The management of the bowels in health and disease, physiologically and homœopathically considered / by G. Calvert Holland.

Wm Sutton.

TRACT No. I.

THE

MANAGEMENT OF THE BOWELS

IN HEALTH AND DISEASE,

PHYSIOLOGICALLY AND HOMŒOPATHICALLY CONSIDERED.

BY

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TRACT No. I.

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VI.

INQUIRY INTO THE PRINCIPLES AND PRACTICE OF MEDICINE.

VOLUME II. PRICE 7s. 1835. LONDON: LONGMAN, REES, ORME, AND CO.

PREFACE.

My attention was directed to the investigation of the subject of the following pages from having observed the effects of homœopathic treatment on disease. It is now more than four years since I adopted the practice, and during a portion of this time have had an opportunity of studying it on a somewhat extensive scale. It is scarcely needful to remark, that I have often been startled at its beneficial effects and occurring under circumstances so widely opposed to my previous allopathic notions concerning what was advisable to be done, especially in combatting acute affections. I allude particularly to the supposed necessity of frequently acting on the bowels. Homœopathy has corrected this serious error which I had entertained from the commencement of my professioual career, exceeding a quarter of a century; and from the interest which novel views and unexpected results gradually awakened in me, has suggested the inquiry to determine why the complete or comparative inactivity of the intestines is a *salutary* condition in the Homœopathic treatment of the most acute forms of disease, as well as in a variety of other disorders. The subject, if properly handled, may be shown to possess important practical relations to the healing art. I shall endeavour, to the best of my ability, to do justice to the undertaking.

Sheffield, May 1st, 1854.

CHAP. I.

CONSIDERATIONS CONCERNING THE FUNCTIONS OF THE BOWELS.

An extraordinary prejudice prevails concerning the necessity of frequently acting upon the bowels by aperient remedies in health, or on the occurrence of any slight derangement of the body. We shall endeavour to show that this is fraught with serious injury to the constitution in certain temperaments, and especially under certain circumstances.

In many cases a tendency to constipation is natural to the system and is required for the continuance of its well being. It is altogether a mistaken idea to suppose that it is desirable that the bowels should be acted upon daily. Where a large quantity of food is taken, and of mixed quality, such will generally be the effect, if nature be left to her uninterrupted operations; because the quantity and quality of the aliments received furnish an abundance of what is called excrementitious matters—that is, matters resulting directly and indirectly from the process of digestion, which must be removed, and this is readily accomplished from their irritating influence upon the nervous surface of the bowels.

Persons who indulge their appetite—who in fact live to eat—and are active in their habits or occupations, very seldom suffer from constipation, except from the disturbance of the system bordering on disease, *which their excesses create.*

This class of individuals will scarcely come under our consideration. We may safely leave them to nature. Our remarks will apply more particularly to those whose powers of consumption are much less, whether from the delicacy of their tastes —the refinement of their habits—or from constitutional peculiarities we shall not determine in this stage of the inquiry. Where comparatively little food is taken, and is slowly acted upon by the digestive organs from their natural or induced inability to perform their functions efficiently; here, as a rule, it is always injudicious to disturb the bowels by aperient remedies, and yet it is practised to a lamentable extent, aggravating the evil it is intended to correct; and in addition seldom fails to produce organic or functional mischief —enfeebled powers of digestion —weakness and derangement of the lungs—palpitation of the heart—distressing head-aches —affections of the urinary bladder, and a long train of nervous symptoms. Some of these consequences are inevitable. We interfere with nature in her struggling efforts to discharge her duties. We presume to assist her—to force her into inordinate exertions when she is labouring to do her best according to the measure of the vital energies which she possesses. What is the result? We compel her to expend more power in the direction of the bowels than she can adequately spare either in reference to them or the well being of the animal economy at large.

There is a common stock of vital energy—a certain capital with which the system is endowed. It has many outlets, issues or escapes. Wherever vital action is carried on there is a source of expenditure. Where this stock is small or extremely limited, as in those who are naturally delicate, or who become so from sedentary pursuits or other causes, the study should be to economise it, which often consists in letting nature alone. There is frequently great practical wisdom displayed in doing nothing—in *watching* or *waiting* for the operations of nature. Unfortunately this species of wisdom

is the last attainment of the medical practitioner, and it is that which the public never fully appreciate. They cannot conceive that beneficial effects can take place without active means.

We hesitate not to acknowledge, that a large amount of the good which we have effected in numerous cases is attributable to the comparative repose of the bowels induced by the treatment employed, or refraining from disturbing that which exists. The presence of this condition gives a greater degree of vital capital to act upon, and so to direct or influence it as to render it instrumental in the removal of disease whatever may be its locality.

We will briefly glance at the functions of the digestive organs —explain the nature of their actions—the effects towards the production of which they co-operate, and then we shall have an opportunity of showing in what manner aperients act,— how they become so injurious to the powers of life.

The stomach has two obvious endowments—that of secretion and of contractility. On the reception of food its nerves are excited, and their aroused activity is communicated to the millions of capillaries or small arteries with which it is richly supplied, in consequence of which a greatly increased quantity of blood is drawn to it, furnishing the secretion of the *gastric juice* according to existing temporary necessities. The contractility of the stomach changes the position of the food or its relations to the internal surface of the organ : as it undergoes the process of elaboration, it is carried forward in the direction of the aperature through which, in successive minute quantities, it enters the first of the bowels : and other portions are then brought under the immediate influence of the gastric juice, and after a similar modification in their properties, are transmitted by the action of the stomach in the same direction, and this is repeated until the process of digestion is accomplished.

It is scarcely necessary to remark, that it would be the

extreme of recklessness and folly to drug the stomach while thus engaged in the execution of important duties. Let it alone under such circumstances. It has quite enough to do to attend to its own legitimate business—the secretion of gastric juice and the elaboration of food. The swallowing of nauseous draughts of physic, at this time, would clearly be prejudicial. Their action on the stomach would not be in harmony with co-existing operations. They would inevitably disorder them; and, if aperient in their influence, they would carry out of the system the nourishing fluid, resulting from the process of digestion, on which the strength and well being of the powers of life depend.

The food, having undergone the required modifications in the stomach, passes into the first bowel—the duodenum, in the condition of chyme, a pulpy substance, where it is further elaborated by the addition of bile and the pancreatic juice. The precise changes effected in it are not satisfactorily known. The chyle, into which it is converted, is a white opake fluid, possessing several of the constituents and characteristics of the blood. The smaller bowels are exceedingly rich in a peculiar class of vessels designated *lacteals*, the office of which is to absorb the chyle and convey it into the thoracic duct, which transmits it into the left subclavian vein, in order that it may flow through the left side of the heart into the lungs, where, from the action of the inspired air it becomes arterial blood, on which every part of the animal system depends for its nourishment. It must be distinctly kept in mind, in the attempt to seize the full force of these remarks, that the successive stages of the digestive process have for their object the production of this chyle; and further, that the body has no other source whence it can derive the elements of strength and vigour. The fluid which passes through the thoracic duct keeps up the necessary supply of blood, out of which is formed every thing that constitutes the living organic structure.

When digestion is naturally feeble, or rendered so by sedentary habits and other circumstances, this stage of digestion—the conversion of chyme into chyle and its absorption, are proportionately tedious. It is long before the lacteals have drawn from the smaller bowels or intestines the whole of the nutritive matter which they contain. To accomplish this efficiently it is necessary that the bowels should be left to their uninterrupted operations. The lacteals will be busily occupied in discharging their duties as long as there is anything that they can abstract.

In a majority of instances, where constipation is one of the predominant symptoms, the process of digestion is weak and is imperfectly performed; and if accompanied with indications of gastric and constitutional derangement, such as flatulence —oppression, weight or pain in the stomach—a furred or slightly polished tongue—distressing affections of the head—occasional palpitation of the heart—nervous diseases, such as tic-doloureux—spasms or cramp—attacks of numbness or deadness of the fingers, purgatives, such as are usually employed, are decidedly injurious. The evil under which the patient labours is not an accumulation of matter in the bowels, which the remedies prescribed may remove, *but a derangement of the system generally, its fluids as well as its solids,* conjoined with the more marked disturbance of particular organs, as the liver, the stomach, and the alimentary canal.

Purgatives, under the circumstances stated, act prejudicially in various ways. They disorder the functions of the stomach—irritate the bowels—the urinary bladder—enfeeble the generative system, and exhaust the constitution at large. The public have no just idea of the extensive organic mischief which they frequently produce. We shall in the subsequent pages point out the particular effects arising from their action. In nine cases out of ten it is a misconception, when persons have recourse to purgatives, to imagine that

the intestines are loaded with their contents, or that the forced removal of these will be followed by that relief or feeling of health which is anticipated. The great object in the majority of these cases, should be to coax nature to the performance of her duties by the mildest and simplest of means, rather than compel her to act by vigorous measures. She becomes obstinate in the ratio of the repetition of the demands made upon her, and in fact in the same proportion becomes unequal to respond to them.

If it be supposed that purgatives act only on the bowels or affect these organs alone, it is an error which cannot be too soon corrected. Purgatives have no such limited influence. Analyzed in a just physiological spirit, their operation will be found to have a direct relation to all parts of the animal economy. The vital conditions of every fibre of the body is modified by them according to the severity of their action and the delicacy of the constitution. In order to render this intelligible, and to bring it within the comprehension of the non-professional reader, we will attempt to explain the nature of the vital changes which take place in the bowels when *unaided* they effect the expulsion of their contents.

It is necessary to understand that all parts of the body are, structurally and by sympathies, united into one comprehensive whole. No organ is independent of others, nor can one act without influencing, though not always in an appreciable degree, the vital conditions of the rest. They constitute a vast circle, having obvious connexions with particular centres, as the brain and the spinal cord, and every movement or change induced in any portion of this circle modifies to some extent the vital relations of the entire circumference.

There is probably no principle in the wide range of physiological science so fruitful as this in its striking and multifarious applications to the well being of life. The thorough apprehension of it opens out a boundless field of enquiry. It throws light on the origin of disease, whatever be its character,

and suggests means, simple, efficient, and calculated to remove or relieve the evil.

All actions of the body are *nervous*, or in other words depend on nervous power for their manifestation. This doctrine we are aware is in opposition to prevailing theories or hypotheses concerning the vital functions in their natural and disordered states. We have elsewhere endeavoured to establish this proposition,* and no one has yet questioned its accuracy. The blood, whether we study the causes of its motion, or the appropriation of its elements to the purposes of the animal economy, is obedient to the influence of this *nervous principle*. From this it derives its vitality and value. Through its agency it is distributed to different organs according to their requirements. Their demand is not a fixed quantity, but varies with every modification in the activity of the functions, which modification is primarily a change in the concentration or direction of nervous power. The successive stages of digestion depend directly on this agent. It is the cause of the motions of the stomach—of the accelerated flow of blood to it to meet its temporary necessities, and of the secretion of gastric juice. The nervous influence brings into play the organic mechanism in virtue of which these results are produced. It imparts to the muscular fibres of the stomach the power of contraction, and to the numerous capillaries of this organ a greatly excited action, or the tendency thereto, in consequence of which they receive an increased quantity of blood to furnish the necessary supply of gastric juice: the abundance of which secretion is clearly to be traced to the operation of nervous power. The different structures of the body may justly be regarded as built upon the nervous system, as it is found to be blended with every particle of living

* "Practical Views on Nervous Diseases," 15s., Wm. Headland, 15, Princes Street, London, 1849; "The Nature and Cure of Consumption, Indigestion, Scrofula, and Nervous Affections," 5s.6d., W. S. Orr and Co., Amen Corner, Paternoster Row, London.

matter. The scalpel, aided by the microscope, cannot disconnect it from its relations to other organic tissues: and it is evident, at least to the philosophical understanding, that the exquisite harmony which pervades the animal economy, —the variety of actions which fall under notice, each occurring both in degree and time according to the necessities of life, must be under the control of one universal principle, which is clearly nervous agency.

These physiological researches are not simply interesting as speculative matters. To regard them in this point of view is to lose sight altogether of their practical value. It is this property which they eminently possess that alone entitles them to consideration.

The foregoing remarks have prepared us for entering upon the explanation of the vital conditions co-operating in the action of the bowels. This action in its origin is purely *nervous*, and it is on this account, as we shall attempt to show, that purgatives, as a rule, are extremely baneful in their direct and indirect influence. We have previously observed, in touching upon the digestive process, that nature is a great economist of her powers: she does one thing at a time when the effort requires the concentration of her energies. The process of digestion exemplifies the fact. The stomach first labours to reduce the food to a pulpy substance, and to accomplish this it must be steadily kept in view, *that the whole nervous system contributes towards the desired result* It depends on the liberal supply of nervous power, and this is furnished from remote regions of the body to stimulate the salivary and other glands to increased action; and further, to impart to the stomach an ability equal to the exigency of the occasion. The operations carried on necessitate the concentration of this power, and when the constitution is delicate, or digestion feeble and embarrassed, we have evidence of the demand made upon the nervous system at large, in the changes induced in the conditions of the brain, as illustrated in the

disinclination and incapacity of the mind for energetic and consecutive application—in the tendency to repose or quiet. The cause is obvious. The results accomplished by the stomach are effected in part at the expence of cerebral nervous agency, which flows in the direction of the temporarily excited organ, and consequently leaves a diminished amount for the purposes of thought and bodily activity. This stage of digestion completed, the next calls into vigorous play other organs, as the liver—the pancreas and the smaller bowels. These are now the centre of vital operations, but a much less demand is made on the nervous system than in the first stage. The pulse, which was previously accelerated and increased in strength, becomes slower and softer—the breathing is easier and more natural—the mind becomes lively and more equal to exertion—the skin is not unfrequently suffused with moisture—the kidneys begin to act and urine is freely secreted. These phenomena are evidence that the nervous system, refreshed and invigorated, returns to its ordinary unexcited conditions and ministers now to the production of other effects. The second stage of digestion consists in two operations: the *conversion* of the chyme or pulp received from the stomach into chyle, and its *absorption* by the lacteals, or vessels numerously distributed over the entire surface of the smaller intestines. Both these operations merit particular attention. When digestion is imperfectly performed, either from constitutional weakness or temporary causes of derangement, both the conversion and absorption of the food are tedious, and for their accomplishment require the uninterrupted repose of the bowels—freedom from all disturbance arising from the action of aperient remedies. The importance of these remarks will be apparent in the further investigation of the subject.

When the second stage of digestion is completed—when the food is thoroughly elaborated and absorbed, the residue of the vital operations, conjoined with the secretions of the several

organs forming the digestive apparatus, compose that refuse which has to be expelled from the bowels. We have now to consider the mode in which it is effected, which we have stated depends on *nervous* influence. This matter, which is useless to the system, and would be detrimental if retained beyond a certain period, (but by this is not to be understood, except where the habit is acquired or is favoured by gross indulgences and robust health, *daily* evacuations,) irritates, as a foreign substance, the sensitive surface of the alimentary canal, and by exciting the contractions of its muscular fibres, facilitates the gradual passage and ultimate expulsion of its contents. It is nervous power which originates the first contractile motion—it is nervous power stimulating these fibres, and unceasingly operating until nature has effected the desired object. It is important to establish this point. The subject has not hitherto been viewed in this light, and hence the nervous relations of the bowels to the rest of the nervous system, in their practical applications, have not been clearly apprehended by any writer. To form a just conception of them, the nerves of the alimentary canal must be regarded as an uninterrupted nervous chain extending through circuitous paths, but unbroken channels, to the brain and spinal cord, the great centres of nervous energy. The nerves in question are the direct media through which these centres transmit their vivifying power; and it must be recollected that the forced action of them, which is produced by the operation of drastic purgatives, is accompanied with the expenditure of a portion of the animating principle not existing in these nerves at the time, that is if the constitution be delicate or suffering from chronic or protracted derangement of the digestive organs, and consequently nervous power, proportionate to this expenditure or loss, *has to be drawn from other sources*, which under such circumstances are not in a condition to meet the demand without injury to themselves. Among these sources are to be enumerated the nerves, ganglia and plexusses belonging

to the heart—the stomach—the liver—the pancreas—the kidneys, and the urinary bladder. A portion of the nervous supply necessary to respond to the urgent requirements of the bowels, arising from their *forced* and active operation, is in the first instance derived from these minor sources, some of which are the connecting links between the nerves of the intestines and the great nervous centres.

The organs here specified suffer from the undue expenditure of the nervous power. The heart occasionally palpitates from debility, or is readily roused to increased action—the liver becomes torpid or sparingly secretes bile—the stomach labours inefficiently in the digestion of food—the lungs not unfrequently exhibit symptoms of disturbance, as short or quickened respiration—the urinary bladder presents indications of irritability, as manifested in the necessity of frequent micturition—the generative system is weakened, and general lassitude or a feeling of exhaustion prevails.

We are here alluding to effects which are often observed to follow the use of purgatives in constitutions which are delicate, or suffering from disorders that have greatly diminished the energies of life. Under these circumstances they are invariably prejudicial and should be scrupulously avoided. The object which they effect may be attained by milder measures.

Before passing to the consideration of other matters involved in this inquiry, we must leave no ambiguity on the mind of the reader —no doubt or embarrassment concerning what is meant by the *nervous relations* of the bowels; or how these and the system generally are affected by the action of purgatives. The nerves of the intestines are the cause of all muscular and vital changes in the condition of these organs, and every operation in which they are engaged is the expenditure of nervous power which has to be supplied from immediate and remote sources; and consequently the forced evacuation of the bowels, under a variety of circumstances, exercises an extremely debilitating influence on the whole of the nervous system. It never fails, as a rule, to aggravate the constipation which the severe means employed are intended to correct.

It is little imagined that purgatives may be regarded *as a peculiar*

mode of abstracting blood from the body. To ordinary observers it is a coloured fluid; but the colouring matter is only one of its constituents. It is formed of various chemical principles, and watery, or frequent evacuations, draw from the circulatory system the fluid which was previously in motion, carrying life and energy to all parts of the animal economy. Those who object to bleeding, on the ground of its exhausting effect, should be equally obstinate, and from the same reasons, to the prejudicial influence of purgatives. The latter *bleed* them in another way, but substantially the same.

If the bowels are loaded with accumulated matter, its removal is necessary, but such accumulation is a rare occurrence: it is not the rule, but the exception. But when it exists, simple measures are equal to its expulsion; and it is scarcely necessary to observe that the milder these are, the less disturbed will be the condition of the whole of the organs which co-operate in the digestive process.

It is an error, and a serious one, to suppose that purgatives are harmless in their operation; and equally so to imagine that they will cure the numerous derangements for which they are usually and by many persons habitually employed. They create a necessity for their repetition, and hence the frequent remark:—"Were I not to be constantly taking aperient remedies my bowels would not act." These organs are like many individuals—to assist them liberally is to paralyse their efforts. There is a mode of encouraging both which calls forth the latent energies they possess; and it should be the special study of the delicate—of those on whom nature has not conferred vigorous bodily endowments, or whose health and strength have been undermined by close sedentary application—by depressing emotions—by undue active medical treatment—by the baneful influence of disease, or by the loss of blood either from excited natural or abnormal causes, to conserve by every possible means the vital powers of the digestive apparatus.

Purgatives are used for a great variety of disorders. There is scarcely any morbid affection of the body for which they are not prescribed, and there is little discrimination in their employment,

or consideration of the effects which they are calculated to produce. A difference of constitution or habit modifies only slightly the selection of the remedies, or the doses in which they are given. Whether the seat of suffering be the head — the chest — the throat or any of the abdominal viscera; and whether it be chronic or acute in its character, if the bowels are found to be inactive, and often when they are not so, it is deemed necessary, as a curative step, to act with more or with less severity upon them. It is regarded both by the practitioner and patient as a safe, if not a salutary course to pursue, and were it neglected, so prevailing is the impression of its importance, the invalid would quickly come to the conclusion that he was very improperly treated. Whatever might be the degree of relief derived or the progess made towards convalescence, he and his friends would be distrustful of the amendment—would be doubtful of its soundness—would question its permanence, if the bowels had not been acted upon almost daily. It is difficult to deal with prejudice so intense and general. It is to be met only by an exposition of just physiological views concerning the functions of the organs co-operating in the process of digestion: the nervous and other relations by which they are associated to each other, and to the rest of the animal system: the nature of disease, by which is to be understood not simply the condition of the organ particularly suffering, but the aggregate of the powers of life, which is the measnre of their derangement and the extent of their vital resources; and lastly, what remedial agents shall be selected to meet the requirements of the occasion.

This selection, if judicious, implies a knowledge of their properties and action which few are studiously anxious to attain.

We now come to the consideration of some of the constitutional causes of constipation, or of the differences observed among individuals with respect to the greater or less facility with which the bowels are accustomed to act. On one part of this subject a uniformity of sentiment prevails. The necessity of a daily evacuation is a universal opinion. It has been adopted without much thought both by the pro-

fession and the public. To superficial observation it seems a legitimate inference. In a great number of instances it is the rule, and in many of these it is important that it should be so. The regularity with which the effect is produced in many originates in two widely different classes of causes. It is a natural result flowing from a high state of health conjoined with generous living, or in other words where the appetite is freely indulged. When an abundance of food is taken, and readily acted upon by the digestive apparatus, the *residue* of the vital operations, which is designated excrementitious matter, will so affect the bowels as to lead to its daily expulsion. Habit will also greatly influence the functions of these organs. They may, in some measure, be trained to perform their duties at stated times. In this there is nothing singular nor is the phenomenon difficult of explanation. The mode in which it occurs, or the physiological principles which account for it, are not generally understood, nor has attention been given to it. It is nevertheless worthy of investigation.

The regularity with which this effect takes place from what is considered habit, depends on a particular state of the *mind*, or in other terms, on mental emotion. It is the brain directly operating on the nerves of the intestines—as directly as volition influences the nerves of the arm or hand in any of its muscular contractions. A feeling co-exists with the suggestions or promptings of nature, and this feeling is a peculiar condition of the cerebrum—of the whole mass of its nervous matter, which places the nerves extending from it and the spinal cord to the bowels, in certain *organic* relations with these important nervous centres. The result is the action of the bowels.

The mental feeling plays an essential part in this affair. It must be kept in view that, like all other emotions, it implies a temporary change in the functions of nervous substance co-operating in the production of this effect. This feeling will be

apt to arise from the occurrence of the hour and other circumstances, in which an uneasy sensation of the intestines is not included, and at a time when the necessity may not be urgent, nevertheless the *feeling* is capable of generating this necessity from what is called the laws of sympathy, by which the brain and spinal cord directly influence the nerves of the bowels:—which sympathy, rendered into intelligible language, means a direct association between the nervous organs affecting and those affected—and the effects produced in both are as purely physical changes or modifications in the condition of nervous substance as any that occur in nature. Habit, in this case, *depends on organic relations established between the nervous centres and the nerves of the bowels*—relations which become obvious and efficient when the mental *feeling* arises which is necessary to their manifestation.

The formation of such a habit is unobjectionable, but it is liable to abuse, and may in fact be injurious in its influence. It not unfrequently leads to the urging of nature, when from particular circumstances she does not at once respond to the induced mental feeling; and in this case there is a straining of the bowels, and ineffectually, which is one of those causes tending to produce *prolapsus ani*, or the protusion of the rectum, which is often observed in young children after severe purging. The habit, however, is prejudicial in another way. It begets an exaggerated idea of the importance of the daily action of the bowels, and when such action does not take place with its accustomed regularity, the individual begins to be mentally uneasy—nervously anxious—imagining that something must be extremely wrong, not from any painful or disagreeable sensation experienced, but simply from the quiescent state of the bowels. The usual practice is then to have recourse to aperient remedies of some kind, and hence the baneful habit of irritating and disturbing the finely organised intestines—forcing them to act when their temporary and prolonged repose may he essential to their future vigorous

operations. The advantage of this repose, in connexion with the weakened or disordered functions of the bowels, is not at all understood by mankind, nor is it appreciated in any degree by the profession. The opinions of both on this matter—on the necessity of the regular action of these organs, in health, and in every stage of disease, are in extraordinary accordance. It almost invariably happens, whatever may have been the nature of the derangement, if conjoined with any degree of constipation, that the patient, when the medical practitioner is called in, informs him, as a circumstance altogether unobjectionable, *that he had previously taken care to act freely on the bowels;* but as the result proved with no decided benefit. Such indiscriminate conduct is fraught with evil. In numerous instances it precludes the possibility of recovery; and in others so exhausts the vital powers that what would otherwise have been an ordinary and easily curable disease, becomes a severe and aggravated affection requiring for its successful treatment great skill and patience. The practitioner likewise, whatever be the character of the symptoms, *goes at the bowels*. They are regarded, either as the cause of the ailment, or the channel through which it is to be relieved; and with few well marked exceptions, the profession concentrate their attention on these organs, and imagine they cannot do wrong in keeping them in active operation. If a patient dies after being bled, blistered, and well-purged, the surgeon is spoken of as one who has done his duty—that in fact he treated the disease with becoming energy—and unfortunately his skill is measured by the severity of the means which he employs. It is lamentable that medical science or knowledge should be judged by such a scale. There is frequently consummate wisdom manifested in doing little.

The interference of the practitioner has for its object either aiding nature in her efforts to throw off disease—seconding these efforts in their salutary direction; or attempting to arrest the progress of disordered action. To accomplish either end,

it must be kept in mind that we have to depend on the vital powers, *and that it is by these and through these that our remedies influence the animal system;* and therefore it should be our study to economise them, as every undue expenditure of their resources proportionately limits the efficiency of our agency. There is less vital capital to co-operate with our endeavours, and without such active co-operation medical treatment is of little avail.

We have stated that persons who live generously, or who are prone to gratify their appetite, in reference rather to amount than quality or variety, are seldom troubled with constipation. It likewise only occasionally occurs in those who are corpulent, or who border on this condition. There are two causes which account for this. In the first place such individuals are not often found among the abstemious of society. They may be moderate in stimulating liquids, but as a rule, they indulge largely in ingesta of some kind; and further, either from the evenness of their temper or the sluggishness of their disposition, their slumbers are easy, sound and prolonged. Nature has an excellent opportunity of appropriating, whether to advantage or not, is not the question, the materials furnished to her. She adds steadily to the existing bulk, until at length corpulency displays itself in its imposing rotundity. This is generally accompanied with a tendency to a laxity or frequent action of the bowels. The accumulation of adipose matter or fat, is evidence of the want of vigorous constitutional tone or vital energy. It mostly characterises the phlegmatic temperament, which does not imply bodily activity or powers of great endurance. Severe medical treatment quickly prostrates the strength, and recovery, after the removal of disease, is tedious and protracted. There is little of what may be designated vital elasticity. We have often witnessed the injurious effects of purgatives on such constitutions, prescribed for the purpose of keeping down the imagined fulness or plethora of the system, and persevered in beyond just limits, as a preventive against the determination

of blood to the head. Symptoms seldom fail to arise from the *practice*, which, as they are usually interpreted, seem to establish the necessity for its continuance, such as dizziness, lightness, or a swimming sensation; or at times a feeling of weight or pressure at the back or upper part of the head; or occasionally a constant humming in the ears, or a distressing throbbing at the temples; and not unfrequently palpitation of the heart on slight exertion, or on the occurrence of any sudden emotion: great nervous anxiety—an apprehension of some serious, undefined evil, almost invariably accompanies this class of symptoms. The patient is withdrawn from his usual nourishing and stimulating diet, and he soon becomes unequal to any steady mental or bodily labour. He gradually loses flesh—the countenance becomes sallow or partially jaundiced—the tongue furred—the appetite indifferent —the pulse small and frequent—the extremities mostly cold, and yet alterative or aperient remedies are enforced, as the brain is still disordered in its functions—the symptoms, of which it is the seat, are indeed aggravated and must necessarily be so from the injudicious character of the practice pursued.

Purgatives and other depletory measures which have been employed are the *cause* of these effects. They have reduced the system beyond its normal standard—they have exhausted the nervous energy, and yet the treatment is persevered in for the purpose of keeping down that degree of corpulency, which is as natural to some men as the coloured skin is to the negro; whilst the attempt to accomplish the object by such means is scarcely less ridiculous than would be the effort to wash the negro white. We have at present under our care two cases which illustrate the justness and force of these observations. The one is that of a gentleman turned fifty, who has suffered for years from distressing head symptoms, such as weight and pressure at the forehead extending to the crown—dizziness—palpitation of the heart—and latterly an acute pain in the region of this organ on slight exertion.

The symptoms which first showed themselves were those of the head, and as he was inclined to be stout, he was bled several times in the arm—had leeches frequently applied to the temples—blisters to the nape of the neck—blisters to the calf of each leg—was salivated on several different occasions, and the bowels for a long period were constantly freely acted upon. He consulted various practitioners in his own immediate neighbourhood, as well as in the metropolis, but they similarily bled, blistered, or purged. Palpitation of the heart, and acute pain in the chest, were the consequences of this treatment; and they are effects, as well as others kindred in their nature, which must necessarily follow such practice. It is this, and not the original disease, that gives rise frequently to lamentable results. Under milder measures—which had for their object the gradual restoration of the exhausted nervous system, displayed in the improved appetite—in the digestion of nutritious food—in the regular action of the bowels—in the production and the distribution of a more liberal stream of healthy blood throughout the body, the patient rapidly advanced towards convalesence.

The other case, which is equally fraught with instruction, is that of a manufacturer, aged 34, who a year and a half ago, was seventeen stone in weight and remarkably healthy and strong. He had some head affection for which he was bled, blistered, and purged. The purging was steadily continued with scarcely any intermission for at least nine months, and was enforced as the bowels would not otherwise act: but it must be remembered that the cessation of their natural functions was to be ascribed altogether to the uninterrupted operation of the purgatives which had been employed. It was these and not the disease which produced inveterate constipation. It is their necessary effect. They weaken and exhaust the nerves not only of the bowels, but of every other internal organ, until at length none of them are equal to their duties; and in addition to their disturbed action, we have

a variety of other symptoms, as nervous anxiety or excitement—distressing sensations of the head, occasionally presenting those indications which are imagined to forbode an attack of apoplexy, but without any just foundation. The symptoms lead to further exhausting measures, and to consequences which we leave to the surmise of others

The patient, whose case is here alluded to, when he came under our care was about *thirteen* stone in weight, and was still suffering from the head affection, and other derangements for the cure of which such active treatment had been used. At the very moment he consulted us, he was told, in a very decisive tone, of the sad results that would follow if his bowels were not acted upon daily. We took a widely different view of his case. We regarded their comparative repose or freedom from disturbance as essential to the restoration of their exhausted energies. Otherwise it would be in vain to attempt to invigorate the body. For this to increase in strength —in the activity and correctness of its vital actions, it is clear that in a given period it must acquire more than it loses. One mode of making the gain exceed the loss, is to diminish the latter. One channel through which this loss finds a ready exit, or by which it is produced, IS THE FREQUENT ACTION OF THE BOWELS. If we allow them rest, within proper limits, they are soon in a condition to do something for themselves; and whilst they are struggling to gather together their powers for the desired effect, the food which has been digested is carried *into* and left in the system, and not drawn *out* of it by the prejudicial influence of purgatives.

The reader will probably exclaim, what, allow the bowels to be confined for several days! There is no rule for their action in disease, and not one that can be defined as co-existing with or necessary to health. Nature, if she were better understood, would be much less interfered with in matters of this kind· Concerning many of her operations we have no particular anxiety—the changes to which they are subject do not arrest our attention, unless accompanied with some painful or unusual sensation; but this is not the case with the bowels. We think it needful that

they should act as regularly as the best adjusted time-piece. An alteration in diet, in regard to quantity or quality—in the activity of the digestive functions—in the habits of the individual, especially in reference to bodily or mental exercise—in the vicissitudes of temperature, or other conditions of the atmosphere, are circumstances which are never taken into account; and though the temporary constipation may give rise to no uneasy feeling—no pain of head—no heat of hands—no flushing of the face—no dryness of the mouth, yet the bowels must be worked at, and nature in vain pleads for rest for a portion of her important organs.

The case, which has led to these remarks, has rapidly improved under a different system of treatment. For a time we did not at all disturb the bowels. We had other objects in view, viz., the strengthening of the digestive organs, the production of more abundant blood, and its more liberal distribution throughout the body—effects which were incompatible with the frequent action of these organs, or indeed with that degree of action which would be natural in an ordinary state of health. If the muscles of the arm are fatigued with labour, rest is essential to the restoration of their strength; and the same argument applies with undiminished force to the bowels—with this difference, that on the prolonged repose of the latter—the duration of which is to be measured by the extent of the previous demands made upon them, *depends the well-being of the whole animal system*. The analogy, which is physiologically just, never enters into the consideration of the profession—they scarcely dream of the bowels being *exhausted* by their frequent and reckless interference. These organs can be called into play in virtue only of the nervous power which they possess, and this power is as susceptible of waste from the operation of purgatives as that of the muscles by their continued exercise.

We are inclined to think that the best constitutions—such as exhibit a combination of the *muscular* and *nervous* temperaments—have a tendency to constipation. Those who are examples of this class may be described as follows: They have no superfluous flesh. They are lean, and have active and well-knit frames. They can undergo great fatigue and labour, and are readily refreshed to enter upon the same tasks. They are generally of a restless and

enterprising character. The ease and alacrity with which they step, and almost every movement of the body, are evidence of the activity of the nervous system. They are liable to few diseases, and what they suffer from are mostly of an acute inflammatory nature. Why such are frequently prone to constipation is not difficult of explanation. The *quantity* of the excrementitious matters in the bowels, which has to be expelled, clearly depends on two causes—the amount of food taken, and the degree in which it is digested and conveyed *into* the system in the form of chyle, which becomes blood the moment it reaches the lungs. We will suppose the amount taken, by different individuals, equal, the *residue* of it, which has to be removed by the action of the intestines, will vary in each.

This fact, which is indisputable, leads to the consideration of interesting and important views. A difference in the quantity of the *residue*, can arise only from a difference in the activity of the *absorbents* of the bowels, whose office it is to select and convey *into* the circulatory system that which is to constitute the future nourishment of the body. The activity of these vessels is modified by various circumstances. It is increased by all kinds of muscular movements, as walking, running, horse exercise; and by mental application, within moderate limits, if only slightly sedentary in its character. The reason is obvious: bodily motion produces several effects—an accelerated circulation of the blood, an augmented distribution of it towards those organs which are brought prominently into action, and at the same time a more stimulating condition of this fluid; and the causes of these effects are accompanied with an expenditure of vital power, and hence a constant demand is created for a supply somewhat proportionate to the loss, which necessitates a corresponding activity on the part of the absorbents of the bowels. They extract, not only rapidly the nutritious matter which is in contact with their open mouths, but a far greater quantity than when the same vessels are not thus excited by the causes in question. Nutrition, in fact, flows, in those directions where it is quickly wasted. Compare an individual, who is a type of this mixed temperament, with one who belongs to the phlegmatic, and then it will be easy to appreciate

the justness of the foregoing train of reasoning The latter is active only by fits, if active at all. If he walks, his steps are slow and measured. The spirit by which he is animated urges him gently along his course, whether it be business or pleasure. Even the pursuit of the latter scarcely makes him restless, or materially accelerates his movements, He is prone to quiet and sensual indulgence. It is evident that the chyle, resulting from the process of digestion, is differently circumstanced in such a constitution from what it is in the other. There are not the same demands for it in the direction of the extremities and surface of the body, from frequent or long-continued muscular exertions, and hence the *residue* of the digestive process in the bowels, will be more abundant, and will give rise to more copious evacuations than in the other case, and there will rarely be a tendency to constipation.

This *residue* arises from two sources, the consideration of which will explain the modifications to which it is subject, both in quantity and character, in the same individual at different times, as well as its conditions characterising different temperaments. It results in part from that portion of the ingesta or aliments which is not adapted to the purposes of nutrition ; and further from the secretions of the abdominal viscera, as the liver, the stomach, the pancreas, and the bowels. These are the only two sources from which the *residue* can be derived. In the muscular and nervous temperament there is a less amount arising from these two sources than in the phlegmatic, and consequently a less tendency to the frequent action of the intestines. The general activity of the body is, as previously remarked, accompanied with a proportionate waste of nutritious materials, and the vital actions by which this expenditure is caused, not only draw the blood abundantly to the parts which are exercised, but maintain it there in vigorous circulation ; and consequently there is a less amount left in the internal viscera to promote copious secretions forming largely the *residue* which has to be expelled, and facilitating its expulsion from their stimulating action on the bowels. In the phlegmatic temperament it is widely different. The blood is less rich or vitalized in its properties, as, in a given time, it is not

subject to the same extensive changes in the lungs ; these changes being in the ratio of the frequency with which the whole mass passes through these organs. It is scarcely necessary to observe that they are proportionate to the general activity of the body. Therefore, as a rule, in a constitution of this or of a kindred temperament, the abdominal viscera (not having any great demands made upon them by a restless or active disposition, and its consequences, excited muscular movements,) will be in a condition fitted to promote copious secretions, which will lead to the production of a large *residue* and its frequent evacuation.

Active exercise, on those not accustomed to it, may for once facilitate the action of the bowels, but it is afterwards often followed by constipation, especially in those in whom the powers of life are finely balanced, or who have no surplus vital energy to spare, and the explanation is to be found in the foregoing remarks on the muscular and nervous temperament.

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