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OBSERVATIONS

ON

INJURIES AND DISEASES

OF

THE RECTUM.

BY

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ADVERTISEMENT.

THE following pages contain an account of cases intended to exemplify the principal varieties which are observed in diseases of the rectum, with the appropriate methods of treatment. I have been led to write upon this subject by several considerations. Diseases of the rectum are of frequent occurrence: they are extremely troublesome, and are often attended with severe pain. The greater number admit, if judiciously treated, of speedy and complete relief: while on the other hand, when not understood, they are liable through misdirected remedies to

be seriously aggravated. Much good may be done by one who is well acquainted with these complaints; much harm, by one who treats them ignorantly.

I may add, that diseases of the rectum are more common in the higher ranks of society than among the poor; and that the ordinary routine of surgical education affords comparatively few opportunities for their study.

19, George Street, Hanover Square,
July 18, 1833.

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OBSERVATIONS

ON

INJURIES AND DISEASES

OF

THE RECTUM.

CHAPTER I.

OF LACERATION OF THE RECTUM.

The simplest affection of the rectum is its partial or complete rupture. The bowel may be *torn through* by violence applied either from within or from without. *Partial laceration* of the bowel is the consequence of force applied to its inner surface. When the slightness of the materials is considered, of which the intestine is framed, its coats consisting but of three slender membranes, the combined thickness of which does not exceed a tenth part of an inch, it appears

surprising that this accident is not more frequent. In the dead body, the intestine is found to be torn by very trifling pressure; and the tone of its fibres when living cannot be supposed to add materially to its strength.

I. I attended a lady under the following circumstances. She had been confined three months before. During her recovery the action of the bowels had been irregular. Without medicine the bowels seldom acted at all; and the relief which she obtained through medicine was attended with great pain. It had therefore become her practice, in order to obtain intervals of ease, to allow the bowels to remain two or three days without acting, and then to take some purgative. The effect of the medicine used to be distressing. What first came away was solid and of large size, and passed only after repeated efforts; and this was attended with great local pain, and a sense of dragging

at the loins, followed by languor and exhaustion.

On one of these occasions something appeared to give way, or to be torn, and her sufferings were now increased by a sense of exquisite soreness at one part in the rectum. It was upon this that she consulted me. Upon examining the bowel I found a small transverse fissure in the lining membrane, at the back part of the bowel immediately within the sphincter, which is the point where fissure is most common. There was a little hardness round it, and it was acutely sensible. The bowel above was large and relaxed, and contained at the time a considerable volume of fecal matter.

I recommended that the bowel should be immediately washed out with warm water, by which means its contents were brought away: that every morning the injection of warm water should be repeated, with the

object of completely unloading and relieving the rectum daily: and that at night a mild mercurial ointment should be applied to the fissure of the mucous membrane. By steadily pursuing this plan, the lady in a short time recovered. Occasionally, since her recovery, when the action of the bowels has become irregular, she has been threatened with a return of the complaint; but upon resuming the use of the remedies by which the part was before restored, she has in each instance found the uneasy sensations cease.

II. A young gentleman, who had been accustomed to an active country life, fell into sedentary habits upon engaging in the study of the law. He experienced frequent headaches, and the bowels were generally constipated. The effort used in evacuating the bowels was now attended with slight eversion of the rectum; and at last, in addition to this source of inconvenience,

he became sensible of acute pain at a point just within the sphincter, which was brought on whenever the bowels acted, and continued for some time afterwards.

After trying several remedies ineffectually, among which was the daily use of an enema, I advised this patient to take every night a grain of blue pill with three grains of compound extract of colocynth, and to apply to the surface, upon which a fissure existed, as in the preceding case, a mercurial ointment. Under this plan the part healed.

The preceding cases may serve to explain the nature of the affection which I would describe, and the principle upon which it is to be treated. It is required to find some remedy by which the action of the bowels may be rendered and kept regular, and to apply to the fissured surface an ointment which may dispose it to heal. Ointments containing the milder

preparations of mercury generally best answer the latter purpose.

As it is evident, that when a laceration of the mucous membrane has existed for a few days, it has become an ulcer, so is it probable that fissure of the rectum often has this character from its commencement. At all events it is as an ulcer, that when neglected the complaint becomes more serious and difficult to manage. The patient then experiences greater pain; mucus, purulent matter, and occasionally blood are discharged with the fæces, and some extent of ulcerated surface is felt upon examination.

The remedies, however, which have been already recommended, are still available in the more aggravated form of the complaint. If the pain be severe, blood may be taken with advantage from the hemorrhoidal vessels by leeches applied to the mucous membrane at the anus, and sup-

positories containing opium or belladonna should be used. The application of lunar caustic to the ulcer, either undiluted or in an ointment containing ten grains to a drachm of lard, will occasionally lessen the irritability of the part, and produce a favourable change. When these means prove ineffectual, and the disease threatens to assume a more formidable character, a remedy may be resorted to with advantage, which, although too severe for common occasions, is exceedingly useful in the present. By an operation resembling that for fistula, the sphincter muscle is to be completely divided on one side, and to be temporarily prevented reuniting by the introduction of a strip of lint into the wound. The sphincter is to be divided in a line leading to the ulcer; the incision is to divide the ulcer itself. The operation may be performed either with a bistoury or with a scalpel.

The advantages which result from the division of the sphincter in this case are the following. The resistance of the sphincter being temporarily removed, there is much less strain and effort upon the ulcerated membrane in the evacuation of the fæces than before. The abstraction of blood from the vessels of the part, which commonly bleed freely, contributes in addition to lessen the sensibility of the ulcer. The application likewise of the mercurial ointment to the sore is rendered more easy, and may be more complete after this operation than before. The following case may serve as an example of the relief afforded by the remedy which I have here recommended, and of the obstinate nature of the affection, as well as of its liability to be overlooked from the sympathetic disorder of adjacent organs which it occasionally produces.

III. James Farrant, ætat. 45, was ad-

mitted into the Middlesex Hospital on the 9th of October. Fifteen months previously he began to experience a sensation of heat and pain at the anus, which would last a few hours and then subside, leaving a feeling of numbness. While the pain lasted, the anus was strongly drawn inwards. The pain extended to the hips and to the sacrum. These symptoms recurred daily: they were always brought on when the bowels acted. About a month after the commencement of the complaint, something appeared to him to give way in the bowel, and a slight discharge of mucus took place, which continued afterwards. Other symptoms were present, which led to a suspicion that the prostate gland was the seat of the disorder. The patient made water more frequently than common; and after the water had passed, some pain or uneasiness was commonly felt deep in the perineum, and of the same description

with that which ensued upon evacuating the bowels: mucus was likewise often discharged from the urethra after the urine had passed.

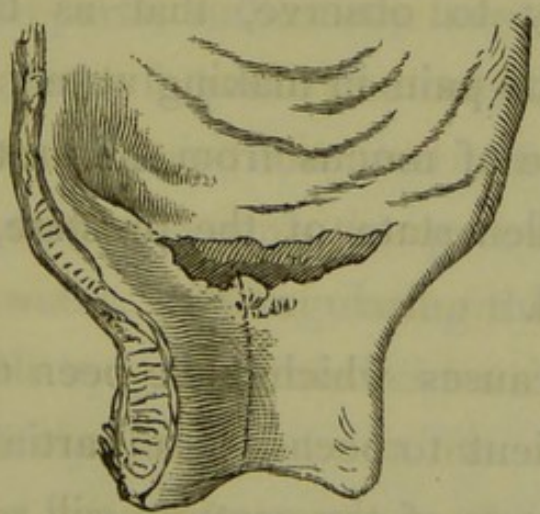
Upon examining the rectum the prostate gland was felt to be large and full and tender on pressure; and to this organ the treatment first employed was directed. Leeches were applied to the perineum, and the hip bath was used. Blood was taken by cupping from the sacrum: an opiate suppository was used at night, an enema of tepid water in the morning. The bowels acted regularly, but the patient did not improve in other respects; the pain remained.

Upon re-examining the rectum, the case presented another character. The seat of pain, at least of soreness, was discovered not to be the prostate, but the posterior surface of the rectum within the sphincter. The bowel at this part was extremely loose and flaccid; but there could be dis-

tinguished upon it an oblong ulcer with a hardened edge.

After trying several remedies ineffectually in this case, I divided the sphincter, delaying afterwards the healing of the wound by the introduction of a few threads of lint into it.

The subjoined figure, which is an imaginary section of the rectum, may convey an idea of the place and character of the ulcer in this case, and of the direction of the incision made.



The patient was sensible of great relief, as soon as the smarting occasioned by the

operation had ceased. The pain which he experienced for several days afterwards he felt to be the soreness of the wound, not the original pain of the ulcer. He resumed the use of the mercurial ointment. Upon examining the bowel a fortnight after the operation, the ulcer was found to have much improved, although it was still to be felt; it had lost much of its sensibility together with its hardened edge. By continuing the use of the mercurial ointment, the patient entirely recovered. It was satisfactory to observe, that as the ulcer healed the pain in making water, with the discharge of mucus from the urethra, and the swollen state of the prostate, equally subsided.

The causes which have been described as sufficient to occasion a partial rupture of the coats of the rectum, will sometimes produce complete laceration of the gut. This accident occurred to an unmarried

lady, whom I subsequently attended with Mr. Langmore, of King Street, Finsbury Square.

IV. ******, ætat. 40, naturally of a very constipated habit of body, and at the time being on a journey, on striving to relieve the bowels, which had not acted for many hours, felt something give way, to use her own expression, and on the following morning some fæces passed *per vaginam*. On examination by the vagina and rectum, a transverse rent was found two inches within the parts, sufficiently large to admit the end of the finger. The only treatment adopted in this case consisted in frequently and carefully cleansing the part by injections of water, and regulating the state of the bowels by proper medicines. The patient entirely recovered. In five weeks the fæces had ceased to pass per vaginam.

As long as such an opening shows a disposition to contract, it is unnecessary and

may be prejudicial to employ any other means than the most scrupulous cleansing. But if the part becomes indolent, and its progress towards restoration stops, various remedies may be resorted to with advantage. The simplest of these is the application of the nitrate of silver to the edge of the opening; or a combination of this, or of some other escharotic, with the use of an elastic gum pessary*.

If the communication of the rectum with the vagina does not contract under the means which have been recommended, there

* The use of nitrate of silver, or of other strong escharotics in parallel cases, is most striking in ulcers through the soft palate. I remember in one instance by this means having caused such a perforation to contract and close, which was an inch in length and half an inch in breadth: it had been produced by syphilitic ulceration, but the edges had put on a healthy appearance, when the use of the escharotic was commenced.

remain others which are available. The edges of the opening having become cicatrized, and the use of escharotic or stimulating applications having been discontinued, the following operation may be resorted to. The edges of the opening may be pared off with curved scissars, and one or two stitches may be passed through the vaginal side of the opening, so as to bring the edges of the rent into close and uninterrupted contact. It is conceivable, that in certain cases of this description it may be necessary to lay the vagina completely into the rectum by dividing the sphincter from the perforation. I have not however met with an instance which required this treatment.

The origin of the following case, I am disposed to think, may have been a small opening suddenly taking place through the rectum into the adjacent cellular tissue.

V. A young man was admitted into the Middlesex Hospital with swelling of the perineum, scrotum, and penis. The skin of the scrotum and penis was greatly distended, and of a dark red colour, with here and there patches of gangrene. The parts therefore presented the appearances which follow rupture of the urethra. But the patient stated that he had never experienced any difficulty in making water; and the symptomatic fever which had supervened had not that low character which commonly attends sloughing from the escape of urine. The tongue was white, the countenance flushed, the pulse frequent and full.

The patient stated, that for six weeks antecedently to the attack his bowels had been remarkably costive, after which he had had a looseness for a few days, when he seemed to feel that an inward

lump had formed in the perineum. This lump or uneasiness between the urethra and rectum had existed two days when the swelling of the scrotum and penis began, which had increased with alarming rapidity.

A deep incision was made in the perineum towards the prostate gland, and superficial incisions were made through the distended skin of the scrotum and penis. A fluid like brownish serum oozed freely from these wounds, but it had at no part an urinous smell. On the contrary, that which flowed from the incision into the perinæum had a distinctly fecal odour. The patient experienced great relief: the gangrene ceased to spread: the redness and tumefaction gradually diminished, the sloughs separated, the symptomatic fever subsided. But in a few days fecal matter began to escape through the wound in the perineum; and the nature of the case was

cleared up by the discovery of an opening from the rectum into the cellular tissue of the perineum, which was finally cured by the common operation for fistula ani.

I entertain no doubt, that in the case which has been narrated the sudden swelling and effusion resulted from the escape of fecal matter into the cellular membrane; but it is possible that the cause in which the opening originated may have been the formation of an abscess on the outside of the bowel, and that the communication may thus have been effected by ulceration from without. Still I have thought that case admissible into the present chapter, in connection with cases of giving way of the bowel from within; as it is not very unlikely, that the symptoms which have been described may have proceeded from the latter cause*.

* The most frequent cause of *sudden* tumefaction of the scrotum, is rupture of the urethra. The

The rectum may be torn through from within, by violence done in the improper use of instruments. I removed a stone from the bladder of a boy fourteen years of age by the lateral operation. The stone, which was of a favourable shape, was extracted quickly. Every thing went on satisfactorily till the eighth day, when

escape of fecal matter into the cellular membrane, as in the case above described, is probably the rarest. I have seen two instances in which sudden swelling of the scrotum, which came and gradually subsided, was not attributable to either of these causes, or to any local cause that was detected. In one instance I have seen the scrotum enormously distended with blood from violence done to the part. In another, the perineum and scrotum were distended and discoloured with blood and serum that had escaped at the lower outlet of the pelvis, after fracture of the ilium, which had lacerated the internal iliac vein. In another instance a child of five years of age was brought into the hospital with extensive swelling and sloughing of the scrotum and integuments of the penis, which had originated in phymosis and ulcers round the glans.

the bowels being confined an injection was ordered, which was administered by the nurse of the ward. I believe that she forced the pipe of the instrument through the rectum into the wound; for the following day fecal matter appeared in the wound, through which it thenceforth for a short time passed as freely as through the anus. The incision, however, in the perineum gradually contracted to a very small sinus, through which a little moisture only escaped, and this finally closed. Still there remained a communication between the bladder and rectum, which was evinced by the urine depositing a sediment of fecal matter. After three months this deposit was no longer seen.

The closing of the communication between the rectum and urinary canal was in this case entirely spontaneous. It was evident, after a few days, that the discharge of fecal matter through it would not

prevent the contraction of the wound, and I determined, as long as the case should go on favourably, not to risk any thing by interfering with the natural process of reparation. I cannot state at what part the communication between the rectum and urinary canal in this instance was situated: I abstained from making an examination which would have satisfied my curiosity on this head, as no further object was to be attained by it.

Some caution is requisite in administering enemas; and many of the ordinary instruments are particularly dangerous. There is a preparation in the museum of Bartholomew's Hospital, from the body of a patient, whose death had been occasioned by the injection of a pint of water gruel into the abdominal cavity through the torn rectum. A similar accident has happened in private practice.

But the most frequent instances of lace-

ration of the rectum into the vagina result from other causes than those already described, and are produced by violence acting from the vagina towards the bowel. This violence is the pressure of the head of the child in labour. The degrees of injury which it occasions are very various.

Occasionally the injury is the same in its degree as in Case IV, being a laceration within the sphincter of trifling extent, which heals as readily when ensuing upon this cause as where it follows any other.

Frequently the laceration is limited to the perineum, is quite external, and involves at the utmost the marginal fibres of the sphincter muscle. In this instance again, the recovery is certain and spontaneous: but it is necessary in both instances to employ cleanliness and rest to promote the reparation of the part.

There are however severer cases, in which the sphincter being completely rup-

tured, the extremity of the bowel communicates with the vagina by a longitudinal fissure from three-fourths of an inch to an inch in length. It is known in such a case that all the fibres of the sphincter are torn through, by the total want of tonic contraction of the bowel at the part where it begins to be entire.

In many instances in which this accident happens, spontaneous reparation of the part does not take place. The force of the sphincter muscle is employed in keeping the rent wide open; and the fæces continually passing through it contribute to prevent its uniting.

In a conversation with Mr. Copeland, I learnt, that in a case of this description he had successfully employed the following method. It occurred to him, that if the sphincter were divided at a second part, its strain upon the rent into the vagina would be greatly lessened, and that the chance of

reparation would be proportionately increased. I understood from him, that he had divided with this object the sphincter laterally, and that the case had turned out completely to his wish.

Soon after this conversation, a similar case came under my own care.

VI. I was requested by a medical practitioner to see, in consultation with him, Mrs. Quye, who had been confined of her fifth child eight days before, Mar. 31, 1830. The labour had been rapid, and the pressure of the head of the child had ruptured the perineum and the sphincter. The fæces passed freely through the vagina by a gaping fissure nearly an inch in length. As the edges of the fissure were not cicatrized, I thought the present a very favourable opportunity for repeating Mr. Copeland's operation. To give the parts every chance, I divided the sphincter muscle upon both sides, performing therefore on either side

the operation for fistula ani. A small strip of lint was introduced into each wound. The edges of the original rent were afterwards washed daily with a solution of nitrate of silver, and fresh lint was replaced in the incisions as often as it was removed by the passage of fæces. The original rent healed very speedily: when it was nearly closed, the lateral wounds were allowed to unite. In five weeks from the operation the incisions had healed, and the patient had recovered the use of the sphincter. She has continued perfectly well to the present time, and was safely confined of another child in November 1832.

The remarkable success which has attended this practice in recent cases, has induced me to determine to employ it, after the manner recommended by Dieffenbach, in cases in which laceration of the sphincter has occurred, and has not been remedied at the time.

In cases of long standing it is however obvious, that the lateral division of the sphincter is a part only of the operation requisite for the restoration of the parts. It is necessary besides, at the least, to produce a granulating surface upon the edges of the fissure.

And as the parts in this class of cases have lost, from time, the tendency which exists in the freshly-torn parts to come together, I conclude that it is absolutely necessary to use ligatures to bring them and to hold them in contact. In other words, I recommend the performance of the following operation. The first step of the operation consists in paring the edges of the fissure: the second is the introduction of sutures, to be tied afterwards in the vagina: the third is the division of the sphincter on either side: the operation is completed by tying the ligatures in the vagina, and by introducing a strip of lint into each of

the two lateral sections of the sphincter. I am the more sanguine as to the general result of this operation, since I had the good fortune to apply ligatures successfully to an old laceration of the rectum into the vagina, without the assistance of the method which I have now described, and therefore under circumstances considerably less favourable. Much, after all, in such an operation depends upon causes over which the surgeon has a very imperfect control. Inflammation of the parts supervening, or diarrhœa, would still be liable to render the operation ineffectual. But the surgeon of course defers attempting it, till the patient is in her best state of health, and the bowels have been thoroughly unloaded by repeated doses of opening medicine. The bowels should not be moved for several days after the operation.

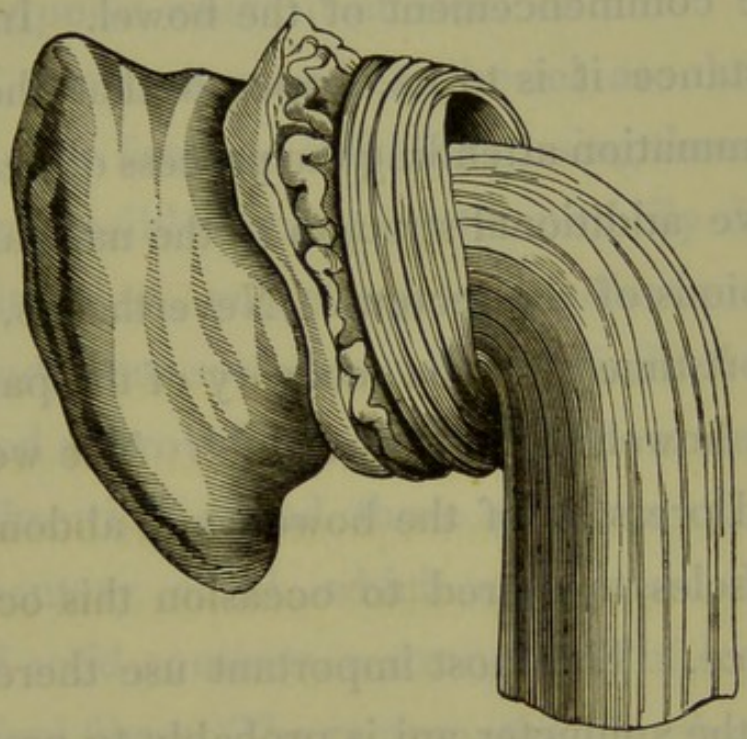
CHAP. II.

OF PROTRUSION OF THE RECTUM.

ANOTHER affection of the rectum, which like the preceding has a mechanical origin, is its eversion and protrusion at the anus. This disorder is called prolapsus or procidentia ani.

Several writers upon this subject, among whom is M. Dupuytren, have described prolapsus ani as consisting in an extrusion of the mucous and submucous coats alone through the action of the muscular coat of the bowel. To correct this misapprehension, I have given a figure from a preparation in the museum of King's College, in which a protrusion of inverted bowel through the sphincter ani is represented,

and the muscular layer is shown to be equally inverted with the lining membranes.



It is natural to suppose that the bowel derives sufficient support from its adhesions to neighbouring organs, to have little disposition to protrude in the healthy state. But a remarkable case, which I shall take another opportunity of relating, served to convince me of the contrary. I had occasion to extirpate the lowest part of the rectum, together with the sphinc-

ter ani. The part healed favourably, and a firm hollow cylinder of cicatrix led up to the commencement of the bowel. In this instance it is to be supposed that the inflammation attending the process of healing gave additional strength to the natural adhesions of the rectum. Nevertheless, in a short time after the recovery of the patient the bowel began to protrude. The weight and pressure of the bowels and abdominal muscles appeared to occasion this occurrence. The most important use therefore of the sphincter ani is probably to prevent protrusion and eversion of the bowel, against which theadhesions of the intestine to neighbouring parts are not sufficient to guard it.

Now at the time the bowels act, the sphincter is necessarily relaxed. The bowel for the time is unsupported, and the strain is allowed to tell upon its lateral adhesions. Under unfavourable circumstances, it is therefore easy to understand that protrusion

may take place even when the sphincter is entire, and when the bowel has not lost the support which it affords.

If the contents of the bowel are habitually too firm and solid, in passing through the extensible canal they temporarily drag it with them, and elongate its adhesions to the adjacent surfaces. Nature indeed has aimed at providing against this occurrence, by throwing round those portions of the alimentary canal, which are intended to hold solid contents, a strong coat of longitudinal fibres. The rectum, the œsophagus, and the colon even although in a less extent, are thus provided with the means of resisting the traction and extension, which the passage of solid contents tends to produce. But the provision has its limits; and where the bowels are habitually costive, it is often found to be inadequate. The adhesions of the bowel to neighbouring parts are lengthened, and the passage of

a mass of solid feces will carry through the rectum an everted fold: this, it is true, at first spontaneously returns; but the cause continuing, the eversion becomes more certain and considerable at each recurrence of action of the bowels.

A gentleman, whose case I have described (Case II), in addition to the fissure in the inner membrane of the rectum, laboured under prolapsus. Both affections had proceeded from the same cause, and were relieved at the same time by the same means. His brother, whom I happened to attend for the effects of a severe accident, mentioned to me, that whenever it happened to himself that the bowels were confined, more or less protrusion of the rectum invariably took place. Thus, in its slightest form, this complaint admits of being remedied, and its recurrence prevented, by obviating the costiveness which has produced it.

Habitual straining of the abdominal muscles, without costiveness, is liable to produce prolapsus. Among the children whom I have operated on, or have seen cut for stone, I hardly recollect an instance in which this symptom has been absent. The reason is very evident. The expulsion of the water in persons afflicted with stone is commonly attended with involuntary bearing down and forcing of the diaphragm and abdominal muscles. The repetition of the violent pressure upon the bowels forces their lowest portion in a state of eversion out of the anus. When the stone has been removed, the cause of irritation which led to the violent action of the abdominal muscles is at an end; the straining does not recur; the bowel is no longer habitually forced down; it gradually recovers its tone: in a short time the protrusion ceases to take place.

In young persons, the peristaltic action of the intestines is peculiarly lively. On

examining the bodies of infants an intus-susception or invagination of some part of the small intestine is often observed to have taken place. The invaginated part being everted bears a close analogy to a prolapsus ani. There is little constriction at the point where the intus-susception begins, and the invaginated part may be drawn back with ease. It is probable that in healthy infants invagination of the small intestine is frequently taking place, but producing no symptoms, and being after a short time withdrawn and set right upon the renewal of the vermicular action. It is to be presumed that some trifling source of irritation in the bowels is the immediate cause of such intus-susception; but its frequent occurrence in children, compared with its infrequency in adults, deserves to be taken as a proof of the remarkable mobility of the bowels in childhood.

To this mobility of the bowels in children

is to be ascribed the frequency with which they suffer from prolapsus. The complaint therefore when occurring in children may be viewed as one to which their time of life renders them liable, and the disposition to which will spontaneously cease as they grow up. Nevertheless, as protrusion of the bowel by no means takes place in children indiscriminately, but in those only who either are of a very delicate constitution, or who labour under habitual constipation of the bowels, the complaint always requires attention. The more so, that although it is to be expected that the disposition towards it will cease with childhood, it is always possible that the habit of eversion may become in time so established in the part, and the part extruded gradually acquire so great a volume, as to require for its relief more serious measures than are necessary if the complaint be taken in time.

In the three cases which follow, are described the common cause and proper treatment of prolapsus in children.

I attended a child between three and four years of age, in which prolapsus of the bowel occurred with every motion. The child was not particularly delicate, but its bowels were habitually costive. A variety of medicines had been tried, to render their action regular, but had failed. I recommended therefore that the use of medicine should be discontinued, and that an enema of water and oil should be administered daily. By these means both ailments were relieved at once.

I attended two children in another family, the one three, the other four years of age. Both laboured under eversion and protrusion of the bowel, which took place at each motion, and required pressure to replace it. These children were of a delicate habit, but with each the

bowels acted for the most part with regularity.

The method which I adopted with success in these cases, consisted in giving tone to the part by means of astringent injections. For the youngest, which was a girl, I prescribed two ounces of the infusion of catechu as an enema, to be used daily; for the elder, a boy, I ordered three ounces of the same infusion, with six grains of acetate of zinc. The remedy was administered in the morning, before the children rose; and they were kept in bed for half an hour afterwards, in order that the injection might be retained. Both the children recovered under this treatment; the protrusion of the bowel being at first lessened in quantity, and then in frequency, till the children would pass two or three days without its recurrence. Occasional doses of opening medicine were given when necessary during the four or

five weeks that the plan which I have described was pursued.

The next case which I shall narrate will illustrate the consequences of neglecting this complaint, and the method of treatment applicable to its confirmed and aggravated form.

A young lady, twenty years of age, had suffered for several years with headaches, torpid bowels, painful and irregular menstruation, pains in the back and legs, irritability of the bladder, hysteria. Dr. Chalmers of Croydon, who was consulted, was led after a short attendance to conjecture that there must be some disease of the rectum, a knowledge of which had been kept back from her family. By closely questioning his patient, he at length learned that she laboured under prolapsus ani; that a protrusion took place every time that the bowels acted; that it was of considerable volume, and that it could not be

replaced without difficulty. The young lady it appeared had suffered from this complaint as long as she could recollect, and as she grew up, the infirmity increasing upon her became a source of perpetual misery, which a false shame prevented her disclosing. The constant fear upon her mind that the complaint would become known, had probably contributed more than the local disorder to cause the train of symptoms under which she suffered.

I saw this patient in consultation. The mass which protruded when the bowels were moved by an enema was of the size of an orange; and as the coats of the bowel which formed it were not at all thickened, I have no doubt that the voluminous folds which came down, were an eversion of as much as six or seven inches of intestine. The sphincter ani was extremely lax: the eversion was ascertained to begin about an inch within it

The method of treatment which Dr. Chalmers and myself recommended should be followed, was the mildest of those which have been practised in confirmed prolapsus; although we were not free from apprehension, considering the length of time the complaint had existed, the magnitude of the protrusion, and the extreme relaxation of the sphincter, that the plan which we proposed to adopt would prove partially successful only, and that more would still require to be done. The operation which was performed was the following:

A small fold of intestine was pinched up with forceps, and tied with a silk ligature: care was taken to include the mucous and submucous coats alone in the ligature: the whole surface included was less than that of a sixpence. Before finally tightening the ligature, the surface of the little fold was cut with scissars. Three such folds were tied upon opposite aspects of the bowel,

and at different distances from the sphincter. The patient hardly felt the operation, so small is the sensibility of the internal parts of the body, unless when inflamed. The parts were then replaced. During the four days which followed the operation, the patient was not allowed to sit up; and the bowels, which had been well unloaded before, were kept confined, very light and moderate liquid nourishment alone being allowed, and an enema of laudanum having been administered. Upon the fourth day, when the bowels were moved with an enema of warm water, the patient was greatly disappointed at finding that the protrusion returned; yet she remarked that the bowel admitted of being replaced with greater ease than before. Some little soreness in the part, however, was now observed; some blood was passed from the bowel; there was irritation in the bladder; and

now, for the first time, protrusion of the bowel attended the act of micturition.

Upon an examination of the bowel on the sixth day after the operation, it was found to be in the following state. The mucous membrane, when the bowel was extruded, appeared fuller and more loaded with blood than before the operation. The little portions of membrane which had been tied had come away; but the ligatures had not yet separated, but remained fixed in the shallow ulcers which they had produced: they were removed. From this time the local complaint improved daily: the protrusions became less and less, then did not recur each time the bowels acted, and in a fortnight had entirely ceased to appear.

The operation which has been described, if care be taken that no more than the mucous and submucous linings of the bowel

be included in the ligature, is as free from risk as it is unattended by pain; and is therefore in my opinion preferable to many others which have been recommended for the cure of prolapsus. I was not indeed without some apprehensions, that in the case detailed something more might be requisite; and that the diminished mobility of the bowel, which would be produced by the ligatures, would be insufficient to keep it from protruding, unless the unnatural relaxation of the sphincter were likewise corrected. We were prepared to recommend, if it had proved necessary, that a small fold of the marginal integument of the bowel should be removed by excision, in order to restore to the sphincter the deficient tone and closeness.

M. Dupuytren recommends the removal of several marginal folds of integument for the cure of prolapsus: but this operation is severe; and my experience of its suc-

cess leads me to prefer the simpler operation which I have described above.

In the cases which I have described of simple prolapsus ani, no serious difficulty was experienced in returning the protruded bowel. In such cases, continued pressure with the hand is all that is necessary, and in a short time the bowel is drawn up. But it occasionally happens that the part cannot be returned by this means; when more pressure, and that successively made upon fold after fold of the bowel, is required. If the part again have been several hours down, through the patient's inability to replace it, it sometimes becomes swollen, inflamed, and exquisitely tender, and will not immediately bear the pressure necessary for its replacement.

I find among my notes the following case, illustrating this state of the disorder.

Edward Kerrison, æt. 65, was admitted into the Middlesex Hospital in March 1830,

under these circumstances. He had been liable during the last sixteen years to occasional protrusion of the bowel, which he attributed with reason probably to his occupation, which was that of a porter. Till the present occasion he had found no difficulty in returning the prolapsus; but the part had now been down eighteen hours, and he had been unable to force it back: it was of the size of a large walnut, swollen, of a scarlet colour, painful and extremely tender, so that he could not bear it to be pressed. The practice therefore pursued was the following. Leeches were applied to the mucous membrane of the bowel, and afterwards an anodyne poultice; and a dose of opium and calomel was administered. The following morning the tenderness of the bowel was greatly diminished, and I returned it without difficulty.

When prolapsus ani is described as a

protrusion and eversion of the bowel, the reader is led to suppose that the complaint is easily identified. And so in fact it is, when the protrusion is combined with no other disorder. There are distinctly to be seen the folds of everted bowel, the red and vascular mucous membrane, and the channel of the intestine opening in the middle of the protrusion; and by examination around the tumour within the sphincter, the circular line is felt, commonly about an inch from the anus, at which the external fold of the protrusion begins.

Occasionally, however, prolapsus ani is attended with, as it may have been produced by piles or by thickening of one or more folds of the mucous membrane of the bowel. In these cases, the removal of the excrescence by the ligature is the first operation to be performed; and this will probably be sufficient to stop the tendency

to prolapsus. Mr. Hey particularly pointed out this complication of disease; and the practice of tying small folds of the sound bowel for the remedy of simple procidentia, appears to have been suggested by the success which attended his treatment of more complicated cases.

Prolapsus ani is most liable to be mistaken for piles, when it is attended with pain, and when the protrusion is not considerable. Occasionally, when the quantity of bowel everted is very trifling, the patient suffers severely each time that the bowels act; and, till he knows the nature of his complaint, increases his distress by continuing to strain for many minutes after the contents of the bowels are expelled.

CHAP. III.

OF BLEEDING FROM, AND PAIN IN, THE RECTUM.

Bleeding from the rectum, and pain in it, are not merely symptoms, which singly or together are features in a variety of diseases of the bowel, but both are occasionally met with as substantive disorders.

Many persons experience slight discharges of blood with the fæces, whenever it happens that the vessels of the abdomen are in a state of congestion. Cold will produce this effect, but more commonly it arises from an over-stimulating diet. The veins of the rectum are the most dependent part of a large system, which has its proper discharge through the capillary circulation in the liver. Any circumstance

therefore which renders the flow of blood through the liver slower in proportion to the mass of blood poured into the abdominal veins, is sure to tell upon the hemorrhoidal veins.

An ordinary attack of bleeding from the rectum has the following course. There is a sense of weight, heat, fulness, and general uneasiness in the bowel: this goes on increasing for twenty-four hours: then the patient observes that when the bowels act, part of the discharge is liquid; it consists of blood, which seems poured out at the time only that the bowels act; or the passage of the feces seems necessary to rupture the small vessels from which the hemorrhage proceeds. In another day the uneasy sensations lessen, and they quickly cease altogether.

Hemorrhage from the rectum, such as I have described it, is generally a relief to the system. The vessels of the rectum are

thus a kind of safety valve to the visceral circulation; and the complaint in this form deserves to be viewed, not as a disorder to be arrested as injurious (still less as a relief to be encouraged and depended upon), but properly as a warning that there is something wrong in the habits of life; that the diet is too stimulating; or that sufficient exercise is not taken; or that the secretions from the bowels are not sufficient in quantity. The recurrence of the attack may probably be prevented by attending to the precautions suggested by the preceding views. The attack itself may be relieved by the use of gentle aperient medicine, with cold bathing to the part.

Bleeding from the bowel sometimes occurs without any pain or sense of fulness in the part, and without sensibly weakening the person who is the subject of it. A patient consulted me, who was suffering in this manner. He said that he had be-

fore occasionally experienced a similar attack; and that he had always found it relieved by the use of strong cathartic medicine. He was about thirty years of age, of a spare but muscular frame. I recommended him to try again the remedy which had before agreed with him, and prescribed for him every other night a smart dose of jalap and calomel: in a few days the discharge of blood had entirely ceased.

Discharge of blood from the rectum seldom continues long without sensibly weakening the system. Where it has produced this effect, a different plan of treatment to that above mentioned is to be recommended. The following case will serve to exemplify it.

James Tucker, ætat. 24, was admitted into the Middlesex Hospital, Oct. 6, 1829. During the three preceding months he had habitually passed blood by stool: at first

he was considerably reduced in strength by this discharge, but afterwards it affected him less. The quantity of blood lost was greater at first than afterwards: at the period of his admission it amounted to two or three table-spoonfuls, which came away immediately after each evacuation. The only pain complained of was occasional numbness and aching down the inside of the thighs. This patient was directed to use an astringent enema containing ten minims of laudanum after each discharge of blood.

The effect of the injection was to constipate the bowels, and to produce a dull pain at the sacrum. The astringency of the injection was therefore lowered, and the laudanum omitted, and a few grains of blue pill and extract of rhubarb were ordered to be taken every night. The discharge of blood gradually lessened; and on the 26th the patient left the hospital cured.

Hemorrhage from the rectum, as the discharge of blood occurs only at the time at which the bowels act, often goes on for a length of time unsuspected by the patient. In this manner the health may be undermined, great bodily weakness brought on, and a variety of nervous symptoms induced, which are often of a character to blind or mislead the observation of the medical attendant. I cannot better illustrate these remarks than by quoting the following case from a paper by Mr. Brodie, in the fifth volume of the Medical Gazette.

"A lady consulted me concerning symptoms which were ascribed to a stricture of the œsophagus. She was unable to swallow the smallest morsel of solid food, so that she was compelled to subsist entirely on liquids, and even these she swallowed with great difficulty. These symptoms had been coming on for upwards of three years. I introduced a full-sized œsophagus bougie,

which entered the stomach without meeting the slightest impediment. From this and other circumstances I was led to conclude, that the difficulty of deglutition was merely a symptom of some other disease. The lady's face was bleached, as if she had suffered from repeated attacks of hemorrhage, and her feet were in some degree œdematous. On inquiry, I found that she had long laboured under internal piles, from which had taken place repeated discharges of blood. To this last disease, then, I directed my chief attention, prescribing two ounces of the infusion of catechu, with fifteen grains of alum, to be used cold, as a lavement, every morning; and at the same time a solution of the sulphate of iron and sulphate of quinine to be taken by the mouth. When this plan had been persevered in for three weeks, the piles were much relieved; they no longer protruded externally; there had been no

recurrence of hemorrhage; her cheeks were less pale; and she swallowed with comparative facility. At the end of six weeks more, the piles occasioned very little inconvenience; she had lost no more blood; her general health was much improved; and there was so little difficulty of deglutition, that I had no hesitation in recommending that after her return to the country she should swallow a bolus of Ward's paste three times daily, with a view to the complete cure of the hemorrhoidal disease."

Of pain in the rectum, unattended with local disease that I could discover, I have only seen two cases.

A gentleman, about forty years of age, sent for me during a paroxysm of pain in the rectum, but it had subsided before I saw him. He told me, that two or three times a year he was liable to this seizure, which was not, that he had observed, connected with

the state of his bowels or with his habits of living. The pain which he used to experience was intense, and would last half an hour. He was not, that he knew of, liable to lose blood by stool, nor had he ever suffered from piles. Upon examining the rectum, I could discover no disease in it. The pain did not appear to arise from spasm of the sphincter.

I attended a patient with Mr. Stephenson of the Edgeware Road, who suffered from pain in the rectum. Something less than two years before this, he had a syphilitic ulcer upon the penis, for which he had taken an unusually large quantity of mercury, owing to the difficulty of producing sensible mercurial action in his system. The ulcer however healed; but while he was recovering, and his system was yet charged with mercury, he began to experience aching pains in the incisor teeth and in the rectum. The sense of aching in the

teeth and in the rectum was not constant, but would come on frequently during the day, without any assignable cause. It had lasted a year and a half, during which he had remained perfectly free from symptoms of lues. This patient, who was otherwise in good health, suffered his mind to be greatly distressed by the continuance of the neuralgia. He was anxious to try every plan which held out the least promise of benefiting him. But of all the remedies which he tried, he appeared to experience relief from one only, which was a course of sarsaparilla.

CHAP. IV.

OF PILES.

Piles, or hemorrhoïds, are soft tumours, which form either within the rectum or about the anus. In the first case they are covered with the mucous membrane of the intestine, and are termed inward piles. In the second case they are covered entirely or in part with the common integument, and are termed outward piles.

Inward piles, and with some exceptions outward piles, arise from congestion of the hemorrhoidal veins. The same causes therefore lead to the production of both kinds. Local causes of obstruction to the return of blood from the rectum; increased flow of blood upon the bowels; obstruction

of the biliary circulation; sedentary habits; exposure to cold and damp; produce indifferently inward and outward piles, and in the same person often give origin to both alternately or together.

Although piles commonly originate in a congestion of the hemorrhoidal veins, and the little tumours which they form are therefore at first composed of dilated elongated and tortuous veins, the bulk of each tumour after a time is often found to be made up either of lymph effused into the adjacent tissue, or of a clot of extravasated blood. In the former case, the pressure of the lymph effused often goes far to diminish or to obliterate the dilated veins in which it began, and the tumour appears as a firm, hard lump, closely resembling cellular texture thickened by inflammation.

Piles are met with in three states: either they are tense, irritable, exquisitely painful; or, without much tension or sensibility,

they are inconvenient from their place and size only; or, thirdly, they are shrunken folds of skin, or thin slips of the lining of the bowel. To convey an adequate idea of the nature of these varieties, and of the methods to be followed in their treatment, it is necessary to consider separately the two classes into which they are divided.

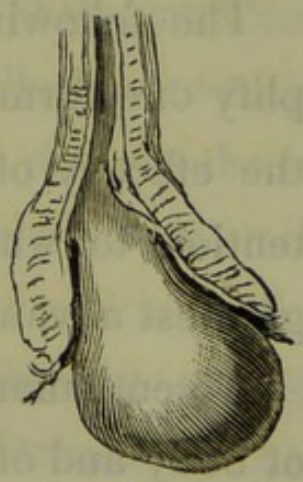
SECTION I.

Of Inward Piles.

Inward piles vary from the size of a pea to that of a large walnut. They are sometimes single, at other times there are several. Sometimes they grow immediately within the sphincter; at other times at some distance above it. They are sometimes attached by a narrow pedicle, at other times they have a broad or elongated base. In some cases they do not protrude beyond

the sphincter; in others they are extruded at every motion.

A pile protruding at each action of the bowels, and afterwards returned by pressure, in what does it differ from a prolapsus? It differs in this respect essentially: it is a tumour formed internally to the muscular coat of the bowel, and not involving it. The canal of the rectum is therefore in its natural place, without elongation or eversion, the pile being an accidental growth of its inner surface. The adjoined diagram represents a section of the rectum with an inward pile in a state of protrusion. It is evident, that if there be a doubt as to the nature of the protrusion, an examination will at once remove it. It is no less evident, that the two complaints will occasionally exist together. The one indeed



naturally leads to the other. Neglected piles often prove a source of irritation sufficient to produce prolapsus, which ceases to recur upon the removal of the cause which occasioned it.

The colour of internal piles varies with their condition. It is sometimes that of the bowel itself, a shade of reddish brown; at other times a dark purple, approaching to black; at other times a bright red. Internal piles are particularly liable to bleed: yet in some instances they exist for several years without bleeding.

The following case will serve to exemplify one form of this disease, as well as the efficacy of a very simple remedy, attention to which is in every case of the greatest advantage.

A gentleman, ætat. 57, of a spare frame of body and of temperate habits, consulted me for piles. Thirty years before, when in good health, he lost by stool a large quan-

tity of blood. In a few hours the anus became tumefied, knotty, painful. The following day he was obliged to ride thirty miles on horseback. As he proceeded on his journey he became better, and on the ensuing day he felt quite well. About four months subsequently he had an attack of the following description. The anus, without any assignable cause, became tender, tumefied, and painful. This state of things continued three days: on the third night he became better; some discharge of mucus with blood took place, and in a day or two he was well again. These attacks were repeated during the following twenty years, and usually recurred once in three months: they were extremely severe and distressing. This gentleman, who is in the medical profession, entertained a strong aversion to medical or surgical treatment: he therefore bore the pain, and contented himself with bathing the part with cold water.

During the last ten years, the character of the complaint had been different. The patient had suffered less severely than before, but he had suffered constantly. The bowels had acted regularly, and that without pain; but every afternoon, about one o'clock, the part had become heated and uneasy, indisposing him to exertion of any kind. Towards evening the uneasy sensations had left him.

Such was the story which this gentleman told me a year ago, when he consulted me. Upon examining the part, I found two internal piles, about as large as beans, which half protruded upon his straining. As he would take no medicine, and use no medicated application, I recommended him to use with scrupulous regularity a lather of soap and water to the part after each action of the bowels, and before the piles were returned. This practice he has followed ever since, and the piles have

for several months ceased to give him any inconvenience.

The best soap that can be employed is common yellow soap. It is serviceable in two ways: on the one hand it removes completely any remains of fecal matter; on the other it acts as an astringent. In the case which I have described, the latter object was I have no doubt quite as important as the former,—the piles being in that simply uneasy state, not very irritable and angry, in which astringent applications are commonly found useful. But the first object is likewise one of great consequence. The want of complete cleansing of the bowel is one of the causes which most tend to the production of piles, whether external or internal. Water alone is not sufficient to cleanse the part: complete ablution with soap as well is necessary for this purpose. Those who are thus scrupulously cleanly suffer less from piles than other people.

A remedy very commonly tried for indolent internal piles, and which in many cases proves of service, is the confectio piperis composita of the Pharmacopœia. This remedy is to be taken internally, in the dose of a drachm, two or three times a day: it seems to act as an astringent when applied locally, giving a salutary tone to the vessels of the part. The following case narrated by Mr. Brodie, in the paper already quoted, will serve at once to illustrate the efficacy of this remedy, and to convey an idea of the irregular nervous symptoms which are often produced by piles.

"A lady consulted me," says Mr. Brodie, "concerning a pain to which she had been for some time subject, beginning in the left ankle, and extending along the instep towards the little toe, and also into the sole of the foot. The pain was described as being very severe. It was unattended by

swelling or redness of the skin, but the foot was tender. She laboured also under internal piles, which protruded externally when she was at the water-closet, at the same time that she lost from them sometimes a larger and sometimes a smaller quantity of blood. On a more particular inquiry, I learned that she was free from pain in the foot in the morning; that the pain attacked her as soon as the first evacuation of the bowels had occasioned a protrusion of the piles; that it was especially induced by an evacuation of hard fæces; and that if she passed a day without any evacuation at all, the pain in the foot never troubled her. Having taken all these facts into consideration, I prescribed for her the daily use of a lavement of cold water; that she should take the Ward's paste (confectio piperis composita) three times daily, and some lenitive electuary at bed-time. After having persevered in this

plan for the space of six weeks, she called on me again. The piles had now ceased to bleed, and in other respects gave her scarcely any inconvenience. The pain in the foot had entirely left her. She observed, that, in proportion as the symptoms produced by the piles had abated, the pain in the foot had abated also."

Another popular and excellent remedy for indolent internal piles is powdered gall-nuts, either mixed in an ointment, or made into a suppository, and introduced into the rectum. It frequently happens, that the preceding or some other astringent applied directly to the bowel has principally to be relied on in the treatment of this complaint, in consequence of the confectio piperis disagreeing with the stomach. It is necessary, in conjunction with the use of astringent applications, to provide for the regular action of the bowels. In general for this purpose the lenitive

electuary, or sulphur, or the two combined, form the most convenient medicines. The bowels are on no account to be purged, but one rather loose evacuation should be procured daily. The use of a lavement of half to two-thirds of a pint of cold water every morning will often be sufficient for this purpose. Or the two last-mentioned remedies may be used together with advantage. In some instances the use of a short rectum bougie is found beneficial in this complaint, but this is not commonly the case.

When it happens that the remedies which have been recommended prove ineffectual and the disease becomes established, the hemorrhoidal tumours generally admit of being removed by a very safe operation.

Mr. —— æt. 49, who some months before had had external piles removed, applied to me for advice for inward piles; which did not cause him pain, and rarely bled, but

were extremely inconvenient from protruding at each motion. He tried during several weeks the remedies which I have described; but not becoming better, he discontinued medicine, determining to put up with the discomfort of the complaint. About a year afterwards this patient consulted me again, and was desirous to have the piles removed by an operation. They were four in number, and of no great size: they were of the colour of the bowel, not tender on pressure, nor tense: they protruded at each motion, when he had to wash and to return them. The operation which I resorted to consisted in tying a strong ligature round the base of each pile; drawing each in succession fully out of the anus with a tenaculum, and applying a ligature to the root of each. This did not cause the patient much pain. On examining the parts on the fourth day, two of the piles which I had tied appeared to

be dead and separating; but two, which were the largest, appeared yet vascular, and bled upon being pricked. I therefore tied a fresh ligature around the base of each of these. In a few days the ligatures separated, leaving superficial ulcers, which healed rapidly; and the patient has been perfectly free from piles since.

Several points are to be thought of in tying inward piles; and when they are duly attended to, the operation is unattended with risk.

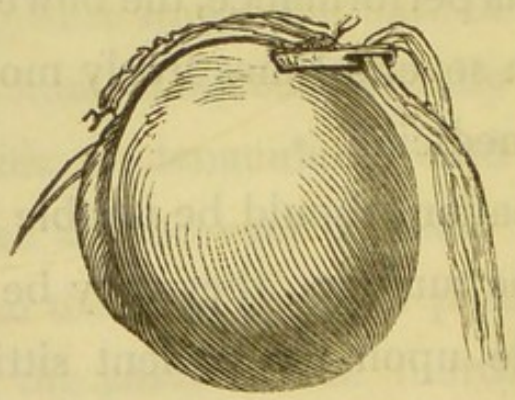
The patient must not undergo this trifling operation, when labouring under any casual indisposition.

Before its performance, the bowels should have been several times freely moved with aperient medicine.

If the patient should be unable easily to extrude the tumours, they may be brought to protrude upon the patient sitting over hot water, and endeavouring to force them

down, or after the use of a lavement of warm water.

The ligature should be drawn round the base of each tumour so tightly, as thoroughly to strangulate it. To ensure this object, it is desirable, after the ligature is applied before finally tying it to cut into the pile; after which precaution the ligature may be drawn much closer than it would otherwise be possible. If the pile be of large size, it is desirable for the same purpose to pass a double ligature through the tumour with a needle, and then to tie either half separately, in the manner shown in the following diagram.



If there are several internal piles, it is necessary that all should be tied.

After tying a pile, the ligature is to be cut short, and the ends are to be returned with the strangulated pile into the rectum. If much pain follow the operation, it may be allayed by a dose of laudanum. The pain generally in a short time subsides entirely; and it is only requisite for the patient to remain at rest for the next few days, when the ligatures and the piles come away without his knowledge. But occasionally fresh pain supervenes on the second or third night. When this happens, it is presumable that the pile has not been entirely strangulated: the parts should then be examined, and the ligature should either be removed for the time, or drawn closer, according to the state of the parts. If much pain supervene after tying piles, it is always safe and useful to apply leeches to the extremity of the bowel.

The removal of internal piles by the ligature is preferable to their excision. It is not more painful. I removed, on two successive occasions, inward piles from the same person, the first set by ligature, the second by the scalpel; and he told me that the pain in either case was much alike. But the objection to excision is the risk of serious hemorrhage. It is true that hemorrhage follows in a very small proportion of cases; but when it happens, it is alarming in its extent, and may greatly debilitate the patient. The following case, although not one in which excision was intended, served to convince me of the hazard of that method.

A little girl eleven years of age was brought to the Middlesex Hospital by her mother. She had during the preceding half year repeatedly lost blood by stool, and at each motion something protruded. Upon examining the part after the bowels

had acted, a small pile not bigger than a large pea, of a red colour, and supported upon a long narrow pedicle which had not much appearance of vascularity, was seen. The child appeared to be perfectly in good health, and no objection presented itself to tying the hemorrhoid at once. Accordingly I applied a ligature to the slender pedicle of the hemorrhoid; but being drawn too tightly, the thread cut through the part, and the pile came away at once. No disposition to bleed showed itself at the time; but the following night the child lost a profuse quantity of blood, and came to the hospital the following day faint and pale and reduced from the bleeding. The hemorrhage did not recur.

To the sources of inconvenience ordinarily attending inward indolent piles, another very serious one is occasionally added, when they attain any considerable size. The patient is not always able

to return the part when it has protruded; which being partially strangulated by the sphincter muscle, swells and becomes inflamed and acutely painful.

I attended with Mr. Reid of Charlotte Street, Bedford Square, Mr. ——, æt. 68, a hale man, but of a relaxed and nervous temperament. Twenty years before, a considerable protrusion from the anus had for the first time taken place, which after several hours of suffering was replaced by a surgeon. The protrusion shortly after again took place, when the patient contrived to return it himself. He soon found the tumour descend whenever the bowels acted; and as his profession required him to be many hours absent from home during the day, he was obliged to carry about with him what was necessary for washing and returning the tumour, in case the bowels should act in the interval.

On the occasion of my seeing him first,

he had just arrived in London for advice. The tumour had descended some hours before, while he was in the country; and the means of reducing it which were usually successful had failed. From an accidental congestion of blood, the tumour had become larger than usual, and the country surgeon was unable to reduce it. The journey to London had caused considerable pain.

Upon examining the part, I found a dark-coloured tumour projecting at the anus of the size of a large French walnut: it was firmly grasped by the sphincter, through which the difficulty of returning it had arisen. The tumour was extremely sensible, but by very gently compressing it, and forcing it upwards, I succeeded after a few minutes in returning it. The tumour seemed double, or had a considerable fissure at its middle, which led me at first to suppose it a prolapsus; but after re-

turning it, I found it to be one large hemorrhoid.

I recommended this patient to remain at his house in London for a few days at rest, taking light nourishment, and having the bowels daily moved. Upon the fourth day the increased sensibility of the part having subsided, I passed a strong ligature round the base of the tumour, and tied it. The tumour separated in ten days; and the patient was completely relieved of the inconvenience it had occasioned.

The observations which have been made in this section apply principally to the nature and treatment of indolent internal piles. In the more painful and angry state of hemorrhoidal tumours, a different course must be adopted. The following case will serve to exemplify this stage of the complaint, and the measures which are requisite for its management.

—— Carney, ætat. 30, was admitted into the Middlesex Hospital, December 19, 1830. During the last year, he had lost blood by stool on an average more than a table-spoonful daily. During the last month, he had suffered severely from aching pain in the lower part of the rectum. On the day of his admission he was worn with intense pain. The anus was full and prominent, and when he strained, the inner part of the bowel protruded in highly sensible and vascular knots. Twenty leeches were applied to the verge of the anus, and afterwards an opiate poultice. The pain subsided: the following day the bowels were moved by a dose of castor oil, and the patient had obtained complete relief.

I give the preceding as an example of the simplest form of the affection which I am describing. Its features are often complicated or disguised by the sympa-

thetic derangement of other organs than the rectum. This is a point upon which the practitioner should be particularly forewarned. A patient, for instance, who is labouring under a sudden and violent attack of piles, may describe as his principal complaint, irritation in the bladder, frequency of micturition, pain in the back, pain and aching down the thighs. In twenty-four hours a profuse discharge of blood from the rectum will spontaneously relieve all these symptoms, and explain the true nature of the attack. But by the timely application of leeches to the anus, the symptoms might have been removed several hours sooner, had the practitioner discovered their real origin.

In such cases there are two objects to be thought of: the first, to reduce the unusual congestion, and to subdue the increased irritability of the parts, and the inflammatory character of the disorder;

the second, to apply in the subsequent stage the remedies recommended for internal piles when indolent. These remedies, however, often prove not to be necessary. When the angry and turgescent state of an hemorrhoid has been promptly relieved by appropriate remedies, the tumour frequently either wholly disappears, or shrinks through absorption to so small a size, and is so little sensible and vascular, as to be productive of no inconvenience.

When hemorrhoids of long standing have been removed, and the habitual discharge of blood or mucus which attends the disorder has been suppressed, it is desirable that the patient should attend very carefully to the state of the bowels, using suitable means to prevent costiveness and even to render the alvine excretions somewhat more large than natural. It is indeed true that the previous discharges of blood

and mucus may have been a drain upon the system, which having been lowered by their means, may require their cessation to enable it to regain its tone. In such a case, the practitioner would be on his guard against perpetuating by the use of purgative medicine the debility of his patient. But as a general rule, the caution given above is strictly to be attended to. The principle is sufficiently established by experience, that the sudden drying up of any discharge which from use has become natural to the system, is liable to be followed in a few months by inflammation or congestion of other organs.

Again, although the means which have been recommended will succeed in curing the greater number of cases of inward piles, yet the practitioner will meet with others, in which, through one cause or another, he is entirely baffled. Either the patient will not alter the habits of life

which have led to the complaint; or there may be internal incurable disease, of which the piles may be a necessary consequence; or, the case being a suitable one, the patient will not consent to have the tumour removed by an operation; or his age or constitution may render an operation unsafe.

In such cases, there is still room for skilful palliative treatment, through which the patient's periods of suffering may be rendered less frequent, and the suffering less severe. By the judicious use of aperient medicines, of astringent and narcotic applications, of the rectum bougie, according to the circumstances of the case, even by directions as to the shape of the seat of a water-closet, very considerable additions may be made to the patient's comfort.

SECTION II.

Of Outward Piles, and Excrescences near the Anus.

Outward piles commonly appear in the following manner, and run the following course. After twenty-four or forty-eight hours, during which the patient has experienced fulness, heat, and itching at the anus, a hard round lump from the size of a pea to that of a chestnut is felt on one side of the margin of the gut. It is extremely tender, so that the patient cannot bear to sit; and in every posture the pressure of the adjacent parts produces more or less aching pain. The patient finds relief sometimes from bathing the part with cold water, sometimes from hot fomentations and poultices, but more generally from the latter. Upon the use of one or other of these remedies, and a dose of laxative medicine, and rest and absti-

nence, the tenseness of the swelling and the sense of fulness and pain abate, and in forty-eight hours more so much amendment has taken place, that the patient is able to sit and move about with comfort. The tumour after a few days shrinks entirely and disappears.

The pain attending an attack of this description is of every degree, from inconvenience and discomfort to intolerable suffering. The pain depends upon the fulness of the vessels of the part, and it is often removed upon the occurrence of spontaneous bleeding from the mucous membrane of the bowel: it may always be mitigated by abstracting blood from the part by leeches. If the tumour is large the pain is generally greater; and at all events the swelling and induration are a longer period in subsiding.

A physician, whom I had formerly attended for inward piles, came from the

country to consult me for such an attack as that which I have described. He had used the remedies which have been recommended, having applied leeches several times, and having been cupped upon the sacrum, and each time with relief; but there remained a tumour of the size of a chestnut on one side of the bowel, which was still painful on pressure, and he was in hopes that an operation would relieve him. Before he saw me, after he arrived in London, he met, and the part was examined by, a surgeon of considerable experience, who told him that he could if he pleased return the tumour within the sphincter, but that the pressure necessary would give considerable pain.

The appearance which the part presented was that of a solid tumour on one side of the anus, extremely firm, partly covered with tense and shining integument, partly with the mucous membrane of the

margin of the bowel. On examining the rectum, the swelling and hardness were found to extend an inch within it. It was evident that no operation would be of service; and that as the tenderness and pain in the part, though still considerable, were progressively lessening, no treatment would be necessary beyond the use of a poultice and occasional doses of opening medicine, with abstinence from wine and heating food. The tumour I concluded to be an outward pile, no part of which would on its diminution be drawn or forced within the sphincter. The result proved that this opinion was right: the tumour only shrunk.

The case which has been described appeared to me interesting in three points of view.

In the first place, it was a striking instance of the possibility of mistaking an external for an internal pile. This mistake

might have been of consequence: if it had been acted on, the patient would have been put to great pain, and the complaint, instead of being benefited would have been materially aggravated.

In the second place, this case established that an hemorrhoidal tumour may form in the part of the bowel surrounded by the sphincter. The swelling was not merely prominent by the side of the anus, but could be traced some way within the sphincter. I mark this circumstance, because I believe that it is laid down on no common authority, that the pressure of the sphincter precludes the formation of the hemorrhoidal tumour within its circumference.

Thirdly, the preceding case gave me an opportunity of ascertaining what becomes of inward piles, when they cease to give uneasiness and to be felt by the patient. This gentleman had consulted me

two years before for an inward pile, which protruded on the action of the bowel, as a round and vascular and turgid knot. By the use of appropriate remedies he had entirely recovered; but I found upon examining the bowel on the present occasion, a soft insensible pendulous process within the rectum, nearly cylindrical, about an inch in length and a third of an inch in diameter. This had been the inward pile, with which he had formerly suffered; it had shrunk, and little remained but the elongated membranes which had formed its covering.

It happened shortly after this, that another gentleman consulted me for an external hemorrhoidal tumour, which in many respects corresponded with that described above. He told me, that his stomach had been deranged for some time previously, and that having been exposed to cold and wet, he had shortly afterwards no-

ticed some uneasiness about the anus, and had discovered a small lump on one side, which appeared springy and compressible. Thinking that he might perhaps succeed in returning it, he made continued pressure upon the tumour, which he seemed by this means to empty, so that it almost disappeared. But the next day the swelling returned, became considerably more painful, throbbed, and was extremely tender. A day or two afterwards I saw this patient. The tumour, which I examined, was very like the last described, but it was more sensible, the skin covering it was more tense, and pressure upon it conveyed a sense of elasticity which made me think that it contained fluid. I therefore punctured it with a lancet, when a quantity of liquid and clotted blood escaped, the part lost its tenseness, and became immediately easier. Some little discharge of blood and serum continued for

a few days, during which the tumour diminished rapidly: it speedily subsided entirely.

I punctured the swelling in the preceding instance, in consequence of the tenseness, elasticity, and throbbing pain which characterized it; without however feeling certain that the swelling was a pile, as it proved to be, and thinking it possible that it might have been an abscess. For I remembered a case, in some respects the converse of the preceding, in which I had been called to treat a small tumour at the side of the anus, attended with pain and throbbing, and in many respects looking like an outward pile, and which had been pronounced to be so, but which I punctured, upon the supposition, which proved to be correct, that it contained matter.

I presume, where an external hemorrhoidal tumour has the characters which I have mentioned—namely, elasticity, tenseness, throbbing—that it is always right to pursue this

practice. Under other circumstances, it is probably injudicious to puncture external hemorrhoidal tumours. I have formerly several times punctured the common form of marginal hemorrhoidal swellings, when they project as swollen blue tumours, part covered with integument, part with mucous membrane, having no great degree of tenseness, although extremely painful. I discontinued this practice, from finding it in no instance of material benefit, and having observed it in some instances to be followed by an increase of pain and irritation. The proper treatment in such cases is to apply fomentation, and if necessary leeches, as recommended above in the irritable stage of hemorrhoids.

There was a patient under my care, in the cancer ward of the Middlesex Hospital, with enlarged and indurated womb. The pressure of this organ upon the rectum produced habitually a difficulty in

evacuating the bowels. On one occasion, the sufferings of the patient became aggravated by the sudden œdematous swelling of the skin around the anus as a thick and acutely sensible fold or collar, the least pressure or contact upon which caused pain. In this instance free scarification was practised; by which the distension was relieved, and the tenderness of the part subsided with the distension.

In the class of cases of external piles which I have described, the tumour is indeed *always without* the sphincter, and is for a greater or less extent of its surface covered with the common integument; but its situation is marginal, so that it is *in part* covered with an extension of the mucous membrane. But there is another class of cases, in which the tumour is entirely covered with the skin, and is more detached from the sphincter muscle and the border of the anus.

The hemorrhoids in these cases, which are extremely common, but more so in women than in men, either originate suddenly in their acutest form — as oblong, firm, highly sensible folds of skin — the swelling generally containing a dilated vein; or else form very gradually, the skin slowly throwing out the tumours, as soft, pendulous folds of integument. The immediate cause of these little growths is irritation of the integument occasioned by the secretions of the neighbouring parts.

The first variety to which I have adverted, I may exemplify by the following case. A young woman, a patient in the Middlesex Hospital for another disorder, complained that there were small folds of skin near the anus, for which she desired relief. They had made their appearance suddenly, with great pain, two years before. For the last year and a half she had suffered little from them, but the appre-

hension that they would again prove painful. As this was likely to be the case, I removed each of the little excrescences, fixing each by means of a tenaculum, and dividing its root with a scalpel.

Another young woman was admitted about the same time into the Middlesex Hospital with painful external piles. She had for several years suffered from this complaint: every two or three weeks considerable pain and tenderness in the tumours would come on. There were two hemorrhoids, one situated behind, one to the side of the anus: they were knotty, and peculiarly hard, but of the common colour, that of the integument. The bowels were naturally costive. For a few nights some gentle aperient medicine was administered, upon which the tumours became less painful. I then removed them; and as it usually happens, after the momentary smart of the operation had sub-

sided, the patient expressed herself as being in a state of comfort which she had not known for years.

The gradual origin of these little folds of skin about the anus from any irritation upon the integument, may be exemplified by the following cases; which I select, however, as much in reference to the other features which they presented, as to their exemplifying one variety of outward piles.

The cases I mean are of the following description. Some soreness is felt of the skin about the anus, which gradually increases. When the part is examined, two or three red circular elevations of the skin are seen, from three to four lines in diameter. They are attended with heat and soreness. If neglected, they sometimes ulcerate. They commonly get well under the use of mercurial applications, joined if necessary with mercury administered internally. I do not

know whether this affection, which I have seen several times, and with one exception in women only, is of a venereal origin. I have not seen it in connection with other symptoms of lues. But in one instance, in a woman forty years of age, it existed at the same time near the anus and in the axilla. The complaint had begun in the first situation, and I have no doubt it had been transferred to the axilla by contact.

I saw the same affection in a child two years of age, a boy. In this case mercurial applications irritated the part, which got well under the use of the zinc ointment. In this case there were originally two blotches, one of which became ulcerated, and the skin beside it grew into a pendulous slip, distinctly caused by the irritation of the neighbouring ulcer. As the original complaint got well, the slip of skin shrunk again and disappeared.

When these little folds of skin originate

from a local cause of irritation, they generally go away spontaneously: sometimes they shrink and disappear; at other times they perish by ulceration. The most common causes of their production are gonorrhœa, or leucorrhœa, when insufficient attention is paid to cleanliness.

These folds of skin at the side of the anus sometimes enclose a considerable mass of dense, white, membranous substance, and form large, hard, fleshy tumours, or condylomata, which are commonly very painful.

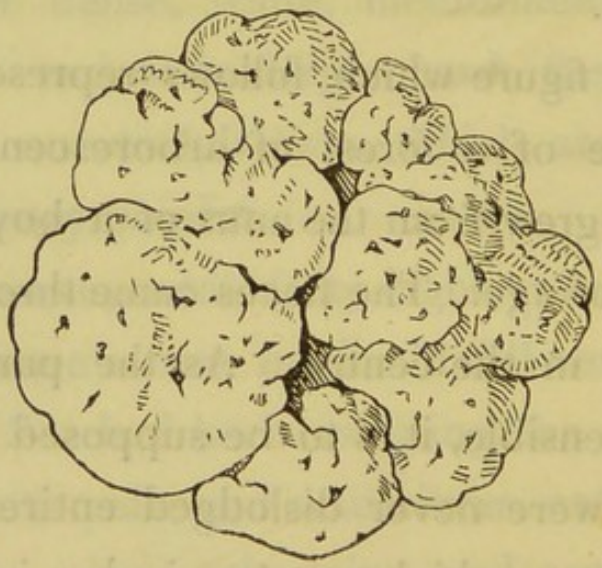
A woman, ætat. forty-eight, was under Dr. Watson's care in the Middlesex Hospital. She had been suffering for several years with pain and uneasiness, extending from the anus to the loins, and round the lower part of the belly; aggravated when the bowels acted, which were generally in a disturbed state, either relaxed or constipated. All these symptoms depended upon

two large, thick condylomata, one on each side of the anus. I removed these tumours with a scalpel; the surface healed very quickly, and the patient was free from all the distress she had previously experienced.

As a general rule, growths external to the anus are to be removed by the scalpel, as the tumours which form within are for the most part best removed by the ligature.

The figure which follows represents the surface of a forest of arborescent warts, which grew from the anus of a boy twelve years of age. The fæces came through the fissure in the centre. As the parts were very sensible, it is to be supposed that the fæces were never dislodged entirely from this mass, which was two inches in height. The absence of cleanliness contributed to the growth of the disease. A surgeon had attempted to remove the mass piecemeal.

by tying three or four of the stems of these warts: but this had had little effect but that of increasing the soreness of the part. The boy being placed under my care, I removed the whole crop with a scalpel, and touched the roots with nitrate of silver, in order to stop the trifling bleeding which followed. The part healed very rapidly, and the warts did not return.



CHAP. V.

OF FISTULA ANI.

By a fistula is meant a narrow channel or sinus, secreting purulent or serous discharge, and having an external opening near the anus through which the matter has vent. The opening of a fistula is often extremely small, so that there may be difficulty in finding it. The channel itself, or fistula, is usually a little larger than a common probe: it is sometimes straight, sometimes crooked: its length may vary from half an inch to several inches. Towards its inner extremity a fistula reaches the coats of the rectum: it may terminate inwards by a small aperture of communi-

cation with the intestine, or blindly as a cul de sac. There may be one fistula, or there may be several; and in the latter case the fistulæ may or may not reciprocally communicate.

A fistula is a consequence of an abscess, which, when it has broken or been punctured, contracts to such a narrow channel as has been described, which continues permanent. The complaint requires to be studied separately in its two stages, first as an abscess, secondly as a permanent sinus.

Abscesses near the rectum again admit of a practical distinction into two kinds: either they are small and superficial, which is the character of those that lead to fistula; or they are deep-seated, when they often contain large accumulations of matter, but rarely produce the secondary complaint.

The frequent occurrence of abscess near the rectum results from the dependent si-

tuation of the part, and from the quantity of loose adipose and cellular tissue with which it is surrounded. The blood from these causes in the hemorrhoidal veins presses heavily on the capillary circulation; and inflammation and abscess in the part ensue, upon the same principle that inflammation and ulceration of the integuments of the leg are produced by varix. Whatever tends to diminish the quantity and firmness of the adipose tissue at the lower part of the pelvis lessens in the same degree the lateral pressure upon the veins, and encourages congestion in them. Causes which produce this effect lead therefore to abscess near the rectum. I have frequently seen large abscesses around the rectum in patients, in whom the complaint has evidently been brought on by hard work and insufficient nourishment: and it is well known how liable small and superficial abscesses

are to occur in those who are extenuated through pulmonary disease.

The formation of deep-seated abscess near the rectum is to be suspected, when the patient experiences aching and throbbing pain in the part, often not constant, but recurring at intervals, and frequently with a spasmodic character, the pain being aggravated on the passage of the fæces, and the complaint attended with symptomatic fever. The abscess often does not declare itself by any external fulness or prominence; and its existence can only be ascertained through an examination of the rectum; when, at some part which is more tender than the rest of the mucous surface, a fulness and fluctuation, if the abscess is matured, are felt.

The most important practical rule respecting deep-seated abscesses near the rectum is that they should be opened at

an early period. The abscess left to itself is slow in making its way to the surface; and, before it spontaneously breaks, an immense accumulation of matter will have been formed. While this process is going on, the patient suffers under increasing pain and irritative fever; and as the complaint generally afflicts those who are of a debilitated constitution, the patient is in danger of sinking before the natural relief of the abscess has taken place. It has not indeed happened to me to have seen a patient perish of this complaint; but I recollect two cases which came under my care within a short period of each other, in the Middlesex Hospital, in which I was apprehensive of a fatal termination. In both cases the rectum was contained in an enormous bag of matter. There was extreme prostration, the tongue dry, the pulse frequent and tremulous; but in twenty-four hours after opening the abscesses, a de-

cisive amendment took place, and recovery followed.

When there is a considerable collection of pus about the rectum, it is important, as in other instances, to allow the matter a *free* escape. This object is not to be attained by large incisions, which however I have seen made, and have been struck with the indolent character which the wound has put on, and with the slow and protracted closure which has followed. The free escape of the matter is to be attained by making a sufficient number of openings of the breadth of the blade of a lancet at proper points. Two or three will generally be found to be sufficient. There is a hospital patient at present under my care, who was admitted with a large abscess on one side of the rectum, which had broken in several ulcerated openings. He had been extenuated through hard work and inadequate nourishment; and

when admitted was in an extreme state of weakness and depression. He was allowed the roast diet of the hospital, and wine; and a part of the abscess which bagged was opened. A few days had made a surprising difference with him; when, without any apparent cause, he again fell back, his countenance looked haggard and anxious, and his strength declined. Upon examining the part, I found that the abscess had burrowed towards the thigh, and that there was an accumulation of matter which had only a circuitous vent. I punctured this, making no alteration in his regimen, and in twenty-four hours the patient again presented the appearance of improving health and vigour.

When there is reason to believe that matter is forming by the rectum, the inflamed part should be opened with a lancet, even if no fluctuation can be felt. The lancet should be pressed home into the

part, where, from an examination by the rectum, the inflammatory fulness and swelling is ascertained to be. A large escape of matter will then frequently take place, where its presence could not have been otherwise ascertained. Or, if a few drops of matter only escape, the progress of the disease is by this relief arrested, and the patient speedily recovers.

I attended with Mr. Lamb, of York Square, Regent's Park, a young lady in whom an abscess threatened to form by the rectum. In addition to the pain experienced in the action of the bowels, and tenderness in the rectum, and constant throbbing and aching in the part, and great distress in every posture but that of lying with the face downwards, there was general fulness of the nates on one side towards the anus. I therefore introduced a lancet to some depth, when blood only followed: I then pressed the instrument still deeper, when a

little matter escaped. In a short time the distress which this patient had experienced was relieved, and she soon entirely recovered.

Deep-seated abscesses near the rectum in men produce more or less obstruction and irritation in the urinary organs, especially if their situation be to the front of the rectum. In the latter case they often indeed threaten to affect the urinary organs principally, and breaking into the urethra, to give rise to urinary fistula; or opening at once into the urethra and the rectum, to originate at once both urinary fistula and fistula ani.

The following case, in which the abscess was seated within or close to the prostate gland, may serve to exemplify the variety of abscess breaking into the rectum alone, and terminating favourably. The collection of the matter in this instance was slow, and was not attended with the acute symptoms and irritative fever belonging to the

class of cases which I have before described.

Wm. Knight, ætat. 65, was admitted into the Middlesex Hospital, August 9, 1832. For five months previously, he had experienced violent aching pains about the hips and loins, and down the back of the thighs to the knees, slight dysuria, and habitual constipation of the bowels. During the last six weeks he had suffered more acute pain within the anus, shooting to the projections of the ischia and round the haunch bones. He passed urine with great difficulty, and could scarcely void it unless at the same time he strove to empty the bowels. Upon examining the rectum, I found a collection of fluid in the region of the prostate gland. This patient experienced relief from the use of the hip bath, with an opiate suppository at night, and mild aperient medicines. But in five days after his admission, the abscess broke into the rectum,

discharging as he thought a pint of matter, which was followed by the complete removal of all his symptoms, and a very speedy recovery. He left the hospital perfectly well on the 28th of September.

The small abscesses which lead to or threaten the production of fistula ani, are commonly situated close to the sphincter, and frequently are formed in the substance of that muscle. They are often attended with considerable pain. They are liable to be mistaken for outward piles, of which mistake I have already given an example. It is of consequence to distinguish such an abscess from a hemorrhoid, as the practice to be pursued in the two cases is different. The outward pile is rarely to be punctured; while the abscess which threatens fistula cannot be too speedily opened. By this means the fistula is prevented: if the abscess be opened early, it speedily dries up.

In the history which patients give of the origin of fistula, they usually state, that after suffering several weeks with occasional pain and throbbing and uneasiness about the anus, something appeared to give way, and that this was followed by a discharge of matter externally, which has continued to the time of their application for advice. Sometimes the pain attending the original suppuration has been so slight as to have passed without notice.

Every case of fistula ani does not require an operation for its relief. The complaint occurring in young persons of a sound constitution from an accidental cause such as constipation of the bowels, will when the cause is removed spontaneously get well. The employment of gentle aperients in such a case, with wholesome and regulated diet, conjoined with the use of astringent lotions to the part, or of the confectio piperis composita internally,

is frequently sufficient for the cure of the disease.

Every fistula will not admit of relief even through an operation. Fistula frequently occurs in persons labouring under pulmonary disease. In these cases it is fruitless to attempt to cure the fistula till the pulmonary symptoms are alleviated. If the parts are divided, the patient's distress is only aggravated by the greater soreness and larger discharge of a larger unhealed and indolent fistulous surface.

In ordinary cases, however, a simple operation is necessary and sufficient for the cure of this malady. The operation consists in dividing the substance intervening between the fistula and the rectum, or in laying open the fistula into the rectum.

It is customary to argue, that the action of the sphincter externus ani is the cause which renders such an operation necessary. The fistula, it is urged, is a narrow chan-

nel leading from the skin into the bowel above the sphincter. But the sphincter is habitually contracted, while the fistula on the other hand is a canal always open. The secretions and contents of the bowel therefore which are under the constant pressure of the adjacent parts, have at once no escape through the anus, while they find a ready passage along the fistula, which the irritation they occasion prevents from closing. After the division of the sphincter, the contents of the rectum are able to pass as readily by the anus as through the fistula, which then granulates and heals, the wound in the rectum itself healing last.

It is evident, however, that this account of the principle of the operation for fistula will not serve in that large class of cases in which there exists no communication between the fistula and the bowel, or in which the sinus is contained in the

sphincter. Yet these cases are often as difficult to manage as the others are, and equally require the same operation for their relief.

The true reason why a fistula ani is so slow of closing, is, that it is a sinus in the cellular tissue. In whatever region of the body such a sinus occurs, the same tardiness of healing is invariably observed. This is well known to surgeons in cases of sinuses in the groin and in the axilla. A principal means available in these cases is pressure applied in the line of the sinus, after action has been excited in it by the use of stimulant injections. But pressure, it is evident, cannot be made against the sides of a fistula ani.

A young woman was admitted into the Middlesex Hospital, with a sinus which opened an inch behind the anus. Upon examining it with a probe, I found that instead of running towards the rectum, it

extended upwards for a length of five inches between the skin and the os sacrum. This patient was of a good constitution, and the bone was not diseased: she attributed the complaint to a blow which she had accidentally received. I tried by pressure to obliterate the sinus, but it was ineffectual. I then laid open the sinus for an inch and a half at its lower part, and made a counter opening at the upper part, and left for a week a few threads drawn with a probe through the undivided part of the sinus. During this period poultices were applied. The threads were then withdrawn, pressure was made, and the part healed rapidly.

The part of the sinus which was divided healed like a common fistula: it granulated from the bottom, the integument uniting the last. The original indisposition to heal and the cure in fistula turn on the same principles as in this case.

The best mode of operating for fistula ani, and the least painful, is the following. Having ascertained by means of a probe in which direction the sinus extends, withdraw the probe, and introduce in its place a strong curved and probe-pointed bistoury. Pass at the same time the forefinger of the left hand into the rectum, and let the point of the bistoury enter the rectum and rest upon the finger. If the fistula do not communicate with the rectum, it is desirable that the bistoury, in addition to a strong rounded end, should have a cutting edge to its extremity: by this means it may be made to divide the membrane of the bowel and to reach the finger. The operation is then completed at once by drawing out together the finger and the instrument resting upon it. It is evident that the intervening substance must have been divided.

It sometimes happens, if the sinus ex-

tends some length by the side of the rectum, that a slight hemorrhage follows the operation. This, however, is seldom more than bathing the part with cold water and keeping it exposed will arrest. I have never seen it extend beyond this. Still it is evident that smart arterial hemorrhage may sometimes take place from the rectum, either after the operation for fistula or on other occasions. And it is important to consider how such bleeding is to be arrested, for it has little disposition to cease, the warmth and moisture of the part contributing to encourage it. An instrument necessary in this emergency is Weiss's improved speculum ani, which consists of three bars of steel, that when they meet form a polished cylinder. The instrument is introduced in this form, and then by turning the handle the blades are expanded and dilate the rectum, exposing its inner surface, upon which the bleeding

vessel may be seen. The source discovered, the bleeding may be arrested either by tying the vessel, or by touching the surface with the nitrate of silver or the cautery.

What is most to be apprehended respecting the event of the operation for fistula ani in a favourable case, is an immediate union of the coats of the divided bowel, leaving the fistula exactly where it was. To prevent this occurrence, and to indispose the divided parts to unite, the operations have been employed of dividing the intervening substance by the ligature, or tearing it with a flexible wire; but of these operations one is too tedious, and the second is unnecessarily painful. The surgeon need only, after the simple division which I have described, introduce a few threads of oiled lint into the wound: but even this expedient is not necessary, if on the following day the surgeon is careful gently to introduce a probe, and separate any adhesion which

has taken place: in the greater number of cases the wound will then readily granulate from the bottom, and the part be healed.

But it is not to be denied that cases occur in which the disease although within the reach of art is not so easily remedied. The following may serve as an example.

—— ——, ætat. 23, a clerk in a mercantile house in the city, applied for advice for fistula. Two little swellings formed near the anus: they were attended with pain, and were supposed to be outward piles. In a month they broke, when the pain was relieved, but the discharge continued. In another month a third lump formed, which, like the preceding, was poulticed, and broke. It was not till three months after this that the patient had leisure for surgical treatment. I found that there were three sinuses, one on each side of the rectum, and one nearly in front.

These I divided, using the precaution the following day of passing a probe along each incision. By these means, which I repeated, the edges of the wounds were prevented closing, but the sinuses continued indolent, and indisposed to fill up. The patient was then directed to bathe the part twice a day with a strong astringent lotion, and to take the confectio piperis composita, together with the lenitive electuary. Another abscess now formed anteriorly to the anus: this was opened into the nearest sinus, the parts were poulticed, and the stimulating treatment omitted. After a few days it was resumed, and the patient then at length got well.

When a complication of fistula ani with urinary fistula exists, if the patient have a good constitution, he may be cured. Of this I have seen more than one instance. The plan to be followed, is first to close the communication with the urethra; which

may often be accomplished through regulated diet and medicine alone, without the use of instruments, unless there is stricture of the urinary canal. When the communication between the urinary canal and the sinuses has closed, which is known by the urine ceasing to flow through them, the cure is completed by the common operation for fistula ani.

CHAP. VI.

OF CONSTIPATION OF THE LOWER BOWELS, AND OF THE USE OF INSTRUMENTS.

The disorders which have been treated of in the preceding sections—fissure of the rectum, laceration, bleeding, hemorrhoids, fistula ani—would admit of being loosely classed together as occasional results of one common cause, namely, constipation of the lower bowels. The disorders which remain to be described—contraction of the sphincter, spasmodic and permanent stricture of the rectum, and carcinoma—might on the other hand be grouped as a variety of causes leading to one common result, namely, mechanical obstruction of the lower bowels.

Between these two classes of disorders a place may be found for the consideration of the following questions.

First, What are the causes of constipation of the lower bowels?

Secondly, What are the precautions necessary in the use of instruments?

The first of these subjects bears an evident relation to the class of disorders already treated of; the second is an essential preliminary to the study of those which remain.

I. Constipation of the lower bowels depends immediately upon one or other of three different causes. Either the secretions are wanting, of which, combined with the refuse of the aliment, fæces are formed; or, fæces being formed, there is not liquid secretion enough for their expulsion; or, the fæces being of a proper quantity and consistence, either they are not of a quality to stimulate the bowels to action, or the mus-

cular fibres of the bowel being enfeebled have not force enough to expel them.

The two following cases are instances of constipation from want of fæces: they exemplify, in different degrees of severity, the consequences which result when the blood is not relieved of this excretion.

A young gentleman, ætat. 25, consulted me, labouring under the following symptoms. He complained of being oppressed with languor, and described himself as incapable of any effort mental or bodily. Frequently during the day he was drowsy and disposed to sleep, and at night he slept long and heavily. He considered that these symptoms, under which with certain intermissions and with variations in their degree he had laboured for several years, depended upon constipation of the bowels. If it happened that the bowels were well relieved in the morning, the oppression which he suffered seemed for that day

lightened of half its weight. In the preceding autumn he had been in the country, taking considerable exercise daily. At that time the action of the bowels had been regular, and he had felt himself perfectly well.

For two months before I saw this patient, he had been endeavouring, by means of medicine, to make up for the want of bodily exercise. He had used injections, but they seldom brought away fæces: he had taken various medicines, but they had generally produced watery motions, which used to lower instead of relieving him. His tongue was clean, his appetite good. There was no embarrassment in the early stages of digestion; no sense of weight or uneasiness at the stomach; no acidity, distension, or flatulence, after his meals. The only bodily sensation which he complained of, was a sense of uneasiness about the middle of

the belly. This uneasiness was greatest, when the bowels were most confined: at such times he could not draw himself fully upright without pain about the umbilicus, which was increased by pressure.

This patient recovered his health upon taking a course of medicine which produced daily a full action of the bowels. The medicine which most contributed to this purpose consisted of equal parts of scammony, gamboge, aloes, and the compound extract of colocynth.

I was requested to see a young medical man, who I heard was in a fit. I found him lying on the floor, sensible, but exhausted with suffering: the flexor muscles of the limbs and the muscles of the abdomen were in strong spasmodic action. He had been in this state for several hours. Ammonia, and hot brandy-and-water were given him, and he gradually rallied. This I learnt was not the first seizure of the kind

which he had experienced. Attacks of a similar description, but of less severity, would come on several times in the year: they were preceded by obstinate costiveness.

This patient, now twenty-eight years of age, up to the age of fifteen enjoyed excellent health. At that age his bowels fell into the state of costiveness which has continued since. He grew up of a slight and delicate frame, physically incapable of much bodily exertion, and indisposed to it by a languor and drowsiness which probably arose from the imperfect action of the bowels. The bowels now act once in five or six days only: what is then passed is healthy; it is only extraordinarily deficient in quantity. With this he has little appetite; and even that he is afraid of indulging, lest it should lead to one of the attacks which I have described. These attacks it has been mentioned recur, when the bowels have been confined for an

unusually long period. The belly then becomes hard, and a little swollen: there is sickness, but nothing is thrown up but what has been recently taken into the stomach: there is a sense of uneasiness and pain above the umbilicus. When at the close of such an attack the bowels are relieved, the motions which pass are still extremely scanty.

When I was asked to see this patient, it was under an impression that he possibly laboured under stricture of the colon. It is not the only instance in which I have seen deficient formation of fæces mistaken for their retention. But it was needless in this case to look for a cause of obstruction, when there was no evidence that an accumulation of fæces ever took place. At the close of the severest seizures, the hardness and tension of the belly went away upon the expulsion of a quantity of fæces not equalling the ordinary daily excretions

of a healthy person. This patient has taken every medicine and every combination of medicines, not entirely without advantage, but without finding that he can calculate upon obtaining relief from the same remedy a second time.

I have selected the two preceding instances, as exemplifying the simplest kind of constipation from deficient secretion. In this class of cases, the deficiency of secretion probably exists in the great bowels, and perhaps in the lower part of the small intestine. But its place may be higher in the alimentary canal.

There is no commoner cause of constipation than insufficient secretion of bile. Indigestion originating in imperfect gastric secretion is again often a cause of the same effect. But these subjects do not properly fall within the scope of the present Treatise. I shall therefore content myself with two remarks which bear upon

them. The first is, that constipation may result from deficient secretion of bile; yet the colour of the small quantity of evacuation may generally be natural. The second, that as indigestion is often a cause of constipation of the lower bowels, so on the other hand it is often produced by it, and is completely relieved when a proper action of the great intestine is produced.

Instances in which fæces are formed, but are not easily from want of a proper liquid secretion eliminated, have been already given. I have mentioned several cases, in which the action of the bowels became healthy upon the daily use of an injection of warm water. The remedy found sufficient for its relief explains the nature of the disorder in these instances.

Dr. O'Beirne has ingeniously supposed, that, in the natural condition of the bowels, the reservoir of the fæces is the coiled portion of bowel immediately above the

rectum. Were this established to be the case, the exact seat of the deficient secretion in the simple form of constipation now considered would be shown. But although Dr. O'Beirne's Treatise is not wanting in practical value, yet I believe his views to be theoretically wrong in this instance. In anatomical examinations, as well as in the living body, healthy fæces are as often found contained in the rectum, and in the higher parts of the colon, as in the sigmoïd flexure. And when from deficient watery secretion small masses of hardened fæces or scibalæ accumulate in the great intestine producing constipation and obstruction their place is liable to be any part of the great intestine. They are sometimes found collected in the rectum, sometimes in the caput coli, and sometimes at an intermediate point.

Mr. Lamb, of York Square, Regent's Park, communicated to me the following

instance. He was present at the examination of the body of a middle-aged person, who had died of obstruction of the bowels, having previously suffered from constipation. There had been an inward swelling, which was felt externally above the right groin, and to which the pain and distress which the patient suffered was referred. Upon opening the abdomen, this swelling was discovered to be the cæcum, enormously distended with scibalæ.

The following case was likewise communicated to me by Mr. Lamb, which from its striking features I prefer to others, as an exemplification of the kind of costiveness now under consideration.

A publican, ætat. 55, had been bedridden for six months. He lay supported in his bed in an inclined position. If he lay down, he was oppressed and uneasy; if he stood up, he vomited. He was corpulent, and ate voraciously. The bowels

never acted without medicine. It had been ascertained that there was no obstruction in the rectum, and the most powerful purgatives had been resorted to without giving relief. The remedy which led to the cure of this patient, was the injection of nine pints of water into the great intestine. The injection brought away an immense quantity of scibalæ. The injection was repeated daily, but not in the same quantity, for a week; and for that period accumulated scibalæ continued to be discharged. When the colon had been thoroughly emptied, an alterative course of medicine and regulated diet entirely restored the health of this patient.

Dr. O'Beirne dwells upon the advantage, where more than the rectum is to be washed out, of introducing into the intestine a long flexible tube through which the water is to be thrown. There are cases no doubt in which this practice is ex-

tremely valuable; but there is no occasion for its adoption, when by the ordinary mode a large quantity of water can be passed into the bowel. The instance last given shows how much may be done in an unfavourable case by the common method; and the passage of instruments into the colon is not so perfectly free from danger in inexperienced hands, as to warrant the general recommendation of this practice.

When the fæces are of a proper consistence, and are not deficient in quantity, constipation may yet result from either of two causes. The quality of the fæces may not be such as to stimulate the bowel to action; or the muscular fibre of the bowel may be weakened and palsied.

A pure instance of the first kind is a frequent result of deficient biliary secretion. The bowels are loaded with a quantity of clayey formation, which they are

too sluggish to eliminate. Aperient medicine combined with mercury relieves this form of costiveness. Instances of the second kind occur in that species of constipation which is met with in elderly people, especially women. Yet it is probable that even here the fault may originally have been an insufficient acridness in the secretions.

Accumulation of fæces in the great intestine in elderly women often has its seat in the rectum. Relief is then easily obtained, the bowel being emptied mechanically.

I was requested by Mr. Reid, of Charlotte Street, Bedford Square, to see an elderly lady who laboured under this disorder. She had generally enjoyed excellent health, and had been accustomed to take much exercise. But ten weeks previously, she had had an attack of rheumatic gout, which had confined her to her

bed. The bowels during this ailment gradually became inactive, and at length she was unable to pass any dejections without medicine. The medicine which best agreed with her was castor oil; but even this remedy failed to give full relief to the bowels. The quantity of fæces passed was small, and their expulsion caused severe pain of a spasmodic character, which remained for hours afterwards. These pains occasionally came on at other times, and were accompanied with throbbing and a sense of stoppage in the rectum. To relieve her sufferings, it was necessary to give opium, which increased the constipation. Upon examining the rectum, Mr. Reid found that it contained a quantity of clayey fæces, which he removed with a scoop. Water was then injected, and more fæces were returned with it. This operation gave the patient great ease; but in the course of a few days the pain gradually returned,

and became more intense than ever; coming on in paroxysms, especially when the bowels were moved, a thin fluid however being all that was passed. It was at this period that I saw the patient, in consultation with Mr. Reid. The accumulation of fæces in the rectum had now returned to a surprising quantity; but there was great tenderness and soreness about the sphincter, which indisposed the patient to allow of any mechanical relief. However, with care and gentleness, the sphincter admitted of being greatly dilated, and an immense volume of fæces was brought away; and the rectum, which was extraordinarily capacious, was completely emptied. She expressed great relief. A dose of castor oil was administered at night, which brought away the following day more fæces, which had probably accumulated in the colon.

This lady did not live many months

after this time; but no return took place of the accumulation and obstruction in the rectum.

If the accumulation be something higher up in the great intestine, it may yet admit of mechanical removal by the use of the flexible tube recommended by Dr. O'Beirne. This instrument may reach the mass of clayey fæces in the sigmoïd flexure of the colon; when the injection of water into the mass will separate it into fragments, which will then be brought away.

But the accumulation may take place at a point beyond the reach of instruments. In this case the exhibition of drastic purgatives is the likeliest means of affording relief.

I attended, with Mr. Drew, an elderly lady, who was labouring under constipation of this description. The belly was large and full, but not tense or tender upon pressure. In conjunction with strong pur-

gative medicines and purgative enemata, the hot bath, and venesection to the extent the pulse and her age would bear, had been tried, but ineffectually. The complaint gave way under the use of oil of croton; and this patient, after passing an immense accumulation of fæces, was restored to health. Two years afterwards she died of a return of this complaint, in which the remedy which had served before was found ineffectual.

Under one attack of disorder or another, the frame must at length sink in old age; out of the many kinds the present certainly may often be averted for years, by attention to the regular performance of one function. When the accumulation in the bowels has taken place, it is full of uncertainty always whether the disorder can be relieved, and the patient live; but it must often be in the power of the patient to prevent the accumulation taking place.

In thus attributing constipation to defective secretion, or imperfect muscular action of the lower bowels, I am practically borne out by the facts which I have narrated. But it may still be inquired, to what remoter influence is the origin of constipation to be attributed?

To exemplify my meaning:—I was consulted in the case of a young lady, one of whose symptoms was obstinate constipation of the bowels, requiring that she should take nightly from twenty to thirty grains of compound extract of colocynth, to produce an action of the bowels the following day. She had been ill four years, and her sufferings had commenced with severe pain across the belly, and obstinate costiveness. After a fortnight's illness the constipation yielded; but one leg became feeble, and the knee of that side was frequently spasmodically bent. This complication of palsy and spasm soon after

affected the opposite leg; afterwards one hand became feeble and contracted. These symptoms grew upon her; but she retained a remarkably fine complexion, and had the appearance, when making no exertion, of perfect health. I entertained little doubt that all the symptoms in this case originated in an affection of the spinal marrow. The vertebral column was indeed perfectly straight and even; but the patient often experienced pain at the lower part of the dorsal portion, and pressure there gave her uneasiness. I recommended that issues should be made at the lower part of the back. The remedy was followed by great relief of all her symptoms. The legs seemed less weak, the knees were not so frequently or so painfully contracted, and the bowels acted with half the usual dose of drastic purgatives. This improvement however was temporary only; and, disappointed of obtaining permanent

relief, this patient consulted other surgeons, as she had consulted several before she applied to myself. She died six months afterwards; and, on examining the spinal chord, it was found for the length of two inches in a state of softening at its lumbar portion.

This is one of a numerous class of cases in which constipation of the bowels is found to depend upon spinal irritation, and in which the abdominal symptoms are the first which show themselves after the invasion of the disease. The reaction of the one organ upon the other is very remarkable.

An amendment of the state of the bowels is an evidence of a temporary alleviation of the spinal disease. The neglect of relieving the bowels by medicine is followed by an aggravation of the nervous symptoms.

But is there in general any parallel connection between deficient secretions of the alimentary canal, and an affection of any other organ?

Without connecting costiveness of the bowels in general with disorder of any other single organ, it is yet evident that the state of the abdominal system which determines it is influenced sympathetically by the state of the other bodily functions; and that there are certain laws upon which its occurrence depends, and rules by attending to which it may in general be prevented.

All the bodily functions are capable of being influenced by, and subjected to, habit. Nothing conduces more to the healthy action of the bowels than attention to this principle. By observing regularly the same period or periods in the twenty-four hours for the relief of the bowels, whatever has been formed or accumulated in them is

found to be prepared at the recurrence of those periods for elimination, and to have been brought to the rectum for that purpose.

Habits of regular bodily exercise promote the due action of the bowels. Neglect or excess in exercise equally interfere with this function.

If proper exercise cannot be taken, it is requisite to substitute for it an altered diet, or the use of aperient medicine, or of injections. It is not found that the daily use of aperient remedies, when needed on this account, renders the bowels afterwards insensible to the ordinary stimuli. Upon resuming wholesome exercise, the spontaneous action of the bowels returns.

II. The instruments that are required under different circumstances to be introduced into the rectum, are the wax bougie, the flexible tube, and the tube of the injecting syringe.

A good wax bougie should admit of being

rendered perfectly pliant and flexible by immersion in hot water. Except in this state, a bougie cannot be introduced with safety beyond four inches into the rectum. Even when it has been rendered pliant, a bougie introduced into the intestine generally meets with some degree of obstruction after passing from five to six inches. The nature of this obstruction is readily shown by anatomical inspection. The end of the instrument catches against the lax walls of the rectum, and pushes before it the substance of the gut as a blind sac. Under these circumstances if force is used, the instrument tears the intestine, and passes into the cavity of the belly.

No adroitness can prevent the rectum being thus caught up in sacs by the bougie. But some nicety of observation is required to distinguish the yielding resistance which such a sac offers, from the resistance of a stricture. It is very certain that surgeons

are occasionally thus misled, and assure their patients that they have stricture when there is none.

When the resistance is a sac of intestine that the instrument has temporarily produced, it will follow that if the instrument is drawn back a little, and then again passed forward with the direction slightly altered, it will keep the channel of the intestine, and not sacculate it at the same place as before. I met with a case some years ago, in which the symptoms led me to think that there was stricture in the sigmoïd flexure of the colon. To ascertain the point, I passed a bougie three feet in length into the bowel: the bougie was something more than half an inch in diameter. It continually caught in the manner which I have described; but by withdrawing it slightly when this happened, and again pressing it gently on, I succeeded in introducing the in-

strument its entire length with very little inconvenience to the patient.

A bougie from half an inch to three quarters of an inch in diameter is quite large enough for the examination of the rectum. If such an instrument pass easily and without pain along the bowel, it may be safely presumed that there is no contraction.

Before introducing a bougie, a double bend should be given to it, one corresponding with the curvature of the sacrum, the second with the inclination of the sigmoïd flexure of the colon to the left. The surgeon should however bear in mind, in reference to this second point, that the bowel occasionally inclines to the right side instead of to the left; and if he meet with any ambiguous resistance, he should, by withdrawing the instrument a little, and again passing it

forward with an altered direction, endeavour to find the natural course of the gut.

I have described the method by which instruments may be safely introduced a considerable height into the bowel; but it will be seen from the remarks which follow, that it is rarely necessary to pass instruments a greater distance than four or five inches.

In the introduction of the flexible tube, the same precautions are to be used as in the introduction of the wax bougie. Its elasticity renders this instrument perhaps more liable to catch up the bowel than even the bougie. The tube should terminate in a smooth round end with two large apertures at its sides. The great point which cannot be too strongly impressed upon the mind of the practitioner, is the extreme delicacy of the part, and the readiness with which it will tear under very moderate pressure.

The tube which forms the extremity of

the ordinary injecting syringe is generally too long and too narrow. The part introduced into the bowel should not be more than an inch and a half in length, and the extremity should be a portion of a sphere, exceeding half an inch in diameter. I have already mentioned cases in which the rectum was torn by the common injecting syringe. Mr. Stanley very recently showed me another example of this accident. A female had died suddenly from inward hemorrhage, owing to the rupture of one of the Fallopian tubes. She had not laboured under disease of the rectum; but a lavement had been administered. The mucous coat of the intestine, which was looked at in the examination, was found raised and torn for a short extent at a little distance within the sphincter, evidently from violence done by the tube of the injecting syringe.

But it is not only immediate laceration

and rupture of the bowel which is to be apprehended from the incautious use of instruments. There is every reason to believe that mechanical hurts occasionally give rise to malignant disease of the rectum, and that roughness and want of care in the employment of instruments are capable of producing cancer in this part.

CHAP. VII.

ON STRICTURE OF THE RECTUM.

The canal of the urethra is particularly subject to two kinds of obstruction, which are called spasmodic and permanent stricture. The first results from a temporary contraction of the muscular fibres surrounding one part of the urethra: the second consists in a partial thickening and loss of extensibility in the lining membrane of the canal, the consequence of a slow process of inflammation. Corresponding affections are met with in the œsophagus, but in this canal they are of much rarer occurrence than in the urethra. When a local cause of obstruction forms in the œsophagus, it is more frequently an ulcer

or a scirrhus than a stricture. The rectum resembles the œsophagus in its affinities for disease, and stricture is as rare in it as ulceration and scirrhus are common.

Spasmodic stricture of the urethra is so frequently seen, and is so uniform in its character, that no doubt remains as to its source and nature. It occurs at a definite point of the urinary canal, which is narrow and interposed between two dilatable parts, and which is surrounded and compressible by muscular fibres. When the spasm is present, an instrument may be passed with facility to this point, when its progress is abruptly stopped. If however it is then gently pressed against the resistance, the spasm in a short time is found to yield, the instrument passes into the bladder, and the patient is relieved.

Spasmodic stricture of the œsophagus is a much rarer affection: the following is an instance in which it occurred.

A German about five-and-twenty years of age applied to me for advice. He stated, that he thought he had a tumour in his œsophagus, which interfered with deglutition. He could swallow liquids only, and of those but little at a time. His voice had the peculiar character which attends ulceration in the larynx. I conjectured from this and other symptoms that the obstruction in the œsophagus was spasmodic, excited by disease in the adjacent organ. A common-sized bougie was firmly resisted at the commencement of the œsophagus: a smaller instrument was stopped at the same part: but upon gentle pressure being made it passed. By using larger and larger bougies, the spasmodic contraction of the œsophagus was in a few days entirely removed.

Spasmodic stricture of the œsophagus commonly has its seat at its commencement, that is to say at the point where the

canal presents the opening of a narrow cylinder, at the termination of the conical and capacious bag of the pharynx. This part is in some degree analogous to the seat of stricture in the urethra.

But what part of the rectum is the seat of spasmodic stricture? From my own experience, I am disposed to think that no single point is more liable to this affection than another. The cases, however, which I have met with, and have considered of this nature, have been any thing but satisfactory. They have left me with the impression that the upper part of the rectum, and the sigmoïd flexure of the colon, are liable to irregular contractions of their muscular tunic, capable of obstructing the passage of the fæces and of making resistance to the introduction of instruments. This irregular action is generally dependent upon a vitiated state of the secretions; and is more frequently relieved by a regulated diet and

alterative medicines, and the use of injections, than by the employment of instruments. Nevertheless the use of the bougie is sometimes beneficial in spasmodic contraction of the rectum.

One of the best instances which I can give of this disorder is the following: it contains a very useful lesson as to its treatment. The patient is a physician, who is now through his own judicious management at length restored to perfect health. The extract which I shall quote from a letter, in which at my request he favoured me with an outline of his case, that had several times been the subject of communication with me before, will convey to the reader an idea of the suffering which may attend this kind of disorder.

"In my life," says the writer of this communication, "I never knew what it was to have a single action of the bowels without the aid of medicine, or to be free

for many hours together from all the wretchedness of disorder and of remedies in conjunction, excepting for two short intervals of time, during one of which I trusted simply to the use of injections of warm water, and during the other when I took the white mustard seed, and that with so singular an effect, that for a while I thought I had quite got rid of my complaint. With the exception of these two intervals, I have never been able till lately to say there is in life that which is worth living for, or in other and more proper words, I did not know what it was to wish to live. To say nothing of the medical discipline which I have undergone again and again, I have been examined and treated for stricture of the rectum and of the sigmoïd flexure of the colon for years, and for years never passed any thing from my bowels larger than a horse-bean, if solid, or of the little finger, if of a softer

consistence. Oftentimes have I been quite incapacitated for exertion, and never able to enter upon my professional duties with any thing like alacrity or cheerfulness. It is now nearly two years ago since I came to the resolution of abandoning all remedial measures: to leave off at once physic, injections, and the bougie: to take nothing in the shape of food that could by possibility irritate the stomach or bowels, and to leave them to act of and for themselves, when they could no longer retain their contents. I had, as you may suppose, difficulties in bringing about so entire a change. At first I suffered much inconvenience from a sense of fulness in the bowels and in the head. But this I contrived to obviate by the very occasional use of an injection of warm water, determining with myself to overcome the disposition to contraction by making the contents of the lower bowels the means of dilating them. By a steady

perseverance in this course of discipline, I have perfectly recovered; know nothing now of that distress of feeling, which for at least twenty years made life burthensome to me; I have seldom or ever occasion to have recourse to medicine, and then only as a man in perfect health would do. I should tell you, that at one time such was the state of the stricture in the rectum, that the largest-sized urethra bougie alone would pass, and that at another the contraction was so far in the intestine that a bougie of three feet in length was considered necessary to reach it."

It may be useful to place in contrast with the preceding case another, which I shall again give in the words of my patient. In this instance the idea of abandoning medicine appears likewise to have been tried, but not with an equally good effect; for it led to a very serious attack of obstruction of the bowels. In this instance the

use of the bougie has proved salutary. There exists indeed in this patient so determinate a point at which the bowel appears narrowed, that it is doubtful to me whether he does not labour under permanent stricture of the rectum, in addition to that tendency to general irregular contraction of the adjacent bowel, which constitutes spasmodic stricture.

"A gentleman, now in his fifty-eighth year, who from early youth had been subject to a very irregular action of the bowels amounting frequently to an alternation of costiveness and dysentery, was about fifteen years ago strongly urged by a physician to abstain from medicine, and to let the bowels alone. This experiment was tried with great resolution. In spite of much suffering and increasing feverishness, the patient took no medicine for more than a week. Inflammation however ensued. Intolerable pain in the abdomen, and si-

multaneous vomiting and purging, reduced him to an alarming state in the middle of the night. Skilful medical assistance was fortunately obtained without loss of time, and the acute symptoms were subdued. The patient's general health however grew worse. His bowels were never at rest. Acrid mucus was incessantly formed, and frequently passed, leaving the sufferer in a state of great weakness. Blood was sometimes observed in the mucus. Scarcely any thing was passed without great effort and pain. Spasmodic contractions of the rectum were constantly attendant on every attempt to ease it. Great emaciation and prostration of muscular power took place, as also restlessness at night, amounting sometimes to the most painful startings from sleep. After a few ineffectual attempts to perform a cure, treating the case as one of liver derangement, he confined himself to the use of the common purgatives for

the paroxysms of the complaint, and of a small quantity of rhubarb and ginger before dinner, for the daily symptoms. Though very slowly, yet he improved from year to year; but owing to the unsettled state of the bowels, he could hardly venture out of his house. By the advice of a friend, he tried, about two years ago, the daily use of lavements by means of Read's syringe. He has used nothing but tepid water. At first the lavement produced great nervous weakness; but this symptom disappeared in a short time. At present he enjoys a certain degree of comfort and ease, which entirely depends on the use of the lavement early in the morning, From a local examination it has lately been ascertained, that the rectum is contracted to about half an inch diameter, at a distance of about five inches from its termination. The daily passing of a wax bougie, softened by heat, is attended with little or no

pain. The distension of the contracted part by this mechanical means relieves the spasmodic contractions, which the patient frequently feels a little above the sigmoïd flexure."

I shall conclude my remarks upon the subject of spasmodic stricture of the rectum with the following case, which was communicated to me by Mr. Crosse of Norwich. I will give it in his own words. It is unnecessary to state, that that very eminent provincial surgeon was not the practitioner through whose mismanagement the fatal termination of the case was produced.

The case is one in which the coats of the intestine were remarkably thin and feeble, which seems to have given rise to an imperfectness in the action of the bowels, which was erroneously considered to proceed from stricture. In every point of view this serious case is full of interest.

"A young woman of delicate frame was

supposed to have stricture of the rectum, which led her medical attendant to employ in no very gentle manner a firm bougie. After much difficulty the instrument was made to pass; but the patient in a few hours became very ill, vomited, and was chilly, and in about forty-eight hours died. It was found that the bougie had perforated the coats of the bowel at the sigmoïd flexure, about seven inches from the anus, and had entered the peritoneal cavity. The preparation, which is in my collection, shows the rectum to be capacious for an inch or two next the anus; but all the rest of the bowel preserved, being a length of eight or nine inches, is very contracted, so that it would only admit a small instrument half an inch in diameter; and at the same time its coats are very delicate and attenuated, readily allowing the bougie, in the hands of a boisterous surgeon, to perforate them. There is a great abundance of adi-

pose substance and of fatty appendages about the sigmoïd flexure of the colon. The bowel presents no thickening or partial contraction, but a smallness of calibre generally, with remarkable delicacy and thinness of the coats—accounting for the presence of symptoms, during the life of the patient, which might have led to the supposition that stricture existed."

Permanent stricture of the rectum consists in a partial thickening of the submucous coat of the bowel, and of the adjacent cellular texture; through which means a smooth ring is formed, generally from a third to half an inch in depth, which projects into and narrows the channel. Sometimes the thickening does not include the whole circle of the intestine, but a segment only. It is presumable that this thickening results from chronic inflammation.

The ordinary seat of stricture of the rectum is from two and a half to four inches

from the orifice of the gut. But sometimes it occurs at a greater distance, at six to seven inches for example; and a contraction of the same nature is occasionally met with in different parts of the colon.

The symptoms of stricture of the rectum are the common and necessary consequences of the excretory canal being narrowed at one part.

The fæces are passed in small and narrow and flattened portions. The quantity voided at a time is inconsiderable, from the effort required to pass it through the stricture. The bowel being thus insufficiently relieved, the effort has to be repeated frequently during the day; and it is only after many efforts that all its contents are passed. The narrowed portion of the canal is extremely sensible; which is owing partly to the thickening which forms it being originally produced by an inflammation, partly to the irritation of the mucous lining of the stric-

ture, which is occasioned by the more forcible pressure of the fæces against it. When the bowels act, in addition to a sense of obstruction in the part, pain is experienced and tenesmus, and mucus is voided; and at other times a sense of weight and tightness, with general uneasiness, is felt. The habitual confinement of the bowels alternates with periods of looseness and purging. Uterine irritation, irritation of the bladder and urethra, numbness and pain down the thighs and legs, are occasionally concomitant symptoms.

But if these symptoms are common to every affection by which the channel of the rectum is narrowed, in what manner is a case in which they occur proved to be a stricture?

It has been mentioned, that the seat of stricture, in nineteen cases out of twenty, is near the orifice of the bowel; that is to say, within the distance which admits of

examination by the finger. In common cases, therefore, no difficulty exists in identifying the disease: the finger may be passed into the smooth and firm narrow ring which forms the stricture; and a demonstration may be thus obtained that no other disease is present.

The treatment of ordinary cases of stricture of the rectum is no less simple in practice than satisfactory in its results. In stricture of the rectum, as in stricture of the urethra, if a bougie of a size calculated easily to fill the stricture be passed through it daily, or every second, third, or fourth day, according to the irritability of the patient, and retained for from ten minutes to a quarter of an hour after each introduction, the pressure of the bougie causes the absorption of the lymph, by which the inflammatory thickening around the canal has been produced; the patient is able gradually to introduce larger and

larger instruments, and the channel is at length restored to its original calibre.

A diet carefully regulated, the use of mild aperient medicines, of injections of tepid water, and of anodyne suppositories, are important accessories in the treatment of stricture of the rectum.

In the use of instruments for contraction of the rectum, the point to be constantly thought of is gentleness. If any considerable degree of force be used, the bowel may be torn. If pressure be made against the stricture with too large an instrument, the adjacent and sound part of the bowel is likely to yield sooner than the stricture. The canal of the urethra is often torn in this manner by the pressure of an instrument too large to enter the strictured part. In stricture again of either canal, if by dexterous management an instrument too large is successfully forced through the contracted part, it may yet produce most

serious consequences. If such an instrument is forcibly passed into a stricture of the urethra, the patient in a few hours after the operation is seized with a rigor, and symptomatic fever follows, which will last several days.

If similar violence be done to the rectum, the surgeon being anxious rapidly to complete the dilatation of the stricture, within twenty-four hours shivering supervenes, as in the former instance: but here it has a more serious character; it is probably the precursor of peritonitis, to which the patient may in a few days fall a sacrifice. There is a singular consent between the pelvic mucous passages and the peritoneum. If a stricture either of the vagina or of the rectum be roughly dealt with, peritonitis is liable to ensue; notwithstanding that the violence is done at a part of either canal, which is not covered with peritoneum.

Such violence is not merely mischievous,

but it is utterly unjustifiable on any ground: it can be used only through a mistake of the principle of dilatation; the object of which is not mechanically to stretch the narrowed canal, but to excite the absorption of that which thickens and contracts it.

In some instances the process of dilatation is very slowly accomplished, the stricture being sharp, firm, and narrow. There is a variation of treatment applicable to such cases, which consists in dividing the stricture in one or more places with a probe-pointed knife. The effect of this operation is for the time to give considerable freedom to the passage through the stricture. But the incisions quickly repair themselves; and the part again contracts, unless prevented by the use of the bougie.

The following is a case in which I employed this practice successfully.

Cornelius Cox, ætat. 28, was admitted into the Middlesex Hospital with stricture of the rectum, beginning two inches from the orifice: it was circular, but broader towards the sacrum than towards the bladder. He had laboured under the ordinary symptoms of stricture for a considerable period. Four months previously to his admission, the urine had begun to flow in part through the rectum. The first treatment adopted in this case was the introduction of an elastic catheter into the bladder, which was retained in the urethra in the expectation that the urinary fistula would be closed through this means. After a few days, however, the instrument produced irritation of the bladder, and it was discontinued. But some advantage had been obtained by its use. Before this time the water flowed on each occasion in large quantities into the rectum: now the quan-

tity was much less; and sometimes the whole contents of the bladder appeared to be discharged through the urethra.

The next measure which I adopted was the division of the stricture of the rectum. The division was made in a direction towards the sacrum. After the operation a short portion of soft wax bougie was introduced into the rectum, and retained there, being removed only when necessary in order that the bowels might act. Under this treatment the patient went on favourably: the channel of the rectum continued open, and for days together no urine passed by it. Before however his recovery was completed, the patient left the hospital, and I lost sight of him.

The division of a stricture of the rectum is not entirely free from risk of one description. I divided in a woman a stricture of the rectum situated within three inches of the anus. In this case, as in the preceding,

the division was made in a direction towards the sacrum. The wound bled at the time, but not to an extent to make me apprehensive of its return. A few hours afterwards, however, very serious hemorrhage supervened. This was arrested by the introduction of a pledget of lint saturated with a strong styptic solution, which was applied to the divided stricture. But the patient had lost so much blood, that I thought it not improbable that I should be compelled to look for and tie the bleeding vessel on account of a return of hemorrhage.

Except therefore under peculiar circumstances, I am not disposed to recommend the division of a stricture. The operation is painful: it does not render the use of the bougie unnecessary; and it is liable to be attended with a considerable loss of blood.

It is not always easy to distinguish stricture of the rectum from incipient carcinoma.

A lady about forty-five years of age had

suffered severely from piles, which were removed five years ago by the ligature. They did not grow from the fore part of the rectum. Some months after this the lady began to feel a tightness and sense of obstruction in the rectum. These sensations gradually became more distressing: much effort and straining were necessary to pass the fæces, which were narrow, flattened, and in fragments. After two years of suffering, this patient consulted me. There was an induration, which began two inches within the rectum, and occupied two-thirds of the circumference of the gut. The central and broadest part of the induration was towards the vagina; at this part it was two-thirds of an inch in depth. The part was acutely sensible. I recommended that the bowels should be relieved every morning by means of a lavement of tepid water, and that a soft wax bougie should be introduced into the narrowed

part every second day. Under this treatment, combined with the occasional use of aperient medicine, a decided amendment took place: the narrowed part yielded to a certain extent, and there was a proportionate alleviation of all the symptoms. But in a short period the patient became worse again; the introduction of the bougie now gave more pain; it was therefore discontinued. The passage was indeed certainly freer, but the induration towards the vagina was not lessened. Under these circumstances I wished Mr. Copeland to see the case with me. The impression which the examination made upon our minds was, that the disorder was likely to prove carcinoma.

The plan which the patient followed was slightly modified. The use of the bougie for a time was not resumed. The increased sensibility of the part went away. But it was not long before the patient again complained

of the contraction returning; upon which the bougie was again used, but for a shorter period than on the first occasion. Since then at intervals the patient has occasionally had recourse to this remedy again. She is now materially better: the narrowing has lost its doubtful character: the induration is less in extent, and the projecting band has little more than the character of a thickened fold of mucous membrane. Some discharge of matter *per vaginam* took place, and continued for several weeks, about a year ago. I am disposed to think that it proceeded from the induration, which may have suppurated, and the abscess have broken into the vagina at that time.

When a narrow stricture of the rectum has existed for some time, the increased pressure of the fæces upon the bowel above the stricture first dilates it, and at length causes it to ulcerate. There are two pre-

parations in the museum of King's College, which well exemplify this occurrence. In one of these, the stricture of the rectum is situated two inches from the orifice: three ulcers are seen in the canal above it leading into fistulous sinuses which opened near the anus. In this specimen, as it is often seen after long-continued stricture of the rectum, a strong oblique band extends across a part of the dilated intestine behind the stricture. Such bands probably result, not from effusion of lymph, but from the process of ulceration undermining and partially detaching portions of the surface.

In the second preparation to which I have referred, openings in the bowel above the stricture are seen to lead into a large and thick sac, which is situated between the uterus and vagina on the front, and the rectum behind: the sac contained nearly a pint of liquid fecal and purulent matter. The nature of the affection was not sus-

pected before death. The patient laboured under symptoms which were considered those of dysentery.

In this instance, the stricture occurred at the junction of the sigmoïd flexure of the colon and of the rectum. Stricture so high in the intestine is extremely rare. The following additional examples, the account of which was given me by Mr. Cæsar Hawkins, will therefore be acceptable to the reader.

" One of these cases is that of a woman, who had no evacuation from the bowels for sixteen days before she died, and who had for some years been subject to somewhat similar attacks of constipation. The stricture was situated just where the rectum commences, about seven inches from the anus; and was so contracted, as only to leave a valvular aperture capable of receiving in its present state a moderate-sized bougie. The bowel above the stric-

ture was very much dilated, being about five inches in diameter, divided into two portions by a band which extended upwards from the strictured part."

"The second case was that of a woman, who was admitted into St. George's Hospital, under the care of Dr. Seymour, with continued constipation; and, as the usual means were unsuccessful, I was desired to see her. I found the rectum very capacious, dilated probably by numerous injections, which however had all returned without fecal matter; but no disease was perceptible in it. I passed carefully a flexible œsophagus tube belonging to Weiss's stomach-pump, and about twelve inches from the anus met with an obstruction through which the tube passed, and evidently entered solid fæces, above where the injections had before reached, which adhered to the end of the tube. I do not remember whether any fæces came away

in consequence of injections passed to this height through the tube; but at all events very little was thus got rid of, and the patient died about three days after her admission in consequence of the confinement of fæces. There was a very firm stricture about the situation I have mentioned, scarcely admitting the end of the little finger to pass through it, partially ulcerated, but not of a scirrhous nature."

There is a case, the nature of which has been explained by Mr. Earle in a paper in the Medical Gazette, that deserves to be considered under the head of stricture. It originates indeed in an opposite state of the parts, and is the result of that great laxity and dilatation which is liable to be produced by frequent large accumulations of fæcal matter in the rectum. When the rectum is in this condition, the upper portion of the gut is liable to be invaginated, or to form a prolapsus within the lower.

The late Mr. Chevalier, in an essay in the tenth volume of the Medico-Chirurgical Transactions, described this stage of the complaint, and advised the best method of relieving it. The suffering which attends it is considerable. Imperfect action of the bowels, frequent and ineffectual attempts to void the fæces, and a discharge of large quantities of puriform mucus are the symptoms; but the exact nature of the disorder can only be ascertained with certainty through an examination. Regulated diet; gentle aperient medicine; the mildest injections first, and afterwards astringent injections; and support and tone given to the bowel by the use of the bougie, are the obvious and efficient remedies in this disorder.

Mr. Earle has further observed, that the prolapsed internal fold is liable to become inflamed, thickened, indurated; the opening through it contracted; and that in

this state the previous symptoms and distress become greatly aggravated.

The symptoms of this affection are particularly likely to be ambiguous; as there is a capacious sac below the stricture, in which fæces may be accumulated, and occasionally be discharged of the natural quantity and appearance, even when nearly absolute obstruction has supervened higher in the canal.

An examination by the finger or with the speculum is essentially requisite to establish the nature of this anomalous complication of disease.

This complicated disorder is to be palliated, and sometimes admits of being cured, by the use of the remedies already mentioned: only that the use of the bougie is now of much more importance; which is to be carefully guided (and in this there is often difficulty) to the contracted opening of the prolapsus.

The patient experiences sensible relief when the bougie can be passed into the aperture of the gut, and the prolapsed portion gently carried upwards upon it. To remove the accumulated fæcal matter, to soothe the increased sensibility of the bowel, to dilate the contracted aperture of the prolapsed portion, and subsequently to restore tone to the intestine, are the objects which are to be accomplished.

There yet remain to be considered, under the present head, affections corresponding with spasmodic and permanent stricture, which occur at the orifice of the gut. These are spasmodic contraction, and permanent thickening and narrowing of the sphincter.

Spasmodic contraction of the sphincter is a kind of cramp. It often comes on suddenly. The patient who has gone to bed quite well, awakes in violent pain. The sphincter muscle is hard and in strong

action, so that the finger cannot without great difficulty be passed into it. In some cases these paroxysms recur daily, in others only two or three times a year. In some the attack comes on gradually, and after producing uneasiness for several days gradually wears off; in others it is sudden in its invasion, and sudden in leaving the patient.

This complaint generally depends upon a confined state of the bowels; and a brisk cathartic at night, with an aperient draught in the morning, will often relieve it. In some cases the patient finds it sufficient to use a lavement of warm water, upon which the spasmodic contraction wears off.

If the pain is very severe at night, an ounce of tepid water, with twenty drops of the liquor opii sedativus, may be injected into the bowel, and at the same time purgative medicine taken. It is better to

use opium in this form than as a suppository. In the latter shape, the remedy by the mechanical irritation which its presence excites has a tendency to excite the sphincter to stronger action.

Sometimes the spasm is relieved by extending the circular sphincter muscle, and keeping its fibres on the stretch. The patient for this purpose may introduce a large mould candle into the anus.

There are cases in which this disease produces long-continued and most serious suffering; in which the anus becomes permanently contracted and hardened, constituting therefore a permanent stricture, and generally combining both permanent and spasmodic contraction. The motions are passed with an effort and with pain, and all the common symptoms of stricture of the rectum are present.

In this more aggravated form, the com-

plaint will yet often yield to simple treatment; — such as the observance of a regulated diet, the use of gentle aperient medicine, the daily use of the bougie, and of lavements of tepid water. If these milder means are insufficient, the sphincter is to be divided, and the wound, by the introduction of threads of lint, is to be made to heal by granulation from the bottom.

CHAP. VIII.

OF CANCER OF THE RECTUM.

The most formidable disease of the rectum, from its severity, its fatal character, and its frequency, is carcinoma. This complaint is liable to occur at every period of life. I have seen it in one instance at the age of twelve; most frequently between the ages of twenty and forty; but hardly less often at a more advanced period of life*.

* At the Middlesex Hospital there is a separate endowment, originating in munificent donations by the grandfather of William Whitbread, Esq. M. P. and by the late Mrs. Stafford, for patients afflicted with cancer; on which account a great number of patients afflicted with carcinoma apply at that institution for admission or relief.

The disease is occasionally produced by some local injury, such as a blow upon the part; but it may be presumed that the tendency to its formation is originally inherent in the frame, and is only brought into activity by the cause to which it is attributed.

Cancer of the rectum is ordinarily slow in its progress, so that its victims may live several years before they sink under it. It is attended with great pain and suffering of various kinds. The severity of the disease however in every case admits of palliation; and in many instances the patient may be raised to a state even of comfort by surgical skill.

Cancer of the rectum, like other affections of this part, is more frequent in women than in men;—a difference, the causes of which are to be sought in the varying conditions of the uterus and in the shape of the female pelvis. The womb during its enlargement in pregnancy interrupts the

free return of blood by the hemorrhoidal veins, and mechanically obstructs the action of the bowels. In the unimpregnated state, the periodical congestion of the uterus cannot fail of extending its influence to the vessels of the rectum. The straightness of the sacrum again in women, and the general expansion of the pelvic bones at the inferior outlet, deprive the lower part of the bowel of that pressure and support which appear to conduce to the healthy state of the visceral organs. Something too there may be in the less regular relief of the bowels and of the bladder, and their frequent over-distension, which result from the natural, but in this instance prejudicial delicacy of women.

The symptoms of cancer of the rectum are, local pain, sometimes of a dull aching character, at other times acute and lancinating, with a sense of weight and confinement in the part, pain and uneasiness ex-

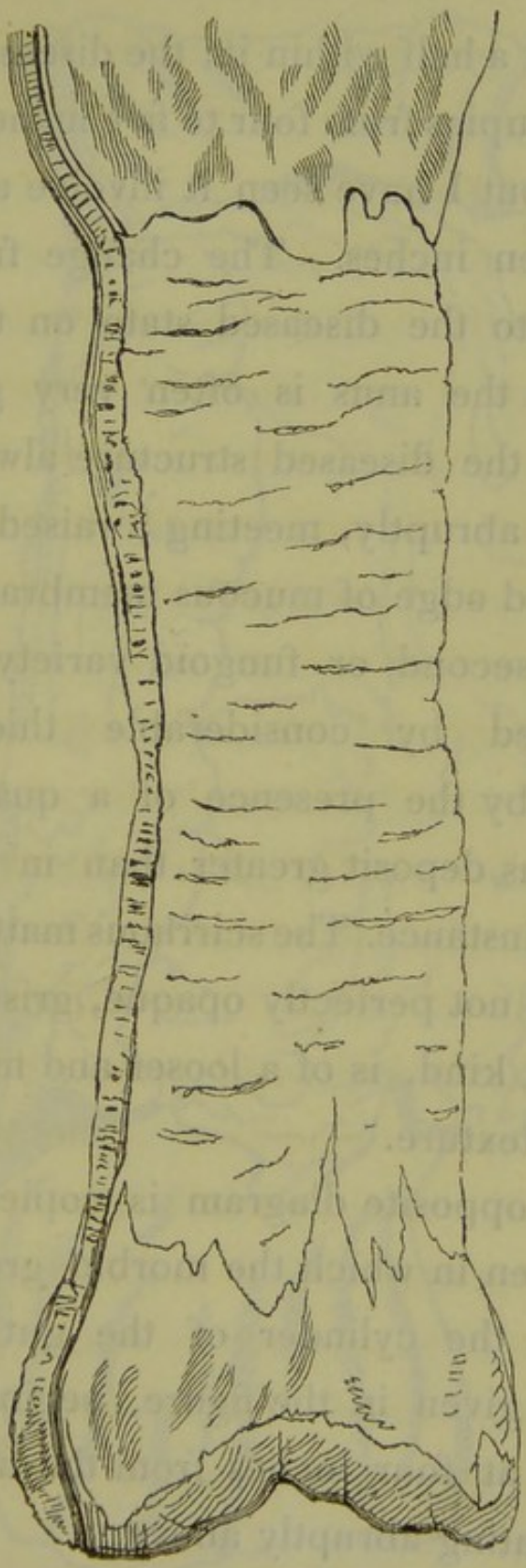
tending round the loins to the pubes, numbness in the hips and thighs. These sensations are aggravated upon walking, standing, or sitting, and are relieved by the recumbent posture. The act of evacuating the bowels increases the pain and distress. The fæces are either liquid, or are passed in small fragments and by repeated efforts: blood, matter, mucus, are expelled with them. The patient, if a female, suffers in addition irritation of the bladder, pain in making water, incontinence of urine, bearing down of the uterus. The difficulty and occasional obstruction of the passage of fæces produce fits of distension and pain and tenderness of the abdomen accompanied with hiccup and vomiting.

The physical changes in the parts, which give rise to these symptoms, are contraction and a peculiar induration of the canal, with ulceration of its mucous liuing. The induration of the canal results from the for-

mation of scirrhus in the muscular coat of the bowel. The disease assumes two different appearances, according to the quantity of the morbid growth which is present.

The two following diagrams, made after specimens in the anatomical museum of King's College, exemplify either form of carcinoma. In each figure the rectum is supposed to be laid open by a longitudinal section, and placed so as to exhibit the inner surface and one of the cut edges.

In the variety of carcinoma of the rectum which is figured in the opposite page, the thickening is inconsiderable; but the mucous membrane is abraded, the muscular coat is hard, firm, gristly, and the canal of the bowel is narrowed. The muscular fibre of the bowel is partly converted into, partly contained in, firm, gristly, fibrous substance. I have not seen this form of the disease extend quite to the anus; but it commonly begins from an inch to an



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inch and a half within it; the disease generally occupies from four to five inches of the bowel, but I have seen it involve as much as sixteen inches. The change from the healthy to the diseased state on the side towards the anus is often very gradual. Above, the diseased structure always terminates abruptly, meeting a raised uneven ulcerated edge of mucous membrane.

The second or fungoïd variety is characterised by considerable thickening, caused by the presence of a quantity of scirrhous deposit greater than in the preceding instance. The scirrhous matter, grey, fibrous, not perfectly opaque, gristly, as in the first kind, is of a looser and more succulent texture.

The opposite diagram is copied from a specimen in which the morbid growth occupied the cylinder of the gut for the length given in the figure, beginning abruptly at four inches from the anus, and terminating abruptly above.

Fungoïd scirrhus at its commencement generally occupies a portion only of the circumference of the bowel, and is felt as a hard tumour situated about three inches within the gut and commonly upon its anterior surface, with the mucous membrane as yet unbroken. The growth of the scirrhus is liable to extend in each direction, upwards to the sigmoïd flexure of the colon, and downwards so as to implicate the anus and to throw the adjacent integument into firm hard knots. Similar disease sometimes originates in and is confined to the sigmoïd flexure of the colon, and is occasionally met with at parts of the great intestine still higher.

In either form of the disease, the fat external to the rectum is liable to assume a firm and crisp texture, resembling the state of the adipose membrane met with around a cancerous mamma.

The severity of suffering in cancer of the rectum bears no proportion to the quantity of bowel implicated in it. There are two ways in which the disease proves fatal. In general the patient consumes gradually, worn out by long-continued suffering. In other instances the disease produces complete obstruction of the bowels, and the patient perishes more quickly. This form of the malady is attended with the severest distress. Complete obstruction of the bowels rarely occurs except in the fungoïd variety, that is to say when there is a large mass of gristly substance in the intestine. But I have known the disease terminate in fatal obstruction, and with the most aggravated suffering, when the mass of fungoïd scirrhus occupied no more than the last three inches of the rectum.

The treatment to be pursued in carcinoma of the rectum is the following.

The pain is to be allayed by opiates.

Solid opium, the acetate and muriate of morphia, the extract of stramonium, are each in their turn available. Opiates act more promptly and efficiently in this disease when taken into the stomach, than when applied in injections or suppositories to the rectum. If administered in the latter form, the subacetate of lead may be advantageously combined with them.

The bowels are to be regularly relieved. In general a drachm of the lenitive electuary taken over-night, with an injection of tepid water the following morning, if it can be used without pain, will be sufficient for this purpose. When these means fail, stronger purgative medicines must be employed. But the next object to relieving the bowels in all disorders of the rectum, is, not to irritate them by exciting unnecessary action. A few drops of laudanum should be taken immediately after the action of the bowels.

The canal of the bowel is to be dilated, *if it be so narrowed by the disease* as to obstruct materially the passage of the fæces. This may be done by means of the rectum bougie; and if the disease be of the kind represented in the first figure, very great and certain benefit ensues from this practice. In some cases even of fungoïd scirrhus I have found decided advantage from the occasional use of the bougie. But in both cases the bougie is to be used very cautiously, and occasionally only.

Towards the fatal period of the worst cases, when the canal is much obstructed, the use of the flexible tube to wash out and unload the bowel above sometimes becomes necessary.

The local abstraction of blood, which is of such important use in retarding the progress of carcinoma of the mamma, is of trifling and but occasional service in cancer of the rectum.

The two following cases will serve as

examples of the ordinary progress of the disease.

Mary Ann Welham, ætat. 31, was admitted into the Middlesex Hospital, in June, 1832. Two years before, when in a weak state, and recovering from an ague, she was brutally ill treated, and kicked upon the fundament. The injury was followed by bleeding from the bowel, swelling, and pain in passing the fæces. After a few days the parts recovered from the immediate effects of the injury; but she continued at times to pass blood, and to experience pain and uneasiness in the rectum. In six months from the infliction of the injury the symptoms were established, under which in an aggravated state she suffered at the time of her admission. These symptoms consisted of pain in the rectum, with aching or throbbing pain at the sacrum and loins extending round the hips to the pubes, frequent urgency to empty the

bowels, incontinence of urine, irritation of the bladder, and bearing down of the womb. The fæces were passed in small flattened fragments, and with blood and matter; the belly was swollen and tender. The symptoms were greatly aggravated, unless she preserved the recumbent posture.

On examining the rectum, the peculiar condition of the part was found, which is represented in the first figure. The mucous membrane began to be wanting about an inch within the sphincter; and beyond this, as far as could be reached, the bowel felt firm and hard, and excoriated. The bowel was *greatly contracted* at two inches from the orifice.

By using the remedies which have been recommended, this patient was in the space of a month restored to comparative comfort. She has obtained and continues to receive the greatest benefit from the use of the bougie, which she is now able to pass

herself. This benefit however is obtained through the *occasional use* of the instrument: if she persists in its use for any length of time, the practice is found to produce irritation and increase of suffering. At first a common urethra bougie would alone pass: in time she was able to pass a bougie half an inch in diameter. When the use of the bougie has been temporarily discontinued, the bowel again contracts, of which she becomes aware through the increasing pain and difficulty in passing the fæces. The bougie is then again employed with relief.

This person is now in the female cancer ward of the Middlesex Hospital, in which patients who are once received are allowed to remain for life.

Thomas Pettit, ætat. 36, was admitted into the Middlesex Hospital in March, 1833. Eighteen months ago he was attacked with a looseness of the bowels, which

lasted three months. At first the complaint by his account was simple diarrhœa; afterwards he passed blood and mucus with pain and straining. When this disorder ceased, the bowels became confined, and he experienced an increasing difficulty in voiding their contents. The characteristic symptoms of carcinoma of the rectum then gradually supervened. He began to experience shooting pain in the rectum, pain at the sacrum on stooping or sitting; a sensation of tightness and of inward swelling in the rectum; difficulty in passing the fæces, which come away in little short pieces, or liquid, and are commonly preceded by a slight discharge of fluid like white of egg and blood; frequent calls to empty the bowels.

Upon examination there is felt, at three inches within the anus, a mass of carcinoma having a ragged opening in the middle, through which the passage of the fæces

takes place. The parts are exactly in the condition represented in the second figure in this chapter. It is impossible to say how far the scirrhus extends. This patient's sufferings have been so greatly mitigated by the remedies which have been used, that he has voluntarily left the hospital, attending only occasionally as an out-patient.

The treatment pursued has been exactly that above recommended. More benefit indeed than I expected has been derived in this case from the use of the bougie. At first I ventured to introduce an urethra bougie a short distance only into the carcinoma; but the patient is now able to pass for seven inches a rectum bougie five lines in diameter.

Instances of fungoïd scirrhus occasionally present themselves, in which the quantity of the malignant growth is so considerable, and the sensibility of the part so

great, that the bougie cannot be introduced or borne. When this is the case, the channel may be enlarged by the division of the scirrhus. No ill consequence follows the operation, and great relief is obtained by it. Of course this practice is only applicable when the part to be divided is within reach of the finger.

Mary Woolgrove, ætat. thirty-two, was recently admitted into the Middlesex Hospital. In the year 1818 she had been cut for fistula, and since that time had never been entirely free from occasional discharges of blood and mucus from the bowel. But it was not till three years and a half ago, that pain and obstruction and other symptoms of carcinoma appeared. At the period of her admission she was greatly extenuated, having suffered for several weeks constant painful purging of liquid matter. The anus was indurated, and surrounded with scirrhous nodules

partly in a state of ulceration. Upon an examination of the rectum, the finger was stopped at an inch within the gut by a mass of fungoïd scirrhus, through which an urethra-bougie could only be passed. By means of opiates the pain which this patient suffered was mitigated, and the purging checked: I then tried to enlarge the passage by the use of bougies. But the attempt was ineffectual, and violent liquid purging returned. Under these circumstances I determined to divide the scirrhus. For this purpose I introduced the blade of a strong straight probe-pointed bistoury upon the fore-finger of the left hand, and divided the scirrhus towards the sacrum, gaining space enough to allow the finger to be passed further into the bowel. I then divided in the same manner the part beyond. The scirrhus terminated, as I had anticipated, at three inches within the anus, so that the operation was entirely successful. It has given

the patient great relief, who now has a free passage through the part, which is besides less sore and painful than before.

The instances which I have given are aggravated cases of the two principal forms of carcinoma of the rectum. The occurrence and distinctness of these two forms of disease I have repeatedly verified by *post mortem* examinations. I observe, in looking over my notes, that I have never seen the first form, that namely which is unattended with thickening, in men. The second I have seen in both sexes.

When carcinoma of the rectum comes before the practitioner as a hard swelling situated just within the anus, with a mucous surface as yet unbroken, the use of the bougie is not needed for the dilatation of the channel, and would be prejudicial by hastening the ulcerative stage of the disease. But other expedients suggest themselves; and we are led to inquire,

whether the disease may not admit of excision, or whether the entire termination of the rectum, including with the diseased part a portion of the adjacent sound bowel, may not be removed.

Mr. Crosse, of Norwich, communicated to me the following particulars of a case in which he performed excision of a carcinoma with temporary benefit to the patient.

"James Rayner, aged thirty-nine years, found some inconvenience about the rectum for four years previously, but continued his occupation as a hackney-coachman up to the time of his admission into the hospital. For three months he had occasionally passed blood, and suffered from a portion of the bowel, as he supposed, prolapsing at each motion. He invariably returned the prolapsus, and without much difficulty. During all this period he suffered more or less pain in the

left thigh, which lately had been severe, and extended down to his toes.

"I found a tumour shaped like a mushroom, two inches in diameter, situated on the left side of the rectum just within the sphincter: it was hard, ulcerated in the centre, and beset with enlarged glands the size of kidney-beans, which could be felt deeper in the rectum. This tumour was so situated as to cause distressing tenesmus; and at each effort the mass protruded, with bleeding and much pain, though frequently no fæces passed. I apprehended it to be of a malignant character, but thought to relieve the great pain and tenesmus, and prolong life, by removing the tumour. I proceeded to the operation by placing the patient in the usual position for lithotomy; and introducing my finger and thumb into the bowel, I grasped and brought down the tumour so as to render it visible without the sphincter. I began to cut away

the tumour at the part deepest in the bowel, stopping to secure each considerable bleeding vessel as I went on, the hold I maintained of the tumour enabling me to pull it down, and keep the bleeding surface accessible. Four ligatures were thus applied, before I separated the last remaining portion of the basis of the tumour. One artery however continued to bleed, to secure which, before the patient was removed from the table, I cut freely through the sphincter ani towards the patient's left side, and expanded the bowel by Weiss's three-bladed speculum — thus gaining a view of the bleeding artery, which was readily secured by tenaculum and ligature. I plugged the wound with shred lint *(charpie)*, kept the buttocks exposed to the air, and directed the constant application of cold water. There was no subsequent hemorrhage. The patient gained ease; was made an out-patient in about

three weeks, having a small unhealed surface still remaining; but from which he suffered so little that he thought himself in good health, and resumed his occupation of a hackney-coachman. After two months he returned, with an increase of the disease. A thin fœtid matter was furnished by an ulcerated surface at the anus; scirrhous tumours were felt within the rectum; and though he suffered less than before, having neither prolapsus nor tenesmus, he was soon confined to his bed from the rapid increase of the disease. Scirrhous tubercles spread over the buttocks upon the skin; the discharge of both urine and fæces was ultimately impeded by scirrhous tumours occupying the pelvis; and the patient died between five and six months after the operation I have described. I was precluded from making a *post mortem* inspection."

But we may go further, and inquire

whether a part of the entire cylinder of the bowel may not be removed along with the scirrhus—the matrix of the disease with the disease itself.

M. Lisfranc recommends and has several times performed excision of the lower part of the rectum, in cases in which the finger can be passed completely beyond the limits of the disease, and the intestine at three or three and a half inches from the anus is ascertained to be healthy.

I performed this operation in the case of a woman about forty years of age, in whom the inner surface of the bowel began to be ulcerated half an inch within the orifice. The ulcer extended round the rectum, and was upwards of an inch in breadth: there was considerable induration. The patient had suffered long and severely, and could not quit the recumbent posture.

The steps of the operation were, first, an oval incision through the skin around the

anus, at a distance of half an inch from the mucous membrane; secondly, dissection of the bowel from the adjacent parts, and securing the vessels as they were cut through; thirdly, division of the bowel, by which the already isolated part including the disease was separated from the sound bowel above.

The results of the operation were as follows. The patient expressed a strong sense of relief and comfort almost immediately after it was concluded. She felt, to use her own expressions, that the cause of her previous sufferings was gone. In a month her appearance became surprisingly altered. The extenuation and distress of countenance that had before been so remarkable left her, and she became a fat and cheerful and comely person. I was now apprehensive of one of two alternatives,—either that the hollow cylindrical cicatrix leading to the bowel would

contract and form a troublesome stricture,—or that as the sphincter was completely removed, there would be distressing incontinence of fæces. Neither of these evils, however, occurred. The cicatrized surface did not contract; and unless the bowels were in a very loose state, the patient was always aware when their action was likely to take place. But a serious evil ensued, which I had not anticipated, and could not obviate. Prolapsus of the bowel came on; some length of intestine was gradually pushed out in a state of eversion; and the mucous surface, irritated by exposure and pressure, became a new and constant source of uneasiness.

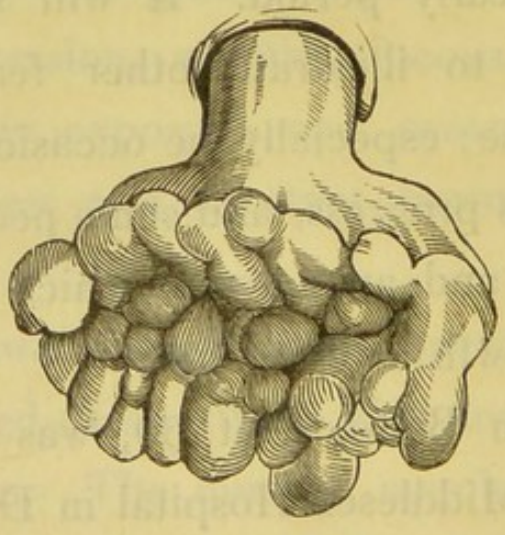
About two years after the operation this patient died of an attack of abdominal inflammation. The mucous membrane adjoining the cicatrix had begun anew to ulcerate.

This is the only case in which I have removed a portion of the entire cylinder of the gut. It has left me with the impression, that in instances of carcinoma of the rectum, in which the disease is confined to the extremity of the bowel, and is attended with great and otherwise unmitigable suffering, the operation should be performed.

I shall close this chapter with the narration of a case, in which I regret that I did not contemplate this operation at a sufficiently early period. It will serve, in addition, to illustrate other features of the disease; especially the occasional slowness of its progress, and some peculiarities of shape and appearance which the scirrhous growth may assume.

William Bond, ætat. 30, was admitted into the Middlesex Hospital in December, 1828. He stated, that as long as he could recollect, a protrusion had taken place

from the rectum whenever the bowels acted, and that expulsion of the fæces was always preceded by a discharge of mucus. Until four months before his admission, the complaint had been unattended with pain. During the latter period he had continually experienced a sense of numbness and aching within the rectum, with variations only in its severity. When the bowels acted, a peculiar substance invariably came down; its shape and size is represented in the figure below.



This substance he could readily return by pressure. Its texture looked not unlike

that of a common polypus of the nose, but it had greater firmness. The disc of the tumour was more vascular than the pedicle, and it bled readily upon being handled. It was quite insensible. Upon examining the rectum, the pedicle of the tumour was found attached to the fore-part of the bowel, behind the prostate gland. There was some little hardness of the rectum at this part. I removed the protruding tumour by the ligature, which gave little pain, but caused some irritation of the bladder. In a fortnight the patient left the hospital, having got rid of the tumour but with some hardness remaining, where it had been attached. He came back again after three months, complaining of a sense of obstruction and uneasiness in the rectum. I now found the fore-part of the rectum occupied by nodular masses, which to the touch appeared of the same substance with the ori-

ginal tumour. They were increasing rapidly. By drawing them out with the tenaculum, and making an incision at their bases, I contrived to include the whole in three ligatures. They came away, but the malignant growth returned. The tumour now grew rapidly, and the patient gradually sank. At three inches from the orifice of the gut, the bowel was perfectly sound. The disease was fungoïd scirrhus.

In fungoïd scirrhus the morbid growth occasionally deviates *in parts* from the character which has been above assigned to it, and is, with complete opacity, whiter, and of a more doughy consistence. But this appearance is rare; and it is still rarer to meet with true medullary disease confined to or originating in the rectum.

Upon looking over the preceding pages, which have now passed through the press, I see that it is necessary to anticipate or to notice the following corrections and omissions.

It would have been better to have treated the subject of simple ulceration of the rectum under a distinct head from laceration; and to have joined with the former an account of follicular ulceration of the rectum and colon,—of phagedenic ulceration of the rectum,—and of the condition of the intestine in dysentery. Follicular and phagedenic ulcerations of the rectum are, however, extremely rare. The former are generally fatal, and the latter require to be treated on principles unconnected with the place of the disease.

I have omitted to treat the ungrateful subject of natural imperforation of the

anus; and to notice the occasional distress produced in the rectum by the presence of foreign bodies, which have passed undigested through the alimentary canal. These, however, are only injurious, when they produce pain or obstruction; and their presence is ascertained by the means adopted to relieve or to investigate the symptoms which they occasion.

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