Observations on the principal diseases of the rectum and anus : particularly stricture of the rectum, the haemorrhoidal excrescence, and fistula in ano / by Thomas Copeland.

OBSERVATIONS

ON

THE PRINCIPAL DISEASES

OF THE

Rectum and Anus.

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ON THE

PRINCIPAL DISEASES

OF THE

RECTUM AND ANUS;

PARTICULARLY

STRICTURE OF THE RECTUM,

THE HÆMORRHOIDAL EXCRESCENCE,

AND

FISTULA IN ANO.

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Alitur vitium, vivitque tegendo.—VIRGIL.

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PREFACE.

IT is the misfortune of Surgery, and consequently of Society, that those diseases which are the produce of slow morbid alteration of parts, have met with less of the attention of Surgeons, and the treatment of them has been less cultivated and improved than their importance demands: while the operative part of Surgery has, by the industrious efforts of the profession, been carried to a perfection, which, in the present state of anatomy and pathology, seems hardly to be increased.

The patient investigation of the origin and progress of disease, is attended with

more difficulty, but with more utility to society, and, perhaps, with more advancement to the progressive art of healing, than the most important and successful operation.

In the Surgery of Chronic Diseases, much, very much, yet remains to be done; but writers seem to have followed one another, particularly in the complaint of which I am principally about to treat, contented to have occasionally described a fatal disease, and its appearances on dissection, without any efforts towards its cure, which that dissection might have suggested, as if the present limits of our knowledge were the boundary of the science.

The functions of the Rectum and Anus are so important to the health and the enjoyment of life; their diseases and derangements so various; and such difficulty and disappointment are frequently

felt by surgeons in their treatment, that I trust it requires no excuse for having brought before the public some of the most distressing and fatal, if not the most common of them. It is remarked by Mr. Pott, that he who thinks he can produce any benefit to society, needs not to be anxious about an apology for the publication of his ideas.

If it shall be found, when the attention of the profession is directed to the subject, that certain diseases, which we have not been in the habit of attributing to affections of the rectum, have their origin in morbid alterations of that organ, I hope I shall not have been uselessly employed. Similar complaints of the urethra give rise to disorders, which were never supposed to have any reference to that canal, until the subject was particularly investigated; and now, some very troublesome, and hitherto unmanageable

diseases, are relieved simply by the introduction of a bougie.

On the subject of the removal of the hæmorrhoidal excrescence, the result of my experience has been somewhat different from what I had been led to expect by the writers who have treated of this affection. I have not always found it a secure and safe operation. Other surgeons also have met with instances of great danger, and even death, produced by the free extirpation of these tumours. I have endeavoured to suggest some other modes of treating the disease, or so to modify the operation, as to render it less serious and less objectionable.

The Prolapsus Ani, so common, and so troublesome a complaint at all ages, but particularly in the later periods of life, has never been considered, and anatomically investigated, with the care that the subject is capable of. The principle of

cure, and the practice I have laid down, will, I trust, be found useful. If, in some instances, it may produce more distress or pain than I have described, it will, I believe, be found to arise from greater violence having been offered to the part, than is either prudent or necessary for the cure of the disease.

It is not intended, however, by any means, to treat fully of all the diseases of the Rectum, in these Observations. The Fistula in Ano, for example, has been so ably treated of, and the cure so simplified by Mr. Pott, that it is quite unnecessary to enter at large on this subject; although a few remarks on some of the most unusual and embarrassing circumstances attending this complaint, may not be uninteresting or superfluous.

Golden Square, 1814.

OBSERVATIONS, &c.

SECTION I.

OBSERVATIONS ON THE STRICTURE OF THE RECTUM.

THE rectum, like every other part of the body, is subject to inflammation and its consequences. It is liable, however, to other kinds of disease, arising from its particular structure, its uses, its relation to the bladder in the male, and the vagina in the female, and to other important parts; but especially from the action which it is every day compelled to perform in the expulsion of the fæces. It is on this account that an attack of inflammation, which would not, perhaps

be an object of serious consideration in many other parts, here becomes often a distressing disease, to be relieved at last only by a surgical operation, and a tedious confinement.

But among the morbid affections of this intestine, those which are attended with a diminution of the capacity of its canal, from whatever cause, are perhaps the most irksome and the most fatal.

I have been led particularly to a consideration of this subject, by a conviction that many of those cases of * ileus, and

* See Memoirs of the London Medical Society, vol. v. page 6: see also Memoirs de l'Academie de Chirurgie, vol. iv. page 226. " Le canal intestinal, peut etre bouché par le retrecissement de ses tuniques, ceque donnera lieu aux memes accidens que le volvulus. Mons. de la Faye a rapporté q'un officier de la maison des Quinze-Vingt, fut attaqué subitement d'une colique tres forte. Elle se manifesta par une vive doleur dans le ventre, avec une tension considerable, la fievre, des vomissemens, enfin tous les accidens qui characterizent la passion iliaque. Il ne rendit pas la moindre partie des lavemens q'on lui donnoit: aussi le ventre devint-il

other more chronic disorders of the bowels, which resist every medical treatment, and are finally destructive, have their origin in organic obstruction of the canal of the large intestines. This obstruction is, very frequently, so near to the anus as to be within the reach of surgical aid, if the cause of the complaint were known. Stricture of the rectum, though, I believe, by no means an uncommon disease, does not usually enter into the contemplation of a practitioner, who is considering the cause of

bientot d'une grosseur et d'une tension enormes: il mourut le seizieme jour de sa maladie. A l'ouverture du corps—a l'endroit ou l'intestin colon s'unit au rectum, vers l'angle obtus que forme la derniere vertébre des lombes avec l'os sacrum, le retrecissement etoit si considerable q'on peut apeine introduire l'extremite du petit doigt dans la cavite de l'intestin. En l'examinant a l'exterieur, il sembloit avoir eté etranglé par une ligature avec un fil, si ce n'est q'il n'y avoit ni pli ni froncement," &c.

There are two or three other similar cases recorded in Mons. Hevin's Memoir sur la Gastrotomie.

obstinately constipated bowels: violent cathartics are given, these only render the disease worse; at last the patient is destroyed, and the dissection proves that the sole cause of the complaint, and of death, was a partial or total obliteration of the canal of the rectum.

These cases are not unfrequently met with in medical writers: there are many recorded in Bonetus, Morgagni*, Ruysch†, and others. Bonetus, indeed, was so satisfied with the impossibility of discovering the disease before death, that he

* Epist. Anatom. Medica 32, art. 6, de Morbis Ventris.

† Ruysch has taken very particular pains in the consideration of, and in relating one case: he seems to have been attached to his patient by private friendship, as well as the wish to relieve so dreadful a disease; for it is written with an elegance of language, which is not very usual in medical description, and a feeling for the sufferings of his patient, which does him so great honour as a man, as a physician, and as a writer, that I shall give the whole case in his own words. See Cases.

makes the following observation on a case which was dissected. "Rectum fibris "quasi tot filis decussatim erat constric- "tum, ut neque sursum, neque deorsum "quicquam transire potuit. Quis vero "mali istius potuit esse presagus? Lyn- "ceus hic taceat, vis clandestina pe- "remit*."

But the most perfect history of the disease is to be met with in a paper, in the Memoirs of the London Medical Society†, under the title of the Schirro-Contracted Rectum, by Dr. Sherwin. Indeed the several phenomena of this affection, in its advanced stages uninfluenced by the only treatment which will relieve it, are detailed by this author with a precision that renders any farther description almost unnecessary. But Dr. Sherwin also

* Sepulcretum Anatomicum, vol. ii. page 269. ed. Genev. 1500.

† Vol. ii. page 9.

considers it as a disease totally beyond the powers of medicine or surgery to relieve, and that our utmost efforts can only palliate the most painful symptoms, and soften the road to inevitable death. Mons. Desault*, in a paper, published, I believe, by one of his pupils, in the Journal de Chirurgie, has the merit of pointing out some of the most common causes of the disease, as well as the mode of relief; but I shall make some farther observations on Mons. Desault's paper, when I come to the treatment of the complaint.

A case of great importance, also, is related by Dr. Mossman†, where a stricture of the rectum was found to have produced obstinate constipation, with the other symptoms which characterize this affection, and finally death. It seems

* Journal de Chirurgie, tom. i.

† Duncan's Annals, 1797, page 307.

extraordinary, that the dissection and consequent elucidation of the disease, did not suggest to the doctor some ideas of detecting and relieving the complaint in future. But, although he has followed the authors I have mentioned, in describing an uncommon, and what they suppose, a necessarily fatal disease, he has furnished us with a very accurate history of the complaint to its final termination, and some important reflections will present themselves on a careful perusal of the case. So true is the remark of Mons. Quesnay, that "souvent les ob- "servations n'eclairent pas meme ceux "qui les communiquent, car les obser- "vateurs envisagent rarement les faits "par le cotè qui peut etre le plus "instruitif*."

But though those who are afflicted with this disease are sometimes quickly

* Memoirs de l'Academie de Chirurgie, tom. i. page 235.

carried off with symptoms resembling those of ileus, this is not the most usual form of the complaint, for it commonly assumes a more chronic character. It attacks people of both sexes, and of almost all ages; but is most common about the middle age, and I think, as far as my experience goes, that women are more frequently affected than men. The first symptom of the disease is an habitual costiveness; but this is so frequent an occurrence, and produced in so many ways, that it is not likely that the cause should be sought for in an organic affection of the rectum; mild purgatives are resorted to, and the symptom being relieved, the cause is no longer sought after.

When this has subsisted for some time, the patient complains of what is called piles, and what is often really so, as a consequence of obstructed circulation in

the parts. The remedies usually given in such cases are applied, sometimes with relief, but more frequently otherwise; and then the good old maxim of the inexpediency of curing piles, perhaps rescues the practitioner from the discredit of failing to relieve his patient, while the cause of the disease is still unknown.

In a short time, as the gut continues to decrease in diameter, the efforts to expel the fæces become more violent, and the consequent progress of the disease more rapid. The stools, which have been long evacuated with difficulty, become contracted in size, appearing like earth-worms in their form, or small pellets. In this stage it is sometimes, in the male, mistaken for an enlarged prostate gland; but if the finger be introduced into the rectum, the gut will be found either obstructed with small tubercles*, or inter-

* Desault loc. citat.

sected with membranous filaments*; or else the introduction of the finger will be opposed by a hard ring of a cartilaginous feel, composed of the diseased inner membrane of the intestine†, instead of that regular tumour on the anterior part of the rectum, which is formed by an enlargement of the prostate gland. As the disease advances, the fæces become more fluid, and there is a thin sanious discharge from the anus, accompanied with tenesmus; not however the painful tenesmus of dysentery‡, but with less distress and less irritation of the parts than in that disease.

During this time the constitution suffers so little, that the patient might be sup-

* Bonetus loc. citat. Case V. in this book.

† Morgagni—Annulo quasi quodam constringi videretur digitus—loc. citato. Adeo induratum ut anceps hærerem an carnosum an cartilaginosum esset dicendum. Ruysch, t. iv. obs. 95.

‡ Sherwin.

posed, from appearance, to enjoy full health. But the ravages of the disease now begin to be felt in their effect on the general habit. Frequent eructations of air confined in the intestines, added to the other symptoms, torment the patient, and render his life miserable. This symptom is so constant, that if it did not occur also in affections of the kidnies, and other complaints, it might be regarded as *pathognomonic*; but I think it prevails to a greater degree in this than in any other disease.

At this period abscesses very frequently form in the neighbourhood of the anus, and sometimes break into the vagina in the female, and the fæces are discharged through the fistulous orifice. In the male, an adhesion takes place with the bladder, and the abscess* discharges itself

* Petit Œuvres Posthum. tom. ii. p. 93, the contrary also occasionally takes place, and urinary calculi

with the urine, and sometimes fæces and wind are voided by the urethra. But more frequently the matter makes its way through the nates, as in cases of common fistula, for which disease it is not unfrequently treated.

The patient often continues a long time in this distressing situation, for none of the vital organs are affected, till, at last, worn out with the pain and the discharge, or perhaps the total obliteration of the rectum, he yields to his fate. This is usually the progress and issue of the disease, when it is not early discovered, and I must confess also, sometimes the termination when it is; that is, when the parts are attacked with cancerous ulceration. But I believe that, when the cause of the complaint is ascertained in

are voided by the rectum. See Paulus Ægineta, and Memoirs of the Medical Society, vol. iii. p. 496, 542.

its early stage, the resources of the healing art are sufficient very materially to relieve, and often to cure it altogether; subject, however, like strictures in the urethra, to the necessity of now and then passing a bougie for a considerable time after the symptoms are removed.

The appearance of the parts on dissection after death is very various; sometimes there are large ulcerations in the vicinity of the stricture, often the canal is only highly inflamed and indurated, almost to obliteration; and, in some instances, the internal mucous membrane appears healthy, while the exterior coverings of the intestine are diseased and thickened to a most extraordinary degree.

The rapid progress * of the disease,

* See some very important observations on this subject in Mons. David's Memoir on the Effects of Motion and Rest, translated by Justamond. Also, Mons. David, under the assumed name of Bazille, sur les Effets de contre Coups en divers parties du Corps. Prix de l'Academie de Chirurgie, tom. iv. quarto.

from a very trivial origin, in parts subject to continual motion, is very remarkable, in many instances, besides that one under consideration; for this reason, a simple wound near the organs of deglutition is so difficult to heal; for this reason, perhaps, it is that pulmonary consumption is so fatal a complaint, for the parts being necessarily in constant motion, have not the opportunity afforded them of recovering from an attack of disease.

SECTION II.

ON THE CAUSES AND DIFFERENT KINDS OF STRICTURE OF THE RECTUM.

STRICTURE of the rectum, like stricture of parts of similar structure, may be produced by whatever excites inflammation, or irritation of the inner membrane of the canal. Thus, it is sometimes the consequence of fistula in ano, or of the operation for it*. The extirpation of the hæmorrhoidal excrescence too, has been followed by stricture of the gut†.

It may be cancerous, and certainly is

* Wiseman, page 237, London, 1676, folio.

† Desault quotes an instance of this kind from Julius Cæsar Claudinus, by Mangetus. Petit Œuvres Posthum. tom. ii. p. 156.

now and then so; but, I believe, much less frequently than is generally imagined, for we must not be deceived by that hard schirrous resistance to the introduction of the finger, which is so constantly met with in one species of the disease, and which is so justly described by Ruysch and Morgagni*, in the passages which I have before quoted. Whoever fully considers the hard cartilaginous feel of the tunica vaginalis testis, in ancient hydroceles, or the extraordinary thickness to which the adherent sac of an old hernia will arrive, or the coats of the bladder,

* Besides the passage which I have cited, it may be remarked, that Morgagni was very well aware that diseases of the rectum have commonly a contracted orifice, dilating itself into a large ulcerated cavity. "Sic enim sæpe recti intestini ac vagini ulcera se habere ut os angustum in capaciorem sinum se dilatet." But Morgagni does not seem to consider that the contracted gut is the cause of the ulceration beyond it, just in the same manner as the urethra ulcerates and gives way behind a stricture of that canal. Morgagni Epist. Anat. Medic. 32. art. 13.

in diseases of the urinary passages, will not be readily disposed to pronounce, on this ground alone, that an indurated stricture of the rectum is of that nature which terminates in cancer.

When the disease is really cancer, it is usually attended with more severe pain, darting through the pelvis to the bladder and the groins, the countenance is of that sallow leaden cast, which is so constantly met with in those who labour under carcinomatous disease; but the dreadful havoc which is soon made by the progress of the cancerous ulceration, does not leave us long in doubt on this point. I have, more than once, seen the whole of the sphincter ani muscle, and the cellular substance surrounding it, so entirely removed by the ravages of this disease, that the anus was continually open to an extent, that would admit of the introduction of a full-sized rectum bougie.

A varicose state of the internal hæmorrhoidal vessels may be the cause of an impediment to the evacuation of the fæces. " J'ai vue," says Mons. Petit, " tout l'interieur du rectum jusqu'a le S. " du colon variqueux, ce que fait une " maladie bien grave de laquelle j'ai vue " peu des gens guerir excepté le malades " que j'ai soupçonné d'avoir *la verole**." I am inclined to believe, that many of those cases which are related by Desault, are of such description. But this, although impeding the passage of the fæces, is different from the kind of stricture I am considering.

The rectum is also sometimes divided and intersected in its canal by small membraneous filaments, which readily give way to the finger, or the bougie, when introduced into the anus, and a dis-

* Petit Oeuvres Posthum. tom. ii. p. 83.

charge of blood follows the examination. This species of stricture is more readily relieved by the bougie than any of the other kinds, but it is attended with more irritation of the parts, so much as to render any examination extremely painful; and there is also commonly a more copious discharge of a thin fœtid matter from the anus. I have twice seen the disease under this form, and it has each time been preceded or accompanied by the hæmorrhoidal excrescence: in one instance a communication took place between the bladder and rectum, which closed under the use of the bougie. It has also been described by Bonetus*, and noticed by Morgagni.

It seems probable that this kind of obstruction is produced by an actual adhesion, or union of the parietes of the gut

* Loc. Citat.

to each other. The rectum is inflamed, from hæmorrhoids, or from some other cause, and coagulable lymph is thrown out on its surface, instead of the natural mucous secretion*. As the passage of the stool gives considerable pain, the effort is suppressed, perhaps, for many days, or for a period quite sufficient for the coalescence of two inflamed surfaces in contact with each other. The greater part of these adhesions will, of course, soon be destroyed by the passage of the fæces. But the very rupture of them is a cause of fresh inflammation, and of fresh adhesions, and thus the disease is re-produced.

If the fæces are evacuated in a fluid

* It has been suggested to me that, mucous membranes do not adhere in a state of inflammation; but I would answer, that such a membrane in a state of high inflammation and excoriation, is no longer a mucous membrane. How often the vagina or the posterior nares are closed after inflammation of those parts, I need not dwell upon.

form, many of these points of union are not broken through; but only elongated, precisely in the same manner as the adhesions between the two laminæ of the pleura are elongated, by the action of the intercostal muscles, after an inflammation of that membrane.

I will not, however, insist on this explanation of the mode by which the disease is produced. It is much more important to know that, painful and distressing as it is, it admits of a more ready relief, than most other disorders of the rectum, when it is early discovered; and when the cause of the disease is overlooked, it goes on to produce very obstinate and very untractable affections of the intestine.

Stricture of the rectum is sometimes said to be produced as a secondary symptom of the venereal disease, or a consequence of venereal inflammation; and it

may be remarked, that we meet with no description of the disease, in any author that I can find, before the time of Wiseman; and the accuracy of the antient writers of surgery, in their history of diseases, is universally allowed, whatever may be said of some of their modes of cure. It may therefore, I think, be fairly inferred, that either the complaint did not occur so frequently formerly, or that it was overlooked by physicians and surgeons, who suffered scarce any thing which related to diseases altogether to escape them. The case in Wiseman, indeed, was the consequence of the operation for the fistula in ano, as it was then performed; but, I believe, he was the first who has described any species of the disease, and he treated it in a way that was well worthy of the imitation of his successors; but I shall say more of this when I come to the treatment of the disease.

Soon after Wiseman, as I have related, many authors have noticed the disease, and they all concur in considering it as inevitably fatal, until Mons. Petit* gives a hint, that when it was a venereal symptom it was curable, by the usual remedies for that disease; but that in other cases he had never seen it relieved.

Desault saw it so frequently in combination with other symptoms, decidedly venereal, that he did not hesitate at once to put his patients under a course of mercury, and with a success that fully warrants us in considering it as, sometimes, a symptom of the venereal disease. He did not, however, trust solely to the effects of this remedy for a cure, for he saw that the particular functions and morbid alteration of the part, required a particular local treatment, inde-

* Loco Citato.

pendent of the medicine which was to cure the constitutional disease. He therefore, during the exhibition of mercury, every day introduced into the rectum, tents imbued with some ointment, of a greater or less size, and for longer or shorter time, according to the circumstances of the case, and by this combined local and constitutional treatment generally cured his patient.

Mons. Desault does not seem, indeed, to consider the tent of so much importance in itself, but only as the vehicle of his medicaments. Be this as it will, however, he relieved his patients of a disease, which, till then, was generally considered as a fatal one.

It should be remarked, that he ascribes the complaint to many other causes, besides the venereal disease, as to rheumatism, to gout, to cutaneous complaints; but, notwithstanding this, he gave his

patients mercury, and mercury relieved them. Richerand* also, in his Nosographie Chirurgicale, considers the stricture of the rectum as sometimes arising from the venereal disease. And this opinion may, perhaps, derive some additional strength, when we reflect how often the neighbouring parts are attacked with complaints, of which no practitioner doubts the venereal origin.

The condylomatous excrescences, which we see every day surrounding the anus; the large rhagades in these parts, though not so frequent a disease, have long been considered venereal. And these, also, in addition to the constitutional remedy, require a local treatment adapted to their

* Le retrecissement de l'extremite inferieure du rectum est quelquefois un vice de confirmation; mais plus souvent l'effet de l'epaississment venerienne de ses parois, de tous les symptoms de l'affection syphilitique il n'en est point de plus grave.—Nosographie Chirurgicale, Paris, 1808, tom. iii. p. 418.

nature, as well as the stricture of the rectum. Even the fistula in ano is sometimes the consequence of the venereal infection*, as has been remarked by Mr. Pott and Le Dran.

After all, I do not by any means intend to assert, that it is always, or even most frequently, a symptom of the venereal disease. If it is met with in combination with other syphilitic complaints, there can be no doubt of the propriety of using mercury. And if it is relieved, in such cases, by mercury, added to the use of the bougie or tent, I think it is reasonable to employ, and to expect benefit from, the same means in other cases, where it may be the solitary symptom, and where we are disappointed in our other methods of cure.

* Pott's Works, by Earle, vol. iii. p. 87. Le Dran, Observ. de Chirurg. tom. ii. obs. 84.

SECTION III.

ON THE TREATMENT OF STRICTURE OF THE RECTUM.

IT has frequently been remarked, that he who knows a disease, cannot be much at a loss how to treat it; and although this may not be true, perhaps, in its fullest extent, I believe no one will dispute, that the art of curing diseases advances, in some sort of proportion, to the increase of our pathological knowledge.

While the disease was generally considered as a cancerous one, it is not surprising that it was constantly fatal; for when left to itself, it is as necessarily, as certainly, and perhaps as quickly de-

structive as cancer itself. For, as I have before remarked, when the complaint is of the true carcinomatous kind, the ulcerative process often removes the impediment to the passage of the fæces, and death at last is produced in the same manner, as when cancerous ulceration takes place in other parts; namely, by gradually exhausting the constitution, with the pain, the discharge, the hæmorrhage, and the general irritation it excites. Whereas the gradual, though certain, obliteration of the rectum in other kinds of the disease, points a shorter road to death, by a total obstruction of the alimentary canal.

When, by habitual costiveness, by the stools wanting their usual figure, the constitution being otherwise in tolerable health, an organic obstruction to the passage of the fæces is suspected; and this suspicion is confirmed, by an exami-

nation of the rectum with the finger; the first object of the surgeon should be an enlargement of the obstructed part, by the introduction of a bougie. This bougie should be of such a size as to pass, when well lubricated with oil, without much difficulty or pain. Sometimes, when the disease has been of long continuance, it will be necessary to begin even with a large sized urethra bougie, or one of the same size as those which are made for a stricture of the œsophagus, and of a length that is likely to pass beyond the stricture; that is, about six, or seven, or eight inches: but, I think, it is of consequence to use a bougie at first, which is rather too small than too large. The benefit is derived much more from the continuance of the bougie in the rectum, than from a sudden dilatation of the strictured part. And when it forcibly distends the stricture, the pain

which is produced, renders it necessary to withdraw the bougie much sooner, than if it had been of a size which would pass easily. When it has remained for half an hour or more, according to the feelings of the patient, it should be removed, and passed again the next day; and the same sized bougie should be continued for several days, before any attempt be made to enlarge it.

In the introduction of the bougie, it is necessary to bear in mind the anatomy and situation of the parts which are concerned. The projection which the os sacrum makes into the pelvis has, in many instances, been taken and treated for stricture of the gut.

The bowels should be kept constantly lax by the use of castor oil, electuary of senna, or some such mild purgative medicines, whenever it is necessary, during the whole cure.

I must here remark, that I am now considering it as a simple stricture, unaccompanied by any specific disease. For when, from other concomitant symptoms, or from the history of the complaint, there is reason to suspect constitutional disease, it is in vain to expect relief from the local treatment alone. But whatever be the nature of the stricture, whether it be that kind in which the rectum is obstructed by tubercles, by membraneous filaments intersecting its canal (which two species are by far the most easily relieved), or whether it be the indurated stricture, from a thickening of the coats of the intestine, this local treatment is equally necessary. And it must be continued, and the bougie gradually enlarged, until the rectum easily receives a full sized bougie. Even for some time after all the symptoms of the complaint have disappeared, it is necessary occasionally,

that is, every two or three days, to introduce the bougie, and withdraw it again. For the disposition of the disease to return, is much more prevalent in the stricture of the rectum, than in a similar affection of the urethra.

In the indurated annular stricture, which has, for a long time, resisted the introduction or the enlargement of the bougie, I have more than once introduced a probe-pointed curved bistoury, and divided the thickened parts, on that side of the rectum which is contiguous to the os sacrum; and I have frequently seen the late Mr. Ford perform the same operation. Wiseman divided a contracted gut three or four times in the same person; his case, however, was not one of idiopathic stricture, but was produced by the rude operation for the fistula in ano, which was practised at that time. The experience of Wiseman, shews that the

operation may be performed with safety and with benefit.

The Greek* and Roman surgeons used much more freedom of operation in their treatment of the maladies of the rectum, than is at present found necessary to their cure. In the common operation for the fistula, the whole of the morbid parts were usually taken away, either by actual cautery, by excision, or by ligature; and the patients often recovered with the functions of the part perfect. There is no fear that any of these practices should be revived; but it may serve to shew, that to introduce an instrument cautiously on the finger, even to a considerable extent up the rectum, and † to di-

* Hippocrates de hæmorrhoidibus. Rectum enim intestinum et secans, et resecans, et consuens, et urens, et putrefaciens, etiamsi gravissima hæc esse videantur, nihil læseris.

† Palletta trovò talvolta vantaggioso il taglio della parte piu ristretta dell' intestino, ch' egli dovette fare

vide the stricture in its posterior part, is not so serious an operation as may be imagined. If it is done when the parts are in a quiet uninflamed state, considerable benefit will be derived; and much time will be saved in prosecuting the cure with the bougie. I have thought, in one instance, however, it is but fair to state, that it produced or accelerated the formation of abscess and consequent fistula; but as the patient had several times before experienced similar impostumations in the part, excited only by the efforts to pass her stools through the stricture, it is not at all certain that this inconvenience was the consequence of the operation; and it is the only one I have seen, which could possibly be attributed to it.

in occasione di congiunta fistola, ed il propone anche per le sole briglie piu strette, senza concomitanza di fistola.—Instituzione Chirurgiche di Monteggia, parte terza, sezione seconda, Milan, 1805, p. 549.

In this operation, it is obvious that the instrument should not be trusted beyond the reach and guidance of the finger; and it is most successful when, from the impression left on the bougie or other circumstances, there is reason to believe that the stricture is not of considerable extent.

The formation of abscess, in the vicinity of the rectum, is a very frequent occurrence in the advanced stages of the disease. I have not uncommonly seen patients, who have had the operation for fistula performed on them,---I need hardly say without success---for it is in vain to attempt the cure of the sinus, while the cause which produced it still remains, perhaps undiscovered, and is daily augmented.

If in consequence of such abscess, a sinus remains after the stricture is relieved, the complaint then becomes a

simple fistula, and is, therefore, to be treated as such. Nevertheless, it is not necessary, in all cases, to wait for the total removal of the stricture before the fistula be divided. If the stricture be situated within reach of the operation, it may be divided at the same time, as the sinus is laid open; and provided the use of the bougie be persisted in, the cure, both of the original disease, and of the fistula, will go on together. The failure of the cure in the cases I have seen, arises from the disease being considered as a simple fistula, in consequence of an abscess of the part, without any reference to the morbid state of the intestine.

The abscess, I have said, sometimes breaks into the vagina; and a communication being formed between this and the rectum, the fæces and wind, obstructed in their natural outlet, make their way through the fistulous orifice in the va-

gina; this is a dreadful addition to the distress of the patient, and more particularly so, as the surgeon cannot promise that it will close again after the stricture is relieved.

Desault gives two cases of this communication, in which the aperture was very much diminished in size, and seemed to be closing under the use of the bougie or tent. But, unfortunately, neither of his cases is related to its termination, for being so considerably relieved, they would not suffer confinement, but left the hospital before they were quite well; he introduced a tent into the vagina similar to the one in the rectum, and to this he attributes his success.

* Another manner of treating this symptom has been, by passing a ligature from the rectum through the fistulous

* C. Bell's System of Operative Surgery.

orifice, bringing it out at the vagina, and then tying it so as to include all the intermediate substance; but of this mode of relieving the complaint I have no experience. I have once seen the aperture between the rectum and vagina heal spontaneously after the stricture was relieved, but this event is too fortunate to be always expected. Mons. Petit relates a case of great importance, where a communication between the rectum and bladder in the male, which allowed of the passage of the fæces and of wind through the penis, was entirely cured by the constant use of the curved catheter*.

Where the disease is in the male, although there is no actual communication with the bladder in most cases, this organ, as well as the kidneys, suffers very considerable derangement of its functions

* La sonde en S. Œuvres Posthum. tom. 2. p. 93.

in the advanced stages of the disease, from its contiguity to the parts immediately affected. Retention, but more commonly suppression of urine, properly so called, is not an unfrequent addition to the sufferings of the patient; but where the bladder is not actually distended, and appearing tumid above the pubis, I should warn the practitioner against the introduction of the catheter, although no urine has been passed for a very long period. In this case, the error is principally in the kidneys, whose function is suspended for the time. But in every case which I have seen*, these glands, after

* When, in the year 1802, the operation of Lithotomy was performed on a late eminent accoucheur, there was very considerable hæmorrhage at the time of the operation, and no secretion of urine took place for six and thirty hours afterwards. I repeatedly placed my hand above the pubis, and there was no tension or tumour, nor in fact was there any untoward symptom; at last the urine burst from the wound, and flowed for a short time. The next day, the third after the opera-

a short time, resume their office of separating the urine, and the symptom disappears; whereas if the catheter be introduced, little or no urine will follow it, and much injury may be done, in such a state of the parts by the introduction of this instrument.

To relieve the habitual costiveness, I have said that it is necessary to have recourse to mild purgatives, such as castor oil, manna, or the like; but at this period we have frequently the opposite inconvenience to encounter, for the stools now come away liquid, mixed with a sanious matter, and often involuntary, so that the patient complains of purging rather than of constipation. Dr. Sherwin* very justly remarks that, we should not be too hasty

tion, the whole of the urine passed by the penis, and at no period afterwards was there any urine evacuated by the wound, so that the bladder healed by the first intention.

* Loco Citato.

in checking this fluid discharge, lest the more serious complaint of obstinate costiveness should be the consequence; but I do not think it is commonly in our power to check it.

I have seen the greatest benefit derived from the local application of opium, whether by glyster, or by the introduction of a grain or two of opium into the anus, when the pain and irritation of the gut are violent; and under such circumstances the warm bath, or fomentations to the part, are so far beneficial as to produce temporary relief. The extract of hemlock, either alone, or mixed with small doses of calomel, is often employed in this and similar complaints. I have frequently used it, and I think with considerable advantage; but when the symptoms point out the propriety of having recourse to mercurial medicines, a more

decided mode of administering them should be adopted.

If the disease is not cancerous, it is for the most part to be relieved by one or the other of these means, when recourse is had to them before the parts have suffered a very long time, and to a great extent in their structure, by the continuance of the disease; and if it be cancerous, I know of no mode whatever that is capable of arresting its progress to a fatal termination.

Before I quit this subject, it may not be unuseful shortly to recapitulate some of the most important circumstances of the disease, and its treatment.

First, That a stricture of the rectum is by no means so uncommon a disease as is usually imagined, and that it has been hitherto generally considered as necessarily fatal, because it has been discovered

only in the last stages, or by dissection after death*.

Secondly, That many of those obstinate cases of constipated bowels, which are of long duration, arise from an organic obstruction to the passage of the fæces, and that this obstruction is most frequently so situated as to be within the reach of surgical aid.

Thirdly, That it is requisite, in such cases, to examine the anus with the finger; or, if the symptoms be strongly marked, and there be no obstruction within the reach of the finger, to examine it with a rectum bougie.

Fourthly, That the use of internal medicines alone will be unavailing in such cases, and that nothing without the use

* See some observations on the diseased appearances of the rectum, by Dr. Baillie. — Morbid Anatomy, page 111.

of the bougie affords any hope of relief to the patient.

Fifthly, That the disease is much less frequently of a cancerous nature, than from the description of authors it may seem to be.

Sixthly, That it is often combined with symptoms of the venereal disease, and, in such cases, is more readily relieved by mercury, added to the use of the bougie, than by any other means.

Seventhly, That if the disease is often found in combination with syphilitic symptoms, it is fair to infer that it may, in some cases, also, be the solitary symptom; and that if it resist the local treatment, and there be reason to suspect venereal mischief in the habit, it is right to try the effect of mercury at the same time.

Lastly, That whatever be the nature of the disease, provided it be not true can-

cer, it is necessary to continue the use of the bougie, at intervals, for a considerable time after the free passage of the fæces has been established, and to return to it whenever there be any symptoms of a recurrence of the complaint.

SECTION IV.

ON THE CONSEQUENCES PRODUCED BY THE IRREGULAR OR TOO POWERFUL ACTION OF THE SPHINCTER MUSCLE.

IT has often occurred to me to remark, and has been observed by others, that cases, which are called stricture of the urethra, and of the œsophagus, admit of more easy, more certain, and quicker relief by the use of the bougie, than they could possibly do if the structure of the membrane of those canals were disturbed, as in cases of real and permanent stricture. Such diseases have usually been called spasmodic stricture. If the other canals of the body are affected, and their functions deranged by

the mere spasm of their muscular fibres, it seems yet more probable that the rectum, surrounded at its extremity by a very powerful muscle, should be liable to a similar affection; and it is in fact not a very uncommon disease, although, as far as I know, it has not been described by any medical or surgical writer.

In the first edition I remarked, that ileus and more chronic disorders of the intestines, were often the consequences of diseases of the rectum; but I was not then so well aware, that several minor complaints of the alimentary canal have the same origin, and require the same treatment. The very close sympathetic relation between the remote parts of a mucous membrane, however, renders it more than probable. The constant irritation of the nose in children affected with worms in the intestines; the swelling of the testicle

from irritation, propagated to the neck of the bladder, in gonorrhea and other affections of the urethra, are familiar instances of this sympathy. I have very frequently met with cases, in which very obstinate and habitual costiveness, with a long train of minor and consequent complaints, as well as some of a more active and painful character, in which there could be no actual stricture discovered on examination*. But in all these cases, I

* The sensibility of mucous membranes is greatest at their extremities; that is, as they are nearer to the surface of the body. When a mucous membrane is inflamed by gonorrhea, dysentery, or catarrh, there is pain whenever the common function of the part is performed; it contracts on the application even of its proper fluids, and affords an impediment to their passage: but when this increased excitability is removed, or when the parts have been long habituated to it, it no longer opposes the passage of the fluids, urine, fæces, &c. in the same degree, but is left in a somewhat contracted state. Mons. Bichat has made some important remarks on this influence of habit, or, as he calls it, "soumission à l'immense

have remarked that the sphincter muscle was either unusually strong in its action, or unusually extensive and broad, embracing the extremity of the gut, in many instances, for two or three inches. These affections, or one of them, may seem to be rather peculiarities of formation than consequences of disease, and will, I think, account better than any other manner with which I am acquainted, for this habitual costiveness and disposition to piles, and other disorders of the rectum, being common to many families.

Mons. Portal* has written an ingenious paper on hereditary diseases and particu-

" influence de l'habit" in mucous membranes. It seems to me, that this is the state which is so readily relieved by the bougie, and that goes on to produce a more permanent disease, if not counteracted. Dr. Darwin has put this principle, perhaps, in a more striking and plainer view.—Account of the retrograde Action of the Absorbents in some Diseases. Litchfield, 1780, p. 96.

* Men. del Institut. Class. Math. & Phys. 1807.

lar conformations; and it seems extraordinary that he has omitted altogether to mention piles, the most common of them. If they arise from a peculiarity in the form of the sphincter muscle, not only the complaint, but the remedy, seem to admit of a very easy explanation.

Anatomists, for the most part, describe the sphincter muscle as two orders of fibres, surrounding merely the extremity of the gut, and decussating or intermixing at their opposite insertions; but Petit* and Portal† have considered it as two distinct muscles. The fact is, that

* Il y a deux sphincters a l'anus, l'un interne que tout le monde connoit, et que s'appelle intestinal a cause de sa situation, l'autre que s'appelle cutané parcequ'il est attaché a la peau.—Œuvres Chirurgicales, tom. ii. p. 198.

† Anatomie Medical. tom. v. p. 258. A l'extremité de l'intestin rectum se trouvent des troupeaux musculaires circulaires, qu'on apercoit tres facilement et auquels ou a donne le nom de sphincter interne de l'anus.

there is considerable variety in the structure of this part in different individuals; and those in whom it is very strong or very extensive, are predisposed to diseases of this part. Sometimes the fibres of one division of the muscle, have a different or alternate contraction with those of the other, and seldom leaving the whole muscle at liberty, and relaxed; in other cases, the muscle is so strong, that the action of the abdominal muscles cannot without difficulty overcome it; and in both these cases there will be habitual costiveness. There is another cause of habitual costiveness, where the rectum, but not the sphincter, is concerned, which has been noticed by Morgagni* and Portal†;

* Morgagni, vol. i. p. 70.

† Portal, Anat. Medical. Mais on remarque a son extremité inferieure pres de l'anus, divers replis de sa lame interne, lesquels forment des especes de valvules rangées a peu pres circulairement. Glisson qui les a reconnues les nomment les valvules semilunaires.

and I have several times seen it on dissection. Mr. Cooper has had the kindness to shew me a specimen of such a peculiarity, but this is not our present subject.

When the sphincter muscle of this powerful and extensive kind is excited by the efforts to pass the stools, to a high degree of inflammation, perhaps there is no disease that the human frame is subject to which is more painful; its involuntary contractions are compared to the pains of labour; they frequently come on immediately, but more usually about an hour or more after each evacuation, and sometimes continue till the succeeding one; in some instances, the complaint goes on to produce suppuration, and consequent fistula; sometimes the irritation is propagated to the neck of the bladder, and produces a retention or impedi-

La membrane interne qui constitue ces replis se relache et se prolonge quelquefois au point de former un bourlet qui s'oppose a la sortie des excrements.

ment to the urine. I have seen it, in two cases, extend up the canal, and give rise to attacks of violent cholic, and an increased secretion from the whole inner membrane of the gut, so that an evacuation of mucous cylinders, of the size of the part of the canal where they are formed, or of detached pieces of mucus, are seen mixed with the fæces; yet all this has been finally removed by the bougie. I have seen it followed by a constant evacuation of shreds of coagulable lymph, which has continued through life, and produced the greatest distress. When this substance accumulated in the bowels, it was accompanied with pain, which continued till it was discharged. A judicious writer, Dr. Pemberton, has remarked, that the appearance of this evacuation, is an evidence that the danger of the acute state of this inflammation has passed.

I shall relate several instances of this disease*. With regard to the treatment, the principal means of relief are the employment of opium and the use of the bougie, but more particularly of the latter. In all the earlier and lesser degrees of inconvenience which it produces, such as obstinate costiveness, long and ineffectual efforts to evacuate the bowels, it is usually all that is necessary, with the occasional use of purgatives. A bougie of a very large size, introduced merely through the sphincter, is sometimes effectual in a very short space of time, that is, after being introduced several times. The degree of dilatation, which the sphincter muscle will bear, has been† well shewn by Mr. Thomas, who was able to introduce his whole hand into the rectum; and if it be very gradually used, there

* See Cases.

† Medico Chirurgical, Tr. vol. i. p. 129.

is hardly any sized bougie which the sphincter will refuse to admit. When the muscle has been dilated and extended several times, it more easily yields to the stimulus of the fæces, and no longer affords the strong impediment which it had heretofore done; or its fibres, which had not perhaps a cotemporary action, assume a more regular dilatation and contraction, and the symptoms subside. In other cases, when there is disease higher up the gut, the relief will of course not be so complete or so permanent, for the character of the complaint may be such as not to be under the controul of a treatment so simple.

SECTION V.

ON THE HÆMORRHOIDAL EXCRESCENCE.

THE intestinal varicose tumour, or hæmorrhoidal excrescence, has been so very accurately described, and distinguished from other complaints which it somewhat resembles, by Sir James Earle and some others, and is a disease so well known to surgeons, that it becomes unnecessary to enter into a minute detail of its nature and its appearances.

But he who has no other opportunity of informing himself on this subject, than what is afforded him by the English writers, who have treated or touched on it, will be apt to conclude that the ex-

tirpation of such excrescences, either by ligature or excision, is always a safe and successful operation. The excision of these tumours has been strongly recommended by Mr. Ware*, under certain and very prudent limitations however, and all the cases he has related, of this operation, have terminated happily. The removal of them by ligature has been as powerfully urged by Sir James Earle in his edition of the works of Mr. Pott†, and each of the cases there recorded is also successful. These modes of relieving the disease are certainly preferable to the rude and elaborate operation which is proposed and practised by Le Dran‡.

* Remarks on the Fistula Lachrymalis, to which are added Observations on Hæmorrhoids.—London, 1798.

† Observations on the Hæmorrhoidal Excrescence, by the editor.—Pott's Works, by Earle, vol. iii.

‡ Pour parvenir à faire sortir les hémorrhoides, je fis mettre à la malade son corps et je le fis serrer suffisamment. Je pris ensuite chacune d'elles l'une apres

But I am sorry to say that, although I have very repeatedly succeeded to the utmost of my wishes in curing the disease by the application of a ligature, this success has not been so uniform, as to establish it in my mind as an operation always to be recommended. In one instance the patient very narrowly escaped death, in another, very serious symptoms were produced by the operation, and in a third case, the operation was actually fatal; I have also heard of one or two

l'autre avec une hérigne, et je les coupai. Pour me rendre maître du sang et porter plus aisément le remede necessaire sur l'artére, qui en fournissoit gros comme le petit doigt, je fis une incision commençant a l'anus et tirant du côté de la Fesse.—Obs. Chirurg. tom. ii. p. 226. Here then is an operation to cure the disease, and an operation still more painful which the former one has rendered necessary: surely the surgeon, or rather the patient, will exclaim with the illustrious Caius Marius, when he had, with great courage, suffered a very similar operation:

"Ὁρῶ το ἐπανόρθωμα τῆς ἀλγηδόνος οὐκ ἄξιον."

PLUTARCHI OPERA. Ed. Par. 1624.

other instances where the life of the patient was destroyed by freely tying off the hæmorrhoidal excrescence.

These circumstances naturally lead one to consider the reasons of such variety in the experience of Surgeons, to seek for information on the subject, and, if possible, to remove the causes of these dangerous and fatal symptoms, or so to modify the operation, as to render it less exceptionable and serious, without being less efficacious in the cure of the disease.

The operation seems to have been very common in France, in the time of Mons. Petit; but it often gave rise to such serious symptoms, and even death, that this excellent Surgeon thought it should be altogether abandoned, or resorted to only in a milder manner, after every other means had failed of giving relief. In one instance, where he performed the operation on a lady, under very favour-

able circumstances, (" on ne pouvoit pas " souhaiter une disposition plus favorable " a l'operation,") by tying three of these piles with ligature, and the inflammation of the abdomen which followed, was so violent as to endanger her life, and resisted the most judicious treatment until the ligatures were removed; but it is an important part of this case, that the unfavourable symptoms subsided when the threads were taken off from the tumours. In another operation, which, in justice to the character of Petit, I should observe, was not performed by himself, five ligatures were applied at once, to as many of these tumours, and inflammation and swelling of the abdomen, vomiting and hiccough were very soon the consequence of the operation. The ligatures were removed, but the event was not so fortunate —the patient died*. " Je compare" says

* Œuvres Posthumes, tom. 2.

this judicious surgeon " ces accidens a " ceux qui accompagnent les hernies, " dans lesquels une petite portion de l'in- " testin est etranglée, si ces sortes de her- " nies ne sont pas secourus promptement, " ils perissent quelquefois en trente ou " quarante heurs, d'une inflammation " gangreneuse qui occupe tout le bas ven- " tre, mais particulierement les intestins. " C'est ainsi que mourut le malade avant " le deuxieme jour accompli." There is no fear that such a case can happen to a careful and prudent surgeon, for I think that no such surgeon would apply ligatures round five of these excrescences at once. But very serious accidents, and even death, sometimes happen when much less injury is offered to the parts, than in the case which Mons. Petit has related. Locked jaw, suppression or retention of urine, and other bad symptoms, have occurred, when no more vio-

lence has been done to the rectum than in many of those cases which have been published, and have terminated happily.

In relating these cases, however, of death or imminent danger, produced by the application of ligature to the hæmorrhoidal excrescence, I must repeat that the instances of cure, without any untoward symptoms resulting from the operation, are far more numerous than such unfortunate occurrences. But it is right that such accidents should be known, and that the operation, when it becomes absolutely necessary, should be undertaken with more caution than I think it usually is.

* Petit proposes that the pile or excres-

* I shall quote one more passage from the very excellent work of M. Petit (vol. ii. 156) because it proves that he was aware of the frequent combination or connection of a stricture of the rectum, with the hæmorrhoidal disease, though I do not quite agree with him that it was the removal of the pile which produced

cence should be denuded of its external covering, which is the internal coat of the intestine, before the ligature be applied, and that as little of the *enveloppes* or skin should be removed as possible. I have attempted this, but do not find it so easy a matter as I think he represents it.

When other means fail, (for I believe that, if the disease be recent, and the tumours not very large, it may admit of relief by other means,) and an operation

the stricture. " On peut remarquer que, dans toutes les operations que j'ai descrites, je recommande de menager la peau ou les enveloppes qui couvrent les hemorrhoides, et de les bien loin detacher pour qu'elles ne soient point comprises inutilement dans l'amputation. Quand on n'observe pas cette loi on court risque de causer un retrecissement de l'anus plus ou moins considerable selon que l'on a coupé plus ou moins de peau." He gives one very lamentable ininstance of this consequence of the operation. " Etant gueri, l'ouverture de l'anus etoit si etroite qu' apeine y pouvoit on passer le canon de seringue.—Lorsque les matieres etoient liées, elles sortoient comme d'une filiere."

for the removal of the excrescence becomes necessary; the safest and best way is to pass a ligature round one only of the tumours at a time, the most painful and troublesome of them, and to wait until the patient has quite recovered from this operation before any thing more be attempted, if any thing more should still be necessary. Mr. Ware has judiciously remarked, that there is usually one of these tumours more inflamed and tender than the rest, that this is the one that should be removed; and that it is not often necessary to extirpate the whole of them, to relieve the patient from the inconvenience he suffers. But I confess that I have hitherto been deterred by the fear of hæmorrhage, from extirpating them by excision: for it is to be recollected that the veins of the abdominal viscera have no valves, and also that considerable difficulty has been felt by

Mr. Hey*, and by other surgeons, in restraining the bleeding after such operation. It is better that this operation by ligature should be repeated two or three times, if it should become necessary, than that the tumours should be all removed at once, at the imminent risk of the life of the patient†.

* Practical Observations on Surgery.

† Among the various modes of extirpating these tumours, which are suggested or recommended by Hippocrates, who has described the disease and its cure almost as well as any of his successors, that of taking them off (I suppose pinching them off, αφελειν auferre,) with the fingers, deserves to be mentioned as a sort of medium between the ligature and the incision, comprehending most of the advantages of each, without the dangers of either. This rude operation of Hippocrates, (which he says may be done without telling the patient any thing of the matter,) producing some kind of contusion at the time of removing the excrescence, is worthy of consideration. It is a well known fact, that the instinct of animals directs them to bite off the umbilical chord, when they produce their young. The laceration which the parts suffer in this natural operation prevents all hæmorrhage

The case in Petit, in which the symptoms of inflammation subsided on the removal of the ligature, and the recent important investigations of Dr. Jones*, on the obliteration of blood-vessels, by the temporary application of a ligature, would lead one to suppose that the continuance of the ligature on the tumour was not necessary to its destruction, and that it would fall off eventually, if the thread were only very tightly applied, and removed again immediately; but this I have never tried.

I have said that when the disease is recent, it may be relieved by other and more mild means than the operation I have been describing; and one of the most useful of these means, from which

from the chord. The life of the young is thus preserved, until the circulation is accommodated to that alteration which is necessary after birth, when the fœtus becomes a perfect and respiring animal.

* Jones on Hæmorrhage, London, 1805.

I have often seen very beneficial effects derived, is the frequent injection of cold water* up the rectum, or water with the addition of a few grains of sulphate of zinc dissolved in it. This should be done after each evacuation, or twice a day, in the quantity of about half a pint at a time, which may easily be retained in the gut; whereas, if a larger quantity be used, it must generally be discharged immediately after its introduction.

But, as far as my experience goes, above every other remedy, in the incipient stages of the hæmorrhoidal excres-

* There is a very remarkable observation from Schmucker in the 5th volume of Richter's Chirurgische Bibliothek, on the use of injections of cold water in the prolapsus ani.

" Ein alter vorfall des mastdarms der auf keine art
" zuruck gebracht werden konnte, ward gleichfals
" durch kalt wasser glucklich gehoben. Man machte
" kalte bahungen, *gab kalte klystiere*, nach 24 stunden
" ging er von sich selbst zuruck, und kam nie wieder
" zum vorschein." Page 233.

cence, as well as in the case of stricture of the rectum, the use of the bougie*, has been most serviceable. But in this case it is necessary that the bougie be of a larger size at first, than in the case of stricture of the gut.

It must have been remarked by many practitioners, that the action of the sphincter ani is unusually strong in most of those persons who are the subject of this disease; so strong as very powerfully to resist the expulsion of the tumours when an examination of, or an operation for the complaint is desired; so strong as sometimes to require very considerable force to overcome its contraction, and introduce the finger, with a view to investigate the state of the inside of the gut.

* Ma piu direttamente opereranno i locali remedii introdotti nell'ano: tra quali trovai prontamente efficace una candeletta di cera spalmata di burro impastato con molta polvere di galla di quercia.—Monteggia loc. cit. p. 521.

If I am right in my conjecture of the causes of the disease, this violent constriction of the sphincter ani muscle is among the most frequent of them. The internal membrane of the rectum, together with the vessels it contains, is protruded without the sphincter ani at each time of the expulsion of the fæces, and is caught, as it were, and its vessels strangulated by the contraction of the muscle. The constant recurrence of this circumstance, assisted, perhaps, by a costive condition of the bowels, is sufficient to produce a varicose state of the hæmorrhoidal vessels, without seeking for the cause in an obstruction of the liver, or other viscera of the abdomen. These *latter causes, indeed, certainly often produce the complaint; but in such cases,

* Cette obstruction du foye; est par rapport aux veines hemorrhoidales, ceque la grossesse dans les femmes, et les jarretieres trop serrées, sont aux veines des jambes.—Petit Œuvres, Post. tom. 2.

there is more constitutional indisposition, the visceral disease is marked by its proper symptoms, and the complaint in question, is a subordinate consideration.

I will not, however, insist on this explanation of the usual origin of the affection; whatever be the mode by which the bougie produces its beneficial effects, whether it be by resisting the strong action of the sphincter muscle, or whether its pressure on the tumours be the essential operation of it, the fact and the practice are still the same. The use of the large bougie does very considerably relieve the inconveniences produced by the hæmorrhoidal excrescence, when the operation of its removal is not thought advisable, or there may be any other objection to its performance.

It may not be superfluous to remark, that it is absolutely requisite that the bowels should be kept constantly in a

relaxed condition by the use of some mild purgative medicine, as castor oil, manna, senna, or the like, whenever the contrary tendency prevails.

Aloes has been observed by Celsus*, and afterwards by Mr. Pott, to be an unfavourable medicine for hæmorrhoidal complaints, so much so, that Fabricius† remarks, that when he suspected a suppression of the bleeding from piles, to be the cause of certain diseases, he endeavoured to re-produce the discharge of blood by the use of aloetic medicines.

* It is curious to observe the close analogy which there is between the celebrated Colicon of Celsus, and another very useful medicine, Ward's Paste for a Fistula, as it is called, but which is only a warm and mild purgative medicine.

† Fabricius ab Aquapendente, p. 618.

SECTION VI.

THE PROLAPSUS ANI.

IT is remarked by the illustrious Morgagni, that among the many theses written on less important subjects, the Prolapsus Ani has never been made the subject of particular disquisition. It has been attributed to relaxation of the sphincter muscle, to extension of the mesocolon, and other causes; but it has never been anatomically and pathologically investigated with the care that so serious a complaint should demand. It is so common, and so distressing a disease, at the later periods of life, that

no efforts to relieve it can be considered useless.

The prolapsus ani has so many points of analogy with the complaint just treated of, that it may, in some measure, be considered as the same disease, in a more chronic and advanced state. It is produced by the same causes, that is, by any causes which will excite long continued irritation or violent straining. It is much more difficultly retained in its position, comes down more frequently when walking or riding, is more easily returned, and produces less pain; but all these are rather consequences of long continuance of the complaint, than difference of its character; it is also a common consequence of the stone and other diseases of the bladder; but in these instances it is only a symptom, and not the complaint itself. It is so frequent a disease, in several branches

of the same family, that particular structure must be supposed to have some share in producing it, or predisposing to it.

The appearances of the disease are so well known, that it is unnecessary to describe them; but the principle of cure is not, I believe, so well understood as it is capable of. In almost every case of prolapsus ani, it is the *internal* membrane only of the intestine which descends through the sphincter muscle. The connection of the external surface of the rectum is so firm with the surrounding parts, that it is almost impossible the whole should be protruded together*; a separation or elongation of the union between the coats of the intestine must therefore

* There are important cases of invagination and protrusion of the colon, and other intestines, mistaken for prolapsus ani, in the Ac. de Chir. v. 612, which should be in the mind of every surgeon before he performs any operation for this complaint.

precede the disease, and form its essential character; whether it be produced by the effusion of blood between them, or by continued tenesmus, or efforts to pass the fæces, or peculiarity of structure, or any other cause. The cure of it must therefore consist in returning the prolapsed gut into its place, and preserving it there, either by means of some mechanical contrivance, of which several have been proposed and used, or by restoring the disturbed union between the inner membrane of the intestine and its external surface.

The first of these intentions is never, for the most part, very difficult, and in early life, often all that is necessary, requiring only gentle and continued pressure, with the fingers lubricated with cerate or oil, or a sponge wrung out of warm water, or sometimes it is facilitated by the finger introduced in ano. In milder cases, merely sitting down upon

the protruded part will return it. With children, a difficulty is often created by the irritating applications which are commonly in use. To retain the part in its situation, Gooch, Desault, and others, have contrived trusses and bandages of different kinds, but perhaps a T * bandage, with a well-adapted compress, is the most simple and best mode of accomplishing it. The benefit of these contrivances is however very limited, and to be depended on only when nothing more effectual is advisable. Caustics, and a variety of applications, have been recommended by the older surgical writers, but I believe they will seldom now be adopted.

A more useful expedient, to prevent its descent while the bowels are evacuated, is, that the patient be provided with a

* The well known Paul Sarpi invented an iron ring, which he wore to support the prolapsed gut in his own case.—See Rhodius. Cent. 2. Ob. 94.

close-stool, with the seat on an inclined plane, so that the evacuation is passed in a position approaching to the upright one; in this posture there will be less effort and less violence done to the part, and it will often not protrude at all, or only in a less degree.

The second intention, I have mentioned, of curing the disease, by restoring the parts to their proper adhesion, is of more importance. The only means of accomplishing this object, is by exciting a degree of inflammation on the *external* surface of the inner membrane, sufficient to produce an union and consolidation of the parts together. If this be attempted by stimulating injections, it will be found to inflame the inner or mucous surface to a degree and extent proportioned to their violence, and to produce great pain and distress to the patient, without any material benefit to the dis-

ease; for the inflammation is propagated along the mucous surface, without extending to the deeper seated parts, or external coat of the intestine. It is one of the properties of inflammation to confine itself to the peculiar structure which it attacks, unless it is of a very violent character, when it affects all the parts in its vicinity. I need not enumerate instances of this principle, they will be easily supplied by every professional reader.

The inner coat of the alimentary canal loses a considerable portion of its villous nature as it approaches its extremities; and wounds of the membrane, at such parts as are most exposed to them, are of a much less serious character than those which are inflicted in the more interior portions of the canal. The importance of this latter kind of wounds, and the resources of nature in repairing them,

have been well shewn in a late publication. I believe the rectum may be wounded without danger, or fear of its powers being restored and healed, as far as the part where it receives its peritoneal reflection, which is quite as far as the derangement of prolapsus ani extends.

This consideration is of considerable consequence, with regard to the pain which a patient suffers by a wound or ligature made to cure this complaint, inasmuch as the degree of pain is beyond all comparison less in proportion as the part wounded or tied is more removed from the anus, and the cutis surrounding it; an operation or ligature, which would be violently painful at the circumference of the anus, if it involve the smallest portion of the skin, is spoken of as little more than uneasiness, or does not call forth any expression of pain, when performed on a part of the membrane more

removed from the seat of external sensation; and the consequent fever and inflammation have the same relation to the part.

The only effectual means then of producing this desirable union between the coats of the intestine, is by a wound, or a removal of a small part of the inner membrane which protrudes at the anus, and which constitutes the disease. "The re-"laxed state of the parts," says† a respectable writer, "which came down at "every evacuation, and the want of suf-"ficient stricture in the *sphincter ani*, "satisfied me, that it was impossible to "afford any effectual relief to my pa-"tient, unless I could bring about a more "firm adhesion to the surrounding cel-"lular membrane, and increase the pro-"per action of the sphincter. Nothing

* Hey's Surgery, page 424.

" seemed to me so likely to effect these " purposes, as the removal of the pendu- " lous flap, and the other protuberances, " which surrounded the anus. I hoped " that the inflammation caused by this " operation would produce a more firm " adhesion of the rectum to the surround- " ing cellular substance."

That the removal of the protruded portion is not very essential to the cure of the disease, I think will appear evident, if it be considered how very small a part of the inner membrane being cut or tied away, in proportion to the whole bulk, will be sufficient, to prevent the remainder from protruding. I have, in some instances, been obliged to repeat the operation on the opposite side of the gut, when the adhesion formed by the wound was not sufficient to support the whole circumference of the canal. But in one case I removed the ligature immediately after

it had been very tightly applied, and returned the intestine. The cure was complete; but I do not know whether the part sloughed or not to which the ligature had been applied.

This injury done to the inner membrane of the intestine, then, is the most certain mode of producing that degree of inflammation, and consequent adhesion, which produces the cure of the disease, and in which, in fact, the cure consists. The mode of performing it which I think is most advisable, and which I have very frequently performed without any one unfavourable circumstance, is, the bowels being well emptied previously, and the time chosen when the projection is considerable, to pass a tight ligature round a very small portion of the inner membrane, at a part not immediately in the vicinity of the anus, that is, above the union of the cutis with the mucous membrane, and to return it, together with the ligature, into the gut.

This is not, for the most part, a painful operation; but it is advisable that a grain of opium, or a few drops of laudanum be given, both to procure ease, and also that the bowels may be somewhat confined for a day or two after the operation; for an evacuation during the active stage of the inflammation would give considerable uneasiness, and interrupt the adhesions which we depend on for the cure. Nevertheless the cure has not been less complete, because the parts have come down in a more swelled and painful state for several days after the operation. The patient must be directed to keep his bed, should live very sparingly, and cloths dipped in goulard and water, or laudanum and water, should be applied when the pain or inflammation require it. In two or three days, if the bowels have not acted spontaneously, some mild aperient should be given.

In about five or six days the ligature comes off, and shortly afterwards the part will heal, and cease to come down, or come down only in a much less degree than before the operation. Such has been the treatment, and such the issue of very many cases which have fallen to my care within these few years, some of which I shall relate more in detail. But there are many circumstances and conditions of health which forbid this operation. If the disease be attended with great purulent discharge, which would lead us to suspect ulceration of some other part of the gut; if there be any affection of the bladder or prostate gland; if the health of the patient be otherwise bad; in short, in this, as in every other surgical operation, much must be left to the judgment of the surgeon on the individual case. But I may just remark, that the abraded state of the membrane, so often seen in

the prolapsus ani of long standing, is not, I believe, a material objection to the operation; on the contrary, there are many points of analogy with other parts of similar structure, having undergone the same change, which would lead one to think more favourably of these cases.

SECTION VII.

ON THE FISTULA IN ANO.

THE writings of the older surgeons, and the rude and even barbarous operation for the fistula in ano, which is described in them, have not yet ceased to operate on the minds of those who are afflicted with this disease.

Although it is now, principally by the labour of Mr. Pott*, become a very simple operation, it occasions more dread

* It is remarkable that a disease of so frequent occurrence should have excited so little of the attention of the English surgical writers. Fewer cases of the disease have been published, and fewer remarks on the infortunia, and the anomalous circumstances attending it during the progress of the cure, than almost any other disease. Except the classical treatise of Mr. Pott, who has by no means exhausted the subject, there has hardly any thing appeared on this subject for the last century.

and reluctance to submit to it, than diseases of a much more serious nature, and operations of a much more dangerous tendency.

Improved, however, as it is, and rendered comparatively easy both to the surgeon and the sufferer, instances of great embarrassment at the time of the operation, and of the disappointment in the cure, are still not very uncommon occurrences.

It would be superfluous to enter into a minute detail of the usual appearances of the complaint, which are familiar to every surgeon, and would only be a repetition of what has been said by other writers; I shall therefore only relate some of those embarrassing accidents which refer to the operation itself, and some of those circumstances which I conceive to be the causes of failure in the ultimate cure.

In this operation, although there are

no vessels of very considerable size in danger of being wounded; yet when the sinus extends far up the side of the gut, an hæmorrhage now and then takes place either at the time of the operation, but more usually a few hours after it, which, if it be not important from the magnitude of the divided artery, becomes often so from the difficulty, perhaps impossibility, of securing it by a needle and ligature. It is surprising, that this circumstance should have passed unobserved by Mr. Pott, in his Treatise on the Fistula in Ano; for I will venture to say, that it has occurred to almost every surgeon, who is in the habit of performing this operation.

The usual method resorted to, when the vessel cannot be secured by ligature, is by filling up the gut and the divided sinus with lint, wet with some astringent and styptic fluid, so as by the combined

effect of the stimulus and the pressure, to restrain the hæmorrhage. A very operose method of accomplishing this is described by Petit, and a more simple mode by Richerand; but although these may sometimes succeed, whoever considers the nature of the contiguous parts, will be persuaded how inefficaciously any pressure must be applied where the bleeding vessel is surrounded with soft parts. The hæmorrhage is apparently stopped indeed by this process, for the blood is, for some time, prevented from escaping externally by the dossils of lint; but the artery still pours its blood into the cavity of the gut, and then issues out through the compresses. This continues for a longer or shorter time, until perhaps, the patient faints from loss of blood, or stops and is again renewed, when the fæces are discharged.

I have so frequently seen the hæmorrhage kept up as long as this method of plugging the intestine was persevered in, and cease spontaneously when every kind of application was omitted, and the parts left for a short time exposed to the open air, together with a cool room, and avoiding all drink that hurries on the circulation; that I cannot help thinking, that the irritation of the compresses keeps up the bleeding, and that the most eligible mode of treating it, when it is impossible to secure the vessel with ligature, is to take off every kind of dressing, and to suffer the part, as much as possible, to be exposed to the external air.

To be a passive spectator, however, of an hæmorrhage, though not a dangerous one, for an hour or two perhaps, after the surgeon has performed an operation, is a very irksome task, and a very painful

state of suspense for the patient; but I am persuaded, from repeated experience, that by being too busy with compresses, and styptics, and astringents, and such like applications, we most frequently only hide the bleeding, and rather prolong its continuance, than otherwise.

The consequences of a very small portion of the placenta, or even a coagulum of blood, left in the uterus, are well known to the professors of midwifery; and the inefficacy of a partial compression, added to all the tribe of medicines usually employed, in hæmorrhages from other parts of the body, is felt and acknowledged by surgeons.

After many unsuccessful attempts to secure a bleeding vessel under such circumstances, I once accomplished it by introducing a blunt gorget into the rectum; and by keeping the gut thus dilated, I was enabled to see the orifice

of the bleeding artery, and to secure it; and I have been led from this to conjecture, that the old instrument, the speculum ani, is not altogether to be rejected from the apparatus of surgery, or rather that a more convenient instrument might be contrived to assist us in similar difficulties.

Among the causes of ill success, in the treatment of the fistula in ano, I have mentioned in the observations on the stricture of the rectum, a morbid state of the inner membrane of the gut, as far from being the least frequent; and where this is the case, the fistula becomes only a symptom, or consequence of the original disease. It is evident that, in such cases, the common operation for the fistula in ano, and subsequent treatment, must fail of success, if the cause which produced the fistula, that is, the disease in the gut itself, be not adverted to.

When this disease is of a curable nature, when it is not cancer, the cure must depend on the state of the gut; and if by the means which are proper under such circumstances, and which have been more fully explained in another place, the condition of the gut be ameliorated or approaching to convalescence, the fistula will yield to the usual operation and treatment of fistula. I say approaching to convalescence, for it is not necessary, nor would it be right in a case of fistula dependant on stricture, to delay the operation until the stricture is subdued, for as I have said, the operation itself will divide the stricture, in many instances, and the use of the bougie may be prosecuted with more advantage during the progress of the cure.

It becomes necessary, then, to attend to the previous condition of the patient's bowels, and the present state of the in-

side of the intestine, in cases of old or complicated fistula in ano.

In such cases too there are other circumstances, and other diseases to be adverted to before the operation be performed with a promise of success, if the surgeon is anxious that his promise and prognostic should be accomplished.

The fistula in ano is very frequently met with, in those persons who are afflicted with symptoms of phthisis pulmonalis. The propriety of performing the operation under such circumstances, must depend on the degree, or stage of this latter disease. These cases are not usually favourable in themselves, nor do they afford a favourable* prognostic of

* Alcuni riguardano come utile in tali casi l'ascesso e la fistola all'ano. Cio può essere in qualche caso: ma io vidi morire ogni tisico, a cui sopravenne tal vizio. ed il Bordeu sull' autoritat d'Ippocrate predisse la morte del delfino di Francia quando senti, essergli venuta una suppurazione all'ano. Monteggia. loc. cit. p. 335.

the issue, although the discharge has been sometimes supposed to be beneficial to the morbid state of the lungs.

The degree of inconvenience, therefore, which the fistula produces, and the other circumstances of the more important disease, are to be taken into consideration before the operation be resolved on, in cases of this description.

A carious state of the posterior bones of the pelvis, or of the lumbar vertebræ, or the common lumbar abscess, are sometimes the causes of fistula in ano; and when this is the case, the discharge is copious beyond all proportion to the apparent complaint; and he who promises to cure such a disease by the common operation for fistula, will not be likely to fulfil the expectations of his patient.

But the most usual cause of failure in the cure of the simple fistula, which is the consequence of the abscess in this

part, is, that some one sinus, whether leading into the gut, above the part divided in the operation, or extending laterally in the nates, is left unopened by the operator.

When the fistula perforates the gut in more places than one, or, which often happens, the perforation cannot be discovered with the probe or director; the operation must be finished by pushing the end of the bistoury through the side of the gut to the finger in ano: but notwithstanding the facility which there seems to be in Mr. Pott's treatise, of doing this, it is not always so very easy a matter to execute; and the communication of the fistula with the gut, which is left untouched in the operation, will not in every instance heal up, and there will still be a discharge from the anus after the external wound has healed, or else, the external wound does not entirely

close. This part of the operation, therefore, is very important, and no pains should be spared in discovering the fistulous aperture in the gut with the director, at the time the operation is performed.

It is not always possible to discover each of the sinuses, where there are many, at the time of the operation; the effusion of blood, perhaps, obscures the orifice, or it is so situated, that it cannot be perceived; but if any one sinus be left undivided, the cure will most probably be incomplete, and the complaint will return. A very little attention, however, to the parts, after the suppuration is established, will discover the orifice of any latent sinus in the nates that still exists. Sometimes, a little external hardness in the nates, will lead us to it; at other times, pressure with the fingers will cause the matter to issue from its

orifice; and, when discovered, there will not be much difficulty or pain in laying it open with a director and sharp pointed curved bistoury.

Before the time of Mr. Pott, Mons. Foubert* had discouraged the extensive opening of abscesses in the vicinity of the anus, and recommended the mere incision to evacuate the matter, and a simple and superficial dressing afterward. The wound, says he, will often remain fistulous, but the fistula will require a much more simple treatment when the inflammation has subsided. A more important improvement, in the dressing and cure of fistula, was also published by Mons. Pouteau, which has not, perhaps, met with the attention it has deserved, probably because it is less conspicuous in his miscellaneous volume, than

* Memoires de l'Acad. de Chirurg. Vol. iii. 243.

if it had been incorporated, like Foubert's paper, with the memoirs of the academy*. Mons. Pouteau had remarked, that many cases of extensive and sloughing abscess near the anus, got well without interfering at all with the gut in the dressing, and that no fistula was left after the cure. He conjectured that the usual painful dressing, with tents and pledgits, to keep the wound open, were unnecessary, to say the least of them. Even in the operation for fistula, after the first inflammation had subsided, (during which it was necessary to preserve the lips of the wound from contact), and suppuration was established, the majority of cases would heal by a more easy, simple, and external treatment. It is true, this method is more likely to be successful where there has been loss of substance from sloughing; but

* Melanges de Chirurgie.

if the probing and deep dressing, which every patient looks forward to with such anxiety, can be safely dispensed with, it is no small improvement in the treatment of fistula. The principal and essential circumstance in the operation for fistula, is, I believe, that the gut, whose membranous structure has such different habits of inflammation and disease, and is separated from its union with the surrounding cellular substance by the suppuration; that the gut, I say, should be involved in the wound, and that the lips of the wound should be kept asunder till suppuration be established. Pouteau was was well aware of the fact, and the practice; but the state of surgery in his time would not allow of a proper explanation of the principle on which it was founded; and the cases he gives are the more valuable, as they were the result of his experience, without any previous theory to support.

How much more easy and simple, both to the surgeon and the patient, would be the treatment of fistula after the operation, and what daily suffering would the latter be spared, if merely an external dressing, or only an occasional insertion of a small piece of lint, were all that was necessary, instead of constantly thrusting a dossil to the bottom of the wound, breaking down and destroying the granulations as fast as they are formed? I have very frequently treated cases of this kind after the manner of Mons. Pouteau, and with all the success which he promises, more particularly when there has been loss of the surrounding substance from sloughing of the cellular membrane.

I shall relate one remarkable case of this kind which fell to my care*.

* See Cases.

SECTION VIII.

ON THE IMPERFORATE ANUS.

AMONG the many forms of death which surround the cradle, and are the objects of parental care and solicitude, those which depend on an imperfect state of the excretory passages are perhaps the most distressing, and make the most painful impression on the minds of the parents; for it is not easy to dismiss from the mind the groundless fear of other instances of malformation in future; and also they require immediate surgical assistance, with no great hope of success.

At the period of birth, the alimentary canal is loaded with a dark coloured fluid, called the meconium, the early evacuation of which is necessary to the health of the infant; and the retention, for a certain time, gives rise to all the consequences which we daily see result from a strangulated hernia. A careful examination of the parts therefore is necessary after birth, and is usually pointed out by the teachers and writers in midwifery; but although the external form and appearance of the organ is perfect, there may be, and very often is, an obstruction or deficiency in the rectum, which the eye cannot detect, as will be presently more fully explained.

Mons. Louis, in the first volume of the Memoirs of the Academie de Chirurgie, has given his particular attention to this complaint, and has related several interesting cases and remarks; but they were

all fatal either in a few days, or after a longer period: and* Mons. Bertin, who has considered the subject at large, remarks, that there are four very distinct varieties of this malformation. The first, and most simple, when the anus is closed by a membrane stretching over its orifice; the second, when the rectum terminates in a cul de sac, at different distances from the anus; third, when it terminates in the vagina of female infants; and, fourth, when it terminates in the bladder of the male.

The first case requires but little surgical treatment, and is, for the most part, successful. The only thing necessary to be done, is the division or destruction of the membrane, either with a lancet or other instrument, according to the tenuity of the membrane which closes the anus. In some instances it is accompanied with a contracted state of the anus, which re-

* Mem. de l'Acad. des Sciences, 1771.

quires the introduction of a bougie or tent for some time.

The second variety of this malformation is more important. Sometimes there is no appearance of aperture at the proper place, or only a small blind foramen or sinus on the os sacrum; more frequently the anus is apparently perfect, but a bougie or other instrument being used, the passage is found to terminate about an inch or more from the external anus. The former kind hardly, if ever, admits of perfect relief, although the operation may succeed in opening a passage for the fæces*, which has been done by Saviard and others. In the latter, rare as the instances of recovery are, it has been my good fortune to preserve the lives of two

* Van Swieten and some others have mentioned the possibility of making an opening in the abdomen when the common operation has failed; but he has not had the courage, or the rashness to perform it.

children, without their suffering any material inconvenience in the function of the part. In both cases, it is a matter of great uncertainty how far the rectum descends. Often it is altogether absent; sometimes there is a separation between the rectum and the sigmoid flexure of the colon, and the colon has been found floating unattached in the abdomen. It is evident that the probability of cure will depend on these circumstances of the malformation. In the more simple cases, however, there are some points which are of great importance in the operation, and the subsequent treatment, which are not, I believe, commonly adverted to. It has been remarked, that there is a better chance of success, when the operation is delayed till the abdomen has become somewhat tense, that is, usually in two, or, at most, three days, rather than at a more early period; and I think that it is

probable, the termination of the rectum may be forced more towards the anus by the efforts of the child to pass the fæces.

When no operation has been performed, or an ineffectual one, the complaint is fatal, in all periods, from four to twelve days. We are not to conclude that the operation has failed altogether, because the meconium does not follow the lancet or trocar, for it often is evacuated during the twenty-four hours which succeed the operation; and the deficiency of gut is supplied by the consolidation of the cellular membrane round the sphincter muscle. In one instance, I have thought the rectum has descended into the wound a short time after the operation.

There does not seem to require any particular directions for the operation, to a person familiar with the natural anatomy of the parts; for we cannot vary it according to circumstances of the case,

and the variations of the complaint, which are concealed from our view. It is of vast importance that the instrument should be carried so far backward, towards the os sacrum, as to secure the seminal apparatus from injury. M. Louis has described a particular trocar and canula for the operation; but, I believe, that a flat trocar will answer every purpose that is intended.

The wound of the gut, made by the trocar, is so small, that although the meconium is evacuated through it at first, from the tense and tumid state of the canal, there is generally manifested a great disposition to unite and coalesce immediately afterwards; thus a great impediment is still given to the expulsion of the fæces, both by the want of power in the contractile parts, which have been over-distended, and by the swelling of the lips of the wound from the succeed-

ing inflammation. This can be remedied only by enlarging the wound, or, what at that period is far better, by the introduction of a hollow instrument, through which the fluid fæces will flow.

This is of so much importance, that I believe many children would have been saved by it, who have perished after the operation has opened the gut.

* The process will be required for a longer or shorter time, and at greater or lesser intervals, according to the child's power of expelling its fæces. Perhaps a large elastic catheter, or a large glyster-pipe, are as convenient as any instruments for the purpose. If the finger be introduced, about a fortnight after the operation, the extremity of the gut will be felt thickened and indurated, in a way

* In the case of Mr. W. Adair, perhaps if the stools had been drawn off, the child would have had a greater probability of recovery.—Medical Facts, vol. iv.

that must necessarily obstruct the passage of the fæces, and will sometimes require to be divided by a small probe bistoury. A bougie or tent must be used for some time afterwards, to preserve the space which has been obtained.

The third species of the complaint is very far from being rare. I have heard of two persons who have gone through life with the malformation; and perhaps an operation, however skilfully performed, has but little chance of closing the vaginal aperture. There is a case related* of the successful issue of this operation; but the author omits to state if the vaginal communication had closed. In the middle of his detail the opening continued, but we are left in doubt of the final issue. I have never done the

* Memoirs of the Medical Society of London, vol. iii. p. 390.

operation, but have lately twice been induced to decline it.

The fourth species I have never seen as a congenital affection, though it is a frequent consequence of disease in the bladder or rectum. Mons. Bertin has given a detail of a case of this description, which I shall translate*; but the powers of nature or art seem altogether inadequate to the relief of so serious a defect in formation, and the operation which M. Bertin proposes, of opening the bladder, will, I believe, never be practised.

* See Cases.

SECTION IX.

ULCERATION OF THE MUCOUS MEMBRANE.

THE inner membrane of the rectum is often affected with ulceration, which is more or less important, in proportion as it is extensive, and as it is situated farther from or nearer to the anus. The principal characters and symptoms of the disease also are derived rather from the part of the gut that is affected, than any peculiarity of the affection. If it is situated quite above the sphincter muscle, it excites but little pain or inconvenience, although it may have advanced to a considerable size.

A quantity of purulent matter is passed before each stool, and sometimes without any fæces accompanying it. For a very considerable time, the influence it has on the general health or comfort of life is not very striking; indeed the disease, on this account, is the more alarming, as it has often arrived to a serious degree before it attracts notice, from the pain or inconvenience it produces. When, on the contrary, the sphincter muscle is involved in the disease, there are, either from the first attack, or after a short period, very frequent and very painful tenesmus, and incontinence of stool, which keep the patient out of society, and destroy all his enjoyments. If it is confined to the mere surface of the membrane round the anus, there is usually an exudation of purulent fluid through the anus. It is often attended with, and per-

haps produces a tendency to, prolapsus ani, from the irritation and straining it excites, and the protruded part has a bright red and abraded aspect.

The appearance which the disease exhibits in dissection is various. Sometimes there is one large ulcerated cavity; in other cases, the rectum is studded with spots of ulceration of various sizes; but those cases which have been produced by a severe attack of dysentery, have often an extensive surface of the canal in a state of ulceration. Sometimes it has a more mild character, and so superficial as to be visible, and within the reach of applications which will relieve it.

In the treatment of this complaint, our means of cure are more certain and more effectual, as the disease is nearer the anus; but the necessity there is of daily performing the natural functions of the part, renders it always a disease of difficult

cure. Ricter has very strongly recommended the injection of a decoction of hæmatoxylum, which is sometimes used with benefit. Mercury, in small and long-continued doses, has, in some instances, been beneficial; and various kinds of mercurial applications, such as aq: calcis cum hydr: submur: or a weak solution of hydrarg: muriat: used as an injection. The expressed juice of the carrot is very generally recommended; but, I believe, more benefit is expected from it, than it is found to produce. When the ulcerations approach towards the external surface, I have seen them often heal under the use of equal parts of aq: lyth: acet: et ol: oliv: when they had resisted every other remedy for a considerable time. But the ulceration of the more interior parts of the canal, is always a serious disease, often baffling all our efforts to relieve it.

SECTION X.

CASES OF STRICTURE OF THE RECTUM.

CASE 1.

A Lady, about forty years of age, who had been affected with an umbilical hernia for many years, was seized with violent pain in the abdomen and vomiting, and had not had any evacuation from the bowels for seven days. The rupture was painful to the touch, was of the size of a very large orange, and had been incapable of reduction for twenty-four hours. Her pulse was quick and weak; she had been taking large doses of calomel, and other strong purgative medicines, without effect. In this state Mr. Ford was called to her, and I saw her with him; the rupture could not be

returned by any effort that was thought prudent, and the vomiting, together with hiccough, was increasing in severity; she was bled, and directed to take some pills with calomel and extract: colocynth: and an injection of the tobacco fume was, with considerable difficulty, thrown up the rectum. It was proposed, that if these means failed of giving her relief, the operation to return the hernia should be performed without further delay.

She now happened to tell us, that she had been for many years of so costive a habit of body, that she could never pass her stools without great pain and difficulty, and seldom without the assistance of glysters, and that they were always very small in size.

These circumstances led to a suspicion that the seat of the disease was not in the hernial sac, but in the rectum; and, on passing the finger, to examine the gut, a

firm indurated stricture was discovered, about two inches up the intestine, which would not admit the point of the finger to pass it.

A rectum bougie, of a small size, was introduced high up the gut, and retained there about ten minutes. Soon after it was withdrawn, there was a copious evacuation of the fæces, the vomiting ceased, and the rupture soon returned spontaneously; in short, all her complaints disappeared, and she was in the same state as before the attack. By persevering in the use of the bougie, the stricture was gradually enlarged, and in a fortnight she could pass her stools better than she had done for many years: she continued, however, daily, to pass the bougie for about a month, and then used it only occasionally. This is now seven years ago; and I saw her very lately for another complaint, when she informed me, that she

remained perfectly well of the stricture; but from fear of a return of her disease, rather than from necessity, she now and then passed the bougie, for a short time, and withdrew it again.

CASE 2.

A poor woman, a patient of the Westminster General Dispensary in 1801, had complained of difficulty and pain in voiding her fæces for three years; and they were generally evacuated in small portions, of the size of a quill, or large urethra bougie. For the last month there had been an ichorous, fœtid discharge from the anus, and frequently, an involuntary flow of liquid fæces from the gut, with almost constant tenesmus; and, to add to her distress, a communication had taken place between the vagina and rectum, through which part the fæces

passed. She had a fistulous orifice in the nates, near the anus, which had once been divided, but did not heal up; there was also a large condylomatous excrescence on the verge of the anus. She had been pregnant about three years before; and the child, when born, was covered with spots, and died soon after its birth. She had the venereal disease nine years since; but, except her present complaint of the rectum, had been tolerably healthy since that time.

On examining the rectum with the finger, which gave her great pain, a stricture was found near the extremity of it, of a hard, schirrus-like feel, which would only admit a very small bougie. She was directed to take a grain of calomel twice a day, with three grains of extract of hemlock, and every day to introduce a bougie, and retain it in the rectum as long as she could bear it without much pain. In

about a week the painful symptoms were considerably relieved; but, as the stricture would not yet admit a larger bougie, a very small probe-pointed curved bistoury was introduced on the fore finger, and the stricture divided in that part which was contiguous to the os sacrum. This operation gave but little pain, and there was hardly any bleeding after it. A bougie of a larger size was then introduced; and, although the parts were more tender for many days, she was still able to continue the use of the bougie, first for a shorter time, but afterwards for many hours. In about three weeks, she was so much relieved, as to pass her stools better than she had done for two years; and there was scarcely any thing passed by the aperture into the vagina, unless when the effort to discharge the fæces was more violent than common. I saw her from time to time for about four

months, gradually getting better, the stools being evacuated without pain, the discharge from the anus having ceased, and her mouth occasionally tender from the medicine, which she continued for near three months. The rectum admitted a full-sized bougie, and the remains of the stricture had a softer feel; but neither the fistula in the nates, nor the orifice in the vagina had quite closed up. She then removed from her residence; and, I regret to say, I have not since seen her.

CASE 3.

A lady, about thirty-two years of age, who had always enjoyed good health, about four years ago, found her bowels so slow in their action, that it was seldom, and with great difficulty, that she could obtain an evacuation without the

assistance of purgative medicines. This costiveness was generally more obstinate during the period of menstruation; she now has, and for these two years past, has had great pain about the anus, frequent inclination to void her fæces; but the efforts produce nothing but blood and mucus; at other times, there is a sanious, very offensive discharge from the rectum. On examining the rectum, a considerable stricture was discovered about an inch from the anus, and a fistulous orifice in the perineum, the remains of an abscess, which broke there about six months ago.

A curved probe-pointed bistoury was introduced into the rectum on the finger, and the stricture freely divided in its posterior part, so that a bougie could be easily passed through it. The next day she took some purgative medicine, and had a more free evacuation than for a

twelvemonth, but complained of pain and difficulty in passing the urine: for several days she voided her fæces involuntarily, and was so uneasy, that the operation did not seem to have mended her condition. But, by perseverance for six weeks, in the use of the bougie, which she sometimes retains in the rectum for twelve hours together, and the occasional use of purgative medicines, these symptoms went off, and she had regular stools without pain or difficulty. She then went to the sea-side for some months, and returned to London quite well; the sanious discharge having stopped, and possessing the power of retaining and evacuating her fæces in the natural way.

CASE 4.

I was desired to see a woman at Lambeth, who some days before had swal-

lowed a plum-stone, which had passed through the intestinal canal as far as the rectum, but there stopped, and had obstructed the passage of the fæces for a considerable time. She had been of a costive habit, and had passed her stools with difficulty for more than a year. On examination, a stricture was discovered about two inches from the anus; a small bougie was introduced, and she was directed to take some castor oil; in a day or two, the stone passed the stricture, and her present complaints were relieved; but whether she continued the use of the bougie to effect a more perfect cure, I have no opportunity of informing myself.

CASE 5.

The servant of a nobleman applied to me for the removal of some hæmorrho-

idal excrescences. About a year before, some similar tumours had been taken away by the late Mr. Ford by the application of a ligature round them. The patient was much relieved by this operation; but his complaints had been returning for the last six months. He had considerable pain in discharging his stools, which were small, generally liquid, and accompanied with a quantity of blood, and a mucous discharge constantly flowed from the anus; he had frequent inclinations to pass his urine, which was evacuated with pain, and the uneasiness continued for some time afterwards. On examination, I found that the cutis surrounding the verge of the anus was elongated into a pendulous flap, but there were none of the varicose tumours about the anus, like those which had been previously removed; nor could I learn that any were protruded when he

went to stool. When I examined the rectum, which gave him great pain, I found my finger obstructed by several filaments, some of which were broken by the force I used, and others extended as far as I could reach, and the whole surface of the rectum had a diseased and thickened feel, but was not particularly contracted in any one part, so as to form a distinct stricture. I then endeavoured to introduce a small bougie, which gave him such great pain, that I was obliged to withdraw it immediately, and a quantity of blood followed the instrument.

I told him, that I thought nothing but the continued use of the bougie would relieve him, together with occasionally taking some mild purgative medicine; but I had no doubt, that these means, if persevered in, would do so: that there were no hæmorrhoidal tumours, nor any com-

plaint, which an operation, such as had been previously performed, would cure.

He went away somewhat discontented; but, in a few days, he returned again, so much relieved by the use of the bougie in the interval, that he was very willing to persist in the plan I had advised. To make the history short, in a month he was so well as to pass a bougie of a much larger size, without any inconvenience, and to use it only occasionally; the discharge from the rectum ceased, and he passed his stools without pain.

Fatal Case of the Stricture of the Rectum, from Ruysch—See note, page 4.

Quid grandia molimur tenues et miseri mortales! qui tot lethalibus morbis sumus obnoxii, ut nemo facile illos recensere posset. Nulibi tamen homines magis

affligunt quam circa vias excretioni inservientes; ubi, si altiores egerint radices, difficillimè possunt eradicari. Quotidie ad vitam sustentandam nobis edendum, bibendum, et quod superfluum est, evacuandum. Si vero viæ, hisce operibus destinatæ malè sint affectæ, mors vitæ sæpius antiponitur ab afflictis. *Amicus* quidam flore ætatis, temperamento melancholico, ante triennium in Hyberniam ob negotia peragenda profectus, de mingendi difficultate conqueri cœpit, quæ brevi tantum sumpsit incrementum, ut assiduè ad urinam guttatim egerendam incitaretur, idque tanto cum cruciatu, et continuo conatu, ut perferre non potuerit. Quid fit? Brevi post, alterum non minoris momenti malum, caput quoque exerere cæpit; nimirum fæces alvinas liberaliter excernendi impotentia, dubio procul ab illis continuis conatibus urinam reddendi, unde intestinum rectum non

solum fuit incrassatum, et schirrosum factum, verum etiam in totum ferè coaluit: vix enim, ac ne vix quidem stilum straminis crassitie in universum admittebat, unde miser nec urinam nec fæces alvinas excernere potuit, nisi guttatim et quidem continuè ichorosâ et purulentâ materiâ remixtas, cum assiduis, tantisque cruciatibus, ut omnes homines ejus præsentiam refugerent. Denique in patriam redux, contulit sese Amstelodamum et me aliosque consuluit, ast incassùm, morbis factis insanabilibus. Hisce malis perpetim incrementa sumentibus, tandem animam Deo reddidit æger, occasionem nobis relinquens malum penitius perscrutandi. Aperto igitur cadavere, in utraque renum pelvi calculum inveni horrendum, et præter hosce in renis dextri medio adhuc alium ingentem. Ureteres et vesica bene erant constituta. Intestinum rectum in universum ita incrassatum depre-

hendi, ut pollicis crassitiem ferè superaret, et ita induratum, ut anceps hærerem an carnosum an verò cartilaginosum esset dicendum. Cavitas quoque dicti intestini, straminis latitudinem haud superabat, et quod notandum, tam firmiter erat connatum ossi sacro, ut cultelli cuspis ad separationem minime sufficeret, sed cuneo ferreo malleoque ligneo eandem peragere coactus fuerim; imo, mirum dictu! cum summo labore ea disjunxi. Hæc omnia Balsamo nostro præparata a nobis reservantur in dicti ægri memoriam, et historiæ raritatem.—Tom. IV. Observ. 95, 4to.

SECTION XI.

CASES

OF THE POWERFUL OR DISEASED ACTION OF THE SPHINCTER MUSCLE.

CASE 1.

I Was consulted by a barrister of eminence for a complaint of the rectum, which he had been afflicted with for many years. He was about forty years old, and otherwise in good health; but so slow and imperfect was the action of his bowels, that he could never pass his fæces without the assistance of a purgative medicine, and very long continued efforts. These efforts frequently excited pain and inflammation, which disqualified him from

his business for many days; but on common occasions, a considerable portion of his time was wasted in efforts to evacuate the bowels. Sometimes he passed well-figured stools; at others, they were small, or liquid. There was no discharge, or protrusion of the membrane from the anus. A bougie passed with difficulty through the sphincter muscle, till it encountered the os sacrum, projecting into the pelvis; and, after some time, went on in the canal of the gut.

On examination, the finger was compressed with great violence by the sphincter muscle, for more than two inches; that is, above twice as much as its usual breadth. I told him, that I did not believe there was any serious stricture of the rectum; but, that he would obtain relief by using very large bougies only through the sphincter muscle; at least, that it was

advisable to commence with this simple treatment.

The introduction of the bougie gave him great pain at first; but became every time easier, and he soon experienced greater facility in passing his stools; so much, that, in two months, he was able, almost, to do without purgative medicines, and but little effort was required in evacuating the bowels.

CASE 2.

Mr. ——, whose father had been under my care for a very serious complaint of the rectum, desired my opinion, in consultation with a surgeon of eminence, on a disease, which was considered stricture of the gut. He had had great difficulty in passing his stools for many months; and they were, for the most part, small or liquid, and was constantly

obliged to use purgatives. Bougies had been used for a considerable time without any material benefit, and they always met with an impediment, about five inches from the rectum. I passed a bougie, with great difficulty, through this impediment; but I found the sphincter muscle so strong, and so broad, that I gave it as my opinion, that if he did not soon obtain relief by his present plan, that larger bougies should be used only through the sphincter muscle.

A short time afterwards this was done; and, in a fortnight, he passed his evacuations more easily, and with less assistance from medicine, than he had ever done, since the appearance of his complaint. He then went into the country; and, with the occasional use of the bougie, experiences but little inconvenience from his complaint.

CASE 3.

The following case is written with such precision and accuracy by the patient, who is a professional gentleman, that I shall give it in his own words; and only remark, that he still continues the use of the bougie, but has occasionally had slighter attacks of irritation of the sphincter muscle, since he detailed his case.

"MY DEAR SIR,

"I feel much obliged by your "anxiety for me; will therefore, at your "request, give you a general account "of myself. For thirty years I have "occasionally been tormented by piles,

" which at first used to bleed at times,
" but for some years have not. About
" sixteen years ago, a small tumour sup-
" purated in the perinæum, which was
" opened, and soon healed; a consider-
" able hardness remained in the part for
" some time, on which I rubbed small
" quantities of ung: hydr: and wore for
" a long time mercurial plasters. From
" that time to last winter I was fre-
" quently tormented with what I sup-
" posed were only blind piles, producing
" pain at times for a few days, and then
" going off again; but I was obliged for
" several years to lessen my riding exer-
" cise, which seemed to increase them;
" and perhaps might appear to indulge
" myself too much in a carriage, as I did
" not think it necessary to give any rea-
" son for this; but the fact was what I
" have just now stated. During the last
" year or two I thought I did not pass

" the fæces so readily as I had done, but
" as my bowels are *weak*, scarcely ever
" having a figured motion, I could not
" be decided; though at times, when I
" was at all costive, which was very sel-
" dom, I found that the bore of the gut
" was certainly less, and had pain after
" passing this sort of motion. This was
" my situation *last January* (Jan. 1811);
" when suddenly, on the 14th of that
" month, I was seized with a violent spas-
" modic pain round the verge of the anus,
" which continued for several hours, and
" was not quieted till I had taken 100
" drops of laudanum. Not being in the
" habit of taking opiates, the next day I
" was vomiting like a drunkard after a
" debauch. The usual means carried all
" this off, and I felt no more till the
" 19th, when going a thirty mile jour-
" ney in a carriage, I returned almost
" *mad* with the pain. As I had suffered

" so much from the consequences of the
" opiate before, I did not repeat it; the
" pain subsided about the same time that
" it had done before; and the next morn-
" ing, on having a motion (without pain,)
" I perceived a small quantity of florid
" blood had come away. I continued
" free from pain; and the next morning,
" after having had an easy motion, got
" on horseback for a short time. To-
" wards the afternoon the swelling (in-
" deed I occasionally discovered small
" tumours on each side of the perinæum)
" which I before mentioned, had occa-
" sionally appeared on the right side of
" the perinæum, grew larger, became
" painful, and in a few hours I had great
" swelling and inflammation over the
" buttock, with very considerable febrile
" symptoms. We put on *one hundred*
" *leeches* in the course of *three days*, and
" followed up the antiphlogistic plan

" boldly, but without effect; nature
" would have her own way; matter ga-
" thered, and was discharged by two
" openings, and a seton kept in for more
" than a month. During this time I had
" no pain; every thing went on well,
" except that I was so *costive*, that it
" was necessary frequently to take either
" Epsom salt, or calomel, or something
" of that sort. I had no pain in having
" motion, and left my bed-room on the
" 9th of *February*. My medical friends
" thought me getting quite well; but
" still the cause of the first irritation
" harassed my mind, and remained un-
" accounted for. Why was there this
" calm? On the 23d of the same month
" the pain returned, coming on *constantly*
" *three* or *four* hours after having had a
" motion, *(never immediately after, and*
" *without pain at the time,)* whether na-
" tural or brought on by purgatives. This

" dreadful pain, beyond my description,
" frequently, nay generally, lasted *eight*
" *or nine hours.* Our friends ——— and
" ———, said my sufferings were more
" like labour pains than any thing else.
" The pain, besides being constantly vio-
" lent, was every four or five minutes
" joined by lancinating pains shooting
" into each buttock, and directly up the
" abdomen, producing strangury and irri-
" tation in every direction. At the end of
" nine or ten hours the pain began gradu-
" ally to decline, and, what certainly
" gave it much the appearance of spasm,
" left me (except being languid,) as well
" as if nothing had happened. As the
" motions were generally in the morn-
" ing, by night the pain had subsided,
" so that I scarcely ever lost any sleep.
" This kept up my strength, together
" with my appetite never failing, when
" I was free from pain; but, during the

" paroxysms, I could neither eat, drink,
" nor keep one moment in a posture. I
" would not have you suppose that I was
" impatient of pain, and complained for
" a little; my medical friends all allowed
" I bore my sufferings with great resolu-
" tion. I have made both the above re-
" marks, solely that you may form some
" idea of the violence of the disease. In
" this miserable way I went on till the
" end of March from the latter end of
" February, never passing a motion with-
" out suffering, in three or four hours, in
" the way I have described. During this
" time my medical friends considered the
" disease as spasmodic, being of that de-
" scription mentioned by my old master,
" Mr. Pott. Taking up that idea, I fully
" tried every thing that was recommend-
" ed; bark, cicuta, hyoscyamos, fomen-
" tations, hot and cold, æther, &c. Dur-
" ing the paroxysm, any thing, however

" mild, whether hot or cold, drove me
" almost mad, so that in the end every
" application was given up. I was once
" prevailed upon to again try opium,
" which I had never ventured to do, from
" fear of the constipation which it pro-
" duced, knowing that nothing less than
" 150 drops of tinct: opii would produce
" any effect. It was tried, but I do not
" know that the duration of the pain was
" shortened; but so obstinate a constipa-
" tion was produced, that a glyster was
" tried, in addition to the purgative me-
" dicines. You will probably say, why
" was not injection tried before? For the
" reason that I have given you, that,
" during the pain, I could not have
" borne, on any account, the admission
" of the pipe. The glyster, however,
" shewed us, what I had long suspected,
" that there was permanent disease; a
" small pipe would scarcely pass. The

" bougie was then resolved upon. An
" elastic gum female catheter was the
" *first size* that could be admitted, and
" at the *second* time, was passed up *six*
" inches without difficulty. This plan
" was begun upon the latter end of
" March, and before I had used it ten
" days, the pain was nearly gone. The
" costiveness ceased almost as soon; my
" countenance began to improve, and my
" general health to mend. Mr. ———
" passed a bougie for me *every morning*
" *soon* after *eight*, from the *latter* end of
" *March* till the beginning of July,
" when I began to pass it myself;
" since which time it has been passed
" every other morning, gradually in-
" creasing, every eight or ten days, the
" size of the bougie, and always keeping
" it in the rectum *full half* an hour, and
" often *three quarters*. The contraction
" seems to be near the anus, so that it

" has never been passed more than *six*
" inches, or *seven* at most; and as the
" symptoms have given way, I hope we
" have no reason to think that there is
" any contraction farther up. One pe-
" culiar circumstance I must mention to
" you, that repeatedly, and it is so at this
" present writing, an induration comes
" on along the course of the seton, and
" feels to me exactly similar to the hard-
" ness I have so frequently felt before:
" it continues for a *few days*, and *goes*
" *off* again without much pain, but pro-
" duces stinging occasionally along the
" cicatrix. Mr. ——— thinks that it is
" an hæmorrhoid, which occasionally
" fills. It is certainly not permanent;
" it is loose in the cellular membrane; I
" mean rather that the skin is loose over
" it, though it seems fixed below; the
" stinging is only during the time of
" having a motion; the swelling is not

" so long as the first joint of my finger.
" You will be glad to know that (except
" during straining before the use of the
" bougie, when a little florid blood occa-
" sionally came away,) there has been no
" appearance of matter or mucus."

SECTION XII.

CASES

OF THE HÆMORRHOIDAL EXCRESCENCE.

CASE 1.

A Gentleman, about thirty-five years of age, in good health, and subject to no other complaint, except now and then an eruption on the skin, had several hæmorrhoidal excrescences. He had been for a long time of a costive habit of body, and usually suppressed his efforts to evacuate the contents of the bowels, until the evening; for the pain and difficulty he experienced, in returning the tumours again into the rectum, interrupted his avocations. He suffered considerable loss of

blood at each time of going to stool. When the excrescences were without the rectum, they discharged a great quantity of thin sanious matter.

On examination, three of these tumours were discovered, and after he had emptied the bowels, and the tumours were protruded, a double ligature was passed through the centre one, and tied on each side of it: as he did not feel any great degree of pain in this part of the operation, the other two smaller ones were also included, each in a separate ligature. He took an opiate immediately afterwards, and went to bed, without much uneasiness. The first two days he passed tolerably well, his bowels were open, he repeated his opiate each night, and lived very abstemiously.

On the third day he became feverish, the pulse weak and quick, and in the evening nausea and hiccough came on,

with pain in the abdomen, and retention of urine. The catheter was introduced, and about a pint of urine evacuated, which gave him great ease; his bowels were emptied by a mild purgative. On the fourth day the nausea, hiccough, and affection of the bladder, were very considerably increased, with great pain in the abdomen, and a weak, quick, intermitting pulse. The only ligature which had not separated was cut out, but the symptoms augmenting rapidly, he died on the morning of the fifth day.

On opening the body, the stomach was found considerably inflamed, the small intestines slightly so, and on taking the bladder and rectum out to examine them more minutely, the internal coat of the rectum, quite down to the anus, was free from inflammation, and the bladder apparently healthy. The prostate gland was considerably enlarged, and several

small calculi in its substance; these were the only diseased appearances on dissection.

CASE 2.

A professional gentleman had several hæmorrhoidal tumours, which gave him great pain, and occasioned considerable loss of blood when he went to stool. A double ligature was passed round the most prominent and painful of them, and he suffered but little pain at the time of the operation.

The next day he complained of great pain in the back and loins, much irritation about the anus, and had some fever. He applied a common poultice to the anus, and his bowels were emptied by a saline purgative medicine. The third day the parts were much swelled, inflamed, and excoriated by the pendulous

ends of the ligature, which were therefore removed. The fourth day he had still great pain in the vicinity of the rectum, together with fever, head-ach, and a diminished secretion of urine. On the fifth day he had less pain and fever, but the parts were swelled externally, with slight ulceration in the perineum. He remained in bed, the poultice was continued to the anus, and his bowels were kept open by saline draughts, with magnesia. The ligature came away on the seventh day, but for a considerable time afterwards he had great pain in the prostate gland and the urethra, the anus was also swelled and painful for many days; after which he gradually recovered, and experienced much relief from the removal of the excrescence.

CASE 3.

A tradesman in Long Acre, about forty years of age, consulted me for a painful affection of the rectum, and gave the following history of his complaint. He was habitually costive, and lost a great quantity of blood whenever he had an evacuation, which he was constantly obliged to solicit by the use of purgative medicines. At the time of passing his stool, there were several tumours protruded from the gut, which could not usually be returned for many hours. During this time he was in great pain, which lasted until he was able to reduce them with his fingers. When I examined him, I found the sphincter ani muscle so rigid, that it was with difficulty I introduced my finger into the gut, which appeared very much obstructed by soft tumours. I requested

him to expel them from the gut, as in the effort to evacuate his fæces, and there appeared two excrescences of the size, and nearly the colour of a large purple grape, which were not very painful to the touch. He was recommended to use an injection of ten grains of sulphate of zinc, dissolved in half a pint of water, twice or three times a day; to keep his bowels open with an electuary of senna; to reduce the tumours as soon as he could after each evacuation; and to empty the gut in as short a time as he could.

He continued this plan for about a fortnight, when I saw him again, somewhat better, but not very materially so. I told him, that I hoped, by perseverance in this plan, he would be relieved; but that the removal of the tumours by ligature, was the most ready way of obtaining a cure, if he would submit to the operation and subsequent confine-

ment. He consented, and, after evacuating his bowels, I took hold of the largest and most painful of these tumours with a double hook, and passed a ligature tight round it. I then tied the other in the same manner, and returned them with the ligatures into the gut. He took an opiate, and went to bed. The next morning he complained of great pain in the abdomen, which was tense and swelled; he had had no sleep, and was hot and feverish. I directed him to live extremely low, and to take castor oil until a copious evacuation was procured. The pain and tension of the abdomen continued for three days; after which, it gradually subsided, the ligatures came away, and he was considerably relieved by the operation. But, in a short time afterwards, he had the mortification to perceive some other similar tumours protruding, and giving him all the

same inconvenience which the former ones had done. As he had suffered so much from the operation which had been performed, I was not willing to propose the removal of them again by ligature; I therefore recommended him to introduce a large rectum bougie, and retain it in the gut for some time, every morning. This he did; and the hæmorrhage, when he went to stool, no longer troubled him; the tumours ceased to appear; and, in about a month, or rather more, he told me he hardly suffered any inconvenience from his complaint; but, that he still occasionally introduced a bougie, and withdrew it again, after it had been in the rectum a short time.

SECTION XIII.

CASES OF PROLAPSUS ANI.

CASE 1.

A Gentleman, about forty-five years of age, and whose general health was very good, consulted me, for a troublesome prolapsus ani, which had existed, and had been increasing, for ten years; but, for the last six months, he could not take the most moderate exercise, without the protrusion of the part. It was easily returned when it first descended; but became painful and bled, if it was suffered to remain any time unreduced. When he went to stool, it came down nearly of the size of an orange. In this state I

saw it; and, after examining carefully, that there was a continuity of surface from the protruded part to the anus, I told him, that I did not think he could obtain any essential relief, without the removal of a small part of the tumour. He readily agreed to it; for he had tried almost every thing that had been advised him, without the smallest benefit. I passed a sharp pointed probe though a small and projecting part of the tumour, and tied it behind the probe with a very tight ligature, such as is used by dentists to secure artificial teeth in their places. Before I drew the ligature tight, I wounded the part that was included, to let out the blood it contained; I withdrew the probe, and returned the prolapse, with the ligature, into the gut. He complained of pain for the moment, but was very soon easy; and, with the assistance of a grain of opium, passed a very good night.

The next day he had but little fever, and some uneasiness of the part; which hardly amounted to pain; I desired him to keep his bed, and to live low, and cloths, with aq: lytharg: acet: C. were applied to the nates.

The third day he had an evacuation, and the part came down, and gave him great pain; which continued some time after the part was returned.

On the fifth day the ligature came away, and left a sore of the size of a sixpence. The prolapse still came down; but in a less degree, and without much pain in returning it. He was now permitted to walk about in his room; and, in a week more, the part had quite healed; but the inner membrane of the gut still came down on one side, whenever he went to stool, though at no other time.

A month afterwards, he told me, that

if I approved of it, and thought it would be effectual, he would wish to have the operation repeated on the other side of the gut. On examination, I found a considerable protrusion of the abraded membrane, and discharging considerable quantity of mucus. I removed a small portion of the abraded part, in the same manner as before, and he suffered the same inconvenience and pain.

In a fortnight the sore had healed, and the rectum came down a little after each evacuation, but retired without any assistance. I have seen him very frequently since; and four years have passed without any return of his complaint.

CASE 2.

A gentleman consulted me for a tumour protruding from the rectum when he went to stool, which he had been af-

fected with for fifteen years, and which was said to originate from repeated attacks of piles. It had several times produced a degree of fever, from the pain he suffered, which had confined him for many weeks to his bed, and had injured his health very materially.

It was after one of these attacks of fever that I saw him, hardly able to walk or stand from debility; he was in great pain after every evacuation; but the pain did not commence till near an hour after his stool, when it continued for many hours. When I examined the protruded part, I found that there was a considerable prolapse of the membrane, as well as three distinct excrescences or tumours growing from it, of a firm indurated structure, which might have been mistaken by some for tumours of a schirrous nature. I was, however, sure they were not so, but only a consequence of repeated attacks of in-

flammation on the part; I therefore told him, that it would be advisable to remove a small portion of the membrane, together with the tumours, when his health was sufficiently restored to permit of it with propriety. He took bark and strengthening medicines under his physician, and in about a month applied to me again.

After emptying the bowels, I included two of the tumours, and a very small portion of the membrane which descended, in a very tight ligature, and the other smaller tumour I removed with the knife. He suffered considerable pain, which was of short duration, went to bed, and took thirty drops of laudanum, and in the evening had some fever and difficulty in passing his urine. He however slept tolerably well, and passed his urine freely the next day.

The third day, as he had passed no eva-

cuation, he took some purgative medicine, and had pain and great protrusion of the gut when he went to stool. He sent for me in great alarm, to say that the ligature had come off with the stool, and that I had failed in my attempt to cure him. I told him that the ligature had been on quite long enough to destroy the tumour, and that its coming away so soon was a favourable circumstance, rather than the contrary. There was a considerable discharge and soreness for many days round the anus; but this gradually subsided, and he no longer suffered any protrusion or pain.

About twelve months afterwards I saw him for another complaint, and was happy to find that he had continued quite well of his former disease.

SECTION XIV.

CASES

OF FISTULA IN ANO.

CASE 1.

A Carpenter, about thirty years of age, had the operation for fistula in ano performed on him in the year 1803. There were two extensive sinuses in the nates divided; but the principal one extended above three inches up the side of the gut, and then perforated it; this also was laid open. There was considerable hæmorrhage at the time of the operation; but the patient fainted, and the bleeding stopped; and, when the wound was dressed, he went to bed. After he had

been in bed about an hour, the hæmorrhage returned, and the bleeding artery was so high up the sinus, as to be entirely out of the reach of the needle and ligature; the gut, therefore, and the wound, were filled up with compresses of lint, wet with spirit of turpentine; and, for some time it was thought, that this mode of compression had succeeded in stopping the hæmorrhage. But, during our fancied security, his pulse became hardly perceptible, his lips pale, and the whole of the body was in a cold sweat. He was now supported by wine and other cordials; and, in a short time, the hæmorrhage burst out again, with as much violence as ever, and continued for more than an hour. All the compresses were now removed, the rectum cleared, as much as possible of coagulated blood, and the wound left without any dressings. The hæmorrhage stopped, and did not

return again; but very large quantities of coagulated blood were evacuated with the fæces for three days afterwards. He was, as may be supposed, extremely debilitated by this loss of blood, but finally recovered his strength, and his fistula was dressed, and cured in the usual way.

CASE 2.

A gentleman, about fifty-six years of age, who had been subject to complaints of the liver, and frequent hæmorrhage from the nose, had the operation for fistula in ano performed. A sinus, leading into the rectum, about an inch from the anus, was first divided, and then another passing towards the os coccygis; the opening of this last discovered another sinus penetrating the gut, about an inch, or rather more, above the former one, which had been divided. This also was laid open,

and the wound bled very freely; but the orifice of the bleeding vessel could not be discovered. In a short time the hæmorrhage diminished, and the wound was dressed in the usual way, by introducing a piece of lint from the gut into the divided sinus. There was some degree of hæmorrhage nearly the whole night, and in the morning a small artery was discovered, and a ligature passed round it, but the bleeding continued and increased very considerably, when he had an evacuation in the middle of the day. The wound was cleared of all the dressings, together with the coagulated blood, and the hæmorrhage ceased.

During the succeeding night there was no bleeding; but in the morning it returned, when he had a stool, and he lost about four ounces of florid fluid blood. The wound was now filled with lint, wet with Ruspini's styptic, which happened

to be at hand; there was a little hæmorrhage during the day, and in the following night; which, however, he passed tolerably well, and the wound began to suppurate plentifully. But when he had an evacuation of the fæces, the bleeding again returned, though in a less degree; and for many days he lost some ounces of fluid blood every time he passed his stool. At last it ceased altogether; the wound went on well, and, in about six weeks, was quite healed.

CASE 3.

A publican, in my neighbourhood, desired my attendance for a very large gangrenous abscess round the anus, which had been in a sloughing state for several days, attended with much fever, and the rectum, on the right side, was insulated

for above four inches, by the mortification of the cellular membrane round it. He was a very corpulent man; and, when the whole of the slough had separated, the cavity would have received a very large orange. In six weeks time, by simple external dressing, it had healed up, except a small sinus, running in contact with the side of the gut, for several inches: this sinus continued to discharge for a considerable time, and gave him great pain when he went to stool. He had been taking bark and liberal diet for some time; but the sinus did not close, and there was often a copious hæmorrhage from it at the time of his evacuations. I should have opened the sinus into the gut before, but, considering its depth, I was willing to give it every chance of healing, without exposing him to the risk of hæmorrhage; for it would have been to no purpose to have opened

it, unless the division were carried to the extent of the sinus. But, as it continued very painful to him, I laid open the sinus, and divided the insulated membrane of the gut, so as to involve the whole of it in the incision. There was but little bleeding, and a piece of lint, wet with oil, was placed between the lips of the wound. When the suppuration had separated the lint, the wound was dressed only superficially every day, without probing or tenting; and, in about three weeks, it was quite healed, and he has had no return of his complaint.

SECTION XV.

CASES

OF IMPERFORATE ANUS.

CASE 1.*

IN the month of April, 1769, an infant, five days old, was brought to me from the parish of Sens, in the bishoprick of Rennes, who evacuated the meconium by the penis; and having no anus, the rectum evidently terminated in the bladder. I saw the importance of the complaint, and the danger of the infant, who had been vomiting three or four days, and

* This case is translated from M. Bertin's Memoir in the Academy of Sciences.

the abdomen was tense. I first desired the parents to fetch M. Thouin, a neighbouring Surgeon: when he arrived, I proposed to make an incision at the place where the anus should have been, which was farther marked out by a bluish spot*. We hoped to open the natural passage for the fæces, and give them a more free exit than through the bladder; and that either the opening in the bladder would close, or that the child would void his fæces mixed with some urine by the new anus.

The abdomen being very hard, and the child vomiting the milk, and even its excrements, M. Thouin made the incision immediately, in the presence of M. Guiot, a surgeon in the neighbourhood, who told us, he had performed the operation twice with success.

* This spot is not always a mark of the confined meconium, as authors describe; in the present case there was evidently no meconium.

But the two cases, related by M. Guiot, were different from the present one, as there was no communication with the bladder; and another diversity from the cases he described was, that, in this case, the meconium did not follow the incision, nor could the rectum either be found with the instrument, or the finger, the best of all instruments.

We judged it necessary to plunge the trocar through the incision: it was passed deep, but without success; which was the more disconcerting, as we were as certain of the existence of the rectum, by the evacuation of the meconium through the bladder, as if we had seen it with our eyes. A tent was introduced into the wound, to preserve the opening for any further trials which might suggest themselves on reflection. We had done all that was advised by authors, in cases when the rectum does not descend to the

anus, and also as much as the debilitated state of the child would bear. The child was taken away at six in the evening, proposing to myself to make some farther attempts the following day, if the condition of the child would permit it.

I requested M. Thouin to see him early in the morning. He told me on his return, that the child was so ill, that he did no more than examine it; but that the meconium had descended on the tent.

The child died; and Mr. Bertin goes on to recommend, in such cases as these, that an incision be made into the bladder, to evacuate the fæces, and reproaches himself that he did not resort to this method in the preceding case. But I believe there are few surgeons, who would now follow his advice; nor is life, perhaps, very desirable on such painful terms, could it even by such means be preserved.

CASE 2.

I was desired by the late Dr. Thynne to see a male child, who was born with an imperforate anus. The form of the anus was perfect externally; but, on introducing a bougie, it was stopped in its progress about an inch from the external aperture; the abdomen was very tumid.

After some consideration, I passed a flat trocar on my finger into the anus, with the point drawn into the canula; and, when it would pass no farther, I projected the point through the impediment: no fluid followed; but when the instrument was withdrawn, I thought I felt the tumid extremity of the gut; and by forcing it on, I came in contact with the os sacrum. I had then no great hope of

the recovery of my little patient, and still less on the following day; but desired, that if any fæcal evacuation took place, I might be sent for.

I was called on the fourth day, and found that a considerable alvine evacuation had passed, and the belly much gone down.

When I examined with my little finger, I found the extremity of the gut, with a small perforation, so very high up in the pelvis, that I was fearful to introduce an instrument to enlarge the opening, if it could, with safety, be avoided.

The next day (fifth), the child had taken some castor oil; the surrounding parts were considerably swelled and inflamed, and the abdomen again tense, though some fæcal evacuation had passed; he seemed easy, and had slept.

The sixth day, but little of the contents of the abdomen had passed, and the child was still swelled and uneasy, until the bowels were evacuated by castor oil. There was a considerable purulent discharge from the anus. I had a great objection to the repeated introduction of instruments, or my finger, lest an interruption should be given to the adhesions which I hoped were forming between the gut and the surrounding parts; but so great was the difficulty of passing the fæces, that the following day I introduced a large elastic catheter, and the fæces flowed freely through it. The catheter was used as often as was necessary, for a considerable time, and to this I chiefly attribute the recovery of my patient, for, during its use, the purulent discharge ceased, and the gut descended nearer to the anus.

When, after some time, I introduced my finger, the aperture at the extremity of the gut was felt, hard and contracted close to the anus, it was dilated by the use of bougies, which were continued for some time, and the child performs his functions with but little interruption, and is otherwise in perfect health.

SECTION XVI.

CASES

OF ULCERATION OF THE RECTUM.

CASE 1.

A Gentleman desired my advice for a constant discharge which flowed from the anus, which was rather a continued inconvenience, than a painful complaint to him. He had a small hæmorrhoidal tumour, which had existed for several years, and was sometimes inflamed and painful; but the discharge was not materially influenced by the state of the tumour. I told him, that, probably, the removal of the pile might stop the discharge, although it did not immediately

flow from that part; and that, at all events, the tumour must one day or other be taken away. I removed it, but the discharge continued the same as before. The pile being taken away, allowed me to perceive a small ulcer under the os coccygis, which, after the trial of several applications, was healed by the use of equal parts of aq: lyth: acet: and olive oil. He has had no discharge or other inconvenience since.

CASE 2.

A gentleman, of advanced age, accustomed to irregular habits of life, desired me to give him my opinion on a very painful affection of the rectum, and constant discharge from the part. He was unable to retain his stool for a moment after the first impulse, and a con-

siderable part of abraded membrane, in a red and thickened state, was projected, and could not, without difficulty, be returned. His health was greatly impaired by the long continuance of the disease, and he had tried every means of relief that many professional gentlemen had recommended to him.

After seeing him several times, to consider his case, I proposed to remove a small portion of the abraded membrane which projected; this was done, with little pain or fever, and in a short time it healed, and the membrane no longer came down after his evacuation; but neither the discharge, nor the incontinence of stool, were mended by this operation, although his evacuations were easier to him. I then advised him to try a decoction of hæmatoxylum, which did no service. He used several kinds of astringent and sedative injections, and

opium introduced in ano, but all without benefit; and, at last, sunk under his disease.

The dissection of the body shewed the whole internal surface of the rectum, from the sphincter to the sigmoid flexure of the colon, covered with small, deep, and detached ulcers. The lower part, which had been operated on, had formed so strong an adhesion to the surrounding parts, that it could not descend by the greatest efforts of passing his stool; and the readiness with which the part healed, after the operation, was an evidence of the benignant character of the ulceration; for it proved, that it was not of a cancerous description.

CASE

OF INDURATED FÆCES AND BILIARY CALCULUS OBSTRUCTING THE RECTUM.

AN elderly lady had for many years complained of great pain in the anus whenever she evacuated the fæces. She was constantly obliged to take purgative medicines; and, even with this assistance, she had considerable difficulty in emptying the intestine. She had now been confined to her bed for several weeks, with pain about the rectum, so violent, that she compared it to that of labour. She was not relieved by the use of purgative medicines, nor by opiates; and glysters could not be thrown up, in consequence of some obstruction in the intestine. On examining the rectum with

the finger, the gut was found to be loaded with* indurated fæces; which were with great difficulty removed by the scoop, which is used in lithotomy, and the finger. When this was done, a hard round body was discovered higher up in the gut. After many attempts, a large biliary calculus was brought away with the same scoop, and more of the alvine concretion, which was lodged above the stone. She took some purgative medicine, and was soon relieved of her complaints.

* There are many cases of this disease recorded in books; particularly by Mr. Hey, by Mr. White, and by Dr. Fothergill: Mr. Hey has quoted Dr. Fothergill's Paper in the Medical Observations; but the reader is disappointed when he refers to it; for it is in the fourth volume, and not the third, as Mr. Hey has quoted.

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