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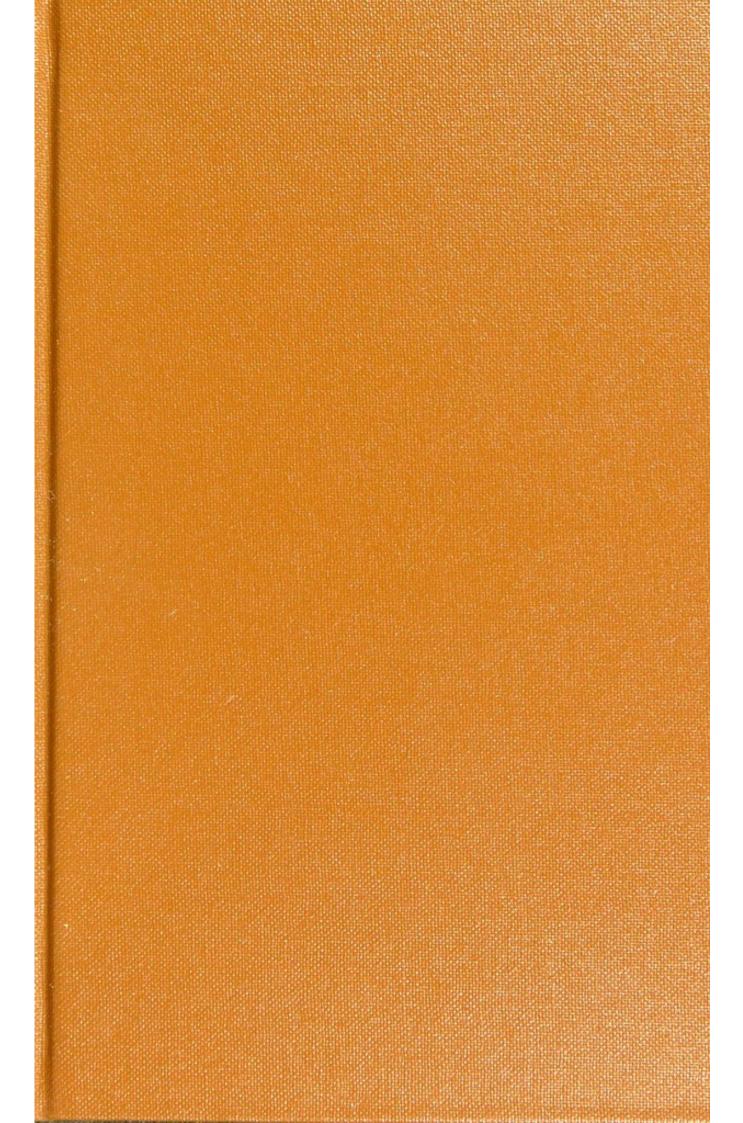
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by D' Wakefield

CONSTIPATED BOWELS:

THE VARIOUS CAUSES

AND

THE DIFFERENT MEANS

OF

CURE.



BY

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THIRD EDITION.



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PREFACE

TO THE

SECOND AND THIRD EDITIONS.

In offering a second edition (November, 1863) it afforded the writer much encouragement to have received practical and written proofs of very favorable consideration from many of his profession.

The second edition has now been out of print for more than twelve months, and repeated intimations have been given that a third would be acceptable. Such intimations having been somewhat tardily attended to, an apology is due to those who may have been inconvenienced thereby.

Gore Lodge, Prince's Gate, Hyde Park; June, 1868.

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PREFACE

TO THE

FIRST EDITION.

Constitution of the Bowels, more frequently perhaps than any other bodily derangement, owes its extreme prevalence to perversion of natural laws—the beneficent laws of Providence. This fact has impelled the writer half unconsciously to assume an unusual degree of the moral tone, but he trusts that good intentions will render this fault excusable, though the monograph be on a medical subject.

Two aspects of the subject are earnestly put forward; first, the necessity of carefully regarding the variety of causes, primary and secondary, which, in different cases, originate or retain a constipated habit; secondly, that essential point for effecting a cure in very obstinate cases—the avoidance or one-sided extremes in treatment.

We have all seen cases of constipation rendered permanently chronic, and almost incurable, by the abuse of medicines. Many of us have known instances in which certain practitioners of the Hahnemann school have encouraged their patients to allow two or three weeks to pass without any evacuation. Each extreme has afforded the writer, through peculiar circumstances of a personal character, many opportunities of observing lamentable results as its consequence.

Notwithstanding the importance of this subject, its special consideration apparently presents almost a gap in medical literature; therefore, the following contribution may not be without some value to the student and young practitioner.

Gore Lodge, Prince's Gate, Hyde Park;

January, 1861.

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CONSTIPATED BOWELS.

CHAPTER I.

INTRODUCTORY.

Primâ faciê, nothing appears to the unreflecting mind more easy than the treatment of constipated bowels. Nevertheless, there exists perhaps no derangement of the human organism which presents more troublesome little difficulties, and causes more mental worry, to the medical practitioner.

One prevalent idea obtains not only with the public generally, but even with many a claimant to a knowledge of medical principles, whose undisciplined mind may employ such principles in direct contravention to nature's laws. In both cases the basis of treatment simply resolves itself into the administration of medicine, the only difference being this—in the former, an almost total absence of knowledge in the selection and combination of medicines exists, while the latter derives considerable advantage from certain definite ideas and rules laid down by the experience of past and present physicians. Whether the one-sided and fallacious idea, viz., the exhibition of medicines, be exclusively

directed (as it too often is) to the use of aperient medicines, or whether the ordinary routine of tonics and bitters be associated therewith for the laudable purpose of neutralising the evil, the *habitual* resort to such artificial aid must ultimately claim a chronic victim to troublesome and frequently most distress-

ing constipation.

To assert that a single dose of purgative medicine ought never to be administered without the intervention of the medical practitioner would be not only arbitrary, but ridiculous. In the outset, a caveat may be entered against any possible assumption that the suggestions offered in the following pages originate from a revolutionary desire of that kind; for, unquestionably, the judicious use of an occasional purgative, at long intervals, must meet with the hearty approval of every enlightened physician. Under certain circumstances, a serious attack of sickness may be warded off by timely recourse to this simple expedient; or should the symptoms not yield to one dose, and the medical attendant be tardily called in, the preliminary may be not altogether valueless in temporarily repulsing the enemy, and in preparing the system for further treatment. Yet, in many instances, so much more apparent than real is the presumed advantage of even one dose selfprescribed or druggist-prescribed, that too great caution can hardly be exercised in considering its propriety. When constipation arises and becomes troublesome, an ordinary laxative, as we too well know, frequently aggravates the pre-existing tendency, almost invariably gives rise to torpidity of the intestinal functions for some days afterwards, and too often urges a repetition of the experiment for the purpose of getting rid of the discomfort resulting from previous compulsory action.

Even at the present day there still remains far too great a tendency in some of our own profession to resort unadvisedly to laxatives in order to save themselves trouble amidst the labours of an extensive practice, or to gratify an irritable patient by a prompt and free evacuation. Probably their judgment might dictate some other course as infinitely more conducive to the true interest, the permanent relief, of the patient. But the difficult question follows, How can this laudable desire be put into practice? Sometimes the impatience, or the nervous timidity, or the self-will of the invalid may present an almost insuperable difficulty to the practitioner who would earnestly wish to husband the vis medicatrix naturæ. Sometimes, on the contrary, the fault lies entirely on the other side. Either the éclat of a rapid effect, or a facile treatment demanding but little reflection, is the main consideration; or perhaps a feeling of mépris, from having previously neglected the study and application of nature's

laws in "so simple an affair as constipation," impedes the carrying out of good intentions. More frequently, however, the absence of personal knowledge regarding minute details in the management of this widely spread evil presents the real difficulty. Although there still are, and from the inherent nature of some minds (found in all classes of the community) there always will be, old-women doctors, elderly and juvenile, within the pale of our profession, yet such in our day are happily the very rare exceptions to the rule. To address these in the language of common-sense would be almost as hopeless a task as to impress reason upon the obtuse and ignorant old women too often employed as the midwives of our poorer fellow-creatures. The valuable proverb, "experientia docet," has its abuse, like most good things. While not presuming to instruct in principles with which all are conversant, still I hope that I may be able to suggest certain details, not without value to a few, especially junior practitioners. The grounds upon which are based anticipations of usefulness from common ideas and suggestions somewhat more than usually elaborated and earnestly put forward, so far as nature's laws are concerned, in the management of constipation, are almost entirely of a practical character. The writer himself has had, in his own person, but too much experience of hereditary tendency to

constipation. Within his own family connection (a tolerably large circle), lamentable instances of the evil consequences arising from a natural or acquired habit of constipation have been far beyond the average. Sympathetic and home-felt influences of such a nature could hardly fail to produce more than ordinary reflection upon, and practical atten-

tion to, the special subject of these pages.

Most minds which come up to the ordinary standard of mankind have the ability (if they exercise the will) to observe and note carefully the simple and everyday operations of nature, without the bias of prejudice and preconceived notions. Medicine, as Dr. Cockle in a late able lecture observes, is rational epiricism. At present such is the fact, and this fact renders it peculiarly obligatory upon every man, who pretends to the dignity of a connection with this profession, to have undergone the ordeal of careful education in principles and in clinical observation properly directed. Subsequently, each, like the volunteer rifleman skirmishing in presence of the enemy, must mainly depend upon his own acumen and original observation, from which he may gather and accumulate fresh ideas, and develope his embryonic resources. Hence medical intuition. Abnormal conditions of the animal economy ought not to be, cannot be, successfully investigated and treated according to routine regulations and medicinal formulæ; but

yet the valuable principles taught in the medical schools are sine quá non for the formation of the accomplished practitioner of medicine. A certain number of years thus occupied affords a severe yet essential mental discipline.

In this country, where the great and valued idea, "the liberty of the subject," is brought so fully into practice as to border on the extreme, and tends in some instances to the disadvantage of the community, "free medicine" is made a warcry by certain self-interested parties, particularly the "druggist interest;" base impostors join in the cry, and the public take it up with an unhappy avidity, under an erroneous impression, excited by the ignorant (because wholly uneducated) pretenders who prey upon their health, their pockets, and their credulity. Professional men, who have devoted their whole time, their property, their lives, to their profession-who have, in the very outset of their career as students, spent years of labour exclusively upon the acquisition of correct and safe principles for their future guidance in practiceare thoughtlessly regarded as foes instead of friends to the community at large. Little do the public know the amount of permanent ill-health originating from the maltreatment of quacks; and among the various derangements of health to be affiliated upon ignorant treatment, Constipation stands out in bold pre-eminence.

Would any person in his senses, with a large property at stake, employ an unqualified person as his attorney? In case of an invasion, would the public be contented to entrust the safety of their are focique to the command of a mere civilian? Would any manufacturer entrust the direction of his works to employés who had received no lengthened instruction in the principles of such operations? Would the owner of valuable steam-machinery entrust the management and repair of his property to any man whose mind had not undergone the previous ordeal of years of special education? Yet (strange inconsistency!) daily do we find our fellow-countrymen of all classes entrusting the most delicate, the most beautiful, the most mysteriously formed, the most complicated machinery—that of the human body—to the tender mercies of persons wholly untaught, and unproved by the test of severe study and examination. The health, often the lives, of those dearer than life itself are committed to the care of the tradesman in drugs, stationed behind his counter amidst his "antibilious pills." The illiterate herbalist, the soidisant medical galvanist, the secret and cure-all remedy-men, et hoc genus omne, each and all claim and receive the suffrages of the long-enduring and credulous public; each has his secret, sovereign remedy, his universal panacea for "all the evils that flesh is heir to."

The foregoing remarks are quite à propos in relation to the special subject under discussion in these pages. If there be one unhealthy condition of the human organism which merits a preference over every other, viewed in connection with the unhappy abuse of medicines through the snake-like fascinations of quack cure-alls-of the ever-open, neat, inviting druggist's shop-or of self-treatment-that condition is constipation. In the present day the evil has increased to an alarming extent, not only as regards the health and strength of the present generation, but further the transmission of an hereditary tendency to torpidity of the bowels and its consequences. Amidst the many abuses that have been taken in hand and suppressed for the advancement of general hygiene, this grave point ought not to be forgotten. Let the light of reason and common-sense once obtain due ascendency, and the bowels of our fellow-countrymen will no longer lie under the liability of being permanently undermined through misplaced confidence in the charla-Within the last few years the progress of science, especially of physiology, has done much towards eradicating the old physician and apothecary system and the abuse of medicines. But an evil, once rampant, is not easily overcome. Time is needed. When the act of prescribing a dose of opening medicine is so simple, it almost needs compulsion to change some men's opinions. Scarcely yet is it

altogether a thing of the past to hear such expressions as these:—"I am quite content with my present line of practice; I have not time to attend to new-fangled notions; clear the intestines of irritating matter, is my motto." This is very plausible, and the more so, inasmuch as no sensible man in the profession can deny that the blue-pill and black-draught method is occasionally, in certain cases, correct and sound in principle and practice.

Whenever a practicable line of treatment, with little or no medicine, can be successfully adopted in any individual case of constipation, such treatment certainly claims a primary consideration. The further we advance out of any impulsive habit of drawing "a bow at a venture" (the shaft dipped with potent drugs, foreign to the constituency of our bodies) in the management of this common malady, the greater distance do we place between ourselves and the druggists, &c., and the more success will attend our efforts in deterring our patients from permanently injuring their own visceral anatomy by undue use of medicines.

Having offered these precursory remarks by way of explanation for entering upon the consideration of so common an ailment as constipation of the bowels, I will now endeavour to arrange and examine the variety of causes which under different circumstances originate and perpetuate it.

CHAPTER II.

THE VARIOUS CAUSES OF CONSTIPATED BOWELS.

The various causes which give rise to constipation of the bowels must ever demand serious consideration on the part of the physician. Success in medical treatment depends much upon the exercise of sound judgment in diagnosis. Constipation ought not to be considered as forming any exception to the rule.

Constipation, however, is so common, so every-day a matter, that there exists an unfortunate tendency, even in the minds of many practitioners, to neglect that careful attention to the totality of circumstances characteristic of individual cases, which attention would infallibly be exerted in most other forms of disease. Human nature is generally apt to fall into habits of routine and want of caution, with consequent failure in due discrimination, where constant familiarity renders anything common. Action thus tends too much to the automatic. Constipation, otherwise than in an exceptional and occasional form, is not an immediately urgent or fatal, but only a very troublesome

and intractable, affection; ergo, it is too often regarded with a feeling somewhat akin to contempt, the undermining effects upon the general health being but little apprehended. Now, it is this undercurrent of thought, more or less passively and even unwittingly existent, which ought to be deprecated, for it undoubtedly tends to the overthrow of confidence in the professional adviser, and to drive invalids into objectionable courses most mischievous to themselves, with the impatient remark, "I can treat my own bowels quite as well, if not better, than the doctor."

Although it must be allowed that an hereditary tendency to constipated bowels (cases of which are not unfrequently met with) is sometimes the fons et origo mali, and thus throughout life may more or less embitter existence; yet, as a rule, both the predisposing and exciting causes wholly originate in circumstances personally attaching to each individual, and for which he cannot justly condemn the constitutions of his progenitors. Such being the case, constipation is more or less avoidable, the intestinal function is more or less under self-control. "Prevention is better than a cure," and a knowledge of causes may do much towards lessening the unpleasant necessity of the latter. I should be glad to see one reform, viz., more frequent application to "the doctor" for his opinion as to cause at the very outset. Let him be requested to explain

the cause, and not merely to treat the effect. Much subsequent misery might thus be warded off.

Since the history of each case and a correct diagnosis are so all-important, I will endeavour to arrange, under separate heads, the great variety of causes which operate, either singly or conjointly, in setting up and establishing inveterate constipation:

1. The use of aperients.

2. Indolent habits, luxury, too much sleep, confinement in hot, relaxing, ill-ventilated apartments, morbid fear of draughts, &c.

3. Torpid liver and deficiency or perversion of

biliary secretion.

4. Neglect of proper periods for evacuating the

bowels, especially when nature impels.

5. Pure nervousness, excessive anxiety regarding frequency and regularity of the alvine evacuations.

6. Want of contractile power, atony of the nerves and the muscular coat of the intestinal canal, irre-

gular peristaltic action, flatulent distension.

7. Deficient secretion of moisture in the lower bowel, owing to which hardened, scybalous masses, or else numerous little bullet-like formations, are apt to lodge in the colon or rectum.

8. Constipation from causes mechanical, and of limited location, e. g., hæmorrhoidal affections, pregnancy, and muscular weakness or pain (rheu-

matic or otherwise) located in the abdominal parietes, loins, diaphragm, &c.

9. Special conditions connected with infancy, old age, cerebro-spinal debility and irritability, and cerebro-spinal paralysis.

THE ABUSE OF PURGATIVES AS A CAUSE OF CONSTIPATION.

Condemnation of this widely spread abuse ought not to be confined to violent purging only, but to the injudicious habit of more or less constantly resorting to opening medicine, even of a mild character. It may safely be inferred that no welleducated medical practitioner of the present day can have his eyes closed to this conviction. He must lament the necessity, even though he may somewhat unduly advocate a recourse to opening medicine through that presumed necessity. Too often he is consulted for the purpose of undertaking the difficult task of attempting to rectify the direful consequences of self-treatment or (worse) of the habitual resort to the druggist's shop. It is a tolerably well-ascertained fact, that obstinate constipation is infinitely more common among our own countrymen than among the French and Germans. The ironical question may naturally arise, Are British bowels different to those of foreigners? Why should one

need what the other can comparatively do without? Why should his pills not unfrequently be as constant as his dinner with the first, while with the latter such disagreeables are a comparative rarity? Surely an all-wise Providence must have organised the intestinal canal, and the various portions of the animal economy upon which it depends, precisely the same in the Englishman as in the Frenchman. Whence then arises the almost proverbial contrast, so unfavorable on the side of the former? evident that the well-being and the enjoyment of life must be sadly interfered with, when the system is habitually subjected to, and the palate nauseated with, drugs. Happily, the contrast can be easily explained, and each of the mixed Anglo-Saxon, Celtic, and Anglo-Norman community, at home and abroad, can obtain an immunity from constipation, equal to the most favoured race. I am led thus to speak, because I have myself heard it sometimes remarked, even by medical brethren, that our variable and humid climate may have something to do with this common evil. Assuredly such an idea has no sound foundation, nor is it a common fallacy among our profession. It is just alluded to, as one which is occasionally broached by way of explanation.

The contrast alluded to arises from the abuse of medicines, which abuse in a great measure owes its origin, and altogether its universality, to the unfor-

tunate facilities afforded in this free country for the purchase of drugs and every description of quack nostrum. The tradesman, behind his counter, is permitted to retail every medicinal drug, almost every potent poison, without the intervention of the educated guardian of the public safety in such matters; -nay, he is permitted to go so far as to usurp the functions of the physician, and is even encouraged (mirabile dictu!) to prescribe hmself on the strength of the pharmacopæia placed in his hands by our own profession, purely for the purpose of giving him instruction as to the proper method of preparing and dispensing medicines. In strictures upon this abuse, however, it is but right to make an exception in favour of most of the respectable members of the Pharmaceutical Society.

In France, the law protects the public from the evil fascination of the blue, red, and green bottle establishments. In England, on the contrary, there exists no such protection, owing to the fear of infringing "the liberty of the subject." This is one among the very few examples of carrying a liberal feeling to an unhappy extreme. The medical profession cannot change the law. If we suggest such a remedy, we immediately bring a storm of virulent abuse from self-interested parties upon our devoted heads. The quacks, who prey upon the health of their deluded fellow-creatures, simul-

taneously raise the plausible tocsin of war against us, viz., that we are acting in furtherance of our own interests.

Reason and common-sense are the only weapons which we can successfully bring to bear upon this singular tendency to place confidence in uneducated and ignorant advisers, when health and life are concerned. I say singular, because in no other important matter of worldly welfare would people dream of trusting, much less of giving a preference to, the uneducated counsellor or unskilled labour; and few, moreover, would confide in themselves, when their mental training had been directed in an entirely different channel. It is matter of notoriety among our own body, and this I would recommend as specially worthy of being impressed by each of us upon our patients, that a considerable number of eminent practitioners invariably distrust their own medical skill, when their own health or that of their family is concerned, and at once request the advice of a professional brother.

If we temporarily stimulate or excite to unwonted and unnatural action the whole or any portion of the animal economy, it is a well-known law of nature that a corresponding stage of depression must follow. An increase of temporary power necessitates an augmentation of present expenditure. The organism is capable of generating a certain amount of power in a given time, that amount

varying, of course, in different individuals, and in the same individual under different circumstances. If we urge any portion of the body to extreme action within this limited period, we must exhaust its powers, and in truth temporarily paralyse it. The stage of exhaustion will be more or less prolonged in proportion to the potency and duration of application of the previous stimulus. The organ must then be allowed perfect rest for a time, in order to permit it to regain its natural power; otherwise, a fresh stimulus must be employed, and renewed action be made compulsory, prior to recovery from the first undue expenditure of power and the consequent exhaustion. Let this process be repeated continually, and the organ will soon obstinately decline to perform its function, except in response to the stimulus to which it has become habituated. More or less permanent depression of its intrinsic power has been induced, even though the wonderful quality of adaptation of the body to change of circumstances may still enable the organ to respond to the acquired habit of an unnatural stimulus.

Now, this is precisely what takes place under the abuse of opening medicine. A constipated habit becomes somewhat troublesome to the feelings of the subject of it; it is so easy to take a dose of medicine; the doctor is not needed for such a trifling purpose: "antibilious" or "aperient" pills, or other form of

laxative is self-prescribed; the internal economy, relieved from its previous overload, feels so much lighter and freer, for a brief period, as quite to elate the sufferer. But what follows? A tendency to increase of constipation for some days subsequently, accompanied by a certain unpleasant sensation of fulness, of flatulent distension, and of lassitude, with ineffectual efforts to obtain ordinary relief. The natural functional powers, having been weakened by undue temporary stimulation, need a certain amount of rest, and cannot resume the even tenour of their course until their demand for satisfaction has been granted. Either rest must be allowed, like sleep to the overwrought brain; or the medical adviser must be called in to direct treatment; or, lastly, another aperient dose must be taken. Some will determine to tolerate the temporary inconvenience, howsoever disagreeable, preferring the first expedient; the more rational will decide upon the second course, and so obtain the immediate advantage of the educated man's varied resources; others (unfortunately for themselves, the largest class) will choose the third method. Repetition of the latter expedient increases the malady; further repetition soon proclaims the necessity for it; obstinate constipation becomes established.

Not only is the abuse of purgatives the most fruitful source of chronic constipation, but, on the

other hand, their moderate use can rarely cure that affection. The rational explanation of the inadequacy of such treatment, as well as the injurious effects of its excess, having been offered; in the next place, the principal causes which lead to this excess should be named. The facilities afforded in this country, for purchase of powerful drugs of all kinds, without the intervention of the physician has been just referred to. Both rich and poor enjoy these dangerous facilities, but a vast difference exists between the motives operating as inducements for each class to avail itself of such facilities. First, the motives which impel the richer classes to resort to purgatives should be noticed, and among these I would especially include their domestic servants, male and female. Here there exists that too prevalent vice, indulgence in eating and drinking infinitely beyond the true wants of the system. This porcine propensity is usually much greater among those who possess no useful occupation for the mind, or no taste for physical exertion. As a rule, the less occupation the greater the tendency to sensuality—the animal obtains a preponderating ascendency over the intellectual and moral. My personal observation bears unquestionable testimony to the fact that this vice prevails more universally among gentlemen's domestic servants than among their superiors. The inteltectual and moral element is lower, the animal

reigns more supreme; and moreover, when a large staff of servants is employed almost entirely in-doors, time is not sufficiently occupied, while they fatten on superabundance, gorge themselves four or five times a day, regard themselves as much maligned individuals if they are cautioned against their sins, and deeply injured and starved if the doctor feels it his duty to restrict them to a sufficient and wholesome regimen. Domestic servants may thus be taken as a type of the class gourmand; yet too often are they led into the extreme through the modified example afforded by their employers, and if not by their immediate master and his family and guests, at least through communication with fellow-servants in other establishments. It is a great social evil, by no means according with a due appreciation of man's superiority over the lower orders of creation.

But such over-indulgence of the appetite is not confined to those who, like certain quadrupeds, are almost hourly craving for the superfluity of aliment which they ought to divide with their starving fellow-men. Amongst the highly educated this extreme is comparatively rare. Attention should be more particularly directed to one very common failing, through which many disagreeable yet perfectly avoidable ills are entailed upon the higher classes.

I refer to the fashionable habit of over-indulgence

at the late dinner table (i. e. only once a day); as though over-repletion once a day were not itself sufficient, without also drawing upon the stomach and assimilating organs for augmented efforts after the fatigues of the day, and subjecting the system to an overplus at the very period when its requirements are the smallest-when physical exercise to work it off is debarred-when sleep, that admirable regenerator of exhausted nature, is to follow-when, in fine, the totality of existing circumstances indicates as clearly as noonday the propriety of a light, moderate, and easily digestible meal. This infringement of the natural law which points to the preservation of due balance between previous supply and subsequent waste, which emphatically says, "put on more coals when the organic machinery is about to undergo more work, but supply less fuel when the ordeal of labour is past, the machinery partially exhausted and demanding rest, the vital flame somewhat languid, and inviting the gentle fan,"-this infringement of a natural law arises, to a great extent, from our social habits; it is one of the unhealthy germs of business or of fashion. Often do we find that the abuse of the dinner table renders every other meal merely an apology for eating. Often it takes away the zest even for breakfast, that meal which the expectant body in healthy condition ought to regard as the great preparatory for the duties of the day. More frequently the so-called

minor meals are not greatly interfered with as to proper quantity, notwithstanding the monstrum horrendum, informe, ingens—the late and heavy dinner. The body and mind become habituated to the latter. It is the one enormous superfluity which positively injures, the negative injury of deprivation of natural appetite for earlier meals co-operating but trivially to weaken the organism.

But constitutions vary. Some individuals digest and assimilate much more slowly and more feebly than others. Some are constitutionally so strong, that the fatigues of the day depress their vital powers but little; they may be able to take, with no great disadvantage, an immoderate meal without subsequent exercise before bedtime. Others however, and these constitute the great majority in the present day, when fox-hunting and out-door business pursuits have given place to more sedentary occupations amidst the routine of a town life-others cannot with impunity take the heaviest daily meal after the fatigues of the day. Comparatively a very small quantity can then be digested, or, if digested, be assimilated and elaborated into healthy nutriment. What then becomes of the superfluity of ingesta? Let the overwrought excretory organs tell the woful tale, taxed as they are to the utmost for the purpose of ejecting from the system that overplus which ought never to have been admitted.

History informs us that Vitellius was in the habit of resorting to vomition, upon receiving from his stomach a peremptory intimation of refusal to satisfy further demands upon its good-nature. Probably in the degenerated condition of the Roman patricians of that day, the example of the imperial glutton was by no means unique. Doubtless, so far as the internal economy is concerned, the direct evacuation of the stomach after over-repletion would be by no means an injudicious course, provided that the organ did not undergo, or declined to be subjected to, a repetition of the distension immediately afterwards. Disgusting as such a course may appear to the more refined indulgers in overeating, it certainly would often save the general organism from subsequent malaise. In these days, however, as emetics are usually out of the question, purgatives are the favourite resource. When gentle Nature cannot respond to the cruel calls made upon her, when she cannot relieve the body from the primary and secondary products of the overloaded stomach, liver, portal system, and other viscera; then art is enlisted in the form of blue pill and black draught, or the druggist's "antibilious pills," or some one of the vast number of patent opening medicines—all consisting of wellknown common drugs, merely differing somewhat in strength. The question may be put closely to those who claim the possession of refined minds, whether even the natural relief of the bowels from the limited amount of débris, resulting from the moderate quantity of ingesta essential for the wear and tear of the system, is not sufficiently humiliating to the higher feelings of the soul, without voluntarily placing ourselves in a position necessitating undue and offensive augmentation of this disagreeable excretion? Surely the natural requirement, at its minimum, gravely reminds us of our frail mortality!

Whether the abuse of purgatives originate in the more vicious indulgence of enormous over-loading of the stomach, morning, noon, and nightwhether it arise from the less brutalising, and more common, yet almost equally injurious habit of engorgement at the late dinner-table ONCE A DAY-whether it arise simply from the fashionable habit of taking the principal meal of the day (moderate though it be) at the very period when the system can least tolerate, while it less needs, a full meal—whether it arise from peculiar delicacy of the natural constitution as a whole, or of the abdominal viscera in particular, whereby the animal economy of one individual may succumb under a slight, yet unfair strain daily repeated, which another may bear with absolute impunitywhatever variety of modification may act as a motive to this abuse, through the production of intestinal, cerebral, or other discomfort-one thing will be

an ordinary (if not invariable) sequence sooner or later, viz., habitual tendency towards constipation and its twin-sister, medicinal purgation.

Among the poor, who from their circumstances can rarely be the subjects of over-repletion, this error is not so universal as with those who have larger pecuniary resources at command. But the old exploded apothecary system has left certain unwholesome fruits behind, even among this class. The more nervously constituted minds are too apt to think that various little temporary ailments must needs require treatment with opening medicine. Why? Because they have been in the habit of seeing medicine unduly given and taken, from their earliest infancy, and with these minds purging is especially associated with the idea of medicine. The more sensible the effects, the greater the advantage to be derived !- and it is difficult to persuade them to the contrary. Further, there exists the tendency to imitate their superiors in social grade; and members of their own families, who have taken the position of domestic servants, are not behindhand in spreading the evil, as well as good, resulting from intercommunication; for an example set by those superior in station, or from education, is very infectious. Indeed, throughout all classes, abuse of purgatives sometimes arises from the notion that medicine is a sine quá non of life. Those affected with this

monomania, at length, hardly feel happy without it. It too often becomes an all-absorbing idea, implanted in their very nature, that they cannot preserve health without all in the controls.

preserve health without physic.

Lastly, the unfortunate habit of administering frequent and ill-advised laxatives to infants and young children must not be overlooked. This evil is a very sad one, inasmuch as the mother or nurse may thus, with the best intentions towards their beloved charges, lay the foundation of a permanently constipated habit—a habit which may be productive of far more misery in after-life than à priori it might appear. At no period of life does nature claim such freedom from interference as in infancy; at no period can she less easily endure even slight deviations from her benignant laws. The tender bud is germinating; the demands of progressing development and growth are superadded to those metamorphoses which the infant has in common with the adult; while the nervous system is exquisitely sensitive to every impression, and consequently obnoxious to the permanent retention of abnormal influences which may be brought continually to bear upon it. Can there be any difficulty in arriving at a correct appreciation of the peculiar. disadvantages beneath which the tender plant must labour under such circumstances? If habit is liable to become a second nature in the adult, this must certainly obtain in the young child.

As in the case of persons of mature age, so in infants, the plausible plea of necessity is always at hand for the purpose of apology, when medicine has been improperly exhibited, and the bowels have been subjected to over-solicitation. The physician, when consulted, has the duty not only of relieving any primary tendency to constipation, but the greater difficulty of rectifying the functional torpor and other consequences resultant from previous maltreatment.

INDOLENT HABITS—LUXURY—CONFINEMENT IN HOT,
RELAXING, AND ILL-VENTILATED APARTMENTS—
MORBID FEAR OF DRAUGHTS—TOO MUCH SLEEP,
ETC., AS CAUSES OF CONSTIPATION,

Are common among most highly civilised nations, with the majority of whom artificial modes of living are to a great extent substituted for natural ones. Whenever the former greatly preponderate over the latter, a series of untoward results must follow; and one of these is a tendency to constiputed bowels.

Partly from choice, in these degenerate days of the animal physique and too prevalent neglect of outdoor pursuits—partly from the presumed necessity of a sedentary life amidst business, writing, reading, needlework, and other handicraft—there exists a lamentable tendency to overlook that necessity for perfect health and strength, the periodical daily subjection of every portion of the human body to a certain amount of exercise. Co-existent with this negative error, is the positive one of confining the body, with but slight intermissions, within too hot, closed up, ill-ventilated rooms. Deficiency of physical exertion necessarily entails torpidity of the entire corporeal mechanism; the circulation is inactive; digestion and assimilation are imperfect; nutrition is imperfect; vitality is lowered. heat cannot be sufficiently generated within the organism, unnatural chilliness is continual, and the slightest draughts are morbidly felt to be intolerable and conducive to colds and partial congestions internally. Since it is as yet the exception to the rule that any considerable expense should be undergone, or subversion of ordinary domestic arrangements permitted, in order to freely ventilate while retaining a fair equilibrium of warmth throughout the apartment—the body, half warmed by the flickering vital flame, urgently demands, for present comfort, the closing up of every nook and corner through which the health-giving, bracing draught of cool fresh air can penetrate; admission is peremptorily refused to the health-giving current, simply because the over-sensitive condition to which lowered vitality has reduced the system prohibits the genial presence of a providential friend.

very current which nature intends to warm the system, just as a draught of air fans the flame and increases combustion in the ordinary fire-grate, is converted into an enemy. Exclude this current, lower the vital fire, and the temperature of the apartment within which the body is confined must be correspondingly raised. Thus absence of wholesome exercise, an extremely limited supply of fresh air, a hot and relaxing atmospheric medium, conjoined with the retention of the carbonic acid and other noxious emanations for hours within a given space, operate day by day to undermine the constitution and mental as well as physical capabilities—if they do not actually shorten a life which may become scarcely worth preservation. The dreadful scene in the Black Hole of Calcutta was but an instance of horrible concentration of those impure, debilitating, and slowly undermining daily influences to which many subject themselves spontaneously and wilfully-many from the presumed necessity of their position in lifemany more from ignorance of the common things of nature.

If torpor and inactivity of the animal functions be a general consequence of submission to such abnormal influences, parity of reasoning will point to constipation as a highly probable result; for a part must partake of the lowered condition of the whole. And so we find it. Torpidity and irregularity of the intestinal operation is a natural sequence.

The more humble classes, whose pecuniary resources are derived from, whose daily bread is dependent upon; their subjecting themselves to such injurious influences, can but partially profit by the instructions of their medical advisers in the preventive direction; and even among the higher classes we must admit the existence of a few whose business pursuits may militate against the best intentions. But, exceptis excipiendis, present attention is directed mainly towards selfinstrumentality in setting up a constipated habit; some either wilfully contravening nature's laws, and being thus the sole authors of their own sufferings; others deviating from the track marked out by nature, because they never happen to have had their eyes sufficiently opened to the impropriety of such a course in connection with enjoyment of life and health. It is far too common to attribute ill health to an infliction of Providence. Grant that a certain proportion of sickness must ever be unavoidable: still it remains an indisputable fact that much of ill-health is self-derived; and it is certainly an injustice done to our God, when evils resulting entirely from our own infringement of His perfect laws are reflected off ourselves, and thrown upon Him. Such injustice is flagrant enough, even in the

absence of a full acquaintance with the errors which may originate and retain ill-health; but how inexcusable is it to plead thus in extenuation of our own faulty habits, when such habits have been knowingly and persistently indulged in, contrary to the dictates of reason, common-sense, and competent advice! Self-deception is too common a sin, and a very plausible one. When the wish is father to the thought, there exists an aptitude to reason upon false premises. A fixed, yet unacknow-ledged, determination is tacitly permitted to lay hold of the mind—to regard only one side of the question. Impartiality is ignored in fact, although professed in word.

Let life be made up of undue self-indulgence—indolent habits—too much sleep—confinement in luxurious, hot, ill-ventilated apartments—outdoor exercise in the close carriage, minus the use of the limbs, except to step in and out, to enter a shop or pay a visit: let life be thus spent, and let us inquire—what are the essential accompaniments of such a course of life? Morbid sensitiveness to the slightest external impressions, incapacity for bodily exertion, diminution of intellectual vigour, inactivity of the secretory functions, imperfect and unhealthy nutrition, difficulty in getting rid of excretions. Morbid sensitiveness becomes so great as to reduce the vital organism (calculated as it is, under natural

circumstances, to resist all ordinary atmospheric variations) to the condition of a perfect thermometric and hygrometric instrument. The most trifling draught causes a cold, a rheumatic or neuralgic pain, or some other unpleasant affection; an east wind is positive misery; while fancy, reigning triumphant, often extracts painful things felt as realities out of pure imagination. The bodily powers, excepting under some temporary excitement, are sometimes felt unequal to the task of moving across the room from the sofa or the easy chair—the "back is so weak"—the "legs can hardly support me;" holding the book in reading fatigues—everything fatigues. The partially unhinged mind co-operates with this real lassitude of body; for renewal and transformation of tissue, with continual removal of effete débris, must take place in the brain just as throughout the rest of the body. The secretory organs being inactive, the aliment taken does not undergo its full conversion into healthy nutriment for the various tissues: the circulating fluids are thus charged with half-elaborated products of the digestive and assimilating organs; while added to this is excretory inactivity, owing to which the retained débris further vitiate and render impure the blood and entire system. The appetite may be still enormous, from inherent and long-uncontrolled gustative propensities, excited by stimuli and cordials, and perhaps medicinal tonics; a providentially

strong constitution may for a time bear up against this. Often, however, the appetite is capricious and not large, and the chronic invalid may not even have this single gratification of pleasure at the table. The state of matters thus self-originating may, to a certain extent, remain tolerable for a considerable number of years, provided the bowels largely and regularly respond. The quantity of irritating, half-digested, putrefactive matter continually present in the intestines will sometimes relieve by the vis-à-tergo, and by keeping up artificial irritation. This will be confined, for the most part, to the hearty eaters. But if (as for the most part must happen, from special torpidity of the abdominal viscera becoming co-existent with the general torpidity of the organism) constipation be a trouble superadded to other abnormal conditions, then things often attain their climax of endurance. Even the habitual use of purgatives, that facile convenience for such condition, will afford but temporary relief, and ultimately will demonstrate the costly character of the service rendered. The rusty and clogged machinery can but imperfectly perform its destined work; yet so great are the conservative and the reparative powers of nature, that a quasi-vegetative life under extremely uncomfortable conditions may be prolonged for a series of years, and, even then, health and comfort can be regained by due reform of vitiated habits in conjunction with strict and rational treatment.

But however experienced, however unprejudiced, however nature-loving the medical adviser may be, one great difficulty must be overcome, which frequently taxes the utmost resources of his patience and ingenuity. The difficulty is this. When the mind of the indolent valetudinarian has been long unaccustomed to make an effort in a direction contrary to the momentary current of thought-when ennui and lassitude have become a second nature—when the body has become enervated, presenting a dead weight to the realisation of the languid desires of the psychological automaton,—the unhappy victim of such a self-inflicted penalty can with difficulty be brought to make the persevering and continuous efforts necessary for a cure. The fervent wish may be deeply implanted in the bosom; the responding essential, firmness, may be almost absent. The cure may be perfectly within the range of possibility; but the only chance for the invalid is to be placed unreservedly, like a child, under the gentle, persuasive, and kind yet firm counsels of the medical monitor.

It is the duty of every medical practitioner earnestly and judiciously to enter into every little detail on these matters, when he is called upon to treat derangements of the health, the predisposing or exciting causes of which may be clearly traced to circumstances avoidable yet morally dif-

ficult for the invalid to overcome. To generalise vaguely, to give a faint outline of hygienic advice, is not sufficient. Our patients cannot fairly be expected to know as much as ourselves regarding the practical application of natural law, therefore we ought not to run away with the superficial idea that indelible impressions can be rapidly stamped upon their minds, with the same facility that fresh ideas on natural philosophy can germinate in our own minds, which have been prepared by years of culture for the reception of the seed. Possessors of knowledge are too apt to forget, that what may be easy of comprehension to themselves may be apprehended with more difficulty by others. Bringing this fact to bear specially upon hygienic and medical matters, we should recollect that our profession has often extreme difficulties wherewith to contend; viz., a dead weight of prejudice, preconceived errors difficult to efface, habits and feelings which have become a second nature. It is therefore more than ordinarily incumbent upon us to enter into minute details, to give a lucid and definite explanation of the mode in which simple causes act and re-act to produce ill-health; to put all things in the most agreeable aspect; and to note carefully the distinctive traits of character, as well as the extent of mental capacity in each individual. Upon the employment of due judgment in these particulars will often depend

the amount of permanent impression to be made upon the mind of the patient as to causes in operation, and consequently the extent of good which can be effected with a view to cure.

I venture these remarks here, because they appear to have a particular relation to this portion of our subject; for many of us are well aware that inattention to minute details, in scrutinising and advising upon causes connected with little daily infringements of nature's laws, is unfortunately of too common occurrence, and not rarely leads to results damaging to medical science and practice, and lamentable to every rational mind imbued with due esprit de corps. The error arises frequently from impulse, haste, and want of thought; sometimes from a want of appreciation of the importance of considerations regarded as mere bagatelle, and beneath notice. But, I would say, all the world is made up of atoms; therefore such contempt of trifles is decidedly unreason-Without an aggregation of detailsattention to "trifles"-where would be the universe?

The prevalence of that bugbear, morbid fear of draughts, is extraordinary among both rich and poor in these artificial days; and the eradication of the exaggerated idea is of the more importance, since the idea indirectly tends to other infringements of the laws of health, which are continually produc-

tive of a constipated habit. The ludicrous gravity with which the most lugubrious complaints are often made about the gentlest currents of air would sometimes almost excite the risible faculties of a Diogenes. The serious side of the question, however, checks the rising smile. The bodies of mankind were never constituted by their All-wise Creator to be morbidly sensitive to the slightest external impressions, atmospheric changes or otherwise. Where would be the perfection which we find in this, equally with all His works, if the human organism were by nature unable to tolerate a slight current of fresh air, suddenly felt, without catching cold, neuralgia, or rheumatism? Christians forget the injustice done to their Creator by attributing to Him consequences solely dependent upon their own abuse of His perfect laws. The vast majority of the actual evils of life are either "tares" individually sown, or are the fungoid growths of depraved social influences.

Indulgence in too much sleep must not be overlooked. This habit, if regarded purely in its moral aspect, is vicious in principle. The brevity of human life is proverbial. It is incumbent upon us to make active use of the preparatory time granted to each of us by our Maker. "Whatsoever thy hand findeth to do, do it with thy might; for there is no work, nor device, nor

knowledge, nor wisdom, in the grave whither thou goest." Seldom can the question reach with its full force the mind of the inveterate sleeper, "How much time do I waste in unnecessary sleep: how much do I actively devote to the duties marked out for me in the station in which my God has placed me?" It is a heart-stirring fact, that most of us need, for healthy sleep, an expenditure of nearly one third of our allotted years. If we reach extreme age, considerably more will have been thus consumed, for the aged usually require much more rest. Truly our active period of life is short enough to enable us to lay a safe foundation for eternity.

When "a little more slumber, a little more sleep, a little more folding of the hands in sleep," is habitually permitted to retain an ascendency over mind and body, considerable demoralisation must more or less result. Even without an alliance with other vitiated ideas and habits, over-indulgence in sleep is, per se, a fruitful source of bodily as well as mental deterioration; and constipation is one of the most troublesome exigents. Let any one in health awake with the full feeling of refreshment following natural sleep, let him fall asleep again for a couple of hours, and it will almost invariably be found that a certain heaviness of head, and even a sensation of lassitude, have resulted from indulgence in the excess. Such excess, persistently given way

to, keeps up more or less cerebral torpor; this alone will tend to a diminution of the healthy tone and powers of the mind; and, since matters will rarely remain in statu quo, sooner or later a general lethargy may supervene. Evils always grow, if not

suppressed.

It has been shown how the several causes, enumerated at the head of this section of our subject, operate in producing lamentable general effects upon the entire constitution. Their relations to constipation, the special subject of these pages, will be readily perceived. The fable of Menenius Agrippa will recur to the mind of the reader. The acute perceptions of the Roman clearly saw and applied an important natural truth. A part of the organism must partake of any abnormal condition of the whole. Torpidity of the entire animal economy must be accompanied or followed by atony of the bowels. Constipation, or diarrhœa, or the two alternately, may result, according to constitution. The first is by far the most common, and, itself a consequence of antecedent agencies, soon becomes a proximate cause in the production of a host of ulterior consequences highly detrimental to health and comfort.

TORPID LIVER AND DEFICIENCY OR PERVERSION OF BILIARY SECRETION.

Constipation acknowledges these as some of the most common proximate causes of its presence; and since they may not only exist as direct causes, but very often act indirectly in a causative capacity, through being themselves consequences of those improper habits and abnormal conditions to which I have adverted, they have primary claims upon our attention.

Torpid liver, with consequent derangement of biliary secretion, is indeed a very common and serious evil, and one which, owing to the legion of unpleasant maladies following in its train, continually attracts the patient towards the physician. The researches of Kiernan, Bernard, Strecker, Budd, Paget, Lehmann, Kölliker, Beale, Pavy, and other able men, have collectively enlightened us on the more scientific points of hepatic physiology and pathology; but we still remain, and perhaps may ever remain in this world, imperfectly acquainted with the mysterious forces in primordial operation, which retain all in harmony and under ordinary circumstances prevent disease. While we take every opportunity of extending our knowledge in the scientific direction, we must nevertheless mainly depend upon clinical observation and well-ascer-

tained natural laws; chemistry and the microscope being accepted as modest though valuable and ever-present subordinates. Knowing, as we do, the comparatively enormous size of the liver, we may à priori well imagine how much the entire system must be dependent upon the proper performance of its destined functions. Knowing likewise the beautiful yet intricate arrangements of the hepatic, portal, and biliary plexuses, as also the extensive nervous connection with the cerebro-spinal and the sympathetic systems, we can realise the facility with which derangements of the liver may occur. We know its extraordinary power of cellformation, as well as elaboration and transformation of alimentative matters; we are aware also of the existence of the multitudinous and ever-changing columns of cells, and the ease with which these can be overloaded, and their contents vitiated. We all have had experience of the possibility of the natural direction of the nervous force and biliary current becoming reversed, as in many cases of jaundice, and the untoward effect on the hepatic functions occasionally arising from a sudden mental shock.

Acquainted with these and many other analogous phenomena, we cannot but appreciate the importance of order and regularity in granting fresh supplies to the liver through the medium of the stomach, of care lest we should overburden it, and of regular

exercise to induce increased respiratory efforts calculated to augment the frequency and power of diaphragmatic movements. Neglect in these respects must necessarily be followed by torpidity, congestion, and general derangement of function; and amongst other evils, constipation of the bowels is very generally a prominent one. Indeed, I have met with many instances where it has not only been the most prominent, but infinitely the most distressing and troublesome consequence, so far as the sensations of the invalid were concerned. There are persons with whom life itself is felt to be a burden, solely from feelings of annoyance, and irritability, and hypochondriasis thus generated. Where negligence and infringement of natural laws are the sole primary agents of mischief in a naturally strong constitution, constipation from hepatic derangement may be regarded as easily avoidable. The medical attendant should exercise his sagacity in detailing the various simple means - simple to himself, but mark! not necessarily simple or comprehensible to all his patients—by which the annoying malady may with certainty be removed; but simple means, the employment of common sense, the judicious lessons which nature strives to implant in our minds, are not unfrequently (as it has already been remarked) much more difficult to bring into actual practice, than are medicinal expedients, such as purgatives and tonics, which often aggravate and render almost incurable that which they were intended to remove.

While we have mischievous agencies operating through the liver-functions to set up constipation, which agencies are easily avoidable, and their consequences as easily curable by the exercise of sound judgment on the part of the practitioner, and obedience on the part of the patient; it must, on the other hand, not be overlooked that there do arise many examples of constipation from livertorpidity, to a certain extent unavoidable. meet with examples from long-continued neglectfrom slavery to avoidable causes, until the lapse of years shall have converted them into unavoidable —is a matter of notoriety in medical practice; nevertheless, obstinate constipation thus implanted is not always incurable, although it seems tacitly to be regarded in this light whenever left hopelessly under the governance of medicine. Cases dependent upon partially unavoidable causes, which demand especial notice, are such as owe their origin to delicate organization and an hereditary predisposition to derangement of the hepatic functions and to constipated bowels arising therefrom. Some persons are in this way more or less afflicted from the cradle to the grave, the constitutional tendency having unhappily been rendered an inveterate habit through erroneous management of the bowels in childhood or in early youth.

But constipation arising from constitutional and unavoidable tendency to irregularity and derangement of the liver functions, does not necessarily imply the existence of constipated bowels in childhood or youth. On the contrary, the inherent debility and faulty condition of the animal economy may evidence itself in early life under the phenomena of weak and loose bowels, or else diarrhœa and constipation alternately; such derangements occurring from very slight errors of diet, slight exposures to cold and damp, or slight atmospheric variations. With the advent of adult life the various duties of life follow, and with them the proverbial inexperience and thoughtlessness of youth, tending to various irregularities (sometimes vicious, sometimes innocent in a moral point of view). These causes, one or all, operate to produce frequent or continual derangements of stomach and liver. Unwittingly, perhaps, the delicate youth of either sex permits daily or weekly recurrences of little disagreeable attacks, resorting perhaps occasionally to a little opening medicine, a blue-pill, or "antibilious" pill, to get temporarily rid of the difficulty. Exercise may be duly taken and a so-called "regular living" may possibly be established; yet, in spite of everything, the liver may continually become deranged; the countenance be pale, sallow, or yellowish; the bowels be liable to flatulency, distension, or other general discomfort; the head may suffer from

weight, oppression, or aching pain,—the entire system may constantly feel below par, and physical exertion may always be attended and followed by undue fatigue. These symptoms, modified of course in different individuals, continually supervene from apparently slight causes (or no cause). The subjects of them are aware that the "antibilious" pill and some ordinary medicinal tonic have effected a little temporary benefit; ergo, symptoms recurring, similar means are again resorted to with temporary alleviation. They are not aware that nothing in the shape of mere physic can avail either for the permanent restoration of deranged functions, or the re-establishment of that inherent amount of vital power which the naturally delicate constitution might really possess. Thus the standard of health is too often insensibly permitted to become lowered, until the undermining operation has left the thinnest superstratum of health, liable to break down under the most moderate external pressure. Again, friends are by no means tardy in gratuitously urging their vague and injudicious counsels, with perhaps the proverbial remarks—"Eat and drink more, take more nutritious food, you don't live well enough, take more wine and bitter beer" -ignorant of the serious fact that the liver and its auxiliaries may be destitute of the power to get rid of and to assimilate the amount of daily material already supplied through the stomach.

Whensoever we discover from the careful consideration of the history of the case and the existing symptoms, that there is present an hereditary or acquired predisposition to irregularity or torpidity of the biliary and general hepatic functions, it is indeed of the highest importance to avoid forcing and irritating the system too much. To touch here upon the frequent abuse of art in treating affections of this kind is a sine qua non in essaying to direct increased attention to constipation as one of the greatest evils resulting from maltreatment of the liver and stomach, not only with reference to persons predisposed to functional derangements from delicate internal organization, but with reference even to the most robust. The latter may bear "heroic" medicinal treatment, and only suffer eventually from permanent obstinacy of the liver and bowels; nature may then need constant and troublesome assistance; but health may be tolerably good, and life in no danger. With the former the case is far different. It is with them not unfrequently a matter of life and death. Sometimes, when life remains, all zest for existence is gone. The liver and bowels are half paralysed, and the entire animal economy (like an army deprived of two central divisions, forming the key of its position) is scarcely in a condition to resist the most insignificant foe, irrespective of that malignant and ever-alert assailant of the delicately organized-

tubercular consumption. My firm belief is, that this fatal pulmonary disease owes its origin, in a great majority of cases (or else, when dormant, is excited into action), through constant neglect of full and frequent exercise of the lungs-a neglect, however, which should never be associated with the exclusive idea of primary disease of the lungs, or even any primary "blood-crasis," but rather with torpidity of the hepatic and other glandular functions, and consequent mal-assimilation, imperfect nutrition, povertystricken blood-corpuscles; followed or preceded by lowering of the presiding nervous forces; and accompanied by loss of power in the digestive organs, as well as the secretory and excretory functions throughout the animal economy. In an able paper published in the pages of the 'British Medical Association Journal,' Dr. W. H. Ross has drawn attention to the fact that liver-derangement almost invariably precedes tubercular deposits in the lungs. I concur with him as to the fact, and regard it as highly instructive and illustrative of the extreme importance of preserving the integrity of the hepatic functions. The mutual dependence of liver and lungs, and the extreme importance of their sympathetic (as well as separate) and healthy exercise of function to the entire animal economy, cannot be too earnestly considered and acted upon in all forms of diseases. Constipation certainly offers no exception to this rule. The connection of hepatic torpidity

and biliary derangement with neglect of chest-expansion and lung-inflation is most patent. The conjoint agency in the production of an obstinately constipated habit can be seen and traced with equal clearness, but has not practically received that universal attention which it may urgently and justly claim.

Should constipated bowels, from torpidity and irregularity of the liver-functions, affect either the delicate or the strong, a variety of serious consequences under different circumstances will follow, the severity of such consequences being inversely proportional to the strength and capabilities of each constitution for resisting malefic impressions. If the functions of the liver be performed inactively, imperfect cell-formation and vitiated elaboration of fluids must ensue, as well as congestion of the hepatic, portal, splenic, and mesenteric vessels, with likewise deranged influence and equilibrium of the nervous currents. Whether, as in some cases, the liver be weak, flaccid, fatty, or passively congested; or, as in others, it become enlarged, indurated, or more actively congested; under each and every such deranged condition the biliary secretion for the supply of the intestinal canal becomes either partially suspended or vitiated in quality. It may be diverted into improper channels, unable to accomplish its proper exit, from vascular engorgements surrounding the main biliary ducts, or (in the flaccid, atonic state) from an absence of the nervous tone and vis à tergo necessary for its propulsion. Perverted secretion, or want of exit into the natural channel, entails the retention in the system of unhealthy formations, which become the materies morbi of gout, of scrofula, of pulmonary consumption, of skin-diseases, in different constitutions. Hence, also, that most painful affection, the formation and passage of gall-stones.

It would appear to be a beautiful provision of nature that the biliary fluid should fulfil a duplex purpose, secretory and excretory. If the latter intention of nature be interfered with, the morbific products, consequently thrown into the circulation, must find egress through the lungs, kidneys, skin, or intestinal glandular system; or (failing this) must deposit themselves in those organs or in other parts of the body. Thus, while the bowels lose their healthy stimulus, a host of sporadic diseases may arise, and zymotic diseases find a congenial nidus.

Healthy bile possesses, besides its other properties, an apparently antiseptic agency, either direct or through its combinations; and we well know that a deficient or a vitiated secretion of it usually gives rise to most offensive fæces. This fact itself ought to be impressed upon the refined mind; but when it is further reflected upon as an external indication of the foul and putrescent con-

dition within, however fair vanity may make the exterior, surely it should urge liver-valetudinarians to ponder deeply, and to form determined resolutions to exercise the utmost self-control, and to follow strictly the guidance of the judicious medical adviser. With health as with religion, to "cleanse the outside of the cup and platter," and to disregard the foul condition within, is a melancholy truism.

That "cleanliness is next to godliness" is an apt proverb. Let it be applied to the interior man, and not to the exterior only. Let due care be taken to preserve unimpaired the hepatic functions, so that the gently stimulating and other influence of healthy biliary secretion be ensured for the intestinal canal and its contents. Then will one of the most fruitful causes of constipated bowels be rendered comparatively rare.

NEGLECT OF PROPER PERIODS FOR EVACUATING THE BOWELS, ESPECIALLY WHEN NATURE IMPELS.

Many become the victims of very obstinate constipation simply from habitual neglect of regularity in permitting the bowels to act; nor can we wonder at the frequency of this error in persons whose time may be valuable or uncertain, whose occupations may either entail long hours and rigid punctuality, or

render them liable to sudden and unexpected summons. In these days of mental labour, of emulation in every branch of industry—professional and mercantile, literary and mechanical—in these days of advanced civilisation and of ultra-expensive habits to keep up appearances, and to gratify love of display-individuals of the male sex are too often subjected, or subject themselves, to undue expenditure of time in their business pursuits, with very little bodily and mental relaxation. From early morn, after perhaps a hurried breakfast, until his late dinner, the man of business, e. g., may have his whole energies devoted to one absorbing train of thought, which renders him indifferent to or insensible of nature's requirements. Some few may doubtless attain a regular habit of the kind to which I refer, between dinner and bedtime; but the greater number do not manage so well, for it seldom happens that the bowels, when forbidden to respond to their instincts after breakfast, will fail to evidence somewhat urgently their sense of wrong, once or twice during the day, at periods so unseasonable as to ensure a veto, except in rare instances of great prudence. I mean that such usually obtains, until continual neglect of their healthy solicitation has produced its mischievous effects, viz., impairment of the natural sensitiveness of the involuntary nerves. In man there certainly is a beautifully adapted combination of voluntary

and involuntary influence, which enables him to a certain extent, by the exercise of the will, to direct times and seasons. But this capability, so much greater than in the lower animals, must not be too much trifled with. If we systematically suppress the signals given involuntarily, by planting our wills too obstinately against them, we shall, sooner or later, establish a mortal though passive foe, in the place of a friendly monitor. The very strong man may tolerate it all, the less strong may do so for a time, but the more delicately organized frame will soon become painfully aware of the unpleasant effects. The evil of hurrying off after breakfast, possibly some distance to town, without attending to a little duty which by practice might ordinarily be instituted as a useful habit, is often enhanced by the absence of convenience just at the right time, as well as by little difficulties of a social character, added to pressure upon business time. Infinitely small as this evil may appear at first, it increases insidiously, gains a firm footing, and often becomes (to say the least) a disagreeable incident, before the subject of it opens his eyes to the gravity of the fact.

By no means would I assert the absolute necessity of fixing the *post-jentaculum* period arbitrarily; for, if the mind be too eager and hasty regarding an *instant* response to a voluntary solicitation (fearing the loss of even a few minutes of valuable time),

the chances are against any satisfaction at all. impatient brain concentrates on itself and expends an undue share of voluntary nervous force: the equilibrium between the voluntary and involuntary movements is temporarily lost, and efforts are made in vain. But to carry out systematically the morning rule or the evening rule, is certainly of no little importance to many individuals. Not a few of us must have practically experienced certain ill consequences of resisting the natural impulse, demonstrated by unpleasant weight and distension of the abdomen, pressure upon the rectum, and ineffective efforts towards obtaining relief before bedtime; followed, perhaps, by an uneasy night with tossing about in bed or unpleasant dreams or nightmare, and on rising in the morning, a sensation of not having been refreshed, lassitude, yawning, stiff and gummy eyes, oppression of head, and flatulence. The involuntary solicitations of the bowels cannot be ignored with entire impunity even by strong persons; much less can those, who are predisposed to irregularity in this respect, afford to decline the invitations. When these solicitations are daily and repeatedly neglected by the latter class of individuals, they will either become sluggish and unsatisfactory, or will obstinately refuse to reappear upon demand. Evening regularity may doubtless be very judiciously substituted for morning, provided habit have eradicated the tendency to nature's solicitation during the daily avocations, and healthy expectancy at vespers be secured.

Besides the risk of half-paralysing the involuntary powers, nervous and muscular, which conduce to regularity of the intestinal function—we should not be unmindful of another serious consequence which operates to augment the evil of constipation thus voluntarily induced. I refer to the absorption of morbid matters from the intestinal canal, and the penalty thus inflicted upon the whole system. General analogy leads me to entertain the opinion, that the risk of re-absorption of such disintegrated and feculent matters as have been cast off and thrown into the ordinary channel of exit, must probably be much more great when nature is making vigorous efforts to empty the sewer, than when the nervous and muscular influences are in a state of quietude. Ergo, grave as the consideration may be, when the bowels are torpid and inactive, fæcal absorption appears even more to be apprehended from a systematic resistance made to involuntary efforts for an evacuation—at all events, so far as relates to immediate metastasis on each occasion. Indeed, I feel assured that I have, on many occasions, been able correctly to trace gastric and bilious attacks (with complete prostration and typhoid symptoms) to continual repetition of this unfortunate opposition to the natural impulse. If the proper channel of exit be wilfully closed, the vis medicatrix naturæ will make

the most strenuous exertions to direct a vicarious current of nervous force and of transformed alvine excreta towards the other excretory organs-skin, kidneys, and lungs, and these may have not only their special duties to perform, and their special excretions to throw off, but may be unfairly treated and be disarranged in function by foreign matters, which, after re-absorption, have not had time to undergo the requisite transformation to adapt them to another excretory organ. Abused as the other emunctories are in chronic constipation with habitual torpor, they have then time to supplement, in some measure, the intestinal function, and are enabled by metamorphic augmentation of their special excreta to assist their disabled fellow-workmen; but where, notwithstanding unfair treatment, nature still possesses sufficient strength to solicit the froward will, persuasively though ineffectually, the direction of force thwarted by one outlet will obviously attempt expulsion of the effete matters through other organs. Few medical men can have been many years in practice without meeting with occasional instances, in which the fact of fæcal absorption has most unpleasantly impressed itself upon his nasal organ. In the emanations through the mouth the peculiarly offensive odour is of course not uncommon, but I have met with a few unmistakable and nauseating examples, in the case of both skin and kidney.

My remarks on this head may appear almost exclusively to apply to those of the ruder sex, whose avocations tend to produce negligence regarding the intestinal functions. Certainly in such we have the evil at its maximum. It must not, however, be lost sight of, that the evil exists in a minor degree among many of both sexes whose time is, to a great extent, their own, and who neglect the sudden natural impulse, simply to save themselves the trouble of immediately rising from a comfortable position in an easy chair, on the sofa, &c.; or to avoid the little self-denial demanded in instantly relinquishing the pleasure of an interesting novel, absorbing paragraph in the newspaper, agreeable conversation with a friend, letter-writing, or other matters comparatively trifling when placed in opposition to the performance of a natural call, which (however disagreeable the idea), if not at once responded to, may not again be possible on that day. Sometimes a feeling of modesty, lest sudden departure for a few minutes from society should be noticed as remarkable, presents itself as another barrier; and when we are compelled to throw out a delicate hint on this point, we are met by the rejoinder, "I cannot attend to the call for appearance' sake." But all little difficulties will melt away before a little firmness, tact, and self-possession. The duty should always be looked upon as a necessary one; and the self-imposed task, of retaining within and carrying about fœtid accumulations, should be regarded in the most revolting possible aspect, all minor feelings and contingencies yielding. Superadded to this, let there be some substantial measure of reflection upon the ulterior consequences of the self-promotion of intestinal irregularity; which disagreeable consequences, under various phenomena and modifications (according to temperament, constitution, and collateral circumstances), will surely arise, if the neglect be permitted to become habitual.

PURE NERVOUSNESS, EXCESSIVE ANXIETY REGARDING FREQUENCY AND REGULARITY OF THE ALVINE EVACUATIONS.

The axiom, "in medio tutissimus ibis," is more acknowledged in theory than in practice. The human mind, as well as the world in general, is partial to extremes. We cannot then wonder that after noticing in the foregoing section one extreme, viz., undue disregard of the intestinal function, attention has next to be directed to its opposite. It is not uncommon to meet with persons who render themselves perfectly miserable regarding their bowels. Unless they can ensure a daily evacuation in perfectly regular quantity and quality, they imagine all sorts of things, believe that they must be radically out of order, and more rarely that there

must be something very serious to prevent their idéal of regularity. The feelings engendered are sometimes purely imaginary, but more commonly they are found to be of a mixed character. While the misery may be to a great extent imaginary, or aggravated by mental exaggeration of slight deviations from regularity, there certainly may be (and often is) much painful reality in the sensations. The reality may be of two kinds, that proceeding from the effects of pure nervousness reflected, through sympathy, upon the abdominal functions; and that resulting from veritable derangements of the animal economy, which have excited nervous susceptibility To the reflecting practitioner, who may have been in the habit of carefully noting details on these points, few examples of a much more distressing character can present themselves than those which are occasionally to be encountered among invalids of this class; and unless the greatest care and attention be brought to bear upon each case, recovery of health is often hopeless. I speak thus of the evil at its maximum; but amongst the diversity of cases, and combination of symptoms appertaining to each, many are not at all intractable.

The temple of Cloacina is a constant resort for such nervous sufferers, and the more devoted her votaries the less satisfaction do they experience from the performance of her rites. When once the too susceptible brain gains a morbid and preponderating

influence over the physical powers and the animal functions generally, it attracts to itself too large a proportion of the nerve-force generated within the organism, the normal equilibrium of the whole is lost, and the harmonious operations of nature are seriously interfered with. Universal derangement will more or less result, but the function upon which the morbid current of thought is especially concentrated will obviously be subjected to the most serious inconvenience. Applying these considerations specially to the intestinal function, à priori reasoning will point out that any predisposition to derangement and irregularity, hereditary or acquired, to which the bowels may be obnoxious, will indubitably be exacerbated in direct proportion to the pressure and duration of the morbid influence exerted by the over-sensitive brain upon the function in question. Not only does the brain itself frequently become completely unhinged under such circumstances, but secondary consequences arise which will be presently referred to-consequences which even under an improved cerebral régime may, under unfavorable circumstances, fix themselves indelibly as causes per se of troublesome constipation.

My memory is charged with several instances of even abject wretchedness under long-continued malady of this character, the most hapless of all being those who had acquired the infatuated habit of systematically resorting to purgatives in their various forms. Such temporary alleviation must ever be of the most evanescent kind, and, as it has been already shown, must necessarily under abuse increase the functional debility which it was intended to remove. Whatever form of medicine be injudiciously employed, the injurious result is almost equally great. No sufferers are so prone as the nervous class to fall into the error of trying first one medicine and then another. First one friend, then another, offers well-meant advice regarding the trial of some favorite prescription, or quack formula; forgetting that, what may be suitable for one constitution may prove highly injurious to another; ignorant likewise that fifty apparently different formulæ, taken in succession, may contain the same drugs, and may be so nearly allied to one another as to render each fresh one simply the repetition of its predecessors. Whether a constipated habit arise from excessive nervous anxiety concentrated upon the bowels, or whether it depend upon the nervous element unduly preponderating over the entire voluntary and involuntary functions, individual constitutions will require, in minute details, something or other different in treatment, and a successful cure can only be effected by carefully taking each case upon its own merits.

WANT OF CONTRACTILE POWER—ATONY OF THE MUSCULAR COAT AND NERVES OF THE INTESTINAL CANAL—IRREGULAR PERISTALTIC ACTION—FLATULENT DISTENSION.

Preceding remarks will have prepared us for a brief consideration of these in a special point of view. It has been shown that the abuse of medicines, the tyranny of art over nature, over-eating, luxurious and indolent habits, occupations of life, sedentary pursuits, resistance of nature's impulses, nervousness and excessive anxiety-singly or variously combined-operate to produce constipated bowels. It needs no magician's wand to cast a speculum upon such agencies, as primarily causative of the visceral disturbances for which we now ask a little attention. The two obviously stand in the relation of cause and effect; nevertheless they may act not only in unison, but likewise as distinct and separate agents of evil. Let the primary be entirely overcome, still the secondary may unhappily remain as proximate and sole cause of the constipation; for it is indisputable that the majority of the most intractable cases of chronic constipation owe their extreme difficulty in cure solely to the consequences of prior conditions, such consequences remaining in operation, even though the original causes may have been controlled with tolerable facility. In a former chapter the general rationale of this inveteracy has been explained. It is now pertinent to reflect upon absence of due contractile power, atony of the nerves and muscular coat of the intestinal canal, irregular peristaltic action, and flatulent distension—not in their relations as consequences, but vice versá, as obstinate causes of persistent and almost incurable constipation.

That these conditions are, to a greater or less extent, universal accompaniments of the constipated habit, is patent to every medical practitioner; and not only so, but every subject of this ailment must of necessity be unpleasantly cognisant of their presence. It is, however, too common a mistake practically to regard them as mere symptoms or consequences, and to overlook the fact that they may act in a twofold capacity. Indubitable as are their consequential relations, we should not be unmindful of their agency as direct causes of the incurability of chronic constipation, when once they have gained a firm footing, are merely held in check by palliatives, or (credat Judæus!) are exasperated continually by worse than vain attempts to dislodge them forcibly by opening the purgative artillery upon them. The strength of their position—their very existence (anamorphosis though it be-may be said to depend upon debility of the organism, local or general.

When general debility exists, the local must as a rule be associated; but the latter may not necessarily be attended by the former. Partial paralysis or diminution of their naturally spontaneous power of action, may affect the abdominal and pelvic viscera, without any serious lowering of the vital powers as a whole, or at all events without any apparent diminution of the physical powers. The more active subjects of such local deficiency of involuntary power wonder how it is that they who pass a sufficiently active life, and possibly, in some cases, indulge in an extreme amount of exercise with impunity and even advantage to their general health, should nevertheless be constantly annoyed by irregular, obstinate, and flatulent bowels. This is no overdrawn picture, no ideal shaft taken from the quiver of a too-fruitful imagination. If, then, among the physically energetic and constitutionally strong, there are to be found occasional instances of constant perturbation from torpidity of the intestinal functions, the result of purely local loss of influence; ought the less active in out-door pursuits, or the more feeble in constitution, to be surprised at becoming the victims of constipated habit from local causes? It is to the latter that the attention of the medical practitioner must be most attracted; for the former may take care of themselves—they may bear their annoyance if they please, and as they usually prefer to do, rather than subject themselves to judicious and essential yet simple regulations, which might ensure the more or less complete banishment of their malady. Such may, if they please, continually flog their obstinate intestinal canal into compulsory action; they may imbibe disagreeable draughts, or swallow almost equally disagreeable pills, usque ad nauseam, they may thus gratify their fancy for stomach and intestinal martyrdom, because they are strong enough to bear the worry, the flatulence, and other sensations inseparable from over-stimulation and irritation by means of foreign substances.

The more delicately organized constitutions, the more feeble conditions of the animal economy, hereditary or acquired, cannot thus with impunity urge their bowels vi et armis. Therefore it is of importance that their medical attendants should earnestly strive to impress them with a conviction of the baneful effects upon the entire organism, which must always follow from the causes at present under discussion being permitted to remain unsubdued, and so to gain an ascendancy. It has been submitted how these, the necessary consequences of certain primary agencies, become themselves subsequently the inherent causes of the continuance of constipation. Prevention is better than cure, and by judicious advice, and attention to that advice, primary causes may be "nipped in the bud," not even excepting those which assail persons

with hereditary predisposition. For after all, these (like most of the ills of life) are, we may repeat, to a very considerable extent self-derived—self-derived, not necessarily from wilful opposition to nature's laws, or recklessness, or imprudence (although each of these has its worshippers), but too often from want of knowledge or appreciation of the probable results of baneful habits and customs, which may not spontaneously strike the mind as at all incorrect, or injurious to health. Our duty is plain when we are called upon in sufficient time to prevent; and when time for prevention is past, we have to cure the primary causes, and obtain a fair basis for the eradication of the secondary causes under consideration.

The complications which often arise, from propagation of morbid influence to the adjacent ganglionic and spinal nervous centres, should ever be borne in mind. When the very common and troublesome local causes of constipated bowels (now under consideration as proximate causes) have been for some time in operation, reflex irritation is apt to be excited. Now this reflex irritation, long continued, too frequently leads to serious spinal lesions and partial paralysis, as well as to painful neuralgic affections, such as lumbago, sciatica, facial neuralgia, neuralgic headaches. Sudden attacks of local or general spasm about the chest or diaphragm, distressing shortness of breath,

and palpitation of the heart, are very common symptoms, either sympathetic or directly induced by inflation of the transverse colon. Besides these, there stands out very prominently one extremely painful consequence, which demands especial mention, viz., irritable bladder, with imperfect and painful micturition, and constant desire to relieve that organ without any valid reason for doing so. In females this unpleasant consequence is peculiarly distressing, not only in connection with their movements and enjoyment of society, but from the liability of such irritation to become associated with irritability of the uterus or ovaria. Either debilitating (and even offensive) leucorrhœa, or painful neuralgia at the catamenial periods, is not an uncommon result.

When the local conditions just considered in their proximate capacity, have been permitted to establish themselves, and have become chronic, it is obvious that consequences of troublesome and even serious character, within the intestinal canal itself, will not be unfrequent. Thus constant nervous irritation and irregular muscular action are very apt to set up an unhealthy condition of the epithelium and glands of the mucous membrane; vitiated secretions may be the result, the epithelial cells may be imperfectly developed, and under very unfavorable circumstances more or less severe inflammation and ulcerations may follow. It hardly

needs intimation that in most cases attacks of colic, with *special* incarceration of flatus in the sigmoid flexure, or the transverse colon, or the neighbourhood of the ileo-cæcal valve, will be of frequent occurrence. The immediate cause of "hernial" protrusions may often be thus traced.

No one can fail to appreciate the importance of regarding separately, as well as in association, these causes of constipated bowels: for in many cases we do find them operating as isolated causes of annoyance and mischief. Local consequences, direct and reflex, are so various—organic lesions arising therefrom may be *ultimata* so grave—that the necessity of early and careful attention to and subjugation of disagreeable local symptoms cannot be too earnestly enforced. Such symptoms with but limited localization may, at least sometimes, be acting as sole causation.

DEFICIENT SECRETION OF MOISTURE.

Another proximate cause of troublesome constipation may be deficiency of secretion of moisture in the lower bowel, owing to which hardened scybalous masses, or else little bullet-like formations, are apt to lodge in the colon or rectum. This cause may be secondary to some which have been already touched upon, or it may partake of a more primary character. In its latter phase it frequently arises from errors of diet, too drying or too stimulating or too highly concentrated food; there may not be a due admixture of alimentary substances; there may not be a due proportion of fruit and vegetables. Even persons of moderate or small appetite will occasionally acquire the habit of using a comparatively too large proportion of animal and farinaceous food. Some, again, indulge too exclusively in overdone flesh-meat, where the salts and juices have been cooked out, and the fibrin has been rendered dry, hard, and unnutritious, albeit the palate may be gratified by its "eating short" owing to increased frangibility, and requiring but little trouble in mastication. Others are partial to hard-boiled eggs. Some, again, have an insuperable dislike to the proper and moderate use of common salt at their meals. Others indulge too much in tea, or more or less freely imbibe ordinary port, dry sherry, and other wines, not uncommonly sophisticated with tannin and other astringents. But absence of a due proportion of fruit and vegetables may perhaps be regarded as the most common error of diet, which tends to produce this condition of bowels. Besides this aspect of the dietetic question, there is another of grave moment to be mentioned. The present day is unhappily notorious for the extent of adulterations practised upon food. There exists a vast amount of direct dishonesty in this respect, but ignorance predominates. The open shop, with unrestricted power of vendition, especially the druggist's, affords as lamentable facilities for the ignorant or dishonest practice of adulteration, as it does for medicinal excess. Powerful drugs and minerals of various kinds have latterly become far more common and cheap than formerly, and the public now are continually liable to have their constitutions undermined, without suspecting "death in the pot." This danger will continue until the legislature may be at length induced to throw its ægis of protection over the community at large—a protection now urgently demanded in consequence of the great changes that have taken place in the world, in a social point of view. Science has advanced in the useful direction, but science (like every other good gift of Providence) is abused. Moreover the axiom, "a little knowledge is a dangerous thing," aptly applies. The petty tradesman—even the domestic servant-gets a smattering of the names and properties of common drugs and minerals; and, unless we are sharply on the look out, we are never sure to what extent our food may be adulterated even in our own domestic establishments. So far as simple constipation is concerned, however, the most commonly injurious substances are alum, and sulphate and carbonate of lime. To these I have now and then traced, other agencies being entirely absent, the dry and scybalous condition of the fæcal

evacuations. Our flour, our bread, and our water, are of course the principal media through which the bowels may become thus deranged, and in this point of view alum and lime salts are not the less worthy of notice, because they are too often regarded as perfectly harmless, or at least incapable of doing any great harm. Thus sulphate of lime has been used on a large scale for confectioneries. The adulteration with alum is not always from the dishonesty or ignorance of the miller or the baker. Pure flour is not so extremely white as is often supposed; yet, regardless of this fact, not only the rich, but even the poor are over-fastidious in looking at the colour. The bread must be very white, but the flour to be employed for making pastry, puddings, &c,. must be almost ultra-white, or grumbling is the result! In the case of bread, I have met with highly amusing instances in out-of-theway country cottages, where the most dirty and slovenly individuals have asked me to look at and taste bread of a very fair colour, which proved most sweet and good, but which they were endeavouring to enlist my sympathies to pronounce disgraceful, and hardly fit for their pigs. The baker and the miller, when arbitrarily called upon to supply an article of unnatural whiteness, must do their best in this respect, or otherwise lose many customers. We may add that these observations are made without losing sight of occasional delinquencies in

adulterating, so as to render passable, damaged and inferior flour; nor, with particular reference to alum, does it escape notice that the practice of such adulteration still exists to an unwarrantable extent, notwithstanding that the educated public have had their eyes opened to the fearful evil of adulteration through the admirable labours of 'The Lancet' Analytical Sanitary Commission. Customers have had much to do with the origin of alum-adulteration. To adulterate perfectly sound flour is quite inexcusable; but it must be granted that alum (as a necessary evil) has had its usefulness in rendering damaged flour capable of undergoing due fermentation in the old-fashioned way by means of yeast, so as to fit the bread for human food in bad seasons, and times of temporary scarcity. Has had its usefulness may be said, because the highly valuable invention of Dr. Daugleish, rendering yeast no longer necessary, ought ere long to be brought into systematic use, if not universally (for taste and habit will prevent this), yet at least among persons with a delicate internal economy. Perfectly wholesome bread (even though not of very good quality) can thus be made of partially damaged and unsound flour, while yeast and alum may render the product of the bakehouse just eatable under such circumstances, but cannot make it perfectly wholesome and nutrititious for robust and healthy persons, much less for the delicate or for those who are obnoxious to constipated bowels from slight causes.

With reference to the constipating effects of constantly using water loaded with salts of lime, several well-marked instances have come under my notice, where delicate ladies and children have invariably suffered when obliged, from temporary residence in calcareous districts, to use such water contrary to custom. The fæcal desiccation, the bullet-like scybalæ, intermixed with inspissated mucus sometimes streaked with blood—the tenesmus, straining, and difficulty in obtaining an evacuation—have been most tedious and painful, and have only ceased under proper management on giving up the use of the water.

The prolonged and injudicious use of the various ferruginous preparations must not be forgotten, as another frequent cause of a dry and scybalous condition of bowels; for even after the suspension of too prolonged a course, the difficulty so created may give much subsequent trouble. Similar in effect is the inconsiderate prolongation of courses of chalybeate waters, and also the more rare instances of persons (unaccustomed to its use) suffering from the slight impregnation of their drinking water with the iron which exists in certain localities.

Although slow lead-poisoning, as a cause of constipation, has a somewhat mixed symptomatology, yet a reference to it here, en passant, in relation to con-

stipation, may not be altogether out of place, while speaking of the injurious and slowly undermining effects of deleterious adulterations. Besides the wellknown lead-poisoning of painters, it is by no means uncommon to meet with cases of accidental origin, from the constant use of water kept in leaden reservoirs, or more rarely from the impregnation of water with lead through new leaden pipes, and even through old leaden pipes when the water is unusually soft. There is, however, another source of the accidental evil, which has not received much attention-viz., the occasionally disgraceful use of the red oxide or the yellow chromate of lead as a colouring matter for lozenges and sweetmeats. It is usually among the children of the poorer classes that we find such instances of obstinate constipation with colic, lassitude, &c. (but partially to be relieved by the most careful attention), as to induce a reflection whether some extraordinary cause may not be in operation, indicating the propriety of special treatment.

VARIOUS MECHANICAL AND OTHER LOCAL CAUSES OF CONSTIPATED BOWELS.

The rationale of purely mechanical causes of constipation is for the most part simple and patent, and the treatment to be based thereupon is suffi-

ciently clear, and almost indisputable in principle, as most surgical and mechanical principles now are; notwithstanding that the very highest professional skill is frequently essential for carrying out in detail even well-defined treatment of causes of a mechanical character.

Most of the mechanical and other allied causes have been most ably investigated, most ably written upon; while, as a rule, they are most ably treated by every one of our professional brotherhood, not only in their scientific aspect, but in strict accordance with those high principles of natural law which are sometimes unhappily disregarded in the practical consideration of constipation arising from other causes. It would therefore be presumptuous to fall into the error of supposing that any experience of my own could possibly give a refreshing impetus to practice connected with this division of the subject.

The mechanical and local causes of constipation, which possess a special and limited sphere of action, may be enumerated as follows:

1. That arising from pregnancy, without other complication. 2. From intestinal calculi, or concretions formed from foreign matters that have entered the stomach, have remained undigested, and have lodged in the canal, particularly in the cæcum.

3. Local non-malignant disease of organic character connected with the intestine itself, such as thicken-

ing and induration of the different coats-stricture arising therefrom, or from circumscribed spasm without thickening of the parts-intus-susceptionthe growth of polypi in the rectum-and hæmorrhoidal enlargements. 4. Mechanical impediments from cancerous or other malignant disease. 5. Impediments from the pressure of tumours external to the intestinal canal, such as abnormal enlargements of one of the abdominal or pelvicviscera—aneurismal, fatty, or other tumours—or ascites. 6. Muscular inefficiency, general or local, in the abdominal walls, e.g., pendulous belly-inguinal, umbilical, or other

rupture-myalgia, rheumatic or otherwise.

To enter upon the consideration of this array of mechanical causes, in extenso, would be superfluous, as well as impossible within the compass of these pages. Fortunately for mankind, amidst the multitudinous forms of disease to which "flesh is heir," most of those just named are comparatively rare in themselves, much more so as causes of constipation; and, indeed, the mere presence of some of them is dreadful enough to neutralize any thought of uneasiness respecting the latter. Therefore, in our present contemplation of constipation as a special derangement, the great majority of these local causes cannot reasonably be taken into account. A few selections from the above, however, claim immediate connection with our subject, especially pregnancy, muscular inefficiency of the abdominal

walls, &c., and one or two others. Pregnancy must, in the abstract, be simply regarded in the light of a natural process. Much of the distress which often arises in this condition of the female economy might be avoided, by living in conformity with nature's laws. Constipation solely from this origin is not, commonly, a very serious inconvenience amongst the rich, still less so amongst the poor. Yet occasionally it proves a highly detrimental complication, and causes a considerable amount of suffering from irritation propagated to the lumbar and sacral plexus, the gravid uterus, and the spine. Sometimes the irritation is direct from fæcal retention and pressure, sometimes it is more purely reflex in character. If, in such cases, the bowels be not judiciously managed, there will be great liability to continually-recurring spasmodic pains in the uterus, loins, and thighs, extremely trying to the female, for weeks or months previous to an accouchement which nevertheless may end naturally. A prolongation of these symptoms entails so much bodily and mental worry, as in some cases to excite general irritation throughout the entire nervous system, diminish strength, and gradually unhinge the vital powers; the result being that, at the period of full gestation, when the greatest demand is to be made upon the powers, they may be hardly able to complete the delivery in the natural way. Complications of various kinds

may arise; much anxiety, which might have been avoided by judicious attention to the intestinal functions during the progress of gestation, may be thus created in the minds of patient and friends; and the medical adviser, whose duty it is to watch and direct the final parturient efforts, may have to contend with unusual difficulties. As all are aware, some females possess painfully-sensitive nervous organizations, and suffer extremely during the whole period of pregnancy. The bowels, in such, often require most careful direction, lest a primarily slight irritation of a local character should, by neglect or oversight, become intractable. Miscarriages are often the result, and these, as we all know, are generally accompanied by those profuse hæmorrhagic losses, which in many instances fearfully debilitate the patient, and two or three recurrences of which will sometimes permanently lower the vital powers, even when medical skill has warded off a fatal issue. If, on the other hand, the period of gestation proceeds to its natural termination under constant irritation from irregular bowels and consequences arising therefrom, the natural strength and regularity of the expulsive pains may be seriously vitiated: nervous influence, which ought to give centrifugal uniformity to the uterine contractions, may be misdirected; the labour may be tedious and much protracted, and after the expulsion of the fœtus (presuming this safely accomplished) there will remain the tendency to imperfect uterine contraction, the risk of hæmorrhage, and (to say the least) prolonged and distressing after-pains, with flatulent distension of the large intestine from deficiency of nervous and muscular power, and perhaps subsequently great trouble in procuring proper alvine evacuations, owing to peristaltic torpidity.

It is proverbial among us how few inconveniences and dangers attend the periods of gestation and parturition among the poorer classes, when conpared with their richer sisterhood. Amidst considerable practice for some years as an accoucheur, I had personal opportunities of noting this marked contrast, more particularly in the country. Luxury and artificial habits are often the parents of misery under these, as under other circumstances. If artificial habits cannot be avoided altogether, still well-directed medical advice, if sought in proper time, may in a great measure prevent the injurious and irritating consequences of constipation in pregnancy.

Muscular weakness of the Abdominal Walls

Is not unfrequently a cause of constipated bowels. The primary agencies causative of this absence of muscular power may be various, and may operate on a portion or on the whole of the abdominal muscular parietes. When they affect partially,

when there is some weak point of limited extent, the surgeon will generally be required.

Weakness of the entire parietes has a well-defined range of primary causation. It either arises from general absence of proper muscular development of the whole body, and consequently of the abdominal walls; or from nervous debility, central or peripheral; or from prior distension, ab internis, of the abdominal walls, which may have so stretched and attenuated the muscles as to render them at length incapable of recovering their elasticity and contractile force. The two former causes have been sufficiently considered in previous sections. The last claims present attention, principally as a sequence of repeated pregnancies, or more rarely of one pregnancy. When the completely "pendulous belly" occurs, it is indeed a most distressing affection in a general sense, irrespective of its agency in the production of constipation. Happily it is seldom met with in its worst form, and then the victim is almost invariably one who has had a number of children, and who has uniformly neglected to remain in the horizontal position for a sufficient length of time after her accouchements.

But there arise numerous examples in a modified form, perchance so apparently trivial as scarcely to be deemed worthy of notice by the practitioner; where, nevertheless, muscular weakness of the

abdominal parietes solely originates and keeps up most troublesome constipation, with incompetency of the peristaltic movements, loaded colon and rectum, flatulent distension, and liability to colic. Under a weakened condition of the walls not only is there a deprivation of the voluntary power to assist expulsion of the fæces, but there is a removal of that firm and uniform pressure to which the intestines, equally with the other abdominal viscera, are naturally subjected. Thence arises not only direct liability to constipation, but various eccentric movements of the intestines released from the ordinary control exercised over them. Nervous and muscular harmony of movement becomes interfered with, the proper balance of forces is lost, and spasmodic action supervenes from slight irritations, or even from variations in position of body. spasmodic local strictures, twisting of the bowels, &c., may take place; and, without necessarily requiring the more stern and severe intervention of the surgeon, will urgently need great judgment in adopting appropriate treatment for the relief of the bowels and the prevention of further mischief.

Hæmorrhoidal Relaxations and Enlargements

May aptly be named, after the foregoing, as occasional causes of constipation, for they are not unfrequent consequences of repeated pregnancies,

and also of muscular inefficiency of the abdominal walls and of the pelvic region. But venous congestion and engorgement, which usually give rise to these local enlargements, originate most frequently in those deviations from natural law to which reference has been amply made in former pages. In fact, the great prevalence of hæmorrhoidal affections may be attributed to eating and drinking too much, to indolent and luxurious habits, to want of due muscular exercise, and to medicinal irritation of the bowels, especially the rectum. To primary overloading of the liver and the portal and mesenteric veins, from over-repletion of stomach, either with or without a sedentary life, the great majority of these local troubles are, indeed, clearly traceable. Occasionally, however, excess in horse-exercise creates a tendency to them, particularly in delicate constitutions. Suspension or deficiency of the catamenia presents another occasional agency in the production of hæmorrhoids, and in females the few years immediately following change of life offer a period peculiarly obnoxious to this affection. But allowing for all occasional causation independent of improper habits of life, the great majority of cases met with in practice have been partially helped into existence by prior infringements of the natural laws ordained for the preservation of healthy balance throughout the organic machinery.

Myalgia and Neuralgia.

Besides muscular inefficiency of the abdominal parietes, from relaxation and atony, it is necessary for the practitioner to be on the qui vive as regards the possibility of constipation being occasioned by a myalgic condition of local character. There may have been a slight strain of the muscular fibres, or surrounding fasciæ, or tendinous connections. Temporary excess in muscular exercise, or in retention of a constrained position, principally in the instance of those who, as a habit, neglect the due exercise of their muscular system, may have been the agent of evil. Or the muscular irritability may be of rheumatic character, from some exposure to damp and cold, from some sudden check to free cutaneous transpiration, perhaps from constitutional predisposition. The pain may be limited to a portion of the abdominal muscles or tendinous expansions, or it may be localized in the lumbar or coccygeal regions. Occasionally I have traced the obstinate persistence of constipation to chronic rheumatic pain of the diaphragm, owing to which the patient scarcely dare make the smallest voluntary effort for relief. Dr. Inman has recently, with much practical ability, called the attention of the profession to the frequent existence of local myalgia where quite unsuspected. No cause of constipation

is more likely to be overlooked by the busy practitioner. The patient, even though suffering much, may be unable to assist the medical practitioner in forming a correct diagnosis.

Closely associated with and in some instances scarcely to be distinguished from pure myalgia, is local neuralgia as a cause of difficult defecation. Intestinal derangements, even of slight character, sometimes propagate pain to the solar plexus and its offshoots supplying the stomach, liver, diaphragm, transverse colon, and other adjacent parts. Sometimes, again, an irritable stomach and deranged digestion may be the originator of the neuralgia. Such neuralgia almost always affects, more or less, the solar plexus, and can be referred to it with tolerable facility by every observant practitioner. It is far from uncommon as a casual and transient cause of difficulty in evacuating the bowels, but more rarely it becomes chronic, and then causes serious interference with due regularity. Nervous force expends itself locally, instead of distributing and extending itself in healthy peristaltic movements along the colon to the rectum; while this local excess of nervous force sets up irritation and pain, referred generally to the epigastrium, and thus often prohibits the employment of the necessary voluntary effort.

In addition to pain in situations already named as occasionally interfering with due action of the

bowels, the different portions of the peritoneum demand more rarely the physician's attention. In rheumatic and gouty subjects that extensively connected membrane is very liable to temporary or chronic irritation; and we are all but too well aware, from the well-known semeiology of acute peritonitis, how extremely painful it may become, and thus present a difficulty to muscular movement.

Whether local pain be myalgic or neuralgic, or of a modified quality, it claims the attention of the practitioner as a quasi-mechanical cause, occasionally to be met with in the character of sole impediment to due action of the bowels.

SPECIAL CONDITIONS ASSOCIATED WITH CONSTIPA-TION IN INFANCY, IN OLD AGE, IN CEREBRO-SPINAL DEBILITY AND IRRITABILITY, AND IN CEREBRO-SPINAL PARALYSIS.

In early childhood there is an almost inconceivable amount of mismanagement, dietetic as well as hygienic; and such mismanagement often tends to lay the foundation of a permanently constipated habit. Other injurious consequences upon the infantile constitution are of course not subjects for present reflection. Ignorance of nature's simple and admirable laws, and absence of common sense, among

mothers and nurses, are indisputable agencies in daily operation among the less educated classes. Among the rich, too, mismanagement may proceed from similar causes; they may be well acquainted with the general outlines of proper management, but they know not how to put them into practice in detail. Some practitioners, of the highest genius and scientific attainments, never charge their minds with an intimate knowledge of minute details in such matters, and for this reason—they are apt to regard them as beneath the dignity of the physician, and only fit for the minds of nurses. They give good, but vague, general orders, which are not properly apprehended, or may be entirely misconstrued. If some really important, but apparently trifling explanation is required by the mother or nurse, the latter is deferred to, as quite competent to follow out matters in her own way. For how can one, who has never considered such trifles as worthy of his careful, or perhaps even casual, reflection, be capable of instilling important minutiæ into the minds of others? Little points of this kind generally require to be impressed in a clearly-defined manner, and with lucid and unmistakeable language.

Formerly this was the rule; now it is the exception. The mismanagement of mothers and nurses far too often proceeds from less excusable motives. The practitioner has taken the trouble (we will suppose) to lay down simple and clear rules, which

cannot be misunderstood. The mother and the nurse do not like the trouble, or perhaps do not like to exercise the moral control over their feelings, which a strict carrying out of the doctor's wishes may entail. "It is hard for the poor child;" it cries, and must needs be indulged in all its little fancies and whims. Or perhaps, nurse crammed with antiquated notions, foolish prejudices, and self-importance, disapproves of the doctor's orders. She may conscientiously wish to do her duty by the child, but she "knows best," and will do everything in her own way. The mother is either blind to the fact how things are mismanaged, or tacitly succumbs to nurse's ill-judged perversity, under the impression that after all, a woman of experience may know more about children than the doctor, particularly if she happen to have brought up a family of her own. For my own part, as a physician and father of a large family, I must confess that ample grounds have been afforded me for mistrusting such "experience" even more than a mere tyro in nursing. The latter can usually be relied npon, if possessed of a moderate amount of common-sense and sense of duty, to carry out to the letter our injunctions; the former is sometimes hopelessly under the influence of erroneous and absurd ideas originally engrafted by other ignorant old women. Thus are children often sacrificed to neglect of details in dietetic and hygienic matters.

If due care in dietetic and sanitary management be enforced, children will seldom suffer from much liability to constipation. But when indigestible and badly prepared food, or too many sweetmeats and cakes, have been permitted; when likewise (as is the rule rather than the exception among "well-todo" people) there have been levied upon the stomach and intestines the extortionate taxes of too fast eating and drinking, with perhaps over-repletion at meals, or habitual "tit-bits" between mealsthen looseness and irritation of bowels, undue secretion of mucus, and generation of ascarides, are frequent results to be succeeded by a chronic condition of constipation. With reference to errors in diet, I feel myself called upon particularly to name the too free use of animal food, its substitution for milk, during the tender years of childhood. Some of our own profession, neglecting nature's precepts, are too apt to fall into the fallacy of believing that flesh-meat is a sine qua non for all cases of debilitated constitution in childhood. The public generally (among the higher classes) are strongly impregnated with, what may be called, the absurd idea. How often is the remark made, "no wonder the child looks delicate and does not thrive, if it only gets milk and no butcher's meat!" Many people fancy that milk is not much better than water in an alimentative point of view. Now I am no advocate of the "vegetarian" doctrine, but must most decidedly say that animal food is given in excess to children, as a rule, in these days, by most families who can afford it; that it is far too stimulating, even once a day regularly, for many children; and that its daily use far more frequently causes derangements, than its absence causes debility, or prevents restitution of health.

But further, mismanagement dietetic and hygienic, as productive of constipated habit, does not present the worst aspect of the question. The most lamentable is undue medication, which (divesting the question of its more fatal character) not unfrequently undermines the healthy tone of the bowels and the other abdominal viscera, and permanently deranges the equilibrium of the nervous forces. I would especially have attention drawn to the evil effects of the various "carminative" and "cordial" drops and mixtures so highly vaunted by the self-interested owners of such patent medicines. Many of the best informed are but partially alive to the real extent of this unintentional child-poisoning. I have often casually come upon little phials of such stuff, where it might have been least expected, and upon inquiry have been told, "Oh! it is a perfectly harmless thing, it is only 'Dalby's Carminative,'" or perhaps "Godfrey's Cordial," with the earnest addition, "you know I would not allow any strong or injurious medicine to be brought into the house

without your knowledge." Alas! little was it known that opium in some form was the tranquillising ingredient; little was it known that the laxatives, continually exhibited, to a great extent owed their necessity to the constipation caused by this opium or morphia. While, however, such detrimental quack-panaceæ must be in the highest degree condemned, there are other common medicinal practices which demand almost equal condemnation, in-re Constipation, when habitually administered. I mean "gray powder," the simple carminative waters, syrups, and even rhubarb; for under judicious and regular management childhood does not stand in constant need of drugs. Indeed, everything in the shape of medicine ought to be given most sparingly, and only under professional advice, while even the medical adviser should, like the Scotchman, "consider twice" before he gives a single dose of hyd. c. cretá. Every dose of every medicine ought to be preceded by such reflections as the following: "Is this really necessary? Have I sound reason for giving this? Is it possible that a vague prophylactic idea of averting an imaginary evil may be the motive power in my mind? Cannot regiminal measures, properly directed, avail for the purpose in view?" It need hardly be added that these strictures do not bear upon the presence of derangements affording undoubted indications of medicinal necessity; but there is a

tendency, by no means rare, to forget that "common things" may be injurious to the child; and that one needless dose, impulsively given, may possibly necessitate the repetition of medicines by thoroughly deranging the internal animal economy. A constipated habit, an obstinate difficulty in procuring regular evacuations, is very easily generated in early life by compulsory measures and temporary stimulations through the exhibition of substances foreign to the constituency of the body; but it is not so easy to eradicate this fault of human creation.

Now it may be safely averred that much of the sufferings of infants from indigestion, from "wind," from deranged bowels, from offensive fæcal accumulation, from sour, slimy, putrid, half-digested excretory matters, or from ascarides, might be prevented by judicious management. Continual irritation of the intestinal canal must ultimately, as a rule, tend to troublesome constipation; even if no worse evil (such as mesenteric disease or hydrocephalus) result. So often is the train laid in infancy and childhood for a life-long tendency to many other maladies besides constipated bowels, that it is incumbent upon each of us to use our best endeavours for the eradication of the fallacious ideas and old-woman notions which are still far too prevalent in the community at large.

Among the numbers that are continually met

with, where constipation dates from infancy and medicines, and points a moral, I may mention a young lady, a relation of my own, whose bowels until seven or eight years of age were hardly ever moved without foreign aid. Frequently recurring convulsions and other disorders, which caused infinite anxiety to her mother, were the consequences. Fortunately subsequent care, and gradual stoppage of medicinal aid, in two or three years cured her.

Old Age. —There is one great difference between constipation in old people and that existent during other periods of life. At an advanced age it is often quite unavoidable, and the bowels must have periodical aid from medicines in order to act at all. As the buoyancy of the whole system is gradually lost with the advance of age, and as all secretory and excretory operations become sluggish preparatory to the natural decay of the entire organic machinery, so must the intestinal functions become sluggish. There are some old persons who retain such unwonted activity of body as well as mind, that they can still indulge to a considerable extent in their former active habits, and physical exercise helps to neutralize the torpidity of age. These, who represent the small minority, may not suffer from unavoidable constipation. It would be contrary to reason, however, to expect that the majority can be thus favourably situated. The world too

well knows that, as a rule, senile limbs partially or wholly refuse to perform their former offices, and this rule particularly applies to the lower extremities. Such diminution of voluntary muscular power will operate unfavourably in several ways. The entire animal economy must lose the benefit of those voluntary movements which at all periods of life are so extremely important for the vigorous performance of each and every function—for due activity in the molecular changes, for expelling from the various tissues disintegrated matters, and for the due appropriation of atmospheric oxygen. Thus will general torpidity of the animal functions be established. Then the involuntary peristaltic action of the intestinal canal becomes imperfect and sluggish; and added to this is the diminution of that voluntary muscular power which enables the young and the healthy materially to aid the involuntary expulsive effort, even in cases where otherwise the deterioration of this involuntary motor force would render the natural completion of such effort an impossibility. Whenever there exists much tendency to constipation from torpidity and imperfect contractile force, affecting the coats of the intestinal canal, it may readily be surmised that the loss of power in the muscles of the lower extremities and hips must deprive the abdominal and lumbar muscles of much of their point d'appui. These last muscles, which might otherwise successfully exert a voluntary effort

for the proper relief of the torpid bowels, being unable to fix themselves firmly, cannot act with efficiency. Consequently, unavoidable constipation, requiring some artificial assistance, often becomes associated with old age as an institution of life, and sometimes embitters existence, unless considerable judgment be shown in the management of an evil more or less inseparable from this period of life.

Amongst local affections particularly associating themselves with aged men, prostatic disease may be noticed as one which occasionally gives rise to constipation of the bowels. Enlargement of the gland, requiring surgical assistance, may not necessarily be present; but much irritation and morbid action may exist, which may vitiate and render inefficient the nervous and muscular forces of the adjacent rectum.

Cerebro-spinal debility and irritability (without actual paralysis) claim some acknowledgment as special causes of constipated bowels, notwithstanding the fact of their frequent association with and

dependence upon other causes.

In the absence of irritability (or some associate cause among those already named) simple cerebrospinal debility rarely affects the bowels to any troublesome extent; but when irritability is the companion of debility, irregular action and constipation, difficult to manage, often supervene.

Salient examples, where these conditions may exist, are afforded by epilepsy, hydrocephalus, "alcoholism," the student's overworked brain, the abuse of the sexual function.

When the practitioner (not overlooking cause and effect) can clearly trace constipated bowels to cerebro-spinal origin, it will of course be necessary to investigate carefully constitutional tendencies, as well as all prior and concurrent influences operating injuriously upon the animal and mental economy.

Drawing upon very simple analogy for an explanation of the ordinary modus operandi of this cerebro-spinal causation,-few on reflection will fail to recall to mind some period when sudden heat and oppression of the head with flushed face (e. g. from entering a heated, close, and badlyventilated closet) has at once completely suspended even a very urgent call of nature. Partial loss of the normal balance between the arterial and venous circulation, of greater or less frequency and duration, will necessarily accompany cerebro-spinal debility with irritability, whatever may be acting as predisposing cause. Thus local congestions, irregular nutrition of the nervous centres, and oppression of the head, being present, may directly cause constipated bowels.

While for obvious reasons granting as little prominence as possible to the abuse of the sexual passion in its relation to cerebro-spinal proximate cause of constipation,-feelings of reticence must not (as in our first edition) lead into the error of avoiding the subject altogether. For, several of the most tedious cases of constipation that it has ever been my duty to treat, solely depended upon cerebro-spinal irritability with debility thus generated, the worst of all being instances, not of natural excess, but of self-manipulation. In these peculiar cases the attention of the physician will be directed to more or less feebleness of the lower extremities; sensation of aching weakness in the loins and through the pelvis; dull and peculiar look of the eyes; deep aching or oppressive pain or uneasiness in the occipital region increased on endeavouring voluntarily to secure an evacuation from the bowels; and (especially those who have been unhappily frightened and maltreated by ignorant and designing wretches) a singular timidity of manner with loss of self-reliance. In such cases the difficulty in restoring tone and balance to the sensori-motor ganglia and the cerebellum often remains for some time an obstacle to complete success over the constipation, even when suitable advice and kind encouragement have had very gratifying effects.

Cerebro-spinal paralysis, in its relation to general helplessness and muscular inefficiency tending to constipation, appears closely allied to the decay of physical vigour in old age. Whether the form of

paralysis be hemiplegia or paraplegia, whether the attack be temporary or incurable, the bowels are frequently very obstinate, and necessarily cause much disturbance to the sufferer. What has been said regarding constipation in aged persons will equally apply to the paralytic; and, if (as too often happens) complications arise, which operate to increase the difficulty in procuring an evacuation, such complications will claim affinity to some one or more of the causes which have received attention in previous sections.

Besides this general phasis in the constipation of paralytic cases, there is one point to which my attention has now and then been directed as a very troublesome symptom, viz., abnormal contraction of the sphincter ani. This contraction may be either spasmodic or obstinately unyielding-painful or painless. In paralytics, we all know that reflex movements of even severely neuralgic character, are very common. In a few instances, where the mutually inhibitory influence of the cerebrospinal and sympathetic systems had been quite upset from disease of the sensori-motor ganglia and cerebellum, I have met with most obstinate difficulty in defecation, which has proved to be owing to the spasm and extreme pain in the sphincter whenever nature herself solicited, or artificial solicitations were made in her behalf. Without pain, such spasmodic contraction is not uncommon.

In the instance of one gentleman, still under my care for disease of the cerebellum and base of the brain of many years' standing, this symptom was, some time ago, the one above all others of which he complained most bitterly, amidst his other great sufferings. He has been almost free from it for some months, but it was only by the utmost attention and care that he was placed in a position to overcome it.

Spasmodic concentration of nervous force may of course affect other portions of the intestinal canal, in cerebro-spinal paralysis, just as in other derangements of the organism to which reference has already been made; for whenever any limited portion of the central nervous system is diseased and paralysed in function, various little temporary disturbances of the animal economy may excite irregular distributions of nervous force, and anomalies in muscular action.

CHAPTER III.

TREATMENT.

GENERAL PRINCIPLES AND DETAILS APPLICABLE TO EVERY MODIFICATION OF CONSTIPATION.

No medical practitioner, in these days of intellectual light and advanced liberality, should feel afraid of acknowledging his freedom from undue prejudices; yet a little moral courage must necessarily be summoned under the not improbable chance of exposure to the unfriendly darts of even the prejudiced and illiberal few. A thoroughly satisfactory consideration of the most successful means of cure cannot be undertaken, in the instance of so common and troublesome an affection as constipated bowels, without a fair exposition of errors and an equitable admission of any real advantage (however infinitesimal) which may be derived from any exclusive method of treatment. Justice and impartiality should impel each one of us to extract any possibly small per-centage of truth even from the most contemptible sources. Every "system," every "pathy" (professing to be perfect in itself) must needs be founded on something akin to falsehood or credulity, but always possesses a little corner-stone of

truth just sufficient to make it partially useful, to render it palatable, and to persuade the thoughtless and the ignorant to swallow it. Some one valuable but narrow idea, or some extremely limited portion of Nature's therapeutic means, is singled out: an atmosphere impregnated with plausibility is generated around it; and a boundary-line is drawn, within and not an inch beyond which disease of every possible description must be treated. The narrow mind forgets or perceives not, the self-interested mind professes not to see, that Nature holds in her grasp a variety of resources, each of which claims a place among therapeutics.

Vain as it would appear to be to imagine that the cure of all diseases can centre itself within the circle of one isolated idea, nevertheless we see the exclusive "hydropathist," "kinesipathist," "mesmerist," "medical-galvanist," disciple of Hahnemann, &c.; each one of whom (in the extreme), amidst a host of vulgar and less creditable claimants, contends for the position of an universal cure-all power—a narrow exclusiveness which is in direct opposition to the plainest precepts of Nature, and which offers a not unpardonable parody upon the lines of Ovid:

"Smyrna, Chios, Colophon, Salamis, Rhodos, Argos, Athenæ, Orbis de patriâ certat, Homere, tuâ."

The unprejudiced practitioner, on the contrary, employs due discrimination and judgment in con-

templating the various agencies which may be operating on various temperaments, and in divers diseased conditions; and then, disregarding the abuses to which any really valuable therapeutic agents may be unfairly subjected, he directs each and all in their right place. He will even go so far as to grant that good may have come out of evil; for often do we find that some valuable remedy, previously somewhat overlooked, has had its individual excellency brought into more bold relief by the ignorant or the unprincipled advocacy of it. (Even the "homœopathic" placebo will not be forgotten, for a placebo is often of great value.) Each advocate of an exclusive "system" cries with alarm and indignation that the medical practitioner is employing his discovery, his remedy; that the practitioner, "unable to cure by his own system," has been obliged to try the "system" of another, whom he calls "quack;" that the orthodox doctor is taking a lesson. But whose is the real offence? Whose the encroachment? Let him who has robbed our quiver of any of its choicest shafts, and then dishonoured it, plead guilty to the impeachment.

The question may be propounded: which of us does not employ frequently in practice cold water, galvanism, movements of the muscles and limbs ("kinesipathy"), gentle rubbing and friction (mesmerism), "homœopathic" administration of medi-

cine, and all the different drugs which form the components of some one or other of all the quack nostrums in existence? The therapeutic quiver of our profession, to the mind divested of prejudice and open to conviction, includes all Nature's shafts.

In the treatment of constipation of the bowels, in its various aspects, there must be no hesitation in plucking any shaft from the fully supplied quiver of therapeutics which clinical experience may have proved to be possessed of more than ordinary efficacy. So intractable do we find this derangement sometimes, and particularly when it has been made so through mal-treatment, that we cannot afford to waive any mode of cure (however perverted by the circumforaneus medicus) which may be in accordance with reason and may present unusual advantages; although it may be so rarely thought of, and consequently resorted to, by the majority of the profession, as virtually not to be in existence as an ordinary remedial agency.

The management of constipation resolves itself into a multitude of details, according to its origin and duration, the variations in the temperament, constitution, and habits of the patient, and complications which may have arisen from the long continuance of the evil. It is useless to attempt to cure an intractable case of this kind without the greatest attention (as we have intimated while discussing the various causes) to all minutiæ, and first,

we must completely master the history of each case, which we shall almost invariably find to have some distinctive feature. We must possess ourselves of a perfect knowledge regarding the constitution hereditary and acquired, the former habits, former diseases, and a general outline of treatment to which the patient may have been at various periods of life subjected. Next we turn to the present condition of the invalid. What are his ordinary habits? What (if any) attempts have lately been made radically to relieve the difficulty? What remedies, medicinal or otherwise, are now habitually resorted to simply for the purpose of securing temporary relief? How frequently is it necessary to stimulate and irritate the unfortunate bowels by foreign substances, in order to prevent the injurious effects of accumulation and overloading? What is the patient's personal experience of the immediate and subsequent effects of habitual doses of irritants? Are large or small doses taken? Have such habitual doses undergone an increase or diminution in quantity or quality latterly? Independently of the special effects on the bowels, do any collateral sensations of a disagreeable, alarming, or painful character affect the brain, stomach, bladder, or hypochondriac or dorsal regions? If periodical doses of medicine have become an unpleasant reality and sine quá non, do any such collateral sensations become worse before or after each

compulsory evacuation? Are the evacuations unusually offensive, or abnormal as to consistence, colour, &c.? Is flatulence a serious inconvenience, and if so, is there any constant distension and uneasiness, or pain, of special moment and specially located?

Having ascertained these various points, and of course having verified them in the usual way where advisable, we now perform (as in other diseases) a careful mental analysis and synthesis of the knowledge we have acquired. It may naturally be assumed that no experienced practitioner would fail to have taken a tout ensemble of the countenance and physiognomonic peculiarities, which will usually afford assistance to the judgment, and instinctively convey an impression tending to further safety in our generalisation. Occasionally we find chronic invalids extremely nervous and imaginative; they may not be naturally so, but long-continued impressions, concentrating themselves on the mind in association with their intestinal annoyances, may partially mislead their imaginations. But we must infer for them, not permit them to infer. Most careful practitioners will almost intuitively separate merely nervous fancies and hallucinations from veritable sufferings. Pure fancy and hallucination, however, I believe not to be quite so common as ill-success, from want of caution or acumen in diagnosis and treatment, would make them. Nevertheless, the occasional existence of a morbid imagination, and a mingling of fancies with realities, points to the propriety of sometimes allowing a liberal discount upon the replies to our queries. Yet even the patient's hallucinations will often afford a useful lesson to the observant mind, as regards idiosyncrasy.

We have arrived (let us suppose) at correct and well-considered conclusions thus far; we have now a good basis upon which to found our line of treatment. Next we have to consider the possible preponderance of either primary or secondary causation; whether it be incumbent upon us, at the outset of treatment, to pay a preferential attention to the former or to the latter. Sometimes careful management, directed solely to the counteraction or removal of primary causes, may suffice; sometimes secondary causes may have become so inveterate, and may be operating with such extreme severity, as to indicate clearly the uselessness of stringency in treating predisposing causation until the proximate causes have been brought in some measure under control; we might be unnecessarily subjecting the patient to irksome regulations, which would afford no equivalent advantage. But yet, in the majority of cases, in which the salient symptoms are of local or secondary character, judicious regulations, with the view to obviate possibly slight primary agencies, cannot be omitted, even at first,

without placing local treatment under serious dis-

advantage.

It is the absolute necessity of close discrimination, regarding the foregoing points of detail, that I would urge, not only if we desire credit and success in treating the intractable varieties of constipation, but on the further ground that sufferers from long-continued derangements of this kind demand more than ordinary tact in management, are apt to be impatient, are often disagreeably impregnated with erroneous notions concerning their malady, and may decline to subject themselves at at first to what they may conceive irksome and nonessential restrictions. Tact at the commencement of treatment, tact in giving a lucid explanation to our patient of the principles upon which we are basing our course of action, tact in minutely directing our remedial measures, so as to conjoin the utmost efficiency with the most agreeable method of giving effect to our intentions-such tact will frequently make just the difference whether our patients will permit themselves to be cured, or whether (themselves their own worst enemies) they rebel against, perhaps, the only rational and certain curative procedure of which their case may admit.

CHAPTER IV.

TREATMENT OF CONSTIPATED BOWELS, WITH RE-FERENCE TO SPECIAL CAUSE AND COMPLICA-TION.

Having offered the foregoing hints regarding the general management of constipation, under whatever circumstances it may present itself, it now remains for me to consider the treatment of its various modifications.

Perhaps it may be right to remark in limine, although the fact may be obvious, that many of the succeeding details will be found more or less applicable to the majority of forms of constipation. Notwithstanding this fact, however, it should not be inferred, as a natural sequence, that the employment even of these can be followed by success if they be adopted (in all cases alike) according to a precise routine, and without careful reflection. Our patients are but too apt to fall into a plausible error of this kind, but among ourselves nothing can be better known and more easily apprehended than the fact that the same remedial measures will require variously detailed employment, according to distinctive indications for treatment in different cases.

A thorough knowledge and appreciation of

causes which may be operating separately or conjointly in the production of a constipated habit confers the key of the position upon the physician who has to offer battle to or besiege the enemy in his stronghold; while attention to apparent trifles, in handling Nature's weapons, enables him successfully, though sometimes slowly, to make approaches to and sap the foundation upon which the unyielding nature of the disease may depend.

We presume that the history of the case has been thoroughly investigated, that the present circumstances of the patient are fully apprehended, and that a correct and unbiassed judgment has been formed after careful reflection upon the totality of

conditions.

by the abuse of Purgatives.—The duration and extent of the evil is of great moment. As a rule we must, at the outset, prohibit the habitual use of opening medicine, if we can do so with safety. But so unpleasant are the sensations of the invalid at first, when the bowels are suddenly deprived of their accustomed irritant, that we ought rarely (even through regard solely for the feelings) to be too brusque in suspending the artificial stimulus to which they have been subjected. I have known persons (very unnecessarily) thus rendered perfectly miserable; in some instances

temporarily, inasmuch as the pristine power of the bowels has happily been restored; in others more permanently, under followers of the pure school of Hahnemann, until the feelings could stand the martyrdom no longer, and cases perfectly curable by rational means have, in despair, relapsed into their previous habit as the lesser of two evils. There is a second aspect, however, in which we should regard the question of sudden suspension of compulsory action of the bowels. Possibly, with much difficulty and annoyance to the sufferer, we might ensure some kind of imperfect evacuation daily, or once in two or three days. But the medicinal action has previously perverted in character, and unduly promoted, the secretory and excretory functions of the intestinal glands and mucous lining. What then must, by no means rarely, be the consequence of a sudden and most irrational deprivation of an accustomed stimulus? Undoubtedly partial paralysis of all the coats of the intestinal canal, for they cannot at once regain that functional activity which is absolutely essential to the wellbeing of the organism.

As in the case of drunkards, so with those who have abused opening medicines, we must be very cautious about suddenly stopping a long-continued excitant. We must judiciously allow "a hair of the dog that bit him." By reducing the quantity of the irritant, or by substitution of less potent drugs, or by

other well-directed treatment, we shall usually be enabled gradually to gain our point with but very slight inconvenience to the patient. Our great aim in every instance must be ultimately to stop all purgatives; but to attain this gratifying result, which can only be done by a gradual restoration of nervine and muscular tone, we must be on our guard against any realisation of "Incidit in Scyllam qui vult vitare Charybdim." Entirely prohibit purgatives as soon as the patient's feelings, as well as constitutional and other conditions, can be brought to tolerate the change without inconvenience, but be guarded, lest this be done prematurely.

So much for the careful direction and suspension of aperient medicine which may have been habitually taken. In the next place, what measures must be adopted in order to renovate the semi-paralysed bowels?

The "vis medicatrix naturæ" will do much for this purpose, and the duty of the physician is to assist, direct, and modify this intrinsic agency. When Nature's operations are permitted by our degenerate race to have their full sway, the vital dynamics are in such vigour, and such mutual harmony exists throughout the animal functions, that local derangements are ordinarily very trifling, inasmuch as impressions of untoward character can with difficulty produce more than a transient effect.

Healthy tone must be given in various ways, partly with reference to the entire organism, which will more or less have suffered, partly with a special view towards the restoration of functional power to the bowels. Diet is primarily an important consideration. If the invalid be careful and abstemious in habits, if he be pale, sallow, and anæmic, it is sometimes nećessary to give an increase of animal food, and a tolerably liberal allowance of good malt liquor or wine. With much accompanying indigestion, where solid animal food may cause uneasiness of the stomach, or heat of head and flushing of the face, it may be desirable for a time to enjoin the use of real beef-tea, or solution of mutton or chicken prepared after the true beeftea method. A small quantity may be taken two or three times a day independently of the other meals. Bulky, farinaceous food must be very limited-not too much bread, no biscuits, no rice, sago, &c. If brown bread (the entire grains ground down into flour) agree, i.e. do not cause any irritation of the mucous membrane with consequent flatulence, the patient may find it the best form of bread, and, if approved of, treacle may be spread on it. Tea and coffee should not be too strong, and should not be imbibed until tolerably cool. If not objected to, porridge made with oatmeal or lentil flour and new milk (not boiled) may at breakfast be substituted for other things. Eggs may be taken, just warmed

through, or beaten up with a little wine and sugar, if preferred, but not boiled or cooked in any form, even in puddings. If the invalid be partial to figs, green or preserved, and find that they do not disagree with the bowels, these are sometimes useful; with some, however, they disagree. The same may be said of tamarinds and prunes. Sometimes a thick decoction of them (one or all) is very useful, and agrees better than the fruit uncooked. A tumbler of cold water, taken at the last moment before getting into bed, is frequently a useful measure.

The plethoric and full-blooded require in some respects a different regimen to those who are weak, pale, and attenuated. Thus, instead of advising an increase of animal food and stimulating beverages, it is often necessary to diminish these considerably, otherwise we may never cure the constipated habit. Fruit and vegetables of all kinds must be employed freely, and stimulating aliment be limited to once a day. They may drink freely of cold water two hours and a half after each meal, and not only imbibe a tumbler of this wholesome liquid at bedtime, but likewise on first rising in the morning (at which time it will rarely be borne by the pale and delicate).

Such are general rules for dietetic management, to be varied and modified according to the circumstances of each case.

Exercise, general and local, active and passive, is extremely important in the treatment of this as in most other causes of constipation. Walking or riding exercise, particularly the former, is sometimes more than ordinarily useful after a draught of cold water; but in pale and thin persons a glass of ale or stout may be often substituted with advantage two hours and a half after a meal, and immediately followed by the exercise. The duration of exercise must, of course, vary with the powers of the invalid; but, as a rule, it must be kept on this side of fatigue. In all cases, however, unless some serious physical impediment prevent, exercise must be very brisk and sharp during the time it lasts. Most persons will find, upon trial, that sharp exercise for a moderate period will cause much less fatigue than lazy and loitering movements during the same period. This does not depend on the muscular movements alone, but, additionally, on the healthy and full inflations of the lungs which ever accompany energetic movement, and the exhilaration thus given to both mind and body by the increased appropriation of atmospheric oxygen.

The adjectives active and passive, associated with the term local exercise, are intended to imply movements either self-derived or derived through the medium of others. The passive movements afford the basis of one of the fashionable 'pathies—an auxiliary ignored by no man when used in its right

place—I mean what is designated "kinesipathy," or the "movement-cure," which owes its origin to the necessity for a truly rational and most valuable adjunct, the judicious and discriminating use of which happens to have been neglected by many of

our profession.

Local movements may be often valuable in procuring a response from the bowels under the condition at present referred to. Invalids themselves may frequently knead the muscles surrounding the abdominal cavity; they may vary the positions of their body, slightly twisting the body, and making alternate movements laterally; or their medical adviser may direct them how to perform a little operation upon themselves, which often proves very effectual for exciting a manifestation of contractile force on the part of the torpid intestine, and for the conversion of irregular and imperfect peristaltic action into a uniform and effective power of expulsion. So few of our professional brotherhood are aware of the occasionally remarkable efficacy of this little operation, when properly performed, that it may not be amiss for me to explain it as follows: Place the tips of the fingers of the right hand exactly over the cæcal region, with very slight pressure; carry them upwards along the ascending colon to the right hypochondrium; continue the movement, without any intermission, over the region of the transverse colon to the angle of junction

with the descending colon; stop not, but proceed downwards gently and steadily to the iliac region of that side; instead of the previously very gentle pressure, the fingers must now be pressed firmly and deeply (without pain) into the pelvic cavity, and there retained for about fifteen seconds; then remove the hand altogether, rest a few seconds, and repeat the procedure; this may be continued for a period of from a few minutes to a quarter of an hour or more. Some little care and tactile dexterity is needed to do this properly, and where the hand is dry, or the cuticle thick and hard, it is advisable to slightly moisten the ends of the fingers. When the right hand is tired the left can be used, and so alternately, but it is better not to alternate them too rapidly. The patient may first try, and may succeed or not. If there be failure, it must not necessarily be given up. Invalids themselves will often fail, and almost invariably if their bowels be extremely intractable. But now the aid of a friend for passive movements may be invaluable, unless the patient strongly objects (which very rarely happens) to the touch of others. The medical adviser can instruct a friend or confidential servant regarding the precise anatomical relations of the parts involved, and the method of performance. All is very simple, if the operator be willing and obliging, and possess ordinary dexterity. I usually order the proceeding to extend over a

period of from five or six minutes to occasionally twenty-five minutes. It will be readily surmised that persons themselves will soon get tired, and often cannot use their fingers properly upon themselves for more than a few minutes. The aid of others is often essential. Some may call the foregoing suggestion "mesmerism" as well as "kinesipathy." Let us rather call it common sense, based on physiological principle.

The use of the cold douche locally, or mere sponging with cold water while sitting in a hipbath, is sometimes expedient for the purpose of giving tone to the half-paralysed bowels. This might be resorted to, other circumstances permit-

ting, every morning and night for a time.

As regards medicinal aid, I have already cautioned against either too sudden deprivation or too long continuance of purgatives. As a rule (when necessary), I have found that a judicious combination of rhubarb, aloes, and nux vomica, in very small doses, and adapted carefully to the conditions of each case, will suffice as a substitute for the more potent purgatives by which the spontaneity of the bowels may have been nearly ruined. Sometimes such medicinal aid may be rendered in the form of a mild and well-mixed aloetic dinner-pill, sometimes bedtime is the best, and sometimes a little pill may be required temporarily both in the middle of the day and at bedtime. I much prefer (when

perchance temporary medicine is urgently needed) to give a very small quantity, and repeat it even three times a day, as a gentle persuader, rather than prescribe one larger dose at longer intervals. Very small doses of tonics are frequently demanded, and among these I would particularly name Liq. Pot. Arsen., the limited employment of which, once a day, sometimes proves very efficacious; it may now and then be alternated with Nux Vomica. With tonics, as with any necessary aperients, I would emphatically say, give not one dose more than accords with prudence and the real (not vague or imaginary) requirements of the patient. Moreover, it cannot but be regarded as a most unphilosophical course to exhibit several tonics simultaneously. because it is like prescribing at random, without any clear and definite idea; secondly, because we know not (if benefit accrue) which may have been the really active agent; thirdly, because judicious alternation of tonics almost invariably affords great advantages, inasmuch as each has its own plane of action within the sphere of the vital dynamics, and each may prove itself either injurious or useless if administered for too long a time continuously, notwithstanding any primary benefit that it may have conferred. How common a thing it is for a patient to insist on persevering with any medicine that appears to have made a hit and just to suit his or her case, notwithstanding advice to the contrary.

Besides the above suggestions regarding treatment directed with the view to a restoration of the lost functional activity of the semi-paralysed bowels, oleaginous laxatives and enemata demand attention. Of course no drastic, such as croton oil, ought even to be hinted at, except as a dire temporary necessity in rare instances of constipation with large accumulations, accompanied by urgent general symptoms, which refuse to succumb to less cogent means. Castor oil is very valuable as an occasional adjunct to tonic treatment. In very obstinate cases it may be employed as a very efficient auxiliary to such a daily pill as I have named; from two to six drachms may be taken every few days, or even on alternate days, at the commencement of treatment, if really required. Some delicate persons, however, from idiosyncrasy cannot take castor oil without much nausea and symptoms of exhaustion and lassitude. In such the finest salad oil, imported from Italy, &c., is an excellent substitute. From half an ounce to an ounce and a half may be taken every night at bedtime (last moment); castor oil ought never to be taken for many successive days, but the salad oil (when pure and good) may be not only tolerated, but taken for a considerable period daily like food, in thin, anæmic, or strumous subjects, always remembering that few excellent general rules are without their exceptions.

Enemata are frequently sine qua non in consti-

pation from the cause under consideration. Nevertheless they require care and moderation, otherwise they may themselves increase the torpidity of the bowels. Exhibited very warm, they should only be employed occasionally; habitually thus employed, the descending colon and the rectum will become relaxed and debilitated. As a rule, the chill should just be taken off the plain cold water used for the purpose, when the patient has been unaccustomed to enemata, or whenever it is found necessary to inject more than half a pint of fluid. But when no inconvenience attends, and particularly in strong constitutions, a small quantity (sixteen ounces as the maximum) should be administered, perfectly cold; it acts in this way like a tonic. In some few cases of much plethora and engorgement of the vascular system, Infusum Quassiæ c. Mag. Sulph. may be advantageously prescribed as an enema at the outset of our campaign against this form of constipation.

Finally, whenever carefully-detailed dietetic and hygienic measures suffice for our purpose, all medicines should be avoided as worse than superfluous in constipation which has been caused by the abuse of opening medicine.

Treatment of Constipation arising from indolent habits, luxury, too much sleep, confinement in hot, relaxing, ill-ventilated apartments, morbid fear of draughts, &c .- It will be obvious that constipated bowels originating from these infringements of the laws of Providence, which wisely leave the enjoyment of perfect health in a great measure at our own option, cannot be radically cured without change of habit. Considerable amelioration may certainly be obtained, and the effects of bad habits may be to a certain extent neutralised, by the tact and acumen of the medical adviser who may be complacent enough to conceal an unpleasant truth, or may lack the moral courage to inform the patient of it, or may clearly see that it would be "labour lost" and unnecessary anxiety, and perhaps opprobrium incurred, to urge the propriety of surrendering injurious yet loved habits. Some parties are indeed occasionally to be met with who will not reason one iota in a direction contrary to their transient self-gratification, and will not see their ill-health in the light of a self-inflicted penalty. Upon such no good impression can be made with a view to the re-institution of lost health and powers. The melancholy fact must be accepted, and we can only do our best under the circumstances, just as the conscientious clergyman will consider it his duty to strive almost against hope to rescue a "son of perdition." With the vast majority of invalids, however, much may be done towards change of habits through the medium of reason and common sense. We need not come

down like a thunderbolt upon their faulty propensities. Indeed, to do so is sometimes very injudicious for other reasons besides the somewhat craven fear of giving offence by too much candour; first, we may actually frighten those who are nervous and sensitive, and so raise up an additional foe wherewith to contend; secondly, we may render any obstinate and persistent determination towards bad habits entirely irremediable, by attempting suddenly to stem the torrent, where, had the current been diverted gradatim, our good intentions might have been successful. Some are well disposed, but may have partially lost firmness and moral courage; others are at first scarcely amenable to friendly counsel; it goes too much against the self-indulgent grain, and a rational fear of sure and certain consequences can alone turn the stream. Much discrimination is needed in dealing with the two classes and their various intermediates. A more than ordinarily careful impression, followed by a vivid appreciation of their own true interests, will not unfrequently offer the only basis upon which successful treatment can be founded.

Indolent habits must give place to more bodily activity, out-door exercise must on no account be omitted, and too rich and over-stimulating aliment must be exchanged for more plain and frugal fare. Attention in these matters may be effected gradually, and not unpleasantly, by little directions of

various kinds, adapted to the tastes and feelings of each invalid. The medical mind, which is fertile in resources, will devise continual little changes for the encouragement of the patient and the relief of ennui (that bane of the indolent). When bodily inactivity of long continuance has undermined the muscular strength, so that great fatigue follows the slightest amount of exercise, a commencement of improved habits may be made by the systematic repetition, several times a day, of a few minutes' walking exercise. The most delicate lady (if not paralysed) can walk briskly in her garden, or can descend several times from her carriage during a drive, and avoid talking such nonsense as "It is too much trouble to get in and out," or "It is too much trouble to dress so often before going out." Is it too much trouble to get well? may aptly be put to the invalid who may be perverse on such points. As regards those who possess plenty of mental activity, but are bodily indolent—the most absorbed in intellectual pursuits, in legislating, in trade-may always, if they please, regularly devote two small portions of the day to exercise, pedestrian or equestrian; and not only will the corporeal functions benefit, but regularity in this respect will invigorate the mental powers, giving them much greater acuteness and extent of grasp. Besides the out-door pursuits which should be judiciously advocated, taking care to enjoin regularity and frequency—but very short

continuance of exercise in the delicate and long unaccustomed to it—a very valuable aid in carrying out our views may be found in in-door exercises of various kinds-the brisk use of the skippingrope or dumb-bells, the practice of a succession of deep inspirations several times a day, even when sitting or reclining, running up and down stairs, and (if convenient) the gymnasium or the tennis-courtmay be resorted to. Where any special circumstances may militate against more active movements, passive ones are not to be overlooked. So-called "kinesipathy" may be brought into play (as previously suggested), through the agency of others. Male or female shampooers may be employed; even confidential domestics may be made useful in many instances.

In all cases of indolence and luxury combined the skin is very inactive. It may look clean, but may, notwithstanding, be thoroughly unclean. A cold, or tepid, or even warm shower-bath may be of great advantage; and, at all events, a complete and free sponging of the entire surface of the body with tepid or chilled water every morning ought to be regarded as an essential process even for common cleanliness. The employment of perfectly cold water for the matutinal ablutions requires discretion. Wherever it can be borne with comfort, and is followed by glowing reaction, it will be of very great advantage. Many invalids, disliking or un-

able to use it at first, become not only accustomed to, but partial to it; and thus it is that "hydropathic establishments" have become so popular and fashionable. But as a "system," this really valuable adjunct to rational management is grossly abused, and I have seen many delicate persons irreparably ruined in health by indiscriminate zeal on the part of the purely "hydropathic" medicus. Strong, robust, and plethoric persons will almost always bear "packing" and cold water usque ad libitum; the pale, the spanæmic, the delicate and strumous generally, ought (if cold water be used) to have it directed and modified with great circumspection. Moreover, the difference between summer and winter must be taken into account. The reintroduction of the old Roman bath is affording another resource highly valuable as an occasional remedy. As Mr. Pollard-Urquhart expresses it, "the frame of the gymnast with the habits of a hog" was not unfrequent with the imperial Romans. Not that any philanthropist would wish to see such a flagrant abuse of so valuable an agent in this Christian country, but, as we have intimated, all good things are subjected to abuse by degenerate man. Now, in the class of cases under consideration, it is usually desirable almost to proscribe the use of hot water or even vapour baths, unless followed by the bracing effects of cold water; they are too relaxing for frequent use, and are liable to

cause lassitude and cerebral oppression and increased constipation. The moderate use of the Roman (hotair) bath, on the contrary, is unobjectionable exceptis excipiendis, where heat externally, with the associated advantages of stimulation of the cutaneous capillaries and augmented cutaneous excretion, is needed. The secondary effect is tonic, much atmospheric oxygen is absorbed, liability to cold is diminished, even the most chilly persons often feeling warm for some hours afterwards, while, at the same time, the exhilarating sensations are not a little due to the discharge of retained effete débris which may have previously caused constant depression as sedative agents, if not as actual materies morbi. Besides the tone given to the capillaries and the purification of the system, there is the concomitant advantage of passive muscular movements through the shampooing, in many cases infinitely superior in efficacy to ordinary movements and gymnastics. It need hardly be added that this remedial agency (like everything potent in action) can, in the case of those who are seriously ill, only be advantageously and safely employed under the direction of the medical adviser.

In the treatment of constipation from indolent and luxurious habits, it rarely happens that we do not find it incumbent upon us to consider and rectify coexistent confinement in hot, relaxing, and perhaps ill-ventilated apartments (however large

they may be), morbid fear of draughts, and the habit of indulging in too much sleep. The ridiculous and almost universally prevailing absurdity of keeping windows closed and excluding the healthgiving atmosphere, and the folly of being afraid of admitting evening or night air, under certain circumstances, have been ably touched upon in Miss Florence Nightingale's admirable little treatise on nursing. Let all valetudinarians and draught-fearing persons read it and receive instruction. Even in winter few rooms, except large ones which have been periodically ventilated by open windows during the day, can remain throughout a long evening sufficiently pure for healthy respiration, when every little aperture is rigidly closed by window-shutters, curtains, &c. The admission of a free current of air for even one or two minutes every two hours, through the opened windows or doors, is the remedy.

The etiology of too much sleep in relation to a constipated habit clearly points to a few simple rules of treatment, besides those just named as applicable to every species of indolent and luxurious indulgence. Firmness and self-control on the part of the patient must be brought to bear. No animal food or stimulus of any kind must be taken after lunch or early dinner. Eight hours ought to be the full amount of sleep in the twenty-four hours, except in childhood or old age. Punctuality

in rising at a fixed time must be carried out with determination. The face and ears and neck may be washed with cold water before going to bed.

In warm weather the feather-bed should be discarded, and a hair mattress substituted. If a fire be needed in the bedroom in cold or very damp weather, it should be always extinguished an hour before actually retiring to bed; if bed-curtains are needed for ad captandum ornament, they should be strictly removed from around the head as well as the body of the sleeper; window-shutters and curtains (if there be any) should never be closed; and the draught from the chimney should never be excluded by letting down the slide, or stuffing with sacks and straw as poor people are in the habit of doing, for the express purpose (it might be fairly imagined) of poisoning themselves in a small room by the pestilential concentration of their own respiratory exhalations. It need hardly be added that these directions, so far as concerns the management of the sleeping apartments, ought to be enforced under all the unhealthy conditions which we are just considering. Those who are inclined to sleep too heavily or too long should especially avoid all malt liquors.

With regard to the medicinal treatment of constipation arising from indolence, luxury, &c., without serious complications, very little need be said. The less medicine the better for the patient, may be

regarded as an axiom. At the outset of rational treatment with a view to cure, a very few doses of an efficient combination of cholagogue and cathartic deobstruents may be necessary and very serviceable. Although this is one of the few exceptions in which I would advocate the necessity of an occasional purgative, yet caution should be still recommended as regards giving more than what may be really essential, while discrimination is exercised in prescribing the doses exactly suitable for the existing circumstances and the constitution of each patient.

One particularly useful assistant in many cases of this class will be found in a recently-introduced beverage, oxygenated water in a slightly effervescing condition. It is not unpleasant to drink, having only the taste of the purest distilled or rain water; but most persons, I find, prefer it with the addition of two teaspoonfuls of orange or lemon syrup, or a few drops of lemon-juice, or half a glass of wineany one of these being first placed in the tumbler into which the bottled water is about to be received. Unfortunately the interests of the tradesman have caused this beverage (excelling all others for ordinary use in hot weather and sedentary life, and possessing peculiar value in some forms of disease) to be somewhat unduly exalted as a medicinal expedient.

Further treatment will depend upon complication with other causes of constipated bowels.

The treatment of torpid liver and deficiency or perversion of biliary secretion demands our attention, so far as its relationship to the cure of consti-

pation appertains.

The sanitary measures to which reference has already been made will be more or less suitable in most cases of this kind. They require, however, some modifications in detail, the nature of which must depend upon idiosyncrasy hereditary or acquired, vital capabilities of each organism, duration of constipation, precise character of fæcal evacuations, and concomitant symptoms which may present themselves as complications.

In treating constipation arising from deranged liver-functions-in the rich we must ever have an eye to the tendency towards too luxurious diet, as regards both quantity and quality; in the poor, on the contrary, it must be our duty to advise, and our endeavour to obtain, if possible for them, a better supply of food, which usually involves the consideration of quality rather than quantity. The suffering rich must be restricted especially as to quantity of sugar, alcoholic and malt liquors, butter, and fatty The allowance of each must matters generally. depend in a great degree upon the amount of outdoor exercise and muscular exertion which may be undergone; indeed, sound philosophy will go further, and will point to the propriety of each day varying the diet in proportion to any possibly great

variations in the amount of physical expenditure. This general rule will apply to both plethoric and thin persons, but there are some essential differences to be made in details. While those who feed up rapidly and take very little exercise should have fats, sugar, and malt liquors, as well as spirits, almost expunged from their dietary; those who are thin and take plenty of exercise (and yet are constantly liable to hepatic derangement and constipation from slight causes) should always be permitted a suitable, but limited, quantity of sugar and fats, as well as alcoholic stimuli. The former should be debarred from all strong stimulating beverages, except a little port or sherry or claret, plentifully diluted with cold water, or very light Chablis, Champagne, sparkling Moselle, &c.; or they may take "imperial," acid (not sweet or acetous) cider, oxygenated water acidulated with lemon-juice, or soda water with a flavour of good brandy. The latter may be allowed stout or pale ale at lunch or early dinner, but not later in the day, unless it be followed by brisk out-door exercise. Tea, coffee, or other fluids, should not habitually be taken at a higher temperature than that of the tongue itself by those who are thin and delicate and dyspeptic; all hot liquids have a tendency in such subjects, indirectly to upset the hepatic functions; cold fluids are tonic and bracing.

All those who are obnoxious to a constipated

habit from this cause should be particularly directed to exercise their lungs very frequently. Inspirations should be deep and full, so as to ensure vigorous costal and diaphragmatic movements, which are essentially necessary in all cases of torpid or congested liver. Let this simple point be neglected, and all other treatment, however well directed, may be fruitless. A great number of little minutiæ might be offered for effecting this desirable end, even within-doors; sharp walking, running, and jumping, are of course very obvious methods. By no means rarely will careful attention to minutiæ, laid down in this particular, itself relieve the torpid liver by completeness in diaphragmatic ascent and descent, and by securing the association of the other muscular movements; while simultaneously, the blood being purified and its cell-formation corrected, the nervous centres become re-invigorated; and healthy and harmonious nervous influence conjoins to restore the secretive energy of the liver, to clear the biliary plexuses and ducts of pent-up products of unhealthy metamorphosis, and to give again to the intestinal canal its proper supply of natural instead of perverted biliary secretion. While the bilious and constipated habit, with all its unpleasant allies, such as nausea, sick headache, flatulence, offensive and difficult defecation, &c., is thus undergoing a not unpleasant primary process with a view to cure, auxiliary

means of "hydropathic" (!) character (modifications of which have previously been named) may be usefully conjoined, according to the toleration and feelings of the patient for such measures, and the usefulness which may be clearly indicated as likely to accrue therefrom. Cold water, if it can be borne—if not, water from 70° to 85°, should be used regularly every morning. A large and very porous sponge, while sitting in a full-sized flat bath, with about three or four inches of water at the bottom, may be employed with advantage. In winter, a two minutes' expenditure of time will usually suffice to pour the water over every part of the body; while in summer, persons accustomed to it will not, as a rule, like to leave their bath under five minutes. The feet should always be included in the bath; to exclude them is a popular mistake, and is the way to ensure cold feet and headaches; but they should be thoroughly rubbed afterwards, until quite warm. When constipation is very obstinate, the hand may be raised high, and the sponge thus squeezed several times, so as to direct the stream of water upon the abdominal surface, especially the right hypochondriac region. Sometimes, particularly in summer, a little douche of this kind, by sitting in a hip-bath, may be locally applied also before going to bed. Occasionally the shower-bath, in strong persons, may be usefully substituted for the sponging-bath every morning.

Even the most delicate should, in the absence of any strong reason to the contrary, perform their own affusions. Reaction will always be secured by a suitable conduction of the whole procedure. Whenever reaction appears difficult of attainment, the best method is to have a large sheet ready to throw over the whole body immediately after the application of the water, and then gradually to rub dry with the aid and beneath the covering of the sheet; or a Turkish towel might be used beneath this external protection. If really called for, which will be rare, the sheet might previously be warmed ready for use, and folded up to retain the heat. During the drying process the patient may be directed to knead and press upon the region of the liver.

Besides this method of employing water as an auxiliary in treatment, there is a truly valuable, yet very simple local application of it, to which I ought specially to allude—one of the oldest and most common applications, it is true, but not very generally modified and detailed in practice. I mean what the pathists in the water line call a "compress," but which may be more aptly designated by the common term "fomentation," whether it be applied cold or warm; for even when adjusted perfectly cold at first, with the usual view to a prolonged application, it must, before the lapse of many minutes, become raised to the temperature of

the skin over which it is placed. Bedtime is usually the best and most convenient period for applying it. The matter is very simple, merely requiring a little common sense in so arranging as to cause no damp or wet on the night-clothes. An ordinary towel, of moderately fine texture, will subserve very well; it should be folded carefully, so as to reach from the epigastrium to within two or three inches of the spine, and it should be from four to five inches in breadth, in front extending from the ensiform cartilage to within an inch of the umbilicus; it should then be thoroughly wetted with cold or tepid water, but with due care observed that the extent of saturation be not such as to permit the water to separate from the folded towel, and run over the patient. Over this wet towel either a piece of dry folded flannel or unbleached calico, or oil-silk, should be closely approximated, and this dry covering should be on every side one inch larger than the wet application beneath. It should be kept on during the whole night, or until quite dry, and repetition of the application will depend upon circumstances. Neither as regards repetition, nor cold or tepid water, nor dry covering, need we follow ultra-"hydropathic" routine. Plethoric invalids will tolerate the more energetic cold applications, frequently repeated; the delicate must have it modified to suit their peculiarities. I can decidedly say that sometimes the proper employment of this simple remedial agency for several successive nights will be found unexpectedly efficacious in relieving a congested or torpid liver, in promoting the discharge of inspissated biliary matters, in restoring to the intestinal canal its healthy supply of hepatic secretion, and in thus relieving constipation arising from such derangement of liver.

With regard to medicines, they must be prescribed, as usual, with great caution. This rule will apply even to the plethoric, who, at the commencement of treatment, whenever suffering from extreme congestion of the brain, rendering apoplexy or paralysis imminent, will always urgently need active unloading of the engorged vascular system. The indication in such persons is first to get rid of the vascular oppression, and consequent hazard to life, under which the whole system is labouring, and thus to form a basis without securing which all other efforts might be futile. Some one of the ordinary formulæ, combining the cholagogue and cathartic, with occasionally the hydragogue purgatives, may be selected, according to the special requirements of each case. We can employ no better medium purgative than the common form-Hyd. Subchlor. (vel. Pil. Hyd.) cum Ext. Coloc. co.—or (as may obviously be preferable sometimes) Pulv. Rhei et Magnes. et Hyd. c. Cretâ. For some days, time depending upon the extent of relief afforded to the system, these may be repeated every night

or on alternate nights. It should be here added that Leptandrin gr. j to gr. iij is highly efficient for unloading the liver, congested bronchi, kidneys, and bowels; and that it may be partially employed as a substitute for the mercurial, if we wish to avoid too frequent repetition of the latter.

When urgent symptoms are absent in the plethoric, no active purgatives should be given at all for constipation from liver derangement. In the weak, delicate, thin, or spanæmic, they are most decidedly contra-indicated in almost every case. Under the most favorable circumstances, temporary aggravation of constipation will ordinarily be the result of their use as *pis aller*.

Gentle medicinal means, of unobjectionable character, are however often advisable and even essential in treating this great cause of constipation. Of course not one dose should be resorted to, if non-medicinal remedies can be made sufficiently avail-

able for the purpose in view.

In many cases occasional (very small) doses of Hyd. cum Cretâ alone are highly useful. The specific deobstruent and cholagogue action of this truly valuable, but terribly abused, therapeutic may be obtained by much more minute doses than are usually considered necessary. With few exceptions, I find from \(\frac{1}{4}\)-grain to one grain a sufficient dose, when given alone at bedtime for two or three successive nights, or in very sensitive subjects every

second or third night. But the Hyd. c. Cretâ is often prepared imperfectly, and then causes considerable annoyance and dissatisfaction to the practitioner. To prepare it properly (as we all know) entails considerable trouble in lengthened trituration of the globules of mercury, and very few druggists are sufficiently impressed with the importance of this Triturated with the due expenditure of time and labour, this formula, in small doses, is perhaps the most desirable of all our mercurial preparations. It is better to prescribe it in a small powder with a little sugar, than in the form of a pill, for I have known pills become hard, and pass through the bowels almost unchanged; whereas it is important to have the small dose absorbed early in the primæ viæ, and admixture with a little sugar helps to secure this object. When the nocturnal dose of Hyd. c. Cretà requires assistance, a very gentle stomachic and tonic evacuant, in formá pilulæ, should be employed, with more or less frequent repetition according to the circumstances of the case, either on rising in the morning or at dinner-time, or even at both periods when the constipation is very obstinate. Let me offer one useful little formula, particularly suited for the delicate.

Be Ext. Rhei Opt., 3ss;
Ext. Taraxaci, gr. xxiv;
Quinæ Sulph., gr. ij (vel Xanthoxylin, gr. xij).
Misce secundum artem, ut fiant pilulæ xij.

In some cases (where the mucous secretion requires regulation) Pulv. Ipec. gr. iij may be substituted for the Quinæ gr. ij in this formula, or these two may be alternate ingredients in the pill. Instead of, or alternately with the foregoing, Fellis Bov. inspiss. gr. v ad gr. x in the form of pill, about two hours after a meal, will be often found very efficacious and may be taken once or twice a day, when a temporary substitute for healthy bile is indicated.

Where a little further medicinal assistance may be essential, occasionally at the outset of treatment a dose of castor oil may be given once or twice a week, two or three hours before rising, or (if that period be difficult to manage) at bedtime; in the latter case, no other medicine must be taken on the same night.

Where the hepatic derangement has been long continued, is very obstinate, and demands somewhat prolonged temporary assistance from medicine, the employment of *Podophyllum peltatum*, after or alternately with the Hyd. cum Cretâ, should be advised. Independently of its remarkable action upon the muscular coat of the bowels, it appears to exert a special influence in unloading the biliary ducts, and a *small* dose at bedtime, for a few successive nights, may often present an effective and safe alternative, if not substitute. It is specially adapted for torpidity with much congestion of liver in sanguineous

and plethoric persons with dusky-red, ruddy, or bluish-red and dark complexions; but it is not, as a rule, suitable or even active in the cases of those who have fine and transparent skins and glandular I take this as very significative, not weakness. only in the selection of cases for its administration, but even of its modus operandi as contrasted with Hydrargyrum preparations. The latter is the secretory alterative; the former appears simply contractile in operation. For somewhat prolonged use, should such necessity arise, small doses of Podophyllin may in fact be regarded as tonic for the muscular coat of the bowels as well as for the liver; and Taraxacum or Œthusa Cynapium may sometimes be usefully combined with it. If efficient for the purpose in view, medicines from the vegetable kingdom seem to be obviously preferable to a metallic preparation, such as mercury.

Again, too much emphasis cannot be laid upon the propriety of rigorously avoiding every single dose of medicine, tonic as well as laxative, which may not be clearly indicated by the peculiarities of each case. That obstinate constipation from biliary derangement, as from other causes, can be temporarily relieved with the greatest facility by means of medicines, is most palpable to every one; but such relief by physic alone, and particularly if injudiciously given, can only be regarded as "blackmail" levied upon one organ to obtain the integrity of the rest; when once paid, the unjust demands will be constantly repeated, and, if these be not successfully evaded, the entire organism must ultimately, to a certain extent, partake of the deterioration occasioned by unfairly overtaxing one of its functions for the purpose of exempting the remainder.

The regular use of a little common salt at every meal is frequently of essential service. Nitromuriatic acid is likewise indirectly useful sometimes, through its alterative action on the liver. Figs, sweet fruity confections, and other "persuaders" of that kind, will rarely agree with those whose constipation arises from biliary derangement; for when healthy biliary secretion is deficient or absent, all viscid and mucilagino-saccharine ingesta have a great tendency to undergo disagreeable fermentative changes, and in this way to render partially putrescent the entire contents of the intestinal canal, and to give rise to flatulence, ineffectual straining, and dysenteric symptoms, through irritation of the mucous membrane and peripheral nerves.

A very simple remedy before mentioned, viz., a tumbler of cold water about two hours after a meal, followed by a little sharp exercise of any kind, will be found an excellent expedient in some cases. Those who are naturally strong will find advantage from this every morning just before or after rising, and likewise before going to bed. The more deli-

cate require some careful modification in this respect. In full-blooded and plethoric individuals, where an oppressed system needs considerable relief for a time, the early morning tumbler of cold water may have Mag. Sulph. 3ss or 3j dissolved in it, or (more agreeable to the taste) a wineglassful of Liq. Mag. Bicarb. vel Citratis may be added to it.

In suggesting treatment for protracted and unusually obstinate constipation from this special cause, viz., hepatic and biliary derangement, I must not omit one powerful yet pleasant and safe remedy, with which I have for some years identified myself beyond any other member of our profession, and in behalf of which my paper read in July, 1859, at the annual meeting of the British Medical Association at Liverpool, may be remembered. The natural reluctance of our profession to take up novel remedies in too great a hurry has, as yet, prevented the study and establishment of the therapeutic agent in question in general practice, but it may be safely affirmed that, when the subject is taken up warmly and actively by the majority of my professional brethren, its value will be unappreciated only by the few who may be wilfully blind.*

^{*} Since I wrote these words in the first edition of this work, a great advance has indeed taken place in professional opinion on this subject. I hope for more.

I refer to the inhalation of oxygen gas, which, under proper exhibition, I have often found to produce an almost immediate effect in constipation depending upon torpid and congested liver, with chronic derangement of the biliary secretion.

My advocacy of oxygen as a valuable curative agent has always been carefully limited to its use in intractable or otherwise incurable diseases. illustrate this special suggestion in the treatment of constipation, it will be merely necessary to say that, excluding many instances of more gradual yet almost equally satisfactory results, it has been my good fortune to administer this remedy in a few cases where every other treatment had failed to afford more than the most transitory benefit to the hepatic functions under long-continued derangement. One of these patients was almost in articulo mortis; three others had become so offensive from impurities, cutaneous eruptions, and tainted breath, as to be hardly approachable without disagreeable impression upon the "olfactories." In each the effects of the oxygen within a few days were most marked. There could be no mistake between the post hoc and the propter hoc. In one case after a single dose, in the others after from three to eight doses, sudden diarrhœa of most offensive character supervened without the aid of any other medicine, and these evacuations were surcharged with a large quantity of offensive (first black, then greenishblack) inspissated bile and mucus, which had evidently been pent up within the biliary ducts and cells, causing extreme depression, and the discharge of which at once relieved that lowered condition.

At page 127 I referred to oxygenated-water, as a general beverage useful for the bowels, among a certain class of invalids. While on the subject of oxygen in its therapeutic relation to constipation from faulty liver, &c., I may possibly be of service to some of our profession interested in the matter by offering a few practical suggestions. This gaseous water may in some instances be successfully substituted for the inhalations; while, more rarely, a certain amount of advantage is derived by the employment of the two forms of exhibition conjointly. To the busy practitioner the water presents much the most easy method of administration; for the correct management of the inhalations demands considerable care and some practical experience. On the other hand, the water will often disagree even in hepatic derangement apparently indicating its trial; while in properly selected cases the judicious use of oxygen by inhalation can never injuriously disturb the internal economy. The water will often cause much internal discomfort and flatulence without corresponding advantage, where the inhalation will be successful and free from any objection whatever.

best rule is never to advise the water in very sensitive conditions of the internal organs and nerves. Some persons will drink with benefit two or three bottles daily; others will only tolerate one bottle. It suits the warm-blooded better than chilly subjects; it often disagrees in cold weather, where it would be highly beneficial in warm weather.

In the cure of constipation, I do not claim for oxygen more than a very circumscribed position of value; but since hepatic torpidity may be not only a cause per se, but may be a complication insidiously co-operating with other and more tangible causes, it behoves us not to lose sight of this remedy, when such complication can be clearly traced as an agency which inhibits the attainment of full effect from our other rational therapeutic measures.

Neglect of proper periods for evacuating the bowels.

Pure nervousness; excessive anxiety regarding frequency and regularity of the alvine evacuations.

—When there has been neglect in responding to the natural solicitations of the bowels, it is very evident that the primary indication is to return to rule in this respect. An after-breakfast rule undoubtedly presents many advantages over every other period of the day, when it can be accomplished without waste of valuable time. If this course is

inadmissible, then some other convenient time of the day, especially after any full meal, should be fixed upon; it is not generally, however, the most desirable course to get up instantly upon the completion of the meal, but rather to sit quietly for ten minutes or a quarter of an hour. The replenishment of the stomach obviously causes mechanical pressure from above downwards, and not only is this pressure itself beneficial for unloading the lower bowel, but it tends to excite peristaltic action. When it is hard to re-establish rule for the purpose in question, a slight modification of certain before-named efficacious yet simple expedients may, in some instances, be tried, viz., a large tumbler (or even two) of cold water taken fully two hours after lunch or early dinner, and followed by a quarter or half an hour's sharp exercise—walking, jumping, or riding, or exercises in a gymnasium, if the preferential out-door exercise be inconvenient Delicate and thin persons may take in town. a glass of stout at a draught under the same circumstances, and with the same view.

In all instances of this neglect of the bowels, much of our success in treatment must naturally depend upon our rational influence over, and the active co-operation of, each invalid.

We have seen the contrast of the preceding in nervousness and excessive anxiety regarding regularity and frequency of the alvine evacuations.

Such cases as these are often truly distressing, and their treatment involves (especially when complicated with functional derangement of liver and indigestion) much more difficulty, anxious care, and exercise of skill on the part of the practitioner, than constipation from any other cause. It is not one or two things, or even a combination of things, which will cure constipation thus arising: it is the judicious method of putting things forward and of impressing the minds of our patients, while at the same time no little detail of mental peculiarity or physical condition escapes our notice, and no minutiæ in employing our varied resources fail to receive our earnest and discriminating attention, according to the requirements of each case. Not only is it difficult to find an exact parallel between the mental undulations of any two persons affected with a conjunction of this nervousness and real physical derangement, but even in the same individual we have often to treat variations of nervous ideas and sensations, changing almost as rapidly as the colours of the chameleon. In long-standing cases this presents the great difficulty, and our very basis of cure must depend upon the re-establishment of self-confidence in the mind of the sufferer. Loss of confidence and extreme nervous anxiety regarding the intestinal function must not be regarded as a matter necessarily involving the idea of a weak or imbecile mind. On the con-

trary, many of our profession must meet with examples of this kind in persons possessing very high intellectual capacity. Now, it is often absolutely impossible for the mind overburdened with anxiety to render effective the visit to Cloacina's temple. Many in perfect health will complain that a simple feeling of haste-of having "only a minute to spare"-will entirely prevent a completion of her rites. How much more must this obtain in the tendency to habitual constipation of the nervously anxious. The primary point then, which we have to impress, is the necessity of giving plenty of time to the operation, and of diverting the mind in various ways from too absorbing attention to it; for intense impressions made upon the brain must be calculated to concentrate and expend locally all the voluntary nervous force generated therein; and in persons whose constitutions or circumstances urgently demand the best-directed voluntary aid, any over-anxious (nay sometimes frantic and irritable) efforts to secure the success of the involuntary solicitation, will certainly defeat their own intentions, due distribution of voluntary nervous force and the proper harmony between the cerebro-spinal and sympathetic systems being prevented. attain the end in view; first, the propriety of fixed periods, and of immediate attention to any involuntary solicitation, must not be overlooked; secondly, the mind must be kept free from either over-anxiety or irritability respecting the matter; thirdly, no annoyance or distress must be entertained in consequence of a possible half-completion or failure; fourthly, the mind should not be unhinged by any imaginary necessity of a regular daily evacuation, for some persons will keep perfectly well with one only once every two or three days. In this last respect much depends upon the extent of appetite and of out-door exercise. To assist the mind against over-anxiety at the proper time, when the response to nature's impulse demands the exercise of a moderate and tranquil will-power, and the suppression of any hastiness or other mental disquietude—a newspaper or other light (not tooabsorbing) reading may quietly distract the attention, at short intervals of a few minutes, during the period which it may be necessary to occupy before the accomplishment of the wishes may be possible. Even in cases of very long standing, a sufficiency of self-control may be mustered up by almost every patient who enjoys the advantage of firm regulation in all little details, through the medium of a practitioner in whom confidence may be felt. A little common-sense conversation, occasionally, upon easily understood points connected with the physiology of the nervous and muscular apparatus, and specially bearing upon the patient's particular case, is sometimes of essential service to the more intelligent among this class of sufferers,

our remarks being correlative to a practical application of them in the minutiæ of management. Few minds will fail to be deeply impressed at length, even if they be intractable at the outset. Reason and tact will gain the day in the long run; and such a victory, such a cure, under adverse circumstances, is ever the highest reward of the physician. Well will it be for all our patients when it is more universally understood and practically acknowledged that the prescription of medicines is but a very small part of the physician's duties, particularly in chronic derangements of a physical character, which may have upset nervous equilibrium and temporarily thrown the mind somewhat off its balance. While daily uniformity of time and tranquil steadiness of purpose (without necessarily being successful, or success being needed daily, at every attempt) go hand in hand as the main principles of success, other carefully prescribed remedial measures must from time to time be brought to bear upon the case, according to the peculiar symptoms and any conjunction of other causes of constipation associated therewith. Other points of management will be considered under the treatment of the next cause.

Want of contractile power, atony of the muscular coat and nerves, irregular peristaltic action, and flatulent distension, have already had some general consideration in relation to their treatment as mere consequences of hepatic derangement or of abuse of aperients. We have now to view their treatment as special causes of constipation, notwithstanding their obviously more or less intimate alliance with other primary causes, as well as with both the before-mentioned extremes of neglect and overanxiety regarding the bowels. The general principles of management of those extremes have been separately noticed, but it has been thought most advisable to associate their medicinal treatment with the therapeutic measures now to be detailed. Either neglect or nervous anxiety having put the malefic train in motion, it is rare indeed in cases of difficult defecation thus originated, that one or all of the above obstacles do not soon present themselves as serious accompaniments; and having become accompaniments, they ultimately attain an influence of most intractable character as causes of obstinate constipation.

In the treatment of this irregularity and torpidity of the intestinal function, whether purely local or complicated with either neglect or extreme nervousness, certain principles of treatment (some of which have previously been detailed) are universally applicable—more or less. It need hardly be said that violent purgation must be altogether avoided; but I would add, do not give one single laxative, however gentle, beyond what is really necessary. Every-

thing depends upon the preservation, or restoration (if lost), of the nervous and muscular tone of the intestinal tube, and of the power of the nervous centres upon which its regular and harmonious contractions are dependent. Where constipation is recent and the patient manageable and rational, we shall seldom find it difficult to effect a perfect cure with properly prescribed sanitary and hygienic measures alone, or at all events with the aid of gentle oleaginous laxatives. The sanitary and hygienic measures, mutatis mutandis, are suitable for most cases. The judicious use of cold or tepid water every morning with subsequent friction, the cold hip-bath with sponge, so as to douche the abdomen for one or two minutes occasionally, the internal use of a glass of cold water at bedtime or early in the morning—these means (some details of which have been previously given), modified in different cases, will afford more or less valuable assistance.

Exercise out of doors should be regular, twice a day if possible, but not too prolonged. If outdoor exercise cannot possibly be managed more than at one period of the day, in-door exercise of some kind for a few minutes at a time, at certain intervals, should be substituted. A pair of light dumb-bells or clubs, or a skipping-rope, should be regular articles of bedroom or dressing-room furniture, and should be used every morning on rising

(after the glass of cold water, should such be ordered), and before the usual matutinal ablution. The gymnasium, when approved of and easily accessible, may be highly useful, and an excellent practice consists in raising up the body and legs by means of the hands grasping a cross pole or rope just within reach. Thus we strengthen the abdominal muscles and promote their more powerful contraction upon the intestines. Rowing in a boat, or an imitation of it in the gymnasium, is very advantageous. Horse-exercise is, when convenient, an excellent auxiliary for the relief of this kind of constipation, particularly for the physically weak, whose previous habits have unfitted them for brisk walking exercise. But walking and riding will be most advantageously used in alternation. As with walking, so with riding, motion should always be rapid while it lasts, but each period of exercise should be sufficiently limited in duration to guard against subsequent lassitude or fatigue.

In very obstinate cases, passive movements are sometimes highly important; indeed with such aid I have known success ensured immediately, where urgent distress, accompanied by extreme tympanitis, had previously yielded but very partially to the best-regulated measures, medicines certainly affording a little temporary relief, but being quickly followed by considerable increase of pain, flatulent

distension, and constipation. For some details pages 113-14 may be referred to. In place of, or in alternation with, the more gentle movements, vigorous yet judicious shampooing will invariably prove very advantageous.

As regards medicines, these must principally be of a tonic character, and any necessary evacuants should be of the most suaviter-in-modo class. Tonics, in alternation with oleaginous laxatives and enemata, will meet the requirements of every invalid, except at the very outset of treatment, when, unhappily, the temporary employment of medicinal irritants is sometimes found essential in cases of long standing. Any such irritants of the least violent kind (such as full doses of rhubarb guarded by Amm. Carb. and some carminative, or the compound colocynth pill with Hyoscyamus) should however, even in the most obstinate cases, be administered as rarely as possible. This rule, which has already been laid down as an axiom in the treatment of every kind of constipation, superlatively enforces itself upon the mind of every rational man who may be called upon to prescribe for constipated bowels, solely or partially caused by the local derangements immediately under consideration.

The oleaginous laxatives, castor oil or salad oil, one or both, usually demand our attention. The former will be called for at the commencement, and

afterwards occasionally either alone or alternately with tonics; its value is as great as its operation is ordinarily unobjectionable, although every practitioner knows that fancy or idiosyncracy does in some instances forbid its exhibition. When so, an occasional resort to a combination of Decoct. Al. comp. with Tinct. Rhei comp., presents a common and useful substitute; but such forms of liquid medicines being exceedingly unpalatable to the majority of our patients, can with propriety be prescribed only for those who do not particularly dislike the flavour.

Salad oil proves itself not unfrequently, in the case of the more weak and delicate, one of the most valuable of gentle persuaders, while it is not the less useful in a dietetic point of view; and having rather an agreeable taste than otherwise, few will rebel against it. The best period for taking it is bedtime; if preferred, it may be taken an hour before lunch or early dinner, and it is always better to take it alone. From two drachms to one ounce may be taken, according to the requirements of the patient. Those who are of plethoric habit and inclined to hepatic derangement are, however, better without this oil. Occasionally, great advantage will be derived from saturating and rubbing the entire abdomen for twenty minutes with the oil, preceding this with a stimulating liniment similar to the Linimentum

Ammoniæ of the Pharmacopæia, so as to increase absorption through the cutaneous capillaries.

As regards enemata, a small one of from two to three ounces of olive (or occasionally one to two ounces of castor) oil, with a little brandy or Sp. Ammoniæ comp., retained for half an hour or more, sometimes presents an efficient means of relief. From two to five ounces of perfectly cold water occasionally proves an excellent tonic enema; very warm enemata should never be habitually employed, they are very relaxing and debilitating to the coats of the lower bowel, and should on no account (as I have before stated) be considered as curative agents in chronic constipation, but should rather be regarded in the light of useful temporary expedients for securing an immediate evacuation under urgent circumstances and great irritation. As regards powerfully stimulating injections, such as turpentine or assafætida--they may now and then be conditionally useful, but their bad secondary effect usually far more than counterbalances any first advantage.

When tonic medicines are used, we should always avoid combination as much as possible. By prescribing very small and not too frequently repeated doses of one tonic at a time, we shall generally secure more success than by combination; and further, we husband instead of rashly expending our reserves. A judicious alternation of such

tonics as may, from totality of conditions present in each case, be most clearly indicated, will be found, as a rule, the most effectual, and indisputably the most philosophical; we can thus discriminate between and employ the specific services of each, and we shall be less liable to fire off random shots, with but a vague idea of hitting the mark. The tonics which I would specially name as calculated to prove faithful allies are Nux Vomica, Quinæ Sulphas, Barytæ Murias, Anthemis Nobilis, the aloetic dinner-pill, and now and then very small doses of Ferri Acetas or Syrupus Ferri Superphos-

phatis.

To enter in extenso upon the special indications for each, according to variety of constitution and minute symptomatology, would in this brochure occupy too much space, and, moreover, would be superfluous, since every well-educated practitioner will at once appreciate (so far as our knowledge extends) their respective spheres of action. The maxim, "Nullum est remedium quod non tempestivo usu tale fiat," will be ever present to our minds when employing the above-named tonics as auxiliaries in the treatment of obstinate constipation. Each will be selected according to its elective affinities and apparently special action, so far as toxicological and physiological researches have enabled us to form a judgment; for nothing can be more clearly established than that almost

every medicine has its special dynamical influence, local or general, upon the animal economy, while we trace in many a special direction of action towards (through some unexplained affinity) certain tissues and organs. Most of the tonics just named, but particularly quinine and iron, are notoriously common agents in the production of constipation, when too large and repeated doses are administered. This, after all, presents a close analogy to the influence of alcoholic liquors; a little strengthens and exhilarates, an overplus is injurious. For the abnormal conditions and accompanying constipation of the bowels to which our remarks are at present directed, Nux Vomica is perhaps the most generally useful tonic, causing increased peristaltic action and contraction of the intestine, through its influence upon the nerves. Any of the other tonics can follow or be taken alternately with it. Bar. Mur. sometimes follows it with apparently considerable advantage, having some influence upon the glandular system and the muscular coat of the intestinal canal. It is a good rule, with few exceptions, in constipated bowels, to prescribe a tonic only once or perhaps twice a day, and never to exhibit any one tonic for more than seven days successively.

Extremely nervous and anxious sufferers from constipation, accompanied by peristaltic irregularity and flatulence, will under some circumstances

receive the most marked benefit from the soothing, yet gently stimulating, effect of (what are too often unjustly stigmatised as ridiculous) very small doses of Vinum Opii or Liq. Morph. Hydroch.-I mean from one drop to three drops of either in a wineglassful of cold water on an empty stomach twice a day. Under no contingency should we permit this dose to be exceeded without special reference to ourselves. Even five minims will cause constipation sometimes, while the minimum dose, by its tranquillising effect upon the irritable or over-susceptible brain, will indirectly act as a tonic, and restore the harmonious co-operation of the voluntary and involuntary functions. Let this not be sneered at as a placebo; let it be tried, in suitable subjects, on physiological principles, and it will occasionally be found as useful as I have found it. Let me only enter one caution, do not combine this minimum dose with a tonic or other medicine however gentle.

Although I am no friend of the smoker, yet I am here desirous to give tobacco-smoking its due, as sometimes in moderation singularly useful (on the same principle, doubtless, as the opium) in relieving tendency to constipation in the sanguineo-nervous and excitable.

In some few instances, it is essentially necessary to treat over-anxious, nervous, and medicine-loving invalids with a pure *placebo* once, twice, or three times a day, or otherwise to encourage medicinal abuse highly detrimental to the patient. The physician's duty is plain. The successful practitioner ought certainly not to have the less credit, because (medicine having failed, or done harm, in other hands) he has effected a cure with a very trifling but judicious employment of it, his main dependence having possibly been placed upon a careful guidance and alteration of the perverted current of thought and imagination.

This portion of the subject may not be closed without an acknowledgment of the utility of galvanism in many troublesome cases of this nature. In nervous persons one of Pulvermacher's (milder) chains around the abdomen will sometimes be found of considerable service, if careful orders be detailed to meet individual requirements as to time and varied position of the application. In other obstinate cases, however, it is necessary in order to derive all the advantage that galvanism can confer, to have interrupted currents properly applied by some competent medical practitioner who has paid special attention to the subject. Considerable skill is required in directing and altering the positive and negative currents, as they are passed to and from the spine and the abdominal regions, as circumstances may dictate. The late improvements in the magneto-electro machines render them very convenient for the purpose at present in

view. Strong continuous currents generally do harm.

I would just name that, where a combination of torpidity with peristaltic irregularity and flatulence obstinately persists after the proper regulation of the galvanic currents in the ordinary way, the chance of benefit should never be cast aside until a duly insulated conductor (principally the negative pole) has been applied within the sphincter ani, the point of application of the positive pole being of course varied.

Deficient secretion of moisture, and hardened scybalæ.—When this condition is simply a consequence and accompaniment of any of the preceding causes which I have named, its treatment will depend upon the nature of the primary causation, and be carried out on similar principles. But we have specially to regard its treatment as a cause in itself of constipation. Therapeutic measures of the most importance will be negative ones, as the reader will have gathered from former remarks, when considering this as a proximate cause of constipation. Any directly injurious agencies must in every case be got rid of. Whenever unintentional or wilful errors of diet, or adulterated aliments, have given rise to this proximate cause of constipation, viz., unnatural dryness of the intestinal canal, the food must undergo proper alteration. If the drinking of calcareous

water be a real or supposed cause, none should be taken which has not previously been boiled, so as to deposit a portion of the lime; and in some cases it is necessary stringently to enjoin the use of none but distilled water or filtered rain-water. When adulterated bread is suspected, good brown bread may be resorted to, for this seldom contains anything unwholesome, or oatcake and oatmeal porridge may be temporarily employed. If white bread be a sine quá non for the palate, unfermented bread, prepared very easily with hydrochloric or tartaric acid and sesquicarbonate of soda, may be specially ordered and baked at home. In very obstinate constipation of this character the latter acid should be preferred, as the diffused tartrate of soda will itself often prove an admirable and gentle persuader, but it will not always suit persons who greatly suffer from flatulence. The excellent aërated bread of Dr. Daugleish may, with advantage, be substituted in most cases. When concentrated animal and farinaceous foods have been too exclusively used, these must be diminished, and vegetable, oily and saccharine articles be partially substituted. Overdone and dry meat, dry and half-swelled rice (which is so common), as well as hard-boiled eggs, must be prohibited. Fruits of all kinds should be taken more or less freely, especially cooked apples. A glass of cold water, with (in delicate persons) a little good sherry or port added, may be beneficial

two hours after each meal. Frequently a table-spoonful of salad oil, either on retiring to bed or on first rising in the morning, will be highly advantageous.

In some cases, and particularly in delicate persons and children, milk diet may be adhered to for a time with great advantage. Those persons who are partial to milk may be entirely confined to this diet, with vegetables.

With due attention in carrying out these hints, medicine will be an exceptional necessity. An occasional dose of castor oil by the mouth—or by the rectum, in half a pint or a pint of gruel—will in most cases suffice. If further medicinal aid be demanded, occasional recourse for a few days to the following formula, modified according to the circumstances of each case, will offer an efficient and harmless expedient:

Pulv. Rhei Turc. Opt., 3ss (vel Leptandrin, gr. vj);
Pulv. Ipecac., gr. ij;
Sapon. Mollis (P. L.), 3ss;
Ol. Cassiæ, miij.

Contere secundum artem, ut fiat massa in pil. xij dividenda.

Of these pills two may be taken at bedtime for two or three successive nights, or sometimes it may be more advisable to prescribe one of them twice a day for a few days. In some obstinately protracted cases after the employment of this prescription, I have found Sulph. Sublim. gr. iij—x, every night

for a few nights successively, very useful in restoring due secretion of moisture. Large doses are detrimental. It might be given alternately with the above. If the large intestine be found, at the commencement of treatment, blocked up with large accumulations of hardened fæces, it will always be necessary to employ copious enemata of warm water, or thin gruel with oil, and even Mag. Sulph. occasionally; and when the ordinary tubal termination of the instrument does not suffice for the removal of the higher accumulations, it is sometimes most advisable, in urgent cases, to direct the careful insertion of a long gum-elastic tube. When other enemata have been but partially serviceable, ox-gall dissolved in warm water, or the free use of olive oil, if finest linseed oil cannot readily be procured, will occasionally be found valuable for assisting to soften and dislodge troublesome masses.

In this class of cases, if great irritation exist, we must endeavour to ward off inflammation by relieving such irritation, and it is generally a judicious prophylactic, under all circumstances of urgency, to enjoin the repeated application of flannel and hot water (with turpentine if desirable) to the abdomen, subsequently to any necessarily free use of warm evacuent enemata. Should restoration of nervous and muscular tone to the intestine be afterwards called for, the further treatment will, of course, be based upon suggestions which have been

already offered under atonic conditions. To rub the abdomen twice a day with a wet towel (cold water with brandy and salt, or sea-salt, added) has often a very good tonic effect.

AMONG THE VARIOUS QUASI-MECHANICAL AND SPECIALLY LOCATED CAUSES OF CONSTIPATED BOWELS WHICH HAVE BEEN NAMED, AND WHICH CLAIM PECULIAR ATTENTION IN THEIR MEDICAL TREATMENT—

Pregnancy often causes considerable trouble and anxiety to the practitioner. We have referred to the extreme prevalence of intestinal disturbance among the rich and indolent, contrasted with its comparative infrequency among the hard-working and poorer classes, notwithstanding that laborious and even imprudent occupations would appear to place the latter under a preponderance of disadvantages. As indicative of rational management, this hint given by nature is significant, and may be taken with due care that a useful idea be not carried to an extreme. With judiciously detailed advice on hygienic principles, much medicinal treatment will not usually be required; although of course there will be exceptions. When laxatives are necessary, great care should be employed in selecting and managing them, especially in delicate

females, so as to cause no irritation or local flatulent distension. Where Ol. Ricini will agree and can be taken without nausea, it certainly is the most safe and efficient evacuant with which we are acquainted. The variations of dose, however, in different constitutions and under different circumstances, demand cautious and discriminating policy. It should never be exhibited in a quantity at all beyond the just claims of the intestinal canal. Some females will receive no effectual assistance from anything less than half an ounce or six drachms, a smaller dose merely causing annoyance; others will not tolerate more than one or two drachms, and I have known half a drachm to perform its work best. Moreover, this oil should never be unnecessarily repeated. It is too often regarded as so simple a remedy, that it may be used "anyhow and at all times," without the slightest inconvenience. Doubtless some strong females can bear with impunity an undue repetition of the doses, but this ought not to be regarded as a rule. With attention to diet, gentle evacuants will demand only occasional employment, even in those who have considerable tendency to constipated bowels. Salad oil (pure) may be advantageously employed as an article of diet, when not unpalateable to the patient. Sweetmeats and sugar should generally be used sparingly, inasmuch as they are liable, when taken too freely, to cause flatulence

and local spasmodic contractions, and secondarily irregular action of bowels. I have known raisins and currants to do this by temporary lodgment in irregularities of the mucous membrane, as well as in the cæcum and the angle of junction between the transverse and descending colon. A combination of rhubarb extract or powder with Ext. Nucis Vom., in small pills, is one good form of gentle evacuant conjointly with tonic, if Ol. Ric. disagree or if flatulence be troublesome; or Ipomœa Cœrulea is sometimes a good and gentle substitute. A few drops of Sp. Amm. Fæt., or Sp. Chlorof., given occasionally, not only prove useful against flatulence and irritation, but often decidedly assist in promoting due peristaltic movements and comfortable evacuations. In delicate persons, with imperfect powers of nutrition, a quarter or half a grain of quinine, taken once a day on an empty stomach (say an hour before lunch) for a few successive days, will sometimes be found more effective in relieving the bowels than any other remedy; but combination with any laxative, except an oleaginous one if necessary (in alternation), will neutralise any permanent advantage of this small dose. Large doses of quinine are not only useless, but injurious, in such constipated tendency as I am now referring to; indeed, they will actually be productive of the very evil which a smaller quantity will remove. Complications will of course demand their appropriate treatment, according to causation primary or secondary.

The treatment of post-partum proclivity to constipation not unfrequently presents considerable difficulties. The consequences of even slightly irrational or meddling management are occasionally most serious, involving annoyance, pain, and various risks to life, on the part of the patient, and not less uneasiness and solicitude on the part of the practitioner. All of us who have at any time been engaged much in obstetric practice know too well the discriminating judgment which is often requisite in exhibiting necessary evacuants. If a single dose be administered prematurely we may pitch the frail bark on Scylla; if we postpone unduly, Charybdis may receive the wreck. One dose spontaneously given by the nurse may cause the doctor infinite vexation. Nurse is, as a rule, obnoxious to the charge of being premature in this respect. When engaged in this branch of practice, it was always my custom to prohibit the administration of the first dose, even of castor oil, except under my especial direction. In delicate persons, during gestation, very small doses of quinine have already been named as very valuable. It is of equal value in sensitive females of constipated habit after accouchement, but this value depends entirely upon attention to minutiæ in its mode of administration. Where its employment seems to

be clearly indicated from the history of previous accouchements, from general delicacy, from laxity of the muscular system, or nervous debility, the first dose should be exhibited about twenty-four hours after the birth of the infant. It should always be taken on an empty stomach, and one or two teaspoonfuls of sound port wine may in many cases be conjoined with advantage. One dose only during the twenty-four hours should be the rule, and the repetition twice will sometimes enable us to negative the subsequent employment of any laxative whatever. When flatulence is much complained of, one or two doses of Tinct. Nucis Vom. miij. ad mv. may with great advantage be prescribed during the second half of the twenty-four hours succeeding parturition, as preliminary to the exhibition of the quinine. A larger dose (or doses often repeated) of this medicine should not be given.

To illustrate this method of giving medicines—one very delicately constituted lady, with weak spine, I watched through seven confinements. During the first three I had the greatest trouble and anxiety regarding the bowels subsequent to accouchement; puerperal convulsions followed the intestinal trouble on one occasion; almost intolerable nervous headaches were the rule. Immediately after all the other parturient periods two doses of quinine were resorted to, according to the plan detailed above; the first dose invariably caused harmonious peri-

staltic action, with entire relief from flatus; the second was as regularly followed by a healthy evacuation. Enema-apparatus and castor-oil were ready, but not needed; and not a single drawback occurred.

In reflecting upon the peculiar post-partum condition—the relaxed condition of the abdominal muscles and the removal of the previous pressure exerted upon the intestinal tube—it cannot but strike the mind that any subsequent medical interference really required for perfecting nature's efforts towards local restoration, should be not only rendered with much discrimination in each case, but should be cautiously tonic. Aperient medicine would be but little required, as a rule, were this principle practically attended to.

It may be added that any constipation with complications must be appropriately treated, according to cause of complication.

Muscular relaxation of the entire abdominal walls, and more rarely that distressing extreme, "pendulous belly," as mechanical causes of constipation, would seldom be met with were the carrying out of proper directions, with respect to post-partum management, ensured. Therefore, in the first place, preventive measures should be recommended. A properly applied bandage is, if not a sine quá non, at least highly desirable—not à la mode

as performed by an ordinary nurse, but according to the well-known definite instructions given at the Dublin Rotunda Hospital, which I well remember to have received when I was an Interne there. By the skilful use of this, properly readjusted at due intervals, for the few days succeeding parturition, the contraction of the distended muscles and the preservation of the integrity of the abdominal walls can be secured; necessary compensation is temporarily given for the sudden removal of the pressure previously exerted upon the intestinal canal by the gravid uterus; flatulent distension, irregular peristaltic action, and constipated bowels are either prevented altogether or reduced to a harmless minimum of disturbance; the well-contracted uterus, partaking of the advantages of uniform and gentle yet firm pressure, is placed under the most favorable circumstances for recovering its natural condition; and last, though not least, after-pains are comparatively very mild and of short duration, the uterus being often spared much sympathetic nervous irritation from surrounding causes connected with intestinal or cystic disturbances. But it should be added, such support unskilfully afforded is often worse than useless, and this will clearly explain why the few accoucheurs who neglect it or leave it to the nurse persist in declaiming against that of which they know not the value.

Besides the properly applied bandage, there is a

second and very obvious preventive measure, viz., the strict preservation of the recumbent posture, in bed, for some days after delivery, so as to permit due contraction of the fibres of the abdominal muscles before their subjection to the weight and pressure (from within) of the abdominal viscera. If this horizontal position be enforced for ten days or more, as is usual with ladies, the bandage may only be requisite for the first twenty-four or forty-eight hours; but in the case of poor women, who cannot be kept in bed for a sufficient length of time, a welladjusted bandage around the abdomen, and even a second at right angles to encircle the perinæum, is in some cases almost a necessity. The permanently relaxed condition, to a greater or less degree, of the abdominal walls is not uncommon (after repeated confinement) among the better classes, in whom the bandage has been neglected; the completely "pendulous" state is rarely seen, except in the poor, hard-working woman. For the cure of constipation resulting from and dependent upon general deficiency in muscular power of the abdomen, much time and cautious regulations will ever be demanded when prophylactic measures have been neglected. Since the cause is mainly mechanical, the treatment must be similar in character, at all events in a great degree. The more or less frequent and lengthened use of well-contrived elastic bandages, alternated with methodical repetitions of

perfect rest on the bed or couch, after removing the artificial support; the local use of cold water, in the form of gentle douche, and in suitable constitutions the use of the cold hip-bath, when the weather is not too cold; careful shampooing, or gentle friction with stimulating liniments; galvanism judiciously applied; the use of the hands, in addition to other support, whenever defectation is solicited—these, variously modified, offer the best means of successfully treating this cause of constipation.

Besides the general muscular relaxation and loss of power to which I have alluded, there are cases of constipation from local and circumscribed weakness, the treatment of which will demand discriminating management, on precisely similar principles to those enumerated above, but with one additional point de vue, viz., mechanical aid directed to the locality specially implicated. Among these may be named, as more immediately related to our present subject, procidentia uteri, umbilical, inguinal, or crural weakness, or herniæ without actual strangulation. In each of these conditions straining at stool must be avoided as much as possible, and can only be admissible under local support with the hands. These likewise form a class of cases in which the repeated use of that occasionally necessary evil, an efficient yet mild aperient, sometimes proves a judicious exception to a general rule. But, as in all cases of habitual constipation, purgatives of a drastic nature

must be entirely prohibited; even one dose may do irreparable injury.

There remain a few further impedimenta, of more or less mechanical character, which appear to demand some notice, regarding medical treatment in special relation to constipation. These are, hamorrhoidal enlargements, spasmodic stricture of any portion of

the bowel, myalgia and neuralgia.

The first two causes, being almost invariably of secondary origin, are as a rule preventible by prudent attention to rational principles in maintaining the healthy tone of the abdomen and its contents. In both forms of impediment discriminative regulation of the general suggestions advocated throughout this little treatise will form the basis of treatment. Indeed, we seldom find either of these agencies pure et simple, even though each may often present the sole apparent cause of difficulty in defecation, so far as the patient's ideas are concerned. Whenever there is varicose enlargement of the hæmorrhoidal vessels, or general tumefaction and effusion into the submucous tissue, or relaxation of the mucous and muscular coats, with vascular torpidity and engorgement, our attention should always be particularly directed to hepatic and portal derangement. Nineteen out of twenty cases will be found more or less intimately associated with such derangements, and we must treat constitutionally,

according to the rules suggested under the consideration of perverted liver and biliary function. The previous history and habits of the patient must likewise claim our close attention, in order that we may discover any former contingency or mischief of local character which may possibly have occurred through irregular or temporarily increased pressure, through muscular or nervous debility, or through violent concussions, straining, or exercises. Having relieved the engorged vessels and predisposing faulty conditions, on the principles formerly inculcated, it may be further desirable to employ local astringent means, such as a weak solution of tannic acid (gr. iv. ad 3j), or Arg. Nitr. or Cupri. Sulph. (gr. ij. ad 3j); and when there is much pain or irritation, either the Ung. Gallæ comp., or a little Ext. Bellad., applied externally, or a small Belladonna or opiate suppository inserted within the sphincter ani. At first, in case of much heat and irritation, soothing and gently evacuant enemata should be decidedly employed, as well as frequently-repeated warm fomentations to the perinæum and anus, and sometimes even a few leeches are advisable.

The use of Belladonna locally is not the only way in which the medicine proves its value in these cases. Small doses taken internally appear to exert a specially stimulating and alterative influence upon the vaso-motor nerves generally. Its well-known

power of dilating the pupil appears analogous to the stimulation of galvanism on the cervical ganglia of the sympathetic. Dr. Brown-Séquard proves, I believe, that it diminishes the amount of blood in the vessels supplying the membranes of the It appears to have a general controlling inspine. fluence over the vascular system, and I may state as certain that, in many cases of hæmorrhoidal as well as uterine venous engorgement and relaxation, its beneficial effect in contracting the vessels is often remarkable; but it is of little use (indeed, often does much harm) to increase doses and continue the remedy, if it fail to produce some good effect in small doses within the first two or three days. When Belladonna internally does not meet the emergency, I would strongly advise the trial of a medicine much less known, but which apparently exerts a powerful influence over hæmorrhoidal engorgements and mucous relaxation of the rectum. The Hamamelis Virginica is the medicine that I allude to, and it may be employed in small doses internally, as well as in the form of small injections.

In the worst and most chronic of these derangements, when no other remedial measures avail to confer any permanent benefit, the use of oxygen gas, one properly-exhibited dose daily, ought never to be omitted. Not only will the cause of constipation be often relieved very quickly, but the whole

system will be rendered more sensitive to the effect of ordinary treatment. Subsequently, the use of the cold hip-bath, or even cold sponging only, is with few exceptions highly desirable to restore permanent tone, while small enemata of cold water will likewise assist and promote healthy evacuation.

In cases of spasmodic stricture of any part of the bowel, giving rise to serious constipation, we have, of course, first to relieve the local spasm and pain—secondly to restore harmonious peristaltic action. Strong purgatives should, in these as in other cases, be avoided, except in the very rare instances where we fail by milder means to clear the bowels of accumulations of impacted fæces, which may have given rise to the spasmodic stricture. Not only do strong purges cause a subsequent stage of peristaltic inefficiency and thus indirectly tend to return of the local spasm, when our object may clearly point to the supreme importance of restoring tone and general intestinal equilibrium; but, should the case not prove to be one purely of spasm, should it be associated with an impacted calculus or foreign body, or local thickening and induration, or twisting, or intus-susception, the free use of purgatives for the relief of the constipation may actually destroy the patient.

Always keeping in view main principles, this class of cases will, in the first instance, derive the most essential advantage from hot water and flannel

fomentations to the abdomen, and to the perinæum when the rectum is the special locality affected; while, alternately with these, the entire abdomen may be very gently rubbed round and round with warm oil, or with Lin. Chlorof. Should decided advantage not soon follow the use of these means, I would (avoiding the internal use of opium as long as possible) recommend the hot flannel to be very freely sprinkled with Tr. Opii. At the same time copious enemata of thin warm gruel with castor oil, or olive oil alone, should be administered; and (these failing), where the diagnosis is sufficiently clear and tympanitis with scybalæ well ascertained, terebinthinate enemata may be cautiously employed and (fæcal accumulation being absent) opiate enemata. Often in the outset when no inflammatory action exists, always when the urgent symptoms have been removed, Nux Vomica (or Strychnine in extremely small doses) is, perhaps, our most valuable medicinal resource for the purpose of restoring nervous and muscular equilibrium to the intestinal canal; but of course discrimination should be employed in its administration, and it should never be combined (though it may sometimes be alternated) with sedatives.

When relaxation or weakness of the muscles of the abdomen is present, they must be properly supported, so as to prevent a return of local spasm through any insufficient pressure exerted upon the abdominal contents. In many cases, after the relief of the pain and urgent symptoms, the gentle movements detailed at pages 113-14 will be found most valuable for assisting to restore peristaltic harmony and thus relieve flatulent distension. In some cases purely spasmodic, such movements will give immediate relief, either by their unaided influence, or in alternation with the hot fomentations, or with camphorated oil frictions. The dexterous carrying out of this last suggestion often proves especially serviceable in spasmodic stricture which may be referred to the ileo-cæcal valve or to the angular turns of the colon.

Myalgia, as a cause of the retention of the intestinal excreta, demands par excellence such treatment as shall be conducive to the relief of pain. If over-exertion, or a bruise or strain, be found to have originated the muscular fault, temporary rest, according to the requirements of each case, must be enforced. An elastic bandage will be useful in some instances. Tepid fomentations ("compress") will be called for, to be repeated more or less frequently. When the myalgic difficulty is of rheumatic character, whether it affect the abdominal muscles or the diaphragm, it may be necessary at the commencement of treatment to have an eye especially to the constitutional condition. Besides the ordinary remedies for rheumatism, according to constitution and other attendant circumstances in each case, I

have found the tincture or infusion of Bryonia Alba vel Diöica of great service for the relief of the myalgia and accompanying constipation, where other means had previously been tried and had failed. This member of the Cucurbitaceæ ought not to be neglected as a remedy for rheumatism. Having an evidently useful influence in affections of the fibrous tissues generally, it claims attention also in constipation depending upon peritoneal or pleuritic pain. Some slight account of it is given by Dr. Pereira; but Dr. Culpeper, in his quaint and occult yet interesting 'Herbalist,' affords us some really good information regarding its properties; and this is probably the source whence the "similia similibus" school have picked up their information regarding it. Our indigenous vegetable kingdom, I feel sure, has been much neglected in medicine.

From whatever cause the muscular pain may have arisen, the employment of Arnica Montana externally, as a fomentation, will often prove an indirect means of great value for the restoration of the action of the bowels by relieving the muscular pain. If there be some slight lesion of the muscular fibres or fibrillæ, it will be particularly efficacious.

Neuralgia, as a local cause of constipation, will of course need the usual treatment for the various forms of that affection; and Aconite may be selected as particularly serviceable in most cases. If it be of gouty or rheumatic character, Bryonia and Arnica

may be employed as above. Besides ordinary means, when it arises from simple nervous irritation, or is accompanied by irregularity in cardiac movements without spasm, a strong lotion of Digitalis may be advised. Am. Hydrochl. is often of considerable benefit, if it be difficult to attribute the neuralgia to any special cause, and if cutaneous action require stimulation. For procuring the alvine evacuation laxative and emollient enemata will be needed. The Roman bath may be often used with advantage. In other respects, the principles of treatment elsewhere named will be applicable.

EARLY CHILDHOOD.

The treatment of obstinate constipation in young children would rarely be called for if proper preventive measures, dietetic and otherwise, were adopted, and if all medicines were sparingly used. In touching upon causes specially acting in child-hood, indications for rational management have already been given. The duties of mothers and nurses have been detailed. Not a single dose of medicine nor (in young infants at the breast) any artificial food should be given without a rational and definite object in view, and except in cases of real necessity. At the very outset of life this rule is too commonly infringed, and we should therefore

invariably make it a point to impress that the first milk will act as a natural laxative, and that, if the infant really needed much nourishment during the twenty-four or thirty-six hours succeeding birth, before the full appearance of its natural food, the mother's milk, God would doubtless have made provision for this emergency. A natural law would have obtained, that the first flow of milk should be within an hour or two after parturition. Ergo, the fair presumption is that the infant should remain fasting for a certain period after birth, before its system becomes adapted for the reception and digestion of food. Were this duly impressed and acted upon, many a poor infant would be spared much misery, much irregularity of bowels, much unnecessary irritation. And further, as regards the nurse's favorite measure, a little dose of castor oil, which is too often resorted to, our best course, as a preventive measure, is to explain the absurdity, superfluity, and evil of exhibiting a by-no-means innocuous laxative at such a period, while we likewise appeal to the reason, and demonstrate the implied distrust of Divine institution. I speak of the rule, granting exceptions in which artificial assistance may be required. If unusual contingencies arise, such as retention of the meconium beyond the usual time, pain and distension of the bowels, undue postponement of the flow of biliary secretion, giving rise to unnatural amount of jaundice, convulsions, &c., it will then be time enough to medicate the infant. If, again, the secretion of milk be temporarily suppressed, or altogether fail, then only will it be necessary to supply artificial food to the infant.

First then, it is incumbent upon us to guard against the infant being ignorantly over-dosed or over-fed; by this means we obviate by anticipation the chances of intestinal irritation or diarrhoea from medicine or undigested food; and the ordinary consequences of such irritation, viz., irregularity and constipation, are thus prevented.

As with infants, so with older children, medicines ought to be very sparingly resorted to; and to ensure against the too frequent necessity of artificial aid to the bowels—regular periods for each meal and judiciously limited quantity at each, according to age, should be established, and too rapid filling of the stomach avoided. Above all, as regards medicines, parents and nurses should ever be carefully instructed that opiate preparations always constipate more or less, that most of the quack cordials contain a small proportion of opium or morphia, and that such potent drugs should never be exhibited to children except under the special direction of the practitioner.

When that very common fault, the admission of too much animal food into the dietary of children, is found to have prevailed in the case of a little

patient affected with constipated bowels, it should be materially diminished, and in many cases it is far the most advisable course to prohibit it altogether and to substitute milk diet exclusively. Boiled milk, in such cases, ought never to be allowed, as it rather tends to confine the bowels, and in delicate children the altered caseine will digest with great difficulty. The maximum temperature to which the milk should be subjected, ought not to exceed 120°. In making a change of this kind, I may venture to add that the irrational and very common prejudices of friends almost invariably require to be guarded against; thus, the peculiar fitness and the singularly valuable nutritive properties of milk for the young organism, as a dietetic basis (even up to adult age), should be explained and brought fully home to their conceptions. Buttermilk or cream and water in thin children, whey in the robust, may be usefully substituted for milk at some one or more of the daily meals, when the full amount of caseine disagrees. Vegetables and fruits in season are generally valuable, when properly regulated, in the constipation of young subjects (not infants).

When looseness and irritation of bowels, undue mucous secretion, or the presence of ascarides, have been (after removal) succeeded by a chronic condition of constipation, dietetic and general regulations should be laid down very carefully, and be con-

joined with an occasional very small dose of Hyd. c. Cretâ, while Castor oil, Rhubarb, Magnes. Carb., Chamomile, Ipecac., Cusparia, and Nux Vomica, may, if temporarily necessary, be employed with discrimination, being the best series of medicines for children under such circumstances. I would however avoid all these medicines, if the dose of Hyd. c. Cretâ, at long intervals, suffice either by itself or with the assistance of olive oil gently rubbed into the abdomen, or a piece of tallow candle or soft wax bougie smeared with castor oil and inserted into the rectum, just through the sphincter. All other medicines, however, may sometimes be avoided in delicate children by an entirely new remedy which I have latterly been advising with remarkable success, viz., a very small bit of oxygenated bread (Welton's patent) with each meal. The movements detailed at pages 113-14 are often highly successful in children. Finally, it should be earnestly inculcated that calomel and black draught, et hoc genus omne, if occasionally indicated in other derangements, should never be prescribed for any form of simple constipation, and that long courses of medicine, foreign to the organism, are never admissible in childhood.

TREATMENT OF CONSTIPATION IN OLD AGE.

Besides general principles such as have already been sufficiently dwelt upon, the treatment of constipation in aged persons claims its especial point or two. These are important, yet very obvious.

Although the exhibition of purgatives should still be guarded, inasmuch as many old people continue very sensitive to medicine, yet the periodical administration of an efficient cathartic is often a real necessity, and this particularly applies to those who eat heartily, and thus load their intestines with half-digested food, which the sluggish formative processes and slow metamorphosis of tissue plainly pronounce to be beyond the wants of the system, if not positively deleterious. Such habits prevailing, and the bowels being unable spontaneously to relieve themselves even with laxative articles of diet, it is essential for health and comfort that any accumulation of excreta, even for two or three successive days only, should be provided against. Thus, it may happen that a tolerably strong dose, regularly every other day, may be requisite, to guard against that which would not have been over-repletion at previous periods of life. In such cases, and for occasional use in most old people, the Ext. Coloc. comp. gr. v to gr. viij,

with Ext. Hyos. gr. ij, affords an excellent formula. Where, however, the bowels are more sensitive, and the quantity of aliment is judiciously limited to the true wants of the system, the tendency to constipation ought not to be habitually opposed by Ext. Coloc. comp. It will be stronger than necessary, and may then excite diarrhoea, which is always dangerous for the aged, and often prostrates rapidly and carries them off suddenly. The best general assistants, which in small doses have an additional stomachic and tonic influence, are Ext. Aloes, well combined with Sap. Hispan., as a dinner-pill; Tinc. Rhei co. zj ad zij, in a wineglassful of cold water, at bedtime or before rising in the morning; and Fellis Bovini inspiss. gr. v ad gr. viij, in form of pill. These may be given separately or variously combined, according to circumstances. Further (as in most cases of intestinal torpidity where very little exercise is taken) an occasional dose of Nux Vomica alone, at bedtime, will be frequently found a most valuable nervine tonic, more particularly when flatulent distension with uneasiness associates itself with the constipation.

In all cases where the physical ability exists, corporeal exercise should be regarded as highly desirable, however slight may be the daily amount. The passive exercise of the carriage, or even of the Bath-chair, over a tolerably rough road, affords much more assistance than is usually thought

towards neutralising any difficulties in defecation; and, where these means are not available, other passive movements, in the form of local rubbings or shampooing, can be employed advantageously.

Too stimulating diet is not only, in a general point of view, contra-indicated in old persons, when they are passing a semi-vegetative life, but it will be found to tend to confined bowels. The moderate use of ripe and fresh fruit in season, and, above all, roasted apples, or stewed pears, prunes, dates, tamarinds, ought not to be forgotten, as suggestive measures, at once desirable and agreeable, in the constipation of advanced age. Most fruits, such as apples, pears, prunes, figs, it should perhaps be added, cannot usually be tolerated, and therefore cannot be taken with advantage for intestinal inefficiency in old people, unless they be first subjected to culinary preparation with the aid of heat.

In some cases enemata of tepid water will suffice without any medicinal assistance; in others, these may be required as auxiliaries to medicinal action.

Cases of extreme difficulty arise occasionally, in which it becomes exceptionally correct to retain old people in life by confining them almost entirely to liquids, nutrient and gently stimulating, so as to provide against the necessity of any evacuation oftener than once in two or three weeks.

Cerebro-spinal debility and irritability, directly conducing to constipated bowels, must undergo a course of treatment primarily directed to the palliation or removal of the predisposing and exciting causes of the cerebro-spinal evil. This object being in view, the usual well-considered management of various diseased conditions, constitutional and acquired (examples of which have been given at a former page), will in different cases devolve upon the physician. Where the debility is unaccompanied by active and continuous irritability with excitement and determination of blood to the head; but where the irritability, though easily excited and continually recurring, is of intermitting character and attended by lowered nutrition, much prostration of the vital powers, and passive congestion; the treatment will be cautiously tonic and soothing. On the other hand, when the constitution of the patient is naturally strong—nutrition active though perverted—the blood-vessels of the system fully supplied—the cerebral irritability and congestion active rather than passive with constant or frequent vascular excitement—the debility partaking of depression or oppression, and temporary exhaustion, rather than actual loss of vital power;—then our treatment will mainly be of an alterative and sedative nature. Whatever name be technically given to the primarily diseased condition, these principles of management will, I need scarcely add,

be applicable. An efficient purgative occasionally exhibited in strong and plethoric constitutions will be not only admissible but necessary; but the continual repetition of such must be condemned. In most cases, be the natural constitution strong or weak, the employment of very diluted but more or less frequently repeated alcoholic stimuli will be desirable, e. g., one or two teaspoonfuls of the best cognac in a due quantity of plain or effervescing water.

The local management of the bowels will be readily gathered from foregoing recommendations regarding treatment under various circumstances; but I may strongly suggest discriminating friction and shampooing over the spine and abdomen, the judicious alternation of hot and cold or tepid water applications, and galvanism.

One species of this class of cases merits some special attention in treatment. At page 95 I made a few passing remarks on the cause in question as one in which the permanent cure of the constipation is often a tedious task. In the female sex reference to this point, on the part of the medical adviser, cannot with propriety be anything but indirect; yet a little tact may generally, without offending delicacy, enable us (thus indirectly) to render our patient fully alive to the baneful consequences. Even with the male sex, it is sometimes desirable to permit our full concep-

tion of motive to be merely suspected. In all cases encouragement is essential, and equally necessary is it to guard the sufferer against friction, which we may speak of as natural (though injurious) for the relief of irritation, just as in scratching for the relief of itching of the skin. Whether the case be one of natural excess or the contrary, self-control must be exercised, and we must aid the patient by advising suitable local applications. As regards medicinal aid, rubbing of the spine and occiput with phosphorated oil is in the majority of cases highly useful even directly for the relief of the bowels; but simple olive oil or camphor liniment with laudanum must alone be employed, when there exists much active excitability and determination of blood to the head in sanguineous subjects. In the latter, too much cold affusion can hardly be used, provided it be properly directed; while a combination of Aconite and Belladonna at bedtime will indirectly assist the bowels. In most instances an alternation of sedative and stimulating liniments to the abdominal and lumbar regions are beneficial, preceded or followed by a gentle cold douche. Opium suppositories at night are now and then useful. Small and frequent enemata of cold water or of olive oil are particularly efficacious. Among internal remedies the hypophosphites of Iron and Ammonia, in alternation with very small doses of quinine, may be specially advised, where

the vital powers have been greatly lowered. So also cod-liver oil, where it do not disagree with the stomach. In congested cases without any considerable undermining of the vital dynamics, I know of no remedy equal to oxygen-gas duly regulated, but it may increase the heat and uneasiness of the head, if it be not carefully administered.

In the constipation of cerebro-spinal paralysis, the suggestions for old-age will, to a great extent, apply; but, as an aperient, the frequent use of colocynth should be avoided, and rhubarb, leptandrin, aloes and soap substituted. Moreover, Nux Vomica, in small doses occasionally, is particularly advantageous. Very small injections of olive oil and gruel, used at bedtime and retained all night, will often obviate the necessity for medicine. These last means are specially useful when the tendency to abnormal contraction of the sphincter ani exists. In the latter cases, whenever spasm is very obstinate, the local application of Belladonna extract is most useful, and it may be preceded or followed by hot fomentations, or fomentations charged with Belladonna may be used. When, however, the spasmodic contraction is not very unyielding, the gentle introduction and short retention of a bougie next morning may suffice to render efficient the small enema of the previous night. Larger enemata are, of course, sometimes essential, but (excepting on occasional emergency) they should not be higher in

temperature than 85°. Gentle shampooing of the abdominal and lumbar regions, and local galvanism, are special means which should not be overlooked, when the bowels are difficult to regulate in cerebrospinal paralysis. Complications will be treated on foregoing principles.

CONCLUSION.

In the preceding pages an endeavour has been made to take a rational view of a very common and very troublesome ailment. No pretensions have been put forward to any great originality or novelty. The intention throughout has been to bring together every method of treatment, however apparently trivial; to neglect no source of therapeutic expediency, however subject to abuse, if impartial experience has proved it to be conditionally valuable. The great principle of successful treatment, viz., the management of each case on its own merits, in connection with its special cause and any special complications, has been steadily maintained as far as possible. Routine in every shape has been condemned. The abuse of aperients, that most common and most injurious of all one-sided errors in treating constipation, has unsparingly received its deserts; while, at the same time, the occasional necessity of a temporary recourse to gentle evacuants, and still more rarely energetic cathartics, has been fully admitted.

The lamentable habit of resorting to opening medicine on every slight emergency has been dwelt upon as indisputably the most flagrant cause of obstinate bowels, while the variety of other agencies which tend to implant a constipated habit have received their share of attention, in their twofold

capacity as single and as associate cause.

Further, diligence in noting little so-called trivialities has been strenuously advocated as essential for the cure of obstinate constipation. And last, though not least, I have ventured, at the risk of wounding certain conscientious though unwise susceptibilities, to advise a suppression of any undue indignation which may be felt when viewing 'pathies and quackeries, such indignation being apt to warp the judgment, to drown justice and impartiality, and to blind the professional eye to details of real value in the employment of some remedial means, which have been subjected to abuse mainly because we, the natural guardians of Nature's curative agencies, have partially neglected or ignored them. the suggestions which have been offered, regarding the management of troublesome bowels, stimulate attention to a common-sense and rational system of treatment; then this brochure (imperfect as it is) may fairly claim possession of a little sphere of usefulness.



