of the uterus. The tube and ovary are then degenerate and useless. The more cystic they become the more discomfort they cause, and the more probably will they form adhesions to intestine and omentum. The health suffers, the patient is crippled, and, if poor, incapacitated from earning her bread. Pyosalpinx, a not infrequent complication, is in itself a source of danger to the patient. Granting that rest is insufficient to relieve the patient, abdominal section is more satisfactory, and even safer, than the palliative measures above noted.

[The operation was then described.] As a rule, oöphorectomy for chronic disease of the appendages is followed by speedy convalescence. Unfortunately, a permanent cure is not so frequent. Mental symptoms occasionally follow double oöphorectomy. The cases where the stump suppurates are particularly unsatisfactory. Fistulous tracts open, close, and reopen in the abdominal wound for months, discharging thin pus. Such cases find their way to the consulting rooms of others, or to other hospitals than the institution where the operation was performed. The operator hears no more of them, and he or the hospital registrar records them in perfect good faith as "cures." A larger minority suffer from a continuance of the pains which preceded the operation, probably on account of intestinal adhesions, or through irremovable inflammatory products which press on nerves. The ligatures certainly set up trouble in some cases.

A pure hydrosalpinx is often very hard to remove, yet it is a source of great pain, especially during menstruation, when the cystic tube becomes tender and its capsule congested. I have found incision and drainage very efficacious in removing the cause of pain. A considerable part of the cyst and capsule should be trimmed away, so as to prevent any chance of closure and refilling. The great advantage of this practice is that no ligatured stump is left behind in the pelvis. Most satisfactory cases have occurred in my own practice.

Another operation, less radical than oöphorectomy, and yet often effectual, is the simple breaking down of adhesions and subsequent drainage, the appendages, relatively healthy, being left behind. The operation is not always easy; and we have not the advantage of reliable statistical records. We hear much about consecutive cases of oöphorectomy, yet little about this simple breaking down of adhesions. Men do not like to record what may be set down as a "partial operation." They fancy it may be reckoned as a failure. The most honest operator in these cases usually sets to work with a fixed idea that the tube or ovary is at the time the chief or even sole cause of trouble. The cutting away of a tube and ovary after ligature is definite, and in the amputated part there is something to show for one's trouble and for the risk to which the patient is exposed. In so many operations it is right to take something away that surgeons very naturally tend to believe that it is wrong to take nothing away. The patient, too, often averse to the prospect of amputation before she submits to any operative proceeding, is often dissatisfied if she learns afterwards that nothing has been removed. Hence the surgeon must clearly explain beforehand, in all cases where he intends to operate, that the abdominal section is intended to set right what is wrong, and is not necessarily undertaken in order to remove anything. The operation for breaking down of adhesions is not easy, and it requires some experience to know what adhesions may safely be sundered and what should be left alone; and to recognise if the appendages may safely be left behind. A free separation of adherent coils of intestine high above the pelvis is dangerous and useless, and a dilated tube and an enlarged cystic ovary will be a greater source of danger and pain after they have been disturbed than before. The breaking down of adhesions, as a distinct operation, always necessitates flushing of the peritoneum and drainage, for capillary oozing is free in these cases, and suppurating foci are sometimes opened up between coils of intestine. The chief advantage of this proceeding is that there is no fear of the grave mental symptoms which sometimes follow double oöphorectomy.

A simple abdominal incision has sometimes proved sufficient to cure all the indications of disease of the appendages, even the most characteristic objective symptoms. This is often seen when the operator finds numerous intestinal adhesions which he fears to disturb. The same result may follow where the patient suffers great pain before-

hand, although no visible or tangible pathological lesion is detected when the abdominal cavity is opened. Statistics on these cases are wanting, for evident reasons explained in relation to the operation for breaking down adhesions. The explanation of these cases is difficult. I find that where chronic peritonitis is present incision of the walls most frequently does good, especially when the parietal peritoneum is much thickened, as in a case under my care a few years ago.

Skutsch and Martin have saved dilated tubes by a plastic operation termed salpingostomy. A hole is cut in the end of the tube, and the serous and mucous coats are then sewn together. This operation may have a great future, but it is inadmissible when suppuration exists, and is almost certain to fail when active adhesive inflammatory processes are in progress, since the new opening must soon be covered up by fresh bands of lymph.

Removal of diseased appendages should be avoided whenever possible. In long-standing neglected cases it is hardly avoidable, yet even then a less severe operative measure, already indicated, may suffice. Practitioners and nurses are growing more and more skilled. Hence neglected cases are becoming rare; unfortunately certain circumstances preclude the chance of their total extinction. I hope, on a future occasion, to be able to analyse a series of cases within my own practice, especially in respect to the relative results of complete and incomplete operations.

THE HISTOLOGY AND PATHOLOGY OF THE FALLOPIAN TUBES.

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HISTOLOGY.

THE progressive elucidation of the many vexed questions in the anatomy and physiology of the Fallopian tubes has of late years made it possible to approach the subject of their pathology in a more comprehensive and more rational manner; but there are yet many interesting details in the microscopic anatomy of the oviducts which deserve and require careful scrutiny, and it is with these histological details that the first part of this paper is occupied. It will thereafter be easier more fully to grasp the meaning of the pathological changes observed in the material upon which the second part of the communication is based. To take a single example: the study of the normal tortuosities observed in the tubes of infants and fetuses must considerably influence the conception formed of the twists and dilatations so frequently found as pathological conditions in the tubes of the adult.

The conclusions arrived at in this paper are founded upon the examination of material obtained from Professor A. R. Simpson's operative clinic, from the *post-mortem* theatre in the Royal Infirmary, and in the Sick Children's Hospital, Edinburgh, and from specimens in the possession of Dr. J. W. Ballantyne. Pairs of tubes to the number of 110 were examined, and in all these cases, except 7, the other pelvic organs were, in addition, investigated; 94 pairs of tubes came from adults varying in age from 17 to 76 years, 5 pairs came from children between the ages of 3 and 15, and 11 pairs from fetuses and newborn infants. Of the 94 cases above mentioned, 61 were consecutive. The methods of research adopted were those usually employed in the microscopic investigation of normal and pathological tissues; but the testing of the patency of the tubes was invariably carried out by means of a mercurial pressure column, and never by the somewhat unreliable probe or bristle. The microscopical examination of longitudinal sections of the tube was found to be a most profitable method of investigation.

Histology of the Tubes.—The examination of the specimens in our possession has revealed the fact that the masterly researches of Henle, Farre, Beigel, Wyder, Martin and others, have so thoroughly exhausted this domain of histology, that

little remains to be added to their accurate descriptions and investigations. Nevertheless, many of the observations of these writers have been strangely overlooked in the textbooks of the day, and in this age of frequent operative interference with the uterine appendages, it is wise to emphasise the descriptions of the tubes already given, and to add, where possible, further details.

Dimensions and Form.—In about 18 per cent. of the normal adult tubes examined, the left was longer than the right; but in all the other cases the tubes were either of the same length, or else the right exceeded the left in length. The longest tube measured 14 and the shortest 7 centimètres, but the usual length was 11 centimètres in the right, and 10 centimètres in the case of the left tube. The transverse measurement of the isthmus varied from 2 to 4 millimètres, and of the ampulla from 7 to 9 millimètres. The ostium abdominale measured from 2 to 5 millimètres in diameter, but it was noted in tubes removed by laparotomy for disease of the ovaries that the abdominal orifice was physiologically closed, whilst in tubes obtained from the *post-mortem* theatre, the ostium was somewhat gaping. The well-known comparison of the tube to a trumpet (tuba) requires to be slightly modified, for the two parts of the oviduct (isthmus and ampulla) differ from each other in form, and the latter shows at its outer end a distinct constricting neck. This point of narrowing divides the ampulla proper from the pavilion or infundibulum, and the walls of the infundibulum consist of the fimbriæ (Fig. 1).

The Fimbriæ.—The fimbriæ are major and minor (primary and secondary), and the major are musculo-mucous, the minor mucous in character. In the fissures between the major fimbriæ, which vary from three to five in number, are implanted the minor fimbriæ, which are often very profuse. The minor fimbriæ are entirely mucous, and are a distinct continuation of the tubal folds or plicæ which, after their passage through the ostium, show a marked tendency to enlarge and branch, and each fimbria shows a roughened granular surface of a yellowish grey colour, and the fimbriæ collectively are imbricated like the petals of a rose. The major fimbriæ consist of a proximal musculo-mucous part and a distal mucous, the distal part closely resembling a minor fimbria, and being a continuation of a larger tube fold, whilst the proximal part is lined internally by mucous membrane thrown into folds, and externally consists of a continuation of the longitudinal muscular fibres of the tube, and is covered by peritoneum up to the point from which the distal part takes its origin. There are oblique as well as longitudinal fibres in the proximal part of the major fimbriæ.

The circular fibres of the tube entirely cease at the point of tubal narrowing, and in the fissures between the major fimbriæ where the minor fimbriæ are implanted the termination of the circular muscular fibres coincides with the muco-peritoneal line. This muco-peritoneal line, a line unique in the histology of the body, may truly then be said to mark the outer limit of the muscular tube wall. The minor fimbriæ and the fringed margins of the major are identical in structure, and, in the greater number of cases, resemble each other in form, being broad at their free ends, and narrow and petiole-like at their attached ends, which are in direct continuation with the tubal plicæ. One of the major fimbriæ is much larger than the others, is known as the ovarian fimbria, and, in the great majority of specimens, strikingly resembles in form a steel pen with dentate margins. It has on its mucous aspect a central furrow, and passing obliquely towards the margins are ridges of the mucosa continuous with the tubal plicæ, and forming the fringed edges. This fimbria differs from the other major fimbriæ in the fact that it has in its whole extent longitudinal and oblique muscular fibres; and in some cases in which the ovarian fimbria does not quite reach the ovary, and in which the communication is formed by the ligamentum infundibulo-ovaricum of Henle, these muscular fibres are sometimes found constituting part of this ligament. This ligament, which fills the intervening space between the end of the ovarian fimbria and the outer extremity of the ovary, is sometimes smooth, sometimes fringed; but the fringes, when they exist, differ in character from the fimbriæ proper, and may properly be called accessory fimbriæ.

There is one additional point with regard to the primary fimbriæ, and that is that two, or occasionally three of them, may

join by their apices to form loops, and along the outer aspect of these loops the peritoneum passes continuously from side to side.

To summarise: there are at the pavilion of every tube from three to five major fimbriæ, including the ovarian, and a varying number of minor fimbriæ, which differ much in size and form, and it is to variations in the number and form of these minor fimbriæ that the profusely fringed or scantily clothed appearance of the outer end of the tube is due.

Fig. 3.—Posterior view of uterus and appendages. A, the uterus enlarged; BB, subserous uterine fibroids; CC, right and left utero-ovarian ligaments; DD, right and left ovaries; EE, left Fallopian tube opened to show the longitudinal folds of mucous membrane, and the continuity with the ovarian fimbria; FF, right Fallopian tube; GG, right and left ovary; HH, "pen-shaped," reaching to the outer end of the ovary; H, pedunculated cyst from the tubules of Kobelt; NN, posterior lip of cervix; SS, anterior lip, hypertrophied, firmly adherent to the vaginal wall, and covered with tubercular ulcerations; O, vagina. One-third natural size. Removed *post mortem*.

A neck of constriction internal to the pavilion has been mentioned (Fig. 1). This was invariably observed in foetuses above 6 months, in newborn infants, and in children between 3 and 5 years, and also was found almost always in adult specimens. This neck of constriction we venture to compare to a sphincter in appearance, and so far microscopical examina-

Fig. 1.—Posterior view of outer two-thirds of Fallopian tube and ovary (adult), showing: A, muco-peritoneal line; B, a major fimbria; C, a minor fimbria; D, margin of the ovarian fimbria; E, the neck of constriction; F, the ampulla; G, pedunculated cyst; H, ovary. Natural size. Removed by abdominal section.

tion has confirmed our belief, for in all the specimens examined the circular blood vessels at this point were more numerous and larger than elsewhere, and in a few specimens it could be clearly seen that the circular muscular fibres of the tube wall were more numerous at the neck of constriction

than elsewhere in the ampulla. This sphincter-like part of the tube measured in adults from 3 to 4 millimètres in breadth and thickness (see Fig. 1).

The ampulla (with this neck and pavilion) in the specimens examined constituted the outer two-thirds of the tube, whilst the isthmus formed the inner third. The tube has its greatest lumen at the ampulla, and in this part of the tube the lumen gradually enlarges from within outwards, the maximum measurement being reached just internal to the neck of constriction. It is in the ampulla in the adult that convolutions when present are situated, and these convolutions have lost to a great extent the spiral character which they possess in the foetus and newborn infant, and in their case also the peritoneum closely follows the tube windings, thus forming another character which serves to distinguish them from the foetal and infantile twists. The isthmus of the tube in adults is almost invariably straight, and whilst its size increases from within outwards, as does that of the ampulla, its rate of increase is much less. The intramural portion of the tube (that is, that part which lies in the uterine wall) is in reality much smaller than has been commonly described, for its internal orifice terminates at the apex of a conelike depression in the upper angle of the cavity of the uterus, this depression being the uterine cornu of that side. The cornu tapers gradually as it passes outwards, and at the root of insertion of the round ligament the canal is found to be much smaller than at any point in the tube. At this, the narrowest point, the tube proper begins, for here the tubal folds commence. The intramural canal, partly cornual, partly tubal, traverses the wall in a curved manner, the curve having its concavity downwards, and at its highest point lying very close to the peritoneum covering the superior uterine wall. Embryology has shown that before the tube can be structurally differentiated from the uterine cornu, its internal limit is marked by a substance which ultimately becomes the round ligament.

Before proceeding to describe in more detail the microscopical characters of the tube, there is one structure—the hydatid of Morgagni—which calls for passing notice. Whilst stalked cysts, the so-called hydatids of Morgagni, were found in 57 per cent. of the specimens examined, the true hydatid of Morgagni was discovered in only 8 per cent. of the adult cases and in 20 per cent. of the foetuses and infants. The true hydatid is always attached by a pedicle to the fimbriae or to the tube itself; it varies in size from that of a pea to that of a small bean; it is lined by a mucosa with simple folds covered by a single layer of ciliated columnar epithelial cells; its wall is always composed of muscular fibres arranged circularly and longitudinally; its outer membrane is the peritoneum; its stalk is always muscular, and its contents consist of clear, limpid fluid.

The so-called hydatids are pedunculated cysts arising from the curved tubules of Kobelt, or stalked terminal cysts from Gartner's duct (called by some the organ of Rosenmüller), and these always are found attached to the anterior surface of the mesosalpinx at a point midway between the outer extremity of the ovary and the fimbriated end of the Fallopian tube. Their stalk is entirely fibrous, so are their walls, which are lined by cubical epithelium, and their size varies from that of a pea to that of the closed fist (Fig. 1, G).

Longitudinal and transverse sections of the Fallopian tube were examined microscopically, and with regard to the muscular wall it was found that the circular fibres were more numerous in the isthmus and intramural portions than in the ampulla. In the isthmus the muscle fibres are definitely arranged in an inner circular and an outer longitudinal layer, the circular fibres outnumbering the longitudinal; but in the ampulla the arrangement into layers is not nearly so definite, and the circular and longitudinal fibres are practically equal in number. In the ampulla, also, longitudinal fibres are in some specimens found lying internal to the circular and bulging into the bases of the mucosa. In the tubes of a pregnant cow examined it was found that the longitudinal fibres were internal, the circular external, and that the longitudinal formed well-marked bundles opposite the bases of the folds; this arrangement may account for the well known coiled form of the tubes in this animal.

On the mucous membrane of the tube are folds, and these are simple and compound. They are fewer, shorter, and less

branched in the isthmus, and there the lumen has a stellate appearance, whereas in the ampulla they are more numerous, more branched, and the lumen is filled with their multiform ramifications. The folds vary in number in the isthmus from five to fifteen, and in the ampulla from fifteen to twenty-eight, and of these about three in the isthmus and eight in the ampulla are branched, the others being simple. Although a submucous layer is not invariably present, it is occasionally found, especially in young women, as a thin layer most evident in the isthmus. When present the submucosa consisted of round and spindle-shaped connective tissue cells of an embryonic character. The tube folds have a basis of similar cells with connective tissue fibres, a central artery, and are covered by columnar ciliated epithelium. With regard to the existence of glands, the appearance of the isthmus on transverse section is distinctly suggestive of such, and several of our specimens, especially those taken from infants and children, show characters identical with those figured by Bland Sutton,¹ and these appearances, conjoined with the presence of mucous and albuminous fluids in the tubes, strongly predispose us to accept the affirmative conclusion arrived at by the above-named author.

The tubes are covered in two-thirds of their circumference by a serous coat, and this is attached to the muscular by a loose layer of areolar tissue in which run a few longitudinal muscular fibres and blood vessels. At the point of the mesosalpinx where the two layers separate to embrace the tube muscular fibres continuous with the circular and with the longitudinal layers of muscle in the tube wall spread out into the broad ligament; in this situation are to be found in some specimens tubular structures lined by a cubical or columnar non-ciliated epithelium, but with regard to the nature of these structures we have arrived at no conclusion, their close proximity to the tube seeming to show that they are not parovarian.

The above description refers mainly to the Fallopian tube in the adult, but there are certain features which are peculiar to the tubes at different periods of life which must be enumerated.

In the foetus of six months the average length of the tube is 1.9 centimètre, the thickness of the isthmus is 1 millimètre and of the ampulla 2.5 millimètres, the average length of the ovarian fimbria is 5 millimètres, and the space between this fimbria and the outer end of the ovary measures 4 millimètres, and is always smooth, never fringed. In the case of the newborn infant (Fig. 2) the tubes average in length

Fig. 2.—Right Fallopian tube and ovary of newborn infant (full term). Natural size.

3 centimètres, the thickness of the isthmus is 1 millimètre, and of the ampulla 3.6 millimètres, the length of the ovarian fimbria is 6 millimètres, and the interspace 4 millimètres, and always smooth.

The naked eye and microscopic appearances in the six months' foetus and newborn infant are practically the same, the only difference being the absence in the infant of spiral convolutions on the isthmus tubæ. The ampulla shows from one to three spiral convolutions, the coiling being from before backwards on both sides of the body, so that the twist is negative on the right and positive on the left side of the body. The peritoneum never follows the windings, but is always very loosely attached to the tube, forming, as it were, an elongated sheath for it. Microscopical examination of the tube in the foetus and infant reveals an extremely cellular submucosa, both in isthmus and in ampulla, but more abundant in the former; a muscular layer, which in the isthmus shows no mingling of circular and longitudinal fibres although it does so in the ampulla, and in which the longitudinal fibres are scanty in both parts of the tube, and a very thin serous covering with an underlying loose areolar tissue layer. In the muscular coat fibrous tissue intervenes between the bundles of muscular fibres both in the longitudinal and circular layers.

With regard to the appearances of the tubes in childhood

¹ *Trans. Obst. Soc. Lond.*, vol. xxx, 1888.

only three children were examined, their ages being 3, 4, and 5 respectively. In the child of 3 years both tubes measured 3 centimètres in length, in that of 4 years both were 4 centimètres in length, but in that of 5 years the right measured 6 centimètres and the left tube 5 centimètres. The thickness of the tube at the ampulla measured 3, 4, and 5 millimètres respectively in the three children. The isthmus measured 1 millimètre in the two younger children, and 2 millimètres in the older child. In all the three the ostium abdominale measured 1 millimètre in diameter. The ovarian fimbria measured 5 millimètres in the youngest child, and 10 millimètres in the other two. The interspace, which was smooth, measured 5 millimètres in the two younger, and 9 millimètres in the older child. In these children the isthmus was straight in two, and slightly wavy in the third; the ampulla showed the same twists as in the infants, and the fimbriae were in these children, as also in the fetuses and infants, ill-developed and scantily clothed. Under the microscope cilia on the mucosa were carefully looked for, but they were only seen in one specimen, and that only at parts. The cells lining the tubes were more cubical in character than in the adult. The submucosa was present, was cellular, with a slight admixture of fibrous tissue, and stained deeply with picrocarmine. The muscular coat showed appearances similar to those in the infant, with less fibrous tissue and with a few longitudinal fibres lying internal to the circular fibres, and resting upon the submucosa. The areolar layer under the peritoneum was loose, and showed blood vessels and a few isolated longitudinal muscular fibres.

In the adult the appearances of the tubes have been already described, but there were minor histological differences in nulliparae, multiparae, etc., which we hope to describe at some future time.

The senile changes in the tubes were found to consist in narrowing and straightening of the canals, with a loss of curvatures, atrophy of the muscular fibres, more especially the longitudinal ones, which, in a woman of 76, were all but absent; conversion of the submucosa into fibrous tissue, fibrous changes in the mucosa, and obliteration of the tubal folds in the isthmus near to its uterine end. In the isthmus, also, the epithelium was found to be shed, and formed what might be called a tube cast, blocking the lumen. The areolar layer underlying the peritoneum was firmer, more fibrous, non-muscular, and more closely united to the muscular coat.

(To be continued.)

CASE OF RECURRENT TYPHLITIS; REMOVAL OF DISEASED VERMIFORM APPENDIX; RECOVERY.

By T. PRIDGIN TEALE, M.A., F.R.S.,

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EARLY in October I was requested by Mr. Raynes, of York, to see Mr. P., a cricketer and football player, who was beginning to recover from a fourth attack of inflammation in the region of the cæcum. My advice was that as soon as all acute symptoms had subsided he should come into the Leeds Infirmary with a view to operation.

History.—In November, 1889, during a game of football, he was "tackled" round the waist and thrown to the ground. No harm seemed to result, but in March last he was seized with pain in the right iliac fossa for the first time. The pain soon passed off, but returned the next day, and continued with increasing intensity for about three days, when a tender swelling was discovered in the iliac region. At the end of three weeks the attack subsided. There had been neither sickness nor constipation. Six weeks from the commencement a tumour could be felt on deep palpation in the right iliac fossa. At the end of seven weeks he had a second attack, much like the first, which lasted three weeks. After a week's convalescence a third attack set in, which practically kept him an invalid, unable to work, until the fourth and most severe attack in the beginning of October, about which I was consulted. The lump found after the first attack could be felt in the intervals, but was now obscured by the tympanitic state of the abdomen, the body being "as hard as a board."

At this time no tumour could be felt *per rectum*. There was great tenderness over the iliac region, and the bowels acted with difficulty. Seeing that he had been practically an invalid and disabled from following his employment for six months, that he had been almost constantly in pain during this period, that the attacks increased in severity and in the tendency to obstruction of the bowels, and that there was a persistent hard swelling to be felt in the situation of the cæcum, I decided to operate.

Operation.—October 13th. The patient being under ether, I made an incision about 4 inches long directly over the tumour, in the line advised by Mr. Treves in his most instructive paper published in the *BRITISH MEDICAL JOURNAL* for November, 1889. The incision, passed obliquely inwards and downwards between the umbilicus and crest of the ilium, and ended a little above and to the outer side of the middle of Poupart's ligament.

On opening the peritoneal cavity the tumour was reached easily, and consisted of adherent omentum and small intestine surrounding a harder centre. By dint of great care in separating, tying, and dividing the adherent omentum, and in gradually disentangling adherent bowel, the imprisoned vermiform appendix was cleared of all adherent structures, and fully exposed. A catgut ligature was applied a quarter of an inch from the cæcum, and the enlarged appendix was cut off one-third of an inch from the ligature, the end of the stump being invaginated and stitched. After due cleansing and washing out by boiled water, and the introduction of a drainage tube, the wound was closed by stitching together first the edges of the peritoneum, and afterwards the muscular and cutaneous sides of the wound. The drainage tube was removed in forty-eight hours. Recovery took place without a drawback, and he was allowed to sit up in three weeks and two days. Eight weeks after the operation, he was perfectly well, was recovering from the anæmic state to which he had been reduced, and had entirely lost the pain which for six months had rarely left him. His report of himself on December 17th is: "I am able now to take the same meals as the rest, and also to walk two or three miles a day without feeling tired or any the worse for it."

THE PARASITIC NATURE OF PSORIASIS; ITS TREATMENT BY MERCURY.¹

By E. D. MAPOTHER, M.D., F.R.C.S.I.,

For many years I treated psoriasis by mercury, under the belief that it was an atavistic manifestation of syphilis; but, remembering that no other manifestation concurs, that it does not appear in the earlier and has been delayed till the later years of life, and that while the psoriatic are very many, the offspring of the hereditarily syphilised are very few, some other view had to be substituted. The dates of development also threw doubt on the suggestion that it was an hereditary blemish; and, indeed, the number of cases in which descent can be traced has been much overrated; for instance of 267 cases tabulated in *Guy's Hospital Reports*, other members of the families are recorded as being affected in only 36, and of 335 patients of Dr. Bulkley anterior heredity was proven in only 33. Then, no diathesis or condition of life seems to control the malady.

Greatly preferring to act on even the suggestion of a rational principle than empirically, I read with true pleasure Lang's assertion that the disease was parasitic. Not being a sufficiently expert histologist to decide between the eminent ones who differed, I had to be content with a full study of the evidence for and against the existence of the epidermidophyton, and reflections on the analogies between psoriasis and diseases positively parasitic, such as *tinea versicolor* or *circinata*, and presumably so such as syphilis and leprosy. From these latter it plainly differs in attacking the skin only.

As to proofs of communicability, we have the statement of such an observer as Unna that a nurse gave the disease to three children under her charge, and reliable records of its

¹ Read in the Section of Dermatology at the Annual Meeting of the British Medical Association held at Birmingham, July, 1890.