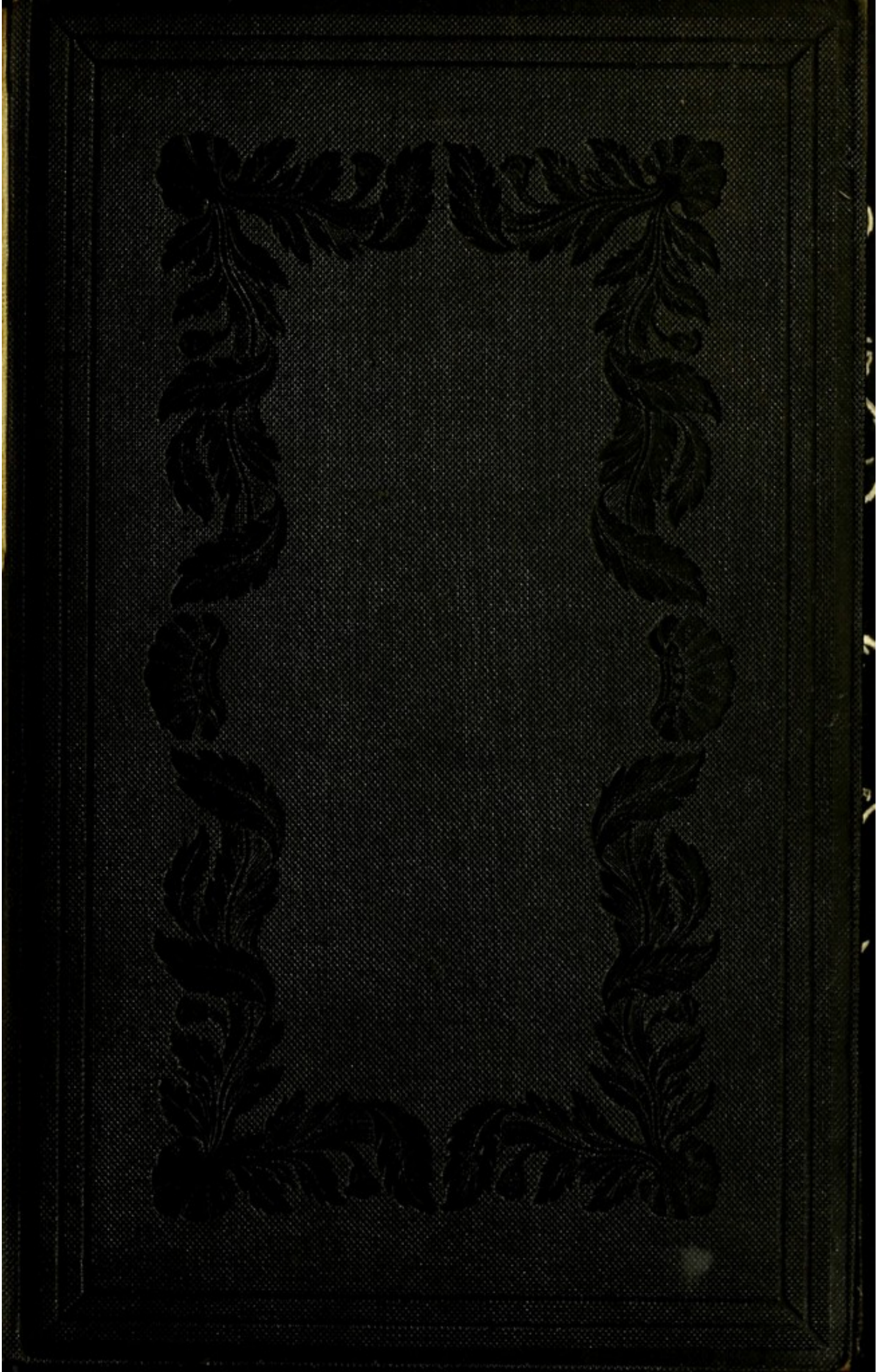
Practical observations on important diseases of the rectum and anus ; with numerous cases illustrating the successful practice of an improved mode of curing the prolapsus ani, piles, or haemorrhoidal tumours, and the fistula in ano, without cutting or confinement ; and the treatment of stricture, fissure, excrescences, intestinal concretions, and other inscidental affections. / by E. D. Silver.



PRACTICAL OBSERVATIONS

ON IMPORTANT

Diseases of the Rectum and Anus;

WITH NUMEROUS CASES

ILLUSTRATING THE SUCCESSFUL PRACTICE OF AN IMPROVED MODE OF CURING THE

PROLAPSUS ANI,

PILES, OR HÆMORRHOIDAL TUMOURS,

AND THE

FISTULA IN ANO,

WITHOUT CUTTING OR CONFINEMENT;

AND THE TREATMENT OF

Stricture, Fissure, Excrescences, Intestinal Concretions,

AND OTHER INCIDENTAL AFFECTIONS.

BY

E. D. SILVER, M.D.,

21A SAVILE ROW, PICCADILLY,

GRADUATE OF KING'S COLLEGE, UNIVERSITY OF ABERDEEN;
MEMBER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND;
FORMERLY ONE OF HER MAJESTY'S COLONIAL SURGEONS; MEDICAL EXAMINER TO THE EUROPEAN LIFE-OFFICE;
ETC., ETC., ETC.

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TO

SIR JAMES M'GRIGOR, BART., M.D.,

K.C.B., K.T.S., F.R.S.,

DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT,

&c., &c.,

This Work is Inscribed,

AS A TRIBUTE

DUE TO HIS ACKNOWLEDGED SUPERIORITY IN THE ART AND SCIENCE OF

MEDICINE AND SURGERY,

AND IN TESTIMONY OF

THE SINCERE RESPECT AND GRATITUDE

OF

THE AUTHOR.

21A *Savile Row, Burlington Gardens,*
March 18, 1851.

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PREFACE.

THE following observations I submit to the public, but more especially to the profession of which I have the honour to be a member, with that confidence of success which an extensive acquaintance with disease and its cure alone can insure. For some years past, it is well known that I have devoted my chief attention to the study of the diseases of the Rectum and Anus; and that I have adopted an improved method of treatment with unerring success, not even a single failure having occurred. It cannot be denied by any surgeon conversant with this subject, but that the use of the knife in cases of Prolapsus Ani, Hæmorrhoidal Tumours, and Fistula in Ano, renders the safety of the patient frequently very doubtful, from the excessive hæmorrhage which often follows the operation, and that, in cases of the latter complaint more especially, the duration of pain is too often prolonged, either through the unskilfulness of the operator, or the tardiness of the subsequent healing process; and also that the consequent necessary confinement to the bed or chamber, for probably an indefinite period, is irksome and debilitating. If we

are enabled, therefore, by any means in our power, to prevent the occurrence of circumstances which impede the progress of the healing art, such means must be considered a desideratum.

The regular action of the functions of the Rectum are so important to the health and the enjoyment of life, that I regret the diseases to which this organ is so commonly liable, and which are so painful and distressing to bear, should not have received more attention from the profession; particularly when I consider that the female sex are such frequent sufferers from these complaints, and to whom, from the delicacy of the situation of these diseases, there appears an almost insurmountable obstacle to the attainment of the desired relief. This delicacy on the part of the patient, has, doubtless, been the chief cause of the feeling of indifference shown by medical practitioners towards these particular complaints, rather than the want of inclination to acquire the necessary information on the subject.

The practical cultivation of Medical and Surgical science, like that of the earth on which we move, requires some ground upon which to work, without which, even the little store the poor man may possess may be ultimately lost for want of the means for improvement; and even where space and means have become sufficiently ample, still the blessing that generally attends industry may not be sufficient to ensure its right application, so prone is the human mind to

run into idle and wild excess, unless every effort be made under the direction of that experience which alone is derived from an extensive practice. The many great advantages I enjoyed as the House-Surgeon to Guy's Hospital, and the facilities afforded me by my excellent and kind friend, the late Mr John Morgan, (Surgeon to the same institution, and to whom I had the honour of being an Assistant,) enabled me, through great determination and perseverance, to bring my peculiar method of treatment to such a state of perfection, as to establish it as the only safe and certain mode of cure for affections of the Rectum and Anus, particularly Prolapsus Ani, Piles, or Hæmorrhoidal Tumours, and Fistula in Ano. I have said Prolapsus *Ani,* the popular term, when, in reality, the disease is a Prolapsus of a portion of the *Rectum;* for the anus is but an opening into, or termination of the alimentary canal, and which, being a fixed point, cannot possibly be prolapsed, although the sphincter muscle may be everted.

In conclusion I have only to remark that each succeeding day strengthens my confidence in the method I adopt for the removal of the diseases herein treated of, and adds to the number of medical friends and private individuals, who are ever willing to acknowledge the efficiency of, and the benefit they have derived from, the treatment I have illustrated in the following pages; and whatever opinions may be formed

of any portion of this work, I desire to indulge the hope, that my observations may be useful to the suffering community, for the heartfelt acknowledgements of the afflicted restored to health, is indeed the greatest gratification a skilful surgeon can receive.

E. D. SILVER, M.D.,
Graduate of King's College, University of Aberdeen; Member of the Royal College of Surgeons of England, &c., &c.

PART I.

THE ANATOMY OF THE RECTUM AND ANUS.

THE inferior portion of the colon and alimentary canal is called the rectum; an improper appellation in the human species, and which originated probably from the usual straight form that this organ presents in the lower animals. Superiorly it is continuous with the termination of the sigmoid flexure of the colon, situated in the left iliac fossa, and terminates inferiorly at the anus. In some rare instances the position of the abdominal viscera is reversed, and, in such cases, the rectum would of course commence on the right side. It is about twelve inches in length, and presents some important changes in its course, which are necessary to be remembered by the individual who introduces a bougie for the removal of contractions of the rectum. At its commencement it descends with an inclination towards the right side of the pelvis, by which it is brought to the median line of the sacrum at its curved and hollow part; it then takes an horizontal direction, and bends obliquely forward and downward for about three or four inches, at which part it is found opposite the apex of the coccyx; from this point it bends to form an angle,

turning upon itself, backward and downward, for one inch and a half, and thus completing its course at the anus.

Like the hollow abdominal viscera, the rectum consists of three tunics, namely—peritoneal, muscular, and mucous; the first being only partial, whilst the others are continuous throughout. It is that portion which is not covered by peritoneum which is usually the seat of disease. The *peritoneum* is reflected from the posterior surface of the bladder in the male, and from the upper and back part of the vagina and uterus in the female, on the exterior surface of the rectum. A *cul de sac* is thus formed, bounded by two false ligaments, one on either side, and which is denominated the recto-vesical fold. It then passes off from the sides of the rectum to the walls of the pelvis; and having embraced the upper portion of the rectum, the laminæ from either side unite and form the meso-rectum, by which it is connected to the sacrum. Between the layers of this large duplicature the superior hæmorrhoidal vessels, with some nerves and cellular tissue, are situated. This process is about four inches in length, and terminates generally opposite the junction of the third and fourth bones of the sacrum. In some instances, however, it does not exist, the peritoneum passing directly from the posterior and lateral parts of the rectum to the sacrum. Thus, the peritoneal coat is but partial, covering the rectum anteriorly for five or six, laterally four or five, and posteriorly three or four inches. The *muscular* coat is thicker and stronger than in the other portions of the large intestine. It consists

of two layers of fibres, the external being longitudinal, and the internal circular. The longitudinal fibres are partly prolongations of those of the colon, but there are others entirely peculiar to the rectum. These parallel fibres are more numerous on the anterior and posterior walls; and their distribution in parallel striæ prevents the rectum being thrown into partial pouches as the colon. They are also most remarkable in the upper three-fourths, being less apparent, and as it were, amalgamated with the levatores ani in the inferior fourth. The circular fibres are neither particularly strong nor numerous, except near the anus, where they form a fleshy flattened ring, nearly an inch in width, constituting what is termed the internal sphincter muscle, which has a slight attachment to the tendinous central point of the perineum. The *mucous* coat is thicker and more vascular than in any other portion of the large intestine. It contains many mucous follicles, which are particularly distinct. This membrane is connected to the middle or muscular coat by lax cellular tissue. Superiorly it is smooth, and when empty, in consequence of its great amplitude, is thrown into oblique and transverse folds, which, however, do not observe any remarkable regular form or arrangement. Inferiorly, it forms vertical duplications which contain cellular tissue. These duplications project forward, so as to form what are termed the columns of the rectum. Some anatomists assert that the formation of these columns result from the contraction of the extremity of the bowel; but this is erroneous; for, though diminished when the mucous membrane is extended,

yet they are not altogether obliterated. They are of variable length, thicker near the anus, where they terminate in rounded extremities, and are from four to twelve in number. Between these folds there are others, generally not very numerous, but always most remarkable opposite the lower border of the internal sphincter muscle, of a semi-lunar form, usually transverse, though sometimes oblique, with their free edges turned upward, thus forming narrow semi-lunar lacunæ, the orifices of which are directed upwards toward the cavity of the intestine. Although Mons. Ribes appears to have experienced much difficulty in finding these particular folds, yet my dissection is in accordance with Winslow's description, who observes, "Towards the circumference of the inner margin of the anus, they form little bags, or semi-lunar lacunæ, the openings of which are turned upward towards the cavity of the intestine."*

The arteries of the rectum are derived from three distinct sources. The superior hæmorrhoidal from the inferior mesenteric, the middle hæmorrhoidal from the internal iliac, and the inferior hæmorrhoidal from the internal pudic arteries after they have re-entered the pelvis. The inferior mesenteric artery finally divides into two branches, called the superior hæmorrhoidal. These vessels course along the posterior surface of the rectum, are at first superficial, but soon perforate the longitudinal fibres, giving off laterally a number of branches which anastomose on the interior surface of the

* Winslow's Anatomy, vol. ii, p 194.

rectum, not only with each other, but also with the middle, and frequently with the inferior hæmorrhoidal arteries. The middle hæmorrhoidal occasionally take their origin from the ischiatic, or internal pudic arteries, and sometimes are found wanting, particularly in the male subject. They also vary in size and number, besides their origin. They take an oblique course downward, behind the bladder in the male, and the vagina in the female, on the exterior surface of the rectum, where the branches into which they are divided anastomose with each other, and also with the superior and inferior hæmorrhoidal arteries. The inferior hæmorrhoidal, two or three in number on each side, pass transversely, giving branches to the levatores ani, and internal and external sphincter muscles. They supply also the cellular, fatty, and tegumentary tissues in the anal region, and finally anastomose with each other, and with the middle, and occasionally with the superior hæmorrhoidal arteries.

The veins of the rectum are very tortuous, have no valves, and correspond with the arteries. Their branches constitute what is termed the hæmorrhoidal plexus, which is situated at the extremity of the rectum, between the mucous and muscular coats. Some of the branches of this plexus pass through the internal sphincter muscle, supplying the cellular and adipose tissues by the side of the rectum, and again unite with the plexus below the edge of this muscle. The hæmorrhoidal veins assist in forming the inferior mesenteric vein, which, with the superior mesenteric, splenic, and gastric veins, compose the

portal system. By the inosculation of the hæmorrhoidal branches with those of the internal iliac vein, an important communication is established between the portal and general venous system.

The nerves of the rectum are derived from the sacral and hypogastric plexuses, and ganglion azygos; and thus are connected with the two great classes which constitute the nervous system, namely, the cranial and spinal nerves, which form the system of animal life; and the sympathetic system, or system of organic life. The nerves from the sacral plexus pass to the lower and posterior part of the rectum, in which course they give off twigs to the hypogastric plexus, and then divide into two sets of branches; the ascending, which proceed towards the sigmoid flexure of the colon; and the descending, a larger nerve, which passes through the two ischiatic openings, and descends to the termination of the rectum, to supply the sphincter muscle and the integument. The branches derived from the hypogastric plexus pass forward and downward to be distributed to the rectum and anus; and those which proceed from the ganglion azygos, are two or three in number, and very small. The ganglion azygos is situated on the first bone of the coccyx, and serves to connect the inferior extremity of the sympathetic system, as does the ganglion of Ribes its upper extremity.

The absorbents are much more numerous than is generally supposed, and terminate in the sacral and lumbar glands.

With regard to the anus. This is a small oval

orifice, directed downward and backward, situated about an inch in front of the extremity of the coccyx, behind the perineum, between the tuberosities of the ischia, but considerably above them in the male, and in the median line between the buttocks. It is covered by fine, soft, pliant skin, furnished with sebaceous follicles, which secrete an unctuous matter of a peculiar odour, and from whose centre hairs grow in the male adult. This integument is corrugated by the action of the sphincter ani, and a short distance above the verge of the orifice it gradually assimilates in structure with the mucous membrane, disappearing opposite the inferior border of the internal sphincter muscle.

The muscles peculiar to the anus are the sphincter and levatores ani. The sphincter ani or externus is a thin, oval, pale muscle, which arises from the tendinous raphé, extending from the apex of the coccyx. Passing downward and forward, it divides into two sets of muscular fibres, which are directed outward at an acute angle, expanding on each side in the middle towards the tuberosity of the ischium, then curving forward and inward, they form the arch of a circle, and unite in front at an angle, similar to that at which they separated, to be inserted into the common central tendinous point of the perineum and tegumentary raphé. Thus the external sphincter muscle encircles the margin of the anus, and forms two commissures, one anterior, and the other posterior to this opening, which are rendered firm by the interlacing of the fibres of each side. In the female, the anterior extremity of this

muscle is shorter and less acute than in the male, and is confounded with the constrictor vaginæ.*

The levator ani is a thin flat muscle, broader above than below, and with its fellow of the opposite side, forms a concave wall. It has been said to resemble a funnel, the concavity being directed towards the pelvis, and the convexity towards the perineum, with two openings in it inferiorly for the transmission of the rectum and urethra. It arises from the posterior and inferior part of the pubes near the symphisis, from the aponeurotic arch, resulting from the separation of the two layers of the pelvic fascia, and from the spinous process of the ischium. The fibres which come from the pubes are fleshy; those from the more anterior part of the arch are thin and tendinous; while the posterior are thick, tendinous, and fleshy. The anterior fibres, passing obliquely downwards, backwards, and inwards, course along the side of the prostate, to be inserted into the central point of the perineum, and into the forepart of the rectum, mixing with the fibres of the sphincters, as well as with those of the opposite side. The middle fibres are inserted into the side of the rectum, above the sphincters, and mingle with the longitudinal fibres of this intestine. And the posterior fibres which are more transverse than the rest, are inserted into the side of the two or three inferior coccygeal bones into the posterior

* If the reader desires to make a minute dissection of these parts, he is confidently recommended to consult Morton's excellent work on the Surgical Anatomy of the Perineum.

part of the rectum, and, with those of the opposite side, into the tendinous raphé, which extends from the coccyx to the rectum. Its anterior border is directed downward and inward, and its posterior is a little inclined upward. In the female this muscle is incorporated with the vagina, and is weaker than in the male; its posterior fibres are also less curved.

From the Anatomy we are necessarily led to the consideration of the Physiology of the Rectum and Anus, to which I accordingly proceed.

PART II.

THE PHYSIOLOGY OF THE RECTUM AND ANUS.

In the rectum the fæces accumulate and gradually lose their thinner parts by absorption. They do not give rise to any uneasiness until a considerable quantity is amassed, when a sensation is created, which demands their expulsion. This sensation is supposed by some to result from the contact of the fæcal matter with the rectum, but such is not the case, for the fæces generally accumulate in large quantities before the sensation alluded to is felt.* Some of the advocates of the above opinion assert that this peculiar feeling is to be referred to the acrimony which the fæces obtain by their stay in the rectum. This explanation, however, is not less specious than the former; for when the fæces are fluid, the sensation is produced very soon after their arrival in the lower bowel, and if the sensation be not complied with, it ceases, and generally does not return until the next accustomed period; also, the longer (after the sensation has been once disobeyed) the fæces remain in the rectum, the less likely is it to return. In truth we are in doubt as

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* Carpenter's Physiology, p. 269.

to the positive cause of this feeling, and must, in the present state of our knowledge, admit that it is organic, and consequently depending upon some spontaneous change in the intestine.

Until the period of defecation, the fæces are supported by the rectum, which is curved for the purpose, and more especially by the natural contraction of the sphincter muscles, which (particularly the external) are capable of relaxation to a certain extent by the will, a circumstance which renders their resistance more easily overcome.

The contraction of the muscular fibres of the intestine would be insufficient to effect defecation without the aid of other important organs, and these are—first, the diaphragm, the contraction of which is followed by the inflation of the lungs; secondly, the arytenoid muscles, which close the glottis, and prevent expiration; and lastly, the abdominal muscles, which act against the diaphragm, so as to compress the viscera, and force them backward and downward, towards the cavity of the pelvis, causing the perineum to descend. The levatores ani also, by pressing the rectum forwards and upwards, and thus obliterating its natural curve, assist materially in this important operation. The force thus produced being greater than the resistance of the sphincters in their healthy condition, the anus is dilated, and the contents of the rectum expelled; an act which is facilitated by the secretion of the follicles.

The contraction of the diaphragm and abdominal parieties is so powerful, that it would exercise a baneful influence on the rectum, by causing a por-

tion of it to protrude, were it not for the resistance of the levatores ani muscles, which, though small, yet from their favourable situation, sufficiently antagonize the force. The anus being narrower than the rectum, the expulsion of the fæces is accompanied with more or less difficulty in proportion to their solidity; for, when liquid, the contraction of the bowel alone seems to be nearly or altogether sufficient for their evacuation.

After the discharge of the fæces, a considerable amount of mucous membrane is displaced by the contraction of the circular fibres of the intestine; but, in proportion as the action of the diaphragm and abdominal muscles ceases, the sphincters begin, and the levatores ani continue to contract, until, by their pressure, as well as by the diminution of the mass, in consequence of the return of respiration, the displaced membrane regains its ordinary situation. An ingenious Italian physiologist, Bellengeri, who made an experimental inquiry into the functions of the spinal marrow, conceived the idea that the posterior columns of the spinal marrow gave nerves to the sphincter ani, which endowed it with the power of contraction, while branches from the anterior columns bestowed on it the faculty of relaxation.

The frequency of fæcal evacuations is uncertain, and depends, in a great measure, upon the quantity and the nature of the food. They occur at shorter intervals in children than in adults, because in the former digestion is more rapid, the secretions more profuse, the contents of the bowels not only more abundant, but fluid, and the intestinal sensibility

greater than in the latter. They are less frequent in females than in males, in so much as the absorbents extract a larger proportion of nutritious matter from the aliment, and the menstrual discharge supplies, in a great degree, the place of intestinal secretions. These evacuations, however, may be said to take place once or twice in twenty-four hours, following one or two ordinary meals; instances, nevertheless, are not wanting in which they only occur after days and even weeks; indeed, in none of the numerous functions of the body do we find habit more influential than in defecation.

The gases are more easily expelled than fæcal matter. Like liquid fæces, they can be dislodged by the action of the intestine alone, though the diaphragm and abdominal muscles most commonly co-operate with the intestinal fibres. Their passage is neither regular nor constant; certain kinds of food are more likely than others to give rise to their formation; and while there are some persons who seldom or never pass any, there are others, particularly those labouring under bad digestion, who are in the habit of doing so unceasingly.

These few observations may, I believe, be considered a fair summary of the Physiology of the Rectum and Anus; and I now proceed to their Pathology as regards those important diseases which most frequently affect these parts.

PART III.

THE PATHOLOGY OF THE RECTUM AND ANUS.

SECTION I.

PROLAPSUS ANI VEL RECTI.

THIS disease, which is a prolapsus of a portion of the rectum, and not of the anus, occasionally exists in two forms ; in the one which I shall take first into consideration, it is a partial protrusion of one or more coats of the rectum beyond the anus ; in the other, and the one of much less frequent occurrence, it is an intussusception of the upper portion of the rectum, and which does not generally protrude externally. The structure of the rectum and anus, with the relative position and immediate connexion of the surrounding parts, should be borne in mind, that the real nature and formation of these inversions may be clearly understood.

It is clearly evident that anything which tends to produce a relaxation of the lining mucous membrane of the bowel must consequently predispose to the occurrence of a prolapsus. Childhood, constitutional debility, want of tone in the muscular parts of the anus, and weakness of the intestine itself, all predispose to this complaint. Children are more subject to it than adults, because the intestine is less curved ;

the sacrum more perpendicular or less curved; the coccyx not yet ossified and movable on the sacrum; the connections of the rectum are less extensive, in consequence of the imperfect development of the prostate, urethra, and vesiculæ seminales, the abdominal viscera are more voluminous, and lastly, the mobility of the intestines is greater. Constitutional debility occurs most commonly in scrofulous children, especially females, who grow up rapidly ; in infants poorly nourished, particularly in those who have been nursed too long ; in persons who have suffered from protracted disease, or from a residence in hot climates ; and in aged persons. Want of tone in the muscular parts of the anus, exists in those who labour under compression or disorganisation of the spinal cord; who have undergone operations for fistula or fissure; who have had large foreign bodies extracted; and who have been in the habit of expelling large masses of hardened fæces. And weakness of the intestine itself is found in those who have constantly recourse to large enemata, or who are subject to excessive fæcal accumulations.

The accumulation of hardened fæces, and the distension of the anus during their expulsion, the phenomenon of constipation, is a common cause of this complaint ; for the straining to force the indurated excrements down, together with the pressure which they exercise on the bowel in descending, is exceedingly liable to protrude the mucous membrane, by elongating the cellular tissue which connects it to the muscular coat of the bowel. All those causes, however, which create an uneasiness and irritation in the rectum may be a source of prolapsus, whether there

be any predisposition or not, from a constitutional debility of the parts. Amongst these are worms, the irritation from which is sometimes almost insufferable; chronic inflammation, and ulceration of the inner membrane ; colic, especially the chronic form of this disease, to which teething children are so subject, and in whom, on dissection, the mucous membrane is found studded with numerous small ulcers ; tumours of any kind within the anus, and more particularly piles; stone in the bladder; sympathetic irritation from disease in the vicinity; pressure of the womb in females who are *enceinte*, by impeding the functions of the bowels; long habitual crying; great exertions of the voice ; violent coughing and sneezing, with those more especially, who are predisposed to prolapsus, as during such efforts the glottis is not closed, and the sphincters are not relaxed; careless use of drastic medicines, and many other causes of a less important nature, or more accidental in their occurrence.

The most usual cause of prolapsus is considered by a modern author to be "a contraction of the gut itself, which not only offers a permanent obstacle to the action of the intestine, but also prevents the ready return of blood through the part; by which the most dependent portions of the mucous membrane become infiltrated, and are permanently increased in size." That a contraction of the bowel may be a cause of prolapsus cannot be disputed, but I am of opinion that strictures of the rectum are not so very common as some surgeons would have you believe.

Prolapsus ani in young children has usually the appearance of a small vascular tumour around the anus, but in the adult, it generally takes place more gradu-

Fig 1.

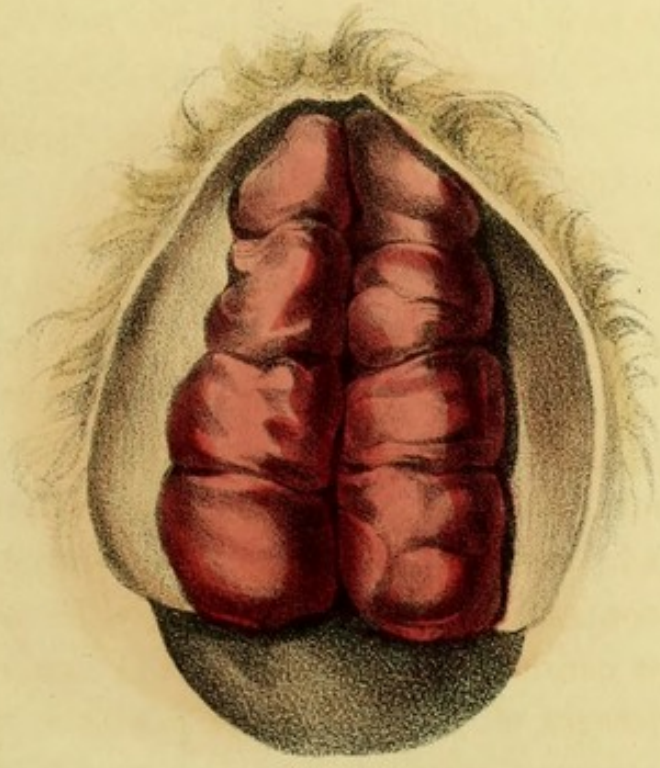


Fig 2.

PROLAPSUS ANI VEL RECTI

Fig 1. The disease in Infancy.
Fig 2. The disease in the Adult

Green lith

Printed by M & N Hanhart.

ally, forming one or two loose flaps of a pale colour, or an extension of integument in a tubular form, from the entire margin of the anus. It is not, however, the whole substance of the intestine which is usually protruded, for the rectum is too strongly attached to the neighbouring parts for the muscular coat to be easily separated, but the tumour is formed almost entirely by the mucous membrane, which has become detached from the muscular coat, and is thus folded again on itself. That this is the fact, is exemplified in the natural cure which sometimes, although very rarely, takes place, when the prolapsed portion sloughs away externally from being constricted by the sphincter muscle. As surgeons have greatly differed upon this point, I have therefore examined minutely into the morbid anatomy of the parts implicated in this disease, and give the above statement as the result of my investigation. On referring to Mr Copeland's work on these diseases, I find that he is of the same opinion. He observes,* "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 precede the disease, and form its essential character."

That the muscular fibres of the longitudinal bands of the rectum may lose their power of action or resistance, and be subject to every impression, either from

* Copeland on Diseases of the Rectum, page 73.

the contents or surrounding parts, in very old cases of disease, is nevertheless true; but these occurrences are fortunately very rare. And I presume that it is to these cases that a surgical author applies the following remark, "If, however, no means are adopted for the relief of the disease, it will continue to increase, till at last the entire portion of the lower part of the rectum will be everted and protruded at the orifice."

This disease in the adult developes itself very slowly, and it is seldom that the prolapsed portion exceeds the length of two inches from the anus, although in extreme cases I have seen it measuring five inches in extent. On its first appearance it is not preceded by any local pain whatever; after a period the tumour presents itself under the form of an inverted funnel, more or less thick round the anus, large and rounded below, and limited above, where it is continuous with the circumference of the intestine, and in the centre of the free extremity is a puckered opening for the exit of the excrements. It presents also a number of folds, of a reddish colour, soft and viscid, somewhat sanguineous, and tender to the touch. The diagnosis of this complaint from a large internal hæmorrhoidal tumour is very distinct. The latter tumour protruded beyond the anus, drags with it the mucous membrane of the rectum, which partly forms its base or neck; it is generally pyriform, smooth, and somewhat hard, and is adherent to one side only of the rectum, whereas in prolapsus the tumour is attached to the entire circumference.

When the prolapsus is recent and not considerable, it causes very trifling inconvenience, gives little pain,

and does not interfere with the general health. It will protrude at stool from the efforts necessary for the expulsion of the fæces, and immediately afterwards return spontaneously within the anus ; should it remain protruded, however, the slightest pressure with the finger will suffice to effect its reduction. Patients generally are enabled to do this themselves with the greatest facility. If the disease is allowed to continue without any effort being made for its relief or cure, it will augment by degrees, the tumour becoming larger, more difficult of reduction, and when returned will protrude again on the slightest effort. In this state it is most inconvenient; the passage of the fæces creates much tenderness, the recumbent posture is painful, and to walk is almost impossible. Yet the disease in this state may be endured for a long period, provided that the tumour can be returned after stooling, and kept enclosed within the anus; but, if it be not reduced and remains constantly protruded, the mucous membrane, exposed to the action of the air and continual friction, augments in volume, becomes fungous, ulcerates, discharges blood and pus, and eventually becomes irreducible. By degrees the health is affected, the digestion deranged, the patient becomes languid, and from the loss of blood is exhausted and dies. I remember seeing a child eight years of age, who had had a prolapsus for six months, which could not be kept reduced. The tumour without being absolutely painful, continually discharged a stream of blood. This child eventually died of consumption. Also an elderly lady, sixty years of age, who for twenty-five years had been afflicted with prolapsus. The tumour first descended at stool, when she easily returned it,

but a minute afterwards it protruded again as large as a man's fist, and in twenty-four hours became livid, fetid, and bled profusely. I felt confident that I could with complete safety cure the prolapsus, but the patient objected. She afterwards died from excessive hæmorrhage.

Sometimes, in those cases in which the disease is comparatively of recent formation, and the bowel has protruded considerably, the sphincter muscles will contract spasmodically around the neck of the tumour in such a manner as to intercept the free course of the circulation. Swelling and violent inflammation of the prolapsed portion supervenes, and the patient is soon affected with the whole course of symptoms which occur in cases of strangulated hernia.

To prevent, therefore, the protruded bowel becoming fixed, as above described, the reduction of the tumour, or return of the gut to its natural position, should be effected with as little delay as possible. In performing this operation, the fingers should be previously anointed with oil or lard, and the pressure made should be gentle and gradual. That portion last protruded should be first returned, when the remainder will generally follow without much difficulty.

If the prolapsed portion is very large and has been a long time protruded, its reduction will not be effected without much trouble, particularly in children, who cannot be kept from crying and straining during your endeavours. After applying for some minutes very cold water to the surface of the tumour, which will reduce the inflammatory symptoms and absorb the air, you make gentle pressure around the integuments of the protruded intestine, and with the fore

finger of the right hand push by degrees the central portion of the prolapsus within the anus, retaining the same there by pressure from the fingers of your left hand. This operation will sometimes take an hour or two to perform, and great gentleness should be employed. In all these cases it is absolutely necessary that the patient, old or young, should wear a T bandage after the prolapsus is reduced, and continue to do so until its permanent cure is effected.

Many methods have been employed for the cure of this disease. In its early stage, in adults, injections of cold water; infusion of roses; decoction of oak-bark, tormentil, pomegranate; or a solution of alum or sulphate of zinc, will be found frequently effective; the bowels being at the same time kept gently open with some mild aperient, and the elastic bougie passed on alternate days. In cases of procedentia recti in infants, an occasional dose of calomel and rhubarb, with an injection, made of one drachm of the tincture ferri sesquichloridi and a pint of cold water every morning, is productive of great benefit. Indeed, Sir Benjamin Brodie states that he has never seen a prolapsus of the rectum in a child which was not cured by this treatment. It will be found also very advantageous to give infants and children afflicted with this complaint, and not troubled with worms, a more solid and nutritious diet, which will often remedy the extreme laxity of fibre, to which this affection is owing; and if the infant be not very young, but still nourished by the breast, it is advisable to have it weaned as soon as possible. Some surgeons, in adult cases, have introduced into the rectum a tent of lint well lubricated with simple ointment, retaining it in its position by a

bandage. This is, however, a very inconvenient and often a futile method to adopt, and as it is only of benefit in cases of very recent origin, the elastic bougie will be found considerably more advantageous, and very effective when judiciously employed.

We read of rather a rough practice amongst the ancients, who employed the actual cautery for the removal of the protruded part in the advanced stage of this disease; and I consider that the practice of some surgeons of the present day is little better than the old barbarous custom of the red-hot iron. I allude to the excision of the prolapsed membrane by the bistoury or curved scissors. The hæmorrhage from this operation is excessive, not only at the time of performing it, but afterwards, when the bowel has been returned within the anus; the pain also is very great, and the healing process generally very tedious.

Sir Charles Bell* mentions a fatal case of prolapsus of the rectum, in which the peritoneum was carried down with the gut, so as to reach beyond the sphincter, and make part of the prolapsus. He observes, "If this prolapsus had been cut off, an opening would have been made into the abdominal cavity, and death inevitably must have followed." He further states, that a physician present at this post-mortem examination, assured him that he had seen death the consequence of the operation of excision on a prolapsus similar to this.

Before any operation however, is performed, it is absolutely necessary to examine the bowel with a rectum bougie, in order to ascertain if any stricture

* Bell on Diseases of the Urethra, Rectum, &c., page 32.

exists; for if there be a contraction of the intestine, we at once discover the chief cause of the prolapsus, to which we accordingly must first give our attention and remove it, before we proceed to the treatment of the secondary complaint. Should, also, the mucous membrane of the rectum be extensively ulcerated, either in conjunction with stricture or not, this affection should likewise be attended to previous to the performance of any operation for the cure of the prolapsus.

The following cases, together with some others in another part of this work, will elucidate my peculiar mode of treatment:—

In September, 1845, I was consulted by a gentleman for a prolapsus of the rectum, to which he had been subject for several years; and his bowels being generally regular, he could not assign any cause for its occurrence. Some time previously he had consulted an eminent surgeon, who had directed him to use the decoction of oak-bark as a lotion, and to inject into the bowel some cold water before going to stool. The lotion relieved the bleeding which occurred, and the cold water facilitated the evacuation of the fæces, but the prolapsus remained uncured.

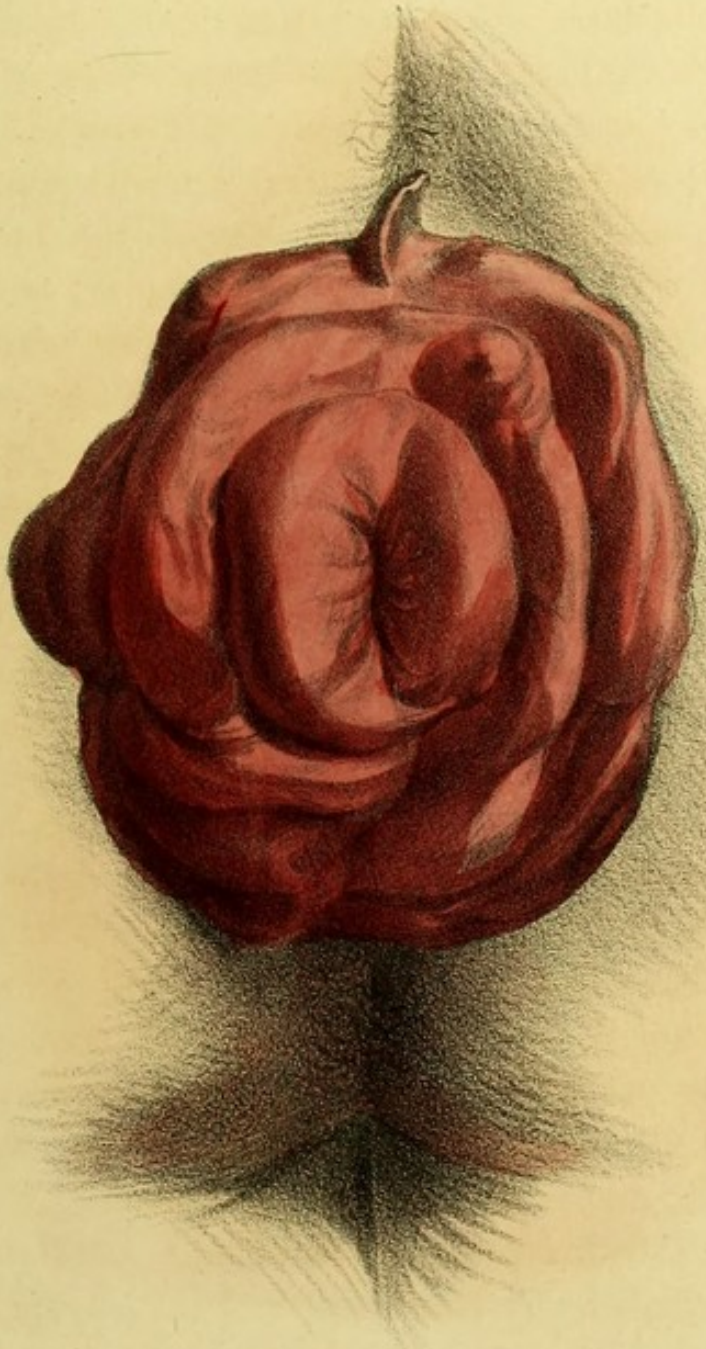
On examination, a little straining protruded a large mass of the mucous membrane of the intestine. It formed a tumour about the size of a large orange; this protrusion the patient informed me was a daily occurrence. The left side of the anus also presented a considerable enlargement, from a relaxed fold of integuments, puffed up with œdema, and full of enlarged and varicose veins. Having returned the protrusion, I prescribed a dose of castor oil to be

taken the following morning. The next day, after the bowels had been relieved, I applied my dressing to the prolapsus. The operation gave him no pain whatever at the time, and very little afterwards. On the second day a dose of castor oil was administered, which produced three free and copious stools, without the least protrusion of the bowel, although, for a long time before he consulted me, he said he never could go to the water-closet without the part coming down, frequently with much pain, always with bleeding, and difficulty in the reduction. The evacuation was attended with very little soreness, and was perfectly free from hæmorrhage. I requested that he would observe the reclined posture, so as to avoid the whole weight and pressure of the abdominal viscera upon the muscles supporting the anus so soon after the operation.

For ten days the bowels were kept gently opened by a mild aperient medicine; and I then ordered an injection of oak-bark daily after an evacuation, and a tepid hip bath early every morning, with a view to assist in restoring the local tone of the bowel and neighbouring parts generally. Two years afterwards he informed me that he had paid constant attention to his health, and to the regular performance of the functions of the alimentary canal, and that the rectum had remained perfectly free from the least perceptible weakness.

A lady, from Brighton, consulted me in June, 1846; she had been for a lengthened period subject to constipation, and in her youth had suffered from

Plate II.



PROLAPSUS ANI VEL RECTI

The Advanced Stage in the Adult.

xxleben lith.

Printed by M & N Hanhart

an obstruction in the bowels, which, for awhile, rendered an evacuation exceedingly difficult; from that time she had always experienced considerable pain and difficulty on going to stool, and was likewise very much troubled with flatulence, producing great distension, so that she was often under the necessity of removing her stays for her temporary relief. The prolapsus followed a severe labour she had twelve years previously to her consulting me, and the complaint had been gradually becoming worse ever since. At first, the bowel protruded only occasionally; but latterly, some portion of the intestine had remained constantly down.

On examination, the inner membrane, which formed the protrusion, on the right side, had become thickened, so as to present the appearance of a soft excrescence, resembling a mulberry in colour and size. There was also a similar appearance on the left side, but to a lesser extent. The whole surface of the protruded portion of the intestine had a highly vascular aspect, and although much thickened, it was perfectly soft. On introducing a bougie into the rectum, I found a stricture about four inches from the anus; it was therefore necessary to continue the use of this instrument until the contraction of the bowel was considerably removed before I proceeded to operate upon the secondary complaint. This I was enabled to do in about a fortnight; when I applied my dressing to each side of the protrusion. Very little pain followed the operation; the bowels were relieved by a dose of castor oil on the second day, with the greatest ease, no protrusion whatever occurring at the time of the evacuation, or afterwards;

and in one month from the commencement of my treatment this lady was perfectly restored to that ease and comfort to which she had been a stranger for several years.

Mr Dixon, surgeon, of Chelsea, requested me to visit a lady who had been afflicted with a protrusion of the mucous membrane of the rectum for eighteen years. At the period of her consulting me she was greatly exhausted by pain, purulent discharge, and confinement, for the moment she stood erect, the protrusion occurred. She had tried all possible local remedies, as leeches, fomentations, anodyne and astringent lotions and ointments, at the same time that she took internally an endless catalogue of drugs, and besides, had persevered for a lengthened period in the use of sea-bathing and sulphurous waters.

On examination, I found that the protruded membrane consisted of a circular fold, which was of a firm indurated structure; indeed, when the part was reduced, it felt like a thick welt of leather, or cartilaginous ring, which was immediately prolapsed by the erect position, coughing, or sneezing. Some surgeons might have mistaken it for scirrhus, but I was satisfied that the peculiar appearance and condition of the part was the result of repeated attacks of inflammation alone. I accordingly recommended for the removal of the complaint the means I had successfully adopted in other cases, to which she immediately consented, and I then prescribed an opening draught to be taken the following morning early.

On visiting my patient the next day, I found that

the medicine had operated copiously, and the bowel protruded as before. I immediately applied my dressing to the protruded fold of membrane. The operation gave very little pain, and with the assistance of an anodyne injection, the succeeding day was passed without the occurrence of a single bad symptom. On the third day the bowels were relieved by a dose of castor oil, and no protrusion whatever occurred at stool, although there was some degree of tenderness. For this I administered another anodyne injection, which speedily afforded the desired relief. The following week the bowels were kept gently open; not the least recurrence of the prolapsus took place; and at the expiration of a fortnight the parts had completely and permanently recovered their normal condition.

When the cure is completed, it is absolutely requisite that great attention should be paid by the patient to the removal and avoidance of all such causes as are known to have a tendency to bring on the complaint. Everything tending to cause either diarrhœa or costiveness should be avoided. In most cases, however, there is a great inclination to constipation, which must be obviated by the administration of half an ounce of castor oil, taken early every morning, or alternately, as circumstances require. The tone of the intestine must be restored by the occasional use of injections of alum and decoction of oak-bark, or vinegar and cold water, thrown up after the bowels have been relieved. A fresh protrusion may be prevented in infants, by making them sit upon a high night-stool, with their legs unsupported.

We now have to consider the second form of this

disease, and which is more legitimately a prolapsus of the rectum, inasmuch as the whole substance of the upper portion of the bowel is concerned, in what is denominated an

INTUS-SUSCEPTION OF THE RECTUM.

This complaint, as I have previously mentioned, is an invagination of the upper part of the bowel into the lower portion. It sometimes, however, consists of a part of the colon having fallen into the upper portion of the rectum; but this is of rare occurrence. The nature of this affection has been generally misunderstood, and little inquired into; and when I consider the immense difficulty which the situation of the disease presents in any attempt of a cure through surgical aid, and even the almost impossibility of affording relief, this indifference is not altogether a matter of surprise. Those causes which give rise to the common prolapsus of the rectum previously considered, may tend to the formation of this species of the complaint. In females, it is generally brought on through the efforts made during labour; and in children, the constant crying during the process of teething tends to produce it; and also excessive scholastic flogging to which youths are sometimes subjected.

The tumour which is the result of this invagination is of various lengths. A French author* mentions a case where it was as long as the fore-arm, and the thickness of two. The invalid was in the habit of

* De Chirur. Op. C. de An. procid. page 583.

replacing it with the greatest facility. De Haller also relates the case of a female, where the colon was invaginated into the rectum, and protruded beyond the anus to the length of a foot; it was eventually the cause of death. Those cases which have come under my own observation have all consisted of the invagination of the rectum itself; the tumour seldom exceeding three inches in length, and presenting a cylindrical form, with a red surface, which discharged both blood and mucus. The inferior extremity has a puckered opening into which the finger can be introduced; and its superior extremity or base is more or less contracted.

The symptoms and the danger of this malady depend chiefly upon the rapidity of its formation. When it occurs gradually, from the straining at stool consequent upon constipated bowels, or efforts made in difficult micturition, the patient may experience very little inconvenience for a long time; but where it arises suddenly from any cause more accidental in its occurrence, symptoms similar to those of strangulated hernia come on with violence, which in a little time may terminate in death. In these serious cases, however, a natural cure sometimes takes place. The portion of the intestine invaginated becomes gangrenous, and sloughs away where it is constricted; the separation of the diseased part not interfering with the natural course of the canal, but, on the contrary, leaving it perfectly free from obstruction. This fortuitous circumstance is fully illustrated in the following very interesting case, which is taken from a French author on Inflammation:*—

* Etudes sur l'Inflammation, par C. L. Somme.

"A young female had been affected for a long while with a contraction of the rectum, three or four inches above the anus; it was followed by ulcerations in this part. The bridle which formed the ring was hard, callous, and so contracted that it only allowed liquid matters to pass: hence arose obstinate constipations and colics. I tried dilatation with bougies, which had momentary success. When the patient was better she neglected herself, and the contraction produced the same accidents. I proposed to divide the bridle; she would not submit to this operation, and preferred employing herself the dilating instruments. I had lost sight of this female, when I was called in to a consultation with a physician. There had been constipation for three weeks; she had vomitings, the belly swelled and very painful violent colics, and fever. The physician, not knowing the infirmity which the patient laboured under, regarded this affection as enteritis, and with reason, for there really was intestinal inflammation. The constipation was overcome by lavements, and very copious sanguineous diarrhœa followed. Besides the very acute pain in the lower belly, she suffered in particular on the left side of the umbilicus. The evacuations became free, and the fever ceased. Some days after I was called in great haste; a piece of membrane had passed by the rectum, which had frightened the nurse; by drawing this slightly a portion of intestine, about a foot in length, came away. This was not a false membrane, but wholly the intestine; internally the villous coat was black; externally the surface was smooth, and there was seen a groove indicating the attachment of the mesentery. Undoubtedly the continual efforts to expel the excrements, and to overcome the obstacle,

had been the cause of an invagination, in consequence of which the intestine mortified, and detached itself. The patient suffered for some time with sanguineous and purulent stools, but was eventually cured."

The surgical art admits of one operation for this disease, and which has certainly been performed with success. It consists of an incision being made into the abdomen, and the strangulated portion of the intestine liberated. Peritonitis, and the other evils consequent upon an operation for inguinal hernia, may also be expected to follow this operation, which is only justifiable in extreme cases, when the life of the patient is in immediate question.

Medically, our efforts are generally but palliative. Crude mercury, or small shot swallowed to the extent of two or three pounds, have both been tried with very little benefit. When the invaginated portion is very little constricted, it is advisable to inject into the rectum, with some force, a pint or more of cold water, and directly after each daily evacuation of the fæces, to introduce an elastic rectum bougie of middle size, but longer than those usually made. The bougie should be passed up the bowel to the extent of twelve inches at least, and allowed to remain from ten to twenty minutes, according to the feelings of the patient; the pressure of the bougie against the prolapsed portion of the intestine will render the reduction easy of accomplishment, and its continued presence will consolidate considerably the relaxed part of the bowel. The patient should afterwards strictly observe the horizontal position, keeping the hips considerably higher than the elevation of the chest ; and the usual means also must be employed

for strengthening the bowel generally, and avoiding constipation.

A few months since I was consulted by a lady who had laboured under this affection for some time previous to making my acquaintance, during which period she had colic pains, vomiting, constipation, and hysterical symptoms. She stated that she had repeated calls to stool, but I found that these discharges consisted of little else than a sanguineous or puriform mucus, which, however, was rather abundant. She asserted that there was something within the bowel, and attributed all her sufferings to it. This led me to make an examination, when I discovered an intus-susception of the upper portion of the rectum. The part which was invaginated was rather firmer and harder than natural, with a central opening about an inch in diameter. I ordered her a light diet, and to observe the horizontal position. I also prescribed a pill to be taken at night, composed of two grains of blue pill, and a like quantity of James's powder; with two teaspoonsful of castor oil in a little warm milk the following morning early. After her bowels were evacuated, I daily introduced into the rectum ten inches of an elastic bougie of middle size; this she retained for about ten minutes the first time, but afterwards longer, as she became accustomed to its use. On the instrument being withdrawn, an injection was given composed of alum and the decoction of oak-bark, and which was retained as long as possible. Under this treatment she recovered at the expiration of a month.

This mode of treatment I have not only found afford relief, but even effect a cure. In those cases

however, where the base of the prolapsus is greatly constricted spasmodically, the fume of tobacco has been used. A common clay pipe answers every purpose, the small end being introduced into the rectum, whilst the bowl is filled with tobacco, which being ignited, is puffed with a bellows as often as it may be deemed necessary; pressure also being made round the verge of the anus, to prevent the escape of the smoke. No more than two or three puffs of smoke should be given at one time; and indeed, the greatest caution ought to be observed in the administration of this dangerous and uncertain remedy.

SECTION II.

PILES, OR HÆMORRHOIDAL TUMOURS.

PILES, commonly so called, but professionally termed HÆMORRHOIDS, are tumours situated in and about the rectum. They have generally been divided into two kinds; namely, blind or external, and bleeding or internal. Those authors who have written upon this disease entertain various opinions relative to the nature of piles. Some express their belief that the blood discharged from them comes neither from arteries nor veins, but from the intermediate capillary vessels, which form the minute extremities of arteries and veins;—whilst the late Mr Abernethy espoused the doctrine that piles were the result of the formation of new vessels.

Sir Benjamin Brodie* considers them to be dilated veins, and gives the following description of *blind* piles: "A patient consults you, complaining of swelling, pain, and tenderness, in the neighbourhood of the anus. You examine the part, and find on its verge a number of tumours, about the size of the end of the thumb or finger, with broad bases, not very distinct from, but running one into the other,

* Sir B. Brodie, op. et vol. cit., page 743.

covered by the common integuments, and of a more or less purple appearance. If you cut into one of these tumours, there is immediately a flow of venous blood, followed by a small quantity of arterial blood, such as might arise from a cut anywhere else. On making a section of the tumour, it presents to the eye the appearance of dilated and tortuous veins. In fact, you cannot doubt that they are dilated veins ; they are exactly like varicose veins of the leg. The tumours which I have described are situated below the sphincter muscle, and we call them *external* piles." The same author observes, relative to *bleeding* piles: "Another patient consults you, complaining also of a swelling at the anus, accompanied by pain and tenderness. You examine the part, and find a number of tumours of a different kind. These, too, have broad bases, and run one into the other, forming a circle, which projects below the anus. They are covered, not by the common integument, but by the mucous membrane of the rectum, protruded from above the sphincter muscle. On making a section of one of these tumours, there immediately flows venous blood, and arterial blood may flow afterwards. On looking at the divided surface, it is evident that the tumour was composed of a large tortuous vein. It is the accidental enlargement of these tumours which causes them to protrude externally ; but they are formed above the sphincter muscle, and we call them *internal* piles, or hæmorrhoids."

The celebrated Mr Copeland coincides in the opinion of the late Sir James Earle,* who considered

* Pott's Works, by Earle, vol. 3.

piles to be " a distension of the hæmorrhoidal vessels," as described by the learned author previously quoted; in this description most modern surgeons also acquiesce. Mr Syme,* late Professor of Surgery in the London University, who has written an excellent little work on the subject, divides hæmorrhoidal tumours into three species, namely, those which depend on enlargement of the veins at the extremity of the rectum; external hæmorrhoids formed by enlargement of the thin skin and subjacent cellular texture at the verge of the anus; and those which consist of a vascular development of the mucous membrane, constituting tumours much disposed to bleed, when protruded from the anus; this latter description he considers to be internal piles.

Foreign authors are also divided in their opinions relative to the nature of piles. Laennec coincides with Mr Abernethy, whilst Le Dran represented them as a number of cysts, containing arterial blood. Morgagni and Petit considered them to be varicose veins, of which opinion was Dupuytren.† Many others have written upon the subject, but the above authors will be found fully explicit on this particular point.

My own experience leads me to coincide in the opinion given by the late Sir Astley Cooper in his excellent lectures, and to consider the generality of piles to be, in their early formation, a simple enlargement of the hæmorrhoidal veins, but which are subsequently liable to the various modifications peculiar

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* James Syme, on Diseases of the Rectum. Edin.

† Leçons Orales de Clinique Chirurg., t. 1, page 340.

to varicose veins. When the hæmorrhoidal tumours are fully developed, I divide them into two kinds, namely, *cutaneous* and *mucous;* the former being external, and situated at the circumference of the anus; the latter, internal, within the rectum, but generally at its inferior part.

The *cutaneous* tumours are those which are commonly denominated *blind* piles, and their number, size, form, and colour, present peculiarities worthy of observation. In the first attack there is ordinarily but one or two tumours, separate from each other; but subsequently the number may augment considerably, and become very indistinct from one another. They are generally round, with a base longer than their summit; but sometimes they present an elongated form, and are attached to the margin of the anus by a small pedicle. Their surface is bright, smooth, soft, and of a red or bluish colour, according to the quality of the blood which they contain. They are often, however, whitish, flabby, shrivelled, and appear to be a simple prolongation of the cuticle, resembling very much an ordinary excrescence. These external hæmorrhoidal tumours are covered with the common integument surrounding the anus; and, although frequently very painful, are not liable to bleed, except they are punctured accidentally or otherwise.

The *mucous* tumours are those which are usually called *bleeding* piles; and these are of less frequent occurrence than the cutaneous, previously mentioned. In their very early state, as I have before observed, they consist simply of a varicose hæmorrhoidal vein; but after occasional attacks of inflammation, the adjacent cellular tissue becomes infused

with lymph, and the tumours then present a round circumscribed form, having broad bases running one into the other, and are covered by the mucous membrane of the rectum. They vary in size, from a small grape to that of a large plum; and are of a pale reddish colour when in a quiescent state. When inflamed they have a bright-red appearance; and if congested are of a dark-brown or purple colour. Ordinarily, they are not very tender to the touch; but when in an inflamed condition they are very irritable. They are mostly protruded beyond the anus, when of a large size, at each evacuation, and have then been mistaken, by those who are unacquainted with the subject, for external or cutaneous piles, polypi, or even prolapsus of the rectum; and it is in this situation, the mucous membrane being in an inflamed condition, that they are very liable to bleed copiously from the action of the sphincter muscle. If gentle pressure be made, they can generally be returned without much difficulty within the rectum, and above the sphincter ani; but this point cannot be effected with those which are formed externally, and possess a cuticle covering.

The blood that proceeds from piles situated internally, may be of two kinds. It is purely of a venous colour when exhaled from the surface of the mucous membrane covering the tumours which are not exposed to accidental compression; but if a violent effort be made, and the tumours are protruded beyond the anus, the sphincters will contract spasmodically around them, and then the blood, which is forced out in a fine stream from one or more points, will be of a pure florid or arterial colour.

From this and other circumstances of less moment, I am led to believe that the capillary vessels are frequently affected in the formation of hæmorrhoidal tumours.

With regard to the hæmorrhage which occurs more or less frequently in hæmorrhoidal disease, many extraordinary cases are recorded; in some of them, however, this flux is mentioned as arising from an effort of nature to maintain the balance of the circulation, rather than as a consequence of local disorganization. The quantity of blood discharged may vary from a few drops to even a pint at a time; but it must not be forgotten that the admixture of other fluids may impose upon the unwary, and lead them to believe that the loss of blood is much more than the absolute amount.

Panaroli cites a case in which a Spanish nobleman is stated to have voided every day, for four years, a pint of blood from some hæmorrhoids, and yet enjoyed perfect health! Montanus, according to the report of Schwevcher, saw a patient who had passed two pounds of blood for forty-five successive days, and finally recovered. Cornarius mentions the case of a gentleman, who, after drinking freely of Hungarian wine, lost two pounds of blood from the nose, and six pounds on each of the four following days from the anus. Nevertheless, he got well without any remedy. Pomme gives the case of a man thirty-six years of age, of a melancholic disposition, who for a long time had been subject to an excessive hæmorrhoidal flux, for which he had tried many remedies, without obtaining relief. At length, having adopted the idea that it had a venereal origin, he underwent an antisyphi-

litic course of treatment, in consequence of which the flux disappeared. However, he was soon attacked with distressing symptoms of cholera, when the hæmorrhage re-appeared. During a month he lost nearly a pint of blood daily, which was followed by colic pains and swelling of the face and extremities. By a generous diet, nutrient injections, and cold baths, the hæmorrhage was arrested, and exercise on horseback rendered him convalescent. Lanzoni cites the case of a priest, who daily passed a pint of blood per anum. Ferdinand states that a girl, twenty years of age, of a sanguineous temperament, sedentary habits, and endowed with much vivacity, in consequence of violent vexation arising from jealousy, became affected with hæmorrhoids, and for many months daily evacuated about half a pint of blood while at stool. The menstrual discharge ceased, her face became œdematous, and she was rendered so weak as to be unable to walk; nevertheless, under proper treatment she perfectly recovered. Harris relates the case of a widow of meagre frame and bilious temperament, who lost upwards of four pounds of blood from hæmorrhoids in a few hours; during the night she had nearly died from exhaustion; the bleeding, however, was arrested by the application of cloths steeped in spirits of wine. Bozelli mentions the case of a tailor, who lost as much as ten pounds of blood at a time. This man was, nevertheless, vigorous and of a jovial character. The flux was diminished by means of the syrup of roses. Spidler saw a potter, who after having suffered for a week with pain in the loins, was seized with a violent colic and severe vomiting. A cathartic was administered, which relieved him; but he passed from twelve to fourteen

pounds of blood, of a bright red colour, from the anus in twenty-four hours, each discharge being accompanied with a slight colic pain. After many remedies were tried in vain, the hæmorrhage was arrested by a stimulating injection. Hoffman states that he knew a widow, fifty years old, of a very full habit, who, in consequence of an indolent course of life and full living, was for eight years subject to hæmorrhoids, at the same time she continued to menstruate. The uterine discharge having ceased, and being bled but once, she was seized, towards the autumnal equinox, first with lassitude and then with coma, for which she was bled in the foot, and took cold water in large quantities without any benefit. At the end of two days, however, a stimulating lavement was administered, when an excessive flux of blood occurred, amounting in twenty-four hours to more than twenty pounds; the consequence of which was a cessation of the coma. Her strength gradually recovered by the employment of invigorating and gentle astringent remedies, together with enemata of cold water. Smetius relates the case of a man forty years of age, who passed per anum at least thirty pints of blood in two or three days. He was cured by a tonic plaister. And Pezold speaks of a Saxon chevalier, who in one attack lost sixty pounds of blood! No doubt exists in my mind, but that these cases abound with exaggeration.

An opinion commonly prevails that this hæmorrhage is of a salutary nature, and on this account many persons have doubtless been persuaded to submit to all the pain and uneasiness which the hæmorrhoidal disease occasions, rather than seek its cure. Nevertheless, this discharge, when excessive and frequent,

will undermine considerably the original vigour of the constitution; and, although in elderly persons the stopping of the hæmorrhoidal flux suddenly might be productive of serious consequences, yet this theory does not apply to individuals in the early or middle age of life, for they should on no account permit the hæmorrhage to continue for a lengthened period, as a premature death might very probably be the result. That fatal cases of the hæmorrhoidal discharge could be cited, our medical records can abundantly prove; indeed, Arius, and the celebrated philosopher Copernicus, are stated to have thus bled to death.

The premonitory symptoms which generally betoken the formation of piles, are, pain in the loins and back, tension in divers regions of the abdomen, heaviness, head-ache, dizziness, constipation, flatulency, numbness of the lower extremities, and fever in a more or less degree. They frequently, however, appear as a simple local affection, unattended by any indications of disorder in other parts of the body.

The cutaneous tumour when small is generally attended with itching, a sense of fulness, and pain upon pressure; but when large, the pain is constant, and accompanied with more or less throbbing, and contraction of the sphincter. The patient becomes very feverish from the constant severe anguish, and is unable to walk, or take any other kind of exercise. The bowels are confined, not from any mechanical obstruction to the free passage of the excrements, but from the will of the invalid, who dreads the increased pain which occurs at stool, from the necessary stretching of the sphincter muscle, spasmodically contracted,

and the contact of the fæcal matter with the tumours, which, combining with the serous discharge emitted from their surface, becomes a source of considerable irritation.

The symptoms of the mucous tumours differ very much from the former, inasmuch as their early appearance is attended with very little uneasiness or knowledge of their existence. When, however, from repeated attacks of inflammation, they have become enlarged, the symptoms become urgent. The bowels are confined, the bulk of the tumours acting as a mechanical obstruction to the discharge of the fæces, and the burning heat and pain excessive and continuous, more particularly after stooling. There is also a sense of weight in the loins, hips, and thighs; a mucopurulent discharge from the rectum; flatulence; painful, frequent, and difficult micturition; rigors; cold and dry skin; white tongue; hardness and contraction of the pulse; anxiety; head-ache; syncope; and other indications of inflammatory fever. The evacuations are generally attended with a protrusion of the tumours, and should a flow of blood occur, the febrile symptoms are for a while relieved; but, if this hæmorrhage does not happen, the inflammatory process may proceed to suppuration.

The phenomenon, therefore, of hæmorrhoidal tumours, are always accompanied with inflammation in a more or less degree. This acute inflammation, after having existed for a few days, will sometimes subside gradually, together with the heat and pain from the tumours, which will also diminish in size; but this relief is only temporary, for the blood being again urged towards the anus, the varicose veins

become re-filled, the tumours enlarged, and the symptoms recur with more severity. The impetus given to the circulation on each occasion generally arising from some acidity in food or drink, or from some other cause of a more accidental nature, as violent exercise, or excessive venery.

Piles are produced from various causes. In some patients it is difficult to fix on any specific reason for their origin, except it be that of an hereditary disposition, probably arising from the conformation or particular structure of the parts. It is, however, certain, that anything capable of retarding the free circulation of the blood through the hæmorrhoidal veins may occasion the disease. The poor I have generally found to be less subject to this complaint than those whose station in life is more elevated; and this is easily accounted for, when we consider the different mode of life in the various classes of society. The diet of the former is more simple, and contains less excitable matter; they also take much exercise and live constantly in the open air, whilst the latter live more luxuriantly, and from their sedentary habits, are more liable to diseased liver and constipated bowels. Thus we find that piles are more common in large cities and towns than in the open country; also in northern climates rather than in those nearer the equator; and it is from the peculiarity of diet and general habits alone of persons residing in hot climates, particularly the Turks, Greeks, and other people of the eastern countries, which cause the diseases of the rectum to be of frequent occurrence amongst them. Changeable weather, however, such as we suffer from in this country, is a frequent source

of these complaints; indeed the number of persons in England thus afflicted is immense, and which I attribute to the accumulation of blood in the internal organs, when the surface of the body which has been hot becomes suddenly chilled by a rapid change of temperature. These conclusions are not merely speculative, but absolutely derived from observation during a residence in various countries.

In general, it is between puberty and the commencement of old age that the hæmorrhoidal affection manifests itself; but no period of life, however, is exempt. The infant, during the early months or first years of its existence, and the individual arrived at the last term and venerable period of life, may severally be attacked with piles for the first time. There has been great diversity of opinion as to the comparative frequency of hæmorrhoidal affections in both sexes. My own experience leads me to believe that males are more subject to them than females, and this is in accordance with what we ought to expect; for the functions of the uterus, so long as they exist in a healthy state, should be sufficient to rid the system of any superfluous blood. Indeed, with women, piles generally arise from local causes of a temporary nature, such as an irregularity in the menstrual discharge, or its cessation at the proper period of life, and pregnancy, the pressure of the gravid uterus upon the blood-vessels impeding the free circulation. If from an irregularity or a cessation of the natural menstrual discharge in women of a plethoric habit, where the system has become surcharged with blood, the vessels of the rectum exhale the superfluous fluid, I always look upon the hæmorrhage as a fortunate occurrence,

for in this way a fatal attack of apoplexy or some other disease may be prevented; and I would encourage, in a female of such temperament, a moderate discharge of blood per rectum by the administration of those medicines, as aloes, colocynth, &c., which possess a particular influence upon the lower portion of the alimentary canal. Although the sanguine and bilious temperament, and the plethoric constitution are the most exposed to an attack of piles, yet no temperament or constitution whatever is exempt. Those individuals, however, who have been subject to epistaxis, or bleeding from the nose, but which has unexpectedly ceased, and they who have suddenly quitted an active for a sedentary life, are very liable to suffer from this hæmorrhoidal affection.

The principal causes, however, which produce piles with the generality of individuals, are habitual constipation, and the prolonged efforts made in voiding the hardened fæces, or the discharge of the urine, retained from some specific cause, especially stricture of the urethra; also the pressure of foreign bodies in the rectum; worms; the frequent use of warm lavements, or emollient fumigations; the ignorant use of drastic and other medicines, particularly empirical nostrums, which, if they are not always the origin, generally aggravate the disease to a serious extent; high-seasoned food, and the various unnatural mixtures which an artificial cookery affords; immoderate use of spirituous liquors, and large potions of strong coffee; organic disease in the vicinity, as of the prostate, bladder, and uterus; the suppression of an habitual sanguinary discharge; the sudden healing of an old ulcer, or of an issue which has been established for a

long period; and lastly, sedentary habits and excessive venery.

The inflammatory attacks occurring in cases where the tumours are situated internally, are liable to be attended with a variety of serious consequences. The violent efforts made for the expulsion of the hardened excrements during an attack of inflammation may protrude the enlarged tumours externally, and the sphincter being supernaturally excited, spasmodically contracts around them; they then speedily augment in size to such an extent as to render their reduction absolutely impossible. From a bright red colour they become bluish or black, together with the portion of mucous membrane which has been displaced and protruded with them, and which takes the appearance mentioned in the previous observations on the prolapsus ani vel recti. The patient thus affected suffers extremely from the violence of the pain, which extends to the perinæum, bladder, and abdomen; and if prompt and proper aid is not given, gangrene attacks the protruded tumours, and the membraneous ring which surrounds them. This may be followed either by a radical cure, or mortification, which may terminate fatally.

Sometimes there is but one mucous tumour, not only very large, but situated very near the external orifice, which projects through the sphincter and causes very great inconvenience. Not long since I operated in a case of this description, in which the mucous discharge was very considerable, the surrounding parts were much engorged, and the patient suffered not only from the friction which his clothes exercised on the protruded tumour, but also from an

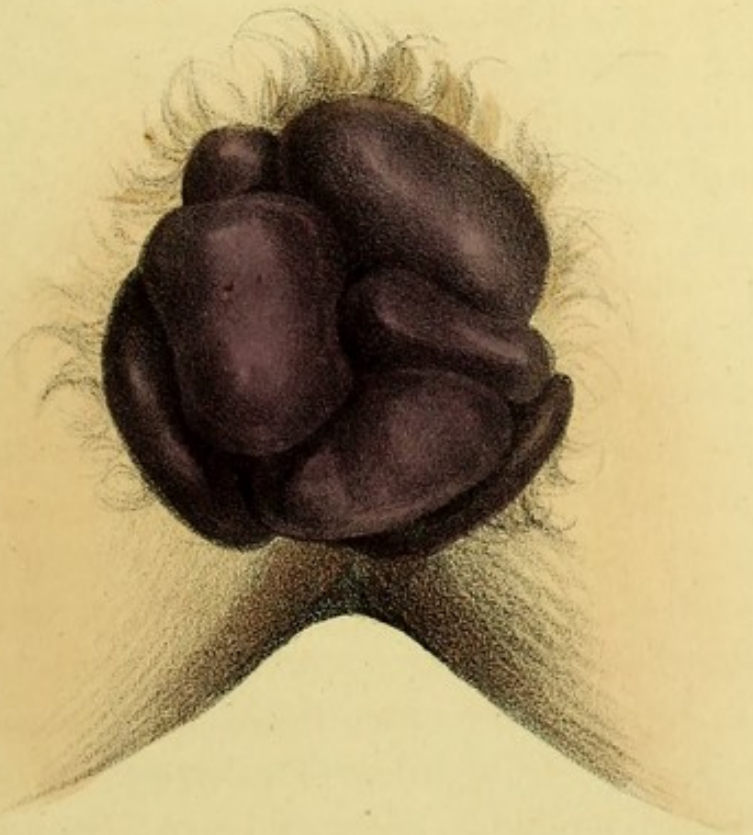
irregular and painful contraction of the sphincter. The relief, however, which he obtained from the removal of the tumour was immediate and permanent.

Very often, in cases of internal hæmorrhoids, the sphincter becomes preternaturally relaxed, and the tumours, in protruding, drag along with them a considerable portion of the inner membrane of the rectum, forming a protrusion so extensive, that persons thus afflicted postpone the calls of nature until they are about to retire for the night, in consequence of the difficulty they experience, and the time they require to reduce it, particularly as the horizontal position is necessary for this purpose. In these cases the protrusion not only occurs when the patient walks, but also when he attempts to ride in a carriage, and thus gives rise to great uneasiness and mucous discharge.

It not unfrequently happens, in consequence of the great inflammation which occurs in cases of hæmorrhoidal tumours, that suppuration supervenes; the pus collecting in the form of an abscess in the substance of the tumour. If the contained pus does not penetrate the surface of the tumour, or it is not discharged by a puncture being made for its exit, it speedily insinuates itself through the adjacent cellular tissue, and thus the abscess will degenerate into a fistula in ano.

With regard to the hæmorrhage which occasionally attends the early formation of piles, when free from the morbid swelling which subsequently forms, I would advise, if the discharge is considerable and frequent, and renders the patient weak and nervous, that a drachm of the confection of black pepper be taken three times in a day, and, if the bowels are torpid, that a little confection of senna, with a small

Plate III.



PILES, or HÆMORRHOIDAL TUMOURS.

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portion of sulphur, be also administered at bed-time. A sedentary life should be avoided, and early rising and retiring, with moderate exercise and plain diet, adopted, by which the secretions will be increased and the circulation equalized. The rectum in extreme cases can be injected with an infusion of catechu and alum, in water; spirits of wine; port wine; the tincture of the sesquichloride of iron and water; or, what is very effective, a solution of tannic acid and cold water. Keeping the body in the horizontal position and perfectly cool, and the administration of an occasional dose of the acetate of lead with opium internally, is also necessary in very urgent cases. When the hæmorrhage, however, has assumed a passive character, and the patient by degrees has become exhausted, we then can administer the sulphate of iron and disulphate of quinine internally with great advantage; whilst sea air and bathing will also be beneficial. After the cessation of the hæmorrhage, the enlarged veins can be treated by compression with the rectum bougie, which may be used either daily or every other day, according to the feelings of the patient; and if the sphincter be affected spasmodically, this can be relieved by the application of a salve, composed of the extract of belladonna and spermaceti ointment, night and morning.

When the hæmorrhoidal tumours are fully developed, their removal cannot be effected too speedily in the greater proportion of cases; this important object many medical men have vainly attempted to effect, without having recourse to surgical art, through the aid of medicine only. The tediousness and uncertainty of this mode of treatment, however, they

consider such important objections, that I believe very few now advise such a course, except in cases where the invalid has acquired a morbid taste for physic, and the expensive visits of a medical gentleman. The following interesting case, related by Sir Benjamin Brodie in the fifth volume of the 'Medical Gazette,' will prove, however, to what extent medicine alone is effectual in this disease:—

"A lady consulted me concerning symptoms which were ascribed to a stricture of the œsophagus. She was unable to swallow the smallest morsel of solid food, so that she was compelled to subsist entirely on liquids, and even these she swallowed with great difficulty. These symptoms had been coming on for upwards of three years. I introduced a full-sized œsophagus bougie, which entered the stomach without meeting the slightest impediment. From this and other circumstances, I was led to conclude that the difficulty of deglutition was merely a symptom of some other disease. The lady's face was bleached, as if she had suffered from repeated attacks of hæmorrhage, and her feet were in some degree œdematous. On inquiry I found she had long laboured under internal piles, from which had taken place repeated discharges of blood. To this last disease, then, I directed my chief attention, prescribing two ounces of the infusion of catechu, with fifteen grains of alum, to be used cold as a lavement, every morning; and at the same time, a solution of the sulphate of iron and sulphate of quinine to be taken by the mouth. When this plan had been persevered in for *three weeks*, the piles were much relieved; they no longer protruded externally; there had been no recurrence of hæmorrhage; her

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

I do not wish to depreciate the value of medical treatment in cases of hæmorrhoids, for doubtless, as an adjunct, it is very useful; and although the above interesting case was one of *internal* hæmorrhoids, which circumstance adds to the renown of this scientific surgeon, yet, nevertheless, we cannot but remark the tardiness of the healing process, which extended over a period of *nine weeks*, and observe, that the relief afforded, though considerable, could have been but temporary, when we consider the formation of these hæmorrhoidal tumours in their fully-developed condition, in which state they are generally found to be when the invalid first consults you concerning them.

The ancients used to apply caustic, and the actual cautery, and thus burn them off; but these practices have happily been long discontinued. Hippocrates recommended pinching them off with the fingers, which he says may be done without telling the patient anything of the matter. "This rude operation," observes Mr Copeland, "is worthy of consideration. It is a well-known fact, that the instinct of animals directs them to bite off the umbilical cord, when they produce their young. The laceration which the parts

suffer in this natural operation prevents all hæmorrhage from the cord."

Modern surgeons, however, remove piles by *excision*, that is, cut them off with the knife or scissors. Those who advocate this method of operating assert, that there is little danger of hæmorrhage; but this statement as regards internal piles is decidedly erroneous, for in years past I have seen the operation by excision performed several times, and after it, one or two branches of the hæmorrhoidal arteries, of a large size, have had to be taken up and tied, the rectum also plugged, and, in two instances, the actual cautery applied. Indeed, so dangerous did this operation appear to be, that I resolved, when left to my own choice, never to have recourse to it. The hæmorrhage from excision does not usually occur until some hours after the operation, when the patient, who has probably been tolerably comfortable, becomes anxious, restless, and is seized with rigors, spasms of the extremities, cold perspirations, sickness of the stomach, swelling and tension of the abdomen, particularly in the left iliac fossa, and colic pains. His pulse becomes small, frequent, and irregular; his respiration anxious; his countenance pale; he is vertiginous, and faints. During this time, the blood has been accumulating in the colon, and he may die without discharging it; but frequently the tenesmus is so great, that he goes to stool, evacuates large clots of blood, faints, and sometimes dies. If the discharge however, takes place in the recumbent position, it affords relief; but this relief is only temporary, for the hæmorrhage returns after the elapse of a short time, and in this way many patients have died.

Indeed, we cannot free this operation from the great danger of hæmorrhage, unless we touch the cut surfaces with the actual cautery, as recommended by Dupuytren, and I have no hesitation in stating that this is a barbarous proceeding, and one that ought not to be adopted.

Sir Astley Cooper relates many cases which occurred in his own practice, where death ensued from cutting internal piles; one was that of a nobleman, which illustrates the danger attending this operation but too plainly. I will, therefore, give it in detail. "Five years ago," observes Sir A. Cooper, "a nobleman applied to me with internal piles. I was upon my guard in this case, and said I did not like to remove the piles without a consultation. A consultation was held, and the removal by excision was agreed to; I accordingly removed them, and he was well in a few days. Two years after he sent for me again, and said that he had some more of these piles with prolapsus ani, and that he wished me to cut them off again; I did so, and as I advised the recumbent posture, he went immediately to bed. As I was anxious about this patient, I did not immediately quit the room, but stood chatting with him for a short time, when he said, 'I believe you must quit the room, for I must have a motion.' I went out of the room; and upon returning shortly after I found him trying to get into bed, and upon looking into the vessel I perceived a considerable quantity of blood in it. In a few minutes after, he said he must have another motion, got out of bed, and again discharged a considerable quantity of blood. This he did four different times; one of the hæmorrhoidal arteries in

the centre of one of the piles which had been removed was divided, and as I was determined he should not die of hæmorrhage, I said I must secure the vessel which bled, and with a speculum ani, I opened the rectum sufficiently to see the blood-vessel, to take it up with a tenaculum, and put a ligature round it. On the following day I found the patient, who was much advanced in years, extremely weak; he had had a severe rigor, he grew gradually worse, and in four days after he died."—The same celebrated surgeon also mentions the case of a lady, the wife of a medical man in the country, who had three piles. Sir A. Cooper removed one only of them by excision, leaving the others untouched ; very little hæmorrhage occurred, but she complained of a good deal of tenderness in the abdomen three days after the operation. The inflammatory symptoms continued to increase, and in a week she died.

Sir Benjamin Brodie, encouraged by the advice of the late Mr Cline, formerly tried the practice of removing internal piles by excision. In the first case or two he found no inconvenience follow; but a case soon occurred in which the patient lost a great deal of blood; in another case, the hæmorrhage was so great, that the patient nearly died; and a third case occurred, in which also the patient lost an enormous quantity of blood, so that Sir B. Brodie now only wonders that death was not the result. He further observes relative to the removal of internal piles by excision, " there may be copious and even dangerous hæmorrhage, since the parts which bleed are out of reach, above the sphincter muscle, where you cannot expose the cut surface so as to be enabled to take up the bleeding vessel."

Mr Copeland also observes, relative to piles, that he has "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." Mr Syme, on one occasion, cut away an internal hæmorrhoid, which was partially protruded, and manual pressure was required to be kept up for several hours before the bleeding ceased. Mons. Petit had a patient with hæmorrhoids, which were supposed to be external, but which were internal piles temporarily protruded. Almost immediately after they had been cut off, the parts were drawn inward. An internal hæmorrhage ensued, which could not be suppressed, and proved fatal in less than five hours. The rectum and colon were found full of black coagulated blood. Sir E. Home also refers to some instances within his knowledge, where, after the removal of internal piles with the knife, the bleeding endangered life. And Mr Salmon, who advocates the use of the knife or scissors, with much candour mentions the case of a gentleman, in which he removed a prolapsus with external piles by excision, and where a "profuse hæmorrhage succeeded the operation, the quantity of blood lost exceeding fourteen ounces in less than ten minutes." The same author again observes in another case, of external piles and prolapsus, in which the patient was a lady, and where the excision of the diseased mass was proposed, "she told me that her medical man had informed her there would be a very great danger

attending it, and that she might bleed to death. She subsequently declined my attendance." My own note-book of hospital cases would also tell some sorrowful tales on this important point, but enough, I think, has been adduced to convince any reasonable-minded man that the extirpation of piles by cutting, particularly those which are internal, is far too dangerous an operation to be recommended.

After the hæmorrhoidal tumours have been all removed, the bougie may be used very advantageously for a week or ten days, which will remove the relaxed state of the mucous membrane that always more or less exists in conjunction with internal hæmorrhoids, and complete the cure of the disease. When the patient has regained his usual health and strength, he should take a great deal of exercise, so as to throw off, by perspiration and other excretions, any superabundant blood which there may be in the system. He should also live sparingly, and be careful to keep his bowels gently relaxed with either a small quantity of castor oil, the confection of senna, or a few figs smeared with olive oil, taken early in the morning. Cold lavation is likewise absolutely necessary each night and morning, but more particularly after every evacuation of the alvine secretions. For the further illustration of my peculiar treatment, I will give the outline of a few cases which have occurred in my own practice; many others, however, will be found in another part of this work.

A lady, the wife of a merchant in the City, consulted me for a painful disease of the rectum, which she thought was piles. She informed me that she was habitually costive, and generally lost a consider-

able quantity of blood when at stool; and for the purpose of producing an easy evacuation of the fæces, she had been in the constant habit of taking purgative medicines. The piles generally protruded when her bowels were acted on, and at times it was with considerable difficulty she could return them with her fingers within the anus.

On examination, I found the sphincter muscle so rigid that it was with difficulty I could introduce my finger into the bowel, which appeared very much obstructed with soft tumours. I requested her to expel them from the gut as though at stool, which she did, and two tumours were protruded, each about the size of a walnut, of a purple colour, and exceedingly painful to the touch. I told her that I could cure her complaint, if she would submit to a slight operation, to which she consented, observing that a little inconvenience for a short time was far preferable to continual anguish and pain.

I accordingly ordered her an aperient draught to be taken early the following morning, which having relieved the bowels completely, enabled me the following afternoon to apply my dressing to the largest and most painful of these tumours; after which I administered an opiate injection, and enjoined her to be as quiet as possible for the remainder of the day. Little or no pain followed the operation, she slept perfectly well without the aid of a composing draught; and a little flatus was the only thing which gave her any inconvenience. On the third day afterwards the bowels were relieved by a dose of castor oil, when no appearance of the tumour which had been operated on remained; and after a week's interval, I was enabled

to apply my dressing to the remaining tumour. The second operation proceeded as favourably as the first, and in a fortnight from the commencement of the treatment all appearance of the tumours had entirely gone. After introducing the bougie daily for a week, the cure was complete, and I believe the patient remains quite well up to the present time.

Mr Craven, surgeon, of Hull, recommended to me the case of a young lady, the daughter of a nobleman, whom I subsequently attended at the family mansion, in —— square. She had travelled by short journeys, to London, for the purpose of receiving my advice, and had lost so much blood during the journey that she was almost exhausted; her lips being very pale, and the blood which continued to flow from the internal piles being so colourless as barely able to stain the linen. Indeed, a patient apparently nearer the termination of existence, but who eventually recovered, I can truly say I have never beheld.

Stimulants were administered to support the little remaining strength, and as everything I advised was happily acquiesced in immediately, I was enabled the following morning to make an examination of the case. On examination I found three internal mucous tumours, each about four inches in circumference, and bleeding profusely, the middle one more particularly. As no time was to be lost, I immediately gave her an enema of tepid water, which sufficiently cleansed the lower bowel, and applied my dressing to the centre tumour. After administering an anodyne injection, I requested that the utmost quietude might be ob-

served. In the evening I again visited my patient, and found that she had suffered no pain of any consequence, and that her spirits were better. I ordered a composing draught to be taken if the rest was very much disturbed, and took my leave.

On the following morning I found that she had not required the composing draught; that she was evidently stronger, though still very feeble; and that the hæmorrhage was much reduced in quantity. I now ordered that the stimulants should not be repeated so often, but that some fluid nourishment should be administered instead. This course was pursued for the three following days, when an aperient draught was given which effectually relieved the bowels. On examining the parts after stool, I found that the tumour operated upon had entirely disappeared, and that the condition of the bowel was such as would enable me to apply my dressing to one of the remaining tumours on the following morning. My proposal having been kindly acceded to by my gentle patient, I accordingly performed the operation the next day. The almost immediate and great beneficial results which followed each operation was remarkable. Indeed, her strength was so much improved the day following this second operation, that she was enabled to leave the chamber, to which she had been carried but a few days previously, almost lifeless, and with a little assistance descend to the drawing-room to join her noble family circle.

The case continued to progress favourably. The second tumour disappeared after three days had elapsed, and the only one remaining was operated upon after a week's interval. At the expiration of

three weeks, all the tumours had entirely gone; the bleeding had completely ceased; her strength had greatly improved, and she needed not the wine and spirits, which had been previously necessary, not simply to keep her from fainting, but to maintain the small remains of life which were then visible. The decoction of bark and nourishing solid food were now ordered, a little confection of senna being also taken each alternate morning. In two months from the commencement of my attendance the local disease was not only completely cured, but her constitution, which had been so much enfeebled by excessive hæmorrhage, had so greatly recovered itself, that she was enabled to leave London with her noble family to return to their country seat.

The following extract is taken from a letter I received from the patient, a gentleman residing in Somersetshire, in October, 1844:—

"I have been under several professional gentlemen without receiving any relief; they consider it a case of piles. With the finger I can feel two or more tumours, just within the sphincter muscle, tender to the touch, giving very great pain when the bowels are evacuated, and which continues for two or three hours after; there is also a fulness and bearing down, with great heat and pain in the urethra; the gut never protrudes that I am aware of, but there is generally a discharge of blood and mucus preceding stools. I have been in this severe state about twelve months, and unless relieved, I am fearful of the consequences, being upwards of sixty years of age."

This gentleman came to London and placed himself under my care. On examination I found two large sanguineous hæmorrhoidal tumours; one on the left side of the bowel, about the size of a hen's egg; the other, smaller, and on the right side. Upon observing the parts after a motion, a considerable fold of the inner membrane of the gut was found protruded, which probably had led the patient to believe that more than two tumours existed. This fold of membrane when protruded resembled an internal tumour considerably, from its congested condition. Having well relieved the bowels by an aperient draught, I was enabled the next day to apply my dressing to the tumour on the left side, and administered an anodyne injection afterwards. The following morning he experienced a numbness of the left leg, which gradually removed in the course of the day, and no other symptom of consequence occurred. On the third day after the operation, an aperient draught was administered, and on examining the parts after stool, the hæmorrhoidal tumour operated on was no longer to be seen. After an interval of four days, I was enabled to continue my treatment to the remaining tumour on the right side. This operation was as successful as the first, and was accompanied with very little pain or inconvenience. After two days the tumour had disappeared, and the fold of the inner membrane no longer protruded, either at stool or other times. I continued my attendance for a week longer, when I examined the rectum, and found it perfectly free from any disease. I accordingly took leave of my patient, who gratefully acknowledged the benefit he had derived from my professional assistance.

A gentleman in the army consulted me for the cure of a disease of the rectum, which he had been informed was piles. He told me that for some months past he had been in extreme pain from this affection, and believed that his general health was beginning to be seriously affected by it. He also observed, that for many years his bowels had never acted without assistance; and, as experience had taught him that the constant use of purgatives was extremely objectionable, he had of late frequently had recourse to injections. He was likewise subject to a severe bilious headache; but, as he regarded this particular symptom to be quite constitutional with him, he did not look for any material improvement in this respect.

On examination, I found three internal hæmorrhoidal tumours; two, about the size of a walnut on the left, and a smaller one on the right side of the bowel. I observed to him, that if he would submit to a slight operation, in three weeks the local complaint would be cured. That the apparently habitual deficiency in the action of the bowels would by a little subsequent attention to medical treatment, be easily corrected; and as to the bilious headache, that likewise would most probably disappear.

After a few moments' consideration, he consented to undergo the necessary treatment. I prescribed the usual aperient draught, and the next day, after the bowels were relieved, applied my dressing to one of the largest tumours, which appeared to be the most painful. Very little pain or inconvenience followed the operation, and at the expiration of two days the tumour had disappeared. I continued the treatment to the tumours which remained, allowing a brief in-

terval between each operation, with the same happy success; and eighteen days only had elapsed when the local disease was perfectly cured. After having prescribed some medicine, consisting of the infusion of bark combined with the sulphate of magnesia, for the restoration of the functions of the alimentary canal, this patient left London, and in a letter since received from him, he states that he has ever since been free from piles and a bilious headach, and that his bowels are being restored to their regular action by the medicine I had prescribed for him on leaving town.

SECTION III.

EXCRESCENCES OF THE RECTUM AND ANUS.

THE excrescences which arise from the mucous membrane of the rectum consist chiefly of the different kinds of polypi. The fleshy polypus is generally the description which is mostly to be met with, the malignant species being happily very rare. One or more polypi may exist at the same time, and in the majority of cases, they are situated just above the sphincter muscle; they are sometimes, however, beyond the reach of the finger. Children, rather than adults, are more subject to them. They are generally of a pyriform shape, having a pedicle; they are likewise highly vascular, and of a florid red colour, but differ altogether in their character from piles. Sir Astley Cooper describes a polypus of the rectum, in form like an earth worm, very vascular, and occurring generally in children. The fleshy polypus is developed very slowly, and in growth seldom exceeds the size of a pullet's egg; whilst the malignant species grow rapidly and attain a very considerable magnitude.

It is very difficult to determine the particular cause

that produces polypi. In some instances it appears to be referable to some mechanical irritation, disturbing the healthy actions of the part, and it is said to have followed the operation for fistula in ano. It appears, however, certain, that a latent disposition, either in the part or the constitution, is called into action by some local irritation.

The symptoms of this disease is a sense of weight and fulness in the rectum, tenesmus, and difficulty in defecation. The evacuations when soft are contracted, flattened, and generally besmeared with blood, mucus, or pus, so as to lead to the belief that there is stricture of the rectum, but the touch at once determines the point. If the polypus be situated near the anus, it will protrude at stool, and if of a large size, much difficulty will be experienced in returning it within the bowel. In some rare instances, the bowel contracts with so much force, as to detach the tumour altogether.*

Fleshy polypi are not very sensible, nor are they dangerous, if within reach and attended to early; but should they be neglected, they may degenerate and prove fatal. The malignant or fungous polypi, however, are much more sensible, and as they are prone to ulceration, the result will generally be fatal, because of the almost impossibility of removing every part of them, and the certain return of the disease if this be not effected.

When the polypi increase in size and malignancy, the patient becomes sallow, and loses his appetite; his tongue is furred, and his thirst intense. He is

* Journal de Medicine, tome xv, page 57, contains a similar case.

troubled with flatulence and colic pains. Emaciation, œdema, and hectic fever now set in. The fæcal discharges can only be effected with difficulty and in small quantity, and even this cannot be accomplished without the aid of enemata or medicine. The tenesmus and weight in the rectum increases; there is much muco-purulent discharge, lancinating pains, and frequently considerable hæmorrhage.

These polypi, when free from induration and ulceration, provided the surrounding parts be sound, ought by all means to be removed. This operation is easily performed, and in the same way as in a case of mucous hæmorrhoidal tumours. There are other excrescences of the rectum, which, however, are mentioned in another part of this work.

The excrescences of the anus are extremely common, but more so in women than in men. Some originate suddenly, in the form of oblong, firm, and highly-sensible folds of skin; whilst others form very gradually, the skin slowly throwing out the tumours as soft, pendulous folds of integument. The immediate cause of these little growths is irritation of the integument occasioned by the secretions of the neighbouring parts. They sometimes, however, present the appearance of red circular elevations of the skin, two or three in number, and from three to four lines in diameter. These are attended with heat and soreness, and if neglected, they sometimes ulcerate. In consequence of the variety of forms these excrescences assume, the Greek, Latin, and Arabic authors have designated them by the fanciful appellations of ficus, thymi, condylomata, crystæ, &c., &c., to which they have been supposed to bear some resemblance.

Some, however, have doubtless been originally piles; for, as Sir B. Brodie observes, "When the cavities of piles become obliterated, they generally form flaps of skin, which gradually waste; but sometimes diseased action takes place in them, and they become converted into excrescences, similar to those which grow from the nymphæ of women."

These arborescent growths generally get well under the use of mercurial applications, in conjunction, if necessary, with the internal administration of mercury, in all those cases where the system is tainted with the syphilitic poison. When they have arisen, however, from insufficient attention to cleanliness in cases of gonorrhœa or leucorrhœa, or, from some other local cause of irritation, a solution of the sulphate of copper, the strong acetic acid, or some other stimulating lotion applied to them, is all that is necessary to effect their removal. They will, nevertheless, at times shrink and disappear spontaneously; whilst, at other times, they perish by ulceration.

SECTION IV.

STRICTURE OF THE RECTUM.

STRICTURE is one of the various morbid affections to which the rectum is liable, and consists of a diminution of the capacity of this intestine. This disease, in its very early stage, is cured with the utmost facility, as the contraction I have invariably found to be situated within the reach of the finger. Strictures, nevertheless, are sometimes found higher up the rectum, but these cases are fortunately exceedingly rare; and although there are a few surgeons who contend that the *common* seat of stricture is beyond the reach of the finger, yet, from the numerous opportunities I have had of forming a correct judgment on this point, obliges me to suspect the honesty of those who advocate such an opinion, and to fear that they are availing themselves of the darkness which has hitherto enveloped the pathology of this disease for an unrighteous purpose. I have also good reason for supposing that there are some individuals who make a profitable trade of treating dyspeptic patients for stricture of the rectum, asserting that the obstruction is situated high up the bowel, when, in fact, this

intestine is not only free from disease, but in a perfectly healthy condition. Such persons apparently cure what in reality never existed, and thus obtain a character for skill to which they are in nowise entitled.

Having thus briefly exposed the malpractices of some mercenary individuals, I will introduce a few quotations from those authors whose opinions are entitled to the highest respect, relative to the situation of stricture of the rectum. Sir B. Brodie * observes: "Strictures of the rectum are commonly situated in the lower part of the gut, within the reach of the finger. . . . . Every now and then, I have heard from medical practitioners of my acquaintance of a stricture of the upper portion of the rectum, or of the sigmoid flexure of the colon, having been discovered after death. Such cases, however, you may be assured, are of very rare occurrence." Sir Charles Bell † writes—"Not unfrequently the inner edge of the deeper sphincter ani being the seat of this stricture; and then the finger enters only to the depth of the second joint, when it is obstructed by a sort of membrane standing across the passage. Sometimes the stricture is more than two inches within the anus, and feels like a perforated septum." Mr Copeland ‡ remarks—"If the finger be introduced into the rectum, the gut will be found either obstructed with small tubercles, or intersected with membranous filaments; or else the introduction of the finger will

* Lon. Med. Gaz., vol. xvi, page 30.
† Bell on the Rectum, &c., page 330.
‡ Copeland on Dis. of the Rectum and Anus, page 9.

be opposed by a hard ring of a cartilaginous feel, composed of the diseased inner membrane of the intestine." Mr Herbert Mayo* also observes, that "The ordinary seat of stricture of the rectum is from two and a half to four inches from the orifice of the gut." The late Mr Liston† considered that a "Stricture is readily ascertained by examination with the finger." And Mr Syme‡ remarks, that "It is generally found about two inches and a half or three inches distant from the orifice."

The above references, I trust, will be considered conclusive as to the correctness of my opinion, that stricture of the rectum is *not commonly* situated high up the intestine, and out of the reach of the finger. Indeed, if anything further was necessary not only to show the utter worthlessness of the opinions of those who make contrary assertions, but also to convince the most sceptical who may entertain a doubt upon the subject, the following judicious observations by Sir Benjamin Brodie on this subject must, I think, at once decide the point in question:—"But what," observes this celebrated surgeon, "is the value of this evidence when compared with that which anatomy affords of the rarity of this kind of stricture? Are there not many causes of a costive state of the bowels besides mechanical obstruction? Will it be always easy, even in the most healthy rectum, to introduce a bougie more than a few inches into it? Although we call the lower bowel the *rectum*, it is anything but

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* Herbert Mayo on Inj. and Dis. of the Rectum, page 165.

† Liston's Elements of Surgery, page 73.

‡ James Syme on the Rectum, page 114.

a straight gut. Three or four inches above the anus, the rectum begins to make flexures which increase as you trace it upwards, until they terminate in the sigmoid flexure of the colon. These flexures of the rectum differ in different individuals, and even in the same individual at different periods. When a bougie is introduced, be it small or large, it is certain that it will be stopped somewhere or another, by one of these flexures; and nothing can be more unphilosophical than to conclude, because a bougie meets with an impediment at the distance of five, or six, or eight, or nine inches, that this is the result of an organic disease of the rectum, when the natural formation of the parts will account for it. But let us suppose that you actually meet with one of those rare cases, in which there is a stricture in the upper part of the rectum, by what means are you to recognise the disease in the living person? Or, if you can recognise it, how can you know its exact situation? If the bougie can only be introduced to a certain distance, how are you to be sure that it is stopped by a stricture, and not by a fold of the bowel; or even by coming in contact with the sacrum? If you employ the force which you would suppose to be necessary to make the bougie penetrate through the stricture, is there no danger of its penetrating the tunics of the intestine instead? I have been informed, on good authority, of seven or eight cases in which this frightful accident occurred, and the patients died in consequence."

So much with respect to the ordinary situation of the disease. I next proceed to consider its other peculiarities. In most of the cases of stricture of the rectum which I have examined after death, there

were no appearances of disease in the surrounding parts. In some the lesion appeared to be chiefly confined to the muscular tunic and cellular tissue; whilst in others, the mucous coat and cellular tissue alone seemed to be affected. The alteration of structure chiefly depended on the deposition of lymph, which gave to the parts more or less hardness. The extent of the stricture was generally about three quarters of an inch, and occupying the entire circumference of the bowel. The capacity of the canal was so greatly contracted in one case, that it would not permit the extremity of the little finger to pass through; and in another, several vascular excrescences, which projected considerably into the bowel, rendered the inner surface of the bowel very irregular. Relative to the morbid anatomy of this disease, Mr Copeland observes: "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 young as well as the old are liable to an attack of this disease; the middle age, however, is the most frequent time of its occurring. Some surgeons consider that females are the most subject to stricture of the rectum, and perhaps they are; but the difference is so little between the sexes, that the frequency of this disease in men and women may be said to be almost equal. Mr Colles, of Dublin,* remarks: "This disease spares neither sex nor rank; it most frequently

* Dublin Hospital Reports, vol. v, page 131.

attacks those who are about the meridian of life; sometimes, however, it afflicts children as early as the seventh or eighth year of their age." A surgical author has asserted that there is frequently a predisposition to stricture of the rectum, amounting to an hereditary taint, but I do not believe it, and return the opinion as absurd to the individual who first started it. Another person also states, that he has witnessed stricture in children of such tender years, that he should think the disease was congenital! Another hypothetical dogma.

The general progress of this disease is slow, exhibiting the character of chronic inflammation, so that the individual who happens to be inflicted with it in its early stage, is for a considerable length of time ignorant of its real nature. Sometimes, however, patients are carried off rapidly with symptoms resembling those of ileus. In the generality of cases, as the obstruction increases, symptoms become manifest which demand an examination per anum. There is a sense of weight and obstruction in the lower bowel; uneasiness, distention, and occasional spasmodic pain in the abdomen; eructations; pain in the seat of the stricture, loins, and sacral region, occasionally extending down the extremities; vesical irritation; bearing down in females; itching and heat about the anus; headache, nervous irritability, and dejection of spirits. The descending colon is loaded with gas and fæces; the urine is generally scanty, high-coloured, and fetid; the bile is also vitiated and diminished in quantity. After awhile the hæmorrhoidal vessels become varicose, and very frequently tumours form. In consequence of the irritation arising from the stricture, a

larger quantity of blood is determined to this part, and, its return being impeded, abscesses form in the cellular tissue near the anus, which sometimes degenerate into fistulæ. The calls to stool now become sudden and frequent, accompanied with much straining, and causing a protrusion of the mucous membrane. Little else, however, than flatus, and a small quantity of mucus mixed with blood is discharged. When fæces are voided, which may occur every two or three days, they are contracted in size, and resemble earthworms or small pellets in their form. After each attempt at stool a sensation continues as though the bowels had not been emptied. Occasionally the fæcal matter accumulates above the stricture, and is rendered fluid by an extra secretion from the mucous membrane, thus affording the patient an abundant liquid evacuation, which gives considerable relief for some time. If at this period the finger be introduced into the rectum, the canal will be found to be very much contracted, indurated, and unyielding, for a greater or less extent, and which cannot readily be mistaken for an enlarged prostate gland in the male, if the anatomy of the parts and the symptoms of the disease be borne in mind.

A remarkable feature of this disease is, that many years may elapse and the patient's health remain unimpaired. Ultimately, however, he loses his appetite, becomes pale, emaciated, and hectic. Purulent matter, which excoriates the anus, is discharged on coughing or assuming the erect posture. These symptoms increase until life is exhausted; or, as Mr Copeland remarks, "Till, at last, worn out with the pain and the discharge, or perhaps the total

obliteration of the rectum, he yields to his fate." Sometimes, however, death is to be attributed to the accumulation of hardened fæces, when hiccough sets in, and they sink with symptoms of ileus. As Sir B. Brodie observes, "In some instances, the patient dies with symptoms of strangulated hernia; that is, a piece of hard fæces is lodged above the stricture, and cannot pass through it. Thus, there is a mechanical obstruction to the passage of the fæces; the belly becomes tympanitic; the tongue dry; there is sickness, vomiting, and the other symptoms indicating strangulation. He may have one of these attacks, and, by means of injections and the use of the bougie, may recover; he may have a second, and recover from that; and then he may have a third, which may prove fatal."

The cause of stricture of the rectum is an irritation or inflammation of the mucous membrane of the bowel, and which is generally produced by frequent and ineffectual efforts to expel the hardened excrements whilst the bowels are in a state of constipation. The action of the intestine is interrupted; the sphincter ani muscle is rigid, and dilates with great difficulty; the abdominal muscles being the chief propelling power. Thus, a fold of the inner membrane of the rectum, just above the superior margin of the internal sphincter muscle, is forced down continually, until inflammation and adhesion takes place, by which means the fold loses its natural softness and forms a hard ring, of a texture somewhat resembling cartilage, and, projecting into the bowel, reduces the ordinary capacity of that portion of the canal which is affected.

Other causes, however, besides constipation, may be the medium of inflammation of the rectum. The operation for hæmorrhoidal and fistulous complaints, when unskilfully performed, is liable to cause inflammation. As Mr Copeland observes, "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." Occasionally, stricture of the rectum occurs as a secondary symptom of the venereal disease; but, in these cases, patients mostly have other well-marked appearances of syphilis elsewhere. Richerand and Delpech have stated that stricture is frequently produced by the venereal poison; and M. Desault considered it so decidedly a syphilitic symptom, that he at once commenced a course of mercurial treatment, and with an uniform success, which greatly favoured his opinion. Foreign bodies, such as fish-bones, are also occasional causes of this disease.

Stricture of the rectum is sometimes of a complicated nature. It may exist in conjunction with membraneous filaments, formed of coagulable lymph thrown out on the surface of the mucous membrane. These cases mostly occur in females, particularly those who have borne children, and where parturition has been difficult. The patient complains not only of a difficulty in passing the fæces, but of a constant pain, which is greatly aggravated after each evacuation. There is also a discharge of mucus tinged with blood. If the rectum is examined, the introduction of the finger causes excruciating pain, and the mucous membrane appears to be in a state of ulceration in the

interstices between the filaments. There is likewise in these cases some small flattened excrescences around the anus externally.

Stricture sometimes, although very rarely, may be cancerous; but the sallow and leaden countenance, the lancinating pains, and the rapidity of the ulcerative process, will at once enable us to arrive at a correct diagnosis. Indeed, so extensive is the cancerous ulceration in some cases, that the sphincter ani muscle and cellular tissue in the immediate neighbourhood have been so completely destroyed, as to leave the anus continually open to a very considerable extent. It is, however, absolutely necessary that these complicated cases in their early stage should be distinguished from those of simple stricture, as the treatment which would be advantageous in the one case would be exceedingly injurious in the malignant affection.

Of all the consequences of stricture of the rectum, even in those cases where the disease is not malignant, the destruction caused by the ulcerative process is the most distressing. In such cases it generally happens that the rectum becomes incorporated with the bladder in the male, and with the vagina in the female, so that the ulceration causes a recto-vesical or recto-vaginal fistula, through which the fæces will be partially evacuated. A much more common consequence, however, of the ulcerative process, is the extravasation of fæcal matter into the cellular tissue, and the formation of stercoraceous abscesses, which degenerate into fistulæ. The number of these fistulæ varies; sometimes there is but one or two, at others from six to twelve, or even more, particularly in women, in

consequence of the greater abundance of cellular tissue in the perineum. In some instances, the rectum adheres to another intestine, and, by a continuation of the ulcerative process, a communication is established between them ; but, unfortunately, it more generally happens that no such adhesion exists, so that the fæcal matter is consequently effused into the cavity of the peritoneum, and thus death is speedily caused by peritoneal inflammation.

In all cases of supposed stricture of the rectum an examination should be insisted upon, for there are certain painful chronic affections of the vagina which simulate the disease, from the contiguity and nervous association of these organs. This examination should be conducted not only with great gentleness, but also with the utmost skill and discernment, for the uterus may be so altered in its position as to deceive even a very careful surgeon, and lead him to suppose that a stricture of the rectum really exists, when, in fact, this organ is in a tolerably healthy condition. Such an unfortunate occurrence is related by Sir Charles Bell,* who observes, " I was called to give my opinion of the condition of a lady, after she had been three years under the use of the bougies. She was very ingenious, and with her pencil she explained everything she felt, and all that she had been ordered to do. But I urged the necessity of an examination, and the possibility of there being some mistake; and, in fact, I found that the obstruction to the rectum arose from the fundus of the uterus having fallen into the hollow of the sacrum. Against this had the bougie been

* Sir C. Bell on Dis. of the Rectum, &c., page 329.

pushed regularly for years, and, happily, without further bad consequences than the expensive attendance of a surgeon. She had been under the care of several gentlemen, both in town and country."

The first point, therefore, in the treatment of stricture of the rectum, is to ascertain, beyond a doubt, that the obstruction to defecation is not caused by an accumulation of hardened fæces within the gut, or an enlargement of the prostate gland; or, if the patient be a female, by a tumour, as of the ovarium, or a retroversion of the uterus; but that a contraction of the bowel really exists. Previous to examining the bowel with the bougie, the rectum should be washed out with warm water, and the bladder emptied. The bougie should also be immersed in hot water until it becomes pliant, then well oiled, and curved to correspond with the flexure of the rectum. At first, the instrument should be introduced perpendicular to the orifice; but when about an inch within the anus, it must be directed upward towards the sacrum; if the introduction is to be extended to a considerable distance, an alteration in the direction of the instrument must be again made, or its progress may be stopped by the point coming in contact with the promontory of the sacrum, and thus give rise to a false supposition that stricture exists in this high situation. In passing the bougie, too much care cannot be taken; all force should be avoided, and, when it is suddenly checked in its course, it ought to be withdrawn for a short distance, its direction varied, and then passed upwards again. I have examined several persons who were considered by other surgeons to be suffering from stricture of the rectum, and have found the

bowel perfectly free from any contraction. Such errors arise from want of dexterity in passing instruments, and from an absence of that knowledge which enables an experienced surgeon to discriminate between the resistance caused by a fold of mucous membrane and a contraction of the intestine.

Being satisfied, however, that a stricture of the rectum really exists, its cure becomes the next important consideration. This is capable of being effected, in the greater number of cases, by the judicious employment of the instrument already mentioned—the bougie. The action of the bougie is not merely to dilate the stricture mechanically, but, by its pressure, to cause an absorption of the effused lymph. Its introduction in some persons is attended with more pain and irritation than in others; consequently, the frequency of its application, and the length of time it may remain in the bowel, must vary according to circumstances. In some patients, we shall not only be enabled to repeat the operation daily, but to allow the bougie to remain introduced for an hour or more; whilst, in others, once or twice a week will be as often as we can employ it. In length the instrument should be sufficiently long to extend beyond the stricture, and so large as to pass through it without force, and keep it gently on the stretch. If the patient can bear it, the bougie may be allowed to remain in the bowel for twenty minutes on its first introduction, and, afterwards, the frequency of the operation, the duration of time the instrument is to remain introduced, and the increase of its size, can be regulated according to the feelings of the patient, and the progress of the case.

During the treatment of this disease, the patient should be kept as much as possible in the horizontal position, and restricted to a diet which, though nutritious, yields the least excrementitious matter, such as animal jellies, strong broths, fresh eggs, arrow-root, &c. The bowels ought to be kept easy by the administration of mild aperients, as castor oil, manna, and the confection of senna; and, if the patient has no objection, an injection of gruel and olive oil can be given occasionally with great advantage. Should any inflammatory symptoms arise, leeches can be applied around the anus, and diluent drinks freely taken. If the disease is complicated with fistulæ, which communicate with the bladder or vagina, we cannot interfere with them until the stricture is considerably relieved.

I was requested by Mr Farrar, surgeon, of Guilford street, Russell square, to visit a gentleman, aged thirty-six, who was suffering from the effects of a violent contusion upon the perineum, which he received from a favourite race-horse. After enduring considerable pain and uneasiness for a month, he was no longer able to move about, and mentioned the circumstance to the above medical gentleman, who advised him to poultice and foment. This he did for a few days, when, one morning at stool, the burning heat, pain, and swelling suddenly subsided, from something giving way in the bowel, and which was succeeded by a copious discharge of matter from the anus; this circumstance at once alarmed him, and, at the suggestion of his medical friend, I was sent for.

On examining the parts, I found, on the left of the sphincter, some extent of integument perforated in several places, and discharging pus. The verge of the

anus was concealed by considerable œdema of the cellular membrane. Introducing the finger per anum, an obstruction was felt at about an inch and a half from the orifice. On questioning the patient on this point, he informed me that the stools were voided with great difficulty, and in very small quantity. The contraction consisted of a defined circular ring, formed within the intestine, not at all resembling the feel of the smooth, soft, inner membrane. It firmly adhered to the cavity, and had a contracted central opening through which a small œsophagus bougie could only be passed. The stricture was ascertained to be nearly two inches in extent. On introducing a silver probe into one of the external openings, a sinus was discovered extending nearly five inches along the outside of the intestine. The contraction, however, prevented me from ascertaining whether the fistula was complete or incomplete.

I ordered some mild aperient medicine, and the following day introduced a very small elastic bougie, which passed through the stricture without causing very much pain or distress, and allowed it to remain for ten minutes. On withdrawing the instrument, I administered an opiate injection, advised the horizontal position, with tepid local bathing and light nutritious diet. Barley-water was to be taken as a drink, and every morning a small quantity of castor oil in some warm milk for promoting an easy evacuation of the excrements. After continuing this treatment for three weeks, the stricture was so far dilated as to enable me to pass the index finger of my left hand through it. I then introduced a probe into one of the external fistulous openings, and found that it per-

forated the intestine rather more than an inch above the superior margin of the contraction. On the following day I applied my dressing to this extensive sinus as recommended in the section on fistula in ano, and discontinued the use of the bougie for a few days.

The case continued to progress favourably, and I was enabled, a fortnight after the latter operation, to discontinue the use of the elastic bougie altogether, as the rectum now admitted of a large-size instrument passing with the greatest facility. Tonics, combined with a mild aperient, were now given. A generous diet ordered, with cold lavation and moderate exercise. The patient continued to improve with rapidity, and I now advised that he should recruit his general health at the sea-side, to which he assented. After a few weeks' absence he returned to town, and informed me, in the kindest manner, that he felt himself perfectly recovered.

In those complicated cases where membraneous filaments exist in conjunction with a contracted state of the intestine, the treatment developed in the following case I have generally found to be the most efficacious. I have thought it better first to give the patient's account of her case verbatim, and afterwards add a few brief remarks, with the outline of the treatment adopted.

Brighton, March 8th, 1845.

Sir,—I have been perusing your 'Treatise on Fistula, Strictures,' &c., and from its perusal I am inclined to consult you, though I have been assured by an eminent surgeon here that no permanent relief can be afforded in my case.

It is now about seven years since I began to suffer from pains in the back; but having at this time unusual discharge at my monthly periods, and likewise troubled with fluor albus, it was looked upon as merely weakness. I became soon after pregnant, and about the seventh month I discovered that, instead of my bowels being relaxed (as I had previously supposed), I was daily passing a quantity of matter. I named this to my medical attendant, who attributed it to cold having settled there; shortly after, however, I was taken dangerously ill with most acute pains in my limbs, which eventually settled in my right leg, depriving me of its use, as also of rest night and day; and although within a few weeks of my confinement, I was obliged to have recourse to bleeding as the only means of preserving my senses. This was supposed to have arisen from the child pressing on a nerve, and I was therefore led to hope that my accouchement would not only restore me to health, but also to the immediate use of my leg. I was safely delivered of a living child; but weeks passed on, leaving me still in the same helpless state. At last it was discovered that fluid had collected between the bones, and two incisions were made with the knife, which gave me great relief; and in a few months I could cross the room with the help of my nurse. During this period my bowels were not thought of, as I was too ill myself to know much about them, and, constantly lying on my back, I did not feel those bearing-down pains which I had hitherto done. At the expiration of eight months, finding myself no better, I consulted Sir Astley Cooper and an eminent physician of London respecting my leg, and at the same time described

the state of my bowels; they attributed it to weakness and want of exercise, observing that they had no doubt, as soon as I was able to walk about, all would be well.

Thus time went on, and I again became pregnant, and with that an increase of my disorder, so that my bowels were never relieved without the aid of aperients, or the lavement. Soon after the sixth month, I took some medicine, which, not being sufficiently active, brought on violent straining and premature labour, the child surviving its birth only a few moments, and I nearly lost my life. After this event I was recommended sea-bathing, which improved my general health, but had no beneficial effect on my malady, which still continued. At last it increased so alarmingly, that I was confident something must be done, or strangulation would end my days. The fæces at this time were never larger than a small pencil, yet so great the force necessary for their expulsion, that for hours afterwards I have felt so ill that I could compare it to nothing else but the sickness of death, attended with dull heavy pains in the limbs, and so cold and lifeless, that I have been laid before the fire, and warm stimulants have been administered to restore animation. At this crisis I was again visited by an eminent surgeon, who at first gave no hope of relief; but after several visits, the stricture of the rectum, together with the sphincter muscle, was cut through with the knife. This gave me very great relief, but very far from a cure, as upwards of two years have elapsed, and I am still a sufferer. I have no command over my bowels, and know not when an evacuation may take place, nor can I for one

moment prevent it. At times I am obliged to have recourse to medicine or the lavement; I suffer much from flatulence, which, when dispersing, causes a sharp pain across the abdomen, and forces matter from the anus; this discharge, however, will happen if I move or walk about, every ten minutes. A moderate-sized bougie can be introduced into the bowel, though I cannot pass a fæces half its size without considerable pain. I am most anxious to seek relief, and with as little delay as possible, as I have a slight suspicion of being a few weeks advanced in pregnancy; and I feel that death in any shape would be preferable, than to again go through what I of late have suffered at those times. Anxiously awaiting your reply,

I am, Sir,

Yours respectfully,

A few days after answering this letter, I received a note, requesting I would visit this lady at her town residence in Queen street, Mayfair, at my earliest convenience. I accordingly did so, and found her, as I expected, very much reduced and out of health. I told her it would be absolutely necessary that she should take some tonic medicine for a few days, in order to improve her general health, and that when she felt stronger, I would make an examination, and commence my treatment for the local complaint. In about a fortnight I was enabled to make an examination of her case, when I found that the rectum appeared divided and intersected in its canal by a number of membraneous filaments, somewhat firm, yet readily compressible by the finger, for about three

inches above the sphincter muscle. At this point the bowel was so thickened and contracted that my index finger could not pass further. There was also a copious discharge of a thin fetid matter; and on questioning the patient relative to the facility with which she voided her stools when the bowels were relaxed, I was informed that at those times the evacuations were perfectly involuntary. She likewise complained of great pain after every stool in the lower part of the rectum, which evidently arose from the interstices between the membraneous excrescences being in a state of ulceration. That there was also ulceration of the bowel above the stricture I had very little doubt of at first, and subsequently my suspicion was but too well confirmed, for I eventually discovered that a communication existed between the vagina and the rectum.

The treatment I adopted in this formidable and complicated case, I am happy to say was eventually successful. I was somewhat fearful, from the pain which the introduction of the finger caused during the examination, that the part would not bear local treatment immediately. I nevertheless was enabled to use the bougie at once, without causing the patient much suffering or inconvenience. I introduced at first a small bougie, which passed through the stricture. As the contraction became absorbed and dilated by the daily introduction of the instrument, I increased its size; this, however, I did very gradually. At the end of a fortnight, not finding that the membraneous filaments were much affected by the use of the bougie, whilst the stricture was considerably relieved, I introduced a tent of lint smeared with

mercurial ointment; this, I soon found, had the desired effect. Whenever the bougie was productive of much pain, it was discontinued for a day or two, and an opiate suppository administered; this happened twice during the entire treatment. While these means were being adopted locally, mild aperients were given daily. I also found that the administration of five minims of the liquor arsenicalis in a wine-glass full of cold water, three times in a day, was productive of great benefit, not only in reducing the discharge from the bowel, but the excessive irritability of the part; indeed, the general health greatly improved from the use of this medicine.

After attending this patient for two months, it became my pleasing duty to pronounce her case, so far as the disease of the rectum was concerned, completely cured. The communication between the vagina and rectum had permanently closed under the use of the bougie. She had also considerably recovered the use of her leg; and I now advised that she should visit, without delay, a southern climate for her complete restoration. To this proposition she at once assented; and previous to her departure I had the felicity to receive the following letter, which I cannot refrain from introducing, on account of the generous and kind sentiments it contains, and which alone I shall ever consider more than an ample reward for those professional services I had the honour to render in this afflicted, though perfectly successful case.

Dear Sir,—I cannot leave England for Italy, whither you have advised me to resort, without expressing the gratitude I feel for my perfect recovery

from a very serious and painful disease, and for which I shall ever feel indebted to you. Words cannot express my admiration of your great skill, neither can I sufficiently thank you for your unremitting attention whilst under your professional care.

Notwithstanding the advice I received from some of the most eminent professional gentlemen, my malady obstinately continued to increase, until Providence placed before me your work on these complaints, the perusal of which led me to seek that excellent advice, to which I owe my present restoration, from almost death, to the enjoyment of renewed life and health.

With every sincere wish for your health and prosperity, I beg to subscribe myself,

Dear Sir,

Your truly grateful patient,

—— ————.

In the treatment of carcinomatous degeneration of the rectum, we can do but very little; indeed, I must agree with Dr Sherwin, that our utmost efforts can only palliate the most painful symptoms, and soften the road to inevitable death. We should, however, endeavour to keep the bowels easy with castor oil, or mild enemata; and with a view to mitigate pain, we can administer hyoscyamus, or use suppositories of opium. Sometimes the application of a few leeches will afford relief. The hip-bath also is very soothing, and can be used at any stage of the disease, without the patient being very much exhausted. The horizontal position should of course be maintained, and a light nourishing diet taken.

When the disease, however, is confined to the extremity of the bowel, and does not extend upwards beyond two and a half or three inches, and provided the general health be good, we may, if the patient desires it, remove the affected parts after the manner in which Lisfranc performed this operation, though I would much rather avoid any such proceeding, for the return of the disease will be more than probable. Twelve months since I performed this operation on a lady in whom the cancerous affection seemed confined to an inch and a half of the intestine, and in all probability commenced at the verge of the anus. The wound healed rapidly, and her general health improved; but there was a slight prolapsus of the bowel, which, however, was completely supported by an apparatus I had made for the purpose. I have since been informed that the patient remains tolerably well, although there are symptoms of a return of the disease. Those who are desirous to read the details of a case of cancer of the rectum, written with an elegance of language which is not very usual in medical works, can refer to the description of one by the celebrated Ruysch, 'Opera Omnia,' tome i, observatio xcv, page 89.

SECTION V.

ULCERATION OF THE RECTUM.

THE posterior surface of the rectum is often the seat of ulceration, which, according to its situation, may or may not be relieved with facility. This disease however, is mostly situated just above the sphincter muscle, and by introducing the finger into the bowel the ulcer may be easily detected from its indurated edge.

The symptoms of this disease are, pain, a sense of weight in the sacral region extending to the loins, vesical irritation, tenesmus, the discharge of a thin bloody fetid pus from the anus, smarting, and even acute pain in the rectum, invariably increased by defecation; and when the ulceration extends low down, spasm of the sphincter, with the other concomitants, as in fissure of the anus.

The ulceration which we are treating of, may arise from inflammation, the entanglement of fæces in the lacunæ, and the venereal poison. The follicles and mucous membrane of the rectum are also ulcerated in chronic dysentery, but as this disease does not

belong to the province of surgery, I cannot take cognizance of it in this work.

The species of ulceration which has a venereal origin may be consecutive to disease in the genital organs, and co-exist with other secondary symptoms. When extensive, this kind of ulceration may destroy life. In some cases the recto-vesical partition in the male is perforated; and frequently the recto-vaginal in the female. These fistulæ are exceedingly difficult to be cured, and generally continue with the patients during life. I have, however, known them to be completely cured, notwithstanding the influence of so many causes which are calculated to continue and aggravate them. But this is not always the case; for with one unfortunate female the previous attempts made to obtain a cure had caused an opening of such dimensions, that the two passages formed but a single cavity; this, however, did not prevent the woman from being one of those who were most admired. From the observations I have made, I find that these recto-vaginal fistulæ almost always coincide with phthisis, and are often accompanied by an engorgement of the labia majora.

Ulceration of the rectum is difficult to heal from the absence of valves in the portal system, and the depending situation of the hæmorrhoidal veins; they are loaded with blood, a condition which is still further increased by the accumulation of fæces in the lower bowels and the action of the sphincter muscle. This difficulty also arises from the passage of the fæces contusing and stretching the ulcerated surface; and, if the ulceration be within the limits of the sphincter, from its being not only unduly com-

pressed, but puckered. We are likewise unable to make pressure, a most efficient remedy in similar diseases of other parts.

In the treatment of this disease the recumbent posture should be observed, a diet taken which affords the least excrementitious matter, and emollient injections. If there be fulness and throbbing in the anal region, leeches should be applied, but the cases in which they may be required are very few indeed. When the general health is impaired by other diseases, or improper habits, it should be improved by appropriate means; and when there is great irritability, anodyne, combined with sudorific remedies, may become necessary. If the ulceration has a venereal origin, antisyphilitic remedies will also be requisite.

When the ulceration is not extensive, and unattended with urgent symptoms, it will generally heal under the treatment just mentioned; and the application of stimulating ointments, to which, if there be spasm of the sphincter, belladonna may be added, and, if there be much pain, opium. If, however, it be more extensive, painful, and attended with severe spasmodic contraction of the sphincter, no application will prove of any avail without the division of the sphincter muscle, and of the ulcer, when practicable; an operation which, when followed by proper dressings, insures a rapid cure. For example:—A lady came under my care in November, 1848, for an ulceration of the right side of the bowel. The ulcer had extended vertically for half an inch, and encircled nearly two-thirds of the extremity of the intestine; being excavated, with jagged and livid edges, devoid of granulations, covered with an ash-

coloured tenaceous matter, and surrounded by a deep inflammatory blush. She was weak, her bowels were confined, her face was flushed, skin hot, and tongue parched, being brown in the centre, with a fiery red state of the margin and point. The pain in the diseased part was severe, and became excruciating during and for several hours after defecation.

Having freely evacuated the bowels by means of an enema, I divided the sphincter muscle in the usual way, after which I dressed the wound from the bottom. This being accomplished, I placed an emollient poultice over the parts affected, and administered a pill of the acetate of morphia. The pain soon subsided, and sound sleep ensued. The same evening the poultice was changed, and a composing draught administered. On the following day the poultices were renewed twice, and I ordered her to take five grains of the Pul. Ipecac. Co. every six hours, and to live on arrow root and beef tea. While removing the poultice on the morning of the fourth day from the operation, the lint came away from the wound, which looked perfectly healthy. Having washed the lower bowel out with warm water, I dressed the wound afresh with dry lint dipped in olive oil. This plan of treatment continued for a fortnight, at the end of which period the parts had healed, and the lady felt herself perfectly recovered.

Again:—

A gentleman consulted me in March, 1849, for an irritation at the verge of the anus, and deranged stomach and bowels. The bowels were alternately constipated and relaxed, and as often as two or three times a week he was subject to acidity at stomach,

always inducing smarting and pain in and about the anus. These attacks often induced a vomiting that set the teeth on edge, with a sour taste in the mouth.

On examination I found the mucous membrane lining the sphincter very irritable and red, and just above the muscle on the left side a small ulcer, extremely painful when touched; evidently the consequence of the parts having been kept in a state of perpetual irritation by the habitual derangement in the digestive functions. The sphincter muscle was so firmly contracted as to offer considerable resistance to the introduction of the speculum; and when, after much difficulty, I succeeded in this effort, the muscular contraction was more violent than I have ever known it to be in any other case. I proposed to remedy the disease by an operation, to which he consented; therefore, on the following day, I divided the sphincter, and applied the usual dressings. It is sufficient to state that within the month he was quite well; and from information since received, I am happy to say, continues so.

SECTION VI.

INTESTINAL CONCRETIONS AND FOREIGN BODIES IN THE RECTUM.

VARIOUS substances are frequently extracted from the rectum. They may consist of those concretions which are generated in consequence of diseased action of the digestive organs; or of foreign bodies, such as pins, nails, fruit stones, coins, small bones, pieces of wood, pots, cups, bottles, &c., which have either been swallowed by the mouth or accidentally forced into the anus by the individual himself, for some ultimate object.

The symptoms induced by the lodgment of large concretions or foreign substances in the rectum are of a formidable description. Fæcal evacuation is prevented and inflammation of the bowels induced. But before this sad termination can occur, local inflammation, and in some instances prolapsus of the mucous membrane, will take place. The parts in the neighbourhood of the anus, and all the mucous membrane that may be protruded, become still further engorged with blood, in consequence of the violent straining, as well as the pressure which the foreign body, when large,

exercises on the hæmorrhoidal veins, thus preventing the return of blood to the centre of circulation. In the male the inflammation may extend to the neck of the bladder, and give rise to the retention of urine; and in the female, to the vagina, causing blenorrhœa and bearing-down pains.

From the size or form of the concretion or foreign body, it may be necessary to divide the sphincter muscle in order to seize and extract it safely This, however, is very rarely necessary, for the anus is very dilatable. For example:—I was requested to visit a delicate lady, whom I found exceedingly sallow, emaciated, and dejected. From the severe bearing-down pains, together with the sense of weight and fulness in the sacral region, which she complained of, I was led to make an examination of the rectum, when I found the mucous membrane slightly protruding from the anus, and very turgid, the sphincter excessively irritable, and a large concretion distending the pouch of the rectum. I consequently apprised her of the nature of her case, and mentioned the absolute necessity for removing the foreign body, to which she very readily consented. Having therefore placed her in a convenient position, I introduced a pair of lithotomy forceps, and cautiously laying hold of the concretion, I gradually and steadily extracted it, with only a slight abrasion of the mucous membrane. It was not so heavy as it was bulky, being about the size of a very large pear. The bowels were then freely evacuated by injections; leeches and fomentations were applied to the anus, the recumbent position enjoined, and a speedy recovery followed.

When indurated fæces obstruct the rectum, they

should be removed with a lithotomy scoop. This I have done in two cases of constipation, one of fifteen days', and the other of nine days' duration. Both persons were of sedentary habits, and subject to constipation. In each case the abdomen was tender and swollen, the calls to stool frequent, and the discharge scanty, consisting of little else than mucus. In one the face and eyes were turgid, the veins of the neck swollen, and the respiration short. In both cases the sphincter muscle was firmly contracted, but yielded to the gradual pressure of the finger. After emptying the rectum of its contents, I threw up a large emollient injection, which caused a complete evacuation of the indurated excrements.

I may mention that leeches, in attempts to apply them to the anus, may make their way into the rectum. A gentleman sent for me one evening, who complained of a very uneasy feeling in the rectum. He mentioned that he had endured considerable pain from an external pile, to which he had applied two leeches. The first, however, did not bite, but was lost, and subsequently could not be found. He had not the slightest idea that it was contained in the rectum (which I, however, suspected), and was greatly surprised when I told him that it was very probably the cause of his uneasiness. I recommended an injection of ox-gall, to which he consented, and the leech was soon discharged, almost dead, to his great astonishment and amusement.

In the mechanical removal of ascarides, which are occasionally lodged in great numbers between the folds and in the lacunæ of the mucous membrane of the rectum, the insertion of the finger is very effectual,

as we are enabled to withdraw it in such a manner as to extract worms that would elude the lard or candle as recommended by Brera.

If not for the edification, at least for the peculiar amusement of the reader, I will mention a few of the many cases where extraordinary substances have been extracted from the rectum. M. Nolet, surgeon to the King of France and Marine Hospital at Brest, relates the following curious case:—A monk wishing to get rid of a violent colic, introduced into the rectum a bottle of Hungary water, through the cork of which he had made a small opening to permit the fluid to flow into the intestine. In his anxiety to perform the operation well, he pushed the bottle so far that it completely entered into the gut. He could neither go to stool nor receive a lavement. A sage femme failed to insert her hand; the forceps and speculum were tried in vain; however, a boy, from eight to nine years of age, succeeded in introducing his hand and removed the bottle. M. Desault, in endeavouring to extract a porcelain jelly-pot of a conical form, and about three inches in length, which had been introduced for eight days, placed on two opposite points of its diameter two strong pincers, which, however, fractured it, so that he was compelled to extract the pieces in succession. M. Saucerotte withdrew a piece of wood three inches in length and two in width, with a corkscrew, which he inserted into the wood, while he steadied it with the fore finger of his left hand. M. Bruchman performed a similar operation with a gimlet. M. Morand mentions the case of a man, about sixty years of age, who presented himself at the Hospital de la Charité, com-

plaining that the pipe of a syringe had entered his rectum, and he could not discharge it. M. Gerard introduced his finger and felt a foreign body, which he removed with a lithotomy forceps, and which proved to be a large knitting sheath of boxwood, about half a foot long. The same surgeon also relates another case of a weaver, an old man, who for a long time had suffered from constipation, having heard vaguely of the efficacy of suppositories in children, introduced a shuttle furnished with its roll of yarn into the rectum. After five days, being unable to withdraw it, he presented himself at the Hotel Dieu for assistance; when M. Bonhomme extracted it with a lithotomy forceps, aided with his finger. M. Thiandière details the case of a man aged twenty-two, who, with a view to overcome costiveness, introduced a forked stick into the rectum. This stick was five inches long; one prong was an inch and a half longer than the other, and they were separated to the extent of two inches, each prong being about four lines in diameter, and the stem formed by their union half an inch. He inserted the stem first, and when the short prong had entered the bowel, he endeavoured, by dragging on the long one, to force out the indurated fæces. In this ingenious essay it is unnecessary to say that he failed completely; the pain being very severe, he ceased his manipulations, and finding it impossible to withdraw the fork, he forced the long prong completely within the anus, with the extraordinary idea that it would be consumed with the food. Fearful to divulge the nature of his case, he bore his sufferings in solitude and despair, until the abdominal pain and difficulty in urinating led him to seek the

aid of M. Thiandière, who, on making an examination, soon discovered the foreign body, but it was so high up that he could scarcely touch it. He endeavoured, but in vain, to extract it with a forceps passed through a speculum. The happy idea then struck him of introducing his hand, which, after having washed out the rectum, he insinuated finger by finger. Conducted by the long branch, he succeeded in reaching the bifurcation of the stick, and disengaged it with difficulty from a fold of the mucous membrane, in which it had become entangled, then compressing the prongs together, he safely removed it. M. Marchetti mentions, happily, an uncommon case. Some vicious students of Goettingen introduced into the rectum of an unfortunate woman, all, save the small extremity, of a pig's tail, from which they had cut enough of the bristles to render it as rough as possible. Various attempts were made to extract it, but in vain. M. Marchetti being consulted, adopted a very simple and ingenious procedure, which consisted in securing its external extremity with a strong waxed thread, and slipping over it into the rectum a canula prepared for the purpose. He thus defended the bowel from the effects of the bristles, and easily removed it. M. Moreau relates the case of a woman, thirty-five years of age, who for a long time, but especially for four years, had laboured under a sensation of considerable weight in the fundament. Her complexion was pale and at times yellow ; she was subject to frequent attacks of colic, and her stomach was so weak that it scarcely retained any nourishment. Her efforts to defecate were sometimes so considerable that they were followed by convulsions and cold perspiration. So much did she dread these efforts, that she resisted

the calls of nature, and consequently seldom had a motion oftener than once in fifteen days or three weeks, when she moderated the violence of the bearing-down pains, and facilitated the discharge of the fæces, by resting the fundament on a round stick. On examining the rectum he perceived a solid body, apparently of large volume. He injected almond oil into the intestine, and then introduced a lithotomy forceps, with which he seized the concretion, but in the extraction it broke; however, the fragments were easily removed. This concretion was of the size of a large pippin.

In the second edition of this work I have given the full particulars of the case of William Cummings, an American sailor, who died in Guy's Hospital in March, 1809.* He had at various times swallowed a number of clasp-knives for the amusement of his comrades. His miserable death was accelerated from the effects produced by a back-spring of a knife he had swallowed, four inches and a quarter in length, which had literally transfixed the colon opposite the left kidney, and projected into the cavity of the abdomen. Another back spring had also transfixed the rectum, with one of its extremities actually fixed in the muscular parieties of the pelvis. On opening the body after death, upwards of thirty or forty portions of blades, knife-springs, and handles, were found in the stomach, some of which were remarkably corroded, and prodigiously reduced in size. These particles, arranged in a glass case, together with the stomach, are preserved in the magnificent museum of Guy's Hospital, and can be seen on application to the learned curator.

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* *Vide* Guy's Hospital Reports.

SECTION VII.

FISTULA IN ANO AND ABSCESS.

FISTULA IN ANO is a sinuous ulcer in the neighbourhood of the rectum and anus. There is a considerable variety in the size and complication of fistulæ. Some have only one or more external openings through the skin, which is termed the *blind external;* others only an internal one, within the rectum, called the *blind internal;* but in most cases there is not only an opening externally, but another internally through the intestine into its cavity ; this is denominated the *complete fistula.* This affection generally confines itself to one side of the gut; but sometimes it half surrounds the bowel; indeed, I have known it encircling the intestine entirely.

Fistula is the common result of abscess by the side of the rectum or anus. These abscesses may be independent of disease of the rectum, or they may arise from a morbid condition of this intestine. An accumulation of fæces, by which the circulation is retarded and the rectum engorged with blood, or the entanglement of small particles of indurated fæces in the lacunæ, may give rise to the formation of abscess. The inflammation, however, which is incidental to

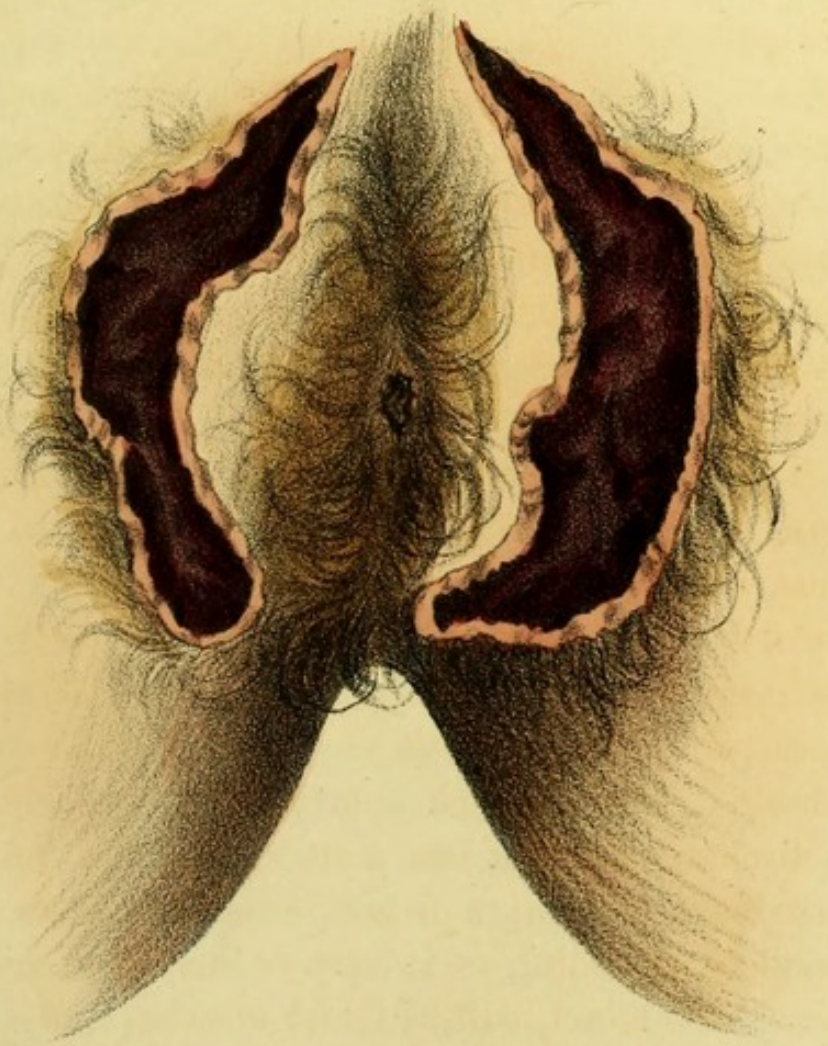
irritable hæmorrhoidal tumours, is a more frequent cause. Ulceration ensues, fæcal matter is extravasated, and an abscess is the result.

Abscesses which degenerate into fistulæ in ano are sometimes consequent to disease of the liver, spleen, heart, and lungs. Disease of the latter organs, and especially tubercular degeneration, is, however, that which most commonly give rise to them ; and this may be accounted for by the tendency which exists to ulceration of the intestines in this disease. Foreign bodies in the rectum, and badly directed incisions in the operation of lithotomy, may also be succeeded by abscess. And another common cause is the neglect to wash away the acrid secretions which collect and produce much tenderness in hot weather between the nates. There are other abscesses which exist in conjunction with malignant and other organic diseases of the rectum ; these, however, seldom terminate in fistula in ano.

The formation of abscess is attended with fever, pain, throbbing, swelling in the neighbourhood of the anus, with frequent and difficult micturition. In a few days matter forms, and is discharged either into the intestine, or externally, by one or more openings, called sinuses, after which the fever and pain speedily subside. The artificial aperture, however, continues to discharge more or less matter; and if a probe be introduced into it, a fistula, either complete or incomplete, according as it may or may not have perforated the bowel, will be found to exist.

The internal orifice of the fistula is sometimes round and callous, especially in consumptive patients; in other cases, and these by far the most numerous,

Plate IV.



FISTULA IN ANO.

Ulceration of the Nates from Fistula in Ano.

Leben lith

Printed by M & N.

it is irregular and soft. The external orifice is sometimes studded with exuberant granulations, which readily bleed, particularly when old; at other times it is irregular and without granulations, especially when recent, and the result of gangrenous inflammation; for the skin, in such cases, is generally undermined, partially livid, and deprived of its vessels by the sloughing of the subjacent cellular tissue, so that it does not really possess the power of creating granulations. This inflammation will sometimes destroy the cellular membrane of the neighbouring parts to such an extent as to occasion an enormous quantity of the nates to slough away.* The parts surrounding these fistulæ are generally very hard, and sometimes so disorganized, that we trace the course of the sinuses with much difficulty. If we examine a recent fistula, we shall find that there is a considerable cavity between its orifices, because the sac of the abscess, which gave rise to it, has not yet contracted. This cavity, however, gradually diminishes in size, until it becomes a simple tube, lined by a fine smooth tissue, resembling a mucous membrane, with this exception, that it is destitute of villosities.

When an acute phlegmonous abscess is about to form near the anus, the patient should be kept in the horizontal position, and on the lowest diet; leeches ought to be applied to the part affected, and followed by emollient fomentations and cataplasms. The bowels should be opened with some mild purgative, and if the patient be plethoric and feverish,

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* *Vide* Plate iv.

it may be prudent to bleed. Diluent drinks ought to be taken freely, as they not only reduce the fever, but facilitate micturition, and with the same view, a tepid hip bath will prove very useful. The repetition of these means must depend upon the skill of the surgeon. As soon as there is anything like fluctuation, a lancet should be introduced into the most prominent part of the tumour, and the matter evacuated, after which the poultices ought to be continued.

When the abscess is of a chronic character, a different course of treatment becomes necessary. The diet should be nutritious, consisting of meats, beer, and wine. The bowels ought to be kept gently relaxed by the administration of some mild cathartic, given at bed time. Small doses of quinine, with sulphuric acid diluted, will prove highly advantageous. The early evacuation of the matter is also very important, not however, by one free incision, but by two or three small ones; for in this manner the matter can be freely evacuated without the danger arising from the introduction of air, and erysipelatous inflammation. In these cases emollient cataplasms are also necessary both before and after the evacuation of the abscess.

If an abscess arises from the lodgment of a foreign body, it ought of course to be extracted; and indeed it is prudent, in many cases, to make a cautious examination of the lower extremity of the rectum, with a view of ascertaining whether the cause of the abscess may not be a foreign body, which has been entangled by the internal sphincter muscle.

In the treatment of fistula in ano, we should be mindful not to operate on those which depend upon

disease of the lungs, else their healing may probably give rise to an increase of the pulmonary disorder, and curtail life. There are also other sympathetic fistulæ, as those depending upon disease of the uterus and spine, as well as those which occur in the last stages of other organic diseases, which it would be improper to interfere with.

This disease is frequently to be cured by the skilful employment of injections, which I have very often successfully used in very extensive cases of fistulæ. For example—I was consulted by a lady, who six months previously had been attacked with pain in the fundament, which she attributed to internal piles. Ten days after being seized with this pain, a suppurating tumour appeared on the right side of the anus, extending from the coccyx to the middle of the perineum. A surgeon in the country, whom she consulted, opened this tumour extensively, and a large quantity of matter was discharged from it. A fortnight afterwards, however, another abscess appeared, which occupied all the left side of the anus. This abscess was also laid open in the same manner as the first, when the rectum was found denuded laterally and posteriorly for about two inches. Various dressings were applied, but with so little effect, that the disease was considered incurable. In this state it was that I saw her first. On examining the part I discovered a very deep fistula; the sinus was so deep, that the whole length of the probe was completely embedded in it. She was very unwilling to undergo any further operations, and I therefore mentioned how successful injections were at times, when she requested that I would be kind

enough to try the effect of an injection in her case. I consequently injected the stimulating solution I have found so very beneficial in many of these cases, into the sinus, and the result was, that there was no further suppuration, but adhesion took place. Her cure was thus completed without an operation.

The usual surgical mode of operating in cases of this disease, is with the knife or bistoury. This operation has many objections, for besides the pain occasioned by the cutting or dividing the fistula throughout its entire length — the danger of excessive hæmorrhage — the consequent confinement to the bed — the patient looks forward with fear and anxiety to the after treatment — the probing, the breaking down and destroying any improper adhesions or unhealthy granulations as fast as they form, and the unnecessary deep dressing of the wound.

This operation by cutting is of very ancient date. Hippocrates has described it; Celsus employed it; the Arabs also practised it, and a full exposition of it, as then performed, is to be found in several of the Arabian authors. The blind external fistulæ, however, were the only kind they dared to touch; for those which perforated the intestine were regarded as incurable. Relative to this mode of operation, Mr Copeland has observed *—"It occasions more dread 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

* Copeland on Dis. of the Rectum and Anus, page 85.

at the time of the operation, and of the disappointment in the cure, are still not very uncommon occurrences." The same author again remarks—" When the sinus extends far up the side of the gut, a 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." The insufficiency of the compress, or indeed of any pressure which can be applied to arrest the bleeding consequent on this operation, is also plainly adverted to by Mr Copeland, who observes—" 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."

With regard to the application of my dressing in cases of fistula in ano, the certainty of a cure is not only more sure, but its employment is safer; and it is frequently applicable in cases where the knife could not be used without some considerable degree of danger or uncertainty. I have employed it with the utmost success in cases in which the patients have been habitually exposed to violent relaxation, or have become extremely debilitated and exhausted from long suppuration. Where the patient can ill afford a long-continued absence from the seat of his affairs, or, from some other cause, is prevented from paying a frequent

visit to his surgeon, my peculiar mode of treatment is admirable, from the little confinement necessary, and the expedition with which the cure is effected. It also does not create that feeling of dread or invincible horror in the individual which is almost inseparable from the use of the knife; and in cases in which the fistulæ are very deeply seated, when blood-vessels of some magnitude are frequently encountered and must unavoidably be divided by the knife, to the great danger of the patient's life from the serious hæmorrhage which follows, my dressing can be applied with the utmost safety, without the least loss of blood, and with the certainty of an effectual cure. For the further illustration of the superiority of my mode of treatment, I have briefly detailed the following cases:—

A lady from Maidstone, fifty years of age, consulted me under the following circumstances. She had been afflicted with fistula during six years. At first, a swelling had suddenly appeared at the right side of the anus, which she thought had been occasioned by a fall, and which subsequently broke, and discharged a considerable quantity of blood and matter. On examination, I found the external orifice of a fistula, which was, however, exceedingly small, and situated about an inch and a half from the margin of the anus. On introducing a probe, the sinus was found to be very deeply seated, being upwards of four inches and a half in extent, and perforating the intestine, which was also greatly denuded. The whole tract of the fistula was surrounded with great hardness; and the pus emitted by the internal sinus was very considerable, and far more abundant than that which was discharged by the external orifice. I prescribed some

aperient medicine, and on the third day applied my dressing, which caused no pain whatever, and eventually came away on the tenth day after its application. The part quickly healed, and the cure was completed in three weeks.

I was requested by Mr Rouse, surgeon, of Fulham, to visit a young gentleman who laboured under fistula in ano. The patient, who was about thirty years of age, informed me, that eighteen months previously, he was attacked with severe pain in the rectum, which lasted for several days, and was succeeded by a considerable discharge from the fundament; immediate relief, however, ensued therefrom, and the discharge ceased at the end of a week. The pain also having gone away, he considered it only a temporary affection, which had cured itself, and thought no more of it until four months afterwards, when a swelling appeared on the right side of the anus, about an inch and a half from the margin of the orifice, which gave him intense pain and prevented him from sitting. A few days afterwards, whilst at stool, this swelling burst and discharged a quantity of bloody matter, which afforded him immediate relief. A yellow discharge had, however, continued ever since, which was of a very offensive smell, and frequently chafed the nates to a considerable extent. On examination, I found that the fistula was complete, and perforated the intestine about four inches from the verge of the anus; the rectum was also considerably denuded, and there was much hardness along the course of the sinus, not only internally, but externally, extending about three inches on the nates. I prescribed the usual aperient medicine, and subsequently applied my

dressing, which came away on the ninth day after its application. There was no necessity for confinement to the bed, not even on the day of the operation; and the patient expressed to me his agreeable surprise, not only at the little pain the treatment occasioned, but at the facility and quickness with which the cure was effected. This occurred at the end of a fortnight from the day of my first consultation.

In July, 1849, a gentleman, forty years of age, consulted me for a fistula which had existed for ten years. He stated that it first appeared in the form of an abscess, which burst and apparently healed. A few months afterwards, however, two painful tumours of considerable size appeared at the margin of the anus, which completely prevented his walking. In this condition he consulted a celebrated surgeon, who recommended an immediate operation, which was performed, the sphincter muscle and rectum being divided and the disorganised skin at the side of the anus largely excised. The wound, however, would not cicatrise, and several sinuses formed under the skin in the immediate neighbourhood; this obliged a second operation, which subsequently proved to be as futile as the first. In this miserable condition he continued for about three months, when the surgeon told him that his case was incurable, and advised that he should take up his residence at Lisbon. He consequently left England, and, after being absent some years, was recommended, in a letter from a friend who had been under my professional care, to return home and consult me without further delay.

On examination, I found several superficial sinuses

on both sides of the anus, and one on the left side of the orifice, which extended a considerable distance up the side of the bowel, and perforated the intestine. This extensive sinus communicated with one of some magnitude on the opposite side. For upwards of four inches the rectum was denuded; the hardness along the course of the left sinus was very considerable; and extensive callosities existed externally; the latter, however, soon diminished from the use of poultices, moistened with a solution of the acetate of lead. After a free evacuation of the intestines by the administration of an active aperient, I was enabled to apply my dressing to the deep-seated sinus, which came away twelve days afterwards; I subsequently injected the superficial sinuses with a stimulating solution, which rapidly caused them to heal up; and at the expiration of three weeks from this gentleman's first visit to me, the cure of this very extensive case was complete.

SECTION VIII.

FISSURE OF THE ANUS, AND SPASMODIC CONSTRICTION OF THE SPHINCTER MUSCLE.

THESE diseases generally exist in conjunction with each other. A constricted state of the sphincter muscle sometimes exists without fissure; but it is mostly a complication of the latter complaint. Fissure, however, never exists without constriction of the anus. It is probable that these two symptoms do not commence together; either the fissure has induced the constriction, or the constriction has preceded the fissure; so that one of these affections will be primitive, and the other accessary or consecutive. I am inclined to believe that the spasmodic constriction is the primary affection; this particular complaint, however, is frequently to be met with as a consequence of other diseases.

The fissure of the anus is by no means an uncommon complaint, for I have met with it upwards of a hundred times in the course of my practice. It is a small painful ulcer, situated immediately within the anus, generally on one or both sides, occasionally on the posterior, and still less frequently on the anterior

part of the orifice. In some cases it is confined to the mucous membrane, though it frequently extends to the muscular tissue. When recent, its edges are soft, and but little elevated; in proportion, however, as it becomes chronic, so are they more hard and prominent. Adult persons appear to be almost exclusively the subjects of this complaint. It is seldom or never met with in children or very young persons. No class of society appears to be exempt from it, and both sexes equally exposed to it; but women more frequently than men, which arises from their leading more sedentary lives, and consequently being more subject to constipation of the bowels. In some cases, fissure is preceded by vascular tumours of the rectum, and is produced by the forcible passage of the indurated fæces. In this act, the vascular tumours are first prolapsed, and then separated, during which process the mucous membrane, rendered friable by inflammation, is ruptured. In the majority of cases, however, there is a total absence of any kind of tumours; the indurated fæces, having accumulated in a large quantity in the rectum, excite a spasmodic constriction of the sphincter muscle, and, through their excessive dryness, heat, and the straining necessary to void them, the mucous membrane covering the sphincter muscle becomes excoriated or lacerated vertically.

The symptoms of both these complaints are very similar. The evacuation of the fæcal matter is accompanied with burning, lancinating, and throbbing pain; indeed, every effort to discharge gas and fæces is attended with excruciating torment, which continues for one or more hours, accompanied with violent

spasmodic action of the sphincter ani. The pain is increased by forced expirations, as coughing, sneezing, and urinating. So violent is the agony, that most persons thus afflicted put off the calls of nature, maintain the recumbent position, and some even avoid taking a proper quantity of nourishment, for fear of increasing the fæcal mass. If they remain many days without going to stool, the pains that they eventually experience in defecation are still more excruciating, and they compare them to what would be produced by the introduction of a burning iron. Some patients are then attacked with a sort of general convulsions, or fall into a swoon. The pain is also always increased by stimulating food, and in females during menstruation. Occasionally I have seen it assume a periodical character, which depended upon some peculiar state of the constitution. When the fæces are solid they are slightly streaked with blood and matter, and, when soft, are figured and of small size. The introduction of the finger is attended with great difficulty and torture, particularly when pressure is made on the fissure; indeed, the characteristic symptom of fissure is a fixed pain in one point of the circumference of the anus, which, however, is absent in simple spasmodic constriction of the sphincter muscle. In some instances, the fissure seems to be a mere depression; in others, to be surmounted by pretty high edges; while, in a few rare instances, we only become cognizant of its situation by the increase of suffering in a certain point, under the same amount of pressure.

The symptoms just detailed relieves me from the necessity of treating at large concerning the diagnosis

of the two complaints. The spasmodic constriction of the sphincter—the pain which accompanies and follows the alvine evacuations—the absence of all lesion in the structure of the anus—the long duration of the complaint, are symptoms common to the spasmodic constriction and to fissure. In the former, the introduction of the finger occasions a very acute pain; it is strongly compressed, but, on whatever part of the anus we press, the pain is not augmented; whilst, in the latter, there is always a fixed pain, which is greatly increased by pressure on the sphincter ani. These particular characters ought to prevent the confounding of the two diseases, whenever a spasmodic constriction of the sphincter happens to exist independent of fissure, or any other complaint.

Most of those patients who have consulted me for these affections, have previously had recourse to medical advice; and invariably has a wrong diagnosis been formed. One had been treated for a supposed disease of the liver; another for an affection of the spleen; another for a venereal complaint; another for a scrofulous taint; and in a great many cases, the symptoms had been thought to be the consequence of internal hæmorrhoids, and treated accordingly. The remedies made use of, in accordance with these several opinions, of course produced no beneficial effect upon the local disease.

With regard to the treatment of fissure, the patient should be kept on a low diet, and observe the recumbent position. It has been recommended to divide the sphincter muscle; but this operation is very rarely necessary, and only in very extreme cases, when all other remedies have been tried in vain. The common

practice of administering cathartics, so as to produce fluid evacuations, cannot be too highly censured, for such discharges stimulate the ulcerated surface, induce dreadful irritation, and increase the spasmodic contraction of the sphincter ani. The better plan is to administer daily half a pint or more of the infusion of linseed as an enema, and after its operation to cleanse the parts well with tepid water. The application of the lead ointment will be generally quite sufficient for the healing of the sore, if properly applied, and should there be much spasm of the sphincter, the extract of belladonna will prove a powerful auxiliary. This simple treatment I have invariably found to be effectual in the majority of cases which have come under my care; indeed, I have known it succeed to perfection in many cases, where the division of the sphincter muscle had been advised by some eminent surgeons as the only and last resource for the cure of the disease. The following cases will effectually illustrate the efficacy of this mode of treatment:—

In May, 1849, a lady consulted me for a burning pain in the anus, which had troubled her for four months. It was particularly distressing after stool, and was much increased by the erect position. She had become exceedingly nervous; lay upon a sofa during the day; and took scarcely any nutriment, fearing the excruciating pain which attended defecation. I mentioned the probability of her complaint being fissure, which on examination proved to be correct. The sore was deep, with a hard base; the surrounding membrane was tumid, and the sphincter muscle in a state of violent contraction. I prescribed an emollient injection daily, and I applied the lead

and belladonna ointment to the fissure and anus night and morning. This treatment, combined with low living and the horizontal position, was continued for about a fortnight, when the sore had healed, the spasm of the sphincter was relieved, and the patient restored to her usual state of health.

Mr Mountford, surgeon, of Queen's square, requested me to visit a gentleman, who for some years had been in a delicate state of health. At the suggestion of a friend he had taken large quantities of some patent medicine, which purged him violently, and gave rise to violent burning pain in the anus, aggravated by the erect position, coughing, sneezing, urinating, and the passage of gas. Defecation produced the most horrid pain, which increased for three or four hours, attended with fever, and then subsided, leaving him weak and exhausted. By this continued suffering for some months, he had become emaciated, melancholy, and so irritable that he could not bear to be touched. On examination I found a fissure, with an indurated base and elevated edges, on each side of the anus, surrounded by an erysipelatous state of the adjacent mucous membrane, and attended with a most violent spasmodic constriction of the sphincter muscle. I employed the same treatment in this case as in the one preceding, and with the same happy result, for at the expiration of three weeks this gentleman was not only quite free from suffering, but was gaining flesh, and fast recovering a perfect state of health.

The treatment of spasmodic constriction of the sphincter muscle, unconnected with fissure of the

anus, depends upon its being either a simple affection in which we cannot trace any other primary complaint, or, upon its connection with some functional disease, as of the genito-urinary organs. Relative to the first species, the following cases will illustrate the treatment I have found the most successful:

Mr Martin, surgeon, of Haverhill, recommended a lady to me who was suffering from an affection which was supposed to be stricture of the rectum. She informed me that six months previously she had a diarrhœa, after which her bowels became constipated, and symptoms set in similar to those of fissure, except that the fæces were neither streaked with blood nor matter. She had become emaciated, restless, feverish, and depressed in mind; indeed, her despondency was such, that she entertained a firm belief of her immediate demise. On examination, I could not discover a fissure, nor was there any increased tenderness at one part of the anus more than another; but the anus was closed so firmly, that I could only introduce my little finger with much difficulty. I prescribed a light nutritious diet; hip baths daily; a tablespoonful of castor oil early every morning; the application of the belladonna ointment to the anus night and morning; and the introduction of a short full-sized rectum bougie every other day, allowing it to remain in from ten to twenty minutes on each occasion. Under this treatment the spasm speedily gave way, and at the end of a fortnight this lady left London quite recovered from her complaint, and greatly improved both in body and mind.

A young lady, nineteen years of age, required my advice for a spasmodic constriction of the sphincter muscle. She was of a very nervous temperament, and occasionally subject to great mental depression. The local symptoms had existed for several months past, and frequently were so violent and painful as to arouse her from her sleep at night, such paroxysms generally continuing for two or three hours. These sudden forcible attacks would occasionally occur during the day whilst walking or riding. I examined the parts carefully, but could not discover any structural disease, nor did the introduction of the finger through the contracted sphincter produce any more pain in one part than in another. I prescribed a vegetable diet, exercise, a warm hip bath every other night, two grains of blue pill and James's powder at bed time, and a small quantity of castor oil the following morning. The infusion of quassia was also taken three times during the day. Under this treatment she soon recovered, and I am happy to say continues perfectly well.

With regard to the treatment of the second species, in which there is some functional disease, as of the genito-urinary organs, the following cases will be found good examples:—

A gentleman, twenty-six years of age, consulted me for the cure of a painful affection of the anus. He complained of frequent spasmodic pain in the lower extremity of the rectum, and great irritability of the urinary organs, which, from his description, I thought might be stone in the bladder. The spas-

modic constriction of the sphincter muscle was always greatly aggravated when the urinary symptoms were severe. On attempting to introduce a sound into his bladder, the passage of the instrument was prevented by a stricture, about four inches from the external orifice of the urethra. The cause of all his distress was at once apparent. Its removal was speedily followed by the absence of the spasmodic constriction of the sphincter muscle, of those other painful symptoms which had for many months afflicted him, and by his perfect restoration to health.

I was requested to visit a gentleman, forty years of age, who suffered from great spasmodic constriction of the sphincter muscle and severe symptoms of stone in the bladder. He had been already sounded by the medical gentleman who usually attended him, and who was unable to discover any calculus. On passing a sound in the most gentle manner down the urethra, he complained of such great irritability, and the spasm of the urinary canal and of the sphincter ani became so violent, that I was obliged to withdraw the instrument, and order him a warm hip bath, and a dose of castor oil with twenty-five minims of laudanum. I afterwards made three further attempts, on alternate days, to pass the instrument into the bladder, but with no better result, the same irritation and spasm being manifested on each occasion. On the eighth day, however, I was enabled to examine the bladder, after injecting into it half a pint of tepid water, and to detect the presence of a calculus of a firm consistence, and rather large size. To remove

this foreign body was the next important consideration, and this I proposed should be effected by *lithotrity* instead of lithotomy. This mode of operation gave the patient great satisfaction, as he entertained the utmost horror of the knife, and stated that he "was determined to keep the stone rather than be cut." In due time the urethra was dilated, the calculus broken, and the whole of the fragments extracted with the utmost facility. I need only further observe that the patient's perfect recovery from all those distressing symptoms which for a long period had afflicted him, speedily followed the operation.

PART IV.

ADDITIONAL CASES.

THE following additional Cases, selected from a great number which have come under the author's care, are here inserted, with a view of illustrating, not only the success which has ever attended his peculiar mode of treatment, but the universal satisfaction of his numerous patients:—

CASE I.

MR S. T., residing in the Strand, forty-five years of age, consulted me six years since for the cure of a complicated disease of the rectum, with which he had been previously afflicted for upwards of twelve years. It was with considerable difficulty that he came to the determination to undergo the treatment necessary for the cure of his complaint, owing to his natural timid disposition, and a fear that there was no effectual relief for him. After I had made an examination of his case, which was one of prolapsus

and hæmorrhoidal tumours, I told him that his cure was undoubtedly quite possible if he was willing to submit to my usual treatment. He eventually complied, and in less than one month was perfectly recovered, in which condition he continues up to the present time.

The following letter I afterwards received from him:—

Strand, June, 1844.

My dear Sir,—I cannot sufficiently express the pleasure which I feel in acknowledging the infinite service you have rendered me, and which your skill alone, I am sure, could have so easily accomplished. To contrast the many years of suffering with the comfort I now feel, would be likening my stupidity in enduring so much pain, to the prudence I exhibited in consulting you for the relief thereof.

As to your treatment of the case,—one, as you know, of a very complicated nature,—I am sure I can never say too much in its praise; so simple and so gentle, that a child could have borne it. Your kindness and attention, also, will ever cause me to feel an interest in your behalf, which I shall always be happy to exhibit whenever occasion serves.

Do not scruple to make use of these few lines, coming from one who is very thankful, but do with them as you may feel disposed; also, do not hesitate to refer any person to me, for, the oftener you do so, the more I shall be delighted to relate the happy tale of my recovery from a very distressing complaint, through the instrumentality of your superior and gentle treatment.

With every sincere wish for your health and welfare, believe me, by dear Sir,

Yours gratefully,

S. T——.

CASE II.

A GENTLEMAN from India, about thirty-seven years of age, consulted me for the cure of a fistula. For some years previous to his being attacked with this disease, he had been afflicted with piles, which had given him great pain; they, however, disappeared, but left behind them a disease far more distressing in its character. He had consulted many surgeons of celebrity in India, and had been once operated on for fistula, which had now re-appeared with increased severity. He was sadly afraid there was no cure for him, as the gentleman who had performed the operation was considered to be of great talent as a surgeon, and would undoubtedly have relieved him from his complaint had it been possible.

On examining this case, I found, besides the fistula, which was very extensive, a stricture of the bowel, about two inches and a half from the anus. I had previously suspected the probability of its existence, from the description the patient gave me of his stools, which he said were very small in size and quantity, and were voided with much difficulty. After prescribing some opening medicine, I was enabled the next day to apply my dressing to the fistula, which, in ten days, came away, the sinus having nearly closed. I then introduced into the rectum a small

bougie, which passed the stricture. By daily using this instrument, and increasing its size by degrees, I soon relieved this patient from those diseases which had so long afflicted him. The following letter I subsequently received from him:—

Norfolk street, Strand, August, 1846.

My dear Sir,—I have great pleasure in sending you the enclosed, and beg to assure you that I shall always retain a grateful sense of the great service you have rendered me in curing me of the distressing complaints for which I put myself under your care. Should you wish to have a formal statement of my case, I shall be most happy to furnish it. And wishing you all that success which you so eminently deserve, believe me, my dear Sir,

Yours very sincerely,

J. C——.

CASE III.

A LADY, about fifty years of age, of delicate habit, consulted me for the relief of what she considered to be constipated bowels. Her stools were invariably dark-coloured and bilious, and were never brought away without the aid of cathartic medicines; the quantity discharged was always very little, and its expulsion was ever attended with much pain and uneasiness. On examination, I found the bowel obstructed by two tumours and a stricture; the latter situated about three inches from the anus. After emptying the bowels by an enema of warm water, I

was enabled to apply my dressing to the largest of the tumours, which in about three days disappeared; the one remaining was then dressed, and, on its removal, I introduced a small-sized bougie into the rectum, which passed the stricture easily. The use of the bougie was afterwards persevered in daily; and, in one month from the commencement of my treatment, the cure was completed.

Previous to this lady leaving town, I received from her the following letter:—

Orchard street, Portman square,
April, 1844.

Dear Sir,—I am about leaving London, but cannot do so until I have acknowledged the great benefit which I have received at your hands. Your professional skill has perfectly relieved me from diseases which for many years have been a source of much misery to me; and I candidly assure you that your kindness and attention will never be forgotten by

Your grateful patient,

——— ——— .

CASE IV.

A GENTLEMAN, from Bermondsey, consulted me for the cure of a complaint of the rectum, which he had been informed was piles. On examination of his case, I found two tumours protruding beyond the anus in a

state of ulceration, and emitting a purulent discharge of yellow matter. I was enabled the same day to apply my dressing to the largest tumour, which disappeared in three days; the other tumour I afterwards operated on, and completed the cure in a fortnight.

The following letter I have since received from this patient:—

Bermondsey, October, 1845.

Dear Sir,—Influenced by feelings of mingled pleasure and gratitude, I now address a few lines to inform you of the great benefit I have experienced from your successful mode of treatment, which has proved to me one of the greatest blessings I ever received from the hand of man.

It is now more than six months since I sought your valuable aid and assistance, during which time I have not only been free from piles, but I have been much better in health and spirits; I can, therefore, with the greatest confidence and the strongest emphasis, pronounce the words, "I am perfectly cured" of a disease I had been labouring under for some years.

Should you ever meet with a patient timid like myself, who wishes a reference to a once fellow-sufferer, I shall be most happy to relieve his mind from all doubts or fears as to the expediency of applying for that relief which I have so greatly received at your hands. With every feeling of gratitude, I remain, dear Sir,

Yours very sincerely,

R. H——.

CASE V.

A LADY, the wife of an officer in the army, then residing in my neighbourhood, applied to me in consequence of a very painful affection of the rectum, which had afflicted her for four years, during which time her health had been gradually declining. She experienced a very distressing uneasiness and bearing down, not only when moving about, but particularly when sitting down. There was also a sense of heat, with a pain which she thought proceeded from a swelling formed within the bowel. These symptoms were greatly aggravated on going to stool. Being naturally very timid, she had not previously consulted any professional gentleman, but hearing of my ability in the cure of these diseases, she had summoned courage enough to pay me a visit.

On examination, I found a fistula and a tumour. In the course of the week she consented to my operating on the tumour; and as soon as it was removed, which was at the end of three days, I was requested to continue my treatment for the cure of the fistula. I accordingly applied my dressing to the fistula; in twelve days it came away, and she expressed herself very much relieved. In three weeks from our first interview she was perfectly cured, as the following letter received from this lady's husband will testify:

United Service Club, April, 1849.

My dear Sir,—Enclosed I have the pleasure to forward you a draft on Messrs Cox and Co., for ——, and take the same opportunity of tendering you my

warmest thanks, in which my dear wife unites, for your skilful treatment and attentions to Mrs H. during the period she has been under your care.

I remain, my dear Sir,

Yours faithfully,

W H——.

CASE VI.

I RECEIVED the following particulars of a case, written by the patient, from an officer in the army residing in India:—

I have been for the last two or three years suffering, at times exceedingly, from piles. I think, from the formation of the anus, that the gut was predisposed in my case to fall or protrude at stooling, which it has done slightly for several years past, but I have suffered no material inconvenience from it. I think it was early in the year 1842 that I had the first severe attack of piles, being then in my thirty-sixth year; they were then rather smaller than a grape, but exceedingly sore and inflamed. They were relieved by rest for a day or two, and the application of some slight ointment, with purgatives. In the month of December, in the same year, they again attacked me; and since then, in consequence, I suppose, of leading a very sedentary life, they have been my constant tormentors. At stooling they bleed, sometimes slightly, at other times very much. I have been obliged to make it a practice to stool going to bed, as the long rest during the night has the effect of allaying the

inflammation and pain which succeed the evacuation of the fæces. The piles continually discharge a sort of humour, sometimes mixed with blood, which has latterly increased in quantity. My habits are very temperate, and I am not an irregular or high liver, plain diet being usually my choice.

This patient subsequently arrived in England, when I received a note requesting I would visit him at —— Hotel, Haymarket. I did so, and continued to attend him daily for three weeks, at the end of which time he felt himself perfectly well. The following letter I received from him previous to his leaving this country to join his regiment on his attaining his Majority:—

London, March, 1850.

My dear Sir,—I have much pleasure in sending you an order for —— on my army agents. As I may shortly leave England, I take this opportunity of expressing to you my grateful thanks for the skill you have shown in the treatment of my case, and of acknowledging your great attention and kindness whilst under your hands.—Wishing you every success and happiness; believe me, my dear Sir,

Yours very sincerely

C. H. H——.

CASE VII.

The following case was written by the patient, a clergyman in Devonshire:—

In February, 1842, I first perceived that I had a fistula. I allowed it to run on until November in that year without taking any notice of it; which, probably, I might not have done then, but that I had another abscess formed in the perinœum, which prevented me attending to my usual professional duties. I consulted a surgeon at Exeter, who, not observing the abscess, recommended me to have the fistula opened, which was accordingly done; in the course of ten days afterwards, the abscess broke and left two sinuses; these also, in the course of two or three weeks were cut open, which put me to great torture. Every attention was paid to the wounds, which healed very slowly, and it was not till the following May, 1843, that they were considered to be healed. In about a month afterwards, however, the fistula showed fresh signs of again troubling me, and there appeared a small external opening in the old place, about half an inch deep, which I could not get to heal up. I went to the sea-side for three weeks in the following August, but it was of no use. I again consulted my surgeon in September, who recommended me to do nothing to it, but wash the part and keep it perfectly clean; to this I have of course attended. The little discharge, the surgeon informed me, was nothing more than mucus; its continuance, however, I am satisfied, will produce serious debility. Thus has my case gone on until the present time; the fistula has increased in depth to about an inch; and the discharge is sometimes clear and bright, and at other times of a darker colour. I mostly put a small piece of lint to the opening every morning, with plaister over it, which

absorbs all dampness, until the following morning, when I again wash the part, and apply lint, &c., as before.

Having now fully detailed the particulars of my case, and having carefully perused your excellent work on these diseases (in which I find cases of far greater magnitude than mine that have been successfully treated by you), will you be so kind as to inform me when I had better come to London, for the purpose of receiving your advice and attendance?

On the 11th of October, 1844, this gentleman arrived in London, and I was requested to visit him, at —— Hotel, Piccadilly. He seemed very much fatigued from the journey, though he had taken two days to perform it, and his health was very much impaired. On examining his case, I found a fistula of very considerable magnitude penetrating the gut, about three inches and a half from the anus. I ordered a draught for him to take the next morning; and the following day, after the bowels were relieved, I applied my dressing. In less than a month he was perfectly cured; and, after acknowledging in a very sincere manner the great benefit he had received from my treatment, he left London to return home to his family. I have since received from him the following letter :—

Exeter, January, 1845

My dear Sir,—According to your request at our last interview, I write to inform you that I continue in the enjoyment of excellent health. I cannot refrain from again begging you to accept my best acknowledgments for the kind care, great skill, and

judgment you exhibited in effecting a complete cure of my long-standing disease. I consider myself a living monument of the superiority of your treatment over the usual surgical method.

Believe me, my dear Sir, I shall ever call to mind with much pleasure the day I went to London for the purpose of consulting you, and be assured that the deep debt of gratitude I owe for the skilful treatment and unremitting attention received at your hands will never be effaced from the memory of

Your ever grateful and obliged,

O. J———.

CASE VIII.

In December, 1844, a gentleman from Buenos Ayres, South America, consulted me for the cure of a disease of the rectum, with which he had been afflicted for many years. He informed me, that, from perusing my work on these complaints, which had been sent him by a relation, he was persuaded to visit England without further delay, and place himself under my treatment.

On examination, I found two large hæmorrhoidal tumours protruding about three-quarters of an inch below the margin of the anus, which was much contracted. The next day, after administering an enema, I applied my dressing to one of the tumours, which, in two days, disappeared. The remaining tumour was subsequently operated on, the contraction of the anus relieved, and the cure completed in less than

three weeks. Previous to this gentleman leaving England I received the following letter from him:—

Brixton, March, 1845.

My dear Sir,—You will no doubt be surprised to find me yet in England; I have been unavoidably detained, but shall leave London early next week. In case I should be deprived of the pleasure of calling on you, to say good-bye, I now address you, to express once more my grateful thanks for your attention while under your hands; and at the same time beg to say, that I have been entirely free from my old complaint of piles, and have not the least apprehension of a return of them. Wishing you every happiness, I remain, my dear Sir, yours very sincerely,

R. B. N———.

CASE IX.

In the same month as the preceding case, a gentleman from Kent consulted me for a very painful disease, which he thought was prolapsus of the rectum. He had been for many years afflicted with this complaint, which, besides the pain it gave, particularly interfered with his usual avocations, being those of a farmer. Having come to London for the purpose of buying a truss, accident placed before him my work on these diseases, a perusal of which immediately determined him to consult me for the cure of his complaint, rather than to purchase an instrument which could only afford temporary relief.

On examination, I found the sphincter muscle so rigid that it was with difficulty I could introduce my finger within the bowel. On withdrawing my finger, an hæmorrhoidal tumour, about the size of a nutmeg, was protruded. The bowels having been relieved, I was enabled to apply my dressing immediately to the tumour, which came away on the third day; I then introduced the bougie, and continued its use daily for nearly a week, which not only removed the spasm of the sphincter muscle, but effectually completed the cure, as the following letter, received from the patient, will testify:—

New Romney, March, 1845.

My dear Sir,—In passing through Ashford yesterday, I gave directions to my bankers there to pay into Messrs Smith, Payne, and Co.'s, Lombard street, the sum of ——— for you. Be kind enough to drop me a line to say you have received it.

I reached home quite well, and beg to acknowledge from my heart, the great kindness and attention I have so lately received from your hands, and for the ease and comfort I now feel from your skill in curing me of a malady which had been a source of misery to me for very many years. Ever shall I feel an interest in your behalf, and long, long may you live in the bosom of your family, and an ornament in your profession, is my sincere wish. Mrs C ——— unites with me in kind regards and many thanks. I have the honour to be, my dear Sir,

Yours very respectfully,

W. C——.

CASE X.

In May, 1845, a gentleman, about forty years of age, consulted me for a troublesome disease of the rectum. He had previously consulted Mr A—— W——, and other surgeons of eminence, but had derived no benefit from their advice. On examination, there appeared two hæmorrhoidal tumours, of an oblong shape and dark red colour. I prescribed for him a draught, and requested to see him the following morning after the bowels were relieved. The next day I applied my dressing to both of the tumours, and in ten days completed the cure.

The following letter I have since received from this patient:—

Southwark, May, 1845.

My dear Sir,—Gratitude will ever be predominant in my breast towards you, for the restoration of my health by your kind and skilful treatment, in having cured me of the piles, with which I had been afflicted for six or seven years. As a cured patient, I cannot refrain from returning you my humble thanks for the uniform attention you have bestowed upon my case. I shall at all times be most happy to certify to your abilities, if it should ever please you to refer to me any one labouring under the bodily ailment which, through your instrumentality, I am now divested of.

Reassuring you of my sincere and heartfelt thanks

for the benefits you have conferred upon me, believe me to be, my dear Sir,

Your very grateful and obliged servant,

W. F. R——.

CASE XI.

THE following case was written by the patient, a clergyman residing in Gloucestershire:—

For many years past I have been a sufferer from internal piles, and for about the last two years I have laboured under prolapsus ani vel recti, in conjunction with the above. In times past, every evacuation was accompanied with a discharge of blood; but latterly I have lost no blood, except in the effort to return the parts which protrude into the rectum. There is a descent of the latter whenever I go to stool. The tumours are large, and oftentimes it is attended with considerable difficulty to force them back. Such is the rigidity of the parts, that I can scarcely put one of my fingers within the rectum. The pain occasioned by the disease is very great, and the prolapsus troubles me much, particularly when I have an evacuation. My bowels are hard to move (they have been so for years), so much so that I am obliged to take medicine every night to keep them open. If I omit to do this, costiveness follows immediately, and, even though assisted by medicine, my evacuations are very deficient. There is great fulness in my bowels, and a medical man in my neighbourhood, whom I consulted

about a year ago, said that they were "gorged" (I use his own term), and that I must get them unloaded. He prescribed for me accordingly, but I have derived little or no benefit. I am desirous, therefore, of availing myself of your advice and treatment, with the hope that, by the blessing of God, I may obtain effectual relief.

This gentleman came to London, and was under my care for nearly three weeks, at the expiration of which period he returned home perfectly cured. I have since received the following letter from him:—

May 12th, 1845.

My dear Sir,—A month having elapsed since my departure from London, I write, according to promise, in reference to the object of my late journey. I am happy to be able to say, that the relief afforded by you under my distressing malady (and for which I desire to be thankful to a kind Providence), has been of a very satisfactory nature. Hitherto I have had no relapse of piles or prolapsus, and, if such be the will of the Lord, I hope I may not be called again to suffer from my old complaint. Agreeably to your kind advice, I have adopted a more generous diet than what I formerly observed, and, instead of my former beverage, water, I drink home-brewed ale, and also a glass or two of port wine.

With a grateful sense of the great benefit derived from your skill, and of your kind attentions during my late visit to London, I remain, my dear Sir,

Yours very truly,

S. M. W——.

CASE XII.

In April, 1845, I received a visit from a lady, who stated her complaint to be at the verge of the anus; observing that, for its relief, she had already consulted three or four of the most eminent surgeons. She said, that several years back, subsequent to a severe complaint in the bowels, she first perceived some little swellings, which were frequently very painful, and that, since that period, she had occasionally been subject to irritation and other inconveniences.

On examination, I found several small tumours at the verge of the anus, and the anus itself very much contracted. I, however, felt satisfied that the contraction would be perfectly relieved on the removal of the constant source of irritation—the tumours. I accordingly applied my dressing to the whole of the tumours, which speedily effected their removal, and in three weeks the cure was complete.

I have since received the following letter from the husband of this lady:—

Crutched Friars, May, 1845.

Dear Sir,—Since I left town I have been ailing a good deal, and have confined myself at Charlton till to-day, when I feel much stronger. This has delayed my sending you the accompanying check for ——, which otherwise should have been sooner in your hands.

Mrs M—— is recovering her strength, and feels very sensibly the great benefit she has received from your treatment, which has removed a painful and annoying complaint, under which she had suffered

severely for some years. With many thanks for all your attentions, I remain, dear Sir,

Yours faithfully,

A. M——.

CASE XIII.

In March, 1846, a nobleman consulted me for a painful disease of the rectum. He had frequently consulted many surgeons of eminence, but had derived no permanent benefit from the various means they employed.

On examination, I found the anus surrounded by soft hæmorrhoidal tumours; there was also considerable spasm of the sphincter muscle; and the part altogether presented an appearance which plainly indicated that disease had existed for many years. The patient's health was very much deranged, and he suffered considerably from the constant irritation of the complaint.

I accordingly prescribed such medicine as I thought requisite, and the following afternoon visited his Lordship at Whitehall, whom I found much more composed and comfortable than I had anticipated. After attending him daily for a fortnight, the cure was completed to our mutual satisfaction, as the following note will testify:—

Whitehall, April, 1846.

Lord ——— has much pleasure in informing Dr Silver that he feels perfectly recovered.

The accompanying present Dr Silver will be so good as to accept, as a grateful acknowledgment of the peculiar skill and attention Dr S. exhibited in the case of his late patient.

CASE XIV.

THE following letter I received from the patient, a medical gentleman residing in Kent:—

Cranbrook, July, 1846.

My dear Sir,—I now have the pleasure of complying with your request, that I would give you some account of my long-continued and complicated complaint, of which your skill has so happily cured me.

It is about ten years since I began to suffer from hæmorrhoidal affections, at first only occasionally, and after the bowels were relieved. For several years the complaint was troublesome by fits, continuing about a week, with intermissions of from one to three or four months. During the fits, some protrusion generally took place after evacuation of the bowels, which it was necessary carefully to return. It was not till about three years ago that I began to suffer almost constantly from uneasiness, often amounting to considerable pain, and attended by more or less of protrusion on taking walking exercise. From this time the disease rapidly increased, till at length I could seldom remain in the erect posture for many minutes together,

without being annoyed at a large protrusion of piles and prolapsus of the intestine. The pain in the tumours, and also in the back, extending down the thighs, rendered all locomotion so irksome, that I was driven seriously to think of obtaining relief, if possible. With my extremely delicate and irritable constitution, the ordinary operation by excision I deemed far too hazardous; but having met with your work on the subject, I soon resolved to place myself under your treatment, and I am now most thankful to be able to say, that through God's blessing on your great skill and unremitting attention, this complicated and most distressing complaint is quite removed. Exercise is now delightful to me, and my general health has greatly improved.

Again requesting you will accept my cordial thanks for all your kind attention and your continued interest in my welfare, I remain, my dear Sir,

Yours most truly,

W. R. D———.

The above patient having described his case and the effect of my treatment with so much accuracy and minuteness, renders any further statement unnecessary; I would, however, just observe, that in a great many cases of these complaints, when the ordinary method of treatment has been found perfectly inadequate for effecting a cure, or too dangerous to be adopted, the treatment I have advised has proved invariably successful.

APPENDIX.

THE following Professional Testimonials were presented by the Author, on his being introduced by the President of the Royal College of Physicians of London to Sir James M'Grigor, Bart., late Director-General of the Army Medical Department, previous to his being appointed one of Her Majesty's Colonial Surgeons, by the Right Hon. the Earl Grey:—

St Helen's place, Bishopsgate.

I can with pleasure bear testimony to Dr Silver's professional qualifications as a Surgeon desirous of entering Her Majesty's Service. He is a Graduate of King's College, and a Member of the Royal College of Surgeons of England, and is in every way qualified as a member of the profession.

C. ASTON KEY, F.R.S.,
Surgeon to H.R.H. the Prince Albert, &c. &c.

Woburn place, Russell square.

I have had frequent opportunities, whilst Surgeon to the University College Hospital, for correctly estimating Dr Silver's abilities in the art and science of Surgery; and I state with much pleasure, that at the bed-side of the patient, he always exhibited that sound practical knowledge, which decidedly entitles him to be considered a good and efficient Surgeon, and fully qualified for an Assistant-Surgeoncy in Her Majesty's Service.

SAMUEL COOPER,

Senior Surgeon and late Professor of Surgery in the University College Hospital.

Finsbury square.

I have much pleasure in certifying to Dr Silver's professional qualifications as a Surgeon generally. He was my Assistant at Guy's Hospital, and in that capacity, I had every opportunity of estimating his abilities, which developed great natural talent, and afforded me the highest gratification.

JOHN MORGAN, F.L.S.,

Surgeon to Guy's Hospital.

New street, Spring gardens.

Mr Bransby Cooper has the greatest pleasure in bearing testimony to the assiduity with which Dr Silver prosecuted his studies during his pupilage at Guy's Hospital, and can most conscientiously say, that he considers Dr Silver in every respect highly qualified to perform the duties of Assistant-Surgeon in Her Majesty's Army, both with credit to himself and with advantage to the Service.

15 New Burlington street.

I believe Dr Silver to be admirably qualified for the appointment of Assistant-Surgeon in the Army, and, as his industry and general conduct have met with the entire approbation of the Medical Staff of St George's Hospital, I shall have great pleasure in forwarding his views in life.

E. CUTLER,
Surgeon to St George's and the Lock Hospitals.

Grafton street, Piccadilly.

I can satisfactorily bear testimony to the fitness of Dr Silver for the professional duties of an Assistant-Surgeon in Her Majesty's Service.

I say this from a personal knowledge of some years, having been well acquainted with his course as a Student at Guy's Hospital, when he not only attended diligently as a pupil, but enjoyed the superior advantages of a Dressership to one of the Surgeons of that large Institution for twelve months.

SAMUEL ASHWELL, M.D.,
Late Obstetric Physician and Lecturer to Guy's Hospital.

Guy's Hospital, London.

I have known Dr Silver for several years, and believe him to be qualified for the office of Assistant-Surgeon to the Army Medical Department.

He has taken his degree of M.D., and is a Member of the Royal College of Surgeons of England, and has neglected no opportunity of making himself acquainted with the various

departments of the profession necessary to be known by a candidate for the Army Medical Department.

JOHN C. W. LEVER, M.D.,
Physician Accoucheur and Professor of Midwifery at Guy's Hospital.

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10 New Broad street, City.

I have much pleasure in recommending Dr Silver as a competent person for the duties of Assistant-Surgeon in the Army; he is a Member of the Royal College of Surgeons, and was formerly an industrious Student at Guy's Hospital, and House Surgeon at the same Institution.

JOHN HILTON, F.R.S.,
Surgeon and Lecturer on Anatomy at Guy's Hospital.

THE END.

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