

Surgical observations, part the second : containing an account of the disorders of the health in general, and of the digestive organs in particular, which accompany local diseases, and obstruct their cure : observations on diseases of the urethra, particularly of that part which is surrounded by the prostate gland : and observations relative to the treatment of one species of the naevi materni / by John Abernethy, F.R.S., honorary member of the Royal Medical Society of Edinburgh.

Contributors

Abernethy, John, 1764-1831.
Francis A. Countway Library of Medicine

Publication/Creation

London : Printed for Longman, Hurst, Rees, and Orme, Paternoster Row, 1806.

Persistent URL

<https://wellcomecollection.org/works/c6aa9vmx>

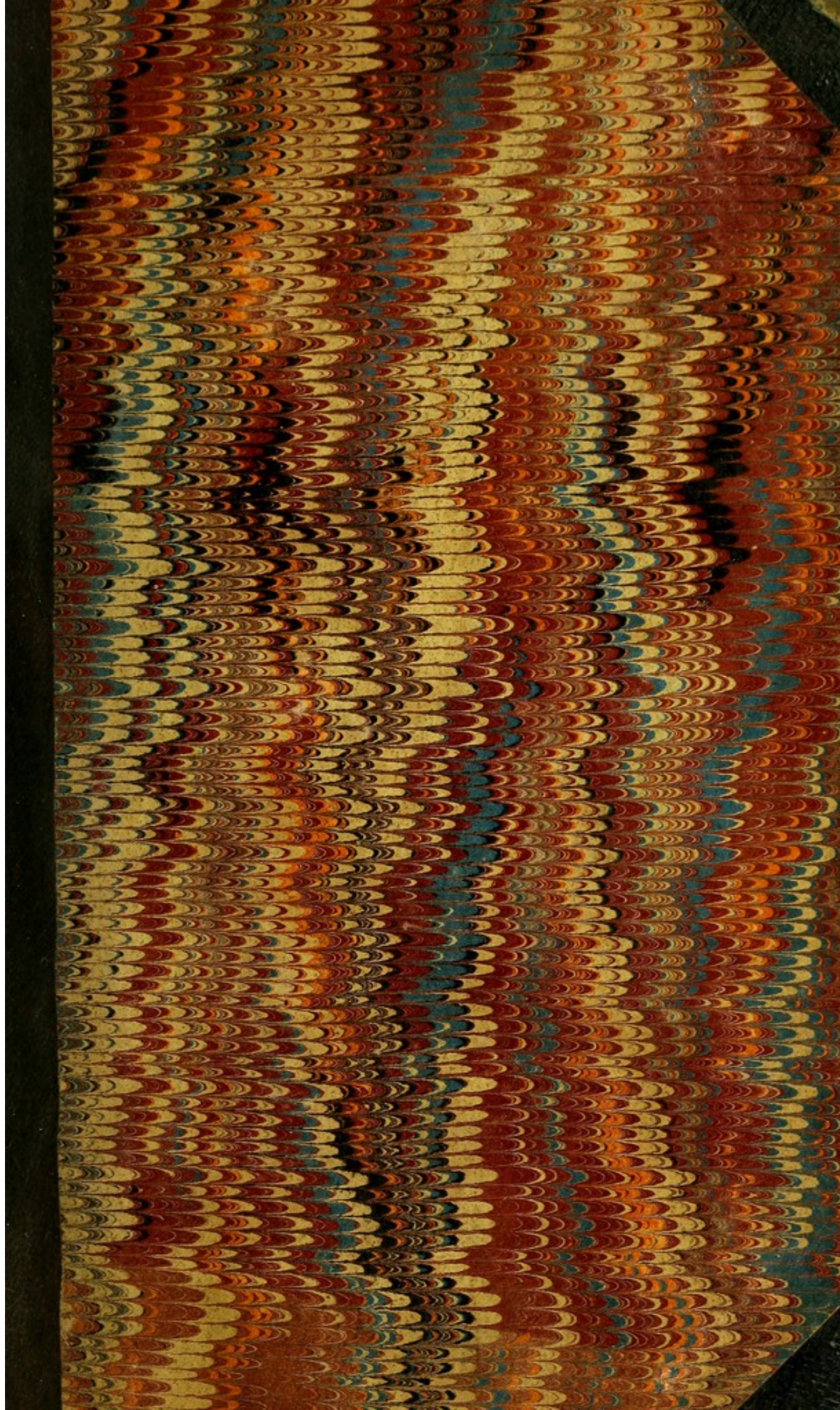
License and attribution

This material has been provided by This material has been provided by the Francis A. Countway Library of Medicine, through the Medical Heritage Library. The original may be consulted at the Francis A. Countway Library of Medicine, Harvard Medical School. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



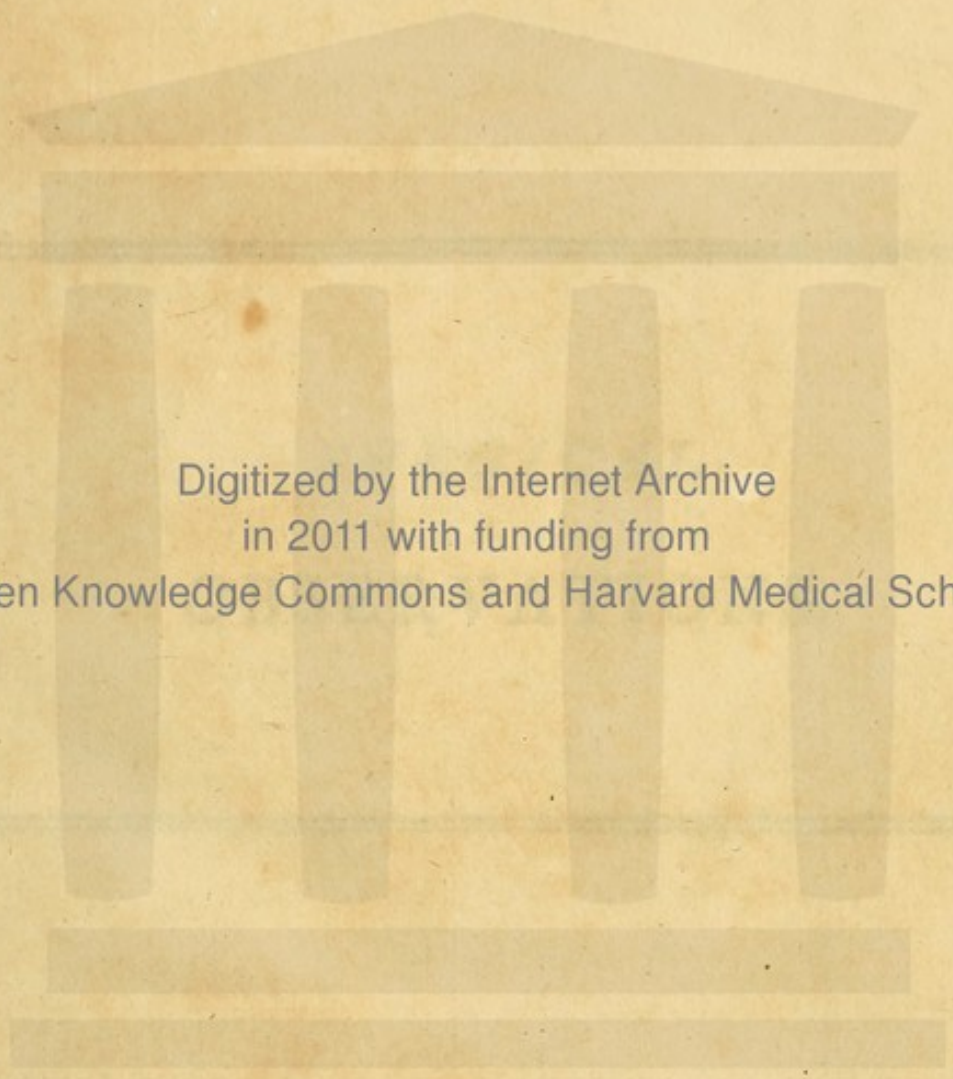
Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>



23.7 53







Digitized by the Internet Archive
in 2011 with funding from
Open Knowledge Commons and Harvard Medical School

ASTRONOMICAL
OBSERVATIONS

SURGICAL
OBSERVATIONS.

OBSEKATIONS.
SUKGICAL

Printed by J. Nichols and Son,
Red Lion Passage, Fleet Street.

(SURGICAL OBSERVATIONS,
PART THE SECOND :
CONTAINING,
AN ACCOUNT OF THE
DISORDERS OF THE HEALTH IN GENERAL,
AND OF THE
DIGESTIVE ORGANS IN PARTICULAR,
WHICH ACCOMPANY LOCAL DISEASES, AND
OBSTRUCT THEIR CURE :—
OBSERVATIONS ON
DISEASES OF THE URETHRA,
PARTICULARLY OF THAT PART WHICH IS SURROUNDED
BY THE PROSTATE GLAND :—
AND, OBSERVATIONS
RELATIVE TO THE TREATMENT OF
ONE SPECIES OF THE *NÆVI MATERNI*.

By JOHN ABERNETHY, F. R. S.

HONORARY MEMBER OF THE ROYAL MEDICAL SOCIETY OF
EDINBURGH, AND OF THE MEDICAL SOCIETIES
OF PARIS, PHILADELPHIA, &c.
ASSISTANT SURGEON TO ST. BARTHOLOMEW'S HOSPITAL,
AND TEACHER OF ANATOMY AND SURGERY.

*“Chirurgus necessarium esse cognitionem Physicæ, Chimiæ, Logicæ,
“omnis (fere) ambitus Medicinæ; neque solo manus exercitio veros
“chirurgos fieri.”* HERM. BOERHAAV. Method. Stud. Med.
locupletata ab Alb. von Haller.

L O N D O N :
PRINTED FOR LONGMAN, HURST, REES, AND ORME,
PATERNOSTER ROW.

1806.

SURGICAL OBSERVATIONS

PART THE SECOND

23

CONTAINING

AN ACCOUNT OF THE

DISORDERS OF THE BLADDER IN GENERAL

53

AND OF THE

DISTURBANCE OF THE PARTS OF THE URINARY

SYSTEM WHICH ACCOMPANY LOCAL LESIONS, AND

OF THE EFFECTS OF THESE LESIONS

ON THE URINARY SYSTEM

IN THE URINARY SYSTEM

PARTICULARLY OF THAT PART WHICH IS SURROUNDED

BY THE PROSTATE GLAND

AND, OBSERVATIONS

RELATIVE TO THE TREATMENT OF

THESE AFFECTIONS

BY JOHN ABELSMITH, F.R.S.

ESQ. MEMBER OF THE ROYAL SOCIETY, OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

OF LONDON, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

EDINBURGH, AND OF THE ROYAL SOCIETY OF

P R E F A C E.

IT is now nearly seven years since Mr. BOODLE, of Ongar, in Essex, told me that, in his opinion, many nervous diseases, and many pulmonary affections, originate in a disorder of the Liver. He regretted his inability to investigate the subject by dissection, and urged me to endeavour to ascertain, by that method, how far his ideas were well founded, or otherwise. The result of these enquiries is related at the conclusion of the first paper in this volume.

Having

Having thus been led to pay attention to disorders of the digestive organs, and their connexion with other diseases, in the relation of cause or effect; the importance of the investigation in which I had engaged gradually increased in my estimation. I soon perceived that the subject was of the highest consequence in the practice of surgery; for local diseases disturb the functions of the digestive organs; and, conversely, a deranged state of those organs, either occurring in consequence of such sympathy, or existing primarily as an original disease, materially affects the progress of local complaints. The facts which I have collected, and the observations which I have made relative to these subjects, will be found in the subsequent paper. It seems to be the duty of every one to promulgate any useful facts which he may possess, relating to an important subject, in order to excite general attention to it; by which the knowledge of that subject is likely to obtain the greatest and most rapid increase.

increase. Influenced by this consideration, and believing that the facts which I have collected merit attention, I submit them to the judgment of the publick.

It is no more than justice to state, that opinions of a similar kind, with respect to the influence of the hepatic function on various forms of disease, have, for some years past, been delivered by Dr. CURRY, Physician to Guy's Hospital, in his lectures upon the Theory and Practice of Medicine; and that our surprise was mutual, at finding such coincidence of sentiment upon a subject hitherto so little adverted to. Until Dr. Curry, however, shall lay the result of his labours before the publick, which he is now preparing to do, it is impossible to say how far our ideas may correspond in the detail; but when two persons begin an investigation with principles nearly similar, it is not, perhaps, unreasonable to

to expect, that the facts which they collect, and the observations which they make, though in different lines of the profession, will be found mutually to support and illustrate each other.

It is no more than justice to state, that opinions of a similar kind, with respect to the influence of the hepatic function on various forms of disease, have, for some years past, been delivered by Dr. Curnut, Physician to Guy's Hospital, in his lectures upon the Theory and Practice of Medicine; and that our struggle was natural, at finding such coincidence of sentiment upon a subject hitherto so little adverted to. Until Dr. Curnut, however, shall lay the result of his labours before the public, which he is now preparing to do, it is impossible to say how far our ideas may correspond in the details; but when two persons begin an investigation with principles nearly similar, it is not perhaps unreasonable to expect that they will arrive at similar results.

On

ON DISORDERS OF THE SYSTEM IN GENERAL, AND OF THE DIGESTIVE ORGANS IN PARTICULAR, WHICH ACCOMPANY LOCAL DISEASES, AND WHICH, WHETHER THEY BE SYMPATHETIC OR IDIOPATHIC, CONSIDERABLY OBSTRUCT THE CURE OF THESE DISEASES.

AN evil seems to me to have arisen from the artificial division of the healing art into the medical and surgical departments. This division has caused the attention of the physician and surgeon to be too exclusively directed to those diseases, which custom has arbitrarily allotted to their care. The effects of local disorders upon the constitution have, in consequence, been too little attended to; and indeed I know of no book, to which I can refer a surgical student for a satisfactory account of those febrile and nervous affections, which local disease produces, except that of

Mr. Hunter*. The reciprocal operation of constitutional disorders upon local diseases has obtained still less attention. To investigate more particularly some parts of these subjects, and to bring them forwards to public notice, are the proposed objects of the present paper.

No part of the animal body can be very considerably disordered, without occasioning a correspondent derangement of the whole constitution. Such disorder has been considered by Mr. Hunter as the result of universal sympathy. This consent of the whole constitution with its parts, manifests itself, in particular instances, by a greater disturbance of the functions of some organs than of others; and from this circumstance these diseases have derived the appellations, by which they are commonly distinguished. If the actions of the sanguiferous system be principally disturbed, and the temperature of the body subject to unnatural variations, the disease is termed fever: if the nervous system be chiefly

* Treatise on the Blood, Inflammation, &c:

affected,

affected, a state of vigilance or of delirium may be produced: convulsions and tetanus take place when the muscular system is more particularly disordered. Though the especial disorder of particular organs thus gives a character and denomination to the disease, it is sufficiently evident, in every instance, that the whole constitution is disturbed, and that parts of it are chiefly affected, perhaps from unknown circumstances relative to the nervous system, or it may be from a predisposition to disorder existing in the parts, which are chiefly affected. It seems to be ascertained, that persons of particular constitutions are predisposed to those febrile actions of the sanguiferous system, which constitute the inflammatory fever; that there is a propensity to convulsions in children, and to tetanus in the inhabitants of warm climates.

It may be a fit subject for enquiry, whether it be possible for particular organs to become affected otherwise, than through the medium of the nervous system in general. Though some instances of sympathy are strange, and

perhaps inexplicable, it must, I think, be admitted, that the inflammatory fever, the state of vigilance and delirium, convulsions and tetanus, which arise in consequence of injuries of the limbs, are produced by irritation imparted to the brain, which, by a kind of reflected operation, occasions a greater disorder of some organs than of others, and thus gives a character and denomination to the disease.

That the stomach and bowels are disordered by injuries and diseases of parts of the body, has been remarked by various persons; but the subject has never been extensively surveyed, nor viewed with that accuracy of observation, which its high importance merits. It has been observed that sprains of tendinous or ligamentous parts produce sudden sickness; and Mr. Hunter has attributed that shivering which is consequent to accidents, and attendant on some diseases, to the state of the stomach. It is also known that, in some local injuries from accident or operations, the stomach has appeared to be the part principally affected. But these remarks have been made only in a cursory

cursorfory manner; and it is my intention to examine the fubject more particularly. The connexion of local difeafes with the ftate of the conftitution in general alfo appears to me either not fufficiently underftood or not duly regarded by the generality of practitioners; and to this fubject I alfo mean to claim their particular attention. I fhall in the firft place felect two cafes to fhew how the ftomach and bowels, or, to fpeak yet more extenfively, the digeftive organs may be affected from local diforder.

C A S E.

A healthy gentleman, about twenty-five years of age, was induced to fubmit to an operation for the return of an adherent omental hernia, rather in order to remove the inconvenience and apprehenfion which the diforder occafioned, than from any urgent neceffity; for any increafed exertion in walking or riding produced the defcent of a portion of intefstine behind the thickened omentum, and obliged him to ftop, and replace it: and
he

he frequently could not accomplish the reduction without considerable difficulty. The application of trusses had been quite ineffectual in obviating these alarming inconveniencies.

The patient's diet on the day preceding the operation was scanty, and consisted of fluid substances. He took on the morning of the operation some Epsom salts and manna, which operated twice, and seemed to have emptied his bowels. A portion of the omentum was cut off, and the remainder was returned after two vessels had been tied. The operation was followed by general disorder of the constitution, manifested by a full and strong pulse, furred tongue, great anxiety, restlessness, and total want of sleep. The stomach was particularly affected, being distended, uneasy on compression, and rejecting every thing that was swallowed. He was bled largely in the evening, and took saline medicines, but could not be prevailed on to swallow any thing else, except some toast and water. The sickness had in some degree abated on the next day. A solution of magnesia vitriolata in mint water
was

was prescribed in small occasional doses, in order to relieve the distension of the stomach, and the unpleasant state of the tongue, by procuring some discharge from the bowels *. In the course of the day he took an ounce of the salts, which was not rejected by the stomach, yet he could scarcely be prevailed

* Patients not unfrequently suffer much after operations from disorder of the stomach, and sometimes die apparently in consequence of this affection, and not from local mischief. In these cases opium sometimes fails to quiet the irritability of the stomach; and I have always considered it as a primary object to produce secretions into the bowels, as I have observed that, if discharges can be procured per anum, the stomach becomes tranquil. The magnesia vitriolata dissolved in common mint water or peppermint water, in small and repeated doses, and clysters, are, I believe, generally directed to produce this effect. It must be acknowledged that it is disorder of the brain that affects the stomach; but the re-action of the latter affection increases and maintains the former, by which it was produced. These cases are exceedingly various with regard to the degree and kind of the disorder; sometimes the brain seems the part chiefly affected, and the nervous energy appears to be greatly impaired. In such cases cordials seem to be the only medicine that can be prescribed with probable benefit. Sometimes a low kind of delirium takes place, with but a slight degree of febrile action. Sometimes the delirium is more violent, and the febrile actions are proportionably increased, attended with subsultus of the muscles and occasional convulsions.

upon

upon to take any thing else. The tongue was still covered by a thick yellow fur; the skin was hot and dry, and the pulse frequent. As there was no particular tenderness about the hypogastric region, he was not again bled. The second night passed without the least sleep. As the salts had produced no effect, the same medicine was ordered in an infusion of fenna, with the addition of some of the tincture, which, by being given in very small doses, was retained. As, however, no effect seemed likely to result from this medicine, a grain of calomel was given at night, and repeated on the following morning. Still the loathing of food continued. The third night passed, like the former ones, without the least sleep, and with great anxiety. On the next morning, two pills, containing five grains of the pil. colocynth. and the same quantity of the pil. aloet. cum myrrhâ, were given every fourth hour. These procured no stool, nor produced any sensation which inclined the patient to believe that they would operate. Again he passed a night without sleep; but, towards the morning, he felt his bowels
apparently

apparently filling, to use his own expression, and a profuse discharge ensued. A dozen copious, fetid, and black evacuations took place between five and ten o'clock, and he had several others in the course of the day; after this, his appetite returned, his tongue became clean, and sound and continued sleep succeeded.

That the chylopoietic organs were in this case the parts chiefly affected, can scarcely be questioned. The sickness, the tenderness of the parts in the epigastric region, the dislike to receive any thing into the stomach, and the state of the tongue, all shew that the stomach was much disordered. The insusceptibility of the bowels to be operated on by those medicines, which would ordinarily have produced discharges from them, and the profuse evacuation which afterwards ensued, and relieved the patient, shew that these viscera participated in the affection. The black colour of the discharges shews, I think, that the secretion of the bile was not healthy. It is probable that some portion of the evacuated
matter

matter proceeded from the liver, in which case it might be justly inferred that this organ was affected in common with the rest of the chylopoietic viscera.

It may be supposed, that the injury done to the omentum might contribute to produce the disorder of these organs, rather than of others. We do not, however, find that such effects commonly succeed to similar operations. The ill consequences in the present case were greater than might perhaps have been expected, if it were not known, that an operation performed on a healthy patient is more apt to produce considerable disorder, than where the constitution has previously sustained the irritation of a disease, for which the operation becomes necessary.

It is probable also that the restlessness and anxiety of the patient were aggravated, if not principally caused by the state of the chylopoietic viscera; since the relief which took place in those parts on the renewal of secretions into them, certainly removed the nervous symptoms.

symptoms. That the discharges were the effect of secretion is proved by the absence of alimentary matter in the bowels, in consequence of the action of the purgative administered on the morning of the operation, and the abstinence both before and after that period*.

I could relate numerous cases in support of the inferences, which I have drawn from the preceding history; that local irritation affecting the nervous system may occasion a subsequent affection of the digestive organs of a

* Two instances are recorded in Mr. Pott's Works of the operation for the reduction of an hernia being performed where no strangulation existed. See Pott's Works, vol. III. pp. 295, 299, edition of 1783.

The operation in the case just related was undertaken upon the authority of these cases, which were both successful. I performed a similar operation on a patient, whose life had been twice in imminent hazard from strangulation, in a case of adherent epiplocele, in which a truss did not keep up the hernia. This operation was followed by violent peritonitis, which could only be subdued by such copious and repeated venæsection, as endangered the patient's life. These cases have made such an impression on my mind, that I should be very averse in future to undertake similar experiments.

most

most momentous nature, and which appears to be the source of great general disorder of the system, because an amendment taking place in the state of those viscera, a corresponding alleviation of the general symptoms ensues. Such cases succeeding to great local irritation must frequently occur to every one; it is therefore unnecessary to adduce more instances.

I shall however relate another case to confirm the opinions which I have delivered, because it appears to me to elucidate still more my present subject.

C A S E.

A gentleman fell with his leg between the bars of an iron grating, which served as a window to a cellar. The part was much bruised, the skin grazed, and the tibia broken into three or four pieces at its upper extremity. The limb was put up in splints by a neighbouring surgeon, and the next day the patient requested to see me in consultation. I attended

tended for a few days, but every thing went on so well, that I discontinued my regular visits, and only called occasionally, without seeing the limb. There was no inflammation; the swelling which had been occasioned by the bruise had subsided, and where the skin had been grazed, two or three trivial ulcers had taken place, which obliged the surgeon to open the bandages and dress them daily. The patient's health had been so good, that about three or four weeks after the accident, he had some friends to dine with him in his room, and afterwards played at cards with them, and parted with them, in the evening, in high spirits. In the middle of the same night, the patient suddenly became delirious, and I was sent for to meet the other surgeon in consultation. The delirium was then so great, that the patient knew not the persons in the room. On looking at the leg, with a view to inquire into the cause of this unexpected occurrence, it was found, that one of the ulcers of the skin on the outside of the limb, on which his position had produced some pressure, had become deep, and apparently penetrated the fascia,

fascia, so as to communicate with the fractured bone, and thus had converted a simple into a compound fracture. To this event we could not but attribute the sudden irritation of the constitution, and the delirium. Opium was immediately given, which quieted this disturbance in a considerable degree, so that on the next day the pulse was more tranquil, and there was no delirium. On the following day his stomach became affected; he was sick, could take nothing by the mouth, had the hiccough, and his abdomen was distended like that of a person in tympanitis; whilst the senses and intellect were not disordered as they had been. In this state he continued about twenty-four hours, when his sufferings were terminated by death. As some suspicions had arisen that the head or abdomen might have been hurt at the time of the accident, the body was inspected; but no injury of these parts was discovered. Upon examining the leg, it was found that the external wound communicated with the fractured tibia, which was broken into several pieces; some of the fractures, ascending in a perpendicular direction,

tion, communicated with the joint of the knee.

In this case the disease was of too short duration for observations to be made respecting the secretions of the chylopoietic organs; but it was evident that there was a complete atony of the stomach and intestines. The consideration of such cases as those which have been related, have convinced me that local irritation may produce a great disorder of the digestive organs. It must, I think, be granted, that it produces such effects through the medium of the nervous system, and that, by a kind of reflected operation, the digestive organs become affected so that the most manifest and greatest disorder seems to exist in them.

Now, if vehement local irritation can produce so violent a disturbance of the chylopoietic organs, it may be expected that a less degree of a similar cause will produce slighter effects of the same nature. Indeed, the foregoing cases were related not merely because
they

they seemed worthy of record by themselves (for such histories are but rarely met with in medical books), but chiefly to prepare the reader for the observations which are to follow.

This slighter kind of derangement occurs in cancerous complaints, which rarely fail to be accompanied with disorder of the abdominal viscera; to which affection I am induced in general to attribute* that difficulty of breathing which has been so generally remarked in the last stages of the disease. We find the same state of the chylopoietic organs in the advanced stages of lumbar abscess, compound fractures, and all kinds of local disease, which impart considerable and continued irritation to the whole constitution. We also find a less important disease, as for instance, a fretful ulcer, keep up a disorder of the system in general and of the digestive organs in particular, which subsides as the irritable state of the ulcer diminishes. But as practitioners in general may not perhaps have so attentively remarked

* See Surgical Observations, Vol. I.

these circumstances as to be familiarly acquainted with them, it may be useful to mention a very common occurrence, which cannot have escaped observation. I allude to the effects of the irritation of teething upon the health of children. The Brain is sometimes so affected as to cause convulsions; the digestive organs are almost constantly disordered. The appetite fails; the tongue is furred; the secretions of the liver are either suspended, deficient, or vitiated. The bowels are either purged or costive, and the fæces fetid. The fæcal matter is often mixed with mucous and other secretions. There is also frequently a very troublesome cough. Such symptoms generally subside when the local irritation ceases, but sometimes the disorder of the digestive organs, thus excited, continues and disturbs the general health of the patient.

If local irritation be capable of disordering the bowels, we naturally conclude that it acts upon them through the medium of the brain. If also the brain and nervous system should be disordered, without any apparent

local disease, we might expect similar derangements in the functions of the digestive organs. In cases, where some morbid poison is absorbed, which produces effects similar to those of syphilis, we frequently find the general irritation of the constitution accompanied also with that disorder of the bowels, which I now proceed more particularly to describe.

This slighter disorder of the chylopoietic organs is, in general, manifested by a diminution of the appetite and digestion, flatulence, and unnatural colour and fetor of the excretions, which are generally deficient in quantity. The tongue is dry, whitish, or furred, particularly at the back part; this symptom is most apparent in the morning. As the disease advances, a tenderness is felt when the epigastric region is compressed, and the patient breathes more by the ribs, and less by the diaphragm than in the healthy state. The urine is frequently turbid. I am inclined to impute these symptoms (for reasons which will be hereafter mentioned) to an irritable state of the chylopoietic organs, which is accompanied
by

by a deficiency or depravity of those secretions, upon the healthy quality of which, the right performance of their functions depends. As all the secretions poured into the alimentary canal are colourless, except the bile, in that alone can any defect or depravity be discovered by inspection.

Before I proceed, I may be allowed to enter more fully into a consideration of the symptoms which denote disorder of the digestive organs; in order to induce surgeons to pay that strict attention to them, which the importance of the subject so well deserves. It would indeed be impossible for the reader to understand, without such prefatory observations, my object in the treatment of the cases which will presently be related, or the opinions which I have formed, relative to their mode of cure.

The changes which the food undergoes in the digestive organs of the more complicated animals are threefold; and distinct organs are allotted to each of the three processes. Diges-

tion takes place in the stomach, chyification in the small intestines; and a third process, hitherto undenominated, is performed in the large intestines. It is probable that in some cases, one set of organs may be more disordered than the others, and of course one of these processes may fail more than the rest. For instance, the stomach may digest the food in a healthy manner, although the intestines do not perform their share of the changes, which they ought to effect.

Disorder of the stomach is generally manifested by the state of the tongue. If there be no fever to disturb the secretions in general, the change which is visible in the tongue can be imputed to no other cause than local disease, or a participation in a disorder of the stomach or lungs. Local irritation or mental anxiety will cause a white and dry tongue; but does not this effect arise through the medium of an affection of the stomach? For although the secretions of the tongue must partake of the general disturbance which prevails in fever, their especial disorder may be, in that case
also,

also, not improperly attributed to the state of the stomach.

The state of the tongue is, in general, an infallible criterion of a disordered condition of the stomach; but it does not point out the kind and degree of that disorder. In recent and considerable affections, where the appetite is lost, and the digestive powers are greatly impaired, the appearances of the tongue are by no means so strikingly unhealthy as in more confirmed cases, where neither the appetite nor digestion appear materially deficient. It is probable that a continuance of irritation in the stomach may so affect the tongue, as to render unnatural secretions habitual to the part, and that these exist independently of the original cause, or may be reproduced by trivial degrees of disorder. Nay, sometimes the cuticle of the tongue seems to have lost its transparency, and to become permanently white, in consequence of continued irritation.

After making the allowances, which such circumstances require, we may in general be enabled

enabled to detect a disordered state of the stomach by observations made on the tongue; and, as it is of consequence to ascertain such disorder at an early period, when the symptoms are probably slight, this organ should be observed in the morning, when it will be found much furred, particularly at the part next the throat. Its appearance may vary in different parts of the day from varieties in the state of the stomach, depending on the excitement which is derived from food, or a state of irritation arising from too long fasting. The tongues of many persons with disorder of the stomach look moderately healthy during the day, though they have been so much furred in the morning, that it has been deemed necessary to scrape them,

A disordered state of secretion, either as to quantity or quality, will be the natural effect of irritation of a secreting organ. This is evidently the case with the tongue; and we may, with great probability, conjecture that the same consequence also takes place in the stomach. Since the juices of the stomach are the immediate
agents

agents in digestion, that process must be disturbed in proportion as its secretions are deficient or vitiated.

If undigested matter pass from the stomach into the intestines, it can scarcely be supposed that their powers are capable of converting it into chyle; and it may become irritating to those organs in consequence of the chemical changes, which it may then undergo. Animal and vegetable matters experience considerable chemical changes before they leave the stomach; and these changes are likely to increase in proportion to the time during which they are detained, unless counteracted by the powers of the digestive organs, powers which seem chiefly to reside in the fluids which are secreted into them.

The extent of the power which the intestines possess of converting the substances contained in them into chyle, or of preventing chemical changes, is unknown. It is probable that much unassimilated matter is absorbed by the lacteals, when the digestive powers fail in
their

their functions. This is demonstrably the case in diabetes, where the vegetable matter floats in the serum of the blood, rendering it turbid, and afterwards combines so as to form sugar in its passage through the kidneys. The strong odour, which various kinds of food impart to the urine, proves also the indiscriminate manner, in which different substances are absorbed from the intestines. May not a turbid and fetid state of the urine very frequently arise from a similar cause; *viz.* from the imperfect action of the digestive organs, in consequence of which, unassimilated matter is taken up by the lacteals, and afterwards separated from the blood, so as to impart these qualities to the urine? It may be reasonably conjectured that the same powers, by which the kidney converts the old materials of our body into that peculiar modification of animal matter, which is dissolved in the water of the urine, and which has been called by the French chemists *urée*, may also enable it, in a healthy and vigorous state, to dispose of much unassimilated substance in a similar way. The further consideration of this subject would, however, lead to

to a discussion foreign to the purpose of the present paper: it will be sufficient to remark at present, that the state of the urine may afford assistance in ascertaining the existence of disorder of the digestive organs, and in indicating its nature. It has been already mentioned, in the brief account of the symptoms, that the urine is frequently turbid. It should, however, also be observed, that the quality of the urine much depends on the state of the nervous system. It is frequently, in the disorders of which I am speaking, pale-coloured and copious, which is probably owing to a state of nervous irritation, such as exists in hysteria. It is not improbable that disorders of the digestive organs, by causing the frequent secretion of unnatural urine, may produce irritation, and subsequent disease of the kidneys.

Modern physiologists seem to agree in the opinion that the *succus gastricus* is the agent, by which digestion is effected; but they are not so unanimous as to the immediate cause of chylification. It is not improbable that the *succus intestinalis* is a principal agent, although
its

its qualities have not yet been enquired into; for, indeed, the investigation would be attended with difficulties almost insuperable.

Since the bile and pancreatic liquor are poured into the intestines at a small distance from the stomach, it is natural to consider these fluids as useful in effecting the change, which the alimentary matter undergoes in the small intestines, namely, its conversion into chyle. The chyme, or aliment digested by the stomach, being viscid, the pancreatic juice has been considered as an useful and necessary diluent.

The uses of the bile have of late much engaged the attention of physiologists. Mr. Hunter observed that it did not seem to incorporate with the chyle; and it certainly cannot do so, and retain its own nature, since its colour and taste are so intense, that it would impart these properties to the chyle, if mixed with it in the smallest quantity. The difficulty of conceiving that the two fluids can be agitated together by the peristaltic motion of the intestines,

tines, without becoming incorporated, has led to an opinion that the bile may combine with the alimentary matter, and lose its original properties; but nothing of this kind is ascertained. Fourcroy thinks that the alkali and saline ingredients of the bile may combine with the chyle, and render it more fluid, while the albumen and resin may combine with the excrementitious matter. It is, indeed, evident that the bile combines either totally or partially with something separated from the chyle, and exists formally in it, and in a state of health uniformly dyes it of its peculiar colour; and therefore it has of late been supposed that the bile may serve to purify the chyle, by precipitating and combining with its feculent parts*.

It has been said in the brief and general recital that has been given of the symptoms,

* In the enquiry into the probable uses of the bile, it ought to be observed, that in many persons, in whom that secretion is either for a considerable time wholly suppressed, very deficient, or much depraved, it does not appear that the nutrition of the body is defective.

which

which characterize disorder in the chylopoietic organs, that the stools are of an unnatural colour and odour. Medical men entertain various opinions respecting the colour of the fæces: to me this property seems generally to depend on the kind and quantity of the bile. All the secretions, which are poured into the alimentary canal, except the bile, are colourless or white; if, therefore, this fluid were wanting, the residue of the aliment would be of the colour, which might be expected to result from some of its undigested parts combined together. When, for instance, the secretion of bile is stopped by the irritation of teething in children, whose diet is chiefly bread and milk, the fæces are white; when this secretion is obstructed in adults, the stools are pale like whitish-brown paper.

In cases of disease, however, coloured secretions may take place from the bowels. I have known instances, in which a fluid like coffee-grounds in colour and consistence was vomited; and a similar matter, of darker colour and of an offensive smell, was discharged
in

in great quantities per anum : and I have seen green bile mixed with these discharges. I have examined the bodies of persons who died of such attacks, and have found the lining of the alimentary canal highly inflamed, and apparently tending to mortification throughout its whole extent, without there being any disease of the liver. I am, therefore, fully aware that the fæces may be coloured by diseased secretions from the bowels themselves ; but, in my opinion, they very rarely derive their colour from this cause. Further ; an unhealthy colour of the fæces may be attributed to some degeneracy in the quality of the alimentary matter ; such as may be supposed to take place when the digestive organs fail in the performance of their offices, and different alimentary substances are in consequence detained in the bowels, where they may pass through chemical decompositions and re-combinations. But, though I am inclined to allow the full operation of these causes, the following reasons lead me to believe that the colour of the fæces generally depends on the kind and quantity of the bile. In the natural
state

state of the digestive organs, when there is no peculiarity of diet, and no medicine is taken, the bile alone colours the residue of the food. The fæces voided during a state of disorder of the digestive organs are sometimes partially coloured; which circumstance cannot be well accounted for upon any other supposition than that of an irregular secretion of the bile. Fluids secreted from the intestines do not usually enter into combination with the fæcal matter, but appear distinctly when excreted. Thus we find mucus and jelly discharged from the bowels, unmixed with the fæces. Medicines which affect the liver produce a very sudden change in the colour of the fæces. Small doses of mercury, without any alteration of diet, sometimes change the stools immediately from a blackish to a light yellow colour, which indicates a healthy but deficient secretion of bile.

Healthy bile in the human subject is generally of a deep yellow brown colour; the brown seems to be the result of the yellow colour concentrated. It appears to me to be

be of the colour of wetted rhubarb; for, if a small portion of either of these substances be put into a large quantity of water, they will dye it of a bright yellow colour, which is actually the colour of these substances, yet it is so concentrated in the mass as to appear of a deep brown. Sometimes, indeed, we find green bile in the gall bladder, when the liver is not diseased. I cannot, however, but think that the natural colour is a yellow, so intense as to appear brown. Green bile is usually poured out in circumstances, where there is evident disorder of the digestive organs; and we cannot well suppose that there are two kinds of healthy bile. The quantity of this fluid should be such as completely to dye the excrement of its peculiar colour. By attending, therefore, to the colour of the fæces, the kind and quantity of bile, which the liver excretes, may in general be ascertained.

The colour of the alvine excretions in these disordered states of the viscera is various. Sometimes they appear to consist of the residue of the food, untinged in the least degree with bile,

bile. Sometimes they are of a light yellow colour, which denotes a very deficient quantity of healthy biliary secretion; they may also be of a deep olive, of a clay brown, and of a blackish brown; all which shew a vitiated state of the biliary secretion.

Any kind of brown, which dilution will not convert into yellow, I should consider as unhealthy, since the colour of healthy bile is a bright yellow, which by concentration appears brown.

Such are the circumstances which I have collected from my own observation, and the reports of others, relative to the alvine excretions, in the disorders which have been described.

I have dwelt thus particularly upon the subject of the biliary secretion, from a belief that its quantity and quality can, in general, be ascertained by inspection, and will therefore serve to indicate the presence of disorder. Whether the foregoing opinions be correct or
not

not, it will, I think, be generally granted that the state of the excretions from the bowels commonly indicates the healthy or disordered state of those organs.

The effects, which medicine or diet may have upon the colour of the fæces, ought, however, to be considered. When the food is coloured, and this colour is not altered by digestion, it will, of course, appear in the fæces; hence if it should be thought desirable to know accurately the state of the biliary secretion, it would be right to restrict patients to a diet that is not likely to colour the fæces. The green colour of vegetables tinges the fæcal residue of the food. Steel also is known to influence the colour of the fæces. It should also be remarked that the exposure of the fæces to air after their expulsion, will, in some instances, cause a considerable alteration in their colour. In our endeavours, therefore, to ascertain whether the liver is performing its office rightly, by observing the colour of the fæces, attention should be paid to the circumstances which have been mentioned,

left we should be deceived, in consequence of such inattention.

I conclude this review of the opinions entertained respecting chylicification, by observing that if the succus intestinalis be an agent in this function, disorder of the intestines is likely to affect its secretion, and thus impede this second important part of the process of assimilation.

The residue of the alimentary matter, mixed with the bile, passes from the small into the large intestines, and there undergoes a sudden change; it acquires a peculiar fetor, and becomes what we denominate fæces. This change is so sudden, that it cannot be ascribed to spontaneous chemical alterations, (which would be gradual) but to some new animal agency. If the contents of the small intestines at their termination, and of the large at their commencement, be examined, they will be found totally different, even within a line of each other; the former being without fetor, and the latter being in all respects
what

what is denominated fæces. Though chemists then might speak of the fæculent matter of chyle as fæces, yet physiologists would rather apply that term to a change in the residue of the food, which takes place in the large intestines, and which seems to be effected by the animal powers of those organs. The fæces quickly suffer chemical decomposition out of the body, although they often remain in the bowels, without undergoing the same kind of change. Their chemical decomposition is attended with the sudden formation of ammonia; yet if they be examined when recent, they are found to contain acids which ammonia would neutralize. The inference, therefore, naturally arises, that this third process, amongst other purposes, may be designed so to modify the residue of the alimentary matter, as to prevent it from undergoing those various chemical changes, which might be stimulating to the containing organs, as well as injurious to the general health.

In a perfectly healthy state of the digestive organs, probably no chemical decomposition,

even of the fæces, takes place; yet such changes happen, in some degree, without apparently producing any injurious consequences. To chemical changes we may probably attribute the extrication of inflammable air, and the various and unnatural odour of the fæcal matter, which is observable in disordered states of the digestive viscera.

The means by which this modification of the residue of the food, which takes place in the large intestines, is effected, are but little known. Analogy leads us to refer it to the effects of a secretion from the lining of those intestines in which it takes place. Now if this secretion deviates from the healthy standard, in consequence of an irritated or disordered state of those organs, we may reasonably expect a corresponding derangement of the process, by which the residue of the food is converted into fæces,

Having taken this general view of the functions of the chylopoietic viscera, in order to facilitate the forming a judgment relative to those

those circumstances which indicate their derangement, I return to speak more fully of that affection of them, which I have described, as arising in surgical cases from the irritation, which local disease or morbid poisons produce upon the sensorium. This subject, it must be acknowledged, is very important, if it can be shewn that disorders of the digestive organs are the cause of a great number of other diseases. The enquiry would then not only lead us to discover the source of many disturbances of the general health, which originate in those of the digestive organs (for patients have no suspicion of any disorder existing in them), but would also lead to the prevention of many secondary diseases of a more vexatious and sometimes of a more fatal nature, than those from which they originated. If the tongue be furred at its back part in the morning, when there is no fever, and when the patient has taken no stimulating or indigestible food the preceding night, it is reasonable to infer in general that the state of the tongue is owing to its participating in the irritation of the stomach. Such participation produces an

alteration

alteration in the secretions of the tongue; they are either deficient in quantity, or vitiated in quality; and it is not unreasonable to suppose that the secretions of the stomach deviate in like manner from their healthy state. A state of irritation in any secreting surface is, indeed, likely to be attended with the same consequences. It is, therefore, fair to infer that, when a general disorder of the digestive organs takes place, those fluids, which produce the changes which the food undergoes in them, are deficient or depraved, and consequently that digestion and the subsequent processes must be but imperfectly performed. The liver is likely to participate in the disorder, and the biliary secretion is either diminished or vitiated. This circumstance admits of ocular demonstration; and I have, therefore, considered it as an evidence of a more or less general disorder of the digestive organs. A very reasonable objection may, however, be made to considering the disorder of the functions of the liver as a criterion of those of the stomach and intestines; since the liver is independent of the latter organs, and may be, as will presently

sently be mentioned, the subject of a disorder confined to itself. In some cases, also, disorder of the alimentary canal may take place, without disturbing the functions of the liver. Still, in general, disorders of the stomach and bowels affect the functions of the liver; and the state of the biliary secretion affords a very useful evidence of a more or less general disorder of the chylopoietic viscera, and should excite our attention to investigate its kind and degree. This disorder, which has been described, must also, I think, be considered as connected with a state of weakness of the affected organs.

It is said, in the recital of the symptoms denoting disorder in the digestive organs, that the fæces are generally deficient in quantity. This circumstance may be accounted for in various ways. It may be supposed that the bile being deficient in quantity, or of an unhealthy quality, may not precipitate the usual proportion of fæculent matter from the chyle. Persons whose bowels are lax, and do not appear to be deficient in their action of carrying downwards the fæculent matter, void it daily

daily in deficient quantities. It may be supposed too that, either from the deficiency of bile, and consequent want of excitement, or from the effects of disorder, a torpid state of the bowels may exist, which causes them to carry downwards the fæculent matter in small quantities. The circumstance may cause a greater absorption of the fæces than what is natural, or an accumulation of them in the colon*.

That the digestive organs in general are affected, in the cases alluded to, is most evident; but I am aware that many varieties of disorder may be included in the general description of the symptoms, which I have given. Future observations may lead to further distinctions; but I see no impropriety at present in speaking of the disordered state as general; since no material disorder can take place in one of the digestive organs, without disturbing the functions of the others. When digestion is imperfectly executed, the functions of the intest-

* The cases related by Doctor Hamilton appear to shew that such accumulation sometimes takes place. See his Treatise on the Effects of purgative Medicines.

tinal canal will soon participate in the disorder of the stomach. Under these circumstances, the secretion of bile will also probably become irregular. Should disease commence in the large intestines, as about the rectum, it disturbs the functions of the stomach, and secretion of the liver, and becomes augmented in its turn by its sympathy with these parts. Should the liver be disordered in the first instance, the stomach and bowels may not immediately sympathize, although they will probably soon become affected.

I feel further warranted in considering the symptoms, which have been recited in the former part of this paper, as arising from a general disturbance of the functions of the digestive organs, from contemplating the effects of blows on different parts of the belly, which do not seem to have injured the structure of any single abdominal viscus, but which yet produce effects denoting a general disorder of the whole of these organs. The symptoms have varied in severity in proportion to the violence of the blow which had been received. In the cases

cases which were the consequence of the more forcible injuries the symptoms were, a furred tongue; great vomiting, so that the stomach could retain no food; difficulty of affecting the bowels by medicine; great fever; and even delirium. Indeed, all those effects were produced, which I have represented as arising from vehement local irritation of remote parts of the body. The disorder has generally terminated by a profuse discharge of black and fetid stools, after which the patient has perfectly recovered. On the contrary, where the symptoms consequent on the blow have been less violent, so as not to claim such strict attention, the disorder has continued. Persons who had been previously in perfect health, have become hypochondriacal, and have had all those symptoms of disorder of the digestive organs, which have been already enumerated as arising from a less degree of local irritation, with such consequent diseases as originate from such disorder, and which will be mentioned in the subsequent part of this paper.

In order to enquire more particularly into the nature of this disorder of the digestive organs,

organs, I have examined the bodies of a considerable number of persons who have died of cancer, lumbar abscesses, and other great local diseases. I knew that these patients had their digestive organs disordered in the manner that I have described, and that in many of them the secretion of bile had been suppressed for a great length of time, and, when it was renewed, that it was very deficient in quantity, and faulty in quality: yet, on dissection, no alteration was discovered in the structure of the chylopoietic viscera, which could be decidedly pronounced to be the effect of disease. It naturally excites surprise, that such a state of irritation, and imperfect performance of the natural functions of these parts should exist for so long a time, as in many cases it is known to do, without producing organic disease; still I believe it may be set down as an axiom, and which has been verified by every observation which I have made, that a state of irritation naturally leads to those diseased actions, which produce an alteration of structure in the irritated parts.

However,

However, where the disordered state of the bowels had been of longer duration, I have found the villous coat of the intestines swollen, pulpy, turgid with blood, and apparently inflamed, and sometimes ulcerated; and these appearances have been most manifest in the large intestines. Having observed repeatedly in dissections of these cases, that the large intestines were more diseased than the small ones, it occurred to me, that the fact might be accounted for in the following manner: If digestion is incomplete, the undigested food must be liable to chemical changes, and the products resulting from this circumstance, are likely to be most stimulating to the large intestines. Indeed, in advanced stages of this disorder, mucus and jelly tinged with blood are discharged, and it seems probable that a kind of chronic dysentery may be induced.

In some instances, where the disorder had existed for many years, the bowels have been diseased throughout their substance; the internal coat being ulcerated, and the peritoneal covering

covering inflamed, so that the convolutions of the intestines were agglutinated to each other. Here the liver also was much diseased, being tuberculated in every part. Such is the result of the information which I have obtained by dissection.

I have represented this disturbed state of the chylopoietic organs in surgical cases, as excited frequently by disorder of the sensorium, produced by great local disease, or from a similar disorder, occasioned by the absorption of morbid matter. The same affection, characterized by the same symptoms, occurs very frequently as an idiopathic complaint. The causes which have appeared to produce it, in the cases which have fallen under my notice, are improprieties of diet, a sedentary life, impure air, anxiety, and too great exertion of the mind or body. It is indeed no wonder, that the continual irritation of our unnatural diet, should, by degrees, produce such disorder of the digestive organs as I have described.

Whatever

Whatever *may* be the origin of this disease; whether it occur as a consequence of nervous disorder, or assume an idiopathic form, it uniformly disturbs the nervous system, when once established. When it is sympathetic, the effect becomes a cause, and maintains that disorder of the nerves, by which it was originally produced.

In the general enumeration of the symptoms, several circumstances have been omitted which occur occasionally, and which may, when the subject is better understood, denote peculiarities in the disease, and corresponding peculiarities in the medical treatment, which is required for its cure. I shall here notice a few of these. The appetite is sometimes moderately good, when the digestion is imperfect; and the latter may not be deficient, although the disease may still exist. In some instances indeed, the appetite is inordinate. Tenderness of the epigastric region on pressure, is not always an attendant, even on advanced stages of the disease. The bowels are alternately

nately costive, or lax even to purging*. The urine is sometimes pale-coloured and copious like that of hysterical patients.

A disorder in the functions of the stomach and bowels, similar to that which has been here described, may exist without the functions of the liver being disordered; and again, the secretion of bile may be interrupted, without the digestive processes being materially impeded. Such circumstances may happen occasionally, but they are not ordinary occurrences, and should be considered as exceptions to general rules, which do not militate against their common operation.

Accurate attention to the subject, especially in medical cases, may lead to important subdivisions, which I have not yet been able to make. But when I find that irritation of the

* I have known persons whose bowels were ordinarily costive, and whose general health was much deranged by disorder of the digestive organs, though they were unconscious of its existence, feel pleased that their bowels were in a comfortably lax state; yet on observing the stools, they resembled pitch in colour and appearance.

nervous system, however it may originate, deranges the chylopoietic organs, and affects the stomach, bowels, and liver, apparently at the same time, I think it fair to infer, that these organs are equally operated on by the same cause. Disorder of the brain may affect the chylopoietic organs; and it is well known that this influence is reciprocal. The stomach is said to be chiefly concerned in producing these effects; but the causes of the sympathetic affection are probably more general. A fit of passion has produced jaundice; and the irritation of teething in children frequently suspends the secretion of bile; so that the stools are not in the least degree tinged with that fluid. If the head can thus affect the liver, it is reasonable to infer, that the liver may reciprocally affect the head. It is very difficult to form an opinion relative to this subject; for, in the instances which have been mentioned, the affection of the liver may take place, only because it forms a part of the digestive organs, and not from a direct sympathy existing between it and the head. Still, however, I do not think it unreasonable to conclude that irritation

tion of the other chylopoietic organs may, as well as that of the stomach, disorder the source of sensation.

In the preceding pages, I have related facts which seem to warrant certain conclusions, that I shall presently mention. As the narrative has been broken into many parts, I think it right to point out the inferences, which may be fairly drawn from the facts already stated, before I proceed to the further discussion of the subject.

1, Sudden and violent local irritation will produce an equally sudden and vehement affection of the digestive organs.

2, A slighter degree of continued local irritation will produce a less violent affection; the ordinary symptoms of which are recited in page 18.

3, This affection is a disorder in the actions, and not a disease in the structure of the affected organs; although it may, when long
E continued,

continued, induce evident diseased appearances, both which circumstances are proved by dissections.

4, A similar disorder of the digestive organs occurs without local irritation, and exists as an idiopathic disease; in which case, it is characterized by the same symptoms.

5, There are some varieties in the symptoms of this disorder, both when it is sympathetic and idiopathic. These are enumerated in page 46.

6, The disorder probably consists in an affection of all the digestive organs in general, though in particular cases, it may be more manifest in some of those organs, than in others.

7, That disorder of the digestive organs frequently affects the nervous system; producing irritability and various consequent affections. This is proved by the effects of blows on the belly, in persons previously healthy; and the
same

same consequences are often observed from whatever cause the disorder originates. At the same time weakness must be produced from imperfect digestion; and from the combination of these causes, *viz.* weakness and irritation, I deduce the origin of many local diseases, and the aggravation of all, as will be seen in the relation of the cases.

Nothing in pathology is more generally admitted, than the reciprocal operation of disorders of the head and of the digestive organs; yet the exceptions to this general rule deserve to be remarked in a comprehensive examination of the subject. Some persons have great disorder of the digestive organs, without any apparent affection of the nervous system; and even diseases of a fatal nature may take place in the former organs, without affecting the latter. Indeed, if we examine any of the most evidently sympathetic affections, we shall find the same exceptions. An inguinal gland, or the testis, frequently inflames from irritation in the urethra; yet great disease occurs occasionally in that canal, without

producing

producing these apparently sympathetic consequences.

We can never be certain that the stomach and bowels are the only organs disordered, nor even that they were primarily affected. General nervous irritation may have preceded the disorder, or may have been caused by it. The history will generally shew, that the derangement of the digestive organs is secondary. It arises from local irritation, and can be produced only through the medium of the sensorium. When it is idiopathic, it frequently originates in causes which affect the nervous system primarily; such as anxiety, too great exertion of mind or body, and impure air. Sedentary habits and irregularities of diet are causes which probably act locally on the organs themselves. Nervous irritability and weakness are not perhaps susceptible of a direct cure by medicine; but the disorders of the digestive organs are more corrigible by medical remedies. In practice, these require our chief attention; and if the disorders be corrected, all nervous irritation

tion frequently ceases, and health is restored. In many instances the nervous irritation, which has induced the disease, is trivial, and would soon cease, were it not kept up by the reaction of its secondary symptoms.

Whether this disorder of the digestive organs be primary or secondary, it produces irritation in the brain; and thus may cause in many instances actual disease of that organ, as will be stated in the conclusion of this paper. But derangement of the digestive organs arises, in many cases, from established nervous disorder; indeed there is often reason to suppose that it is dependent on, or connected with, actual disease of the brain. In such cases, the correction of the disordered functions cannot be accomplished; and even if it were practicable, it would not cure the disease. It is however highly necessary and advantageous to attend to the disorder of the digestive organs, where it is only a symptom of nervous disease. The relief of the former will often mitigate, though it cannot cure the latter.

I shall,

I shall, in the next place, represent the general circumstances, relative to the health of those persons who have local diseases, apparently caused or maintained by disorder of the whole system. They generally declare that they are in good health, except that they feel disturbed by their local complaints; yet they are found, on enquiry, to have all those symptoms, which characterize a disordered state of the digestive organs. The mind is also frequently irritable and despondent; anxiety and languor are expressed in the countenance. The pulse is frequent or feeble, and slight exercise produces considerable perspiration and fatigue. These patients are sometimes restless at night, but when they sleep soundly they awaken unrefreshed, with lassitude, and sometimes a sensation, as if they were incapable of moving. Slight noises generally cause them to start, and they are, to use their own expression, very nervous. These circumstances seem to me to indicate weakness and irritability of the nervous and muscular systems; which, in addition to the disorder of the

the

the digestive organs, that has been described, are the chief circumstances observable relative to the general health of those patients, whose cases are related in the following part of this paper. By correcting the obvious errors in the state of the digestive organs, the local disease, which had baffled all attempts at cure by local means, has speedily got well, and the patient has acknowledged that such an alteration has taken place in his general health, as excites his astonishment.

The connexion of local disease with general disorder has been often remarked; it has been formerly attributed to impurity of the fluids; a theory which is not irrational. Imperfect digestion must influence the qualities of the blood, and all parts of the body may be affected from this source. But the modern explanation of these phænomena, by means of sympathies, is probably preferable. Afflicting intelligence will destroy the appetite and produce a white tongue in a healthy person; and a blow on the stomach disorders the head. These phænomena

nomena take place independently of the blood, and can only be explained by admitting that disturbance of one organ immediately affects another.

The writings of the ancients abound with passages, in which diseases are attributed to affections of the abdominal viscera, and the same fact has been noticed by several of the moderns. The French surgeons appear to be very solicitous to keep the bowels in a cool and tranquil state; and Deffault ascribes the origin of erysipelas to a bilious cause. The German surgeons, Richter and Schmucker, attribute many local diseases to gastric affections; and in Italy, Scarpa views the subject in the same light. The English practitioners seem to have been less attentive to this class of disorders; insomuch that Fischer, a German, who published an account of the state of medicine in this country, expresses his surprise that the English should be so little acquainted with gastric diseases. I know not exactly what ideas these gentlemen may annex to the terms gastric and bilious disorders,

ders, since they do not particularly describe them. I have represented the subject in the foregoing pages, as it has appeared to me on the most attentive examination. There are circumstances which denote irritation of the digestive organs to exist, and deficiency or depravity of their secretions; and the disorder exists in every gradation, between the slightest and most violent affection, without any evident difference in its nature.

The result of all the observations, which I have been able to make, relative to this subject, has induced me to believe that the disorder of the digestive organs, caused by the various circumstances, which have been recited, consists in a weakness and irritability of the affected parts, accompanied by a deficiency or depravity of the fluids secreted by them, and upon the healthy qualities of which, the right performance of their functions seems to depend. The opinion that the disordered state of the digestive organs, which has been described, consists in a weak and irritable state of them, attended by
a

a deficiency or vitiated state of their secretions, is deduced immediately from the consideration of the symptoms, and confirmed by all the collateral evidence, which we can collect. The duration of the affection, without fatal consequences, shews that it is a disorder of functions, and not a disease of structure. Dissections confirm the opinion. Blows, which excite general irritation of the digestive organs, produce also the symptoms which characterize the like disorder, when it arises from nervous irritation, or is excited by intemperance. I doubt not but every one will, on reflection, consider the disorders of the digestive organs to be of the first importance, and will perceive the propriety of diligently enquiring into their nature that we may know them when they exist, and that our attempts to remedy them may be conducted on rational principles. This consideration will, I trust, vindicate me in employing so much time in an investigation which, perhaps, some may consider as tedious and unprofitable.

It

It is generally admitted, that disorders of the chylopoietic viscera will affect the source of sensation, and consequently the whole body; but the variety of diseases which may result from this cause, has not been duly weighed and reflected on,

It may produce in the nervous system an abolition of the functions of the brain; or a state of excitation, causing delirium, partial nervous inactivity and insensibility, or the opposite state of irritation and pain. It may produce in the muscular system, weakness, tremors, and palsy; or the contrary affections of spasm and convulsions. It may excite fever by disturbing the actions of the sanguiferous system, and cause various local diseases by the nervous irritation, which it produces; and by the weakness, which is consequent on nervous disorder or imperfect chyli-fication. Or if local diseases occur in a constitution deranged in the manner which I have described, they will become peculiar in their nature and progress, and difficult of cure. Affections of all those parts which have a continuity

tinuity of surface with the stomach; as the throat, mouth, lips, skin, eyes, nose, and ears, may be originally caused or aggravated by this complaint. I must observe, before I proceed to the relation of cases, that such a disorder of the digestive organs as I have described existed in every instance. I do not take upon myself to say that it was the primary cause of the general derangement of the constitution, with which the local disease appeared to be connected; it might have been the consequence, as indeed has been stated in these preliminary observations.

I shall now proceed to mention the plan which I have pursued in the treatment of these disorders, when they have been connected with surgical diseases; and the following cases will demonstrate with what degree of success. I do not feel altogether competent to give full directions, relative to this subject; because I have never attended to medical cases with that degree of observation which would lead me properly to

to appreciate the efficacy of different medicines, when administered either in their simple or compounded forms. The subject is so important, that the public would be highly indebted to any practitioner, who would point out the varieties of these diseases, and the appropriate modes of cure. The method of treatment which I have adopted is simple, and founded on the opinions I have formed, of the nature of the disease, and physiological views of the functions of the affected organs. Believing the disordered parts to be in a state of weakness and of irritability, my object has been, to diminish the former and allay the latter. Believing also that the secretions into the stomach and bowels, upon the healthy state of which, the due performance of their functions depends, were, in consequence of such disorder, either deficient in quantity or depraved in quality; I have endeavoured to excite, by means of medicine, a more copious and healthy secretion.

In conformity to these views of the subject, the patients have been recommended to be particularly

particularly attentive to their diet. The food should be nutritious, and easy of digestion: strong plain broths, animal food of loose texture, milk, eggs, and farinaceous vegetables, are the articles which appear most adviseable. But, as custom and inclination have so great an effect in regulating the actions of the stomach, I have contented myself with recommending patients not to eat any thing, which it was probable that they could not digest. It seems reasonable to suppose that, if the food be properly digested, it will not irritate the intestinal canal; but that, if digestion fails, the animal and vegetable matters will undergo chemical changes in their passage through the long tract of intestines, and thereby maintain a state of irritation in those organs. I have urged patients not to oppress the powers of the stomach by too great a quantity of food, nor to take a second meal, until time has been allowed for the digestion of the first. I have also cautioned them not to let the stomach become irritable by too long abstinence. I have ordered five grains of powdered rhubarb an hour before dinner, with a view of inviting secretions

secretions into the stomach, and of preparing it for the office of digestion. This gentle excitation perhaps induces it to expel any residue of alimentary matter, and creates a kind of artificial appetite; so that persons habitually subject to indigestion experience very considerable benefit from the practice. Where rhubarb has disagreed, columbo has been substituted.

The function of digestion will not, however, go on well, even where these circumstances have been attended to, if the stomach be deprived of a stimulus to which it has been long accustomed. Uneasy sensations will be experienced, denoting, if I may so express it, a discontented state of this organ, and a want of the expected stimulus. It is on this account injurious to restrain those patients from the use of wine who have been in the habit of taking it. A moderate quantity may be allowed after dinner; but strong fermented liquors must be injurious at any other period. It is wrong to stimulate the stomach when it has no task to perform.

A regular

A regular diurnal evacuation of the bowels is particularly necessary, since the detention of the fæces must prove irritating to these organs. Purging medicines sometimes relieve unpleasant sensations; but they do not in general produce even this effect; and all active purges seem to me to increase the disorder. It is natural to suppose that strong stimuli will aggravate the unhealthy condition of weak and irritable parts.

It is difficult, in many cases, to correct the disease by diet or medicine. The bowels are costive for a time, and then fits of purging come on. The former state must be obviated, in order to prevent the latter. Medicines which excite a healthy action of the bowels in one person, are either inert or too active in another. Doses which would have no effect in a state of health, become purgative in this disorder; a circumstance which shews that the bowels are irritable. There are some rare instances of the contrary, in which it is exceedingly difficult to excite the actions and secretions of these viscera. In some cases a diet of

a more vegetable and less stimulating nature, with saline aperients, do good. In others, a more generous diet, and aperients of a warmer kind are beneficial. The object which I have had in view, in all cases, is to excite the peristaltic action of the bowels, without purging; so as to insure the expulsion of whatever ought to be discharged.

In giving purgative medicines I have endeavoured to combine them, so as to excite and strengthen at the same time. Rhubarb, columbo, and kali vitriolat. have been given together; or an infusion of gentian with fenna or tincture of rhubarb. When the infusion of gentian with fenna has been given, it has been prescribed, in the subsequent cases, according to the following formula:

℞. Infus. gentian. comp. ʒj.

Infus. fennæ, ʒij.

Tinct. cardamom. comp. ʒj.

Fiat haustus, bis quotidie, vel pro re natâ, sumendus.

It is sometimes necessary to increase the quantity of infusion of fenna. I have found in some cases, that the purgative medicines and spices dissolved in spirit and water, have answered better than any thing else, in producing a sufficient, but not too copious discharge from the bowels. Equal parts of compound tincture of rhubarb and fenna is the formula to which I allude. When irritation in the large intestines has been denoted by the mixture of mucus and jelly with the fæces, and sudden and urgent calls to void them, I have advised oily and mucilaginous medicines as aperients; as castor oil, mixed with a large proportion of mucilage. My sole object, however, has been to regulate the state of the bowels; and when they have been regular without medicine, I have rarely recommended any.

At the same time, I have not been inattentive to the error in the biliary secretion, which exists in the greater number of these cases. I have endeavoured to correct this error by the administration of such small doses
of

of mercury, as do not irritate the bowels, and are not likely to affect the constitution, even though persevered in for a considerable time. In this state of the digestive organs, calomel, in small quantities, sometimes proves irritating. I have combined it as in Plummer's pill, and have given one grain every other night. Where this dose produced uneasy sensations, or acted as an aperient, five grains of the pil. hydrarg. were substituted in its place; and even this quantity has been diminished in some cases. When it appeared necessary, on account of the biliary secretion, and when the calomel did not irritate the bowels, I have increased the dose. The relief, which arises from the increase or correction of the biliary secretion, in the majority of these cases, shews how much the liver is concerned in causing or aggravating the symptoms in these diseases.

There are numerous and undoubted proofs of the utility of mercury, in correcting and augmenting the biliary secretion; but the mode of administering it has not, perhaps,

been sufficiently attended to. I have known patients, who have voided nothing but blackish stools for some months, discharge fæces of a light yellow colour, denoting a healthy, but deficient secretion of bile upon taking such small doses of mercury. The effect of this change on the constitution and spirits, has been surprisingly great; though the state of the stomach did not appear to be altered. The use of mercury by inunction, sometimes acts beneficially, in correcting the biliary secretion; but, if the constitution be irritated, and weakened by that medicine, the actions of the liver are disturbed; and the digestive organs in general, become deranged. Mercury in my opinion, acts most certainly, and efficaciously, when taken into the bowels; and a much smaller quantity will suffice, when its application is in this manner rendered chiefly local.

Although experience has made me think very highly of the efficacy of small doses of mercury, in exciting and correcting the biliary secretion; yet it ought to be mentioned, that

that in some few cases, this medicine fails to produce its usual effects, and that the biliary secretion becomes healthy without its administration.

Facts are wanting, to enable us to ascertain, whether mercury ameliorates and augments the secretions of the other digestive organs, as it does that of the liver. The stomach frequently appears worse during its employment, whilst the stools are considerably better; I have, in such cases, discontinued the medicine, and returned to it again if the state of the liver made it necessary. When benefit is obtained from a small quantity of medicine, we naturally expect an increased advantage from an augmented dose; this is so natural an error, that an admonition against it appears necessary. I have observed in some instances, where small doses of mercury have unexpectedly affected the mouth, that considerable benefit seemed to arise from this circumstance. Yet it is wrong, in general, to augment the dose of the medicine, so as to create even local irritation in the bowels
by

by it. In the majority of cases the disorder has existed for a long time, and has become habitual; therefore it is not likely to get well suddenly. For this reason, we should adapt our treatment to the more rational expectation of effecting a gradual recovery than a sudden cure. The most judicious treatment will not remedy the disease, if the exciting causes continue to operate; such as improprieties of diet, agitation of mind, sedentary habits, or impure air.

The following cases will afford sufficient testimony of the efficacy of such simple treatment, as I have recommended. In some inveterate cases, apparently depending on established nervous disorder, it has been ineffectual. Under such circumstances, the nervous affection appears to require the principal attention.

When the state of the health required it, or the disease did not yield to the treatment, which I have described, I have referred the case to the physician; under whose direction, benefit has been obtained by medicines of
more

more activity than those which I had ventured to recommend, conjoined with tonics, and those medicines which are usually termed nervous.

In investigating the treatment of these disorders, it is necessary to ascertain, not only what medicine is beneficial, but also what change it produces in the circumstances of the disorder. The administration of a medicine may in one case be succeeded by a discharge of bile, and a striking relief from long-continued and distressful feelings : yet the same medicine may be given in many other instances without the same consequence. Was the change then in this instance accidental ? or must it be attributed to some unnoticed peculiarity in the disease or constitution ?

Bark and steel are not uncommonly given in these diseases : they ought, I think, to be administered in small doses, and never when the tongue is dry ; as they seem to suppress those secretions, which in many cases are already deficient ; and the increase of which
would

would tend to relieve irritation in the affected organs. I mention this opinion, however, rather to account to the reader for these medicines not having been prescribed in the subsequent cases, than from any other motive; as I do not feel perfectly competent to decide upon their degree or kind of utility.

Vegetable diet-drinks appear to me very useful in tranquillizing and correcting disorders of the stomach and bowels, for this is the manner in which they seem to be efficacious in the cure of local diseases. The vegetables prescribed in the different formulæ are so dissimilar, that we can scarcely suppose that they act specifically upon the local disease. Even Sweet-wort has obtained considerable celebrity. When diet-drinks fail to correct the disorders of the digestive organs, they also fail to produce any amendment on local diseases. Such observations have induced me to believe that they have the utility, which I have ascribed to them, of tranquillizing and correcting disorders of the stomach and bowels. It is allowable to form an opinion from such observations,

observations, though I am sensible of their invalidity as arguments to prove its truth.

Whenever circumstances would permit, I have recommended the patients to take as much exercise as they could, short of producing fatigue; to live much in the open air; and, if possible, not to suffer their minds to be agitated by anxiety, or fatigued by exertion. When the disorders, which have been the subject of this paper, have been long continued, they do not admit of a speedy cure; hence attention to diet, air, exercise, and mental tranquillity, are more decidedly beneficial than medicines. Surgeons in London meet with frequent and convincing instances of the efficacy of pure air. Patients under the irritation of a local disease, who scarcely eat or sleep in town, recover their appetite, digestion, and sleep so suddenly on their removal into the country, as to leave no room for doubting, that the change of air has produced this beneficial alteration in their health. The whole of the plan of treatment which is here recommended is so simple, and apparently so inefficient,

inefficient, that its power might reasonably be doubted, did not facts attest its utility. I should not have thought it right to have thus related it in detail, but for the purpose of avoiding repetition in the recital of the cases which are to follow; and also because it seemed right to state as explicitly as possible to the younger part of the profession, what are the curative intentions in disorders of this nature*.

* After I had written the above account of the treatment, which I had found the most successful in the correction of disordered states of the digestive organs, I was much gratified by the perusal of Doctor Hamilton's publication on the Effects of Purgative Medicines. I think there is a great coincidence in the mode of treatment which I have described, and that which is sanctioned by his more extensive experience. He prescribes purgative medicines to act as eccoprotics, to excite but not to stimulate the bowels; and he combines with them generally anirritating doses of mercury.

C A S E S.

SECTION I.

Long before my attention was excited to disorders of the digestive organs, I had remarked that there was a paralytic affection of the lower extremities, resembling that which is produced by a disorder of the medulla spinalis, in consequence of disease of the bodies of the vertebræ. This paralytic affection also appeared to me to vary with the state of the patient's health.

These observations led me to propose a method of treatment, which proved successful in the cases of two young ladies, who were affected in this manner. The issues, which had been ineffectually kept open in the back, were healed; and the state of the health

health in general was amended by attention to diet and medicine, by exercise, and country air. The use of the limbs returned in proportion as the health became established. Such were the observations which I had made relative to this subject, when I met with the following cases.

C A S E.

A young lady, whose stomach and bowels were disordered in the manner already described, became gradually affected with weakness in the lower extremities, and pain in the loins. The pain became at length very severe, and was aggravated in a manner almost insupportable by the agitation of a carriage. This lady could scarcely walk, and gave a description of the state of her limbs, so exactly resembling that which is sometimes consequent to disease of the vertebræ, that I thought it right to examine the spine. I struck with my finger the spinous process of each lumbar vertebra, and upon touching one in particular, the patient complained of great pain; but
pressure

pressure on the contiguous vertebræ also caused much uneasiness. Under these circumstances I placed a blister on each side of the spine, and kept up a discharge from the surface by dressing it with savine cerate. These means, with rest, relieved her sufferings; but, as her health declined, she went into the country, where she soon became much better. The blisters were now suffered to heal, and she shortly afterwards had recovered so much, as to take long rides on a rough-going horse. She returned from the country in good health, and was both muscular and fat. About a year afterwards she was so ill, in the same way, that she wished to have issues made in the back: but I would not consent to this, from knowing that the bone could not be diseased. Of this return of pain in the back, and weakness in the lower extremities, she again got well, upon amendment of her health in general. Since that period, now five years ago, she has been, sometimes, very well, at others, pale and emaciated; and these changes have corresponded with the natural or deranged state of her bowels.

CASE.

C A S E.

I was consulted on the case of a young lady, who had been blistered severely for a pain at the bottom of her back, which was chiefly felt at the junction of the ilium and sacrum. It was supposed, that disease had taken place in the bone from some injury, and had affected the sacral nerves: for she could not stand without support, so great was the weakness in the front of the thighs. There was no projection of the vertebræ. If the sacral nerves had been affected, the leg ought to have suffered the greatest share of pain and weakness; but that was not the case. She had no appetite; her tongue was greatly furred; her bowels costive; and pulse generally 110. I strongly objected to making issues in this case; but as the patients' sufferings increased, it was done. She went into the country, and died in four or five months. The bone was found, upon examination, to be perfectly healthy; but the mesenteric glands and lungs were diseased, and it was concluded that she died of consumption,

sumption. I could not learn the state of the liver, nor do I know whether its appearances were particularly attended to.

C A S E.

A young lady had been confined about six months to her chamber, on account of pain in the loins, and weakness of the lower extremities, which prevented her from standing or walking. The weakness of her limbs had been gradually increasing for a year and a half, before it became so bad as to make her incapable of moving about. Issues had been kept open, during that time, on each side of the spine; but, as the patient got no better, my opinion was asked, respecting the seat of the disease of the bone: for it was concluded, that the issues had only failed from not having been made in the right place. I found, upon inquiry, that the chief seat of her pain was in the posterior edge of the liver. Indeed, that viscus was enlarged, so as to be felt in the epigastric region, and so tender as to cause
much

much pain on being compressed, at any part, along the cartilages of the ribs. Her tongue was furred; her appetite deficient; digestion bad; bowels costive; and stools black, or else untinged with bile. I had no hesitation in advising, that the issues should be discontinued; and that attention should be chiefly directed to rectify the disorder of the chylopoietic viscera. Mild mercurials and aperients were given, by which, with other means, she got materially better in health, and was able to walk about as well as ever. The gentleman who attended this patient, met me accidentally, two months afterwards, and informed me that she was quite well. I said, that as her disease had been a long time in forming, it could hardly be expected that she should recover so suddenly. He considered this expression as implying some doubt of his accuracy, and, therefore, sent the patient to me in the morning. She came from Lambeth, in a hackney coach, and looked very well: she observed, that long before her confinement, she could not have borne the agitation of a carriage; but that now, she did not feel it.

I have

I have been informed, by several intelligent students, that similar cases have occurred in the hospital: as I was not a witness of these, I shall not relate them. I shall, however, mention one, which I saw, and superintended myself; although it is, in some measure, imperfect, as the patient quitted the hospital suddenly, without our knowing where he went to.

C A S E.

Thomas Crighton, aged twenty-three, was admitted into St. Bartholomew's Hospital, on account of a palsy of his limbs. About a year before, while the use of his limbs was yet unimpaired, he was attacked repeatedly with violent pain in his bowels; uniformly preceded by costiveness, and, generally, terminated by a copious discharge of loose, fetid, black stools. The relief afforded by the diarrhoea was speedy and uniform. In the course of six months his lower extremities became affected with occasional twitchings, and he found that he could not regulate their motions in walking: this increased to such a

G

degree

degree as to make him incapable of taking any exercise. He had, at the commencement of his illness, a confusion of vision; and a constant and violent pain in the head. The former symptom increased so much, that he could discern no object distinctly; a candle, for instance, although held near him, appeared as large as the moon. The sensation of his lower extremities continued perfect; but the actions of the bladder were no longer under the controul of the will; the urine sometimes flowing involuntarily; and, at others, being retained for some hours, with considerable pain. He, afterwards, began to lose the use of his upper extremities: the left hand and arm were more affected than the right; but there was no difference in the affection of the leg of the same side. His speech, also, became much impaired; he hesitated and faltered considerably, and the tones of his voice were irregular, so that, at length, he could scarcely make himself understood. At the time of his admission into the hospital, there was an entire loss of voluntary motion in the lower extremities, and a great diminution in
that

that of the upper. The bowels were deranged; there was constant head-ache; the speech was very indistinct; and vision so imperfect, that he could not read the largest print. An issue was made in the neck, and some medicines were prescribed, under the direction of the physician. As the treatment did not prove beneficial, I was desired to examine the spine, and found such a curvature and projection of the spinous processes of the upper lumbar and lower dorsal vertebræ, that, I thought, the bodies of those bones must be diseased. I was, therefore, inclined to attribute the paralysis of the lower extremities to this disease of the spine; and, consequently, directed, that issues should be made on each side of the projecting vertebræ. As this supposition would not account for the paralytic affection of the parts above, and as the bowels were deranged, I ordered two grains of calomel with eight of rhubarb, to be taken twice a week, and some infusion of gentian with fenna, occasionally. After using these medicines, for about three weeks, his bowels became regular, the biliary secretion

healthy, and his appetite good. He could move his hands and arms nearly as well as ever; and his eye-sight was so much improved that he could read a news-paper; indeed, it was nearly well. The functions of the bladder were completely restored*; his speech became articulate; and, his general health, in every respect, much improved. He remained in the hospital about two months, but with very little amendment in the state of the lower extremities, when his friends suddenly removed him, on account of some disagreement with the nurses, and I was unable to learn whither they had conveyed him.

The history of the preceding case was taken by Mr. Cruttwell, who had been for several years a most industrious student at the hospital, and whose accurate observation and extensive information induce me to place entire confidence in any statement of a case which I

* I have seen several cases which induce me to believe that the weakness of the sphincter vesicæ, which occasions young persons to void their urine during sleep, very frequently arises from the same cause.

receive from him. To that gentleman I am, also, indebted for the following particulars relating to a patient, who died some little time ago in the hospital, and whose body was examined. The dissection serves still further to elucidate my present subject.

C A S E.

Elizabeth Griffin, twenty years of age, was admitted into St. Bartholomew's hospital in August, 1805, on account of an inability to move her lower limbs; which was supposed to originate from a disease of the spine. On examination, however, there were no appearances, which indicated caries of the vertebræ. Her voice was, at times, considerably affected: and she was subject to occasional attacks resembling, in some degree, epileptic paroxysms. The affection of the limbs was liable to considerable variations. At times, as she assured me, she could walk across the ward with very little difficulty; at others, she could not even stand without assistance. Her tongue was extremely, and, I believe, constantly white; her

her pulse natural. Her bowels were, generally, costive, and it was necessary to employ active medicines in order to procure stools, which were always of a dark colour. A slight temporary diarrhœa sometimes happened, and she invariably remarked, that the ease or difficulty with which she could walk, and the pain in her head with which she was troubled, were in exact conformity to the state of the bowels, all the symptoms being relieved by the diarrhœa, and returning as the bowels became again costive. There was an appearance of irritability and languor in the eye, which I have before observed in these cases, and the pupils were generally much dilated. After the patient had continued in the hospital about seven weeks, she was attacked with fever, and died. To this brief account of the symptoms, I now subjoin the dissection.

No diseased appearances were observed in the brain, though it was examined with the most particular attention: neither was there any disease of the vertebræ. No disease, in short, was observed except in the abdominal viscera.

The

The chief morbid appearance, in them, consisted in an ulcerated state of the villous coat of the ilium near to its termination in the cæcum. The ulcers were numerous, and situated where the mucous glands are chiefly found. The internal coat of the large intestines, also, appeared inflamed.

The liver was healthy in its structure. In the gall bladder about one ounce and a half of a light green ferous fluid was found, which had not in the least degree the soapy, or mucaginous feel of bile,

Cases, like those which have been related, are not, if I may judge from my own experience, at all uncommon. They sufficiently prove, in my opinion, that local nervous disorders and muscular debility may arise from a general disorder of the health, in which the digestive organs are generally much affected. This disorder, as has been stated in the preliminary observations, may, sometimes, be the cause, and sometimes the effect, of the nervous affection. In either case, however, its correction

rection is of high importance in the medical treatment of the disease. In the case, beginning at page 79, as well as in that which immediately follows, disorder of the digestive organs must, I think, be allowed to be the cause of the nervous affection, from the sudden and complete cessation of the latter, when the cure of the former was accomplished. Decisive instances like these are particularly valuable; they shew what great nervous disorder may be produced by that of the digestive organs, and consequently how much the latter disorder is likely to aggravate the former, when it occurs even secondarily as its effect. I have seen a considerable number of such cases, which I cannot relate with precision, because I had not sufficient opportunities of observing the patients, to enable me to note the progress of the disease with accuracy.

Of these I can only observe, in general terms, that I have seen several instances of pain, imbecillity, and wasting of the muscles in one of the lower extremities, which were considered as the effect of disease about the
hip

hip joint; yet the event proved that there was no organic disease of that part. The disease was connected with that state of constitution that I have described, and was amended as the health in general improved. I have also seen several instances of wasting of the muscles of one of the upper extremities in children; so much indeed were the muscles shrunk, that the bones and joints could be as distinctly examined as in a skeleton. The local affection in these cases came on suddenly. I lately saw a little boy, who had had this kind of affection of his left arm several years ago, and on whose case I was at that time consulted. The bowels had been violently disordered prior to the paralytic affection, and were, at the time I saw him, in an extremely unhealthy state. I recommended that the chief attention should be paid to correct the errors of these organs, which was in some degree accomplished, and that the arm should be supported by a sling. The arm gradually recovered, and though it is not at present quite so large and strong as the other, yet the difference is so slight, that

that it would not attract the attention of a common observer. About six months ago I saw a little boy very similarly circumstanced, and in his case, the arm quickly recovered its powers of motion, as the state of the digestive organs became healthy.

I have also seen cases in children, in whom, after some general disorder of the health, accompanied by derangement of the stomach and bowels, a muscular affection of the extremities has taken place, like that which produces the varus and valgus; I mean a predominance of the actions of some muscles over others, producing distortion of the limb. I have seen this happen sometimes in one, sometimes in both the lower extremities. I have also seen the arm similarly affected.

That the local symptoms in those cases, as well as in those which have been more fully detailed, arise from a nervous affection of the brain, and not from any cause acting locally on the nerves of the affected part, will, I believe, on due consideration be granted.

I suspect

I suspect however that some persons may hesitate to admit such an opinion, from the belief that disorder of the brain must operate generally, and not partially, on the nervous system. Perhaps the contemplation of the consequences of slight apoplectic effusions in the brain, may assist us in forming just notions on this subject. Such slight effusions of blood, occurring in various parts of the brain, have been known to paralyze one leg or one arm, or the muscles of the tongue, or of one half of the face, without affecting the rest of the nervous or muscular system.

Another opinion which I wish to be considered is, whether, when there is considerable and continued paralysis, there must necessarily exist some pressure or organic disease in the brain. That this exists in many instances is undoubted; but the number of cases in which the paralytic affection is merely nervous, and independent of visible disease, is in my opinion very considerable. The instances which have been related warrant this conclusion,

conclusion, and shew such cases to be more frequent than is, I believe, generally supposed. When there is organic disease of the brain, the case seems to be very hopeless; and probably no considerable alleviation of the symptoms will take place, by that attention to the state of the digestive organs which I have recommended. In dubious cases, and such, on the first examination of them, the majority of these occurrences will probably be, it seems right to try the effect of correcting disorder of the digestive organs, with a view to alleviate nervous irritation, before we proceed to those severer methods, which the belief of the existence of organic or vascular disease in the brain would induce us to institute. For if blood-letting and counter irritation be employed, in order to diminish vascular action; or if mercury be employed to some extent in order to induce the absorption of deposited substance; these measures must aggravate that disorder of the general health, upon which, in many instances, the nervous affection depends.

My object, in the recital of the foregoing cases, is to point out a cause of local paralysis, which from its locality would, I suspect, be generally attributed to some local disorder of the nerves of the affected part. Such an opinion of the nature of the complaint would consequently lead to an erroneous treatment. If my opinion of the nature of these cases be correct, they can only be successfully treated by means which operate upon the constitution in general. I have particularly recommended that our efforts should be directed to correct any errors that may exist in the functions of the primæ viæ, for reasons that have been stated in the preliminary observations. Of the efficacy of such endeavours I have seen many more instances than I have brought forward; indeed the propriety of such attempts seems so obvious, that I doubt not but they will be made, and the effect of them will, by that means, be generally demonstrated. It is right however to mention, that in some cases to which I have attended, I have been foiled in my endeavours to correct, by the simple measures which I have related

related in the introductory remarks, the disorders of the digestive organs; and in these I thought that the disorder of the digestive organs depended on some established disease in the brain.

In other cases, when the functions of the digestive organs had been partially corrected, the nervous and muscular affections were mitigated, but not cured. Indeed sufficient time has not yet elapsed to enable me to form a probable opinion, as to the event of some cases, to which I allude. I have also met with one instance, in which the bowels became moderately correct in their functions, without any evident amendment in the state of the limbs; and I have known two instances of persons, who were suddenly seized with paralysis of the lower extremities, apparently dependent on general nervous disorder, in which the digestive organs scarcely seemed affected.

In several of the cases which I have related, there were nervous pains in the affected limbs.

That

That local nervous pains may depend on general nervous disorder seems to me very probable; at least, I can take upon me to affirm, that I have known nervous pains cured by correcting the disorders, which in these cases existed in the digestive organs. In the cases also of tic douloureux which have fallen under my observation, there has been great disorder of the digestive organs; and I have known cases resembling those of tic douloureux cured by correcting the unhealthy state of those organs.

I wish finally to excite the attention of Surgeons to the state of the bowels in tetanus. The occurrence of this disorder occasionally, when the wound which produced it is healing, seems to indicate that the effects, which have been produced by its irritation, continue. It has been, I think, fully shewn, that local irritation may disorder the digestive organs; which disorder continuing, and aggravating the affection of the sensorium, may possibly lead to the production of tetanus, at a time when the wound is no longer irritable. In

four cases of tetanus, in which I had an opportunity of inquiring into the state of the bowels, the evacuations from them were not like fæces. I wish to propose, in investigating the cause of tetanus, as a question, what is the state of the bowels between the infliction of the injury and the occurrence of that dreadful malady * ?

* Such cases as I have related, with others that it would be foreign to my present purpose to mention, have impressed the opinion on my mind, that disorders of the digestive organs may originally cause, or may secondarily aggravate, a nervous disorder; and produce, as has been "mentioned, in the nervous system, an abolition of the functions of the brain; or a state of excitation causing delirium, partial nervous inactivity, and insensibility; or the opposite state of irritation and pain: in the muscular system, weakness, tremors, and palsy; or the contrary affections of spasms and convulsions." Could these circumstances be proved, it would be scarcely necessary to add, that those painful affections of parts, to which perhaps some pre-disposition exists, may be excited in a similar manner; such as gout and rheumatism. Indeed rheumatic pains are very usually concomitant upon that state of constitution, which existed in the patients, whose cases I am relating.

C A S E S.

SECTION II.

I shall next speak of those cases, in which local disorders of the head, produced by blows, are kept up and aggravated by affections of the digestive organs. After what has been observed respecting the reciprocal influence of diseases of the brain, and of the chylopoietic viscera, it will readily be admitted, that an injury of the former may disturb the functions of the latter. Thus, concussion of the brain occasions vomiting as one of its immediate consequences, and will also be found to produce almost constantly, at a more remote period, that disturbance of the digestive organs, which I have described in this paper. If the disturbance be only moderate in degree, but continued, it will often re-act upon the head,

so as to occasion an irritable state of the injured parts, and impede their recovery.

In many cases of blows upon the head, a slow inflammatory affection continues in the parts chiefly injured, and ultimately produces destructive diseases. The bone sometimes becomes diseased, or an exostosis grows from its internal table; the dura mater becomes thickened, or matter slowly collects on its surface. Such local disorders produce others of a more general nature, and destroy the patient. These occurrences are however, in my opinion, rare in comparison with the cases first described; in which a painful state of the injured parts is kept up by means of disorder existing in the digestive organs. The necessity for an accurate discrimination between these disorders, must strike us on the most superficial view of the subject; for the lowering treatment which is necessary in the first and rarer case would be detrimental in the second and more frequent. By attending to the state of the digestive organs in these dubious cases, we may be enabled to form a probable opinion

nion of the nature of the local complaint; for if there is nothing wrong in the general health to excite or maintain it, we may reasonably conclude that it is merely local; on the other hand, the inefficacy of evacuations in curing the local disease would naturally suggest the opinion, that it proceeds from irritation, and is dependent on a disorder of the health in general. It should be further observed, that when the local disease is of an inflammatory nature, and likely to induce morbid alterations in the structure of the affected parts, still it may be maintained and aggravated by disorder of the digestive organs. I have very frequently seen patients suffer so severely as to warrant a suspicion, that local disease of the most formidable nature existed; in these the usual methods of treatment were ineffectual; and they recovered suddenly or slowly, in proportion as the state of the digestive organs was corrected. I shall relate some examples of the disease under consideration, which will enable the reader to identify the case, when it occurs in practice.

C A S E.

A young gentleman, about ten years of age, fell out of a window, six feet high, and struck the back part of his head against some stones. He was stunned by the blow, but perfectly recovered from the effects of the accident by bleeding, purging, and a low diet. He caught the scarlet-fever about six weeks afterwards; and recovered from that also. But, whilst he was convalescent, the pains returned in that part of the head which had been struck, with so much violence as to induce the belief that some serious local mischief would ensue. After they had continued without abatement for a few days, I was desired to see him. He was lying in bed, and could scarcely be prevailed on to lift his head from the pillow. The integuments of the occiput were so tender, that he would hardly allow me to examine the part; I ascertained, however, that there was no fluid under the scalp, nor any inequality in the bone. He dozed a good deal, and lay in a
comatose

comatose state, but was occasionally restless. His pulse was very frequent, his skin hot and dry, and his tongue covered with a thick yellow fur. He breathed almost without moving the diaphragm, and complained much if the epigastric region was compressed. He loathed food; his bowels were costive, and his stools of a blackish colour. He was ordered to take small doses of calomel at night, and draughts with rhubarb and kali vitriolatum in the morning. The tongue soon became clean, and the stools natural; his appetite and spirits returned, and he no longer complained of any uneasiness in the head.

This case presents us with a striking example of what I believe to be a common occurrence; I mean, a disordered state of the digestive organs taking place subsequent to a considerable febrile affection. Indeed, when we reflect in how weak and irritable a state the brain must be left upon the subsidence of such a disorder, and how much the chylopoietic viscera must suffer from the impaired and disordered energy of the brain, we might naturally

naturally expect such a derangement of the functions of the digestive organs to ensue. When such disorder happens in this manner, it frequently produces many local diseases, to which the constitution may perhaps be predisposed; a circumstance I shall speak of in a future part of this paper. In the present case, it brought on a painful state of parts recently injured, with a considerable degree of fever. That the morbid state of the stomach and bowels was the cause of both is fairly to be inferred from their ceasing so immediately, when the disorder of the digestive organs was corrected. A case of this kind, presenting an example of sudden recovery, is particularly valuable, because it clearly demonstrates the cause and the effect in such diseases. The cause can indeed be seldom so suddenly removed; and the gradual cessation of it under any plan of treatment leaves room for a variety of conjectures, as to the mode of cure or of recovery from those disorders, which I have considered as effects. I could relate many cases of similar but less severe symptoms produced by the same cause, which gradually
got

got well, in proportion as the disorders of the digestive organs were corrected. As it does not, however, appear to me necessary to accumulate instances to prove so obvious a fact, I shall content myself with adducing two more cases, to exhibit such effects in different points of view.

C A S E.

A lady fell down in frosty weather, in consequence of her feet slipping from under her, and the occiput struck against a smooth stone pavement. She was stunned by the fall, but soon recovered; nor had she for some weeks the severe symptoms, which appeared in the sequel. This circumstance shews that there was nothing produced by the blow that necessarily caused the subsequent symptoms; which must therefore be attributed to inflammation or irritation taking place afterwards. After some weeks had elapsed from the time of the accident, the parts which had been struck became extremely painful; and
the

the pain extended forwards over the scalp to the right eye, the sight of which became imperfect. The integuments upon which the blow had been received were extremely tender, and the patient became faint when they were examined even slightly. These circumstances naturally induced a belief that some disease was taking place; and bleeding and purging were employed to prevent its progress. The symptoms were mitigated for a time by these means, but they quickly returned with as much severity as before. After three months the patient came to London, fully persuaded that nothing but an operation would be of permanent benefit. When I first saw her, she tottered in moving from one chair to another, and replied to questions with hesitation and effort. Her eye-sight was so much affected, that she could not read; and she entertained an apprehension that she should lose her senses. Her tongue was but slightly furred; her bowels were habitually costive, and the stools dark coloured. It was evident where the injury had been received; for the aponeurosis had been separated from
the

the pericranium by an effusion of blood; and, though this blood had been absorbed, the detachment of the scalp was distinguishable by the touch. No inequality was perceptible in the surface of the bone. When I mentioned my suspicion that these symptoms were rather the effect of irritability of constitution, dependent on the state of the stomach and bowels, than of local mischief, she gave not the least credit to the opinion; but said she was persuaded that the bone was starred, and that three fissures extended in different directions. I ordered her to take five grains of the pilul. hydrarg. every second night, and a draught twice a day, containing one ounce of the compound infusion of gentian, two drams of the infusion of senna, and one dram of the compound tincture of cardamoms. These medicines produced a considerable purgative effect. On the second day there was but little pain in the head; the patient walked about the room very steadily, and had read a newspaper in the morning. When I asked her opinion of this surprising alteration, she imputed it to the evacuations which had taken place; but she was still persuaded that the bone

bone was injured, and still apprehensive that, without some operation, she should ultimately lose her senses. The medicines were continued in such quantity as to procure only one alvine evacuation daily. A fortnight elapsed under this plan of treatment, during which the stools became nearly of a natural colour, and the patient's health was considerably amended. There were times when no uneasiness was felt in the head; and, during some nights, the pain was so trivial as to give but little interruption to her sleep. It was, however, occasionally disturbed by pains, which were, in her opinion, as intense as at any former period of the complaint. Her pulse was good, and her muscular strength greatly improved. The occurrence of the pain in paroxysms strongly impressed me with the belief that it was nervous, rather than depending upon local disease. Under these circumstances all ideas of an operation were dismissed from my mind, but it was far otherwise with respect to the patient. Being obliged to return into the country, she considered the possibility of a relapse with horror; and was so convinced that the bone had been injured, that she

he earnestly requested it might be examined, were it merely to ascertain what was the fact. I saw no objection to this examination, but thought, on the contrary, that advantage might possibly arise from an incision, which would loosen the tension of the scalp, and produce a discharge that might relieve the irritation of the part. I accordingly made an incision of a semicircular form, extending farther back than the part which had been struck, and turned up a portion of the scalp, so as to see the bone, covered by its pericranium, to the extent of a crown piece. The bone was uninjured, and, together with the pericranium, appeared perfectly natural. The scalp being replaced, the wound was dressed superficially, without any attempt to favour the union of the parts. If they united under these circumstances, there would be an additional reason for believing, that neither the bone nor the subjacent parts were diseased. The pain was as severe for the two first days and nights after this examination as it had been at any former period; it abated when the wound began to discharge, and had entirely

tirely ceased on the fifth day. This state of tranquillity continued as long as the patient remained in town, which was about three weeks after the division of the scalp. The wound at that time had nearly healed. She has since had occasional returns of pain in the head when her general health has been disordered, but never to that degree as to induce a suspicion that any local vascular disease existed.

To exhibit the effects of the re-action of disorders of the digestive organs upon those of the head in another point of view, I subjoin the following case.

C A S E.

May 29, 1805, a labouring man, aged forty-five, fell from a considerable height upon his head, and was immediately brought to St. Bartholomew's Hospital. No fracture of the skull could be discerned: and the patient seemed to labour under the effects of violent concussion of the brain. By venesection

section and other antiphlogistic means, he soon recovered his senses. Every thing went on very favourably for three days, when he was attacked with shivering, nausea, pain in the head, impatience of light, and other symptoms, which usually are considered as denoting inflammation of the membranes of the brain. He was consequently bled; and had a blister applied on the head. He was suddenly seized in the evening with a more excruciating pain in the head, which, after lasting half an hour, was succeeded by convulsions, so violent that three men could scarcely hold him. When the fit abated, he expressed himself much relieved, and said that he was easier than before its accession. Some calomel and rhubarb were given to obviate a costive state of his bowels. On the next morning (June 2nd.) he had a return of the pain and convulsions; and the symptoms were so violent, that he was bled four times in the course of the day. This treatment, however, had no effect in diminishing the pain and other symptoms, and another fit of convulsions took place in the evening. The purgative operated

on the succeeding night, and brought away a large quantity of highly-offensive feculent matter of a light greenish-yellow colour. On the 3d of June his breath was extremely offensive; his skin hot and dry; his pulse quick; his tongue thickly furred; and he had great tenderness in the epigastric region, and right hypochondrium. He was ordered to take two grains of calomel immediately, and a saline medicine at intervals; this produced two motions in the course of the day. By pursuing this plan for a few days, the state of his bowels was rendered more regular, and the discharges acquired a healthy colour; in proportion as this was effected, the tenderness of the abdomen was removed, and the tongue became clean. He had no return of convulsions, the pain and other symptoms subsided, and in a short time, when the digestive organs had been restored to a natural state, he went out of the Hospital perfectly well.

Cases of this description have been noted from the earliest ages. Many passages are
to

to be met with in Galen, that shew that he was well acquainted with the circumstances that have been stated in this section. Bertrandi* has related instances of abscesses taking place in the liver consequent to injuries of the head. Andouillé† relates additional cases, and makes further observations on the same subject. Of late, Richter‡ has delivered similar opinions, and has directed the practice which should be pursued, when the head is disordered by the re-action of affections of the digestive organs. Still however these circumstances seem to me to be stated rather as occasional, than as occurrences which are common and naturally to be expected, and I therefore think myself warranted in supposing, that they have not made a sufficient impression on the minds of Surgeons, in this country at least.

I beg leave, in the conclusion of this section, to repeat what was said in the former

* Mémoires de l'Académie de Chirurgie, tom. 3, p. 484.

† Ibid, p. 506.

‡ Chirurg. Biblioth. b. viii, p. 538.

one, *viz.* that I consider the disease as depending on nervous irritation in the parts affected, which is either caused, maintained, or aggravated by disorders of the digestive organs. Yet as the local disease must be regarded as chiefly nervous, it might, in some rare instances, exist independently of any manifest disorder of those organs. I may further add, that much nervous irritation in any part generally excites vascular action. It becomes therefore highly important to attend to the nature and cure of such disorder, as it might ultimately lead to the production of organic disease, which would destroy the patient.

C A S E S.

SECTION III.

I proceed to speak of some diseases of the throat, skin, and bones, which so much resemble venereal complaints, that they are frequently treated as such; but which take place without any reasonable ground for attributing them to the absorption of any morbid poison. A disorder of the digestive organs constantly exists in these cases; and produces, or at least aggravates and protracts a state of weakness and irritability of constitution; to which the origin of the disease must undoubtedly be referred.

C A S E.

A gentleman residing in the country, who had been many years married, and whose

moral character prevented any suspicion of his having exposed himself to venereal infection, had an ulcer in the right tonsil, possessing every character of a truly syphilitic sore. The figure of the ulceration was oval; it had extended itself deeply, and presented a surface covered with adhering matter, and without the least appearance of granulations. It had continued three months without amendment, although various medicines had been employed during that period. These circumstances impressed the minds of the medical attendants with an opinion, that the disease was venereal. On me they had a contrary effect. I thought that a venereal ulcer would have become materially worse in that time, as mercury had not been used to arrest its progress. Finding that the patient had a furred tongue, and disorder of the digestive organs, I recommended, as the first object of attention, the correction of that derangement of the stomach, from which the sore-throat had probably originated. The patient went to the sea-side, where his throat was alternately better and worse; but the dimensions of
the

the ulcer were not enlarged. Three months elapsed before I saw the patient a second time; when I told him, that my argument against the complaint being venereal was greatly strengthened. It was manifest that the disorder, to which I had imputed the sore, still existed. Being unwilling however that the responsibility should rest entirely upon myself, I advised him to consult another surgeon, who, judging of the nature of the sore from its appearance (which indeed was strikingly characteristic of venereal disease), recommended a course of mercury. The patient underwent, in consequence of this advice, a regular mercurial course; during which the sore got well. Between two and three months afterwards another sore formed in the palate, which had the characters of a venereal ulcer, in a still more striking degree, if possible, than the former. It was situated just where the soft palate proceeds from the bone. It was of a circular figure, and so deep as to expose the bone. The circumference of the ulcer was tumid and inflamed; its edges were not smooth,

but had a tendency to ulcerate. There was no appearance of granulations, and the discharge adhered to the surface of the ulcer. The patient now applied to me again; when I repeated my original opinion, that these sores depended on the state of his health in general. He consulted another Surgeon, who recommended the use of the Lisbon Diet-Drink, with the application of the oxymel æruginis to the part; under which treatment the ulcer healed; and no other complaint has since occurred, though two years have elapsed.

C A S E.

A gentleman, who was habitually subject in a great degree to disorder of the digestive organs, had an excoriation of the prepuce, which had continued about three weeks, when copper-coloured eruptions came out all over his body, so strikingly similar to those which are venereal, that some of his medical attendants recommended the immediate use of mercury. It was however agreed

to

to delay the mercurial course for a little time ; and to give the patient half a grain of calomel, with three grains of hemlock night and morning, and a solution of magnesia vitriolata in mint-water, so as to keep the bowels freely open. The spots began to die away almost immediately, and soon disappeared altogether. The patient then mentioned that he had several times had the same kind of eruption, which had disappeared in like manner upon taking some opening medicines.

In calling the reader's attention to those diseases of the bones which resemble syphilitic affections, I shall not pretend to relate any case in detail ; for Surgeons can seldom trace the progress of these diseases for themselves, but are obliged to rely on the doubtful history given of their patients. I shall endeavour to sketch the principal parts of the subject, referring to particular cases, merely to shew that the picture is not drawn from fancy, but is copied from nature.

I have been frequently consulted on account of supposed venereal affections of the bones ;
where

where the periosteum has been thickened and tender, and the bone enlarged, and the concomitant pains have been so much aggravated at night as to deprive the patient of rest. The history of the case has removed all suspicion of a venereal origin; while general indisposition, a furred tongue, loss of appetite, and other attendant symptoms, have clearly indicated great disorder of the chylopoietic viscera. By attending to the state of the digestive organs in these cases, the patient's health is amended; the general rheumatic pains are diminished; sleep is procured; and the disease has receded almost entirely. After some time has elapsed, the bone may again swell, the swelling may again be checked, and return no more. Perhaps similar diseases may take place in other bones, at times very remote from the first occurrence of the disorder. If mercury be not employed, there are decisive circumstances in the history of the disease, which prove that it is not syphilitic. Sometimes suppuration takes place, and exposes the bone: this occasionally proves a kind of crisis to the disease at that part. But the circumstances of these diseases are so variable, as to preclude

preclude a complete enumeration of their symptoms.

I shall briefly mention the cases of two patients, by whom I was consulted about the same time, in order to identify the diseases to which I allude. Both these gentlemen had been married for many years; and there was not the least reason to suppose that any morbid poison had been imbibed. They became generally indisposed, had restless nights, pain in the head and about the shoulders; and a painful thickening of the periosteum of the tibia, with enlargement of the bone, took place. The chylopoietic viscera were disordered in both these cases. One gentleman had used mercury repeatedly to a considerable extent, which produced a temporary alleviation of his disease; but his sufferings seemed to be augmented upon the cessation of the mercurial excitement. The other patient never used any mercury. They both experienced a considerable mitigation of pain from those medicines, which corrected the state of the chylopoietic organs. Their diseases were checked, and never became again so bad as before

before attention had been paid to the state of the viscera. Both these patients were better or worse as the state of the bowels varied; and they both gradually, but slowly, recovered.

Similar diseases are so common, that I believe every surgeon of experience will admit that affections of the bones, with wandering pains, often occur from general disorder of the health. I have never seen these cases unaccompanied by disorder of the chylopoietic organs; and I have always found them most benefited by whatever has tended to rectify the functions of these organs.

There was no reason, in any of the cases alluded to, to suspect the absorption of poison. I will add another, to corroborate this statement. A gentleman, who had been married about eight years, and had no venereal disease during that period, was seized with a violent fever. Shortly after his recovery, a thickening of the periosteum on the parietal bone took place. The scalp was also much swollen, so as to threaten suppuration. He was at this
time

time in ill health, and had great derangement of the digestive organs. By such attention to this latter disorder as I have mentioned in former cases, this swelling subsided, and no trace of it remained. The patient afterwards went into the country, where his health was still more amended. In about twelve months he had several tumours of the same kind in different parts of the cranium; one alone threatened to suppurate: for these he underwent a mercurial course, which relieved them, so as to induce him to persevere in it to an extent, which almost constantly cures venereal disease. His health, during the latter part of the mercurial course, being much disordered by the medicine, his diseases became proportionally aggravated; he therefore desisted from the use of mercury; at which time his complaints were but little better than at their commencement. These diseases, however, gradually got well in the space of little more than a year; still the patient continued in a bad state of health, the symptoms of which were a furred tongue, indigestion, and faulty biliary secretion.

I add

I add another case, which came under the observation of Dr. Baillie. A student of medicine, who attended the lectures in Windmill-street, was observed to look very much out of health; and, on enquiry, it was found that he had nodes upon his shins, which so exactly resembled those that are venereal, that no doubt was entertained of their being of that nature. It was therefore earnestly recommended to him not to delay the mercurial course, which seemed requisite for the cure. He was very reluctant to comply with this advice, and declared upon his honour that he had similar swellings before he had had any sexual connection. This declaration made the mercurial plan be laid aside; and the nodes got well by a strong decoction of sarsaparilla, without a single grain of mercury being employed. Now, if this account be accurate, it shews that diseases like syphilis can arise from disorder of the health, even without any sexual intercourse.

All surgeons of experience will, I believe, admit that diseases resembling syphilis occur
from

from disorder of the health in general. In all the cases which I have instanced there was not the least reason to suppose that any morbid poison had been imbibed to produce the diseases which existed. I wish much to have this point ascertained or refuted by the general experience of surgeons. The cases, which would tend to establish it, must be of rare occurrence. All the instances, to which I have alluded, occurred in men who had been long married, and on whose veracity I could rely. There is also, in my opinion, sufficient intrinsic evidence in each case to prove that the disease was not venereal. It was this kind of cases which I had in view in my last publication, in discussing the question whether those diseases, which may be denominated pseudosyphilitic, arise from some modification of the venereal poison, or from a peculiarity of constitution in the patients, who are exposed to the action of truly syphilitic virus. I have there said, that "it deserves to be observed that diseases resembling syphilis do occur, without any reason to suppose that any morbid poison has been admitted into the system."

I have

I have been induced to dwell upon this subject, which may perhaps be considered more speculative than useful, because, if the opinion were verified, it would explain the occurrence of pseudosyphilitic diseases in a very striking and satisfactory manner. If local diseases, resembling syphilis, may take place in the throat, skin, and bones, from a certain state of weakness, and irritability of constitution, then various modifications of animal matter being absorbed may so disorder the general health as to induce such a state of weakness and irritation, which is likely to produce those symptoms; and such symptoms are rather to be regarded as arising from the propensities of the constitution, than from the peculiar properties of the matter which is imbibed. It is shewn in my former publication, that the poison which produces pseudosyphilitic symptoms is sometimes absorbed without an evident breach of surface in the skin; sometimes from a trivial sore which soon heals; whilst, in other cases, it produces local sores of various and dissimilar characters.

If, however, the reader should doubt whether diseases resembling syphilis may arise without the absorption of infectious matter, that doubt will probably be removed by the facts which are recorded in the next Section; for it will there be shewn that various and dissimilar local diseases originate from the same source, I mean from a similar disorder of the health in general,

CASES.

SECTION IV.

The next class of cases, to which I shall call the reader's attention, is that of unhealthy indurations, abscesses, and fores. Sometimes but one local disease of this description exists, but in general they break out in succession in different parts of the body. The circumstance of their successive formation is, I think, a proof that they depend upon some error in the health in general; and I have accordingly observed that they are seldom, if ever, unattended with disorder of the digestive organs. The imperfect history, which the patients generally afford of their previous state of health, will not enable us to determine with certainty, that the disorder of the bowels was the cause of their ill health and subsequent

subsequent local diseases; but I can confidently affirm, that those diseases in general become tractable, in proportion as the disorder of the viscera is corrected; and that frequently no new local symptoms occur, after some attention has been paid to the state of the digestive organs. The diseases to which I allude, have not been described in books of Surgery; and indeed it is scarcely possible to delineate with precision their various appearances. It would be quite impracticable to describe all the diseases which make the subject of the present section; namely, unhealthy indurations, abscesses, and sores. They may be compared most justly, in variety and number, with the infinitely diversified combinations and shades of colour. Yet a brief and general description of them will assist to recall them to the remembrance of the experienced surgeon; and to enable the inexperienced practitioner to recognize them when they occur.

Some of these affections are quite superficial, occupying merely the skin. The first
that

that I shall describe is, I believe, well known to surgeons, as a disease, which is frequently, though not constantly, cured by giving mercury to such an extent as slightly to affect the constitution. A small induration or tubercle takes place in the skin, and this is followed by the successive formation of others at small distances from the original one. The skin between these tubercles becomes thickened. Chord-like substances, which are probably indurated absorbents, may sometimes be felt, extending along the thickened skin. The tubercles ulcerate, and form foul ulcers, which heal slowly and break out again.

Another species of superficial or cutaneous ulcer begins generally in one point, and extends in every direction. The chasm of the ulcer is formed either by a very sudden ulceration, or by sloughing. A fore is left, which first secretes a sanious, and then an ichorous fluid. Granulations afterwards arise, and the fore heals. The granulations are however indurated and unsound; and when the patient supposes that the fore is cured, it is suddenly reproduced

reproduced by a process similar to that by which it was originally occasioned. After some time the ulcer again heals, and again breaks out. Whilst these processes are going on in the middle, the fore enlarges in its circumference; the edges, which are thickened, become at times highly inflamed, and either ulcerate or slough. The disposition to disease is aggravated by fits, and there are intervals when it is apparently tranquil. When this fore has enlarged to a considerable extent, in the manner already described, the central parts, which have healed unsoundly, break out into separate ulcers; and thus present an appearance of several fores, connected with each other by indurated skin or newly-formed substance.

I shall briefly mention some of the principal circumstances relating to the last fore of this description, which came under my care. The patient, who had been ill for more than two years, and had taken a great deal of mercury, came from the country in very bad health, and with his digestive organs much disor-

K

dered.

dered. The fore was so painful, particularly at night, that he was in the habit of taking a good deal of opium to procure rest. It occupied the back of the hand and wrist. He had had somewhat similar sores on his head and face; but they were nearly healed, though disposed to ulcerate again. By that attention to the state of the bowels which I have described, and by dressing the fore with an aqueous solution of opium, the greater part of it was healed in the space of three weeks; and the remainder was so much amended, and so little painful, that he had left off his opium shortly after the commencement of this treatment. As the patient's circumstances made it inconvenient to him to remain in town, he went into the country, where the fore broke out again. He then applied to a person who sold a famous diet-drink; and before he had taken twelve bottles, the fore was perfectly healed, and has not since broke out. The diet-drink, he says, had no sensible operation; but his bowels became regular and comfortable, and his appetite amended by taking it.

Another

Another variety of these sores originates in a more deeply seated disease. The cellular substance under the skin becomes thickened, and an unhealthy abscess follows; after the bursting of which, a foul sore is formed. In consequence of this process, the fascia of the limb is sometimes exposed to view, and seems to have sloughed: when the slough has separated, the disease may get well slowly. In many cases, however, there is no exposure, nor separation of the fascia. Sometimes the sore does not extend beyond the limits of the original induration, but heals slowly; while other diseases of the same kind occur in succession in various parts of the body. In other cases, the ulceration of the original sore spreads along the contiguous parts, whilst those which were first affected get well; and thus the sore assumes an herpetic character. In many cases the ulceration extends from the whole circumference of the sore, and thus the scar and ulcerated edges have a circular or oval form; in others, the disease is propagated in particular directions, so that the

K 2 *insurgent & ulcerated*

ulcerated surface presents the most irregular and peculiar figures.

These diseases sometimes are small in extent in the beginning, but enlarge considerably before the skin gives way; and, when this happens, it proves a kind of crisis to the disease, which afterwards heals slowly. In these cases it becomes the object of surgery to bring the disease to a crisis, whilst it is yet of small extent; which may be effected by producing ulceration of the skin by means of caustic.

Some of these sores are formed from diseases beginning in the absorbent glands; in which case the gland, having first been indurated, suppurates and bursts, and ulceration ensues. When this circumstance has taken place, in an absorbent gland of the neck for instance, another ulcer may form, in the manner above stated, in the skin and subjacent parts, without any gland being involved in it. A third ulcer, having a diseased gland for its cause, may form in the vicinity; and thus the disease proceeds without any regularity.

I once

I once thought it a necessary but most difficult task for a surgeon to remark the varieties of these diseases, in order to understand his profession, and contribute to its improvement. But, since I have found that these diseases indicate some disorder of the health in general, the correction of which is the great object in their cure and prevention, I have perceived that there is less necessity for undertaking this most arduous investigation; which, indeed, could never be accomplished without very extensive opportunities and indefatigable diligence.

It will be found in the majority of these peculiar diseases, that the patient had been indisposed for some time before the occurrence of the complaint, and, that afterwards the health had become more evidently deranged. The digestive organs are disordered. The tongue is furred at the back part, chiefly in the morning; and the biliary secretion is deficient or depraved. My attention has been directed to the correction of this disorder; and the most beneficial effects have resulted from

from this attention. The sores have healed readily in some instances; and, in those cases where many had formed in succession, no new disease has in general taken place. In some few instances, new sores have formed after the medical treatment of the disorder had commenced, and even after it had been for some time continued. This probably arises from the difficulty, which is experienced in correcting an habitual and long continued constitutional disorder. In some still rarer cases I have found similar but much milder diseases arise, after the disorder of the digestive organs had been in a great degree corrected.

Whilst I am writing this, there are four patients, whom I have attended in St. Bartholomew's hospital, with these diseases; which I mention, to shew the younger part of the profession how frequent they are. The health of these patients has been surprisingly amended in a very short period, by employing the means which I have described; and the sores have healed rapidly, although nothing but simple dressings have been applied to them.

It is not meant by these observations to depreciate the utility of topical applications to diseased fores, but merely to shew how much they depend on the state of the health in general; for some of them, which have remained uncorrected by a great variety of local applications, will get well under simple dressings, when the state of the constitution is amended. It is not, however, to be expected that this will generally happen; for local diseased actions have been excited, are established, and may continue, independently of the cause which produced them. Topical remedies will, under these circumstances, be employed with the greatest advantage. Again, topical applications are of the highest utility in general practice, because an irritable fore affects the whole constitution, and aggravates and maintains that disorder by which it might have been originally caused. The disorder of the digestive organs cannot in many instances be corrected, till the fretful state of the local disease is diminished. I may further mention, with relation to this subject, that I have seen patients who scarcely ever slept, from the pain
of

of the local disease, whose stomachs were greatly disordered, and who had a distressing purging, which could only be controlled by opium, sleep without interruption during the night: regain their appetite, and have their bowels become tranquil and regular, when, after various trials, a dressing has at last been applied, which quieted the irritable state of the fore. It is right however to mention, that the effects of such an application are not, in general, permanent; but after a time the fore becomes again fretful, and requires some new dressing to soothe or controul its irritability.

I have seen some cases of such diseased fores as I have described, in consultation with other surgeons, who have become convinced that my opinions are well founded. Others have occurred, even in the persons of medical men, whose feelings co-operated to render their conviction more strong.

Having thus, by general observation, imbibed the opinion that the peculiarities of
local

local disease depend chiefly on the state of the constitution, I shall relate some cases, which were treated in conformity with the principles which such an opinion would naturally suggest. I must, however, previously caution the reader against inferring, that I attribute all local diseases to some general error in the state of the health. I have seen local diseases, which could not be deduced from any general indisposition, nor corrected by remedies which act on the constitution at large. I wish to guard against the suspicion of being inclined to make general assertions; while I avow at the same time, that my observations induce me to believe, that the peculiarities of local disease generally depend upon constitutional causes. Reason also suggests the same opinion; for if sores of the same character break out in succession in different parts of the body, can we doubt but that they arise from the state of the health in general?

There appears to me a combination of nervous irritability and weakness, and to such a combination

tion I am inclined to attribute the peculiarities of these variable and unclassified local diseases. Perhaps I may explain my meaning further, by adverting to what happens not unfrequently in cases of venereal and other buboes. The part and the constitution have been both weakened by the disease that has occurred; they have been further debilitated by the mercury employed for its correction. The disease subsides, but a new disease and action commences; a trivial wound frets out into a phagedænic sore, which is very difficult of cure. The sores, in different cases, are nearly as various in appearance, as those of which I have been speaking. To what are we to attribute these dissimilar, perplexing, peculiar sores, if not to irritation occurring in weak and irritable parts? As the peculiar diseased actions of these sores originate chiefly from the weakness and irritability of the parts, induced by the previous disorder which they have undergone; so in their advanced stages they frequently present the best instance, that can perhaps be adduced, of a peculiar local disease existing

ing

ing independently of constitutional disorder. It is true they affect the health in general; but it may, by attention, be kept in a moderately right state, and yet the sore remains unamended. The diseased actions of these sores sometimes gradually, and sometimes suddenly cease; when healthy actions succeeding, the sore heals. I remember a sore of this description, to which almost every variety of dressing had been tried without benefit. It was very extensive, and had burrowed in various directions beneath the skin. The ulceration at length became stationary; but after nine months the sore still remained as foul and fretful as it had been for a considerable time; when in the course of one week it perfectly cicatrized, leaving the hollows which I have described; for it had thrown out no granulations to fill these chasms.

Having thus stated the opinions, which I have formed, relative to these kinds of local diseases; and which were deduced from cases too numerous to record, of which I have preserved no accurate accounts; I proceed to relate

relate some cases treated in conformity to these opinions, which will, I trust, be sufficient to exemplify and illustrate the present subject.

C A S E.

A gentleman's servant, between thirty and forty years of age, was sent to me with a bad ulcer in his cheek, situated between the nose and under eye-lid. The surrounding parts were inflamed, swollen, and indurated, so as to rise fully half an inch above their natural level. The sore was of an oval figure; measuring about an inch and a half in length, and half an inch in breadth and depth; indeed I could scarcely see its bottom. The surface was covered by adhering matter of a greenish hue. The cuticle round the margin was thickened, and had in some parts scaled off. The patient had been rubbing in the mercurial ointment for this complaint. He declared that he had had no chancre for many years, but had contracted a gonorrhœa about a year before his
present

present disorder. His health was much disturbed; he had no appetite; his tongue was much furred and tremulous; his bowels alternately costive and lax; his fæces blackish. I advised him to take five grains of rhubarb about an hour before dinner, and five grains of the pil. hydrarg. every second night, with castor oil or senna tea occasionally, so as to procure a motion daily. The sore was dressed with sperma ceti cerate. I saw him again in three days; when he said that he felt himself under the greatest obligations to me. He had been entirely free from pain and distressful sensations, since he began to take the medicines; although he declared, that before that time, he should have been thankful to any one who would have destroyed him. I mention this, because I have often remarked in these cases, the surprisingly great relief and comfort which have arisen from a change, produced by means apparently insignificant and inadequate. The bowels now acted regularly, and the stools were more copious and of a more natural colour, and to this correction of the biliary secretions

secretions I am inclined to impute that relief, which he so forcibly depicted. The sore had discharged profusely; the surrounding swelling and inflammation were much lessened. He pursued the same plan of treatment for a month; during which time he recovered his appetite; his tongue became clean; his bowels regular, and the biliary secretion natural. The sore had contracted into a small compass, but without the appearance of granulations; and the surrounding parts were not swollen, though still red. His health became at this time again much disordered, in consequence of his catching cold, from exposure to rain. He had pain in the bowels, with a slight purging; his appetite failed; his tongue was furred; and he had a severe cough, attended with copious expectoration. The sore on the cheek also enlarged to about one half of its former size: and the surrounding parts became tumid. I had the patient admitted into St. Bartholomew's Hospital, where he took the decoction of cascarella with squills. His cough got materially better in a short time: the state of his stomach
and

and bowels also greatly improved. The sore again diminished in size. About a fortnight after his admission into the hospital, an eruption came out over his whole body. The spots were of a copperish hue, but rather smaller, and more elevated, than venereal eruptions generally are *. Some of the eruptions gradually disappeared; and, in about a fortnight, it was certain that many were entirely gone. About this time he began to complain of his throat; and an ulcer, of the size of a shilling, formed in each tonsil. The edges of these sores were elevated, and uneven, without any appearance of granulations; the surface was covered with yellow adhering matter. The patient now again caught cold: he was attacked with pain in the bowels, and purging, which obliged him to get up frequently in the night, and to remain for some time out of bed. The cough and expectoration returned: he lost his appetite; and had a furred tongue. Dr. Roberts, whom I met at the hospital, did me the fa-

* Many persons who saw this patient did not entertain a doubt but that all the symptoms arose from syphilis; it was their progress alone which evinced the contrary.

your to prescribe for him. In a day or two afterwards, an erysipelatous inflammation appeared on the right side of his face, opposite to the situation of the sore. The eyelids were so tumid that he could not open them: the erysipelas spread to the other side of the face; and the other eye was equally closed. The fever also ran very high, and the patient became delirious; so that he was obliged, for many days, to be confined by a strait waistcoat. These symptoms gradually abated, and he recovered, so as to be in better health than I had ever seen him. He was discharged in about six weeks, in a state of convalescence; and attended Dr. Roberts as an out-patient. The eruption and sore throat had entirely disappeared; the original ulcer was firmly healed; and the contiguous skin had become soft and natural, though it was still discoloured. A year has since elapsed, and he has had no return of his complaints.

It is, I think, sufficiently evident, in the present instance, that the peculiarities of the local diseases had their origin in the state of the constitution.

CASE.

C A S E.

I was consulted, by a medical gentleman in my neighbourhood, on the case of a lady about forty years of age; who had been long subject to dyspepsia, and severe head-aches. Her present and chief complaint had been of about three months duration. It began with weakness, and an apparent irregularity in the motions of the lower extremities, attended with considerable pains resembling rheumatism, and rigidity of the calves of the legs. These symptoms increasing, she was unable, in the course of a month, to move about at all; but was obliged to be lifted in and out of bed. At this time an induration of the muscles of the calf of each leg had taken place. The indurated substance was about three inches in length, and between two and three in breadth. It was severely painful at times, and the integuments covering it were occasionally inflamed. There was also some pain and swelling in the ham. Leeches, sedative lotions, and mercurial ointment

ment had been applied, cicuta and tonics had been given, but without alleviating the symptoms. I first saw the patient about six weeks after she had been obliged to keep her bed entirely; and the peculiarities of the present case led me at once to refer its origin to the state of the health in general. The appetite and digestion were impaired, the tongue was much furred, and the fæces blackish. I merely recommended fomentations to the indurated parts, considering it the primary object to correct the morbid state of the digestive organs. With this view the compound infusion of gentian with the infusion of fenna and tincture of cardamoms was given, in such doses as to procure an adequate evacuation daily, and five grains of the pil. hydrarg. were taken every second night. These simple medicines were completely successful: after taking them a short time, the discharges from the bowels were natural, and properly coloured with bile. The appetite returned; the tongue became clean, and the pains almost immediately ceased. No cutaneous inflammation indicating a disposition to suppuration, appeared
again

again over the indurated parts, which gradually recovered their natural state. In a fortnight the patient could go about with a stick, and in two months could walk as well as before her complaint. She has enjoyed better health, since this time, than for many years before*.

C A S E.

A gentleman, thirty-two years of age, who had been subject for several years to occasional attacks of severe pain in the bowels, was seized, about the end of August, with a violent purging, which continued for a fortnight, and was attended with fever. About a month afterwards, he felt pain in his leg at night, which became gradually continued even during the day, and obliged him

* The state of the indurated muscles, in this case, was such as would lead to the belief that suppuration would take place in different parts of the hardness; indeed, I have seen many cases less formidable in appearance terminate in that manner. Seeing how much the irritability of muscles is disordered by that state of constitution which I have been describing, I think it is allowable to conclude that most of the organic diseases of muscles originate from this cause.

to confine himself to bed. In the beginning of October a swelling was perceived near the inner ankle, which suppurated, and was opened on the twentieth of the same month. Two large tea cups full of dark brown matter were evacuated. The discharge continued profuse for some time, and afterwards diminished. Four other small gatherings then took place in succession, and bursting continued to discharge; each aperture fretting out into a foul sore. About the beginning of February I first saw this case, which was considered as a disease of the bone. The five sores had apertures in them leading to sinuses, which communicated with each other. A probe introduced into one of these, near the bottom of the tibia, could be moved upwards and downwards along the surface of the bone, which was not, however, denuded. From an upper ulcer the probe could be passed behind the bone, and under the muscles of the calf; this indeed seemed to be the original seat of the abscess, from which the sinuses proceeded to their different outlets. The integuments were œdematous, and firm to the touch; so that I could not distinctly

tinctly feel the outline of the tibia; but I thought that the bone was not altered either in form or size. The firmness with which the patient stood upon the limb, and the want of aching pain in the bone contributed also to make me believe that it was not diseased, and that the whole disorder consisted in an unhealthy abscess, the discharge from which had caused various sinuses in the manner already described. I could not but attribute such a disease to a general disorder of the health, and indeed the patient's countenance and appearance indicated a constitution much weakened and harraffed by illness. His tongue was furred, and the discharges from the bowels were irregular, deficient in quantity, and of a blackish colour. With a view to the correction of these symptoms, I directed the patient to take five grains of the pil. hydrarg. every second night, and the infusion of gentian with fenna, so as to procure one motion daily. But little benefit was obtained by these measures; and in about a fortnight afterwards a thickening of the integuments took place over the fibula; a considerable swelling gradually arose, and another abscess formed, which

which burst in about three weeks, and discharged a considerable quantity of brownish matter mixed with blood. During this time the limb was merely poulticed, and the patient could not leave his bed. His pain was extreme, and he had no rest at night. The use of opium was necessary to alleviate his sufferings, and opening medicines occasionally to procure stools. He took but little nourishment, and his health greatly declined. The disordered state of the stomach and bowels was much aggravated by this local irritation. Indeed, the situation of my patient was now particularly perplexing. The local disease made the general health worse; and the aggravation of this general disorder, which appeared to have been the cause of the local disease and of its continuance, proportionately increased the latter malady. The confinement to bed afforded an additional obstacle to recovery; yet it was impossible to remove him in his present state, on account of the pain which motion occasioned. The leg was insupportably painful in a dependent posture. As change of air and exercise seemed essential to his recovery, I was induced to try if Mr. Baynton's
excellent

excellent bandage, by supporting the weakened vessels, would prevent their distention, and the consequent pain. The fores were dressed, after as much matter had been expressed from the sinuses as could be done without occasioning pain. Strips of sticking-plaster were applied after the manner of a many-tailed bandage; and the limb was afterwards rolled with a calico roller. The patient felt comfortable, and found his limb strengthened. He was directed to wet the roller, if the parts became heated. The effect of this treatment was surprising both to the patient and myself. The pain, which had been constant before pressure was employed, ceased from the time of dressing till five o'clock on the following morning; but from that time it gradually increased till noon, when the dressings were renewed. The cause of this occurrence now became manifest; for, upon opening the bandage, more than a tea-cup-full of matter was discharged from the different sinuses. I dressed the limb as before, cutting holes for the escape of the matter opposite to two of the chief sinuses. I desired the patient to put his leg to the ground, in order

to

to ascertain the effect of the perpendicular position when the vessels were supported; and he experienced no inconvenience. This day passed, as the former, without pain; and, as the matter poured into the sinuses readily escaped, he had no uneasiness from its detention. I recommended him to sit up, and put his leg to the ground several times in the day, in order to accustom it to that position. After I had dressed it on the third morning, the patient stood up, and took two or three steps very feebly; but this was rather the effect of general weakness than of particular infirmity in the diseased limb. I now advised him to go a little way out of town in a carriage. The air and exercise, together with the freedom from pain, produced a very beneficial effect. He began to recover his appetite, slept at night, and acquired so much strength, that he was able in a week to go about his house, and to resume his attention to business. The discharge from the sinuses was very trifling, and the sores looked much better. The patient now undertook to dress his leg himself, and hired a lodging out of town, so that I only saw him occasionally. His limb was
so

so much amended in the course of a fortnight, that it caused no more trouble than that of daily dressing. But his health was not good. His countenance had the same expression of illness as when I first saw him; his tongue was white and dry; his bowels costive; and the stools of an unhealthy colour. I therefore recommended him to take again the same medicines which I had formerly ordered him. His health now improved; his tongue became moister, and less furred; the bowels more regular; and the faeces coloured with a more healthy bile. He continued recovering till the middle of April, when he began to complain of the trouble of applying the sticking-plaster, and used the calico roller alone. I did not see him for three weeks, and then found him in a very desponding state. He complained of the tediousness of his confinement, which had lasted more than half a year, and said that he would willingly submit to have the sinuses laid open, if that would make him well. I found his leg well, excepting two orifices near the tibia; three ulcers, which formed the apertures of as many sinuses, had
healed;

healed; the outline of the bone could be distinctly felt; and there was no alteration of it in form or size. I was unable at first to account for this despondency under such favourable circumstances; but I soon discovered that it was the effect of hypochondriacism. For his tongue was much furred and dry; and at the same time that he left off the bandage, he had also discontinued his medicines. I urged him to return to them immediately; and called on him again in ten days, when he perceived clearly the absurdity of his late despondency, as well as its cause. He called on me on the 10th of July, with a new swelling near the upper part of the tibia, which threatened to form an abscess, similar to those which had formerly taken place. I covered the limb with the bandage of sticking-plaster, as at first. The new disease disappeared entirely; and the old ones were so much benefited by the exact and equal pressure, that the patient felt no difference between the sound and the affected limb. The ulcers gradually healed, and his health is better than it has been for some years: yet still there is an evident

dent tendency to disorder of the digestive organs.

If upon an extensive and accurate examination of the subject it were to appear that many very peculiar and very dissimilar local diseases originate from a common cause, namely from weakness and irritability of the system in general, our enquiry would be further extended, and we should feel anxious to know whether similar causes may not operate in the production of more common and more frequent local disorders. As far as my late observations have enabled me to determine, that state of the digestive organs, which I consider as denoting constitutional disorder, exists prior to the formation of a carbuncle; and is exacerbated during the progress of that disease. This opinion indeed will appear probable, if we consider the kind of persons who are attacked with carbuncles, and the considerable derangement of health, which even a trivial local disease of this nature occasions. I shall mention but one case in support

port of this opinion, though I have made similar remarks in several other instances.

C A S E.

I attended a gentleman, who was afflicted with carbuncles, during three successive attacks, at the interval of about a year between each. I made an incision through the indurated skin, down to the subjacent sloughy cellular substance, and thus brought the local disease to a crisis. This treatment was sufficient in the two first attacks; the extension of the disease was prevented; the sloughs separated, and the wound healed. The patient, whose mode of life was intemperate, had cough; difficult respiration; fullness and tenderness of the parts situated in the epigastric region; unhealthy secretion of bile; and in short, all those symptoms which denote a very considerable degree of disorder of the digestive organs: it is probable indeed that some organic disease of the chylopoietic viscera existed. After he had recovered from
the

the carbuncle, I told him that the most important disease still existed; and urged him to be attentive to his diet, and to the directions of his medical attendants. He still however continued to live intemperately, and his disorder increased. He was indeed nearly dying from diseased viscera, when he was attacked with carbuncle for the third time. The division of the parts produced a temporary cessation of the disease; but it began again to spread in every direction from its circumference, and he died.

It will not, I believe, be doubted, that boils are a slighter degree, with some variation, of the same disease, which causes anthrax and carbuncle; and it is almost unnecessary to remark, that some persons are subject to a successive formation of very large and troublesome boils from the least irritation of the skin. I have seen many persons thus affected; and there has been in every instance disorder of the digestive organs, the correction of which has prevented the return of these vexatious local diseases. One gentleman,

tleman, who had been tormented for many years by the quick successive formation of boils as large as eggs, has been free from them for some years; though he has had other disorders which denote such a condition of the constitution, as it has been my object to describe in this paper.

I have remarked in many instances that diseases of the absorbent glands, such as are usually and justly denominated scrofula, occurring in adults, have apparently originated from the disorder which I have described. In several cases the local disease was of long duration, and had become worse rather than better under various plans of medical treatment; yet it amended regularly, and sometimes even quickly, in proportion as the state of the digestive organs was corrected. I need not detail any cases on this occasion, since every surgeon must know them familiarly. The patients are commonly sent to the sea-side, or into the country; where enlarged glands subside, and those which have suppurated and ulcerated heal; and the local disease

disease recovers, in proportion as the health in general is amended.

There are cases of scrofulous diseases occurring suddenly, and in various parts of the body at the same time, which seem to originate in that state of health, which is occasioned by disorder of the digestive organs. I have chiefly observed these cases in children; and they have followed some violent febrile affection. In two cases which I shall particularly mention, the small-pox was the antecedent disease. I have already stated, that when the health has been considerably disordered by some violent disease, the digestive organs may become subsequently affected; and that this disorder proves a cause of many secondary diseases.

C A S E.

A child of two years old had the small-pox, from which he did not seem to recover, but, on the contrary got into a very bad state
of

of health. The absorbent glands on the right side of the neck became enlarged in succession, so as to form altogether a very considerable tumour, which extended down to the collar bone. The axillary glands then became affected in the same manner; the swelling was unusually great, and seemed to extend under the pectoral muscle, elevating it, and forming by this means a continuation of tumour, with the glands of the neck. These swellings had partially suppurated, and had broken in two places, viz. in the neck, and about the margin of the pectoral muscle: but no relief followed; on the contrary, the mass of disease seemed to be rapidly increasing. The child was bowed forwards, so that the spine was much curved in the loins; the left leg appeared paralytic; and a swelling was perceived in the abdomen, which I could not but ascribe to an enlargement of the external iliac glands. The child was extremely emaciated; his skin felt hot and dry; his tongue was covered with a brown fur; and the stools were black and highly offensive. As there was no expectation that he could survive this desperate

desperate state, those medicines only were prescribed that seemed likely to correct the state of the digestive organs; such as occasional doses of calomel and rhubarb. A strict attention to diet was also recommended. Under this treatment the stools gradually became natural, and the tongue clean. The disease seemed to stop immediately. As the health was restored, the swellings rapidly subsided; and the child became one of the healthiest and stoutest of the family.

C A S E.

A female child, after having had the small pox, got into bad health from disorder of the digestive organs. She was then suddenly attacked with a scrofulous affection of the knee and elbow of the opposite sides of the body. Two collections of fluid had taken place beneath the fascia of the leg and thigh. The joints were greatly enlarged, and the swelling was apparently caused by an increase in the size of the bones. Had I seen either

M joint,

joint, as a single case of disease, I should have said that it would leave the child a cripple. It was manifest, in the present instance, that these diseases were the consequence of ill-health; and that the first object was to correct the general disorder of the system. The functions of the digestive organs, which were deranged, were restored to their natural state, by employing the same diet and medicines which had been so signally successful in the preceding case. By these means the health was re-established, and the local diseases gradually disappeared.

I have heard it remarked by surgeons of great experience, that patients often recover when many scrofulous diseases appear at the same time; although some of them may be so considerable, that they would seem to warrant amputation had they appeared singly. The cases which I have related afford a most clear and satisfactory account of the mode of recovery. General irritation and weakness bring on diseases, to which perhaps a pre-disposition may exist, in several parts

parts of the body; these cease when their exciting cause is removed.

After having attempted to shew that pseudo-syphilitic and many other non-descript diseases arise apparently from the state of the constitution, and that carbuncle and scrofula are sometimes consequences of the same cause; it may be enquired, whether all these various affections originate from a similar disorder of the general health. If the same general disturbance of the health can produce a great many varieties of local disease, it may produce many others, and even every variety *. If the actions of any part of the body are excited by accidental causes, it may be reasonably inferred that, in a state of health, they will be simple and common, unless the stimulant is of a peculiar nature. But if these actions are specific and diseased, we naturally conclude that the cause of their becoming

* Even in cancer, disorder of the digestive organs appears to be antecedent to the local disease, and aggravated by its existence; but whether this disorder be the effect or cause of the constitutional diathesis cannot be at present determined.

fo is constitutional. The occurrence of fimilar local difeafes in different parts of the body, furnifhes an additional proof that the caufe of fuch difeafes is constitutional. But although the cafes related in this paper naturally fuggeft an opinion that there is fome constitutional caufe for the production of local difeafes, they do not amount to a complete proof. Indeed I have never inveftigated this point particularly, though it deferves and admits of examination.

The fubject may be viewed in another way : weaknefs and irritability occurring bring on thofe local difeafes, to which a pre-difpofition exifts ; and thence the connexion which I have obferved of fuch difeafes with impaired health may be accounted for. The cafes contained in this paper are, in my opinion, infufficient to determine whether the constitutional diforder is to be regarded as the exciting or the pre-difpofing caufe of the local difeafe.

I have alfo obferved that difeafes of particular organs feem to originate, in many instances,

instances, from disorder of the system in general. The testis of the male subject, and breast of the female, have furnished me with examples of this observation. In the cases to which I allude, the testes were alternately affected, enlarging considerably, and then subsiding *. I have met with numerous and interesting cases of such diseases of the breast; however, the relation of a few will be sufficient to inform the reader of all that I know concerning this subject.

C A S E.

A lady came to London, to submit to the removal of a diseased breast, if it should be judged necessary. The disease had existed for more than two years. The breast of the affected side was one third larger than the

* The cause which excites and maintains alternate irritation and disease of the testes, generally resides in the urethra; but there was no disease of that part, in the cases which I now mention. The patients first became unhealthy, and disorder of the testes followed. Similar affections are not uncommon in pseudo-syphilis.

other;

other; indurated in several parts; and so much enlarged and hardened in one place, that this might have been taken for a distinct tumour on a hasty and inattentive examination*. This part was situated near the margin of the pectoral muscle. The disease had resisted the various means employed with a view to disperse it, such as leeches, lotions, mercurial ointment, &c. It was occasionally painful, and caused the patient so much mental anxiety, that the surgeon, who attended her in the country, thought it should be removed. The mammary gland of the opposite side was far from being in a perfectly healthy state; which circumstance appeared to forbid an operation, since the same disease might take place afterwards in the opposite breast. The patient's general health was much impaired, her tongue was furred, her appetite deficient, her digestion

* It may not be improper to observe here, for the instruction of the younger part of the profession, that if a breast containing a portion which is particularly indurated be examined with the points of the fingers placed circularly, the disease will feel like a separate tumour; but if the flat surface of the fingers be moved over it, its true nature will become manifest.

imperfect;

imperfect; the biliary secretion was disordered, and the bowels costive. I ordered her to take a compound calomel pill every other night, five grains of rhubarb half an hour before dinner, and the infusion of gentian with fenna, so as to procure a sufficient evacuation of the bowels daily. Linen moistened in water was applied to the part in the evening, or when it felt painful and heated. This plan of treatment reduced the bulk of the diseased gland by at least one third in the course of a fortnight. The patient went afterwards into the country, still employing the same medicines; and was entirely free from the disease in three months, though she felt occasional shooting pains, which probably indicated that her health was not completely re-established.

C A S E,

A lady consulted me on account of a considerable swelling of the breast, attended with much pain. It had come on suddenly, and had been painful about a week; but she thought

thought that a lump had existed previous to this time. The principal tumour was on the side next the sternum, and was as large as an hen's egg; it seemed to be distinct, yet there was a general swelling, with partial induration of the substance of the gland. The tongue was furred, the bowels costive, and the pulse frequent; and she was, to use her own expression, very nervous. I directed her to use the same means as were mentioned in the preceding case. Small doses of mercury act beneficially on the bowels, by inducing regular and healthy secretions; and I know no better method of administering it as a discutient. The general induration of the breast and tumefaction of the integuments subsided quickly under this treatment, and left the lump in the same state which I supposed it to have been in before the attack of general swelling and pain. In another week this apparently distinct tumour was flattened on its surface, diminished in size, and confused with the substance of the mammary gland. Its form varied each successive week; it first became oblong, and afterwards seemed to separate into two parts; but in less than six weeks no trace of it could be felt.

CASE.

C A S E.

A medical man, who resides in the country, brought his daughter to town for advice. She had apparently a tumour in her left breast, between the nipple and the axilla; in which part she had felt a good deal of pain. The swelling was of very considerable size, and the breast so tender, that I could not exactly make out whether it arose from distinct tumour, or from a partial enlargement of the mammary gland. Want of time prevented the patient's father from shewing the case to another surgeon. I could only give him this opinion; that in the present circumstances no one would think of an operation. I recommended the application of the *lotio ammon. acetat.* when the part felt heated; and as the patient had disorder of the stomach and bowels to a great degree, that the chief attention should be paid to the state of these organs. A grain of calomel was directed to be taken every second night; rhubarb before dinner, and *infus. gentian. and fenna*, if necessary.

About

About two months afterwards, having occasion to be in that part of the country where the patient resided, I called on her. Her father then told me that the swelling had subsided considerably, after his daughter's return in the country; and that of late he had not examined the complaint, as she told him she felt no uneasiness from it.

When I now examined the breast, I could not perceive any difference between it and the other. No vestige was left of a disorder, which had been of such a magnitude, as to occasion considerable alarm; a circumstance that excited the greatest surprize in the mind of her father, who was a practitioner of much experience*.

Before I had paid attention to those complaints which arise from, or are aggravated by constitutional causes, I could not have believed that such considerable local diseases, after resisting various topical and general

* I have also known cases of induration and suppuration of the salivary glands, apparently caused by the same general disorder, and cured by the same treatment.

means, should give way so readily and completely to small doses of medicine. It is only by considering the manner in which this effect is produced, that the subject can be placed in a proper point of view.

An attention to the state of the bowels is indispensably necessary, even in the common practice of surgery. A simple cut of the finger frets into a bad phagedænic sore, which resists every local remedy so long, that amputation is at last proposed. This is the consequence of bad health, which in its turn is aggravated by the irritation of the sore. The patient has a furred tongue, with other symptoms of disordered digestive organs. An attention to this disorder corrects the painful state of the sore, which now heals rapidly under simple dressings.

A patient has a disorder in the urethra, almost too trivial for surgical attention; yet producing much inconvenience. The functions of the digestive organs are impaired, and he is hypochondriacal. He consults a
physician,

physician, under whose care, his general health is amended, and he no longer feels or thinks of the local disease.

An erysipelatous inflammation of the leg is imputed to some trivial cause; as for instance a gnat-bite. It becomes worse under the common remedies. The health has been long declining, and the chylopoietic viscera are obviously deranged. The erysipelas is quickly cured by medicines prescribed for that disorder.

A patient supposes that his knee is strained; for pain and inflammation of the joint suddenly come on, with deposition of fluid into the articular cavity; this attack is attended with fever, furred tongue, and unnatural discharges from the bowels. Leeches, cooling washes, and poultices, in short, all topical applications are unavailing. It is a case of rheumatic inflammation, for which a physician is consulted. Five or six weeks elapse without any abatement of the disease, the patient being almost unable to stir in bed.

An

An alteration in the health suddenly takes place; the tongue becomes clean; and there is no longer any pain in the knee. All the fluid is absorbed from the joint in two days, and the patient walks about his chamber. Or there may actually have been some local injury; but the consequences are very considerable and violent, and quite incommensurate to the cause. Such occurrences can only be assigned by imputing the effects to the state of the health in general. I could relate a great number of cases to illustrate this subject, but it does not seem to me to need any further exemplification*.

I again repeat at the conclusion of this section, that though I admit the possibility of the existence of diseases strictly local, and have adduced some instances of them, I consider the diseases, which I have been describing, to arise from disorder of the health in general, which is

* As operations are injuries, so we ought not to perform them when the constitution is in this state. I could relate several instances of the wounds made in operations, assuming diseased actions from such a state of the constitution.

often caused, though sometimes merely aggravated, by disorders of the digestive organs; and it follows, if this view of the subject be correct, that such diseases may sometimes exist, without any manifest disorder of the digestive organs. The disorders of these viscera may act in a two-fold manner on the constitution; they may be the cause of an impure or imperfect state of the blood, and they may cause or aggravate nervous irritability. Whether in consequence of such effects they are to be regarded as the predisposing, as well as the exciting causes of such diseases as I have described, is an enquiry very worthy of investigation; but it does not appear to me to be determinable by the facts which have been recited.

C A S E S.

SECTION V.

Disorders of parts which have a continuity of surface with the alimentary canal.

I had formerly observed spasmodic strictures of the œsophagus to disappear under various modes of treatment, in a manner which I did not understand. Mercury seemed to effect the cure in three instances. Many cases have occurred to me lately, in which the irritation in the œsophagus seemed to be first excited and afterwards maintained by disorder of the digestive organs. It will be readily allowed, that spasmodic strictures of the œsophagus, when long continued, may cause a thickening in the affected part of the tube, and thus the stricture may become permanent. One instance will be sufficient to illustrate

trate and verify this view of the subject; indeed I merely wish to excite attention to this subject, for I am incompetent to give an opinion as to the frequency or degree, in which affections of the stomach produce these disorders.

C A S E.

A lady, who had been in bad health for many years, and was supposed by her medical attendants to have a stricture of the œsophagus, became at last incapable of swallowing any food, except in very small quantities; she was even then obliged to drink some fluid after each morsel, to facilitate its descent into the stomach. Some mucus and blood rose into the mouth after vomiting, which very generally followed the taking of food. Under these circumstances, I was requested to pass a bougie, in order to ascertain the state of the œsophagus; but I declined this examination, on account of the disorder which existed in the stomach. The tongue was greatly furred; the parts in the epigastric region

region very tender: the bowels much disordered; the secretion of bile either very unnatural, or entirely wanting; every symptom, in short, which indicates an aggravated form of disorder of the digestive organs, existed in a striking degree. The stomach and bowels were brought into a better state by such medical attentions as I have already so often described; and the œsophagus partook of this amendment: for moderately sized morsels of food could now be swallowed without the necessity of washing them down by liquids. The general health also improved, and she became fat. But the disorder of the digestive organs, which had been of long continuance, was not completely subdued; she was still subject to relapses, and in some of these the difficulty of deglutition again occurred.

The throat and mouth are the parts next in order; but it is unnecessary to relate additional cases under this head: some of the instances already recorded will be sufficient to confirm my sentiments on this subject,

and the propriety of the practice which I have recommended.

That diseases of the nose may be caused or aggravated by irritation arising from the stomach is a proposition, which will, I think, be readily granted. Indeed it seems surprising that the operation of this cause has been so little adverted to in books of surgery; since the phænomena which prove the fact are so well known. Are the monstrous noses, caused by excessive drinking of vinous and spirituous liquors, to be otherwise accounted for, than by irritation arising from the stomach? And do not worms in children cause a teasing sensation in the extremity of the nose? I had seen in private practice, several cases of irritation and swelling of the end of the nose, in some instances accompanied with small ulcerations of the pituitary membrane. In these cases, the skin over the nose, which was tumid, became rough and discoloured: the middle of the discoloured part became sound; whilst the circumference retaining its morbid actions, the disease there spread in a small degree. In these cases

cases the tongue was furred; and there were evident indications of disorder in the stomach and bowels. The disease was checked, and cured, by attention to this disorder. I was strongly impressed with the opinion, that if these cases had been neglected, they would have terminated in that herpetic ulceration, which so often affects the end of the nose. I have also seen several instances of that herpetic ulceration in its confirmed state more materially benefited by medical attention to correct the disorder of the digestive organs than by any local application: and I feel confident that it may be frequently cured by such endeavours.

I have observed, in all the cases of that noisome and intractable disease, ozæna, which have come under my care lately, that the stomach and bowels have been disordered; and more benefit has been obtained by endeavouring to bring these organs into a healthy state, than by all the local applications which had been previously tried. I stated to a medical friend my opinions respecting one patient

who came from the country, and begged to know the effect of the treatment which I had proposed. He informed me, after some months, that he had not been able to succeed in correcting the visceral disorder; and after relating the means which had been used, he adds, "The patient was now attacked with a bilious disorder, to which she had formerly been subject, and for which I gave her six grains of calomel in a bolus, which soon relieved her. During this attack the nose seemed well; there was no fetor in the discharge, and she recovered her sense of smelling." However the disease returned afterwards as before.

In farther confirmation of the opinion, that diseases of the nose depend much upon the state of the stomach, I shall mention the case of a woman, who had a disease of the nose, which I expected would, at least, prove very tedious and very troublesome, but which got well speedily under simple dressings, in consequence, as appeared, from the effect of internal medicines.

CASE.

C A S E.

This patient was between thirty and forty years of age; had a furred tongue, bowels alternately costive and lax, and their discharges discoloured. An enlargement of the left alar nasi, caused by a great thickening of the parts covering and lining the cartilage, had gradually taken place. The skin was discoloured, and an ulcer, about the size of a sixpence, had formed on the under surface of the ala. The sore was deep, with a sloughing surface, and uneven and spreading edges. Spermaceti cerate was employed as a dressing; and the external skin was frequently bathed with Goulard's wash. She was ordered to take internally five grains of rhubarb an hour before dinner, five grains of the pil. hydrarg. every second night, and the infusion of gentian with fenna occasionally. The sore ceased to spread, the swelling gradually subsided, and all diseased appearances were removed in the course of a month. The patient also found her health considerably amended.

In

In most cases of deafness, there is probably a state of irritation, and a tendency to inflammation, throughout the passages of the ear. The external meatus is unusually sensible, the secretions being either suppressed, or discharged in an unnatural quantity. The lining of the eustachian trumpet is thickened; and hence it becomes partially obstructed. It must be admitted that such a state of the organ is likely to be aggravated by a cause, which maintains or produces irritation in the nose. When dullness of hearing also depends on a torpid state of the nerves, it may be caused by the same circumstance, which is known to affect the sensibility of other nerves.

Indeed, I have remarked that the hearing of many persons has considerably varied with the state of their health in general; so that I felt no surprise from the occurrence related in the following case.

A gentleman applied to me on account of some pseudosyphilitic symptoms, which I told him would gradually become well. I advised him,

him, at the same time, to be particularly attentive to the state of his digestive organs, which were generally disordered by the effects of the poison. He took five grains of the pil. hydrarg. every second or third night. The disorders for which he had consulted me were all removed in the course of two months; when I received a letter from him, saying, that he thought it a duty he owed to me and to the public to inform me, that the lenient course of mercury, which I had recommended, had cured him of a considerable degree of habitual deafness.

It is well known that ophthalmia frequently arises from constitutional causes; and in such cases the digestive organs are generally deranged. The health will be most speedily restored, and the local disease most effectually diminished, by correcting the disordered state of the abdominal viscera. There is no necessity for enlarging upon this subject; yet it may be useful to state what I have observed respecting those ophthalmies, which take place subsequently to gonorrhœa, and which have generally

generally been ascribed to a retropulsion of that disorder, or to the accidental application of the discharge to the surface of the eye. In the worst of the cases which I have seen lately there was considerable redness and irritability of the eye, lasting nearly a fortnight. The digestive organs were deranged in all the cases to which I allude; and I attribute the comparative well-doing of these patients to the attention which was paid to their correction, and to tonic and stimulating applications, as a solution of zincum vitriolatum to the surface of the globe, and unguentum hydrargyri nitrati to the eyelids. In other cases, which I had formerly been witness to, where evacuations by bleeding and purging, &c. were employed, the disorder was extremely obstinate; nay several patients lost their sight,

That cutaneous diseases* are much connected with the state of the stomach, is generally

* It may perhaps be right to advert to the direct and sudden sympathy which exists between the skin and the stomach. In affections of the latter organ, the skin is dry and cold, moist and cold,

rally known. Hence various medicines have been recommended to correct disorders of that viscus, with the view of removing the more evident, but consequent disease of the skin. The account, which I have given of disorders of the digestive organs, may lead to a more rational and less empirical treatment, and to the more just appreciation of the value and mode of action of remedies, which are sanctioned by experience. It is almost superfluous to relate any case to authenticate so well known a fact; the following, however, may be found interesting and instructive.

A patient in St. Bartholomew's hospital had an herpetic disease of the skin. This had cold, hot and dry, or moist and dry; and it suddenly changes from the one to the other condition, as the state of the stomach varies. When the digestive organs are disordered, the irritable state of the skin is manifested by the effects of blisters and other irritating applications. A blister produces a tormenting local disease, and even a Burgundy pitch plaster causes extensive erythema. Indeed, when the constitution is irritable, all the modes of counter-irritation, which surgeons employ under other circumstances with success for the cure of local diseases, are likely to do harm; and thus these curative methods obtain discredit in consequence of their ill-timed employment.

healed

healed in the middle, and spread in the circumference to such a degree, that it occupied nearly the whole length of the leg, and included two thirds of its circumference. The skin had recovered a moderately sound state in the centre. The disease was propagated in the circumference by an ulceration, which threw out a projecting and firm fungus of a tawny colour, of about half an inch in breadth. A small groove or channel separated this fungus from the surrounding inflamed skin, which had not yet ulcerated. A similar disease occupied the back part of the arm; this was of an oval figure, and resembled, in every circumstance, that which I have already described upon the leg. These diseases had existed for nearly two years, and continued to spread in opposition to every mode of treatment. Mercury had been employed, even to salivation, without any marked alleviation of the local complaint. I immediately perceived that the digestive organs were greatly deranged: upon correcting this disorder, the skin surrounding the disease became pale; and all disposition to spread ceased. The fungus, however,

however, still projected, and did not heal; it was therefore dressed with a weak solution of kali arsenicatum. This remedy seemed to subvert the diseased actions, which had produced the fungus; so that, in less than two months, the patient was discharged from the hospital perfectly well.

I have seen similar herpetic diseases, of much less extent, succeed to the absorption of matter from sores upon the genitals. These have got well when the patient has gone into the country, and appeared again when he has returned to town. They have healed under a course of mercury, and broken out again when it was discontinued.

In this review of disorders, occurring in parts having a continuity of surface with the digestive organs, I have traced them from the stomach. Another set of diseases may originate from the same source. The large intestines suffer more in advanced stages of these disorders than the smaller ones; hence disorders of the rectum, and particularly many
irritable

irritable diseases about the orifice of that bowel, are deducible from this cause. I shall not, however, prolong the account by the relation of cases; but content myself with assuring the reader, that the opinion has been derived from facts, and not from preconceived notions of the operation of such disorders.

SECTION VI.

IN this Section I shall mention what information I have obtained by dissection, relative to the causation of other diseases by those of the digestive organs. The reciprocal sympathy, which exists between the brain and the digestive organs, is generally admitted; but the kind and the degree of the effects arising from this sympathy, is not, perhaps, in general, sufficiently understood. These organs mutually increase each other's disorder; till the affection of the sensorium leads to the greatest disturbance of the nervous functions, and even of those of the mind.

All this may happen without any visible disease of the brain. Dr. Kirkland particularly directed the attention of medical men to nervous apoplexy; and the observations, which have been made since that time, have proved, that not only a general derangement of the functions

functions of the nervous system producing apoplexy, but also partial effects of a similar nature causing hemiplegia and paralysis, may take place, without any visible change of structure in the brain. I have met with numerous instances of this kind; but could not determine whether the affections were merely nervous, or whether they were produced, or aggravated by disorder of the digestive organs. I only know, that the patients died affected by apoplexy, hemiplegia, or more local paralysis, without any derangement in the evident structure of the brain. I may also mention, that I formerly examined the brains of three persons who died in a comatose state, in consequence of the metastasis of rheumatism. In these cases no morbid appearance was observed in the brain, except some slight marks of inflammation of the pia mater. It therefore appears clearly to me, that disorder and abolition of the nervous functions may take place, without any organic affection of the brain. The perfect recovery of patients, which sometimes happens, after such disorders, may also be considered as additional evidence

evidence of there having been, in such instances, no organic disease of the brain.

There can be no doubt but that epilepsy may, in like manner, take place without any morbid alteration of the structure of the brain, or its membranes. Some of the persons whose heads were examined, without the discovery of any disease of those parts, had been subject to attacks like those of epilepsy. Dr. Henry Frazer has, of late, published a decisive instance in proof of this fact. A patient died of epilepsy, and his brain was examined with particular attention, by Mr. Cooper, without any morbid alteration of structure being discovered*. In general, however, morbid appearances are evident in the brains of those persons who die of epilepsy. Tubercles are most frequently met with. There is, however, a disorder of structure which I wish briefly to mention, as I do not find that it has been noticed. In two persons, who died of epilepsy, I found the medullary substance of each hemisphere altered from its natural

* See Frazer on Epilepsy, page 39.

structure; it had lost its natural firmness, and smoothness of surface, and appeared like thick curdled cream.

Now, if disorder of the digestive organs is capable of causing or aggravating nervous disorder, even to the production of those effects which have been mentioned, when there is no alteration of structure; it must be granted that such a state of irritation of the sensorium may lay the foundation of an excitement of the vascular structure of the brain, and thus very frequently produce organic disease. When this has occurred, it will aggravate and establish the nervous affection, and thus perhaps render it insusceptible of cure.

Such are the general observations which I have made, by means of anatomical enquiry, relative to these subjects. With respect more especially to the investigation of my present object, I have examined the bodies of six patients, in whom disease most certainly began in the abdominal viscera, and was continued

tinued in them to the conclusion of their lives. Nevertheless the patients seemed to die rather of nervous disorder, than of disease of the parts first affected. One of the patients died affected with apoplectic symptoms, and five with hemiplegia.

In all these cases the liver was greatly diseased, and the bowels also exhibited diseased appearances. In three of the cases there was considerable inflammation of the membranes of the brain; and a good deal of water in the ventricles. In two of them no morbid appearance of the brain was discovered. I have also examined a child, who was supposed to have died of the hydrocephalus, accompanied by great disorder of the stomach and bowels. In this case the bowels were inflamed, the liver found, and the brain perfectly healthy in appearance; yet there had been so great a diminution of sensation and motion, as to leave no doubt of the existence of hydrocephalus. I am aware, that great opportunities of observation, accurate attention to the history of diseases, and anatomical examination

nation of fatal cases, are requisite to enable us to form just notions relative to the present subject. I thought, however, that it might not be improper to state what had been the result of my own enquiries by dissection, in order to promote a more general attention to the subject.

When my attention was first directed to the subject of the sympathetic affections of other organs, which were caused by the disorders of those concerned in digestion, my primary object was to endeavour to ascertain, by dissection, how far pulmonary diseases originated from such a source. I have, in the course of my enquiries, had several opportunities of examining the bodies of patients who apparently died of phthisis, combined with diseases of the digestive organs. In these cases both the history and dissection tended to prove, that the chylopoietic viscera were the seat of the greatest and most established disease, and that the pulmonary affection was a secondary disorder. The liver was greatly diseased, and the lungs were also beset with tubercles; yet a considerable

siderable portion of those organs was found. But dissections can never conclusively ascertain the truth of the opinions which I have stated; for the same disposition to disease existing in the constitution may equally affect both the pulmonary and digestive organs. Nay, observations made in dissection in general, would tend to disprove the opinions alluded to; for diseases of the lungs are very commonly met with in dead bodies, while those of the liver and bowels are much less frequent. Yet considerable disorder of the digestive organs does exist, and may continue for many years, without any organic disease being apparent: it is possible, therefore, that such disorder may excite disease of the lungs, and thus produce a worse disease in the latter organs, than what existed in the former. In short, the opinions which I have mentioned, cannot be either ascertained or refuted by anatomical researches alone.

Accurate attention to the state of the digestive organs may determine this important subject, and lead to the prevention and cure of

the sympathetic diseases which I have mentioned. The attention alluded to, is not of that general kind which adverts only to the quantity of the ingesta, and the periodical expulsion of the egesta, but one that more strictly observes whether the viscera are free from irritation, and whether their secretions are healthy or otherwise. My opportunities of acquiring practical information on this subject must necessarily have been very limited; yet I have seen many cases which, to me, appeared to prove, that pulmonary irritation sometimes proceeds from disorder of the digestive organs. In such cases of surgical diseases, accompanied by disorder of the digestive organs, as have been related, I have occasionally observed a cough attended with expectoration to cease, upon the correction of the disorder of the digestive organs.

A case, which happened about five years ago, strongly impressed these opinions on my mind. A servant of mine told me, that his wife was dying of a consumption, which had been rapidly increasing for six months, and
had

had baffled all attempts to relieve it. Thinking that I could procure her some medical assistance from the hospital, I went to see her. The case, however, seemed past hope. She was extremely emaciated; her pulse beat 140 in a minute; her face was flushed; she had a most distressing cough; and spit up more than a pint of mucus, mixed with pus and streaked with blood, in twenty-four hours. The circumstance, however, which most disturbed her was a continual purging of black and offensive matter. She told me that the disorder of the bowels was the first disorder; that it had preceded the pulmonary affection, and, indeed, that it was an habitual complaint. I thought it unnecessary to trouble my medical friends in so hopeless a case; and ordered some pills, containing one grain of opium, to be taken in such quantity as was necessary to stop the purging. As she informed me that the disorder began in the bowels, I added to each pill half a grain of calomel. By these means the purging was so much checked, that she did not find it necessary to take more than two pills in twenty-four hours; and when she
had

had taken twelve, the mercury, very unexpectedly, affected the mouth. From that period, the stools became of a natural colour and consistence; the cough and expectoration ceased; and she was soon sufficiently recovered to go into the country; from whence she returned apparently in good health.

Now if it were to be ascertained, that pulmonary irritation, which might of course produce pulmonary disease, sometimes arises from disorder of the digestive organs; it would be right to enquire farther, whether it produces such effects, by the nervous disorder it occasions, and by its operation on the health in general; or by means of a more immediate sympathy existing between the pulmonary and digestive organs. I do not mean to insinuate, by what has been said, that pulmonary diseases do not arise originally and idiosyncratically; but only to suggest that they may arise sympathetically, or in consequence of disorder of the digestive organs. The proportionate number of cases, in which they originate in this manner, can only be determined
by

by very extensive experience. That the stomach and bowels are disordered, during the progress of phthisis, will, I conclude, be readily admitted; and that an attention to correct such disorder is requisite, must be acknowledged, from what has been said relative to the influence of such treatment upon various local diseases.

The actions of the heart seem to me also to become disordered from sympathy with the stomach. That palpitations, and feeble or intermitting actions of that organ arise from this cause, is proved by their ceasing, when the state of the stomach becomes changed. The palpitations which take place after eating, in cases where the heart is irritable, farther evince the sympathy which exists between these organs. Surgeons are occasionally consulted on palpitations of the heart, which the patients mistake for aneurisms: I have seen many instances, where the great degree of palpitation led to a belief, that some organic affection existed. This has ceased on an amendment of the general health, apparently arising from

from an amelioration of the state of the digestive organs, and the patients have continued in perfect health. I have not collected any accurate narratives of the cases that I have seen: none at least which I could properly present to the public as a proof of the fact. There is nothing, however, of which I am more perfectly convinced; for I have felt it to be true in my own person. After considerable and unusual fatigue, I was seized with pain, and a sensation of coldness in the region of the stomach. I had no appetite, and the biliary secretion was suppressed. Whilst this disorder continued, which was for many weeks, my pulse intermitted very frequently, and I was distressed with hypochondriacal sensations. Upon an alteration in the state of the digestive organs, and a renewal of the biliary secretions, which happened very suddenly after taking five grains of the pil. hydrarg. my pulse became perfectly regular, and my mind tranquil.

The observations, which I have made in surgical cases, lead me also to attribute many hæmor-

rhages, and particularly those from the nose, to a sympathetic affection of the heart and arteries, excited by disorder of the digestive organs.

If such a state of the system in general, as I have described, and which is manifested by circumstances denoting the digestive organs to be in an unhealthy state, and the nervous system to be likewise disordered, may, in some instances, cause various local diseases of parts not essential to life, the care of which, custom has consigned to the surgeon; and may, in other instances, produce disorders of organs essential to our existence, the care of which is allotted to the physician; the subject must be allowed to be of the highest importance. Of late, indeed, I have been inclined to consider these circumstances as the cause of the complicated diseases which are met with in man, so much more frequently than in animals. In man the brain is more sensitive, and liable to be disordered by mental affections. In man the digestive organs are liable to be disordered by stimulating and unnatural diet.

Sedentary

Sedentary habits and impure air co-operate to aggravate these disorders. The disorders of the brain and digestive organs mutually increase each other; and thus a state of constitution arises, which is productive of the most general and complex diseases. But even these do not seem to me to be the most calamitous terminations of such causes. The disorder of the sensorium, excited and aggravated by the means which have been described, frequently affects the mind. The operations of the intellect become enfeebled, perplexed, and perverted; the temper and disposition irritable, unbenevolent, and desponding; the moral character and conduct appears even liable to be affected by these circumstances. The individual in this case is not the only sufferer, but the evil extends to his connections and to society. The subject, therefore, appears to me of such importance, that no apology need be offered for this imperfect attempt to place it under general contemplation*.

* The ancients, who formed their judgment of the nature of disorders by observing the excretions, denominated an irritable

I feel myself under great obligations to Mr. Boodle, from whom, as I have mentioned in the preface, I first derived those opinions which are recorded in the foregoing pages. By this view of the subject, which he first instructed me to take, I think I can perceive many circumstances relating to the causes and effects of diseases, which before would either have been very obscure, or not all distinguishable. Mr. Boodle first instructed me how to detect disorders of the digestive organs, when their local symptoms were so trivial as to be unnoticed even by the patient; and pointed out to me what were the curative indications in these disorders. Many of the cases, which I have related, shew how much faulty actions of the liver contribute to cause or aggravate the general disorder. The relief, which frequently arises from the renewal or correc-

and desponding state of mind, Hypochondriasis; and when a more fixed and irrational dejection took place, they deemed it an atrabiliary disorder, and called it Melancholia. There can be no doubt of the correctness of their observations; for if the disorder began in the nervous system, it would generally produce and become aggravated by that disorder of the digestive organs, from which they denominated it.

tion

tion of the biliary secretion, in these cases, was the circumstance which at first made the greatest impression on his mind. I believe, however, that his opinions of the nature of the disorder of the digestive organs, and its operation in the production of other diseases, have been, and are, very similar to those which I have delivered. Indeed, as we have lived in the most unreserved communication of our sentiments, it is not probable, that our opinions are materially different. I have been very solicitous that Mr. Boodle should publish his own account of this subject, and the facts which he has collected: but as his time is fully occupied in the practice of his profession, it is probable, that many years might elapse before he could do so, in a manner satisfactory to himself. I hope and expect, however, that he will undertake this task. The medical treatment of diseases, is the most important part of our knowledge relating to them. The plan, which I have suggested, may be applicable to such disorders of the digestive organs as require the attention of a surgeon, whose chief object is the cure of local disease; but it appears

appears to me very inadequate to the cure of those more complicated forms of disease, which come under the care of the physician. To this subject Mr. Boodle has, I know, paid great attention; and a narrative of cases must be valuable, when given by a person who remarks the progress of disease, and the effects of medicine, with sagacity and accuracy.

On Diseases of the Urethra; particularly of that part, which is surrounded by the prostate Gland.

EVERY surgeon will, I believe, acknowledge that an obscurity hangs over the subject of strictures of the urethra, which prevents us from perceiving the cause of many circumstances, which occur in daily practice. Contractions of this canal are sometimes readily enlarged to their natural diameter by the introduction of common bougies, and the cure thus effected is permanent. In other cases it is difficult to procure even a temporary enlargement of the contracted part; and the stricture returns, when the means by which it was relieved are discontinued. This variety in the event of different cases may, in some instances, depend on the kind and duration of the

the

the disease in the strictures themselves; yet, in many others, I am convinced that it is owing to other circumstances, which it is my design to consider in the present paper. Before my observation had been directed to these circumstances, I was much puzzled to account for the discordance in the result of cases apparently similar. I was equally unable to understand some occurrences, like those which are represented in the following case.

C A S E.

A gentleman, whose life was made uncomfortable by a very frequent and very urgent propensity to void his urine, applied to me for advice. Two strictures were discovered in the further part of the urethra, which did not oppose the passage of a bougie as large as a goosequill. Some difficulty was experienced when the bougie entered that part of the urethra, which passes through the prostate gland; and the patient complained of pain, which was considerably increased at the
 orifice

orifice of the bladder. The instrument, however, entered the bladder, though with difficulty; and it seemed to be grasped by the sphincter. The prostate was enlarged to twice its natural size; which circumstance seemed to me to explain the cause of the slight impediment, which occurred to the passage of the instrument through it. The urethra was unusually long in this patient; and though bougies had been frequently introduced, I suspect that they had never been passed into the bladder. The patient was of this opinion, from the peculiar sensations which he experienced, and which he had never felt before. He called upon me four days afterwards, said that he was much relieved, and requested to have the operation repeated. The same bougie which had been used before now passed with much greater facility. The patient still felt peculiar sensations, though much diminished in degree, as the instrument went through the prostate. It entered the bladder without difficulty, and without appearing to be grasped. I now introduced a larger bougie, which went through the strictures with less difficulty than
the

the smaller one had done on its first introduction. This produced the same uneasy sensation on entering the prostate; it was retarded for a moment at the orifice of the bladder, and was slightly grasped at its entrance. All the symptoms were still more relieved by this second introduction. The same operation was repeated a few times; at first every fourth day, and afterwards once a week, till a bougie of the largest size could be passed without occasioning any uneasiness. The patient, during the latter part of the time, did not require to void his urine more frequently than is common. He was relieved from a great trouble; and, though many years have elapsed, he has not experienced similar inconvenience.

Such cases as the preceding induced me to suspect that a stricture might exist in the orifice of the bladder. The following case gave me new and, as I think, just ideas relative to this subject. Whether the opinions be correct or not, the cases, it must be admitted, deserve attention.

C A S E.

A gentleman, more than seventy years of age, had experienced for about six years a difficulty in voiding his urine, which gradually increased, till the stream became very small. This was attended with a frequent propensity to discharge the urine, which disturbed him every second or third hour during the night. At last a complete retention took place when he was in the country; and a surgeon attempted to introduce a small catheter, which however was prevented, by a stricture, from passing farther than six inches. The patient immediately came to London, when I directed him to take some castor oil, and to bathe the perinæum and adjacent parts frequently with warm water. After some time the urine flowed again, and he was relieved from the present urgent symptoms. In two days I examined the urethra, and found a stricture at six inches, through which I could not pass even a very small bougie. I touched this with the *argentum nitratum*; but the application

cation did not produce any alteration in the circumstances of the disease. On the third day the bougie passed on to a stricture at seven inches, which was also touched with caustic; and the same treatment was repeated with another stricture, at the distance of half an inch from this. The bougie now passed through all the strictures, and entered the prostate, when I was obliged to withdraw it immediately, from a sudden attack of pain and faintness. No enlargement of the prostate was discovered by an examination per anum; nor was it tender when compressed. I told the patient that I considered it very desirable to introduce a tubular instrument into the bladder, but that the minuteness of the stream of urine rendered it doubtful whether this could be accomplished. I requested him to call in another surgeon, that the attempt might be made by us conjointly. A flexible varnished catheter, containing a strong wire, was readily passed into the prostate, but could not be made to enter the bladder. The attempt was not long persevered in, from an apprehension of doing injury, if the instrument

were not guided in the right track. No blood flowed upon withdrawing the catheter. A slight retention of urine followed this attempt; but, after a few days, the patient was in the same state as before. On examining the urethra four days afterwards, I found that the smallest bougie would not pass farther than six inches; so that the contraction of the first stricture had been re-excited by the irritation occasioned by our late attempt. As the application of the *argentum nitratum* had so suddenly and completely relieved this stricture in the first instance, I now repeated this application, although I knew that the stricture was merely spasmodic. In the course of a few days a small bougie was introduced into the prostate, and afterwards a larger one. I now wished to ascertain whether I could pass the bougie into the bladder, or learn, by means of that instrument, the cause of the obstruction. As the patient found that he could void his urine most easily when lying on the left side, it seemed probable that the orifice of the urethra might be found in that direction. I therefore depressed the point of the instrument,

and

and carried the other extremity towards the right groin, when most unexpectedly it went forwards into the bladder. When the bougie was withdrawn, a considerable quantity of clotted blood and mucus, with some matter, oozed out of the urethra; and the patient afterwards voided in a large stream about eight ounces of turbid and foetid urine mixed with mucus; after which he felt as if his bladder were completely emptied. From this time he had no occasion to void his urine more frequently than is natural, and he expelled it in as large a stream, and with as much facility, as he had ever done at any period of his life. The bougie was for some time introduced every third day, and afterwards once a week. It passed easily not only through the urethra, but into the bladder, when guided in the direction which has been mentioned. At first the point was soiled with blood and matter, but afterwards these appearances were no longer observable, which led me to conclude that the circumference of the ulcerated orifice of the bladder had completely healed. Two years afterwards this gentleman

gentleman experienced a recurrence of his former complaints; a small bougie only could now be introduced into the bladder. A larger bougie was passed through the urethra on the next attempt; but it was not carried forwards into the bladder, from an apprehension of irritating the prostate. After a few days the larger bougie was introduced into the bladder, and met with a little resistance at its orifice. From this time it passed with the same facility as when I discontinued my former attendance, and the patient found himself equally well. Two years have now elapsed without any necessity for repeating these operations.

In this case a disease took place in the prostate gland, without producing any evident enlargement or tenderness of its substance, though it proceeded to a state of ulceration. The disease seems to have operated on the continuous parts in two directions; backwards upon the bladder, rendering that organ irritable; and forwards upon the urethra, causing strictures, which were
in

in some degree organic, but chiefly of a spasmodic nature. It must be allowed, however, that the obstruction of the aperture into the bladder by the discharges from the ulcerated surface contributed in a great degree to maintain the irritability of the organ, by impeding the discharge of the urine. This disease was also of a nature that admitted of relief, and the passage of a bougie seemed to effect its cure. It had, however, a tendency to recur, and the use of the bougie lessened the irritability of the part, and arrested the progress of the disease.

The circumstances of this case do not indeed unfold the cause and precise nature of the disorder, which, however, will in my opinion be elucidated by those which follow. They induced me to suppose that those instances, which I had formerly met with, and which appeared so unintelligible, were of a similar nature; and they made me particularly attentive to the state of the urethra, where it passes through the prostate gland, as I saw the possibility of this canal being diseased,

diseased, without the prostate being materially implicated in the disorder. The following case occurred soon afterwards.

C A S E.

A gentleman, between fifty and sixty years of age, had for twenty years been subject to occasional fits of dysury. I was desired to see him in one of these, which had been very severe and long continued. He was obliged to void the urine at least every hour. The calls were sudden and urgent, and the pain continued for a considerable time after the urine had been discharged. He had some fever, which such irritation would naturally produce. A moderate-sized bougie stopped at two strictures, but passed through them without much difficulty: when it entered the prostate, the patient complained of burning pain; of a strong irritation to make water; and grew so faint that I had merely time, by a gentle pressure, to ascertain that the bougie would pass into the bladder: when

I with-

I withdrew it, the point was covered with blood. The patient was directed to bathe the perinaeum with warm water frequently, if the dysfury was urgent. He was much relieved by the introduction of the bougie, and did not want afterwards to void his urine oftener than every second or third hour. The calls were less urgent, and the subsequent uneasiness less in severity and duration. After two days, a bougie of the same size was introduced to the extent of eight inches, and withdrawn; no blood adhered to its surface. A smaller bougie, much curved, was now passed into the bladder; the patient complained of the same uneasy sensation as before, when it entered the prostate; but he did not grow faint. The point was bloody for three quarters of an inch, but less so than on its first introduction. More relief was experienced this time. The urine was now voided only every fourth hour. Two days afterwards the bougie was again introduced into the bladder, considerably curved, and with the point carried along the upper surface of the urethra, where it passes through the prostate gland.

gland. The point was soiled with a yellowish fluid, slightly tinted with blood. As the patient was getting much better, the operation was not repeated till after four days, and then at the end of a week; at which time the blood and the yellow fluid had entirely disappeared. The urine was not voided more frequently than natural, nor was its expulsion attended or succeeded by any painful sensation. The strictures in this case felt firm, and not easily dilatable: I thought it necessary to relieve them, lest they should contribute to re-induce the irritation in the prostate; but the patient felt himself so well, that he was averse to any thing which might renew his former sufferings, and he has had no symptoms of dysuria since that period. The prostate in this patient was not enlarged nor tender. Conclusions similar to those, which were deduced from the former case, may be more fairly drawn from this; viz. that a disease may occur in the membrane of the urethra where it passes through the prostate, and that it may render the bladder irritable, and produce strictures in the urethra; for in this case there
was

was no mechanical obstruction to the expulsion of the urine to produce irritation in the bladder. It also appears, that the disease admitted of relief by the introduction of a bougie.

I have lately met with another case in a younger man, who is between twenty and thirty years of age, and who was afflicted with similar fits of dysury, the cause of which could not be ascertained. I passed a bougie for him a few times, but found no stricture in the urethra. The same painful sensations were produced in the prostate, as in the preceding cases. The bougie did not appear at the time to relieve the dysury; but the complaint gradually ceased, and the patient left town. He has been much better since this time, and attributes his relief to the passage of the bougie.

C A S E.

A gentleman, about sixty years of age, was affected with dysury, which increased in violence, though various means were employed during

during two years for his relief. He voided his urine every second hour, or oftener, with great pain and severe irritation; which continued for some time after its expulsion. He had such a sensation of heat and uneasiness in the perinæum, that he could not bear to bring his thighs together; and he was obliged to use a cushion, with a vacancy in the middle, when he sat down. He could not ride in a carriage, or even walk out, although his general health was good. A moderate-sized bougie halted a little at two strictures, and when it arrived at the prostate produced a violent burning sensation, a vehement propensity to void the urine, and extreme pain at about two inches from the orifice of the urethra; which part was always particularly painful during the time of voiding the urine, and after its expulsion. On withdrawing the bougie, which had entered the bladder, its point was found to be covered with blood. The prostate being examined, felt rather broader than usual, but was not tender. The patient was relieved by the introduction of the bougie, which was repeated on the third day: it.

it went more freely through the strictures, and the sensations, caused by its passage through the prostate, were diminished. The point of the bougie was bloody. I ascertained that the blood came from that part of the urethra which is situated in the prostate, by introducing a large bougie to the distance of eight inches, and then withdrawing it: the point was not in the least soiled with blood. The second introduction of the bougie produced considerable relief. The urine was retained longer, the uneasy sensation in the perinæum was diminished, and the patient could walk or sit down more comfortably. The bougie was used every third or fourth day for three weeks; and then once a week for a month longer, its size being gradually increased. The appearance of blood on the point gradually ceased: it was afterwards soiled with a purulent and then with a mucous fluid, which appearances also gradually ceased. The water was now voided only at intervals of four hours, the subsequent pain being either trivial or entirely absent; the uneasiness in the perinæum was

so inconsiderable, that the patient could walk for several hours, and sit down without pain. The feminal discharges had been attended with extreme pain, so great as almost to produce fainting, before the state of the prostate had been relieved: they afterwards took place without any unusual sensation.

These cases shew that the urethra may become irritable and diseased, where it passes through the prostate gland, without any material disorder of the contiguous parts. They induced me to pay particular attention to the state of that part of the urethra; which attention will, in my opinion, be found of great consequence in directing our treatment of these disorders. As it would render this paper extremely voluminous to detail the particular cases which I have met with, I shall merely relate the observations which I have made, and the inferences which I have drawn from them; that the profession in general may investigate the subject, and determine how far these observations and opinions are correct.

First,

First, then, it has appeared to me that a state of inflammation and irritation may take place in the remote part of the urethra to a greater or less extent. It may produce in the prostate that peculiar sensibility of the part which I have described; and in the perinæum it may cause contractions of different parts of the canal. Either of these affections may be more permanent than the other, even where each part has been equally affected in the beginning. This state of inflammation and irritation is frequently produced by gonorrhœa, though it may occur from other causes. If, injudiciously, a bougie be introduced when this disorder first occurs in a gonorrhœa, numerous spasmodic strictures* are met with; the patient becomes alarmed by the difficulty of passing the instrument, and by the name of strictures, and consults a more experienced surgeon, who directs local warm bathing, and

* I have used the term spasmodic strictures in the indiscriminate manner in which it is generally employed, though I am aware that it is objectionable: a stricture from spasm is not a stricture; and a stricture may be irritable or spasmodical, or otherwise.

the application of leeches to the perinæum. The disorder is cured; the patient expects that strictures remain; a full-sized bougie is introduced to satisfy him, which passes without the least difficulty. I am unable to determine whether in such cases the urethra is affected in the first instance in that part which passes through the prostate, as I never made any examination under these circumstances, though I think it very probable that it is so. When a gleet becomes unusually protracted, it is frequently owing to the effects of this disorder in the remote part of the urethra, maintaining a degree of irritation in the front. Under these circumstances, it is allowable to introduce a bougie, when strictures will frequently be found in the perinæum; and in many cases, the patients whom I have attended have experienced those sensations, which are characteristic of tenderness in the membrane of the urethra, where it passes through the prostate. If, therefore, we look to the origin of those cases, which we are called upon to attend in their advanced stages, we might expect to find the disorder of the urethra various
with

with respect to the kind and extent of the disease. That it will be found so in practice I do not hesitate to affirm, from the observations which I have already made relative to this subject. In some cases, strictures in that part of the canal, which is subject to such contractions, will be the sole disease. In others, an uneasiness, and such sensations as I have described, will be complained of as the bougie passes through the last inch of the urethra, which is contained in the prostate gland. In some cases also, the strictures will be the less degree of the disease, and the irritation in the prostate the greater; and in some cases it will be found that nothing is discoverable which can fairly be denominated a stricture, and yet the tenderness which I have described exists in a most painful degree. In deducing these diseases from the inflammation which gonorrhœa excites, I mean only to trace them from a very common origin. The same disorders frequently take place without having been preceded by that complaint. An attention to the circumstances, which have been mentioned, seems to me to explain the contra-

dictory events which happen, when a similar plan of treatment is pursued for the cure of diseases of the urethra. When strictures are the sole disease, they are often readily, and generally permanently, cured. When an irritation, such as I have described, exists in the prostate, it is difficult to enlarge the contracted portions of the canal; and, when that is accomplished, the strictures recur, as a cause of irritation to the urethra still continues. In some cases, the enlargement of the strictures fails to mitigate the dysury, and in others it is augmented by the measures, which have been employed to cure the strictures, when the state of irritation at the neck of the bladder has been unadverted to. Many patients have applied to me under these circumstances, after having been under the care of other surgeons. They have stated, that small bougies only could be passed in the first instance, and that though the largest could now be introduced, the complaint was no better; nay, some have thought themselves materially worse. A bougie has passed in these cases eight inches, without meeting any considerable obstruction,

or

or exciting much sensation; but, after this point, it caused a most acute and burning pain, with vehement desire to make water. Some have enquired if I was withdrawing the bougie, whilst it was slowly proceeding, and some have complained of great pain in the front of the urethra. Similar cases have occurred in my own practice. I have relieved strictures, without materially benefiting my patients; of late years, I may venture to say, without making them worse; because I have been cautious not to hurt the canal, where it passes through the prostate.

Some cases of disorders of the urinary organs are made worse in the attempt to cure strictures: and I think I deliver an important admonition, to the younger part of the profession, when I caution them to beware, in their attempts to cure strictures, that they do not irritate or injure the last inch of that canal, where there are no strictures, but in which considerable disorder may nevertheless exist.

In some cases of diseased urethra, which I have not unfrequently met with, strictures are found, through which a small bougie passes with difficulty ; and it produces those sensations, in passing through the prostate, which I have described, as peculiar to that part of the canal when in a diseased state. The patient, however, experiences relief from the introduction of the bougie ; and if it be passed again on the third day, it will meet with no obstruction from the strictures, and cause less uneasiness in passing through the prostate. I have then taken a bougie of a larger size, such as it would have been impossible to introduce in the first instance, and this has passed through the strictures to the distance of eight inches ; but I have forbore to carry it any farther, lest I should irritate the urethra near the neck of the bladder. It appears therefore to me, that you may relieve or aggravate strictures in such cases in proportion as you diminish or augment the morbid sensibility of the remote part of the urethra ; and an attention to the state of this part is on this account of the greatest importance.

Having

Having thus adverted to the probable origin of the disease, which I am endeavouring to describe, and its connection with strictures, I proceed to observe, that such a state of morbid sensibility in that portion of the urethra, which passes through the prostate, may perhaps exist as a symptom of an irritable bladder. If the lining of the bladder were inflamed and irritable, it is probable that the disorder would extend into the urethra for some small distance. In the fourth case, I believe that the disease in question was complicated with an irritable state of the bladder; but whether it was to be considered as an adjunct circumstance, or in the relation of cause or effect, cannot be determined. The irritability of the bladder was diminished, but not cured, by the treatment which lessened this disease. In one gentleman, who apparently died of an irritable bladder, and who complained of the sensations, which I have described, in an acute degree, on the bougie passing through the prostate, the diseased parts were examined, but very trivial morbid appearances were observed. The lining of
the

the bladder was not perfectly natural, and was inflamed; yet the diseased appearances were not striking; and in the urethra the deviation from the healthy structure was still less so.

It is not improbable, however, that such a morbid sensibility of the prostatic urethra may arise from an irritable bladder. Perhaps, also, it may occasionally arise from the irritation of the last stricture. Many patients with strictures, who complained much of the sensations at the neck of the bladder, at the commencement of the treatment of their complaint, have asserted, that they felt no unusual sensations when the bougie passed through the prostate, after the strictures had been cured. Yet, though I would admit that a tenderness of the canal of the urethra in the prostate may sometimes arise from its proximity and continuity with the lining of the bladder, or with the last stricture, I think it more frequently exists as an original and independent disease. It has been shewn, that it may render the bladder irritable, and excite con-

tractions

tractions in the urethra. Some cases have been adduced, which shew that this state may exist, and yet the bladder may not be constantly irritable, but that it may be affected by fits. I have also met with a case where this sensibility existed in an extreme degree, and yet it seemed to have very little influence on the bladder. I have likewise known this irritable state of the urethra complicated with the common enlargement of the prostate.

I proceed, in the next place, to relate what I have observed respecting the treatment of the disease, which I have been describing. The three first cases shew, in a striking manner, the advantage derived from the introduction of bougies; and I have seen many similar ones, though I scarcely think so demonstrative of the utility of this mode of treatment. I know some patients with occasional attacks of dysury, and who have this tenderness of the remote part of the urethra, in whom the passage of a bougie, together with warm bathing of the perinæum and adjacent parts, very speedily relieves a disease, which

which had proved very tedious and distressing, before these measures were adopted. If a bougie be introduced, for the first time, in a case of this description, severe pain is felt, and faintness is occasioned: if this operation be repeated three days afterwards, the pain perhaps is much less severe, and it may diminish at each succeeding introduction of the instrument. Should this be found to be the case, surely nothing need be farther said in commendation of this mode of treatment. The morbid sensibility of parts is diminished by it. This happened in the three first cases in a remarkable degree, and I have known it take place in many others. Nor is there any thing in this event that should excite surprise: every surgeon is familiar with the same circumstance, with relation to strictures in the urethra. The first introductions of a bougie are very painful; the subsequent ones are even disregarded. Still, however, I think it may be useful to dwell a little on this subject, and consider the probable causes of these effects, as it may tend to establish rules for our conduct in practice. It appears to me, that we
diminish

diminish the morbid as well as the natural sensibility of parts by doing them a degree of violence, short of that which produces a kind of re-action in them, by which their sensibility is heightened. This is, indeed, the consideration, which guides my practice in these and in many other cases. If, even in strictures of the urethra, the sensibility of the canal becomes increased by the introduction of bougies, or, in other words, if inflammation is excited, surely it is wrong to prosecute such measures at this juncture. If the morbid sensibility be diminished, we may use more freedom in the prosecution of our measures. In passing the bougie, in the cases now under consideration, it ought at first, I think, to be so small as not at all to distend the irritable urethra. I have always curved it considerably, and kept the point in contact with the upper surface of the urethra, as it passes through the gland. I recommend warm bathing to the perinæum, with a view to obviate or diminish irritation. If I find, on the second introduction of the bougie, the sensibility of the parts diminished, it induces me afterwards to proceed

proceed more freely ; but at all times with a caution excited and regulated by the consideration which I have mentioned. Now, though such conduct has been successful in many instances, I am concerned to state, that it has failed in some others ; and, when I clearly ascertain that I am not likely to succeed, I cease to make farther attempts by the introduction of bougies, and pursue only general methods, such as warm bathing, bleeding by leeches, &c. When there are strictures, which it is right to enlarge, I pass the bougie through the last stricture, without carrying it on, so as to irritate the tender part of the urethra, which lies behind it. A knowledge of the nature of diseases cannot but be desirable, even though it does not enable us to cure them all. If strictures are removed, and dysury remains, I believe it is common to consider it as arising from an irritable bladder : now, though this may be a general truth, there are many exceptions. I do not find that attention is paid to that description of cases, which makes the subject of the present paper : I was unacquainted with them
till

till I met with the cases which I first mentioned: the knowledge which I have thus obtained has enabled me to afford relief in many cases, and has prevented me from error in others.

On the Treatment of one Species of the
Nævi Materni.

I shall relate two cases, and say a few words on the treatment of this complaint, which is a congenital deformity, consisting in a cluster of enlarged vessels, filled, and occasionally distended by the influx of blood from numerous surrounding arteries. The deformity to which I allude is so well known, and so frequent an occurrence, as to preclude the necessity of any description. Mr. John Bell has of late proposed an ingenious theory of its formation, and has denominated it an aneurysmal enlargement of the vessels, in consequence of their anastomoses. There can be no doubt that the repletion, distention, and consequent enlargement of the dilated vessels depends

depends upon a kind of inflammatory action of the surrounding arteries; for, if that be wanting, the mark ceases to enlarge, and if present, it increases in size in proportion to the degree of inflammatory action. In many cases these marks, having increased to a certain degree, cease to enlarge; they then remain stationary, or gradually diminish, till they almost disappear. This occurrence is not so frequent as to induce surgeons to expect such an event, or to prohibit, in consequence of such expectation, their removal. For, if they continue to enlarge, the operation must be commensurate to their size. The consequences of their bursting are alarming and vexatious. It is not, however, my intention to speak of these affections in general, but only to state what, perhaps, may in some instances be done with success, when the removal of the unnatural structure cannot be accomplished. For this preternatural enlargement of vessels is not always cutaneous. I have seen it occupying the whole substance of the cheek, neither appearing beneath the skin nor the membrane of the mouth: I have

met

met with it in the orbit of the eye, and have found it covering the whole of an extremity, or nearly one half of the trunk of the body. If any means can be pursued, under such circumstances, to check the progress of the complaint, they surely deserve attention. I was lately so fortunate as to succeed in such endeavours, in cases, the relation of which is my chief object at present.

C A S E.

A child about two months old was brought to St. Bartholomew's hospital, with this unnatural enlargement of vessels, distributed every where beneath the fore arm, from the wrist to the elbow. In a short time it had swollen to that degree, that the circumference of the affected fore arm was twice the size of the other. The vessels were large and contorted; and to give the reader an idea of their appearance, I may mention that the child's mother affirmed that they resembled the entrails of a pig, with which she had either been frightened or disgusted during her pregnancy.

The

The skin was of a dusky hue, and had not its natural smoothness of surface. The heat of this fore-arm was much greater than that of the corresponding sound one. Pressure forced the blood out of the vessels, and temporarily diminished the bulk of the limb, and made it of a paler colour. The child's mother lives at Turnham Green, where Mr. Graham, an ingenious surgeon, who was for a long time a student at St. Bartholomew's Hospital, also resides. I requested this gentleman to take charge of the case, and try the effect of the following plan of treatment, which it seemed to me right to institute. First, I was desirous of ascertaining whether a permanent and equable pressure would not prevent the distension and consequent enlargement of the turgid vessels; secondly, whether reducing the temperature of the limb would not diminish the inflammatory action, upon which their repletion seemed to depend. These two intentions admitted of being readily accomplished. A many-tailed bandage of sticking plaster seemed
adequate

adequate to effect the first, and wetting the limb with water the latter. These measures were judiciously carried into effect by Mr. Graham; the pressure was first made slightly, and afterwards more forcibly, as the part seemed to bear it without inconvenience. A roller was applied over the plaster and kept wet, if the limb felt hotter than natural, so as to regulate its temperature. The success of these measures exceeded our most sanguine expectations. The size of the limb gradually diminished, and its temperature became natural. After six months, Mr. Graham removed the bandages, which it was not necessary to continue any longer. The limb was in some degree wasted, from pressure and disease, but it soon gradually re-acquired its natural size. After the bandages had been left off for a month, I saw the child. The skin was pale and had a slightly shrivelled appearance. The contorted vessels felt like solid chords interposed between it and the fascia of the forearm.

CASE.

C A S E.

A child had this unnatural state of the vessels in the orbit of the eye. They gradually increased in magnitude, and extended themselves into the upper eye-lid, so as to keep it permanently closed. The clustered vessels also projected out of the orbit, at the upper part, and made the integuments protrude, forming a tumour as large as a walnut. Of course, the removal of this disease did not appear practicable. I was consulted on this case by Mr. Hurlock, whom I told of the success of the former experiment. Pressure to any extent was here evidently impossible; but the abstraction of heat, and consequent diminution of inflammatory action might be attempted. I recommended that folded linen, wet with rose water saturated with alum, should be bound on to the projecting part, and kept constantly damp. Under this treatment the disorder as regularly receded as it had before increased. After about three months it had gradually sunk within the orbit, and the child could

open its eye. Shortly afterwards all medical treatment was discontinued, and no appearance of this unnatural structure remains.

A third case of a very extensive mark of this description, covering the back and shoulder, got well, as I am informed, by the same treatment. I have not, however, been able to learn the particulars. It appears to me probable, from the foregoing cases, that if the preternatural distention of the vessels could be prevented, the blood might coagulate in them; and thus this unnatural contexture of vessels, being rendered impervious, might become obliterated.

The best mode of obtaining and increasing professional knowledge is, in my opinion, to pay that strict attention to cases, which enables us to note those nice shades of difference, which distinguish diseases from each other; and also to form some regular arrangement of them; so that, ultimately, we may be able to discover their natural series and order. This method I have pursued from the beginning of my professional

professional studies. Whenever the opinions, which an attention to cases had impressed on my mind, differed from those which seemed to prevail amongst other practitioners, I published the cases, and the inferences which I drew from them ; because I thought the cases, at least, deserved attention, and that the justness of my opinions would either be confirmed or confuted by those of the public. It is also of acknowledged utility to the promotion of science, to excite investigation, and even publicly to announce the deficiencies of our knowledge. Such were the considerations, which induced me to lay before the public my former and the present essays and observations. I am induced to mention my motives, though indeed they are sufficiently apparent, because I suspect that I may, on this occasion, be again censured for producing unfinished performances, and for not paying sufficient attention to the records of similar cases, which are contained in books. The very design of the work includes in it, however, a degree and acknowledgment of imperfection ; and

and what I wish to observe on this subject will be best expressed in the words of Horace :

“ Est quôdam prodire tenus ; si non datur ultra.”

For my apparent inattention to reading on the subjects, which it is the intention of these essays and observations to illustrate, I have formerly assigned, what appeared to me to be an adequate apology—

“ In proportion as we advance in knowledge, we are led to remark many circumstances in the progress of a disorder, which had before passed without notice ; but which, if known and duly attended to, would clearly point out the nature of the complaint. Hence the records of former cases are of much less value ; as the symptoms, about which we are now anxious to inquire, have, in them, been entirely overlooked.” To adduce cases without opportunities of identifying them, would only lead to controversy.

Again then I publish a work, with all these imperfections, regardless too of my own reputation,

putation, whilst I am conscious of performing a duty in not secreting knowledge, or making it merely subservient to private views; but in publishing information, which could not be collected without opportunities that few possess, and which may, in various ways, contribute to promote the advancement of medical knowledge.

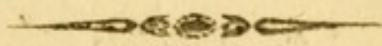


MEDICAL AND SURGICAL WORKS

PRINTED FOR

LONGMAN, HURST, REES, AND ORME,

PATERNOSTER-ROW.



1.—**SURGICAL OBSERVATIONS:** containing a Classification of Tumours, with Cases to illustrate the History of each Species; an Account of Diseases which strictly resemble the Venereal Disease; and various Cases illustrative of different Surgical Subjects. By JOHN ABERNETHY, F. R. S. Honorary Member of the Royal Medical Society of Edinburgh, and of the Medical Societies of Paris, Philadelphia, &c. Assistant Surgeon of St. Bartholomew's Hospital, and Teacher of Anatomy and Surgery. In 1 vol. 8vo. Price 6s. boards.

2.—**SURGICAL and PHISIOLOGICAL ESSAYS.** By JOHN ABERNETHY, F. R. S. &c. In 2 parts, 8vo. price 8s. boards.

3.—**THE MODERN PRACTICE of PHYSIC.** By EDWARD GOODMAN CLARKE, M. D. Author of "*Medicinæ Praxeos Compendium*;" of the Royal College of Physicians, London, and Physician to the Forces, &c. In 1 vol. 8vo. price 9s. in boards.

"This volume may be recommended to the student, as containing the best compendium of modern improvements in medicine and therapeutics, which we have had occasion to peruse. The detail of symptoms, under each head, is very comprehensive and correct; and scarcely any remedies, which have stood the test of experience, are omitted to be mentioned."

CRITICAL REV. Dec. 1805.

"We have perused the above work with much gratification, and we earnestly recommend it as deserving of the attention, particularly of the junior branches, of the profession, as it is written in an able and scientific manner; and we are well assured that it will not derogate any thing from the reputation the author has already obtained by his *Medicinæ Praxeos Compendium*."

MEDICAL JOURNAL, Dec. 1805.

4.—**MEMOIRS of the MEDICAL SOCIETY of LONDON,** instituted in the Year 1773, the Sixth Volume, in 8vo. price 12s. boards.

5.—**THE ANATOMY OF THE HUMAN BODY.** By JOHN and CHARLES BELL, Surgeons, Edinburgh. In 4 vols. royal 8vo.—The Two first volumes of this Work contain the Anatomy of the Bones, Muscles, and Joints; and of the Heart and Arteries; with numerous Engravings, Price 11. 10s. in

Boards. The Third Volume contains the Anatomy of the Brain, and Description of the Course of the Nerves; and the Anatomy of the Eye and Ear; with Engravings. Price 16s. in Boards. The Fourth Volume contains the Anatomy of the Viscera of the Abdomen, the Parts of the Male and Female Pelvis, and the Lymphatic System, with Engravings. Price 15s. in Boards.

6.—ENGRAVINGS OF THE BONES, MUSCLES AND JOINTS, illustrating the First Volume of the Anatomy of the Human Body. By JOHN BELL, Surgeon. In Quarto, with about 200 Pages of explanatory Letter-press. Price 11. 11s. 6d. in Boards.

7.—ENGRAVINGS of the ARTERIES, illustrating the Second Volume of the Anatomy of the Human Body. By JOHN BELL, Surgeon; and serving as an Introduction to the Surgery of the Arteries. By CHARLES BELL, Surgeon. Superbly printed in Imperial 8vo, and beautifully coloured, Price 11. 1s. in Boards.

8.—The ANATOMY of the BRAIN; explained in a Series of Engravings, beautifully coloured, with a Dissertation on the Communication between the Ventricles of the Brain. By CHARLES BELL, Fellow of the Royal College of Surgeons, of Edinburgh. Elegantly printed in royal 4to, on fine Wove Paper, hot-pressed, Price 21. 2s. Boards.

9.—A SERIES of ENGRAVINGS, explaining the Course of the Nerves. By CHARLES BELL, Fellow of the Royal College of Surgeons. In royal 4to, with Letter-press Descriptions. Price 11. 1s. in Boards.

10.—The PRINCIPLES OF SURGERY; Volume the First; as they relate to Wounds, Ulcers, and Fistulas; Aneurisms, and Wounded Arteries, Fractures of the Limbs; and the Duties of the Military and Hospital Surgeon. By JOHN BELL, Surgeon. In One large Volume, royal 4to, illustrated by Eighty Engravings, many of them accurately coloured from Nature. Price 41. 4s. in Boards.

The Second Volume containing, the OPERATIONS of SURGERY, as they relate to the Anatomy and Diseases of the Urethra and Bladder; the Skull and the Brain; with numerous Engravings. In Two Parts, 4to. Price 51. 5s. in Boards.

