, No. 20, till the bowels be well cleared; and then take *five grains of quinine*, either in a powder or a pill, just

before the beginning of the fit. This will often cure the disorder at once: and if it do not, a little perseverance in the same course will, in time; effect the cure. But as these complaints have an exciting cause, in some hidden quality of the air; so change of air is sometimes necessary to complete the cure and render it permanent.

§ 10.—*Of Fevers in general.*—I cannot treat at full length of fevers for want of room, and because when violent or of peculiar character, people should advise with some skilful general practitioner before they tamper with them: but I may remark that among the poor, in cottages, we are often called on to see a person taken ill, whose illness, on examination, turns out to be a sort of fever, attended with pain and congestion in some part of the body or limbs. In these cases, as the patient cannot often afford an apothecary; it is advisable for the clergy and others who may be called in, to know what to do. I should say, first examine the pulse, and then the tongue, and if the former beat quick or hard, and if the latter be foul or white, there is fever; and by giving immediately one pill, No. 20, and then a draught of Infus. Rosæ, No. 2, three times a day, so as completely to evacuate the bowels; the complaint will frequently go off, without further assistance.

Indeed the plan of immediately opening the bowels with the above medicines on the occurrence of illness of any kind, will often succeed in preventing further mischief and effecting a cure.

In fevers, attended with irruption, as small pox, measles, scarlet fever, and others, although they come in the air, being epidemics, or are propagated afterwards by contagion, yet the true treatment is very simple, and all beyond it is quackery. Open the bowels as I have directed, keep the patient cool, the diet low and scanty, and fresh air constantly in the room; and all will in general end well. After the irruptions dry or scab off, then a few pills, together with a return to the ordinary feeding, but in smaller quantities, is advisable.

It becomes also important to know how to treat persons, after a fever be passed: and on this subject there is a popular erroneous opinion, which is natural, but at the same time so dangerous, that it deserves particular consideration. When the constitution has been debilitated by disease, or exhausted by fatigue, I have seen people actually persuade the sufferer to take nutritive and stimulating things, and that too even against his appetite. Such practices greatly aggravate the disorder and produce further weakness by exhausting the remaining excitability; whereas the practice should be to give but little food,

and that by degrees, and at regular intervals of six hours at least, so as to allow the enfeebled stomach to recover its digestive power between the meals, which it can only do by rest, good air, and the excitement of cheerful ideas after eating: and that food should be selected which agrees best with the individual. It was an excellent saying of father Lessius, in his Hygiasticon, "*Non enim multitudo ciborum et deliciæ naturam debilem corroborant, sed modica quantitas viribus respondens et qualitas temperamento conveniens.*"

§ 11.—*Of Lowness of Spirit, and other Nervous Complaints.*—Since the spread of Mr. Abernethy's medical doctrines, and the consequent improvement of practice, several persons have positively asserted that nervous diseases never occur while the digestive organs can be kept in order. This may be generally true; but it is true also, that during the prevalence of epidemics, and at periods of irritability, it is often impossible, by medicines, to regulate the stomach and bowels. Hence, at those times, we fail in one of the essential means of cure.

Hysteria, epilepsy, melancholy, spectral illusions of various kinds, and all those disorders called nervous, observe the same course as I have described, having crises near the lunar periods, and being frequently products of the epidemic constitution of the

air. That whimsical disease chorea once prevailed so generally, in France, as an epidemic, that all medicines were deemed unavailing, and recourse was had to prayers to St. Vitus, about whose feast in July it occurred, hence called St. Vitus' Dance; a similar occurrence gave rise to the name St. Anthony's Fire, at a time when erysipelas prevailed as an epidemic.

We may add to the above, that nervous complaints depend, in a great measure, on the particular forms of the brain, which may be considered as the predisponent cause of the disorder; while derangement of stomach and liver, inactive habits, and bad air, may be regarded as the source of their excitement. The doctrine respecting the brain belongs properly, to phrenology, a science which cannot be discussed here; but it may be of use to observe, that in whatever degree the organization gives particular propensities to the mind, excellence depends greatly on education, and on the number and sort of external influences taken collectively. Applying this doctrine to nervous disorders, I should say, that though patients with particular constitutions may be very prone to complaints of this kind; yet they may be greatly relieved by alterative medicine, by exercise, by early hours, and by the excitement of cheerful ideas, prospects, and opinions. Catholics are less subject to ner-

vous complaints than protestants: and this I take to be owing to two causes, one physical, and the other moral; for they live more abstemiously, and vary their food and habits periodically, feasting and fasting by turns, which is wholesome; while, at the same time, religion is perpetually presenting occasions for meditating on the future solace which is promised, for present ills, if cheerfully borne and courageously combated by moral discipline.

In most nervous disorders, as well as in the low spirits that follow the bilious fever, the liver is defective in its functions. And the patient should have recourse to *five grains of blue pill*, taken at regular intervals, with the *diet drink of sarsaparilla*, or my draught, No. 1, taken before dinner every day; and, above all, he should take hard exercise, on foot or on horseback, early in the morning, and again before dinner; and should sleep with plenty of fresh air in the room.

I have a good opinion of vegetable drinks, as sage tea, balm tea, and so on. There is a Mr. Whitlaw, an American, now in London, who is making some excellent cures of various diseases, by means of some vegetable infusions which he discovered among the Indians, and brought to Europe.

I cannot omit, in this place, to caution nervous patients against the dangerous cus-

tom of driving off low spirits, of any kind, with wine and strong drinks: it produces, no doubt, a momentary relief from some harassing idea; but it invariably leads to a worse state of the disorder, and often causes it to end in melancholy, and even in madness. Waterdrinkers have the best animal spirits in the long run, and are by much the most free from disorders of all kinds.

§ 12.—*Of Spectral Illusions.*—By far the most mysterious and fearful of all nervous disorders are the spectral phantoms, or false appearances, of persons and things which do not really exist; and, probably, the ghosts of country villages, and the spectres of haunted houses may have originated in nervous impressions of this kind. I have related a great many curious cases of this malady in my book, on the “Origin of Disorders,” and I shall not therefore repeat them here. They belong, like vivid dreams, nightmare, and other phantoms of this kind, to the class of nervous complaints, and are to be guarded against by the same rules, and cured by bleeding and physicking in the same manner. The occasional coincidence between the appearance of the phantom, and the event to which it seemed to relate, of which I know many instances, constitutes indeed a very mysterious part of their history; but this does not belong to medicine, but to de-

monology, and I must refer my readers to works on that subject for particulars.

This disorder, however, by shewing the power of the sensorium to represent past images with all the vividness of real perceptions, and to form others out of the storehouse of the fancy, serves to explain the manner in which visions may have been presented to the mind; and it may have been one of the secondary means employed by the Deity, that is on the admission of the truth of miraculous interposition, in order to convey prophecies to particular individuals. Philosophy in the end always serves to confirm religious history: Nature must always be in accordance with herself; and we may learn, even from disease, to illustrate some of the profoundest subjects of metaphysical speculation.

A common sort of spectra are those seen so often in childhood, which appear like various and everchanging spots, speckles, lozenges, squares, and patterns, floating as it were before us, as we lie in bed at night; and which, aided by a little effort of the will, seem to be undergoing a perpetual variation in their shapes and colours. A more active imagination will convert them into pageant rows of images, and processions of various sorts. The hideous faces, which Locke describes, as passing before the patient by night as he lies in bed, are of the same class.

A more vivid ocular spectrum occurs from defect or irritation of the eyes, called *muscae volitantes*: it varies in kind; but in all cases is to be treated as a nervous complaint. Darwin has curiously classed these spectres in his *Zoonomia*.

I shall not particularize any more nervous complaints; but observe that they are usually worse about the full moon; and are again troublesome at new moon; at both which periods the brain and body at large are found to be more irritable than at other times; a circumstance which accounts for the Chinese, and other Asiatic nations, fasting at those periods; endeavouring, as it were, by abstaining from the stimulus of food, to countervail the action exerted on the brain by the moon. And indeed persons who are conscious of this influence, would do well to take a little medicine a day or two before the lunar changes, avoiding, at the same time, all irritating meat and drinks.

§ 13.—*Of Imaginary Disorders.*—The *malade imaginaire* is a real and not merely a fictitious character: independently of the numerous fugitive pains felt by the hypochondriac, many actual diseases of the inflammatory kind are brought on by an immediate sympathy, with particular apprehensions of the mind. Hydrophobia is one very remarkable instance: the canine madness is a disorder of such rare occurrence,

that many able physiologists have doubted its existence altogether: yet a tremendous disease of the throat and fauces occurs frequently in nervous people, in consequence of the fear of hydrophobia; a dog, suffering from some perfectly innocent irritation, having perhaps bitten them; a silly alarm is then given; the incautious editors of newspapers give out the false cry of prevalent hydrophobia, and every one who gets a bite or a scratch, fancies he is going mad, and about to be smothered in a featherbed. The dog is foolishly destroyed, instead of being tied up to ascertain whether or no he be really rabid; and the patients, suffering from unappeased alarm, positively suffer all the symptoms of the disorder, and even die, owing to the strange sympathy which exists between the throat and certain feelings of the mind. This is the real history of what are called cases of hydrophobia; and one of the most culpable, cruel, and inconsiderate abuses of the incautious freedom of the press, is its propagating such stories, and thus causing the loss of many lives. Subjects of popular terror appear in Europe to occur almost periodically: at one time it was witchcraft; and, we believe, on good authority, that in the Calvinistic States of Geneva, besides other places, 4000 poor old women and men were formerly burnt for witches, in the space of a very few years; and this

vicious superstition prevailed, more less, all over Europe, even in the great Catholic States; and in our own country, so lately as the beginning of the last century. And what is most remarkable is, that the persons who fancied themselves bewitched, actually suffered the most acute and unaccountable bodily disorders, produced, in fact, by fear. When the legislative proceedings against sorcery and witchcraft ceased, the diseases ceased also; and the same fate would attend hydrophobia, which is not more clearly made out by cases than the effects of witchcraft were. I could enumerate many other similar nervous complaints of which the basis was a morbid imagination, were not the mere mention of them capable of increasing the evil.

CHAPTER III.

Of the extraordinary Power of Mind with which Men are endowed who observe Fasting and Austerity—Various Examples in all the Sciences—Consequences of the Reverse Habits.

It was said by Jesus Christ in the sermon on the mount, "First seek ye the kingdom of God and his righteousness, and all other things shall be added unto you." And this saying seems to have been remarkably fulfilled by the pious and learned men who composed the Religious Orders of the

middle ages. For we have no where, in the whole circle of literature, any such examples of stupendous and useful works on the arts and sciences, as have been produced by them. In this frivolous age, in which it has pleased God to cast our lot, we have certainly much improved on many sciences; and though the art of legislation and moral government have derived very little benefit from them; yet the particular branches of natural history and philosophy have advanced. From this many have vainly inferred, that our ancestors were less scientific than we are, and they are foolishly stigmatized as belonging to dark ages, a period in history signalized above all others for its gigantic labours in civilization, and in all the customs, arts, and sciences, which render human life happy. The principal persons to whom we are indebted for these improvements are, firstly, the Benedictine Monks of the early ages, then the Mendicant Orders of Friars, including the Pilgrims, and lastly the Jesuits, who, notwithstanding the falsehoods uttered against them, by the rapacious aristocrats of this age of plunder, have outdone all the rest, both in works of humanity and in scientific labours. The present century boasts of its literary institutions and societies, but they seem composed of punies, when compared to the men to whom I allude; they prate and conceit themselves much about science to be sure;

but, with the exception of a few individuals, highly gifted by nature, such as Sir I. Newton, and some great philosophers, they may be justly said to have improved much less on the discoveries of our forefathers than might have been expected. I attribute this to the voluptuous habits of the times, and the weakness both of mind and body which they engender; and particularly to the loss of that habit of long attention and perseverance in labour of mind, which is so requisite to the perfection of genius. Habitual sensuality begins by destroying the voluntary power of the individual, over the wanderings of fancy: hence the faculty of attention is impaired, irrelevant ideas obtrude, and the whole of that beautiful machinery, the mind of man, is deranged. And thus it happens that persons fitted by Nature for intellectual exertion, either seek to dispel the tedium of life in sports which were fitter for the meaner grades of intellect alone, or expend their remaining energies on novels, plays, and other light and useless reading. I have heard many men who are fond of science, and still fonder of being thought scientific, say that they would give anything to have the genius and power of mind possessed by Archimedes, Galileo, or other great philosophers; who, nevertheless, have appeared to me to have much of the requisite talents; and who might have succeeded

to their wishes if the bad habits of modern life had not enfeebled their minds. I have told them that there was no royal road to greatness; and that in this, as in other things, we must obtain the crown by carrying the cross; or, in other words, that the mortification of the voluptuous solicitations of the body, together with fasting and abstinence, constitute the ordeal through which ambitious students must pass, in order to obtain a consciousness of control over a large store of recollected knowledge. To the want of this power, combined with an idle and desultory distribution of time, I ascribe the fact, that persons really fond of knowledge, and having their whole time on their hands, actually achieve nothing great or useful in science; or if they do, they confine it to some particular hobby horse which they ride eternally, to the exclusion of everything else. More will be said of the requisites of genius in my section on Attention: in the meanwhile let us go on with some examples of what I have put forth respecting the ascetics.

Before I detail the varied learning of the religious orders, I must remind the reader that they were men bound by vows to live regular lives; that they were obliged to say offices, out of their breveries, at stated times of day; beside the singing or hearing mass, vespers, and other public services; so that

they had their day filled up as it were, and had, comparatively, little time left for exercise, recreation, and the indulgence in scientific labours. And yet with all this regular work on their hands, which they were bound to perform, the cloistered monks, and even the jesuits living in the world, have produced more ponderous folios of really literary scientific and useful information than any other set of men whatever; as I shall be able to prove: but while I am proving it by example, let me beg of the reader to keep in mind that they rose early, lived hard, avoided general indulgence, fasted and abstained periodically, and for the performance of the rest, trusted, without morbid anxiety, to habits of industry, and to that perseverance which is produced by a consciousness of a worthy motive.

As I shall devote a particular chapter to medicine and botany, so I will draw examples, herein, from other sciences, omitting, of course, theology, which was their profession, and in which they are allowed to have excelled all other writers. Let us first take music, for it happens to occur to me, having just stumbled on those great prodigies in the history of music—the folio volumes of Father Kircher, and of the Friar Mersennus—from which, in fact, Sir John Hawkins and Dr. Burney took most of their observations on antient music. In looking

carefully over these books I was astonished, not only at the body of learning which they contained, but at its arrangement and the compendious introduction to the science of sound; particularly in Kircher's great work the *Musurgia Universalis*, wherein he not only describes and figures the antient instruments of every sort, including a complete Campanalogia, but gives us a metaphysical treatise on harmonics, and begins with the anatomy of the parts of the ear; descending to the minutest particular, and describing and drawing the small bones of the ears of various animals. The lore of this work, which is the great prototype of all subsequent treatises on music, is immense; yet it was only the product of the hours of recreation of F. Kircher, a learned member of the Society of Jesus, in the 16th century. He wrote it in latin, and it was printed at Rome during the Jubilee, in 1650. Mersennus, a Franciscan Friar, gives us much additional matter: his book entitled *Harmonie Universelle*, and was published in folio, at Paris, in 1636. Both these men had their time, as I have described, broken in upon by the hours of their respective rules. Before them, St. Gregory invented what is called the Gregorian Chant, afterwards so universally adopted; he composed music; and also reformed the calendar, a work requiring great mathematical and as-

tronomical knowledge. His Sacramentary is also a wonderful work. He reformed also the Missal, and did other learned things; and yet he had all the hours of a monk to observe, and the laborious office of Pope to go through, filling the pontifical chair till the year 604.

Let us now turn to classical literature: we shall find not only that, had it not been for the monastery libraries, the classical authors would have been lost to us, but that all the best editions were collated, revised, and prepared for publication by the monks; and that they were afterwards castigated and made fit for the use of schools by the Jesuits. But I need hardly swell the catalogue of particulars. We cannot open any work of the history of the sciences and arts, but what we find the traces of monkish learning and energy. We find bells invented by St. Paulinus, clocks by another monk, printing by a third, painted glass by a fourth, gothic architecture by other religious devotees; and so we might go on. And yet these are the men whom the lying tongues of mendacious protestant libellers call the "idle, dirty, and dissolute monks." The truth is, that under the patronage of the catholic church, with the stimulus to energy afforded by her enchanting doctrines, supplying as they did the defects of human nature, all the arts of life flourished, and

were brought to perfection: hence, what we call the "age of painting," the "age of sculpture," and so on; and though I am ready to admit, with the pious moralist, the exhilarating effects produced by faith, hope, and charity on the mind, as contradistinguished from the enervating influence of protestant doubts, despair, and cupidity; yet, as a physician, I cannot help ascribing the wonderful efforts of human ingenuity in former times, in great measure, to their habits of early rising, austerity, and abstinence. But it is time to consider of the medicine and botany of the early ages, on which all our modern professional knowledge is founded. I shall, however, first call the reader's mind to the subject of the mental quality of Attention; as on it depend the principal causes of discovery, and of useful inventions.

§ 1.—*Of Attention.*—If I walk into the country early in the morning, having long spent my time in town; and remain abroad a whole day; a hundred sounds and sights arrest my senses and command my attention, which the swink hind, who is accustomed to them, and whose attention is directed to objects of his immediate wants, does neither hear nor see, at least, to his knowledge. The burst of morning light, and the beautiful tints of the clouds, to him are unseen; to me they are striking objects; the cock, who is a herald of the morning, the matin bell, the

mower's scythe, the song of the milkmaid, and as day advances, the hum of the bee among the flowers, the noontide chimes, and the curfew at the fall of day, besides lowing herds and the bleating of the wattled flocks, are all striking objects of attention on first going into the country, which wear off, in ordinary minds, by degrees; but in certain geniuses, as painters, poets, and men of taste, these beauties of Nature always command notice; and excellence in the arts consists in that power over the attention, whereby we can hold them long in mental review, so as to describe, explain, and represent them. In lively and overgifted poetical minds the defect is found to be, that such objects of sense obtrude too much, and lead the mind away from more ordinary business, producing what is called distraction, which is the reverse of recollectedness. Now, in all these cases, the great thing to acquire is a habit of controuling the faculty of attention, and this power over the direction of the mind I find to be particularly impaired by sensuality of every kind, whether it consist in sexual indulgence, or in the luxuries of the table. The defect complained of increases with age, and hence it happens, that senility sooner becomes a second childhood, in effeminate and debauched persons, than it does in austere, self commanding, and well-disciplined minds. Hence it happens also,

that native talent is so often spoiled in early life, and that geniuses become idle, because they have enfeebled their minds by indulgence, and lost that moral controul which is necessary to perfection. Men of genius are, now a days, proverbially idle, and it is from this cause that discipline has been relaxed, and abstemiousness given way to indulgence. And it will be found that it is only in those rare cases in which industry and talent have been united by the powerful efforts of the will, in a well regulated mind, that real excellence and true greatness of character have been produced.

Horace, in spite of his practical defects, was a moral philosopher in theory, and would have been so in practise in a catholic age: he saw clearly that the passions enervated and wore away the body, debilitated the mind, and impaired those energies which spring from self command; and he, justly enough, describes the liver and the state of the bile as the principal medium of such moral prostration; a very fine illustration of which may be seen in his Ode to Lydia. In this respect he is superior, as a writer for youth, to Anacreon and the other lyrical poets, whose compositions are simple eulogies of sensuality.

CHAPTER IV.

On the Origin and Progress of Medicine—on the Best Manner of taking Physic—and on the Best Forms for Prescriptions.

As medicine, like other sciences, had its beginning in the night of time, so must its early history be conjectural and uncertain. It is warrantable, however, to think that the instinctive propensities of our nature, and the provision against evil made for us in our various sympathies and antipathies, did lead men in the origin of society, to the finding out of what was nutritious or medicinal in the vegetable kingdom, before our acute senses had been blunted by the luxuries of refinement. Men may also have been assisted in this respect by the instincts of animals, who will, often, fly to diverse herbs when they be sick, as to a certain remedy. Among the American Indians, as well as among the wilder hordes of African Negroes, and even among the savages of the Northern parts of Europe and Asia, many new vegetable remedies are, from time to time, made known to our physicians, and added to our stock of medical knowledge; so that we may consider it as certain, that a simple knowledge of the power of herbs, and the manner of applying them, was the origin of the healing art. Afterwards the science

of medicine was made into a study, and this useful art was principally practised by the priests, monks, and virgins of the early religious orders, as a part of the duties of christian charity; and it need hardly be observed, that medicine was more simple and effective, and much less perverted by theory and mysticism, than it has been in later times, since it became a trade carried on by regular professors. My object in this *Medicina Simplex* has been to reduce it, as much as might be, to its former simplicity, embodying all the really useful discoveries which have been since made, and doing service to the profession, by exposing a great deal of the trash with which it has got incumbered. Many absurd remedies have been palmed off on the believingness of men, partly through ignorance and conceit, and partly by design, to impose on the unwary. Owing to this cause it happens, that medicine, though a benefit in itself, includes a counteracting evil, since a large portion of the mixtures ordered are useless, while many are injurious, to the constitution. Of all the abusers of the medical profession—the most practical satyrist—is the Emperor of China, who, acting under an impression that it must be the interest of those, who are daily paid by the patient, to protract the disease, usually pays his physicians a stipend while he is well, and suspends it whenever he is disordered, with a

view of securing their honest endeavours at least.

An article in a country paper has some curious remarks on physicians:—The Chinese have long been celebrated for their sagacity, and the acuteness with which they see into the bearings of particular customs and laws. They show this sagacity in no one thing more strongly than in the manner in which physicians are paid in China. Instead of being paid by fees when persons are ill, which the Chinese would regard as holding out inducements to them to make a job of the case, each family in China pays to some physician an annual sum, a portion of which pay is suspended whenever any of the family are ill, and this suspension of pay is continued till health be restored, or death ensue, in which latter case a forfeiture is paid by the doctor in the minus ratio of the age of the patient. By this means Chinese physicians acquire a vital interest in hastening the cure. The Chinese frequently remark, that by what they learn from Europeans, physic in England is a dangerous traffic, in which the prolongation of an illness becomes so closely connected with the interest of the physician, that it requires more than an ordinary degree of moral fortitude to resist the temptation to effect it. Besides which, there is another great evil resulting from the trade of physic in Europe,

that it makes physicians jealous of the medical knowledge of the public ; and hence it is that mercenary European practitioners usually forbid their patients the use of books of Domestic Medicine, for the twofold reason, that the knowledge of popular remedies would injure their practice, while a little insight into the real simplicity of medicine would furnish the discerning public with a clue to the scandalous humbug of empyrical monopoly. If European doctors were not proverbially on bad terms with each other, this craft would be able to establish a tremendous tax upon health ; but, fortunately, the pretensions of one jealous monopolist are often founded on the real or alleged bad practice of his competitor. And hence, if a sick man were to consult fifty physicians in London, one after another, he would find his constitution consigned to the ruthless operation of nearly fifty different and counteracting panaceas ! In China, medical men have as much interest in enlightening the public mind on the subject of physic, as they have to keep it in ignorance in Europe. Practise is certainly improving in England ; but as long as the system of calling, uncalled for, for a second, third, or fourth fee, continues, so long will medicine be a trade dangerous to the sufferer, in direct proportion as it is available to the physician. The apothecary, too, has an interest in keeping

the physician up to his drug trade, and any inroads on the score of simplicity in medicine, would make him a dangerous rival to the doctor. This state of things cannot exist in China. There the physician really assists Nature: in England, Nature has art and imposture to struggle with; and the remarkable cures made by medicines so opposite in their known effects, in England, can only be ascribed to the overbearing power of this our kindest mother to subdue disease in time, of herself, and often aided by fortunate changes of the weather, to persevere in her curative nisus, till the animal machine be restored to health, in spite of the evil influence of half a hundred prescribed sources of irritation—thus say the Chinese. Now the only way in this case, to do away the evil, is to enlighten the public mind; and, by opening a wide field for competition, to destroy the empiricism of the regular bred physicians, as well as that of those whom the profession may choose to call quacks. Perhaps the most important reform of all in the profession, would be to annihilate the dangerous distinction between surgeon, physician, and pharmacopolist; and to render all branches necessary to a medical degree; and oblige all to practise all, and become like the Scottish, French, and other foreign practitioners.

In that most useful and laborious class of men, the apothecaries, all the three branches

of surgery, medicine, and pharmacy, are united; and this circumstance, together with that of their being more familiar with the constitutions of their patients, renders them, it must be allowed, the most efficient part of the profession, as well as the safest and most confidential medical advisers of the family : while the calling in a *pure physician*, in cases of extreme danger, is resorted to, frequently as a mere compliance with the etiquette of an old custom, which originated at a period when the apothecaries were not so well educated as they are at present. For as both are educated now, I confess I can see no superiority whatever which the pure physician possesses over the apothecary, while the latter has the advantage of much additional information in which the former is frequently deficient, both in anatomy and in practical chemistry.

Medicine has from a long period been a wavering and uncertain science, and its successive doctors, so far from producing a steady advance of its principles, have exhibited, in their endless varieties of opinion and contradictory practises, the fullest possible proof of its precarious and empirical character. To strip it, therefore, of the solid basis and support of surgery and anatomy, is like taking the ballast out of a tottering bark in a squally day, and setting it afloat without a rudder, on the uncertain billows of the

ocean. It is notorious that, for ages, what one physician has recommended another has condemned; one forbids animal food, another recommends a breakfast of roast beef; a third prohibits wine and beer; a fourth warmth; one says eat little and often; another more justly prescribes regular meals, twice or, at most, three times a day; one gives calomel for almost every complaint; another almost condemns its use altogether; even fire and fresh air have found their enemies among our professors; and the most opposite sort of drugs have repeatedly been prescribed in the same disorders, and with an apparent similarity of result; while, in reality, as I have often discovered, a change in the state of the air has been the effective agent in the recovery of the patient. All this contradictory practise will be found to vary inversely as physic shall be founded on rational views of physiology, and on a sound *practical* knowledge of science.

The bitterness of vituperation, and the jealousy so frequently conspicuous in rival physicians arises, too, in my opinion, from the uncertain nature of the science itself, when exclusive of surgery: for there being no regular authority, nor definitive source of appeal, as there is in the Law, the mutual animosities of the parties, however unconscious of it they may be themselves, really spring from the very fragile nature of the

bone which they contend for; and in this respect they resemble the more ignorant sort of theologians, whose reciprocal hatred and mutual accusations of heresy, have always varied in direct proportion to their common ignorance of the subjects about which they disputed.

There are two more things that I wish to point out to the notice of the profession. One is, that at present, the most serious cases, even those styled purely medical cases, are often carried for consultation to eminent surgeons, by preference, from a just notion that the seat and nature of a disease must be best known to a morbid anatomist. The second thing is, that the consciousness of superior and more extensive attainments on the part of the apothecaries will naturally make them reluctant to call in the advice of physicians, whose titles enable them to assume a nominal superiority. For, on the simple axiom of *continens contento major*, the apothecary, educated as he is now a days, must, *cæteris paribus*, be superior to the pure physician.

These, and other circumstances, which I could point out, in the great changes which education is working in the manners and habits of social life, must tend to lessen the public esteem for our branch of the profession; and if the change which I have here recommended does not take place, must

sooner or later bury the farcical vocation of *pure physician* in the utter oblivion which it deserves, in an age of intellectual improvement.

A counterpart to the evil of pure physician has been recognized in the tendency which *exclusive* surgery will have, not only to encourage a dangerous enterprize in operations, but to resort ignorantly to the knife, in many cases where medical skill would be more available.

Without the full knowledge of anatomy, physiology, chemistry, and surgery, our profession soon degenerates into mere empyricism, and reduces us to the humble level of the quack doctor. And it is in consequence of the public getting daily better acquainted with this truth, that the apothecaries are becoming our rivals in the confidence of the invalid, in this period of general inquiry and knowledge.*

* I should suggest the formation of medical colleges, bearing the title, *Collegium Facultatis Medicinae*. In these there should be lectures given in anatomy, physiology, surgery, chemistry; botany, comprising the medicinal properties of species; pharmacy; meteorology, comprising the influence of air on disorders, pestilence, and epidemia; theory and practise of medicine, forensic medicine, and if required, on the particular branches, as ophthalmology, and so on. Such a college should be instituted in every large town where there was an hospital, to which the students should have access, subject to certain regulations. The

But I must now quit this digression, and pass on to the consideration of the *Materia Medica*.

CHAPTER V.

Materia Medica and Medicinal Plants.

All must agree that this department of medicine has made but little progress; the chief merit of our most able medical writers, of which indeed we have but few, being, that they have exposed the fallacy of many useless nostrums, and restored medicine to the simplicity with which our ancestors employed it. Among the foremost of these renovators of the science, was Mr. Abernethy; and his successors in the school of simple medicine and rational surgery, to this day, will be found the safest practitioners, to

directors of the college should appoint and hear the several examinations of the particular professors, and should, after a due course of study, confer degrees, which should become a warrant, that the public might with safety employ the candidate. Whether or no there should be subordinate surgeons for country practice, as at Vienna, I leave to subsequent inquiry. But at present I am inclined to think that there should be but one sort; and that if a man, from conscious eminence, from some manual defect, or from age, should choose to decline the operative part, and be only consulted, he should rest his title to that distinction on his acquired renown, and on those merits of which the public might have become the judges.

whose care the anxious invalid may trust his frail and ailing body.

The specific virtues of certain herbs appear to have been known at a very early period, as we learn from Aristotle, Dioscorides, Pliny, and others; but for the more refined and useful cultivation of plants, for the purposes both of medicine and of food, we are indebted to the Catholic orders of the early and middle ages of the church.

Among the false accusations which fanatics are always bringing against religious people who differ from them, no one appears more glaring and atrocious than the charge of idleness and uselessness brought by Protestant sectarians against the monks and friars of the last ages. For, as I have before shewn in other instances, we are really indebted to them for the excellence of the arts, science, and literature, more than to any other body of men in the world. Medical botany affords a very striking example of this fact; for this is certain, that the monks, friars, and pilgrims, of the early ages, were the first cultivators of botany, and the gardens of convents were the first repositories of curious and useful plants. Labouring continually in corporal as well as in spiritual works of mercy, the religious orders of old collected whatever was useful or beautiful among plants, and converted all which were esculent or medicinal to the use

of the poor, who were the continual objects of their solicitude.

The garden of an antient abbey was not merely a place of recreation, but of utility; and a monastery was, in good old Catholic times, the greatest comfort of the neighbourhood in which it stood. It seems, also, that from the constant habit of attending to the calendar, plants were generally named after those saints or festivals about the period of whose anniversaries they came into flower. When the great European Babel began, at that period ridiculously enough called the "Reformation," and the misuse of words became general, right being called wrong, and wrong right, the very names of plants were changed, in order to divert men's minds from the least recollection of antient Catholic piety.

The following are a few examples which occur, all of medicinal plants whose names have been changed in later times. The *Virgin's Bower*, of the monastic physicians, was changed into *Flammula Jovis*, by the new pharmacians; the *Hedge Hyssop*, into *Gratiola*; the *St. John's Wort*, so called from blowing about St. John the Baptist's Day, was changed into *Hypericum*; *Fleur de St. Louis*, into *Iris*; *Palma Christi*, into *Ricinus*; *Our Master Wort*, into *Imperatoria*; *Sweet Bay*, into *Laurus*; *Pasqueflower*, into *Anemone*; *Our Lady's Smock*, into *Cardimine*;

Solomon's Seal, into *Convallaria*; *Our Lady's Hair*, into *Trichomanes*; *Fair Maids of February*, into *Snowdrop*; *Balm*, into *Melissa*; *Marjorum*, into *Origanum*; *Crowfoot*, into *Ranunculus*; *Herb Trinity*, into *Hearts-ease*; *Avens*, into *Geum*; *Coltsfoot*, into *Tussilago*; *Knee Holy*, into *Ruscus*; *Wormwood*, into *Absinthium*; *Ladder to Heaven*, into *Lilies of the Valley*; *Rosemary*, into *Rosmarinus*; *Marygold*, into *Calendula*, and so on. Thus the antient names were not only changed, but in this change all the references to religious subjects, which would have led people to a knowledge of their culture among the monastic orders, were artfully left out.

But we will take a few more examples. Enter into any garden, and the common name of *Marygold*, *Our Lady's Seal*, *Our Lady's Bedstraw*, *Holy Oak*, corrupted into *Holyhock*, *The Virgin's Thistle*, *St. Barnaby's Thistle*, *Herb Trinity*, *Herb St. Christopher*, *Herb St. Robert*, *Herb St. Timothy*, *Jacob's Ladder*, *Star of Bethlehem*, now called *Ornithogalum*; *Star of Jerusalem*, now made *Goatsbeard*; *Passion Flower*, now *Passiflora*; *Lent Lily*, now *Daffodil*; *Canterbury Bells*, so called in honour of *St. Augustine*, but now made into *Campanula*; *Cursed Thistle*, now *Carduus*, besides *Archangel*, *Apple of Jerusalem*, *St. Paul's Betany*, *Basil*, *Herb St. Barbara*, *Bishopsweed*, *Herba*

Christi; *Herba Benedicta*, *Herb St. Margaret*, erroneously converted into *La Belle Marguerite*; *God's Flower*, *Flos Jovis*; *Job's Tears*, *Our Lady's Laces*, *Our Lady's Mantle*, *Our Lady's Slipper*, *Monk's Hood*, *Friar's Cowl*, *St. Peter's Herb*, *Bean of St. Ignatius*, *Jesuit's Bark*, and a hundred more such.*

The modern Linneans have got some curious names for plants, certainly less fitted for the chaste ears of cloistered virginity, and more in unison with the spirit of protestant improvement—such as *Venus' Looking-glass*, *Venus' Navelwort*, *Lycoperdon Colliforme*, and *Phallus Impudicus*!

In fact, medicine in Europe may be almost said to have originated with Catholic clergy, and particularly the regular orders. I shall not, however, dwell further on this point, but shall proceed to subjoin a catalogue of popular prescriptions for common use, and I believe that it contains nearly all that can be deemed necessary for the ordinary cases of disorder which occur.

* See also a great list of these names in the *Pocket Encyclopedia of Gardening*, by T. Forster, 12mo., London, 1827.

CHAPTER VI.

DOMESTIC PRESCRIPTIONS.

DRAUGHTS.

- No. 1. R. *Infus. Gentian comp.* oz. j.
Infus. Sennæ, dr. jj.
Tinc. Cardamom. comp. dr. j. M.

A draught to be taken an hour before dinner, as a stomachic in cases of bad digestion, where there is also slight costiveness. Take with it Pill No. 14, at night, now and then with advantage. Where there is no constipation of bowels, the senna may be omitted or diminished in quantity.

2. R. *Infus. Rosarum.* oz. j.
Sulphat. Magnes. d. j.
Syrupi. q. s. M.

A cooling and rather opening draught, to be taken once or twice a day in fever, on an empty stomach. This draught is assisted by Pill No. 14, taken every other night. It may likewise be taken in the morning, to help to carry off the Powder No. 11, in cases of colds, slight feverish complaints, coughs, sore throats, and so on. It may also be taken to carry off any of those Pills given over night, which contain much calomel.

3. R. *Decoct. Sarsaparillæ comp.* oz. jj.

A draught to be taken twice a day on an empty stomach, in cases of eruptions of the skin, of boils, of nervous irritability, and many others. Its effect is powerfully increased as an alterative by five gr. of *blue pill*, taken at night, No. 19. Both this and simple decoction are good diet drinks; but where they do not agree with the stomach, the draught No. 1 may be tried.

4. R. *Mistur. Camphor.* oz. j.
Spirit Æther nitr. dr. j.
Carbonat. Ammon. gr. vii. M.

A very useful draught taken once or twice a day in cases of corrupt states of body, of oedematous swellings, incipient dropsy, and other disorders of this sort. A pill of calomel and squill, No. 22, taken at night, greatly assists it in dropsy. And in other cases, any of the aperient Pills, containing calomel, may be taken with it with advantage, viz. Nos. 14 or 20.

5. R. *Vini. Ipecacuanhæ*, dr. j.
Antimon. Tartariz. gr. j.
Aquæ puræ. oz. j. M.

A safe and certain emetic; but I do not recommend emetics except in cases of poison, or in a few cases where an overloaded and foul stomach is found not to be properly cleared by purgatives, which is seldom the case, if we select those cathartics which operate with certainty on the stomach and upper part of the canal, as liquid rhubarb, senna, and so on. Salts are apt to deceive in this respect, and to pass through, affording the specious appearance of liquid stools, without really clearing the canal of its contents. The following are some effectual purgatives:—

6. R. *Pulveris Rhei.* gr. xv.
Potassæ Sulphat. gr. xiii.
Aquæ Cinnamomi. oz. j. M.

This draught will effectually clear the stomach, and is a good and safe purgative; its effect will be rendered more complete, if Pill No. 20, be taken the preceding night. In cases of getting up with a sick headache from indigestion, it will remove the cause as soon as any mixture, and may be taken promptly on the occasion, while, should any crudity remain after its operation, the pill of calomel and aloes, No. 14, may be taken at night.

7. R. *Sodæ Tartarizat.* dr. ij.
Sodæ Carbonat. scr. j.

Put the above powder into a glass of lemonade, and take it in a state of effervescence; it forms a most grateful and cooling aperient in cases of feverishness.

8. R. *Infus. Sennæ.* oz. j.
Tinct. Jalap. dr. j.
Potass. Tartar. dr. j.
Cum aliquo Syrupo. M.

The above may be taken as a strong clearing draught, instead of No. 6, where the patient cannot keep rhubarb on his stomach, but it is not near so certain. And I advise that Pill No. 14 be taken with it, if not beforehand, to increase the effect if required.

9. R. *Potassæ Subcarbonat,* gr. x.
Infus. Gentian. comp. oz. j.
Spirit Æther. comp. dr. ss.
Tinct. Cinnamom. dr. j. M.

Diuretic draught. To increase it, take, over night, Pill No. 22.

10. R. *Misturae Camphor.* oz. j. ss.
Liquor Ammon. Acet. oz. ss.
Liquor Antimon. Tartar. min. x.
Tinct. Oyii. min. vi. M.

Diaphoretic draught, to be taken at night, in cases of violent cold, and cutaneous obstruction. Open the bowels previously with Pill No. 20.

POWDERS.

11. R. *Pulveris. Antimon.* gr. iij.
Calomel. gr. j.—*Fiat Pulvis.*

A powder very useful for children suffering from colds with disordered digestive organs. It is good for bad colds in general, and is highly beneficial in slight fevers. It should be taken at night, and draught No. 2 in the morning.

12. R. *Calomel,* gr. j.
Pulv. Scammoniae. gr. iv.

A useful powder to give children who suffer from overloaded bowels, or where excrements appear dark or otherwise of an unnatural colour. It may be repeated at intervals with great advantage.

13. R. *Sulphat. Quininae,* gr. iij.

Twice a day in ague and other intermittents after the bowels have been well evacuated with Pill No. 14 or No. 20. The quinine may be made up in pills for those who prefer it.

PILLS.

14. R. *Calomel* gr. j.
Extr. Aloes. gr. ij.
Rhei. gr. ij.—Pill.

The most efficacious pill for ordinary occasions, to be taken either one or two at a time, as occasion requires, to clear the bowels.

15. R. *Extr. Aloes,* gr. iij
Rhei. gr. ij.—Pil.
 16. R. *Extr. Aloes,* gr. iv.
Saponis gr. j.—Pil.
 17. R. *Extr. Aloes.*
Extr. Colocynth, comp.
Rhei. Of each gr. j.—Pil.

Those who are subject to constipation of bowels may make choice of any of the above three pills, to be taken periodically

and frequently as occasion requires. But for a constancy I recommend No. 16, as being the least likely to lead to subsequent constipation, and entail a necessity for physic.

18. R. *Pil. Calomel comp.* gr. v.

Twice a day in acute rheumatism; and for an alterative; assisted by draughts No. 2 or No. 10. This is called the Red Pill.

19. R. *Pil. Hydrarg.* gr. v.

Commonly called Blue Pill, may be taken every alternate night in cases of defective action of liver, and for an alterative; assisted by draughts No. 1, No. 2, or No. 4, according to the case. See those numbers.

20. R. *Calomel—Extr. Aloes—Extr. Colocynth—
Rhei. aa.* gr. j.—*Antimon. Tartariz.* gr. $\frac{1}{8}$.

Fiat Pil. A good pill for clearing the bowels previous to giving quinine for ague, and as preparatory to a course of alteratives: dose 1 or 2 pills, according to the constitution of the patient.

21. R. *Camphora.* gr. ij.
Pulv. Antimon. gr. iij.
Opii. Purif. gr. j.
Confect. Arom. q. s.—Pil.

Diaphoretic, and useful to procure sleep where there is restlessness and fever, with dry skin. Next morning take draught No. 2.

22. R. *Calomel.* gr. j.
Pulv. Scillae. gr. iij.—Pil.

At night, to assist, draughts Nos. 4 and 9.

ADDITIONAL PRESCRIPTIONS.

23. R. *Infus. Gentian. comp.* oz. j.
Liquor Potassae Subcarb. dr. j.
Tinct. Cascarillae, d. j. M.
24. R. *Infus. Cascarillae,* oz. j.

Some prefer the above draughts to No. 1.

BURNS AND SCALDS.

An excellent method has been discovered of covering the excoriated surfaces with flour. See the "*Lancet*" for 1828, a popular work of great utility.

Vegetable diet drinks, as sage, balm, alehoof, and horehound tea, are good alterative drinks, and are too much laid aside in our times.

N.B.—For general purposes, as an aperient, and particularly for bilious persons, Pil. No. 20 is found to be the best in use; and its employment is becoming daily more extensive. Many druggists keep them already prepared.

§ 1.—Of the Medical Treatment of Children.

I am persuaded that a number of infants might be spared the annoyance of long and dangerous diseases, if prompt attention were paid, by their mothers and nurses, to the following rule:—On perceiving a young child to be unwell, drowsy, or even fretful, examine immediately the state of the excrements; and if you find them green, dark, or otherwise discoloured, give the powder No. 12, and repeat it at intervals of a day or two, till they become of a natural colour; taking care, at the same time, to keep the child on a spare diet, given only at the regular periods of meals.

The health of children, in England especially, is perpetually injured, owing to a false estimate of the quantity of food requisite to maintain the body in health: a very little of good nutritious food is sufficient for all useful purposes; and the least repletion is sure to lead to disease, sooner or later. The straightest, strongest, and best formed children are those of the poor, in healthy

districts, who live sparingly, and are in constant exercise out of doors. The meagre, rickety, and debilitated offspring of the rich, are often rendered so by luxury and ill-judged care; by want of exercise in all varieties of weather; and, above all, by too much food. An old woman, in every village, instructed in simple medicine, and employed to visit the cottages of the poor, and act on the advice of this little book, would be found a wonderful lifepreserver, and would make, as I have often heard Abernethy say, as good a physician as three fourths of the profession are.

§ 2.—Of the Effects of Medicina Simplex in Epidemics.

Although all disorders of a febrile kind, and, indeed, almost all devastating and popular maladies, are of an epidemic character, and depend, for their existing causes, on some obscure malaria, prevailing at certain periods of the world; yet the predisponent causes are in the body, and owe their origin to repletion and other bad habits. Among the numerous vices introduced by the Protestant Reformation, one of the most destructive was gluttony; and it was owing to this that the visitations of pestilence became, since that time, more severe than before. Hence the terrible scourges of the *sudor*

Anglicus or sweating sickness, the falling sickness, as well as the memorable plague of London, derived their destructive force and virulence. But as some remarkable instances and proofs of this will be found in my larger work on epidemic, I shall omit them here. A return to the *Medicina Simplex*, simple diet, and periodical fasts of our forefathers, would counteract the effect of these specific irritants, and give to the largest number of persons the greatest chance of surviving their frightful visitations.

CHAPTER VII.

Some Particular Observations respecting the Influence of Air on the Organs of Hearing.

Among the many and varied effects produced by changes in the state of the atmosphere on the human body, none are more interesting, both to the physiologist and to the general philosopher, than the influence of changes in the elasticity and pressure of the air on the organs of hearing.

Fluctuating affections of organs often lead to the knowledge of those of a more lasting kind, and, for this reason, the following facts and observations will, I doubt not, be deemed interesting and useful; for I am in hopes that in time they may lead to the further elucidation of the pathology of the

ear; many of whose more lasting disorders may be found to depend on a protracted operation of causes, similar to those whose casual application produces deafness of a transitory nature.

I was first apprised of the effects produced on the ears by sudden changes of atmospheric pressure, by the following facts:—In coming down from lofty hills, into deep valleys, during journeys over mountainous countries, some years ago, I found that in very rapid descents I was suddenly affected with a deafness, similar to that produced by very loud explosions; it was accompanied with a sense of weight and obstruction, and with both sorts of tinnitus aurium: but after I had been down half an hour or more, I was entirely relieved, and could hear as well as ever. On inquiry I found many persons subject to the same annoyance, while others were quite free from it. My curiosity being much excited, I began to prepare for speculating on the cause of this curious affection, by closely observing the laws of its occurrence in my own person. I found that hills whose height exceeded two thousand feet, if their declivity made an angle of above thirty-five degrees with the horizontal plane of their bases, would always afford me an opportunity of making this experiment.

I experienced this sensation for the first time on descending from the summit of

Cader Idris, to Dolgelly, in Wales, in August 1814, the weather being fine: a similar effect was produced, in wet weather, in passing over the mountains by Ulswater; and in fine hot weather, in Helvellen and Skiddaw, in May 1816. The same transient deafness occurred in a great degree, but of short duration, after the descent from Mount Jura, in Switzerland, on Monday, July 29, 1822, just before a tempest; and so great was the annoyance while it lasted, that it diminished the pleasure of viewing the stupendous mountain scenery of the Swiss and Savoyard Alps, and the Lake of Geneva, bordered with villages and vineyards, which few can see for the first time without emotion. I mention these facts to show that variety of of weather and of situation will not prevent the effect. I descended from Mount Snowdon in August 1815, and traversed the hills of Ben Nevis in 1816, without experiencing much of it, but then the barometer was falling, and a diminishing atmospherical pressure might well be supposed able to countervail the effects of a slow descent. I was less fatigued, too, on these two occasions, which might be a favourable circumstance.

I put repeated questions to people who had travelled, according to my habits of inquiry, and I found that the susceptibility of different persons to this affection varied, from those who could scarcely come down

from a Devonshire hill without feeling it, to those who scarcely feel it at all. I examined aeronauts, and have since compared their accounts with the observations that I made during my own aerial voyage in April of the present year, and I find that rapid descents in balloons afford the most perfect examples of this disorder, which indeed is only what might be expected, as from the greater elevations and more rapid descent of aerial voyagers, they must, *a fortiori*, be liable to an augmented attack of that disorder which affected the sojourners over hills; that is, provided sudden changes of elevation were really the circumstance necessary to the phenomena. Always cautious not to mistake accidental coincidences for effects, I now repeated experiments on my own person. I placed myself in different positions in carriages when descending great hills, in order to find out whether any mechanical movement of the blood towards the head, in the ordinary act of descending, could be in part the cause; but position made no difference in the effect. And I soon afterwards found a sort of counterpart effect produced in ascending, though accompanied with some differences; for in mounting to a great height, there was a snapping in the ear, and some diminution of hearing, but none of the disagreeable sense of fullness; nor did I at a subsequent period, when deaf after de-

scending in a balloon, feel this detestable sense of fullness, which may therefore be connected with the fatigue of a mountain journey. Adverting again to the cause, and recollecting that the density of air varied in the inverse geometrical ratio, in ascending, I readily found a solution of this question in the effect which a destruction of the equilibrium of the air, within and without the tympanum, might have on the action of that organ in hearing. The Eustachian tubes seemed calculated to preserve this equilibrium; their obliteration by disease was a known cause of deafness; and Mr. Cooper's operation of perforating the *membrana tympani* seemed, when effective, to be of use by substituting an adventitious orifice, for preserving the same balance. I recollected, too, that though a probe could be readily passed through the Eustachian tubes, yet that there were many cases of imperfect or contracted passage; and believing cases of this sort to be common, it seemed reasonable to attribute the transitory deafness, which some persons experience, to the slowness with which the necessary equilibrium between the air within, and that without the ear, which sudden descent would destroy, was restored by the tubes, whose thoroughfare might be naturally difficult, and might be rendered more so by some pressure from blood, produced by the exertion of ascent.

A circumstance, placing this explanation of the thing beyond the reach of doubt, soon after occurred: during one of those well-known sudden elevations of the barometer to 30. 50., I experienced, in common with some other persons, the same easily recognised phenomenon of slight temporary deafness, and a sensation of fullness in the internal parts of the ears. Hence it seems that changes of atmospherical pressure are concerned in the production of fluctuating obstructions to hearing; hence also we may infer the propriety of trying to produce this disturbance of equilibrium, and so force imperfect passages, by changing elevation, availing ourselves of the occurrence of changes of barometer as an auxiliary, in cases where deafness seems to arise from the more trifling obstruction of the Eustachian tubes.

I may mention, before I leave this subject, that I have known several persons who have experienced a very considerable relief from long continued deafness, on changing the air by going to a distant place; I have also known several in whom a mild alterative course of medicine, undertaken for the cure of some other complaint, has cured habitual deafness. Mr. Abernethy has related other instances of this fact; and, I think, he has rightly ascribed it to the improved state of the digestive organs, with which all parts about the head are apt to sympathize.

As the circumstances of my ascent with an air balloon, together with the observations which I have made on the affections of the ears, may interest the reader, I shall give it more at length, and shall conclude with some comparisons between my notes and those of other aeronauts :—

Account of an Aerial Voyage made by Dr. Forster and Mr. Green, from the Gardens of the Dominican Friars, at Chelmsford, on Saturday, April 30, 1831.

At about a quarter before six, the barometer standing at 29. 20., thermometer 63., wind gentle and ESE, the balloon being entirely disengaged from its ropes, we ascended slowly and majestically into the air, in a direction nearly WNW, passing onward towards Writtle, over the green and fresh valley through which the Chelmer runs. The first sensation produced by rising, on the occasion of a first aerial voyage, is both astonishing and delightful; the deception of vision, whereby the earth appears to recede instead of the balloon ascending, was, to me at least, lost in a moment, and the consciousness of mounting succeeded as we distanced the crowd and the scenery below, although no motion was felt in the car. We were in a minute above the trees and all the buildings, the tops of which, as well as the gardens, were filled

with spectators, all of whom looking towards us, and getting smaller and smaller as we rose, had a very curious and pleasing effect. As we were wafted by the light breeze over the valley, I could still see the gentle motion of the leaves of the trees which grow along the river; but in a few minutes more this could no longer be discerned, from our increased altitude; and as the rotatory motion of the balloon, when rising, turned us slowly round, I could not easily notice the degree of rapidity with which the angle subtended by any prominent object—as, for example, the church, or the shire hall, diminished; the scene was constantly changing, as we turned gradually towards every part of the prospect; and my companion now observed to me, that we had the main ocean in view, and, indeed, we distinctly saw both the Thames and the sea beyond the Nore, and soon afterwards the whole line of coast beyond Kent. In the direction of the Maldon river, and hovering over its marshy lands, we saw what had evidently been a cumulus now subsiding into a stratus or white evening mist, stretching over the ground in its descent, which we at first took for smoke. Higher up there were cumuli in the air, much nimbiform haze still more elevated, and some waneclouds. The beauty of the prospect now increased, and the fields, here and there coloured with the bright

yellow of the flowering colewort, green with the young wheat, or richly brown from fallows, chequered with rows of trees, whose new green foliage and blossoms enlivened their darker hue, and intersected with rivers, roads, and villages, had a most enchanting effect. All earthly sounds had ceased; we had got above the breeze which swept the surface of the ground, and into a region comparatively calm, and lighter than it was below. We were now conscious of no motion whatever. At this time we threw out the grappling anchor, which we thought might as well hang out as encumber us in the basket, which, being small, afforded us little spare room to move about. We ascertained our ascent by throwing out small pieces of paper, which fell directly down; though, on our descending a little lower, afterwards, we passed one, which for a moment I mistook for a butterfly, which I was astonished to see in so rarified an atmosphere. We now threw out ballast; my companion, placing the bag of sand against his knee, as he sat on the edge of the basket, let its contents fall gradually, and we ascended again. I presently felt a slight motion, heard the great buoyant balloon above us make a noise, as if touched by wind, and felt a slight jogging in the car. We exclaimed that we had got into another current, which turned out to be the case; and being now

nearly over the park at Writtle, we were gently wafted back again, till we came almost over the northern end of Chelmsford, where, at a very great altitude, probably near 5,000 feet, we noticed a variety of objects as we moved gently round with the oscillating machine. Below us, and to the eastward, was the town, the church of which could scarcely be discerned; beyond it were the gas works, Springfield, the gaol, Boreham House avenues and its long piece of water, in miniature. A little more to the left, as we gyrated round, we saw the convent of New Hall; and then, turning towards the North and West, the fine soft blue tints of the distant horizon was a most delicious finishing to the vast scene. We were still ascending, and at length, bearing towards Springfield, we attained our greatest altitude: sheep in the field could not any longer be seen even as white dots; and a windmill, in a field near Writtle, had lost its distinctive form, and might have been mistaken for a woman in a white petticoat, as one of these mills was, on one occasion, by Mr. Green's brother. On looking straight down from the edge of the car, on the country below, it had just the appearance of a great map. The hanging my head over the basket, and so looking down, was, however, by much the least agreeable mode of surveying the surface of our mother earth, from whose

leading strings we seemed to have burst; and would have made persons who were less accustomed than myself to be on high precipices, very giddy. I felt no sort of unpleasant sensation, notwithstanding our immense elevation; and the consciousness of insulation in the air made us feel more as if we were a part of the balloon above us than of the world below. I now perceived a sensation of pressure on the tympanum of the ear, accompanied by a snapping noise, very like what other aeronauts have described, and which I had before experienced in a greater degree, after surmounting very high hills in Switzerland. It was also accompanied with temporary deafness, but not by that sense of fullness which I have found so disagreeable after descending from terrestrial elevations: it is, however, probably similar to what Lunardi, Garnerin, M M. Charles and Robert, and all the early aerial travellers, who mounted very high, have described. We were still throwing out ballast, and the balloon, taking a sort of crescent course while mounting, must, as I have since become convinced, have been slowly ascending in an irregular spiral. At length, at a great but unascertained elevation, we found ourselves perfectly becalmed, and so remained for near a quarter of an hour, the motionless spectators of a vast panorama, over which the most profound and indescribable

silence prevailed. Accustomed as I had been, in the course of my varied life, to all sorts of situations, on high mountains, in boats upon the waves, in travelling, in floating on gentle water, I had as yet seen nothing like this. I remember, in crossing to France, the first experience of a steam boat, paddling across the level brine like a fish, was a curious phenomenon, having before been only conveyed by sailing vessels. But this newborn Leviathan of the deep is nothing to a balloon; neither is the sensation produced by a balloon in motion at all comparable to a balloon at rest. Picture to yourself, reader, two persons suspended in a small wicker basket, slung under an inflated bag of huge dimensions buoyant in the air, immediately beneath a canopy of mist, and in the elevated plane of evaporating clouds, whose grotesque forms are gradually becoming lost amid the shadows of greyhooded evening, in perfect stillness, without any perceivable motion, and looking down upon a great and apparently concave amphitheatre, divided like a map, and made up of objects rendered too diminutive by their distance to be well defined, and which appear to have no altitude at the great height from which we view them;—and you may get some idea of the sensation produced by a view from a becalmed balloon. One seems, as it were, to have been divested of all ter-

restial connections, and, raised above the smoke and stir of that dim spot which men call earth, to be breathing, in delicious tranquillity, the purer ether of celestial regions.

The thing which at first seems most inexplicable is, that at such an elevation persons unaccustomed to great heights do not oftener turn giddy ; but I am convinced, by both experience and reasoning, that it is owing to the idea of complete insulation. Few people could rock ever so gently, for ten minutes, sitting on the truck of a frigate afloat, without losing their balance, yet I found I could hang over the slender osier woof of the car of the balloon in the air without any sensation of giddiness. In the case of being on the mast, or on a high spire, the real cause of vertigo is the consciousness of connection with the tottering or floating body below us. I proved this by looking up at our connection with the flying balloon above us, and then, for the sake of experiment, imagining the possible bursting of the machine, or the snapping of the ropes ; which in a moment created all the sensation of vertigo, but which did not last longer than I chose to entertain it. I found, however, that looking straight down on the ground was less agreeable than looking more horizontally at the prospect ; and I remember to have heard the same remark made by other

aeronauts. To return to our voyage, from which philosophy has induced me to digress, we found at about six o'clock that the balloon was still gently ascending; and at this time I became conscious again of increased altitude by a loud snapping in the ears. I therefore thought it prudent to check the ascent by means of the valve, and to get down into a region of less rarified air, that I might be free from annoyance, in order to observe the view: at length we thought it time to prepare for our descent, and, pulling the valve again, got into a faint breath of wind, probably only some stray eddy from the interstices of clouds, or the replenishing breeze of one of those slight electrical vacuums which I believe often take place in variable weather. A second or third pull made us come down more rapidly, and we were soon floating over the pine trees near Broomfield Lodge; and moving again with a moderate velocity, I now expressed a great wish to ascend again by throwing out ballast, and thus flying in the breeze to a greater distance, so as to view a large tract of country, but my companion fearing that we might be pursued by the horsemen, and that a crowd might collect and do damage to the balloon, I yielded to his apprehensions, and we came down rapidly towards the earth. In a few minutes we felt something take hold of the anchor, and a boy and some

men hauled us down into the middle of a field of oats.

I experienced no other inconvenience whatever during the voyage than the affection of the ears above described.

I shall now record, for the benefit of my philosophical readers, some observations made during the aerial voyage. And, firstly, with respect to the organ of hearing and the propagation of sound, I must observe, that at a very moderate elevation all the sounds below us, loud as they were, became inaudible; while it is well known that a lark on the wing above our heads on a spring morning is as distinctly heard to sing, when almost out of sight from elevation, as when he is near the ground: hence I admit the probability that sounds descend better than they rise.

I had an opportunity of noticing very distinctly the manner in which cumuli below us subsided into fog in the evening, which, stretching over the marshes as it descended along the course of the water, had the appearance of white smoke.

The temporary deafness produced by change of elevation is, in fact, caused by sudden rarification; the air enclosed within the auditory apparatus expanding as the external pressure is lessened, whereby the chorda tympani is stretched. In descending

again, the reverse phenomenon takes place, but in either case the effects are similar.

The pressure from impetus of blood to the head when we descend from high hills, after the fatigues of ascent, enhances the effect, and produces momentary confusion; hence I would advise all persons, subject either to what the Italians call *capiplenium*, or to headache, to submit to depletion previous to ascending to a great altitude, as a good precaution against danger. I felt so certain of the effect on the tympanum which I had to encounter, that I made up my mind to it beforehand. In persons in whom the Eustachian tubes are perfectly free from obstruction, this effect might possibly not take place. Sadler, Lunardi, and indeed most aeronauts, have experienced this painful effect of a quick descent.

When at a great height the prospect below seems concave, the horizon being elevated all round like the ridge of a bowl—at least so it appeared to me. On a mountain, the convexity of our terrestrial support, and the peaks of other mountains, probably destroy this effect.

I at first intended to take up with me an electrometer and other electrical instruments, but I am persuaded, that from the humidity of the surrounding atmosphere, I could not have used them, and if we had had sudden squalls and changes of currents in the air to

encounter, which I suspected might be the case, we might have broken them.

I shall conclude with some remarks, which may be of use to other aerial travellers, arranged under distinct heads; they may serve as a guide for future observations and discoveries, and point out what are the accidents to be guarded against:—

Of Giddiness.—Habit, the having been accustomed to be on heights, and perhaps something in organization also, have guarded me against all apprehension of giddiness; neither am I sick at sea, either from the rolling motion of a cutter before the wind, or the saltigrade progression of a steamboat, but as all persons may not be so circumstanced, I may venture, in the absence of experience, to hazard some conjectures on the mode of preventing giddiness in all these cases of unwonted motion. To those who cannot look down from a pinnacle with ease, I would recommend not to look, on first ascending, directly on objects beneath the balloon, but on the distant horizon. In a similar way formerly, and before I was used to the motion of a floating vessel tossed on the billows of the ocean, I have kept away the sea sickness by fixing my attention on distant objects on shore, or on ships afar off. The cause of this is, that there is less change of relative position perceived, because the angle subtended by distant objects varies

with less rapidity. I am fond of scudding quickly in the air, over a rapid succession of terrestrial objects; but I question if this be not the very thing which persons not used to sailing would be annoyed by. Again, the oscillation of the balloon and car in mounting slowly is less agreeable than direct motion; just in the same way that a barge in a wallowing sea, with little wind, would be more annoying to persons accustomed to it, than the going through the water swiftly in a sharp keeled vessel with a light breeze on the beam. I differ with those who think that the shaking is the sole cause of sea sickness.

In ascending, the balloon has a rotatory motion, which some persons might find very unpleasant; and what is very curious is, that this oscillation appears usually to take place in the order of the signs, that is, from right to left, taking the upper vertex of the balloon as the north pole. If this be always the case, it would look as if there were some cause for the direction of this motion beyond the mere mechanical effect of ascent; or as if bodies afloat in air acquired polarity. Of this, however, I have said more in another place: it belongs rather to natural philosophy than to medicine.

§ 3.—Statement of the various effects produced on the Human Organism, and particularly the Organ of Hearing, by Changes in the Rarification and other Conditions of the Air, with Observations on the Means to be adopted to mollify or to prevent the same.

As I have already described the results of my own experience of the effects of changes in the rarification of the air, during my own alpine as well as aerial voyages, I shall now proceed to compare these results with those of other travellers who have either ascended very high on mountains, or in balloons, but particularly the latter, as they afford much more striking examples of the effects of change of situation, because, from the rapidity of ascent and descent, the changes are quicker performed, and the effects the more striking.

M. Pilatre de Rosier, the prototype of aeronauts, made the first voyage ever performed in the air, in a rarified air balloon, 74 feet in vertical diameter, from the garden of the Palace la Muette, at Paris, on the 21st of November 1783. He was accompanied by the Marquis d'Arlandes. They ascended to no considerable height compared with what has been achieved since, though probably above 1000 feet, and consequently they experienced no pressure on the ears. But MM. Charles and Robert, who ascended from Paris, on Monday, December 1st, 1783,

with an inflammable air balloon, mounted much higher: they came down at Nesle, and after M. Robert got out, the balloon ascended again with great rapidity with M. Charles alone, and such was the height to which he was carried, that when almost out of sight of the earth, he felt an extraordinary pain in his right ear and in his maxillary glans, which he attributed to dilatation of air in the cellular substance, from the suddenly increased rarification of the atmosphere: he was at this time about 10,000 feet high;—the pain gradually went off as he descended.

M. Blanchard, who made his first voyage in a balloon, from Paris, on the 2d of March 1784, surpassed the clouds, and yet felt no other particular sensation except a sort of drowsiness, which has frequently been experienced by aeronauts. But in his voyage from Little Chelsea, on the 16th of October 1784, on mounting to a very great height, he felt a difficulty of breathing, similar to what M. Green described, when he ascended very rapidly from Colchester in 1829. I am inclined to think this inconvenience, even in persons disposed to it, may be avoided by making a slow ascent. We find nothing unpleasant recorded by MM. Morveau and Bertrand, who went up from Dijon on the 25th of April 1784, to the reputed elevation of 13,000 feet. Nor has M. Blanchard

recorded any sensation produced by his ascent of 9000 feet, from Rouen, at seven, P. M., on the 23d of May 1784.

On the 15th of July 1784, at near eight P. M., the two MM. Roberts and the Duke of Chartres ascended in a balloon from the Park of St. Cloud. During this extraordinary and dangerous voyage we read of no particular sensations; but perhaps the simple deafness, being a thing of common occurrence, was not thought worth while recording.

Vincent Lunardi made the first aerial voyage ever seen in England on the 14th of September 1784, but records no particular sensation.

The longest and perhaps the most interesting aerial voyage ever made was that of MM. Vallet, the two Roberts, and Collin Hullin, from Paris, on the 19th of September 1784, but it was rather signalized for length than height, and no uneasy sensations are recorded.

On the 4th of January 1785, Mr. Harper ascended in a balloon from Birmingham in hard rain, but rapidly passing the clouds, got into a clear air above them. Describing this voyage, he observes that he experienced no other sensation of an unpleasant kind except temporary deafness.

On Friday, the 7th of January 1785, MM. Blanchard and Jefferies made the celebrated

aerial voyage across the Channel from Dover to Calais, during which they did not ascend very high, and to this cause I ascribe it that no account is given of any deafness: besides, Mr. Blanchard does not seem to have been subject to this affection: some persons are not. When I descended from Mount Jura into Switzerland, on Monday, the 29th of July 1822, on arriving at Gex, I suffered not only from temporary deafness, but from pressure and a feeling of fullness about the ears; but my wife, who travelled with me, did not experience any such sensation. Again, the same person is not always affected in the same way, though under apparently very similar circumstances: after my ascent of Mount Cader Idris, in Wales, on the 14th of August 1814, I was for some time slightly deaf, and felt fullness in the ears; but on descending from Mount Snowdon, which is higher, in August 1815, I felt no sort of inconvenience. Another thing too I must remark, that the deafness which I experienced, after my descent from the aerial voyage in the balloon, on the 30th of April 1831, was attended by very little fullness or sensible obstruction in or about the ears, but merely a difficulty of hearing: in this respect it differed from the affections which follow descents from mountains; in the latter case something may be added, by the fatigue, to the ordinary effect of change of

altitude. Col. Beaufoy describes the slight deafness and pain, and distension of features which he experienced when he descended from Mont Blanc, in Savoy, about forty years ago.

I shall now proceed to some more modern aerostatic experiments, and shall shew that the same or similar effects have been produced by ascent and descent on the organ of hearing. It may be observed, with regard to aerostation, that there was a long lapse of time about the end of the last and beginning of the present century, in which, during the French war, we heard very little of ballooning in England; and it was not till the happy return of intercourse with the Continent, in 1801, that any remarkable voyages have been recorded.

On Monday, the 28th of June 1802, M. Garnerin and Capt. Snowden ascended from Chelsea Gardens, and came down near Colchester in less than an hour. No unpleasant sensation, except the slight affection of the ears, before alluded to, was felt. I saw M. Garnerin ascend again in a long balloon, on Monday, the 5th July 1802, from Marylebone: he descended at Chingford. On Tuesday, August the 3d, in the same year, in the evening, both M. Garnerin and his wife ascended from Vauxhall. Early in September he ascended from Bath.

On Tuesday, the 21st of September, M. Garnerin ascended from the Park, London, and came down in his parachute. This novel mode of descent made him sick and faintish, but in no other way injured him: the rapid whirling and oscillation of the parachute in falling is sufficient to account for his faintness.

On the 1st of July 1803, M. and Madame Garnerin ascended from St. Petersbourg. In the middle of July, of the same year, Mr. Robertson, accompanied by M. Lhoest, went up in a balloon from Hamburgh, and having attained a great height, he could scarcely endure the cold; his teeth chattered, his head became swelled, and blood came from his nose. M. Lhoest, his companion, was violently affected, but in a different way; it was simply such a swelling of the head that he could not bear his hat on. They both had singing of the ears all the way down, but the other sensations of pain disappeared on getting towards the earth. At their greatest elevation they could scarcely hear each other speak. A bird, taken up with them, was killed by the extreme rarification of the air.

On Monday, the 12th of August 1811, Mr. Sadler, jun. and Capt. Paget went up from the Mermaid Tea Gardens, Hackney, at about three o'clock, and descended near Tilbury Fort, Essex. In perusing the account

of this voyage, I find temporary deafness noticed on descending. See *Philosophical Magazine* for 1811.

On Thursday, the 29th of August 1811, Mr. Sadler, sen. and Mr. Henry Beaufoy ascended from the same place, Hackney, and descended near Kelvedon, in Essex. Mr. Beaufoy records, among other things in his interesting account of this voyage, that he felt a singing in the ears and some deafness, after descending, as well as while in the air. See *Philosophical Magazine* for 1811.

On St. Swithin's Day, Friday, the 15th of July 1814, Mr. Sadler and one of his sons ascended from Burlington Gardens, London, and fell at Great Warley Franks, near Ockenden, in Essex. During this voyage, and at a great elevation above the clouds, Mr. Sadler felt great positive pain in his ears, which his son, soon afterwards, felt also, but in a less degree. Mr. Sadler mentioned that he and Mr. Windham had both felt this pain in the ears when they ascended together, above thirty years before. See *Gentleman's Magazine* for 1814, vol. ii. p. 81.

On Friday, July the 29th, 1814, Mr. W. Sadler ascended again from Burlington Gardens, accompanied by another person; they remained forty eight minutes in the air, and fell at Coggeshall, in Essex.

On Monday, August the 1st, 1814, Mr. W. Sadler went up again from the Green

Park, London; and in this voyage he with difficulty saved his life; for not only did the valve of the balloon freeze, so that he was unable to check the ascent of the balloon, but the net burst at the top, and he perceived the balloon gradually protruding itself through it; so that he expected every moment to be precipitated to the earth. He saved himself, however, by tying the long silken neck of the balloon round his body, and after being carried to a tremendous height into a cold air, wherein he was almost frozen, he at length came down into Mucking Marshes, opposite Gravesend. This was on the afternoon of the great fete given in the Park, in celebration of the Battle of Paris.

On Thursday, the 17th of June 1824, Mr. Graham ascended with Capt. Beaufoy from London, and in this, as in other voyages, we find the aeronauts complain of singing in the ears and deafness on beginning to descend, and for some time afterwards. Capt. Beaufoy observes, in his account of this voyage, that for a whole day afterwards, whenever he attempted to blow his nose, he was sensible of a loud snapping noise in his ears like the report of a pistol.

On Tuesday, the 19th of May 1829, Mr. Green ascended from Chelmsford, and fell at Hornsey.

On Saturday, the 30th of April 1831, Dr. Forster and Mr. Green ascended from the Dominican Friars, at Moulsham, which voyage and its incidents are described above.

On Ascension Day, in the same year, Mr. Green ascended again from the same place, accompanied by two persons, and came down at Baddow, only two miles from the place of ascent.

In all the above accounts, the details of which I have examined, I have found that whenever the balloons have gone to any great height, the aeronauts have experienced sensations of uneasiness in the ears, &c., but with the modifications which I have described, depending, no doubt, on varieties of constitution, and of the state of the atmosphere. The voyages have been made in various climates and times of year, by persons of dissimilar habits and constitutions, and during different kinds of wind and of weather. These circumstances therefore leave no doubt on my mind that the affections of the ears and other parts of the organism are produced by some general causes; probably by sudden changes in the density of the atmosphere; and perhaps aided by some other aerial agency with which we are at present but little acquainted. That we possess but little power, by means of art, to prevent these sensations altogether, I am convinced; at the same time I am equally convinced that

simple diet and active habits, by giving strength to the body, and at the same time preventing repletion, would in a great measure mitigate the effects of all those external causes of disorder which are beyond human control. With regard to sickness, whether at sea in a ship, in a swing, in a carriage, or in the air in a balloon, I am persuaded that those persons who are subject to it would do well to empty the bowels by physic previous to their voyage, and to take but little food just before setting off. In short, the *Medicina Simplex*, so amply explained, and so forcibly insisted on, in these sheets, is the real thing necessary, in order to counteract the various evils of artificial life, which are more or less entailed on every body as the natural antithesis to the boasted blessings of civilization.

§ 4.—Rules for Travellers.

Some persons being liable to become sick at stomach in a close carriage, or in a ship at sea, I am induced to subjoin these following short rules:—

1. Before you travel, either by sea or land, take care that the stomach be properly cleared. Suppose, for example, you intended to begin a voyage on any particular day in the week, say Sunday—you should open your bowels on the Friday night

previous with Pill No. 20, and perhaps take a draught of the Mixture No. 1 on the Saturday morning: the stomach would then be cleared out, and the operation over in good time. On the Saturday or day previous, eat but little, and only of solid, easily digested food; and be particularly attentive, on the morning before you set off, to take only a very light breakfast. This will often prevent sickness at sea as well as in a carriage on land.

2. When at sea, look on objects at a distance, and not on the water below the sides of the ship; and hold fast to some rope, or to the side of the vessel, so as to make yourself a part of the moving machine. This prevents the compound motion of your own body and the ship, which often disorders the stomach. To suck lemon or acid fruit is a relief, but to some persons the very smell of brandy produces the disorder.

3. Never eat in a coach, nor suffer any children to do so whose health you value. You will take no hurt by fasting; but by feeding while the stomach is in the unnatural condition produced by a close and jolting journey, you may do much harm.

By observing all these rules strictly, much uneasiness, and even ill health, may be avoided.

CHAPTER VIII.

§ 1.—Of the Calendar and its Medicinal Rules.

I now come to the detail of a subject the most curious and interesting of any part of our inquiry. I have hinted at it before, but it deserves a more particular investigation; I mean the object and effects of that powerful director of our pilgrimage on earth—the CALENDAR OF THE CATHOLIC CHURCH—and I shall be able to show in the sequel, that it is the great *regula medicinalis* of the human body as well as mind; the perpetual preservation against the untimely exercise of the various functions of nature, and the incidental temptations of the world; and is calculated to give consistency and permanent effect to all those maxims of antient wisdom which have been embodied in the discipline of the Church, and which afford a standing proof of the philosophy and good sense of her early councils. Genius, breaking out here and there among men rising in knowledge as science advanced, may be considered, as it were, scattered sporadically over the surface of the civilized world; but the inventive instinct of genius, and the labours of talented individuals, would have been limited in their range or wholly lost, had it not been for the grand principle of concentration established by catholicity; in

consequence of which, all able men, from the scorching equator, to the frozen arctic regions, brought their discoveries, their improvements, and even their suggestions, for the advancement of moral man, to the great Councils of Rome and her dependencies. The Papal Chair became the centre to which all that was useful or novel was brought, and from which, in turn, all that had been submitted to competent Councils and approved, was sent out again to every part of the Christian world, for the general use of man. Thus the Holy See was a centre of unity, from which rays of light spread all around, diffusing knowledge, prescribing rules for the best use of time, with medicinal orders and salutary restrictions, and thus diffusing human happiness. If we dispassionately reflect on the arrangement by which this was effected, we shall find it the only one by which general good could have been diffused over a large space of ground; for every art and science, from the remote parts of Christendom, tended to one point, and from that one point was again multiplied over the globe; so that, in this respect at least, Catholicity was a cosmopolitan scheme for giving to *all* the benefit of *each*. Man, in his individual capacity, wandering and imperfect, became a part of a great community, of the whole of whose collective knowledge each had the benefit. Catholic

Christianity is in fact a community of interests, and a commerce of mutual helps, with one sublime eventual reward, for its object. And it is only because the schisms of modern religionists, aided by the insanity of mind which ill conducted health has entailed on the dupes of private superstition, have bewildered the human understanding and perverted the judgment, that this great principle has been lost sight of, among the farcical errors of new fashioned fanaticism. Unanimity was necessary to give effect to the Christian scheme, but unanimity could only be produced among the diversified minds of erring mortals, particularly in matters above the grasp of reason, by having one rule of faith and conduct. In establishing this rule, which, when once determined on, should be afterwards permanent, the true philosophical method of representative government was acted on; for the great Councils of the *elite* of the Church were chosen and assembled by the people; and, with the Pope at their head, they consulted, interpreted the Gospels, and founded the great *Regula Vitæ* on them, assisted by the collective wisdom of an assemblage of talented but diversified minds. Hence the authorities on which received truths were based were of the most perfect kind; and the best proof of the fact, that it was a perfect system, is to be found in the history of its effects, and of the bodily

and physical calamities which men have brought on themselves, in later times, by its abandonment. But this is too wide a field to enter on in this work ; I shall therefore confine my observations to medicine. At the same time, however, it is necessary to remind the reader, that the body and mind are so closely connected, and so reciprocally operative on each other, that no system of medicine is perfect which does not embrace the mental as well as the corporeal causes of health. From the bias of professional prejudice, and the *idola fori*, as Lord Bacon called it, moralists have insisted too much on the one, and physicians too much on the other.

Among the most powerful sources of health may be reckoned ease of mind ; while the reverse state leads to inevitable disorder. Hence the steady and unquestioned hopes of eventual felicity produced in the minds of unanimous Catholics by their faith, together with the equable, and, as it were, well balanced affections and passions, and the sanitary interchanges of joyous festivity, and of austerity and penance, which the rule of discipline enjoins, have a remarkable tendency to keep both body and mind in a sound state, and to fit man for the satisfactory exertion of his native energies. What can give so useful a stimulus to the exercise of our faculties, as the having in view some

permanent object of ultimate attainment, of immense value, and with which all our actions are in real or supposed relation? The ancient Polytheism and its Elysium, which was in fact, as Guerrin du Rocher says, only a very imperfect heresy from the ancient religion, implied, in some measure, the necessity which there was, that hope should be carried beyond the tomb, in order to stimulate men to useful labours; but it was Catholicity, with its unanimous consent of doctrine, which brought the requisite state of mind so nearly to perfection. And thus we see, that after the decline of Grecian and Roman letters, men were roused again, from the horrors of Gothic barbarianism to a high state of the arts, by the efforts of religion;—whence the great schools of painting, of logic, of classical literature; the perfection of ecclesiastical architecture, the churches, cathedrals, and the wonderful foundations and schools of charity, of piety, and of knowledge, had their origin; all of which have been abused in modern times, or supplanted by jails—the appendages of public delinquency—because the *Conservative Rule of Catholic Community* was partially destroyed, and the selfish system of monopoly, to which sensualists accommodated their fanaticism, had partially taken its place. History proves the great increase both of crime and of insanity which took

place immediately after the pretended Protestant Reformation; and the same evil is still complained of. Medical inquiry also shows the more severe inflictions of epidemical and general disease with which England has been scourged since that unhappy period, in consequence of the laying aside of the salutary rules of health and of penance, and the beastly gluttony and debilitating passions which followed. Hence those more severe visitations of *Sudor Anglicus*, Epilepsy, and Plague, which we read of as following in succession.

One of the greatest efforts of the Christian policy in the regulation of human life, was the composition of the Calendar, which established rules of conduct, for every period of the year. It was a promulgation, on a grand scale, of the advantages, both spiritual and temporal, to be gained by the judicious distribution of time, accompanied by a perpetual record of the most memorable events in religious history: it pointed out also the natural phenomena of the year, and the astronomical divisions of time; and contained dietetic and sanitary rules for each season, useful both as penance and as medicine. It propounded also the most difficult of all regulations—the rule for suspending rule, or in other words, it diversified the offices of our pilgrimage, and chequered the picture of life with the most pleasing vicissitudes of

fasting, feasting, and rejoicing; and above all, it taught men to connect all their periodical diversions with the hopes of future felicity, by pointing out the days on which great events in Christian history are celebrated, as the proper public holidays, for the amusement and recreation of the poor as well as the rich. The Protestants, since the "Reformation," have done much to deteriorate these festivals, and to render both them, as well as the Sundays throughout the year, dull, spiritless, and puritanical. Sundays and holidays should be chiefly devoted to religious duties, I grant, and to the commemoration of the Saints, or great events of the day; but they are not *Sabbaths*, as the fanatics pretend, but public religious festivals. Even Milton, the great Protestant writer and poet, has shewn that the Sabbath was abolished by Christianity; and the DOMINICA, or weekly festival of the Lord's Day, substituted in its stead by the Catholic Church. But then this was never intended as a day of gloom or suspension of amusement. Sunday evening should be spent in diversion, as it is in fact, by the higher orders, and by sensible people; for otherwise the poor labourer, who toils every day in the week, has no periods of pleasing relaxation. The truth is, the Protestant "Reformation" was a revolution, which operated solely in favour of riches and hypocrisy,

and one which shut the poor man out of every innocent enjoyment of life, with which the good old Catholic Church had amply provided him. I am positive both of the policy and religious utility of combining the duties of Sundays and Festivals with public amusements, as our forefathers did, and as is done now in many Catholic countries. It not only keeps the mind agreeably excited, but teaches us, even from childhood, to connect religious observances with ideas which delight the senses, cementing our notions of temporal and future happiness together, by an habitual and natural association of ideas.

Cowardice and pride, at that happy period in our Catholic history to which I have made allusion, had not sapped the virtue of the wealthy, nor its reaction appeared in the vulgar insolence, insubordination, and discontent of the poor; in those times, I say, the coming round of the great feasts, fasts, and holidays of the year made up the principal objects of the poor man's solicitude; for while they afforded him temporary relief from toil on earth, they taught him to connect all his pleasures with his duties. I have elsewhere said, and I repeat it as an important truth, that the return of the various feasts then constituted the truest of human delights, for they afforded pleasure without the alloy of regret at the flight of time with which the returning

seasons alone would embitter the most agreeable sensations. Every festival marked some period in the progress of the life of a pilgrim to Heaven, which, while it subdued the force of sorrows, gave animation to present joys, and made existence almost appear to be beginning, where moral life ended; thus pouring the balm of consolation over cares and trouble, while it steeped the interludes of fleeting mirth and festivity in the spirit of everlasting happiness.

In ancient families the children looked forward from festival to festival as to important joyous periods, and counted the days from Christmas to Easter, and from Whitsuntide to the Assumption, as marking the return of holidays, when, after salutary penances, they should dance and sing, and skip on the green, decorated with garlands, to the sound of the merry pipe, in a season of religious exhilaration, when old and young come forth to enjoy festivities in which, by social communion and pleasantries, they forecast the joys of heaven.

The aged enjoyed these festivals, as well as the young; the infirm, in moments of ease, as well as the vigorous; for to all they told the impressive tale of joys to come, merged the value of present pleasures in the importance of their future entail, and consequently tended to equalize the value of life to all. Reason and faith taught every

body, in those days, that time was of little moment compared with everlastingness. And whether life was reduced to the lingering memory of a second childhood; was enjoyed still in the full vigour of manhood; or was as yet only dawning on the expectancy of youth; it was viewed merely as a passing moment of trial, the beginning or point of commencement of a great something called eternity, in which the changing qualities of time and space would be lost in a perpetuity of enjoyment, on an infinitely magnified scale. The very exterior of every church was then an instructive emblem: the spire pointed to the place to which men are to aspire; the cock on the vane was an ensign of vigilance which always moved accordant to the breath of heaven; the painted windows were storied with inspiring subjects of religious history; every niche in the wall was filled with images of saints and exemplary persons; and the bells in the steeple called the faithful to prayer, imitative in their sweet notes of the admonition of the original preachers, some deep, some shrill, some loud, some mellow, but all in melodious harmony: the lighted tapers were emblems of joy, and the music was expressive of the concord of an united congregation. All this compendium of admonitory and healthful excitements is still to be found among the "Institutions of Catholicism,"

but it is abolished by all those specious schisms, of which private judgment of Scripture is the basis; and has never been a quotient in their delusive problem of contradictions!

Any philosopher who knows well the nature of the human mind will readily perceive that an unanimous people, with their thoughts fixed on a great future good, would find, in their religion, a source of relief from the *tedium vitæ* which destroys so extensively the energies of thinking men, and makes them dissolute, idle, and unhealthy. "For what," says the desultory speculator, "do I labour? In a few years it will be of no consequence what I have done. Why not, then, enjoy the pleasures of sense, while they last?"—Thus reasoning, the passions take the place of salutary duties, cares are brought on, and ill endured, and the mind and body acting reciprocally, a state of disease is induced, which saps the power of enjoyment, and shortens life. On the other hand, when a catholic feels that every action is of eternal consequence, that duties and labour lead to reward, and that each passing phenomenon is but a part of the accomplishment of some great design, then, and then only, is he stimulated to great and useful actions, while the consciousness of unity of purpose pervading the whole of society—namely, the labouring *ad majoram*

Dei gloriam, gives a buoyancy to the mind, and enables men to go through hardships with ease, and to enjoy, without remorse, the periodical recreations prescribed by the Calendar. It is in this manner, and on similar principles, that I can account for the superior health of catholic countries, in which fasts and abstinences are still observed according to the canon of the Calendar, and where people are still taught, in consideration of the comparative value of virtue, to preserve that equanimity amidst the vexations of life, which contributes so much to the healthy performance of the digestive functions.

The only persons who, in reality, reasoned correctly on moral ethics and the philosophy of life, were the ascetics of those early times, which have been called the Dark Ages, in the insulting language of modern paradox, by those hoodwinked dupes of a factious oligarchy who could not see their light.

In these days, although men are making great progress in certain branches of civilization and in science, yet human nature, always deceptive and imperfect, has grossly failed of late, in the right appreciation of the moral conditions of health, one of the principal of which is, *command of self*; another is *a due interchange of the various sorts of excitement*; a third is *a permanent object to be eventually obtained, which,*

by being always kept in view, should be capable, through life, of maintaining equanimity. A person brought up thus to regulate his mind, would find in the *Paradisus Christianorum* additional reason to act on Horace's excellent maxim:—

Rebus angustis, animorus atque
Fortis appare, sapienter idem,
Contrahe, vento nimium secundo,
Turgida vela.

All this was done by the rules of the ancient Calendar and the discipline of Catholicity—a familiar review of which will convince any reasonable mind of the truth of what I have said.

SUPPLEMENTARY ESSAY.

ON ASCETIC AUSTERITY, FASTING, ETC., SHOW-
ING ITS CONNEXION WITH PHYSICAL AND
MORAL EXCELLENCE.*

CHAPTER I.

IF any one who is capable of making accurate observations will take the trouble to observe, and to reflect on the manner in which people form those habits of thinking what they call their opinions, he will soon discover that, in addition to the impulse of individual organization, which varies in different persons, they derive them from three principal sources: namely, 1st, Authority, which, according as it is good or bad, comprehends either just authority, or evil prejudice. 2dly, Experiment, which leads to salutary or baneful results, according as it is accurate or inaccurate. And 3dly, The bias given to opinion from one's own particular passions, and imaginary interests, which last is, from the fallibility of human nature, the most fertile source of erroneous opinion, and one which, in men of weak and superficial minds, often supersedes every other.

* Some of these observations were published before, in a Catholic magazine.

The passion for strong drink affords a striking example of this truth. There is sufficient evidence of its baneful effects before the public, and familiar to every body, to justify the putting down of all the public sources of drunkenness, and of forbidding the free use of fermented and spirituous liquors in every private family; notwithstanding which, the interest in the revenue and excise on spirit on the one hand, and the passion for this execrable habit of unnatural stimulation on the other, combine their influence to render Great Britain, or, at least, England, one of the most inebriated, and, consequently, the most debauched country in Europe. For one sort of sensual indulgence leads naturally to another, by weakening the mental powers, and destroying the habitual control over the passions, which the common sense of mankind, the joint opinion of philosophers and moralists, and above all, the experience and authority of the Catholic fathers of the church, have shown and declared to be essential to the formation of a virtuous and energetic character.

Abstinence and fasting, both periodical and occasional, long as they have been corroborated by the common suffrages of mankind, wholesome as they have been shewn to be by the ablest medical writers, and sanctified as they have been by discipline

and practices of the church during eighteen successive centuries, have, nevertheless, fallen into disrepute, and have given place to baneful habits of gluttony and voluptuousness, in consequence, as it would seem, of the preponderance of the lastmentioned fallacious source of opinion over the other two. Reason and experience are, in the generality of mankind, more likely to suffer from the bias of passion than authority, because man is an animal, who, considered in the mass, is calculated to be swayed by the latter rather than the former.

An example of my position may be drawn from the disgusting profligacy which usually follows the springing up of any new heretical sect of Christians; for the authority of the mother church being lost, and nobody really respecting that of any of her spurious offspring, pride and sensuality soon get the better of reason, and a false religion is speedily formed, adapted to the depraved passions of the rebellious individuals: and an authority, which even heretics find requisite, is sought for, or rather conjured up, and put forth as being founded on a private interpretation and judgment of the Scriptures. This was remarkably the case at the eventful period of what the Protestants call the Reformation. This terrific heresy, which has done so much harm both to sound philosophy and to effective religion, seems to

have began by a laxity of discipline and a diminution of corporal austerities. Laxity and an increased luxury crept into the church, debased the courts of Europe, and pervaded the people. Rebellion against authority followed. The cupidity of a monarch, monstrous in iniquity, availing himself of the voluptuousness of the times, found means to tempt the people, by pandering to their passions, to throw off the spiritual authority of their great Christian pastor, promising them at the same time the spoils of the church. And thus it was that Henry VIII. was enabled to palm the false doctrines of the proud and lustful Luther, and the coldblooded, blasphemous Calvin, on the once good and faithful people of England. What followed is well known to every intelligent, and acknowledged by every candid historian,—a state of moral depravity never before known in Britain, which at this unhappy period seemed to rival even Protestant nations in the measure of her iniquities.

If ever there was a period in the world's history calculated to make the cheek of the student doubly pale, to make the pen fall from the powerless hand of the scribe, and the tears of the good man to wash out the direful characters on the paper that lies before him, in pity for the sufferings of degraded humanity, it must surely be the period of the Protestant Reformation.

It is probable that at this distance of time, and after so many lying scribblers have been employed to tarnish and falsify the records of history, and to poison the minds of youth, we have scarcely a distinct notion of the horrors of the Reformation, nor of the number of martyrs who suffered at the hands of the Protestants for their fidelity. But enough is known, not only to show the iniquity of the whole proceeding, but also to establish the fact, that all the actors in every scene of this tragedy were moved by an inordinate desire to gratify their own voluptuous desires, and to feed their rebellious pride, in direct opposition to the established precepts of the old, but newly discarded religion. It must be ceded in candour to Protestants, who will, of course, try to make the best of a bad cause, particularly when their own worldly interest is so closely allied to it, that there were abuses in the Catholic Church, which led to this Protestant Heresy. But we should also recollect the particular nature of those abuses; for the recollection of these bears closely on the subject in question—it was a relaxation of the salutary discipline of our forefathers, of which the most powerfully beneficial are abstinence and fasting, that paved the way for what followed. Self indulgence, as directly opposed to self denial, greediness as opposed to abstinence, drunk-

eness as opposed to sobriety, lust as opposed to virginity, avarice as the opposite of voluntary poverty, and pride as the reverse of humility, might naturally enough be expected, as was really the case, to lead to the temporary overthrow of a religion, which enforced the above virtues, and forbid the antagonist vices, and to pave the way for one which allowed more latitude to luxury and intemperance. That a state of body and mind, which is the natural result of habitual intemperance, conducted the victims of Luther and Calvin to the crimes of the period we are alluding to, is a fact, of which I am convinced, from having deeply studied and reflected on the natural tendency of intemperance in a medical point of view. If Luther could be credited for any thing, it is for the account he gives of the apostate priests of his time. And those who meditate much relaxation in fasting and abstinence, will do well to examine accurately the facts I am about to describe in these pages; and also to reflect well on the diminution of those salutary mortifications which led to the indifference to Catholicity that preceded the Reformation, and to the tremendous swell and deluge of sensuality which followed it, when once the protecting hand of Mother Church was violently wrested from her apostate children.

It was then that the benevolent friar and

the pious vestal were driven from their sacred retreats, and their religious houses, once the refuge of the poor, and the repository of sacred lore, vended to the proud and voracious lordling, who, loving luxury rather than austerity, was bribed thus to change his birthright for the mess of pottage—to throw up his religion, and become the pander to a profligate and avaricious monarch. The astonishing impudence with which the lying historians of the Reformation falsify every fact concerning it, which is the great cause of the prejudices entertained at this day against Christianity, is only to be accounted for on the principle stated above, combined with the recollection, that at the period we are alluding to it was dangerous either to write or even to speak the truth. To speak or write otherwise than on the apostate side of the question, was to run the danger of being banished by an intolerant monarch, or trampled by a Jezebel queen.

It is curious to reflect on the numberless mean and petty stratagems that were devised at the period we allude to, in order to prevent men from returning to the religion which was fitted for the solace of all their distresses. Even after the wicked prohibition of the mass was taken off, Catholics were forbid the use of many things which were emblems of the virtues of their reli-

gion. They were prohibited the use of bells, because, as it would seem, the sweet concord of these instruments had been so closely connected, in the mind, with the harmony of their worship, and the consolation of their prayers, to which they called them. They were forbid steeples, where the cock on the vane, emblem of watchfulness and of clerical vigilance, long disused, seemed ever to turn to the breath of heaven, to which the lofty spire appeared to point. Pictures and images of our Lady and of the saints were discouraged, because they supplied the defects of the imagination in representing holy persons whose chastity and severe austerities had become objects of dread. The music in Catholic chapels was silenced, for it was too pleasing a memento of the melodious alleluias which Catholicism represented the saints as singing for ever round the court of heaven.

So carnal, indeed, was the mind, and so cunning, forsooth, in the protection of this carnality, that I am persuaded, that if prescriptive could have been as easily managed as proscriptive laws, Elizabeth would have issued a proclamation, ordering her lustful liege subjects to devour daily a certain quantity of gross flesh meat, in order to dispose the body for athletic prowess, and to disqualify the mind for meditation and the exercise of the intellectual powers. The

story of her mode of choosing a yeoman is well known, in which, after rejecting two moderate eaters, she gave the preference to a vulgar beefeater, who replied rudely to her majesty with an oath. *

When fasting and abstinence ceased to be regarded as virtues, Englishmen reverted to brutal extravagances in gluttony, of which history has recorded no parallel since the luxurious reign of the Cæsars in ancient Rome. If there were no other proofs of this fact, the authenticated accounts of the feasts of those times, and of the bill of fare of Elizabeth's tables, would establish the fact beyond doubt. The intemperance of the times which followed the Reformation, led to the notorious *Sudor Anglicus*, or sweating sickness, in the reign of Edward VI., to the epilepsy, called falling sickness, and afterwards to the plague of London; for the reception of which, in these climes, the constitution was prepared by an effeminating debauchery, such as illiberal Christians are wont to ascribe to the Turks.

I shall conclude these preliminary remarks by observing, that when the good Catholic reflects on the detestable state of society at the time of the Reformation, when father was at war with son, husband with wife, mother with daughter—when confidence

* “Beef, and be d—— to you all!!!”

was lost, and to whisper was to betray—when the faithful were butchered and burnt at the stake—when hideous debauchery reigned dominant, and the saintly look of female chastity was a mark of scorn—when the historian was forced to be a libeller, and whoever could speak was compelled to blaspheme—when the very human voice seemed to lose its music—when men talked only in paradox, and the gift of speech was abused with falsehood, and the tongue articulated only the language of misnomer—when princes erected a false standard of judgment in their own caprices, and when to legislate was to oppress—when spiritual darkness was spread over northern Europe, that reminded one of the terrible obscurity that overshadowed Mount Calvary after the crucifixion;—when, I say, the Catholic reflects on all this, and becomes convinced how closely debauchery and the rejection of salutary fasts and penances is connected therewith, he will be convinced also of the propriety and duty of adhering to practices, notwithstanding their temporary inconvenience, which have been sanctioned by the combined wisdom of our ancestors; and will repeat with additional fervour his primal office, when he comes to the emphatical sentence, *Carnis terat superbiam potus cibi-que parcitas*.

I trust and fully believe, that in the above

picture of the state of society which accompanied and followed the Reformation, I have been guilty of no exaggeration, either voluntary or accidental, but that it will be fully borne out by facts.

In the formation of the above opinion of the Protestant Reformation, and its causes and effects, I have not been guided, as many may have been, by the prejudices of early education, which, as every physiologist knows, become so very often an immoveable basis to the errors of maturer life: on the contrary, I was brought up in habits of thinking and acting which were most hostile to the idea that powerful discipline, of any kind, was necessary to the effective preservation of human excellence. And in the formation of the opinion that I have subsequently adopted, I have yielded my assent slowly, but I trust with certain and irrevocable judgment, to the evidence which history afforded, after a laborious examination of her pages.

Those who think this remark foreign to the present inquiry, should reflect on the close connection which subsists between the body and the mind; of which the fathers of the church seem to have had a clearer view, and to have made a better use of it, than the doctors of medicine. The comparison which I have made, too, between the moral evils of the Reformation, and the dietetic habits

of society at that period, will not surprise or disgust the physiologist, when he considers that it elucidates the important connexion between the state of the animal machine, and the moral state of society: nor can it prove a scandal to the catholic, when it shows, as he will find it does show and prove beyond dispute, that the discipline which the consolidated wisdom of the early councils of the church superadded to her essential doctrines, for the better regulation of the faithful, and for purposes of salutary mortification, were also conducive to a more intellectual and elevated disposition of the mind, induced by means of a real though unsuspected regeneration of the bodily powers: nor will it be deemed a small incentive to the maintenance of the salutary penances alluded to, when it is shown that their gradual abandonment kept pace with the corruption of morals and the eclipse of intellect, and led eventually to a disgustingly vicious state of society, of all which we need no better proof, if others were wanting, than the history of our own country, from the growth of profligacy, superstition, insanity, and disease, in the reign of Henry VIII., to its consummation in the reign of William III., and its explosion in the French revolution of 1790. Nor can it escape observation, that the restoration of the catholic religion in Europe, the increase of

catholicity, and a more liberal policy towards it in heretical states, as well as the gradual developement and use of the antiphlogistic regimen, and a better understood pathology of the digestive organs, are now actually accompanying, if not producing, a superior state of morals, and are slowly and secretly merging the night of bigotry and oppression in the dawn of more liberal and enlightened days.

I request the particular attention of the philosophic reader to the following observation. The most complete proof that the manifestation of the powers of the mind depend on the bodily organization, is derived, since the discoveries of MM. Gall and Spurzheim, from phrenology. From this doctrine we also learn on what particular organs of the brain each mental faculty depends. But the organs themselves, like other parts of the body, are capable of material alteration in their functions, powers, and associations, by means of education. Hence it happens, that, varied as we are by nature, we are made to assimilate by art, in furtherance of the great civilizing object of the social compact, of which catholicity is the most perfect instrument. From phrenology we also learn how much the mind, depending on its organs, must be influenced by diet, and by other sanitary, or insalubrious customs.

Some persons may take objections to this

doctrine by saying that it tends to materialism: those who do so, however, do not attach clear notions to metaphysical words. What we are primarily conscious of are sensations: when we can designate any of these by the terms hardness or resistance, and when, by the faculty of individuality, we ascribe this sensation of hardness, and some other sensations, as of form or colour, to one and the same external cause, operating on the several senses, we designate that cause by the name of matter. As the living *body* is the medium of, so the *mind* is the capacity for, sensation, and the posthumous continuance of this identical capacity is the *soul*. The delusive philosophy of David Hume has been completely overthrown by the logical metaphysics of the "Essay on an External Universe;" and men will not again impugn the opinion of ages, on the ground of their own speculations. But had it not been for the subtile falsehoods of Hume, and the blunders of Locke and Paley, it would never have entered into the heads of men to say, that in placing the sensations under the influence of the *medium of sensations*, we identified the latter with the *capacity for sensations*, or destroyed whatever grounds before existed for believing in the *eternal continuation of that individual capacity*.

An argument was once attempted against

the ascetic rigour of fasting and other catholic practices, on the grounds that the heathen religions had fasts. This is, however, another of the absurd subterfuges of those who would revolt, without knowing how. We might just as well impugn the doctrine of the intercession of the saints, on the ground that the Greeks and Egyptians invoked the aid of their tributary gods; or the belief in the Deity itself, merely because savage tribes worship the sun. Fasting originated with the Jews, and like many other sacred rites, spread from Judaism into idolatrous nations, was incorporated with their orgies, and was mingled afterwards with the polytheistical religions of ancient Egypt, Greece, and Rome. Just as the few enlightened doctrines, and salutary practices, now to be found among protestant sects, are but scintillations of catholicism. The good councils of an eloquent mother are preserved entire by the faithful children; but the spurious progeny always retain some of her features. There are, indeed, some striking marks of resemblance between the ceremonial and adjunct parts of the Jewish and Catholic religions; there is also an imposing superiority of Jewish over any heretical Christian worship, which makes one reluctantly confess that Judaism is preferable to perverted Christianity. And the reason is this: Judaism was once, as catho-

licism is now, the uniting religion, and derived its institution from the same source, being an authentic rule of holy and of healthy life. Both Judaism and Catholicism are distinguished from the collateral heresies of the times in which each prevailed, by consistency, unity, a splendid ceremonial worship, and promises of reward, founded on sound morality, and the merit of good works; the false religions collateral to each, by which certain apostates were led away, have been equally distinguished by want of unanimity, superstition, bad morals, and the depreciation of good works. The superstitious worship of the golden calf, and the perpetual falling off of the Jews into idolatry, may be compared to the antinomian fanaticism of our modern evangelicals, who worship an idol of imagination, a frenzy of belief in something, which they call a "justifying faith," to the almost total rejection of good morals. And Luther and Calvin, who drew the unguarded children of Christendom into heresy, may be compared to Jeroboam, the son of Nebat, who made Israel to sin. And, finally, let it be remembered, that both Judaism and Catholicism have ever been distinguished from apostates and heretics by their periodical fasts, feasts, and ablutions; by coupling prayer with abstinence; by the intercourse with, and the intercession of, angels; and

by sackcloth and ashes, hair shirts, and voluntary privations; by means of which they have fitted the body for those elevated sentiments of the mind, which have led to great and heroic actions; while schismatics from Christianity have been lured away by lust, like the faithless among the Jews of old; and that there is much resemblance between those apostates, who panted for the sinecures procured by the sacrilegious plunder of King Henry VIII., and the stray sheep of the house of Israel, who longed after the flesh pots of Egypt.

From the different manner in which the several professions are educated, independently of the varieties in the natural organization of minds, it may readily be expected that dissimilar views will be taken of the same subject. I view religious institutions as a philosopher and physiologist, not as a divine. I see in the wise institutions of Catholicity, a source of human improvement, and of popular protection against tyranny, and above all, an ample provision against disease both mental and bodily. In monastic institutions, a check to population is afforded of the purest kind, and one which is strangely contrasted to those fearful sources of depopulation recommended by parson Malthus. And it is a fact illustrative of the inconsistency and cruelty of protestant paradoxes, that those who con-

demn the voluntary celibacy and poverty of the catholic vestals, on the pretended grounds of humanity, have been the foremost to recommend legislators to discountenance the early marriages of the poor, as a check to population, and thus to deprive the labourer, who tills the earth, of the means of employing such small portion of its fruits as he may reap from daily toil, in maintaining the comforts of a family, to cheer the long and tedious hours of his pilgrimage, and make his old age happy. I repeat, that looking as I do, as a moralist, on the Protestant Reformation, viewing it in all its consequences, and comparing its fruits with those of Catholicity, I am induced to regard it as one of the greatest evils that ever befel this country. The poor were despoiled of their rights; and the consolations which religion afforded, under wrongs, were destroyed by the mutual bickerings of a thousand new sects, and the gradations of doubt which succeeded one another among half enlightened men, which ended too often in total infidelity. The first breaking up of the public faith of Christendom, which became necessary to the plunder of religious property which was contemplated, led to all the confusion which has since followed. The Catholic alone remained steadfast to the creed of his ancestors, and continued bound by its religious obligations. The Protestant Episcopalian affected

to condemn the Catholic for believing in the Real Presence, while he retained the equally incomprehensible doctrine of the Trinity; the Lutheran boasted of his capacity to believe consubstantiation; the Calvinist preached predestination, and filled his hearers with gloomy views of futurity; the Arian found fault with the Trinitarian; the Socinian sneered at the distinctions of the Arian; the Deist abused the Socinian; and the Atheist laughed at them all!!! In the mean time swarms of new sects of untaught, unauthorised and imbecile persons arose, and all mutual confidence being lost amidst this modern Babel, and the state being endangered by the immorality and excesses of men left without any bias from religious direction, deadly persecutions were instituted against all who differed from the new state religion! This is the true picture of what happened, and I will ask any physician whether in such a state of doubt and anarchy, any of those medicinal and moral consolations are to be found which distinguish the institutions of catholicity? The truth is, that the nature of the human mind is still but imperfectly understood by philosophers; the value of moral agents is overlooked in medicine, as that of medicinal agents is in morals; and it will never happen, till religious persecutions are at an end, and *inquiry left perfectly free*, that a true *Philosophy of Mind*, embracing

all the elements of human knowledge, and all the defects of imperfect organizations, together with their respective remedies, will again be duly understood and appreciated.* For that which authority enjoined in former times, must in this age be made a subject also of reasonable discussion: and when that discussion shall be fairly undertaken, free from interest, or the prejudices of party views, I feel persuaded that the same doctrines will be resumed which resulted, of old, from the deliberations of the early councils, who founded by degrees the wise institutions of Catholicism.

In pursuing this great end, we must never forget that what are called moral and physical agencies have a reciprocal operation. What the mind perceives are sensations, and it is in the right appreciation of the moral value and causes and consequences of these, that judgment of the truth depends.

To return from this excursion to medicine: I have known many cases of hypo-

* See the following works: Bellarmine *de ascensu Mentis in DEUM*—the works of St. Jerome and of St. Augustine, &c.—the *Essai sur l'Indifference en matiere de Religion*, by the Abbe de la Mennais—the works of the Abbé Guerrin du Rocher, *sur le Mythologie*, &c.; and Lady Mary Shepherd's *Essays on Cause and Effect*, 8vo., and, *On the Perception of an External Universe*, 12mo. Also, Mr. Clissold's little pamphlet; and my *Preface to Locke's Letters*.

chondriacal melancholy where the mind could not easily be restored to a sound state, even after the physical cause in the liver had been removed; because the mental cause remained; and this cause has frequently been some religious delusion, which would not have occurred under the regime and discipline of the catholic church. I mention these things merely as medical facts; and I take leave of the subject in the hope that its importance will draw on it the attention, not only of the nosologists, but of others, whose historical and theological knowledge may furnish the means of doing it more justice than I can pretend to, confined as my studies have been within the more narrow limits of natural history and physiology.

From the remotest ages, as far back as history enables us to trace the practices of men, we find fasting mentioned as a salutary practice, both for mental discipline and for regeneration of the animal powers. The early institutions of the Jews had, superadded to their penitential object, the additional merit of preserving health of body. Their forbidding pork and other luscious meats, called unclean from their gross effect on the body, as well as their numerous fasts and ablutions, had all of them a tendency to keep pure the animal juices, and render the frame fit for labour both of body and of mind.

Perhaps to these sacred institutions we may trace that look of health and personal beauty so often remarked in Jewish children, and in those persons in general in all countries who observe fasts and ablutions: indeed washing and bathing are too much neglected in the north of Europe. There are two grand sources of a predisposition to disease. 1st. The engendering of a bad constitution in youth by unwholesome diet and slothful habits; and, 2dly, the transmission of such injured constitutions to posterity. Both these are fertile sources of disease, and may engender, as Dr. Carmichael of Dublin observes, that fearful train of symptoms usually denominated by the terms scrofulous and cancerous diseases. I take it that endemical predispositions to disease, as well as the particular healthiness of certain people, and of certain nations and tribes, are generally the consequence either of a combination of these two fertile sources of cachexia, or of its converse, habitual wholesome food, good air, exercise, and salubrious habits in general.

I have lived for three years as wholly on vegetable food as Pythagoras himself could desire. I was well, and experienced increase of intellectual power, but was liable to *some* weakness on taking great exercise. I afterwards tried an habitual full diet of animal food; an increased and deceptive appearance of strength *at first* was followed by weak-

ness from oppressed arterial circulation, and an increased tendency to headache and disorders of the digestive organs. I have latterly observed habitually a diet of good nutritive food, with periodical abstinence, and occasional more complete fasting, with the greatest combined advantage of strength and of freedom from plethora, and a consequent activity of the brain. Some of my cotemporary students of physiology have practised and testified to the virtues of the same line of conduct; and thus we have the pleasure to support, by experience, a practice which is venerable from its antiquity, and sanctified by its religious use. That persons would all be in a much safer state of health, whose habitual temperance and a periodical abstinence prepared the body for a more austere fast in the trying season of the spring, is a fact of which I am persuaded, more than I am of any other medical fact that I know of; and it is wisely observed by St. Basil in his *Homily de Jejunio*, that as wrestlers train themselves by exercise before combat, so ought Christians by abstemiousness to prepare themselves for fasting.

The sapient institutes of Moses, with regard to the diet, and habits of the Israelites, prepared them for any fasting or austerity which they might have to undergo. The customs of the early Catholics did the same in a greater degree. The Lenten Fast cannot

try the constitution of a Carmelite, or a vestal of St. Clare, in the same degree that it would a jolly alderman of a protestant corporation; and taking the extremes of an argument as prominent cases in exemplification of the principle contended for, I say there must be proportionate proofs of it to be found in all the intervening gradations of comparative abstemiousness. Another practice of the ancient Jews, and one which seems to have spread itself into many oriental nations, ought not to be passed over in silence, from a piece of curious and instructive physiology that it is calculated to bring to mind. These ancient nations, on the receipt of any bad intelligence, as, for example, the death of beloved relations, mourned for them in sackcloth and ashes, fasting, praying, and practising voluntary mortifications. This pious penitence, this complete identification of the sufferings of our fellow creatures with our own, with whom, or at whose woes we would be also sad, was also a salubrious preventative against the physical results of grief. For if, while we are under the influence of the depressing passions, we eat and stimulate our digestive organs, the gastric juice will not be secreted, nor the food digest; combined with this, the stimulus will derange the bile, the irritation of the liver will be reflected on the brain, and common grief will be converted into the most fixed and insupportable melan-

choly of hypochondriacism, as is too often exemplified in the fatal derangement of mind incident to drinkers of spirits when influenced by methodism, grief, or any of the depressing passions. A good catholic, under the guidance of the universal mother, adopts a plan of conduct on the death of a relation conformable to the ancient model: he ceases to revel in pleasure; he lives quietly, abstemiously, and free from violent stimulus, praying for the departed, and thereby producing, under grief, its salutary antagonist in the excitement of hope, in the pious belief that he is still aiding a departed object of love, to obtain, through purgatory, a state of never ending happiness in which he hopes to meet him. The protestant too often (but there are many virtuous exceptions) consoles himself with a drop of spiritual comfort of a far different kind, and one which, attacking the liver, under the influence of grief, is provocative of the worst retaliation from an irritated brain. It is one of the deepest physical misfortunes of the protestant heresy, that it leaves its dupes so little consolation on the death of friends, compared with that of the catholic religion. The protestant commits his friend's carcase to the ground, and ceases, in the hour of affliction, to pray for those who have been the object of his supplications to heaven during a long previous life, professing to entertain fears at the same time of

man's more than possible damnation. To him, indeed, dissolution is a gloomy process; the sting of death is sharpened, and the victory of the grave is complete. Under these depressing circumstances, the fatal catastrophe is sometimes finished by gin; and it is no wonder, when strong spirits are administered where the mind is deflected by the images alluded to, and perplexed by private judgment, that sorrow should go on to despair, and despair to insanity, of which close connection of the mind with the bodily organs the madhouses in protestant countries afford a melancholy but instructive example. I adduce these facts to shew the great connexion there is between the body and the mind.

I do not mean any offence to any religion whatever. I believe there are good and bad people labouring under every possible variety of religious delusion, so infinitely diversified that the limits of sound and of unsound mind are hardly discernible. The disunited Protestants, whose endless disputes about doctrines that none of them comprehend, only describable as a jargon of mutual contradictions—the Mahommedan, the Jew, the Brachman—the poor Indian who sees God in the clouds, and hears him in the wind—the Polytheist, who personifies the great first cause in every elementary effect—the Pantheist, who believes him to be every-

where—the Deist, who rests satisfied that he is somewhere, and the Atheist who sees him nowhere,—may be all of them men of unimpeachable integrity of character, and, if such, they ought to be respected in proportion to their intellectual and moral merits; but it is the duty of every one to stand up for that which he believes to be best. And though this is not the place to speak of matters of faith, yet with reference to medical research, I say the whole of the doctrine and discipline of the catholic church seems so calculated to maintain health of body, soundness of mind, and purity of morals, that no apology seems necessary on the part of a physician for an attempt, however imperfect, to place it under the more general contemplation of the profession.

To return to the especial subject of this letter, the history and antiquity of fasting and austerity, I may observe, that though local habits, like limited religions, may originate in prejudice, or some accidental cause, and may not be worth consideration; yet customs of very general prevalence in every age and country must have some foundation in reason and experience; and if farther ratified by all extensive religions, may justly claim the attention of the philosopher. With regard to fasting, it is probable that many of the people and nations who adopted it from the Jews were not aware of its medical utility;

still its long continuance and the suffrages of ages shew that it never could have been injurious to the constitution. Though the Greeks and Romans of old observed long and painful fasts, yet we do not find their physicians complaining of its hurtfulness, while every able writer on medicine among the ancients declaims against the bad effects of gluttony and repletion, and most of them recommend abstinence as the first and most effectual of the curative intentions of medicine. There are certainly some invalids who cannot fast, but the complaint that there are many persons who cannot fast and abstain may be called the effeminate outcry of modern medical heresy. I grant that in early catholic times pain and sickness would not have deterred men from their austerities, and, therefore, we cannot easily ascertain whether or not these practices on any constitutions produced mischief; but I suspect it never did. And among the ancient Romans, who did not possess the heroism of catholics, persons who could not fast would have been allowed to go on eating; and some mention of such exceptions to the general rule would have been found among the very numerous historians, poets, and miscellaneous scribblers of those times.

The connexion of fasting with prayer, and the belief that the former added fervour to the latter, and also rendered it more accept-

able to heaven, is one of the oldest features of religion, which, originating with the Jews, seems, like the doctrine of angelical intercession, to have pervaded nearly all the forms of worship in the known world.

It is a remarkable fact, that the modern heresies have been distinguished by the rejection of all those salutary practices of discipline by which the catholic religion is allied by similarity to the most extensive and ancient religions of the world. This observation agrees also very well with another fact, that these heresies originated in pride and cupidity, and with an intolerance of those fasts, penances, and privations, which the consummate wisdom of all ancient lawgivers found necessary, in order to unite our carnal and fallible nature to spiritual things, and to prevent men from becoming perfect beasts. One act of sensuality leads, as St. Gregory observes, almost inevitably to others, and penance and austerity, conferring self command, are the only safe means of restoring the equilibrium of the mind, when the passions have once got the mastery. Opulence, freeing man from necessity, and therefore tempting him away from voluntary hardship, has ever led to the destruction of states, of families, and of individuals. Even lawful indulgence, unless checked by periodical austerity, is apt to degenerate into abuse. Marriage may lead to voluptuousness; wealth to avarice; and power

to pride. Some individuals of both sexes have always been found among Christians, who seem instinctively called to exhibit brilliant examples of the virtues which are the opposite to these vices, by that peculiarity of disposition, which, in the nomenclature of phrenology, is called "propensity," and, in the language of religion, "vocation." Such persons, aware of the necessity of austerity, and the danger of even lawful indulgence, have made and piously observed vows of perfect chastity, voluntary poverty, and entire obedience; and have founded communities for the purpose of practising these virtues, and hence originated the monastic orders. These orders, varied by local circumstances, and adapted to the diversified shades of natural character in their founders, but united in faith, did, by discipline and penance and the conquest of animal passions, achieve heroic virtues; and exhibited the greatest examples of all those intellectual faculties and superior sentiments which distinguish man from the brute. These orders have, therefore, always been at once the glory and consummation of catholicism, and the objects of invidious obloquy. The learned fathers are eloquent on the subject of these orders, and of the austerities which enabled them to attain to such a degree of excellence, particularly fasting: so dangerous indeed is the omission of it, particularly when coupled

with indulgence, so much easier is it to abstain than to refrain, that priests, and those who are destined to a life of greater sanctity, are forbid, by rules of the church, indulgences, that the bulk of the laity are allowed, under suitable restrictions, to enjoy according to the law of Nature. The great councils of the fathers formed their notions and judgment of discipline, on long experience; but modern physiology has taught me, by investigation of the laws of animal life, many things that other people receive only on authority, and has convinced me of the superexcellence of the three great evangelical councils, as the means of giving, to the human part of our nature, the greatest preponderance over the animal, and at the same time, if followed with medical care, of conferring also a large share of bodily health, to the latest period of a long life. People fell into a gross mistake, in dating strength of body and mind, from nourishment and instruction alone: austerity is a great adjutant means of both; and since the new doctrines and habits of modern times have prevailed, it has become a subject of common complaint, that though commerce is extended, and the luxuries of life multiplied, the mind has lost its vigour, and the body its strength.

But it is time to wind up this subject by a review of ancient records. The Jews fasted from the first period of their history. Moses

instituted more severe and long fasts; they continued from sunset to sunset. In the time of Zaccharias four regular seasons of fasting are recorded. Strewing ashes on the head, similar to our Ash Wednesday custom, and other voluntary humiliations, were soon added. From the Israelites, the Egyptians, Assyrians, and Phœnicians learned to fast. The custom extended itself consequently to the Greeks, many of whose philosophers had recourse to abstinence as a means of moral and intellectual excellence.* The Romans instituted great fasts. Livy relates fasts observed to appease Heaven in consequence of prodigies. We may learn from Leo of Modena, Baxter, and other authors, that fasting became general among the Persians, Medes, and Indians. The Chinese observe fasts with great punctiliousness; and the Mahommedans are so strict in them, that they deny themselves the sweet smell of flowers and the odour of perfumes, on fasting days. Of the severe fasts of our Catholic forefathers, and of the eloquence of St. Basil, St. Jerom, Tertullian, and others, on the subject of fasting, I need not treat in this place. All the above nations, who fasted with their prayers,

* On this subject Porphyry has left us some notices. See also Father Lessius' excellent little Book on Temperance.

were faithful to the objects of their worship, and were united, generally speaking, among one another, like Catholics. To the lot of the modern fanatics it has fallen to abjure their fasts, and to substitute luxury for austerity; and it is also their accompanying curse, to be disunited in faith, gloomy in worship, bigoted from ignorance, and intolerant from want of humility.

I trust that in what I have said above, no one will accuse me of any wish to stir up prejudice, to foster bigotry, or to restore to any dominant religion, institutions at variance with the liberties of mankind, merely on the ground of their medical utility. The catholic, like all other religions, has had its abuses. The inquisition, although the antithesis to the madhouse, was one: no one can justify force in religion, nor would I recommend Catholicism, were it not the best for human nature, and the one which, being really the consummation of society, is entitled to be, and will be again adopted freely and fairly, as the object of choice. It is now spread all over the world; it is found to suit every climate, soil, and character; and it may be observed that among Europeans, all catholic countries are more healthy, moral and happy, than those in which heresy prevails. The French are more moral than the English; much belongs no doubt to the excellence of their police, their native organiza-

tion of mind, and their determined love of liberty and equality ; but much of the kindness of manner so common among the peasantry in all catholic states, and so contrasted to the rude and vulgar selfishness of the same class in Albion's boasted isle, must be attributed to the higher moral influence of catholic institutions. The student who follows my argument must not, however, be beguiled into narrow sentiments, even respecting the truth : he must travel in imagination over the vast regions of Africa, and of Asia, and familiarize himself with a thousand different modes of adoring the Deity, which varieties of physical organization suggest, and which localities favour. The protestant heresies are despicable more from their bigotry and demoralizing fanaticism, than from their differences of opinion, to which Nature gives them an obvious right. But the monumental religions of India, and the worship of the Persian Mithraics, the solemn worship and fidelity of the Musselmans, nay, even the idolatry of Guinea or Negroland, are all objects of research, and curiosity, and of respect, where the parties are sincere and devoid of persecution. If wild theorists think that these varieties will not always exist, so long as Nature shall continue to sport in the endless modifications of mind, and Fortune ride on her revolving axle through the chequered ways of life, they

have studied history and physiology in vain. Society fluctuates in every climate, and individual genius rises, here and there, above ordinary delusions; but man in the aggregate does not change: and those who imagine that the institutions of ancient wisdom can safely be supplanted by modern moral philosophy, on the ground that society is progressive, have read to little purpose the lessons of the Muse of history. I would send them back to the study of past times, and appeal to the perished glory of Thebes, and of Palmyra, and of Babylon—to the lost arts of Tyre and Sidon—to the astronomy, navigation, and commerce of the Phœnicians—to the decayed philosophy of Athens and of Rome—and to Nineveh and Ecbatana, whose sites are perished, and whose names only remain,—and would bid them seek, if they can, in the alternate billows of society, for any new and improved principle of religious and civil legislation. In the mean time, I feel convinced, that however ardent may be the benevolence of such philanthropic speculators in real life, the wishing cap of Fortunatus will not bring this philosopher's stone; practical men will look to facts, and will not trust the sublime science of government in the hands of the victims of a spirit of innovation. I repeat again, that in religion, in customs, and in morals, we ought to take enlarged and enlightened views; and

in what I have said by way of comparison between catholicism and heresy in Europe, I have had always practical results in view. I have seen protestant disunion and its crimes and misery, and I have seen catholic unity and its commerce of comforts, its virtues and its consolations. I have seen the riches and idle voluptuousness of a clerical oligarchy conduce to personal vice, misery, and a spirit of persecution: and I have also viewed the happiness of catholic orders in poverty, and even under persecution. I have examined the health which results from faith, hope, and charity, and the morbid sensations proceeding from doubt, despair, and mutual hatred;—I say I have viewed all these things as a physician and philosopher; and my apology for this long obtrusion of their comparative effects, in a work on health and happiness, is that they have furnished me with a satisfactory answer to the old Horatian question:

Divitiis homines an sint virtute beati?

SECOND SUPPLEMENTARY ESSAY.

*On the Medicinal and Moral Effect of Chastity, and
on the Regulation of the Sexual Functions.*

FEW things are so ill understood, in this country, as the management of young people at the age of puberty, when the organs distinctive of each sex begin to develope themselves, and to excite corresponding desires. Two extremes are often followed with regard to children, both of which are erroneous, and one execrably bad. Among protestants, and particularly among the profligate aristocracy, young people are exposed to various excitements to vice at this age, which exasperate their passions, and induce a premature exercise of the sexual organs, that not only engenders early vicious habits, but brings on debility, by sapping, in the very onset, the stamina of the constitution. Parents, conscious of their own vicious conduct in this respect, send their children to school to be out of harm's way, and the influence of their own evil example; and though this may seem at first sight to be a virtuous sacrifice, it is in reality a mere pretext for idleness and dissipation, and so far from being of service to the offspring, it in fact flings them out of the frying pan into the fire. For, in-

dependent of the vicious habits of large and ill conducted boarding schools, which are notorious, girls get worse managed there than at home; taught on the one hand to be mere dolls, to dance, to dress, and learn every trivial accomplishment calculated to fit them for the *maitresses* of their future admirers; and having nothing in their heads but notions of jealous rivalry in the power of pleasing the other sex, they merge all sense of solid virtue in the mock modesty which it is requisite to assume, in order to respond to the cold, phlegmatic, and hypocritical manners of Britain; while on the other hand, their passions being excited by the vicious and unnatural impulse given to thought, they become, under a bad system of feeding and exercise, chlorotic and unhealthy. Then they sometimes resort to practices still further destructive of the constitution and of the mind. When they return home, they see the same conflict between principles ignorantly laid down, and practices artfully glossed over, which they talked of and read of, at school; bad habits complete the tragedy, and in a few years a sickly and deformed girl is patched up by quacks and physicians for a venal marriage with some old worn out debauchee. The result of this must naturally be a debilitated offspring. I do not mean to say that this is always the case, for there

are numerous exceptions, where kind Nature bursts the bonds of vitiated artifice; but it is the evident tendency of all the notions and customs entertained in England concerning wedlock, adultery, and divorce, to defeat the genuine object of the grand reproductive function of animal life, and to destroy the protection formerly given to it, by the Catholic religion, in the institution of the sacrament of marriage. Sometimes the reverse, but still a lesser evil, results to catholic children brought up in convents, where all knowledge of sexual matters being too long withheld, they get exaggerated notions of the value of perpetual chastity, and may perhaps mistake Nature's laws, under some delusive impressions of this kind. There is, however, no comparison between the magnitude of these evils. The *eleve du couvent* is at least pure in heart; and having before her the brightest examples of chastity, obedience, and poverty of spirit, is calculated to make a faithful wife and a good mother. For let it be observed, that example does much more than precept, in the formation of the character, in early life. We are all various in our dispositions, owing to peculiarities of organization: but it is obvious to all naturalists, that example is above all other things necessary to give a proper bias to thought, and to render individuals conformable to the rules of the social compact, and the

ordinances of religion. I should recommend a medium between the two extremes; but in saying this I by no means intend to propose any compromise of the rules of moral order: I mean simply this, that young people should be allowed to gain acquaintance with all the real laws of Nature, and should be taught them in a proper way and by discreet persons; and then the use of propensities should be carefully distinguished from the abuse. The French and the Scotch in this respect are far superior to the English, having less sham modesty, less duplicity, and consequently more real innocence and virtue: the same applies to the catholic Irish, who are said to be far superior in faithfulness and moral virtue to the women of parallel rank in this country.

I have no doubt but that when the laws of sympathy shall be better understood, very numerous complaints, at present not suspected, will be found to result from the erroneous conduct pursued towards children at the age to which this essay relates. They should be allowed plenty of exercise, and constant exposure to weather, at this period of life; the bowels should be kept open, the diet moderate, and the abstinences and fasts, where strength permit, should be observed; every artificial or wrong excitement from novels, plays, and promiscuous society, should be avoided, and, above all, the mind should

be directed in forming just notions about marriage, and habituated to salutary restraints and the coercive exercises of regular life.

A vicious state of feeling with respect to marriage exists in protestant nations, but particularly in this country, at which an enlightened foreigner startles with horror! Under a specious moral exterior, a system of deceitful intrigue is too often carried on, which has no parallel in any of the old catholic states, and is exceeded in turpitude only by the mercenary manner in which it is compromised. A profligate fellow runs away with his neighbour's wife, and then is received again into society, while the poor woman, probably not much more to blame than her seducer, is discarded, and the offender, being sued at law for damages, pays for his crime in a ratio compounded of the length of his purse and the amount of his guilt—as if the offence were a mere robbery of goods and chattels—instead of being punished in person for an outrage against one of the greatest conservative ordinances of social life. Such vices will occur, from the frailty of our nature, and I am not for dealing too harshly with them; but the vicious influence on society of a pecuniary recompence, instead of a suitable punishment, is a deplorable instance of the progress which heresy has made in crime, and proves

the disorganizing influence which it exerts on society, in this instance giving an Asiatic colouring to a crime formerly condemned in Catholic Europe, by converting it into a robbery, conformably to the Mohammedan notion of property in women! Both parties should in justice be punished, and, *cæteris paribus*, both equally: both should likewise be again received into society, after salutary penance and proofs of amendment. But filthy lucre should have no share in the business further than this, that it is very proper that rich people, who commit errors against society, should pay for them, but the deodand should be applied to purposes of charity, as it was of old, by the court of conscience established in the confessional. Again I say, the offending parties should never be allowed to marry, it being contrary to religion and justice. Man and wife should be brought together again, for the sake of the children; and however disagreeable this forced reunion might be, it is the least of two evils; and what can we do, in a pilgrimage full of obstacles to perfection, but choose between evils? I am persuaded,—I speak also as a physician,—that the levity and wrong notions entertained about marriage, and the little care taken to fortify the minds of young people with command of self, is the cause of as much disease as it is of misery. Take what care you can to avert a bad match

by a strict education and selection of society, but the knot once tied is indissoluble !

Christianity recognizes no such process as divorce. There is a lawful *divortium a mensa et thoro*, and it has sometimes been mutually agreed on, under the sanction of the church, for prudential motives, or for the purpose of living in the perfection of religious vows ; but there is no *divortium a vinculo matrimonii*. And the Christian precept, which forbids the marriage of an adulterer or an adulteress, is in strict conformity with that principle of national justice which throws the helpless progeny, for protection, into the arms of the civil law.

I shall quote in conclusion the following excellent observations on Marriage, from a French newspaper. They are worthy of the great nation from which they came ; and if at the close we find that a severe reflection is cast on the mercenary practice of England in this respect, let us, out of pure love of country, hope at least that, in these eventful times of political regeneration, many changes for the better may be made in this, as in other branches of our laws and customs, in furtherance of the great objects of health and happiness, which it is the professed intention of this essay to promote :—

“ Marriage is a contract between three persons—two present, one, the child, absent, but represented by the public power,

guarantee of the engagements of the spouse, for public authority always represents in the family the person absent, the child before its birth, the father after his death. The contract formed by or between three persons cannot be broken by two to the prejudice of the third, the most feeble of the society; and this third person can never consent to a rupture wholly to his prejudice, because that he is always minor in the family. Marriage is a natural, not a commercial association. The joint capital is not equal, since the man brings the protection of strength, the woman the wants of feebleness. The results in the case of separation are not equal, since the man separates possessed of all his authority, and of all that which the woman brought pureless—youth, beauty, fruitfulness, fortune; she can, in case of dissolution, take back only her money. Marriage is then naturally indissoluble. To establish divorce is the will to corrupt morals by the laws. Not only will it corrupt thus the family by the license permitted to the desires of man, but it will banish happiness and peace by the hatred which divorce will not fail to kindle amongst families. In fact, what resentments will it not excite among sensible people, just appreciators of the benefit and the offence? What tears, what blood will not flow, from the affront of a girl of innocence, sent back without honour and with-

out name, into the bosom of those parents which she had formerly quitted, happy and proud of the beauty of a virgin, and the dignity of a bride? And if the French degenerate to the point of being insensible, they will, without doubt, soon arrive at that excess of abasement on which a neighbouring people has fallen, to value by pounds, shillings, and pence, the weakness of woman, the crime of a seducer, the shame of a husband; and to adjudge the injury received by the amount of damages."

I am disposed to assent to every word of the above passage, and to agree with the author in the demoralizing influence of the principle of divorce: but it is time to turn to the more direct physical effects of premature or excessive indulgence in these debilitating passions. As this Essay is meant to be popular, I shall for obvious reasons abridge a great deal of the detail of the subject, and content myself with assuring the reader generally, that there is scarcely any evil habit, gluttony excepted, which so much impairs the strength of the constitution, and saps the very sources of mental energy, as the passion alluded to, particularly if early indulged in: it renders the nerves irritable, the body weak, the mind feeble and irresolute, and in the end produces premature death, by disabling the animal machine from bearing up against the various exciting causes of

disorder to which we are unavoidably exposed during our pilgrimage through life. It has been wantonly stated by some persons that the reverse habit, or perpetual chastity, conduces on the other hand to various chronic complaints; but I confess, that after much research, I can find no ground for such an opinion. On the contrary, celibates, whether male or female, have more vivacity, health, and vigour, to a later period, than married people, particularly where the individual is not troubled with an organization which predisposes much to amateness. And I believe that if we could safely speculate on a pious and intellectual state of society as the result of improvement in civilization, monastic and votive celibacy might be pointed out as the genuine check to population, and the natural succedaneum for the devastating ills of profligacy, pestilence, and famine, which at present counterpoise the exuberant fecundity of human beings. Fully persuaded as I am that the charges made by the mendacious protestant libellers against the virtue of the religious orders are, with a few exceptions of individuals, false, it appears to me evident that the number of converts of both sexes in early times must have materially checked the redundancy of population, and substituted piety for pauperism. This must have been a great benefit to society, independent

of the good which monastic institutions have been proved to do, as sources of public charity, and as houses of education for youth; and if in any thing the sordid jealousy which seeks by libel to dismantle virtue of her laurels is eminently conspicuous, it is in the wicked falsehoods daily uttered by heretics against the religious orders of the mother church. History proves also that chastity, and even celibacy, as well as temperance, conduce to long life; and where this has not been the case, the premature death of the saints and others, who are cases of exception to the rule, may be traced to their having worn themselves out by violent exertions in the exercise of their holy vocation.

But there is one fearful consideration to be made before we quit this subject, which relates to innate varieties of mind. Not only the useful talents with which God has endowed us, but the original frailties of our being, also are subject to great variation in different individuals, owing to organic causes. And therefore the knowledge of the propensities of different children is essential for those who would right well know their particular vocation, and the temptations to which each is most liable. For this reason I recommend schoolmasters as well as physicians to study the organology of the brain.* From this most inte-

* See the Works of Gall and Spurzheim; and also my Abridgment thereof. 8vo. London, 1816.

resting science they will learn the material causes or organic means employed to chequer life with variety of character. They will also see how evil, mixing itself with every good in this our imperfect state, is original and various, and they will consequently learn how to apply those means which education furnishes, for cultivating the one and repressing the other. It seems, therefore, proper in this place to subjoin some reflections on the subject, in order to clear up many erroneous views of the science of Phrenology, and to shew its conformity with history and the religious maxims of our forefathers.

THIRD SUPPLEMENTARY ESSAY.

On the Influence which particular varieties of Cerebral Organization have over the Disorders of the Individual; and on the means of counteracting the same.

PHRENOLOGY is the Science which teaches the varieties in the human constitution and character, as they are indicated by the corresponding varieties in the form and size of the organs of the brain; the particulars of which will be found in the numerous and elaborate works of MM. Gall and Spurzheim on that subject. It is sufficient for our present purpose to observe, that the particular disorders to which individuals are liable, are in a great measure dependent on the cerebral organization. Persons with much of the organ of cautiousness, and but little of that of hope, for instance, are more liable to despondency than others who have the reverse organization, and when afflicted with the ordinary derangements of the biliary system, often become melancholic. Such persons should be very careful to keep the stomach and liver in good order; since, in addition to the frequent inconvenience of visceral disorder, they will be liable to a depressing affection of the sympathizing organs of the brain. I have already spoken of the ten-

dency of such states of disorder to bring on the woeful malady called religious melancholy, which is so often found in protestant countries, owing to the gloom and uncertainty which belongs to the creed of the people. Physiology points out the necessity of moral as well as physical counteraction in such cases; whence the value of the consistent creed and solid hopes of future happiness promised by the catholic faith. We hence can see also, why in catholic countries there is actually less of these disorders. Hope, the great panacea of all earthly ills, is there consistently and undoubtingly indulged in, and it is made the business of life to deserve its promises; while all incidental pleasures are regarded as mere recreations from the labour of virtue. Hence it happens that when the organs of the brain get so out of order as to present to the mind exaggerated pictures of the misfortunes of life, the patient feels that he has lost nothing of the principal thing, which being all through life in the foreground, can never receive any drawback but from sin; against the effects of which the universal religion prepares a remedy in the Confessional. By this Sacrament, the patient who seeks consolation from real or imaginary evil, is made to rectify errors, to satisfy the conscience, and also at times, formerly at least, to do sanitary penances, as fasting and austerity: thus both the moral

and the physical means of cure are resorted to, and the organs of the brain and of the stomach being reciprocally relieved, the malady is cured, in catholic states; while in those where Heresy throws shadows, from her barren pinions, on this sublunary scene, the evil is made worse rather than better by time and reflection, till a mistaken recourse to fermented liquors completes the catastrophe. I account, on this principle, for the comparison already drawn.

Another affection dependent on a particular organization consists in the false spectral illusions which I have described in page 65, and which principally occur in persons who have the part of the brain between the organs of ideality, of imitation, and of hope, much developed; the same organization also disposes to credulity in general, and gives a mystic character to the mind.*

Persons thus organized, when they become irritable from digestive disorder, and particularly when any striking image, or painful idea, has made a too strong impression, are liable to see false representations of the same or other images, which appear with so much vividness that they are taken for real external objects: hence, in my opinion, occur the numerous stories of Ghosts, with which country villages abound, and which,

* See *Organologie*, par F. J. Gall, vol. v. page 345, in which he explains the physical causes of Visions.

in superstitious ages, peopled old dilapidated mansions with spectres.* Insanity affords remarkable proofs of the doctrine of Phrenology, by exhibiting the effects of peculiar organizations in a state of disease.

I have been often consulted by people who have fancied themselves or their houses haunted, owing to misunderstanding the nature of such supernatural visitors. In general I have recommended bloodletting, in order to change the erroneous course of the circulation, and then alterative medicines to set the digestive organs to rights: under careful treatment the patients usually recover.

The great question of Phrenology is one which is not generally understood; but it deserves a more particular examination, on the part of those who desire to found their medical practice on a sound and rational physiology. Objections have been raised to it, founded on false views of the subject; but in my opinion it comprehends the true philosophy of the mind, being founded on facts, and not on theories. And till it shall be better understood, superficial persons will continue to be the sport of vain and speculative systems of metaphysics. Phrenology proposes to examine what are the material conditions of our various faculties, and it seems to

* See *Ferrier on Apparitions*, *Hibbert on Spectral Illusions*, and *Somatopsychonologia*, p. 56.

me impossible to treat scientifically either of the mind or its disorders, until the physical conditions of the various propensities, sentiments, and intellectual faculties be rightly understood. The subject is too vast for any further investigation here, but I thought proper to throw out these hints, in order to promote a more general inquiry into the merits of organology.

With regard to the objections urged against this doctrine, that it tends to materialism, and to lessen the value of education, I can only say, that persons, who argue so, do not understand it. The capacity for sensation, which is individual and identical, through all the changes of life, cannot be confounded with its organs; although the latter may be proved necessary for its various manifestations. Locke led to this confusion, by his very absurd assertion that personal identity consisted in memory; for if this were true, loss of memory would be loss of self. The doctrine is, however, absurd; for if identity consisted in memory, a man would not be the same person at twenty years old as he was when an infant. Neither can identity consist in the continuance of any visible bodily parts, as these are all changed by the wear and tear of the body, and are replaced by nutrition. If identity consist neither in organs, nor in memory alone, it cannot consist in both together;

since we have shewn that one is lost by time, and the other by absorption, in the term of a long life! Are we not therefore justified in referring it to something else? Are we not justified, with all the sages of antiquity, with the united fathers of the church, with the whole school of Christian philosophy, and with common sense and common language on our side, in asserting that the mind of every individual, in other words his *moi*, is a separate and permanently identical being, which, though dependent here on certain organs for its sensations of the external world, may hereafter be united to yet other organs, and retain its identity, when in relation to still more sublime and glorified objects?—M. Spurzheim endeavours to support his doctrine from the writings of St. Paul, St. Augustine, St. Jerome, and others: but surely if these great saints were aware of the truth of phrenology, they were also aware of its perfect accordance with the doctrine of matter and spirit, and of future life? So much for materialism. Now, as for education, I conceive our doctrine will be of great use to it, by pointing out the particular line of life for which each child is best fitted: for the organs only give strong natural propensities, and it is the business of education to improve the good ones, and to repress the bad, by counteraction; and to render all men, diversified as each may be, of mutual use

in society, by binding them in the great uniting bond of catholic religious obligation; and thus giving a consistent and useful direction to passions and mental endowments, which if left to themselves, or to the shallow guidance of private judgment, would produce nothing but anarchy and confusion, would hinder improvement, and frustrate the conservative object of the social compact.

§ 2. *Of the Scope of Education.*

As a sequel to what has been already said of the natural varieties of the human mind, which form the distinguishing marks of nations, of families, and of individuals, it will be important to shew in what degree education can cope with the bias of the natural propensities, and give a wholesome impulse to the mind. I believe the scope of education to be very wide, if it be only properly managed; for, first, we can repress those propensities which are pernicious, by counteraction; and, secondly, we can call forth and polish those which are useful, and bring them, by judicious early exercise, to a high degree of perfection. Education, subject to the rules of the catholic calendar, which is in other words the active charity of man under the guidance of rules, can work wonders in the human mind, as the history of

all civilized Christian nations has proved; but without this guidance it never fails to do harm. Directed by the concentrative policy of the church, it fits unanimous citizens for the exercise of the human faculties, in the way best calculated to promote the interests of social man. But where the energies of the mind are put into motion without such direction, the result has always been a wider disunion and the destruction of society, because new wants have been created, and new sources of selfish ambition opened, unattended by a community of object. This reflection will enable us to account for the valuable products of study in catholic societies, and will explain to us, on the other hand, how revolutions, civil war, and every species of social vice and disorder, arise from literary education in protestant states, where one unanimous religion is no longer prevalent. We hear daily complaints in this country of the evils of education; and feel the force of the humiliating truth, that fresh wants have been created, crimes multiplied and refined, and the honesty and courage of our forefathers supplanted by hypocrisy and corruption. This is all through the want of coupling education with religion. Knowledge is power. How absurd is it, therefore, to call forth power without directing it! But as this subject is amply treated of elsewhere,

I shall go on to make some remarks worthy of particular attention,

Education is not confined to mere instruction: it is twofold. It demands that we should point out to the student what is to be done, and at the same time enable him to do it: the latter comprehends discipline. Education should begin with the CATECHISM, go along with the CALENDAR, and finish, where it too often begins, with the CYCLOPÆDIA. For I contend that the first truths necessary to be embraced by the mind, are not matters of reason, nor can they be understood at that time of life when it is necessary to make them the basis of Rules of Conduct. We may reason on them later in life, when the mind is ripe; but they are deep metaphysical truths, and are from God, who is truth. The Catechism was therefore constructed by the councils of wise and holy men assembled in council, to form the groundwork of the human character. And the Calendar, constructed also by the same wise councillors, is the means of training up youth in the practice of those virtues which the Catechism points out; it is likewise the great rule of life for all, being the waybook of our earthly pilgrimage. At a later period of education, the Circle of the Sciences may justly offer its varied objects to the notice of the student, with immense advantage to the progress of civilization.

If we look closely into the great doctrines taught in the Catechism, and exemplified in the festivals and holy biography of the Calendar, we shall find them to be profound metaphysical axioms, which are given to us on authority, and which, as such, are the necessary basis of all useful science, but which, if reduced to metaphysical questions, would lead to every disorder of doubt and confusion — such, for example, as the eternal being of God; the creation of man; the external and continuous existence of the objects of sensation; the scheme of human redemption; the foreknowledge of the Creator, and yet the free will of the creature; — in short, all the great axioms or primordial truths placed beyond the reach of physical proof, and yet firmly believed in; not only on the strength of authority, which directs the first movements of the infant mind; but also because, in maturer life, we find it still harder to doubt them.

The perplexing question about cause and effect, about the existence of matter and spirit, and indeed all the metaphysical subtilities of philosophers, resolve themselves at last into acts of faith; for we must believe in our sensations, and must distinguish the outward and continuously existing objects which excite our perceptive sensations, from those modified reactions of the sensorium which are called conceptive sensations or

thoughts. In dreams, and false visions from disease, our conceptions have the appearance of perceptions, but still they are false or deceitful. And we shall find the great discrimen between what we call real and what we call false sensations to consist in this — that the former do, and the latter do not, respond to our anticipations, so as to constitute a consistent source of available truths. This inquiry, however, is becoming too deep for most readers. I shall therefore abandon it, with this reflection, that true doctrines, like true perceptions, are those which are of universal application, which are available, since their promises will be fulfilled, and whose converse, or errors, are, like conceptions, the mere fabric of individual minds. If Berkeley and Hume had been catholic Christians before they had been minute philosophers, they would not respectively have fallen into two such antagonist errors as they did. Many of the saints and early fathers, with a basis of education founded on the authorised truths of the Catechism, possessed all their knowledge and imagination, and had at the same time the clue to the truth. See the enlightened works of the Abbe de la Mennais. The ancients, in the absence of Christianity, did better than the moderns, for instead of reasoning alone on those great questions, they embodied all the authorised truths which they could collect, into fables

and figures, and hence their mythology. See Father Guerrin du Rocher's work, *sur les Tems Fabuleux*. But to return to education — it is obvious that in our days *precept* is too much relied on, and *example* too much neglected. The historical calendar or breviary, containing the lives of the saints, is of wonderful utility in exciting in youth an habitual emulation of the Christian virtues. Example does more than precept. I have often admired the character of "my Uncle Toby" in the novel, who set an example to children of humanity towards even insects and reptiles, saying a child began by killing flies and ended in murdering men. *Nemo repente fiat turpissimus*, and by degrees we descend the fatal precipice of crime, to Hell; if we make no efforts to follow the example of Virtue mounting the ladder to Heaven. Cardinal Bellarmine, a man whose virtues are examples of general imitation, carried his just notions of humanity to animals so far, that he would never disturb worms at their work, if he could avoid it, saying that we had no right unnecessarily, or in sport, to interrupt animals in the enjoyment of the only life which, we had authority for saying, they had to enjoy. This was a sentiment worthy a good catholic, and one which, if duly acted on, would lessen the frequency of all crimes of violence and cruelty. Those who are cruel

to animals are invariably so to man also, whenever a secure opportunity offers; and Dr. Johnson very wisely questioned whether the public ought to place confidence in any of those experimental surgeons who practised on living animals, and whose cruelties were already become a scandal to the profession. If surgeons be suspected to be accessaries, after the fact, to the horrid crimes which the dissecting room has elicited, it is nothing more than what they deserve, from the infernal deeds of cruelty of which they have publicly acknowledged themselves the perpetrators.

Charity, which commands us to exchange selfishness for community, includes within her wide range all creatures having life; for they are all manifestations of the Holy Ghost, whom we are to adore as the *dominus et vivicans*, and all his creatures as ourselves. Education, when once this great truth shall be understood, will have power to do more for the civilization of our species than has ever been done yet; for if men should learn of the Calendar, after the example of Christ and the saints, to make all sacrifices of self which could be shewn to be necessary for the general good, I ask, what might not be achieved that is great and beautiful in society?

FOURTH SUPPLEMENTARY ESSAY.

§ 1. *On the Moral Foundation and other Auxiliary Means of Health and Happiness through Life, and particularly in Old Age.*

WHAT has hitherto been said in this work has related to the physical and moral conditions of a Healthy Life. The conditions of a Happy Old Age, which is the second part of the Enquiry, demand, however, a more particular consideration; they depend on yet higher principles, and involve the great desideratum of certainty in the religious expectation of future happiness.

Now, admitting the truth of the Christian religion, for which we have a balance of evidence, it must yet be obvious to every keen observer, that there is a dissatisfactory state of doubt increasing in the world, respecting truths which have hitherto formed the basis of social happiness. This doubt has two obvious causes: one is the perplexity occasioned in protestant states, and also in all countries where free enquiry is encouraged, by the contradictory doctrines of sectarians; the other is the practical atheism in which men seem to live, who, although they gloss over vice with cant, or support trafficking and lucrative establishments, do nevertheless

almost wholly neglect the main duties of life, which such establishments used to enforce, before their prostitution. I believe the reasoning of philosophers has not had much influence with the multitude.

The above, then, are the obvious sources of a weakened faith, and of doubt and despondency in Age. But there is another cause, which is obscure and not generally perceived; namely, that the natural order of education is reversed, through the vanity of modern teachers. They begin education at the wrong end; they commence by doctrines of inductive philosophy, and train up men to be doubters, even where doubt is folly, lest they should become believers, where belief would be fatal to their own sceptical systems. Allured by sensible objects, and proud of philosophical acumen, young men readily fall into this delusive system, which places the foundation of certitude in the demonstrable sciences; whereas, in fact, the great axioms on which the sciences are founded admit of no proof. The juvenile philosophers overlook this, and then at last, finding that the axioms, on which all the rest hangs, do not admit of the proof which is employed to establish the superstructure, they end in being about as wise as they began, and all seems uncertainty and disappointment in the research. This error, however, as it tends materially to derogate from

the tranquil happiness of Age, deserves a particular consideration in this place.

All elementary truths are incapable of demonstration; they can neither be defined nor proved in language; their very nature precludes it. Like axioms in mathematics, when once propounded to the human mind, they are acknowledged and become part of our general feelings; and if proof thereof should be sought for, it would appear to result from the greater difficulty which we should have in entertaining the converse proposition. The being, eternity, and attributes of God; the relation between the Creator and the creature; the nature and the continuous and external existence of objects of sensation, when unperceived by the mind; even our own individuality and personal identity, come under this class of fundamental articles of belief. The admission of the above great truths, as Newton observed with respect to astronomy in particular, is absolutely necessary to the sciences in general, unless we intend all to be confusion, and hope to conduct our pupils to that ridiculous and execrable abyss of scepticism which made Des Cartes and Berkely doubt of their own existence. But I contend that in education we must extend our views beyond physical science, and that there are other great truths, which, like the former, do not admit of that sort of proof which

we call scientific demonstration, but which are also elementary axioms, and which are necessary to the existence and perfection of the social compact, without which the happiness of man is incomplete, if not unattainable. These are the doctrines of future life; the great moral virtues of Faith, Hope, and Charity, and other fundamental maxims of morality and religion. These appear, like the former class of truths, to demand our assent, because the converse propositions will be found to lead us into greater difficulties. But above all other reasons, they command our agreement, because they are supported on the greatest of all authority, that of the wisest and best men, in the wisest and best ages of the world, assembled together in council. When any doctrine has thus been tried, proved, and as it were reflected from the variously inclined minds of diverse individuals, it comes out, as it were, a medium power, like the resolution of motion in mechanics. Philosophers who have attempted to deride or disprove these doctrines have apparently mistaken entirely the nature of the evidence. They have also wilfully or negligently confounded the great metaphysical doctrines themselves with the emblematical language employed to adapt them to our imperfect capacities. The great question at issue would be this: whether these dogmas, so useful in their application to so-

ciety, have been originally given to men by some immediate inspiration from the Creator, in a manner called revelation; or whether they have been merely the result of the more than probable conjectures of wise men in council.* Now though I see no comparative difficulty in the former of the two cases stated; yet in either case, they are unassailable by any one individual; so that what is called the right of private judgment, in such matters, is a useless prerogative at least! But, however, I presume herein that I am writing principally for Christians, who admit that these doctrines are true, are authorized, and ought to form the basis of moral order in society, and of sound philosophy in science. And on this supposition I am going to prove my assertion, which I set out with, that the order of education should be, to begin with the great fundamental truths in a catechistical way—to enforce their moral obligation on the minds of *all*, by the rules of discipline, the feasts, fasts, sacraments, and other things ordered throughout the Christian year; and then to finish education with the sciences, according to the particular bent of *each* individual genius. This is what I mean by the relative importance which I attach to the consecutive order of the CATECHISM, the CALEN-

* What are axioms.

DAR, and the CYCLOPÆDIA, as the progressive means of education; each of which I shall separately treat of, and shall shew in what respect they may conduce to the comforts of Old Age in particular, as well as to the advancement of happiness in general.

§ 2. *Of the Catechism.*

Under the consideration of the Catechism I include all the fundamental truths which ought to be conveyed to youth in the earliest stage; for though the first which ought to be offered to the notice of children should be the Catechism of Religious and Moral Maxims; yet there might be other catechisms of science made to follow it, and particularly one for minds who early shew great powers of comparison, which I would call the Metaphysical Catechism. There might be others for the different sciences. For I hold it to be right, in all advanced states of the sciences, to have certain established truths presented to young minds as subjects of belief, anterior to their going into the demonstrative proofs: to begin in each individual with the discovery and the proofs, is in fact to invent a new, in every generation, and to deprive each of the past experience of its predecessors. If Minerva, ascending to the Temple of Fame, should

have reached the middle of the ladder, would she not receive her pupils thereat at once into her arms, instead of making them begin to climb from the bottom? In this essay, however, I shall confine myself principally to the consideration of those things which may become an available source of comfort in old age. In treating of this subject, the first thing which occurs to me is, that early impressions made on the infant mind are lasting; while those made in manhood are more fugitive, and are generally soonest obliterated. Thus we find that old persons often recollect with astonishing exactness the scenes of their youth, and retain the opinions, prejudices, hopes, and even the superstitious fears of their childhood, to a late period, while they can scarcely remember what happened only a few years ago: so that in this respect, as well as in helplessness, old age becomes a second childhood. The maxim of Solomon, which says, *train up a child in the way he should go, and he will never depart therefrom*, is founded on the knowledge of this fact. In animals which are domesticated, as well as in man, we find that habit cannot be taught with any effect in advanced stages of life. In man it may be regarded as one of the kindest provisions of Nature, that when the recollections of events in maturer life have

passed away, which, being chequered with cares and mixed with painful thoughts, would cease to delight us, the imagery of early childhood, and the pleasing ideas first excited in our inquisitive minds, should be remembered with a vivid and peculiar sensation of delight. Every person must be more or less sensible of this, as he advances in life. Every man of reflection must also perceive, that when strong religious associations make part of these early trains of thought, they would become by the law of Nature very useful subjects of the old man's meditations. I have known aged persons who could relate things which had happened in their infancy for whole days and weeks together, who could scarcely remember what they did yesterday.

Now let us apply this argument to religion. If children are brought up to begin doubting, like little premature philosophers, is it not evident that these doubts will recur, and embitter their later years? while on the contrary, lively images of religious hope, impressed as matters to be believed unhesitatingly, will become permanent, and though obscured amidst the impassioned energies of vigorous animality, will, by an established law of our nature, return in the evening of life, like beams of sunshine breaking out through clouds on the shadows of departing day.

Children used to be taught the articles of

Faith with the first rudiments of grammar; then Hope in things unseen was excited as soon as they could hope at all; and when they could but lisp, the names of Charity and the Saints were in their mouths. This should in fact always be the case. They should be early used also to all the splendid ceremonies of the church and its alluring emblems, that these might ever be first in their thoughts; and habits of controlling their petty desires, with a view to great ends, and in imitation of the grand examples recorded in the Calendar, should also be early induced; so that the mind should be so moulded on the Christian model, while the material was ductile, that no subsequent assault could afterwards materially injure it, when it was become hard to change. How often do we hear it said that the life of man is frequently made up of efforts to accomplish desires conceived in childhood. In my own case I recollect several objects in infancy which I should never have rested easy if I had not attained to. Now how delightful must be the senectetude of those persons whose object of early ambition was the very thing that advancing age brought them nearer to, and to which death is, as it were, only a passage! People are apt to forget, in the spring of life, that a long span of existence is to close the scene, in which the flowers will be withered and the sap dry — when grayhaired age, approaching by

degrees, demands a corresponding change of ideas and of pleasures. For this they ought to prepare. This period Cicero endeavoured to enliven. This period of life has by meditative people been found the happiest, and it has seldom been one of discomfiture. The catholic religion is distinguished for its capability of ensuring the comforts of this season of life ; for while the sanatory rules of the Calendar, in the fasts and feasts, tend to confer on us a healthy old age, the peculiar nature of its salutary doctrines, if early taught, must enable us to enjoy that health, and to employ our time agreeably and usefully, from the reflection that time is not lost, as it passes, but used—not spent but invested ; and that the passing sensations of our waning pilgrimage are only the algebra of some important truths behind the scene. Thus ought the Catechism and the Calendar to make up the infant mind for Heaven, before the Cyclopædia shall ornament it for the world. The not doing this is the grand fault of modern teaching ; and hence education has been libelled, as leading to crime and revolution, merely because modern schemers have mistaken the nature and scope of its functions, and know not the right way to apply it as an instrument of moral order. *

* The Catechism is admirably and fully explained in a work entitled "The Poor Man's Catechism," by John Mannock, O.S.B. London, 1762 ; but there are new editions of it.

One thing of importance, as indeed it affects civil government, ought to be observed, namely, that the new notion of detaching it from divine government is one among the most dangerous errors of the day. All the ancient governments of the world, either under the law of Nature, or that of Moses, or subsequently under the law of Christianity, are founded on divine laws. The civil legislator should not be an ecclesiastic, but he should be restrained and directed by divine authority. The republican principle of popular sovereignty presupposes popular perfectibility, which the history of man denies. If man had a right to control man, on any other than established and universal laws, there would be no end to the capricious tyranny to which nations would be subject. All government is of God by origin, and can therefore only be held by man in trust; and I contend that the newly created desire to legislate without religion arises from ignorance of the foundation of all just government.

The Catechism includes not only our duties of faith, but our duties of civil and domestic conduct; it makes the necessary maxims of social virtue a part of our infant nature, which sets subsequent temptation to error of thought almost at defiance, particularly if example go along with it; that is to say, if children, while they are acquiring the

truth, and learning to venerate the saints who have promulged it, do also perceive in their parents and companions actions conformable thereunto. On a similar principle I am inclined to question the propriety of suffering catholic children to mix freely with young persons of various sects; for though Charity may demand a free intercourse with all men in mature life, yet Prudence points out the danger, in infancy, when the judgment is weak and impressions are strong, of perverted examples. Every wandering of thought is the beginning of error of action; and if prevention be better than remedy, the inquisitorial power which nips sin in the bud is more valuable and less harsh than the severe punishment of mature vices.* I am not an advocate for severity in either case: but punishment should always be purgatorial, or else it is mere sacrifice for example, which is contrary to the precepts of charity.

To conclude what I have to say about the Calendar. Do not children left to themselves ask us the most puzzling and profound questions, such as, Who made them?

* The severe laws of England afford one example of modern paradox; for while protestant writers in England decry the horrors of the Inquisition, which was to prevent crime, they continue to corrupt the morals and exasperate the delinquency of this age by sanguinary and vindictive punishments, unknown in other countries where catholicism prevails.

Who made God? What were we made for? and so on; which shows how naturally these thoughts occur to the mind, and how advisable it is to satisfy them, according to their advance in judgment, with elementary truths. The Catechism does all this, and follows it up with lessons in all the varieties and gradations of virtue and perfection; and it forms the basis of that disposition of mind which in senility constitutes the source of happiness. I have known aged catholics who had become dim of sight, and could not read, and whose external senses were failing through excess of years, nevertheless find the greatest delight at the rosary, even when they could scarcely feel their beads; for probably early associations had furnished agreeable subjects of meditation connected therewith.

§ 3. *Of the Calendar.*

By the word Calendar we should include the periodical distribution of time in general, and by the Christian Calendar the distribution of the time of a Christian in particular. Civilization depends much on the enforcement of rules. For individuals not being able of their own caprice to conduct themselves in polished society, a social compact is formed, whereby all, by delegation, con-

struct rules to be observed by each universally. In matters of higher importance, this consent of all is not sufficient, but authority, anciently derived from heaven, is superadded; hence the authorized Calendar of the church, which, coupled with the Almanac of celestial phenomena, affords the great rule of life, the division of time, and the exemplar of sanctity for imitation.* There are two species of cant at the present day equally false — the one the cant of the conventicle, and this leads to fanaticism; the other the cant of the academy, and this leads to scepticism. Both are opposed to catholic truth; both are comprehended in the term heresy, or a schism from the one source of authority. Catholicism is, in religion and morals, what polarity is in light. It is moral polity in perfection; and the higher the polity, the more complete the unanimity and singleness of purpose produced, the more complete is civilization. The schismatics of fanaticism assume a right of private interpretation in matters obscurely revealed. The heretics of philosophy assume the right of judging all things by the law of Nature, forgetting that nature includes all the defective proportions of organs in indi-

* See the *Perennial Calendar*, the *Catholic Annual*, &c. wherein an attempt is made to place all natural phenomena as subjects for study, in the order of the Calendar.

viduals, and all the consequent errors of conduct. The Tower of Babel is a good type of modern heresy; for in the latter, as in the fabled builders of the tower, men endeavouring to reach heaven by their own means, instead of by means of authority, were so confounded in their language that they understood not one another, of which the motley swarms of subdivided sectarians and philosophers afford an example. Man is an imitative being; and in the Calendar we find examples of every variety of excellence; a perusal of it will convince us that even the ordinary arts and sciences of life owe their origin mainly to the saints and early monks and ascetics recorded therein.

But the great use of the Calendar as a means of a happy old age is this, that in successively keeping the Fasts and Feasts, and reading the lives of the Saints, a man does the same thing over and over again, as the seasons come round, in varied succession, all his life; perfecting his knowledge, each year, of every important truth, and at the end finding his own pilgrimage about to close in a change which has been the common object sought by the illustrious palmers which he has been reading of! Thus is induced a consciousness of consistency through life, and a satisfaction that time has not been wasted in desultory and useless im-

pulses. But I must soon pass to the third subject—the Circle of Sciences.

I shall however survey the indications of the Calendar, in order to shew that the particular observances of the Artificial Christian Year correspond, as it were, to the successive appearances of the Natural Year, and make part of that happy analogy which exists between natural and canonical devotion.* The year of the Missal and Breviary begins in the Advent, instead of New Year's Tide, an agreement very proper, as shall hereafter be seen, but we must particularise the revolving seasons;—beginning first with

ADVENT.—After the winds of Autumn have blown their blast, and whirled the last withered leaves from the trees; when the flowers are gone, and the natural year closed in the still dark weather of December, we celebrate the *Adventus Domini*, or the period immediately before the coming of Christ. The two fasting days, Wednesday and Friday, the Ember Week, and the whole service of this first penitential time of preparation, corresponds to the state of the elements. We expect physically a new

* As events in the life of Christ are daily represented in the emblematical ceremonies of the mass, so are the great events in the developement and fulfilment of the Christian scheme celebrated in the round of the year.

year, or beginning regeneration, and we attend morally on a new birth. The cocks, which crow almost perpetually during this season, and awaken with unusual clamour the little dark wintry day, seem like the forewarning prophets, and remind us of St. John the Baptist preaching in the desert. As the hallowed time approaches, the nightly minstrels called Wakes play their vigil madrigals in our streets; and at length comes

CHRISTMAS—whereby the Nativity is celebrated. Nature now corresponds with the Calendar, and often covers in a case of snow every living thing, as if to confine the attention of men to the celebration of the festival. The garnished windows, the holy berries and mistletoe, the ivied walls and the festive hall, now announce a season of gaiety, joy, and mirth; the cheerful fire, the Christmas log, the hospitality of the social board, are all fitting things for this frosty time of year. The week following is spent in recreations and games, and the mind of man is agreeably relaxed. Meanwhile the

NEW YEAR opens with the life of Christ. Then comes

Candlemas—when the Purification of our Lady is celebrated, just as the virgin snow-drops peep above the ground, and the first winter birds, the robin and the wren, are heard again; and as we pace along, with the procession of lighted tapers, we see the earliest signs of lengthened daylight.

Then comes the long Lenten Fast and its Ashes, preparatory to the sable solemnities of Holy Week, at a season when Nature also is bleak and cold;—the succeeding of Pascual Feasts and the celebration of the Resurrection, while vegetation is again springing into life,—the exhilarating Rogation Processions to chaunt the divine praises and beg blessings on the fruits of the earth, responding to the season of flowers and young leaves, when every meadow is spangled with colours, when every blossomed maybush has a bird singing with us,—and lastly, the consummation of the religious rites of Pentecost, and the great mystery of Corpus Christi, at a period when all animated nature out of doors is also perfected and robed in the mantle of summer! These are all illustrations of the coincidence of natural phenomena with religious exhibitions which must have struck every attentive observer. They prove how much picturesque effect, which is the voice of God speaking by the eloquence of his handmaid Nature, harmonizes the mind and prepares it for the particular duties of the respective seasons. They deceive themselves, and know nothing of the real nature and imperfections of man, or of the powerful use of emblems, who think that the labour is lost that lights up splendid lamps before shrines and holy images, and is employed in celebrating the festivals of the revolving year.

Another remarkable proof of the just arrangement of the periods of the festivals is deducible from their convenience with the natural distribution of human labour in the country. The festivities of Christmas occur at a time of year when the husbandman has but little to do, and every peasant is ready to rejoice with his landlord in the gothic hall of hospitality. The same applies to New Year's tide; for dull winter is the farmer's holiday, and is well fitted, after the preparatory abstinence and fast of Advent be over, to be enjoyed as a season of mirth and merriment, occurring between the autumnal and the spring ploughing and sowing time. Then again comes Lent and its fast, at a season when abstemiousness is almost necessary; for we find people who live well, actually being blooded, both at spring and fall, to secure to themselves health for the rest of the year; a very unnatural practice, and one for which fasting is a sufficient substitute. The rural labour of the vernal period is not severe, and there is also some time to spare; and thus we find the moveable festivals take place in spring, and are over before haytime and harvest, during the latter of which only one great feast occurs, namely, the Assumption, which gives one day of rest and of respite from the severe toils of the cornfield. The weather is generally fine, and the grateful farmer has

no objection to see his sheaves standing up, and his peasantry at mass, during this one day, any more than he has on Sundays; nor were the peasantry less pleased in former times, before the festivals of obligation were relaxed in the master's favour, to leave a field of haycocks on St. John the Baptist's Day, as they are allowed to do now on that of SS. Peter and Paul, to be tanned by the sun; while they give their laboured limbs a holiday, and thank God merrily for the blessings of the yearly produce of the land.

Michaelmas, with the well known goose, comes just before the vintage, and after it is over, and the glowing clusters of grapes have been repositied in the homely wine cask, which stands beside a good barrel of ale laid up against Christmas, then comes the festival of Allhallows, when we first celebrate in joy All the Saints already reigning in Heaven, where we hope to go, and then pray for All the Souls still remaining in purgatory, which we hope to avoid, by a charitable transition, on two consecutive days.

The Ember Days, too, whereon we fast and pray for the benefit of the soil, and for good weather for harvest, are all salutary at their proper periods.

Martilmas, the Festival of the Presentation, and the concerts on St. Cecilia's Day, diversify the later autumn; the feast of the

Conception enlivens the beginning of winter; and at length Advent proceeds till the sound of the nightly wake, and the story of the Christmas carol, again lead on the pilgrim to the celebration of the great feast of Christ's Nativity.

Thus the Catholic Year rolls round in holy merriment, and in due penance; variety chequers the scene; there is always something going on — always something to cheer or to purify the heart of man; and the revolving seasons prove that the Calendar is a chronicle of God's blessings. We will spare the reader the pain of reading the invidious contrast of the dull spiritless year of the puritan and heretic; for we hate to spoil a harmonious picture of life, by a closing discord: and we will hope, that when religion in these enlightened days shall have been stripped of its instrumentalities as a political engine, it will resume its influence and popularity, and that pristine and genuine Catholicity, on the strength of its own pretensions, will extend its benign influence over the earth in peace.

§ 4. *Of the Cyclopædia.*

Study, as well as food, should be apportioned to the native genius, the strength and the opportunity of the individual. Mental

labour is a source of exhaustion, as well as the stimulus of food, or the debilitating passions; and it requires to be conducted by a judicious distribution of time, of which rules will be found in the former part of this work. Some sciences and arts, however, are more destructive of life than others, while there are among them some which, having a soothing influence, without producing much labour, actually promote long life: of the latter kind is Music, on which too much praise cannot be bestowed. This divine science excites us to various acts of valour, of love, or of devotion, according to its varieties, by associations established on principles but little understood: it calms the temper, soothes affliction, or excites mirth. The harmonised sonatas of Corelli, the great concertos of Handel or of Purcell, and the national songs of the Swiss, are in their nature equally pleasing. But music, like all other sciences, has produced its greatest effects when employed in the service of religion, and we are made sensible of its varied effects from the sweet sonnerie of the bells in the steeple, to the grand peal of the organ in the fullvoiced choir of singers. All sciences should be made appendages to the great catholic science of life, as they were formerly; and this would keep them to their use and prevent their abuse. In early times the minstrel's lute, the sculptor's chisel, the

artist's pencil, and the painter's colours, were all made subservient to the holy cause, and it was at that period that the great "ages of the arts" severally took place, and the finest schools were formed. But there is also this great consolation in works of art and science so employed, that while the oldest man is enjoying their effect on his senses, he scarcely feels regret at so soon parting from them; because they rouse in his mind the most powerful images, by association, of much higher orders of pleasure which await him. Thus may the very circle of sciences which delight the energetic minds of Youth be converted into a foundation for the calm pleasures of Age. It seems to me that astronomy, and all the great sciences, admit of the same application. We are taught in philosophy to regard the Creator as a boundless Ocean of creative Intelligence, whence all beings spring and to whom they all return; and, as far as the sciences are concerned, the making them all appendages to a union of Faith, Hope, and Charity, like rays of light round a common centre, is the best mode of resolving every thing into DEITY, because it teaches us to regard GOD in all things.

§ 5. *Of the Early Culture of Curiosity.*

There are various modes in which the cultivation of the arts and sciences may lead to both the prolongation and happiness of life, which I shall now proceed to detail. And first of all, I will allude to the exciting in youth, a fondness and aptitude for various sciences and objects of thought. In many cases, Nature herself creates this desire to convert all the diverse objects of the creation into subjects of study, by means of a strong and peculiar organization of the brain. Of this latter I am myself an example; for having the imaginative organs, Ideality, Individuality, Cause, and Comparison, strongly developed, I was in my very childhood a sort of philosopher, though the objects were comparatively juvenile and useless. To give the reader an idea of the aptitude of my mind to turn every remarkable object or event into the nucleus of a theory, or the theme of an hypothesis, I must be allowed to enter into some particulars. At four years old, like other boys, I got fond of tops, kites, and other playthings, but I was not content with a few of these, nor with the best of each kind, but I would make large collections of all the different sorts, and so compare one with the other. I collected above a hundred peg tops, arranged them, and gave each a

name, painted them of different colours, and thus shewed in my earliest toys a disposition which in later life might turn out the foundation of a cabinet naturalist and collector. As early as 1796, my seventh year, struck with the various colours of the crocus and other spring flowers, which grew along a broad gravel walk, I began a hortus siccus, and sought the greatest contrasts, as well as the approximations in the tints and forms of plants towards each other; for I have been always delighted with comparisons. Soon after this, I took a childish fancy to weather-cocks, and instruments in meteorology became an object of study. I sought to know all the different kinds as to shape and construction, and imagined as many more, so that I might, at ten years' old, have directed a mechanic in this particular branch of art. The winter following I began to study lamps, in consequence of seeing the lamplighters at work on lamps by the road. I soon knew every sort of lamp and lantern in common use. Afterwards, circumstances of play among children threw me among bells in the steeples to which lads resort to ring on Sundays and Festivals; and from this accident I began to adapt my new amusement to my philosophy. I studied the melody of instruments of percussion, and the harmony of peals of chimes and carillons. I read every book or article concerning them, and

this passion remaining, my first object in visiting Scotland and the Netherlands was to examine those large treble octaves of music bells, which belong to the popular town music of those countries.

On another occasion, being confined as a boy by illness to the house and garden of the family seat at Walthamstow, and unable to pursue my accustomed sports, I converted the household objects which surrounded me into a source of systematic philosophy. Looking at the smoke going up the flue as I lay on a chair by the fire, as a child, I said, "Why should I not study the construction of chimneys, and know every sort of chimney pot and cowl that have been used to prevent apartments from smoking? These rages of juvenile philosophy were the basis of my studies in maturer life; and I can date some of the most vivid sensations produced by science or discovery at a subsequent period, to the early impressions of my young days; and they will in all probability solace, by means of memory, those of approaching age, after the talent and means of observation shall have been enfeebled by time. I mention them, merely to shew how much, *cæteris paribus*, may be added to the stock of the old man's pleasures, by exciting an aptitude for diversified pursuits in youth.

I am also an advocate for allowing children to exercise their own little minds freely

on natural questions, directing them only to ascribe all hidden causes to God, in order to prevent superstition, and exalt early natural religion. I think too that the use of those comparisons and ejaculatory gratulations recommended by St. Francis of Sales, of great benefit in inducing early piety and gaiety of mind. Children are now too much confined in schools: they should on the contrary be much abroad, storing their minds with the knowledge of Nature's varied train of animated beings; and this ingathering of knowledge, combined with the habit I allude to, would make their thoughts at night, while they recollected the day, a sort of nosegay of divine aspirations—a moral counterpart to the bouquets of flowers which they gathered in their morning rambles. All this would be operative on age. For as the careful botanist lays up the choicest plants in a hortus siccus, for mature study and arrangement, so does a child lay up, in the mystical folds of the memory, the blossoms of its early cropping, wherein they get matured, and their uses known and extended. The images of these early perceptions, reflected in the magical telescope of time, present to the mind of an old person the most delightful pictures; they are indeed scenes in which the peculiar colouring of the infant fancy is softened down by the sober tints of age, and which

are cast on the obscure camera of the mind, with a pleasure as indescribable, as the physical causes which produce its enchantment are unknown!

I cannot help thinking that book learning is much too early obtruded on the attention of children: they must first learn to become acquainted with things themselves, and they will then understand the descriptions of them: and for this reason natural history, and particularly botany, should be first studied in the fields: and with respect to all the other sciences, the rudiments laid in infancy must be of a practical nature. I knew all the principal stars by sight and name, before I ever read a word about them. Oreries for astronomy, models in mechanics, maps and charts for geography, and familiar discourses, together with an encouragement to ask any questions that suggest themselves to children, are among the best foundations of future science. For children who are taught according to the present erroneous system of premature schooling get a sort of verbal knowledge which is not real; and a false mode of reasoning on the knowledge of the sounds significant alone, before the things signified be rightly known. This is a fatal error, and is the cause of half the stupid prejudices that enslave mankind. History is a thing to be taught with much caution, on account

of the great force of example: it may be much assisted by collections of coins and medals, which would form an amusement without fatiguing the mind or overstraining its powers, which is of all things the most prejudicial. And it may here be observed generally, that premature developement both of mental faculties and of passions leads to premature decay. I cannot help repeating, before I quit the subject, that the basis of future happiness is laid in childhood, and that, where character is concerned, of all other things example is the most influential. We are naturally imitative; and if examples of practical virtue, humanity, and good sense, be not before the eyes of youth, manhood will be vitiated by the erroneous bias of passion, and age will be unhappy from the absence of salutary recollections and solid hopes. Children should never be allowed to follow any field sports, for they get thereby habits of cruelty, and whoever is cruel to an animal, would, if he dared, be the same to a man; and the injustice, the cruelty, the insults practised towards feeble and defenceless woman in England, springs from that habitual tyranny which is caused by early cruelty towards animals. Beasts as well as men should be made objects of legislative protection in a greater degree than they are; and the first admonition to children should be to be kind to them. Had

this been done in the West, as it is in India, we of Christian Europe should not have been, as we are at the present day, justly stigmatized as a savage people, and put to shame by the humanity of Hindostan. But I must close this excursion, and turn once more to the auxiliary means of health and longevity, as follows.

§ 6. *Husbanding the Vital Power, in Youth.*

Whatever that vital principle be, which unites the mind to organized matter, and constitutes it the capacity for sensations, performing all the functions of individualized animal being; certain it is that its exhaustion, somehow or other effected, is the cause of death. To preserve this principle is therefore the object of the macrobiotic art. Now vitality may be extinguished by sudden, violent, or continued action of any kind; may be prematurely spent by early activity; or may be deteriorated and exhausted by the passions. The first air of the morning seems to renovate it, and it is possible that it may, like the blood, be capable of nourishment: oxygen and good air may be its pabulum. And we may in this manner account for the effects which I am going to describe. If a man go from a low bad air, into a healthy high situation, he becomes more florid, feels

invigorated, and loses many disorders which he may have had before. If a man begin a course of early rising, the same effects follow; and hence we see, that in addition to the wholesome operation of travelling, on the mind, by drawing an invalid away from himself, into a variety of novel scenes; the habit of frequently changing our place, and the early exercise connected with it, may contribute much to long life by renovating and diffusing over the system that subtile principle of life by which the soul and body are held together. Instances of great longevity have often occurred among travellers. The benefit of ventilation in rooms, and the use of hardihood and exposure to the changes of the weather, have been before spoken of.

The next thing which occurs is the husbanding of the vital power, which is to be done by a judicious distribution of energies. Perhaps nothing shortens life so much as premature excitement of the sexual organs; and indeed every the least excess in physical love is attended with danger both to the body and the mind. So that Dr. Hufeland, in his excellent book on the Art of Prolonging Life, is right in setting down morality, either in celibacy, or in happy monogamy, as one of the greatest means of strengthening the body and prolonging its existence.

An important subject here occurs to me,

which I am in duty bound to explain, as well and as delicately as I can. There is a remarkable sympathy between the sexual passion and the mental functions in general; in other words, between the power to generate living beings, and the power to generate clear thought, or what, in modern phrenology, would be called the sympathy between the cerebellum and the intellectual organs of the cerebrum. If this passion be too early or too strongly exercised, it weakens the powers of the mind in an incredible degree; and though in some measure the leaving off all indulgence therein, even in thought, will restore the impaired energies of the understanding, yet the mischief once done, the effect will in time follow; and the transgression against the limits of nature will be punished in the end of life, by weakness, disease, and disquietude. The opposite evil that is falsely supposed to arise from celibacy, is a mere chimaera, and has no truth in it: on the contrary, celibacy is the best of all states for the labour of the mind, and has been therefore marked out as such by St. Paul as the fittest for the Christian pilgrimage. And if we recollect how much easier it is to abstain wholly from any violent passion than it is to moderate it, we shall see how in this as in other instances, modern physiology and common sense confirm the holy maxims of

the ancient fathers. No man, says Dr. Hufeland, ever accomplished any great design, or acquired the self command requisite for continued labour, who was much addicted to this effeminating debauchery. The great Sir Isaac Newton was quite chaste his whole life; and the stupendous mental energies and fortitude of the saints and martyrs and learned writers of the early ages must be ascribed, more than to any thing else, to their total disuse of this debilitating stimulus. What is still more remarkable is that its abuses are worse in their effects than the most excessive use; and hence we see the necessity of keeping back youth, and forbidding them all lewd or romantic books, and every sort of means by which ideas of this kind can be easily excited. Pause then reader, and ask who have ever achieved this ascetic object? who have by discipline ever controlled the wild sallies of cupidity so powerfully, and directed the vital energies so well towards the conservation of the powers of the mind, as the Catholic saints? Does not our church exhibit, in its various Religious Orders, the maximum of that preponderance of mind over body which distinguishes human from mere animal nature? Does it not also present to us, in its Laity and Secular Members, the finest instances of household virtue and social organization? Have not its laborious celebrate

clergy afforded the most venerable examples of pious and happy longevity? If we cannot withhold assent to the truths involved in these questions, let us praise the rightwiseness of our ancestors, and avoid modern folly, in the mode of educating youth, and teach them to be hardy, austere, self denying; to abstain, to fast, to labour regularly, to keep early hours, and in short to retrace the steps of dilapidated ancient wisdom; in order that life may be usefully occupied, in the season of toil; and that at the season of rest which closes the scene, it may be free from disease, so as ultimately to secure to the mind the calm exercise of its powers, at the most important moment of its last earthly change!

In all ages men have looked on long life as a desirable object. Plutarch, Horace, Cicero, Seneca, all the great philosophers and poets, have extolled it and sung its praises, and have laboured to shew how old age may be rendered less burdensome and even agreeable: but the catholic religion alone, with its ultimate rewards, has conferred on this period of our existence its genuine comforts. The same has afforded the best means of attaining to great age. I have read many books on longevity, and studied many maxims of health; but I confess they all seem, to me, to be only fragments of the

great conservative rules which the church has embodied as a whole. I do not find that they can be much improved on, though physiology will amplify and explain them; and therefore, if an individual of my humble pretensions may hope to counsel mankind with success, I should say that in admonishing those who direct the affairs of education to maintain intact all the regulations of ancient wisdom, I am conferring a lasting benefit on posterity.

The result of all my enquiries into the subject of health and longevity has been as follows:—On an average, Catholics live longer than Protestants, and enjoy better health; the greatest instances of longevity have been among the Hermits, Pilgrims, Carmelites, and the more severe monastic orders, particularly those who live on vegetable food, avoid spirituous liquors, and have been much out of doors. That this scanty diet has also contributed towards the calm and resigned mode of death for which Catholics are so distinguished, is beyond doubt. For they go out like a candle, whose visible flame is gradually extinct, while the remaining particles ascend in fumes towards Heaven.

CONCLUSION.

As the necessary conclusion, drawn from the above premises, we may fairly state that life will be lengthened, age rendered healthy and tranquil, and death disarmed of its pretended terrors by the *Medicina Simplex* that embraces those rules, which are explained and rendered familiar in this work: they comprehend, however, nothing more than the rules anciently laid down by the catholic church, which are proved herein to be strictly conformable to the soundest and best proved physiology; and which thereby prove that in this, as in every department of science, the founders of our great Institutions of Charity possessed physical as well as divine knowledge. And when we consider the whole arrangement of this religion, its splendid and central magnificence in Rome, its illuminating branches, extending over every part of the globe, and adapting its discipline to the habits and manners of every age and of every clime, without in the least abrogating from its doctrines — when we consider also its uniformity of faith, its enlivening hopes, and its unrivalled charities, the wisdom of its councils, the beauty of its exterior, its

patronage of all the arts, and its diffusion of all the comforts of life;—and when we confront with all this the poor, miserable, isolated character of all the little local heresies that selfish or conceited individuals have produced, which are ever subdividing and all mutually accusing each other of blasphemy and error, and destroying that neighbourly community which Christianity recommends and the Catholic church consolidates—when we interpose, between all the puny schismatical modes of worship and the great mother church some of those monumental Indian religions, and find that for charity, extent, and duration, they fall as far short of Catholicism on the one hand, as they exceed any ephemeral heresy on the other; and when finally we reflect that metaphysical inquiry, which destroys at once the contradictory pretensions of all the latter, actually gives the former additional support, against which alone Deism contends in vain, we must come to the irresistible conclusion that, however veiled in mysterious symbols, the Catholic Church is the genuine vehicle by which it has pleased the Creator to convey to the imperfect mind of his creatures, the end and object of their being, the duties of their pilgrimage, and the best means of rendering the burden of life light, by wearing the yoke of virtue. In addition to this, it responds to all those painful questions about

our origin, our end, and the nature of creation, which so naturally spring up in enquiring minds; and it thus encourages us throughout life with the pleasing anticipation, that when the bondage of the flesh shall be dissolved, death will also solve the problem, and we shall at length be launched into a vast and mighty scene of assembled sanctity and perfection, and shall see, when in relation to more perfect senses, the end and design of what, on this side of the curtain, appears an endless and indissoluble enigma.

The philosopher, however, in choosing between such a system, and the cold and selfish code of Atheism, finds that no compromise is possible; his cultured mind soars above all that is low, local, little, or contradictory: every form of Protestantism appears therefore disgusting to his refined taste, absurd to his reasoning powers, shocking to his feelings of benevolence, and at variance with his sublime conceptions of the Deity: he finds himself placed in a dilemma between Catholicism and Infidelity, while Faith, Hope and Charity, sitting in judgment between them, direct his choice to his eternal advantage.

APPENDIX.

§ 1.—*Important Considerations respecting Drinking, Smoking, and taking Opium.*

One thing more remains to be discussed, which was omitted in the foregoing pages, and I shall therefore make it the subject of an Appendix. I allude to the use and abuse of spirituous and fermented liquors, opiates, and tobacco.

SPIRITUOUS LIQUORS.—In order to make my readers understand wherein lies the danger from the constant habit of drinking spirituous and fermented liquors, I must advert to that known principle in physiology, whereby, in consequence of the susceptibility of the animal body varying conversely as the stimulus, all such drinks used habitually tend to exhaust the vital principle, and consequently to bring on premature death. They do this in two ways: firstly, by giving rise to various local and general inflammations, which lead to mortal diseases; secondly, by causing the lamp of life to burn out furiously, instead of running its natural course. The disordered liver; the Promethean fire in the bowels of a toper, which induces the melancholy state of the mind, by irritating the brain; the monstrous noses; the bloated cheeks, and the dropsies and jaundice of those who habituate themselves to these liquors, are proofs of my assertion, that drinking leads to deformity and disorganization; while the fact that those who feed well and drink much ardent spirit are shortlived, proves their power to exhaust the sources of life. But though drunkenness and gluttony have always been regarded as destructive vices, the evils arising from the constant use of strong wines and spirits in more moderate quan-

tities are not so generally known ; and it is against this habit which I would caution my readers. Studious and sedentary people, and particularly literary characters, would do well to use coffee after dinner instead of beer, wine, and suchlike drinks. But as the Temperance Societies are likely to do much to reform the world in this way, I shall merely observe that I verily believe that a downright drunken set out, once or twice a year, would do infinitely less harm than the constant habit of swilling spirits and wine by dribblets. *Gutta cavat lapidem non vi sed sæpe cadendo*, is a proverb which applies with remarkable force to the drops of spiritual comfort taken from the can and the wine glass almost daily with a specious impunity, but in reality full of hidden danger. For they slowly and secretly sap the very fountain of life, vitiate the sensations, disorganize the body, prematurely dim the eyesight, impair the hearing, and render death painful, convulsive, and unnatural.

OPIMUM.—The habit of eating opium, and of taking laudanum, does as much mischief in the eastern as that of drinking drams does in the western parts of the world ; but as the latter habit is attended with some circumstances in its *modus operandi* of a peculiar kind, which render it highly worthy the study of the metaphysician as well as the physician, I shall enlarge rather more on this subject.

In a medicinal point of view I do not object to opium. There is, in every boon of nature, the use and the abuse. The juices of both the grape and the poppy may be usefully pressed into the service of medicine ; but both are pernicious except when given with care, and in extreme necessity. Opium, however, acts in a manner calculated in the highest degree to destroy the power of life. Its effects are at first agreeable, it lulls pain, it induces soft and gentle slumbers, and under other circumstances it exhilarates and expands the powers of thought ; but observe, there is always a corresponding torpor and a frightful state of exhaustion destined to follow its delightful spells, and I believe the

principle to be universal which I have stated to belong to stimulants, that they leave the patient in a worse state than they found him. What Hufeland says of intensive and extensive life, seems to be well illustrated by the effect of stimulating aliments. If we live the faster for the time, we shall live for a shorter period in the end.

Opium, however, has some effects which strongly illustrate the immediate power of the vital principle over the sentient capacity—in other words, of life over mind. After taking opium there is, in addition to the pleasurable exhilaration, a sense of expansion as to SPACE, and of extension as to TIME, which is truly extraordinary, and which shews how even the most simple of our elementary ideas are under the influence of organization. Dr. Maddan, in his travels, thus describes the effects of this drug. He says—"The pleasure of the sensation seemed to depend on the universal expansion of mind and matter; my faculties appeared enlarged; every thing I looked on seemed increased in volume; I had no longer, when I closed my eyes, any consciousness of the effects of this drug, such as I had when they were open; it appeared to me as if it were only external objects which were acted on by the imagination and magnified into images of pleasure; in short, it was the faint exquisite music of a waking dream." He then goes on to describe the brilliant visions of delight which filled his brain during the ensuing night, and his painful exhaustion next day. Davy, the chemist, described a similar thing as resulting from inhaling the gaseous oxide of azote.

The effects of Tobacco, another narcotic, are an illustration of a similar principle. I therefore would never recommend either the chewing of it, or the taking of snuff; but I believe the more gentle and soothing effects of smoking to be useful, and by no means attended with danger. Indeed I always adopt the practice, and generally recommend it, of smoking a pipe after meals; it keeps the mind and body quiet,

promotes digestion, and induces a pleasant composure of the nervous power.*

Far different, indeed, are the effects of Opium ; most writers on which have described its debilitating effects. But the most astonishing effects of opium are described by the English opium eater, who, speaking of the vast processions which passed before him, in his dreams, in mournful pomp, friezes of never ending stories, &c. tells us—"As Midas turned all things to gold, that yet baffled his hopes and defrauded his human desires, so, whatsoever things capable of being visually represented I did but think of in the darkness, immediately shaped themselves in phantoms of the eye ; and, by a process apparently no less inevitable, when thus once traced in faint and visionary colours, like writings in sympathetic ink, they were drawn out, by the fierce chemistry of my dreams, into insufferable splendour that fretted my

* As the Temperance Societies are likely to do away with the vicious and unhealthy habit of drinking spirits, I trust they will recommend the salutary succedaneum, to the poor, of smoking. Cascarilla is also a good thing to smoke ; it is the bark of a shrub so called, which is imported into the country from the Bahama Islands, where it was probably long in use, and brought by the Jesuits into Europe. I can safely recommend the use of this bark in low fevers, intermittents, and typhus ; its qualities are tonic and antiseptic. There is another use to which it may be applied, which is important, namely, as a fumigation to prevent the effects of malaria, and in sick rooms to correct bad effluvia. It yields a fine aromatic odour, and is very wholesome for sedentary and studious people to smoke, if mixed with good tobacco. I have repeatedly seen the good effects of smoking, and wish it were more generally in use among the clergy and the students. The best composition for smoking, both as to general healthfulness and against infection, is the following :—

Turkey tobacco, 1lb.

Dutch Canaster tobacco, 4oz.

Cascarilla Bark, broken small, 1oz.

Mix the above well, and smoke a pipe of it every evening, when the house is shut up ; it is also a good digester after meals.

heart. For this, and all other changes in my dreams, were accompanied by deepseated anxiety and gloomy melancholy, such as are wholly incommunicable by words. I seemed every night to descend, not metaphorically, but literally to descend, into chasms and sunless abysses, depths below depths, from which it seemed hopeless that I could ever reascend. This I do not dwell upon, because the state of gloom which attended these gorgeous spectacles, amounting at least to utter darkness, as of some suicidal despondency, cannot be approached by words. The sense of space, and, in the end, the sense of time, were both powerfully effected. Buildings and landscapes were exhibited in proportions so vast as the bodily eye is not fitted to receive; space swelled, and was amplified to an extent of unutterable infinity. This, however, did not disturb me so much as the vast expansion of time; I sometimes seemed to have lived for 70 or 100 years in one night; nay, sometimes had feelings representative of a millenium passed in that time, or, however, of a duration far beyond the limits of any human experience. The minutest incidents of childhood, or forgotten scenes of later years, were often revived; I could not be said to recollect them, for if I had been told of them when waking, I should not have been able to acknowledge them as parts of my past experience: but placed as they were before me, in dreams like intuitions, and clothed in all their evanescent circumstances and accompanying feelings, I recognised them instantaneously. I was once told by a near relation of mine, that having in her childhood fallen into a river, and being on the very verge of death but for the critical assistance which reached her, she saw in a moment her whole life, in its minutest incidents, arrayed before her simultaneously, as in a mirror, and she had a faculty, developed as suddenly, for comprehending the whole and every part. This, from some opium experiences of mine, I can believe; I have, indeed, seen the same thing asserted twice in modern books."—He then goes on to say there is nothing forgotten by the mind, but only obscured,

and that all will rush into the memory on the great Judgment Day.

It is probable there are different substances, as yet unknown, which may act speedily on particular organs of the body and of the brain, and many of which might be turned to good account, to divert morbid action from one organ to others. But of all the drugs hitherto known, including all the specific animal poisons, none appears so wonderful in its effects as opium. The extension of time and space is one of the most remarkable; and we need no longer marvel, on waking, after a few minutes' sleep, to find that we have gone through scenes in our dreams that would have required whole days of real life to transact them—when we find that a few grains of opium will cause, not only the most splendid scenery in our dreams, but give in one single night the consciousness of a whole century of sentient existence. The fact proves how time, and space, and size, are, like other ideas, effects of organic causes, subject of course to the power only of God primordially, and how even an eternity of bliss or of pain might by similar means be conferred on the mind, wrapped up in a moment of vital existence!

Such reflections as these must astound and refute the casuists and philosophers. If they do not answer their idle objections and cavils against matters of faith, they at least upset the vaunted ascendancy of reason; and though nothing is absolutely proved by such facts as I have alluded to, yet they all tend to show how in this, as in all sciences, every physical discovery ends in metaphysical speculation, and all at length resolves itself into God, who alone can lift up the veil and let the light of truth into the darkened speculum, through which all seems an enigma. Thus do we, in every inquiry, mounting gradually to final causes, come to a stop which we cannot pass in this life, in our *ascensus per creaturas ad Creatorem*!

Is it, however, probable, since God has given to man, in addition to his animal powers, a higher order of faculties, that such elevated sentiments are intended to

be thrown away and to end in nothing? Is it not more conformable to analogy to suppose that the capability of such sublime meditations is conferred on us for ulterior objects, when the mind, matured in this world, shall be prepared for more exalted sensations; and if so, is it not likely also that some infallible rule should be left to guide us, and become a succedaneum to our manifold imperfections? If a rule of life be then by any means imposed on man, as a guide to his conduct, and the basis of his social improvement, the rule of philosophising would teach us to regard it as simple, comprehensive, and universal. And I believe we shall find the great canon of catholicism includes within its spiritual and moral legislation, susceptible of great and perhaps of perpetual improvement, all that is requisite for this purpose. And when we consider the advancing knowledge of the age that we live in—the changes going on in morals, in literature, in science, and in humanity, aided by temperance societies and other sources of improvement, may we not hope that catholicity will march with the age, overcome all the corruptions of ignorance, and, in the sequel, bring us, by the end of the twentieth century, to something like the fabled millennium of Christian ideality. But let us in the meanwhile take care to keep straight forward in the sheep walks of the *Bonus Pastor*, or, by wandering into the byways of private judgments, we may fall into hidden jeopardy and be lost!

§ 2.—On *Epidemic Pestilence, and on the Effect of Diet thereon.*

I believe every variety of pestilence is more or less the result of specific but hidden qualities in the air of those seasons and countries in which they prevail; whether these states of atmosphere be or be not connected with the production of animalculæ, it is certain to me, that they depend on an electrical agency, particularly that most formidable change, when the wind first getting

into the East, brings headach, fever, and lassitude in the animal constitution; and in the garden, blights, mildews, and destructive vermin. I have been frequently in the habit, on fine Sunday evenings in summer, to beguile my leisure hours with the electrical kite, and subsequently with small balloons; and I have found that while the former always showed strong signs of electricity in variable weather, the latter, by their previous courses, proved that the various upper currents of air descended and blew in turn over the surface of the earth. These experiments, at first intended as amusement, led me afterwards to make others expressly for purposes of science; and I am convinced, in the result, that all our aerial vicissitudes are more or less connected with electricity, which in some form or other exercises a perpetual influence over the bodies of all animated beings. The various and intricate natural relations which subsist between those modified agents, electricity, galvanism, magnetism, and vitality, are deserving of a more particular notice elsewhere.

This Essay, however, relating principally to the medicinal means which we may possess of removing the predisposing causes of disease, and of invigorating the bodily power and tranquillizing the mind, would be rendered too complex and too extended for general use, if I were to allow my disposition to speculate any further latitude on this subject. What we have to do with herein is diet, medicine, and healthful rules, and their power to intensify enjoyment and extend life by a due choice of aliment, and the regulation of excitements. With respect to food, various plans of diet have been tried in vain, because the true principle was not hit upon: some have lived wholly on vegetables, others on animal food. Most of my early friends and scientific associates have made trial of a vegetable diet as well as myself. Mr. Lawrence, now so eminent as a surgeon, lived on vegetable food for several years, with great benefit to his health, which had been impaired by his studious habits. Lord Byron found more mental energy on his diet of herbs. Percy Bysshe Shelley, the distinguished author

of Queen Mab and other poems, lived wholly on the productions of agriculture, and tasted of nothing which had possessed animal life; he used, during our early intimacy and friendship, to argue with me that such diet softened the ferocities of our nature and made us better men.* Sir Richard Phillips has published thirty or more consequent arguments against animal food, in the form of "Reasons," and these reasons are ably put together; for many years he has never ventured to soil his lips with the remains of disorganizing animal beings. Dr. Lambe, the well known patron and director of the vegetable feeders, is a proof of its good effects; and to prove to me the valuable consequence of herbaceous food, he used to promise to himself the pleasure of burying all his contemporaries of the College of Physicians! This learned writer has recorded some surprising good effects of the diet which he recommends. I must now mention my own experience on this subject. For at three or four different times in my life, I have

* One of the most amiable of the good traits in Shelley's character, and one which counterbalanced some unfortunate errors in the expression of his opinions, was his humanity. He never could bear taking away life for the purpose of gluttony, and used to argue that the whole history of the culinary art was stained with the annals of animal bloodshed. That men should never take away animal life for sport, humanity obliged me to admit; but I have sometimes questioned whether the making man an exception to the general analogies of nature, throughout which life is sustained by the destruction of life, would in the end contribute to the quantum of animal enjoyment. For pasture land is now covered with abundance of tame beasts, who enjoy for a time the boon of life, but who would have no existence were they not bled for the use of food. The other question, however, proposed by Shelley, whether the savage and dirty scenes of butchery connected with the eating of animal food does not brutalize the heart of man, and prepare him for still more ferocious crimes, is one of much higher importance. The subject is worthy of the most attentive examination of moralists and legislators.—Xenocrates was right, that temperance and example are the foundations of morality.

made experiments of a vegetable diet, and in each instance I have found that so soon as the stomach got reconciled to the change, I had as much strength of body, with more vigour and clearness of mind, than I had been conscious of before. The true principle of health had, however, not yet occurred to me, and though I will not deny the value of vegetable diet in certain cases, yet subsequent enquiry has convinced me of the necessity of applying the *Rules of Change of Diet*, which it is one principal object of this book to recommend; if we desire to gain all those advantages of health and tranquillity which conduce, as far as bodily agents are concerned, to a healthy and a happy old age.

§ 3.—*Is there a Principle of Retributive Justice?*

Some philosophers maintain that there is an inherent and universal principle in nature, whereby certain sins will be invariable harbingers of evil. That it is a part of God's moral government of the world, that retributive justice should be visited on him who offends; and that in some shape or other, acts of cruelty, oppression, and sacrilege, will be retaliated on the head of the offender or of his posterity, and frequently on both, agreeably to the ancient saying of the Lord in the decalogue, when he promised to manifest his punishment for evil and his reward for good even unto the third and fourth generation. Others contend that the punishment for guilt is deferred to a future state alone. But the latter supposition is not in consonance with the common sense of mankind, the proverbial language of whose adages, and most ancient popular philosophy, expresses a very different sentiment. Thus in the expression, that *ill gotten wealth bodes nobody good*, that "*Qui captat capitur*"—that great is the justice which condemns, the *necis artifices arte perire sua*, we recognise the principle of retribution even in this state of existence. Lactantius is said to have written a very learned work on this subject as it applies to persecution, and has shown

that persecutors often die by the same means which they may have employed to destroy others; of which curious fact the whole history of the protestant "reformation" is full of examples. A still more striking proof of the operation of this principle is to be found in Sir Henry Spelman's History of Sacrilege, wherein he shews that in all cases of the plundering of holy institutions, and the purloining of sacred property and applying it to profane uses, the most tremendous judgments have been visited on those who have thus robbed Charity of her dower.—See also Lactantius on the Death of Persecutors.

P. S. Since writing the above, I have learned of the existence of two Societies, both of which will probably lead to good result. One is a *Society for Preventing Cruelty to Animals*, by inculcating more humane precepts, and punishing offenders against the laws of humanity. This will have a vast beneficial effect on society, inasmuch as the barbarian vices of our country are more dependent on early example than on any other cause: if children be allowed to indulge in any sport in which is involved the sufferings of animals, they will, by degrees, grow indifferent to those of their own species. Habit is so much second nature, that no precept will afterwards efface the traces of bad example in this respect. The second Society to which I allude, is that formed at Manchester, as a sort of extended *Temperance Society*; it is said already to include above 150 whole families, who bind themselves never to eat any animal food, or to drink any fermented or spirituous liquors. It will be curious to observe what health they and their posterity may enjoy, and whether they may be exempt from many of the epidemic and local disorders which attack persons who feed in the common way. I am persuaded of the efficacy of scanty diet, and of change; but whether a diet wholly composed of farinaceous vegetables, bread and fruit, and a beverage of only water, be or be not most conducive to health, is a question which experience, on an extended scale, alone can

decide. Should it prove, as I suspect, that vegetable food will in time answer all the purposes of mixed diet, much will be gained ; because it has been proved that the same quantity of land will afford a much larger proportion of vegetable than it will of animal food.

The following Letter, which was addressed to the Editor of a provincial Paper, may not inappropriately be inserted here.

AMUSEMENTS FOR THE POOR.

SIR,—In addition to the benevolent and truly enlightened views of the Temperance Societies, which I believe will be productive of much advantage to the poor, give me leave to suggest another improvement in the comforts and morality of the poorer classes ; I mean the establishment of some public amusements for them on SUNDAY EVENINGS, similar to those established on the Continent, and in Ireland. For the mind of man wants recreation ; and innocent pastimes, on *Sundays*, after the canonical hours of devotion are over, have in all countries been found the most conducive to the morality and comforts of the labouring classes. England is the only nation in Europe in which the Sunday is kept with puritanical and gloomy strictness, which surely, in this enlightened and philosophical age, ought not to be the case. Even in this country, before the fanatical period of the Commonwealth, there were Sunday Evening Amusements. The Sabbath in fact, according to ancient law and usage, begins on Saturday evening, and ends with the evening service on Sunday ; nor would the introduction of the public diversions I allude to, in any way interfere with the devotions of the day. Religion too would not get into disrepute, as it unhappily has done in our country, if more ra-

tional views were taken of its observances, and a certain mixture of hilarity and pleasure would be invariably introduced into it. The feasts, festivals, country wakes, pastoral festivity, and all the amusements for the poor, of ancient and better days, were of singular service in preserving the morals of the people. For there did the high and low, rich and poor, farmer and landlord, master and servant, mix together and dissipate, among innocent games and pastimes, that fretful accumulation of the animal spirits which results from idleness; and which the dull monotony of our modern Sabbaths is so calculated to increase and convert into disaffection. Religion was intended to make men better and happier, and not to make them dull and spiritless. And besides, what do most of our gentry and better informed people do, but ride about all Sunday in the parks and parades, and then go home to a sumptuous dinner, which a poor cook has been toiling all day to prepare? I would have the poor and the rich make equal sacrifices, and on the evening of the dominical and festival days, at least, meet in joyous harmony together at some public place, and in rural mirth and festivity prove that Christianity tended to equalize the pleasures of mankind, without destroying the mutual relation of master and man, and taught all to be humble, and abandon to fools and upstarts, all those notions of pride, of riches, and of station, which now-a-days destroy the morality of all classes by keeping them apart from each other.

But while I am recommending amusement on Sunday evenings, I would by no means allow of *servile work* being done on the Lord's Day, as is too frequently the case in England, and against which there are penalties by Statute of Henry VII., Charles I., and Charles II., and which are forbid by the laws of God. For this would be injuring the poor to benefit the rich, which is the accursed habit of modern times. In short, what I recommend is a return to those social habits of our ancestors, which once made old England happy and flourishing, and which preserved in the minds of all men an attachment to true religion and sound morality—

consolidated the honour of the Deity and the glory of the state, and bid defiance to the inroads of the gloom of the conventicle, and the fanaticism of a distempered mind. We must recollect that the world are not all philosophers, and that they who labour hard six days of the week have a right to amusements on the seventh. We, who possess better education, and more leisure, have philosophical recreation for these holydays of a better sort; and I confess, I generally employ my Sunday afternoon in useful experiments and the pursuits of science; but what is a poor man to do without these resources? Give him rational and active public amusement, I say, and you will keep him from more private vices—from drunkenness and solitary dissipation, and by making him feel that he has diversion provided for him as well as the rich, he will be grateful, healthy, and moral; and it is to this cause, principally, that I attribute the superior morality of many foreign states to that of England.

I am, Sir,

Your obedient Servant,

T. FORSTER.

April 17, 1832.

INDEX.

- Abstinence and Fasting, 24. Rules for observing, 28. Popular pills for assisting, 28. Utility of in early ages, 29. Conducive to strength of body and mind, 69. Supplementary letters on, *ibid et seq.*
- Abernethy, M. quoted, 55.
- Ague and intermittents, 59.
- Amusements for the poor, Appendix, 252.
- Ardent spirit should be avoided, 24.
- Asthma, change of air in, 58.
- Atmospheric changes affect the health, 1 *et alibi.*
- Attention the first requisite of genius, 76.
- Aurium tinnitus, 54.
- Balloon, voyage in, 105.
- Basil, St. his Homily on Fasting, 163.
- Baron Maseres, 27.
- Bells invented by St. Paulinus, 75. Exhilarating sound of, 223.
- Belles Lettres and Beaux Arts, promoted by Catholicism, 70 and 76.
- Benedictines, their wise rules, 26.
- Bilious complaints, 8.
- Bloodletting at spring and fall, 226.
- Bowels, complaints of the, 39.
- Burns and scalds, 96, at the end of the prescriptions for family use.
- Cause and effect, 198.
- Calendar, its importance, 128. Illustrations of the wonderful utility of, 129 and sequel.
- Catholic religion, and its wholesome rules, 36, 128, 141. Affords protection against tyranny, 157.
- Carlisle, Sir Anthony, quoted, 34.
- Celibacy of the religious orders the best check to population, 158.
- Change, its good effects, 33.
- Chastity, its medicinal value, 177.
- Children suffer much at school, 20. Ought to be allowed plenty of fruit, 21. Medical treatment of, 97. Erroneous treatment of, 12.
- Chinese, their notion of medical men, 83.
- Cicero de Senectute, 31.

- Coincidences, extraordinary, 66.
 Conceptive illusions from spectres, 66. From opium and do-
 cares, Appendix.
 Cornaro, the old Venetian, 25.
 Cross, the, necessary to the crown, in health, science, and
 morals, as well as in religion, 72.

 De La Mennais, his book on indifference in religion, 160
 (Note.)
 Deafness, 52. From aerial causes, 99. In mountain jour-
 neys, 100. In aerial voyages, 112.
 Diet, the periodical changes of, better than sameness, 33.
 Divorce, forbidden by Christianity, by civil law, and by rea-
 son, 183.

 Ears, experiments on, 103. Singing in, 54.
 Earache and deafness, 52.
 Ease of mind, 23.
 Elizabeth, Queen, her vice and vulgarity, 149.
 Ember days, use of, 30, 219.
 Emblems of virtue destroyed, 148.
 Epidemic disorders caused by the air, 1. Sort of persons
 affected by, 3. Effects of simple medicine in, 98.
 Equanimity necessary to health, 138, 140.
 Eustachian tubes, 103.
 Exercise, air, and sleep, 22.
 Eyes, disorder of, 54. Candlelight, injurious to, 55. Pre-
 mature decay of in age, 55.

 Fasts, particulars of, 26. Their general use, 25. Fasting
 and abstinence, 24, 141. Fasts and festivals, their use, 32,
 128, 141, 220.
 Fevers, 60. Treatment of persons after, 61.
 Food, rules respecting, 11 and sequel.
 French, more moral than the English, 173.

 Gall and Spurzheim, their doctrine of importance to the
 schoolmaster, 189.
 Genius, requisites of, 72.
 Guerrin du Rocher, his book on fabulous times, 200. Referred
 to, 160, Note.
 Gluttony, 98.
 Grief, use of fasting in, 164.

 Handel and Purcel, 223.
 Harmony between the calendar of the church and the circle
 of the seasons, 220.

Headaches, general history of, 40. Varieties of, 41. Prescriptions for, 41, 42, and 44. Electric causes of, 43.

Holydays of the Catholic Church favourable to the ease and comforts of the poor, 220, and sequel.

Hydrophobia, very rare disease, 68. Generally mistaken, *ibid.*

Hypochondriasis, the frequent consequence of stimulating liquors and grief, 24, 165.

Idiosyncracies, 14.

Ignatius, St. of Loyola, his rules, 4.

Imaginary disorders, 67.

Indigestion, symptoms of, 5. Its varieties and cure, 9.

Inventive genius called into action by temperance, 75.

Kircher, F. his genius and learning, 73.

King Henry VIII, 44, &c.

Lessius, F. his book on temperance, 172 (Note.)

Liver, importance of, 8. Rule to judge of its disorder, 8.

Lowness of spirits, 62.

Lungs, disorders of, 59.

Marriage, erroneous notion of, 179.

Materia Medica, 88.

Measles, how to treat, 61.

Meals, periods of, 16, and sequel.

Medicine, Chinese idea of, 81. Can be improved by simplification, 84.

Medical College recommended, 87.

Botany, 88.

Mersonnus, his learning, 73.

Moral fortitude, 64.

Morgagni, his wicked experiments, 18.

Moon, influence of at her periods, 67.

Music brought to perfection by Catholicity, 74. Conducive to long life, 223.

Mind, metaphysical description of the, 154. Effect upon the body, 141.

Newton, Sir Isaac, 30.

Nervous disorders, 62.

Ocular Spectra, 67.

Opium, wonderful effects of, 244.

Orders of Religieuse, their longevity, 13.

Organs of hearing, 99. Of the brain, *ib.* Organology supports Catholic doctrine, 189.

- Papal Chair, and its extensive influence, 129.
 Paulinus, invented bells, 75.
 Phrenology, importance of, 189.
 Physicians, defects of their education in general, 86. Chinese notion of, 81.
 Plants, medicinal, discovered by the Monks and Friars, 89. Their names were the suggestions of Catholic piety, 90.
 Poor Clares, their longevity, 31.
 Puberty a critical age, 177. Erroneously treated, *ibid*.
 Prescriptions, list of, 93 to 96.
 Protestant heresy sharpens the sting of death, 165.

 Quality of food, 13.
 Quietude, its medical use, 23.

 Reformation, conduced to bad health, 141. Horrors of the, 144.
 Religion, its medicinal effects, 128. Ought to be free, 173.
 Religions, good people in all, 166.
 Religious Orders, their learning, 69. Their botanical and medical science, 90.
 Restorative effects of abstinence, 152.
 Retributive justice, remarks on, 250.
 Roaring in the ears, 54.
 Rogation, 30.
 Rules of diet, 11.

 Sea Sickness, remedy for, 127.
 Self command, conducive to health, 139.
 Scope of Education, 195.
 Schools, sufferings of children at, 19. Cause of ill health in children, 20.
 Singing in the ears, 54.
 Small Pox, 61.
 Smoking, remarks on, 243. Directions for, 244.
 Society for preventing cruelty to animals, 251.
 Spectral illusions, 65 and 191.
 Spectra of childhood, 66.
 Spirituous Liquors, effects of explained, 241.
 Spring Festivals, their timely occurrence, 219.
 Stools, having regular, 7. Signs of unhealthy, 8.
 Stuffing a cold to starve a fever, 57.
 Symptoms of digestive disorders, 5.
 Sudor Anglicus, 149.
 Supplementary Essays, 141 and sequel.
 St. Vitus's Dance, 63.
 St. Anthony's Fire, 63.

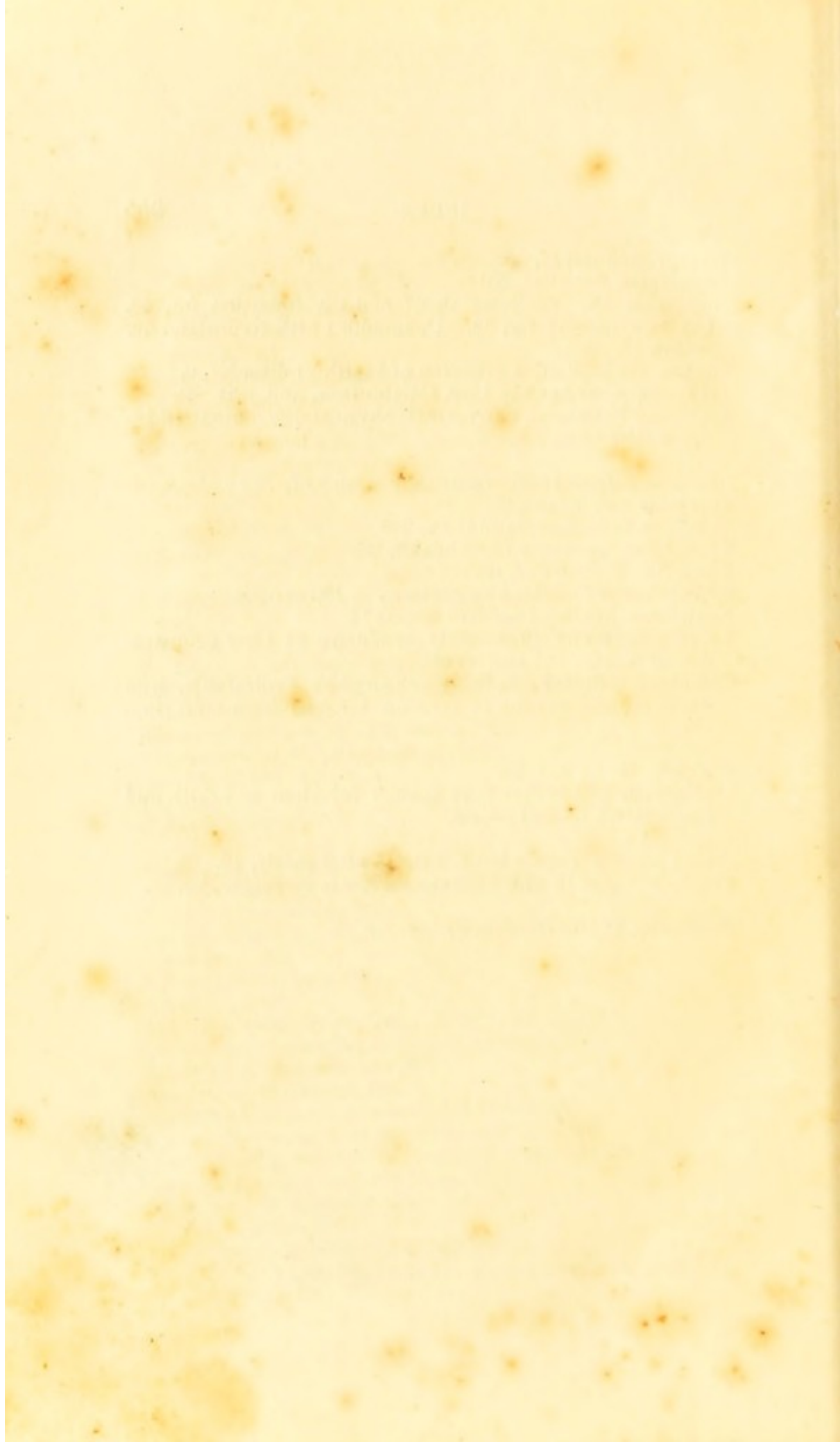
- Teeth, rottenness of, 46.
Temperance Societies, 251.
Toothache, 45. Varieties of, 47 and 50. Remedies for, 48.
Clarke's cement for, 48. Confounded with Neuralgia, 49.
Stages of, 48.
Tongue, the look of, a criterion of health or disorder, 6.
Trappists, more healthy than Carthusians, and why, 26.
Truth and Falsehood, correct metaphysical discrimination between, 199.

Universe, external and continuous proofs of, 154.
Vegetable diet drinks, 97.
Vegetable food, speculations on, 248.
Ventilation, necessity of to health, 23.
Vitus, St. the dance of, 63.
Vital power regenerated by abstinence, 152 *et alibi*.
Voluptuous habits of modern times, 71.
Voluptuousness of Protestants conducive to their comparative ill health, 141 and sequel.
Voluntary Celibacy, foolishly censured by Protestants, who would propose cruelly to restrain the poor from marrying, 158.

Whitlaw, M. quoted, 64.
Witchcraft, the foolish laws against injurious to health and sound mind, 68 and sequel.

Young persons should have a siesta after meals, 19.
Youth, a season in which much exercise is necessary, 20.

Zoonomia, of Dr. Darwin, 67.





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