menstrual epochs, and that each element will bias the embryo in the direction of its own sex. It is wrong, no doubt, to talk of these elements having a sex, but I am writing on the supposition that each element has an inherent power, by which, when the complementary element is met with, the sex is determined in favour of the stronger.

I am, Sirs, yours truly,

LOUIS E. STEVENSON, M.B.

Jedburgh, N.B., Sept. 28th, 1891.

"RECURRENCE OF SYMPTOMS AFTER GASTRO-ENTEROSTOMY."

To the Editors of THE LANCET.

SIRS,—In discussing this case clearly we are dealing merely with possibilities, which it would be idle and unprofitable to follow further, as the pathological specimen alone can demonstrate whether the artificial gastro-jejunal opening has closed or not. At a future date, however, I trust Mr. Larkin will communicate in your columns what actually has taken place in his most interesting case.

Mr. Larkin has, I fear, misunderstood me, as he says my main suggestion is that "the contraction occurred at the opening made in the peritoneal layers of the transverse meso-colon and great omentum; what I said was constriction—quite a different thing from contraction—of the jejunum may have taken place at the aperture in the transverse meso-colon. It is to this point I wish to refer, and the clearest way of expressing myself will be to give the reasons for my discontinuing to perform the operation by this method. By referring to Mr. Larkin's admirable diagrams my meaning will be more readily understood.¹ By drawing a loop of the jejunum through an opening in the meso-colon and great omentum we have two portions of intestine closely approximated, and firmly fixed by peritoneal cicatrization to an aperture in the meso-colon (necessarily of rather narrow dimensions) at the one end, and to the point on the stomach which the surgeon may select at the other extremity of the loop at the other end; in Mr. Larkin's case at the cardiac end and, judging from the diagram, rather high up. Between these two points the intestine passes through an opening in the great omentum. The two portions of intestine thus run nearly parallel to each other throughout the whole loop. The dangers of the operation performed in this manner are, I think, threefold:—1. There is actual danger of nipping of the intestine by peritoneal cicatrization and constriction at the aperture at the meso-colon. This evidently did not occur in Mr. Larkin's case, as the biliary and pancreatic secretion passed readily. 2. There is danger of kinking of the intestine at the gastric opening on account of the sharp curve which takes place. This accident did not apparently occur. 3. This is purely a mechanical danger. The loop of intestine is, as we have seen, fixed at both ends—viz., stomach and meso-colon. The physiological action of the stomach in health, we are taught, is, when empty, the greater curvature is directed downwards, but when the viscus is distended it rotates upon the lesser omentum, and the greater curvature is directed forwards, while the anterior surface is directed upwards. This action, then, must of necessity cause considerable traction upon the loop of intestine fixed at the two points, as I have described. The result of this is to temporarily contract, and possibly close, the opening between the intestine and stomach, especially when the loop is united high up on the cardiac end. The lumen of the intestine would be still patent for the flow of the biliary and pancreatic secretions. A similar danger may occur from a loaded transverse colon; if Fig. 1 is carefully studied it will be seen how readily constriction may occur from this cause. For these reasons I now invariably adopt the method of performing gastro-enterostomy by turning a loop of the jejunum round the transverse colon. I am not saying that any of these factors were responsible for the obstruction which occurred in Mr. Larkin's case, as it is impossible to decide upon what we have not seen, but I place them before the profession for what they are worth, and can only say they are conclusions drawn, not hurriedly or upon theoretical grounds alone, but upon actual practical experience.

I am, Sirs, yours very faithfully,

FREDK. BOWREMAN JESSETT.

Upper Wimpole-street, Oct. 3rd, 1891.

THE USE OF ANTISEPTICS.

To the Editors of THE LANCET.

SIRS,—As a practitioner of perhaps the least important branch of surgery, it seemed hardly fitting I should take upon myself to challenge Mr. Lawson Tait to a full defence of the position which he has assumed on the above question; but, in common, I am sure, with a large number of your readers, I felt very much inclined on perusing his lecture to dispute the sweeping generalisations which are criticised by Mr. Adamson in THE LANCET of to-day. The surgery of the teeth, and the treatment of inflammatory conditions within and around them, only represent in miniature what is displayed on a larger scale in general surgery; but the relatively simple structure of the organs and their exposed position render the processes of dental disease and the effects of treatment more easily and correctly observable. I will simply affirm what will be corroborated by every dental practitioner: that the antiseptic method has rendered amenable to treatment a vast class of cases which before the introduction of this method were extremely unsatisfactory. Cases of teeth with putrid pulp canals and chronic abscesses or fistulæ through the alveolus and gum—cases entirely analogous to surgical conditions affecting wider areas in other parts—yield at once to antiseptic measures. Such cases before the antiseptic system was understood and practised formed the opprobrium of dental surgery; they are nowadays curable with almost complete certainty. Although there can be no question as to the success of Mr. Tait's practice in abdominal surgery, it is difficult to see how on scientific grounds he can support his views. Indeed there seems something contradictory in his statements. He insists upon perfect cleanliness. But scientific cleanliness cannot be produced or maintained without antisepticism. From the surgical point of view, the presence of micro-organisms constitutes uncleanness; without them putrefaction and fermentation—the production of septic conditions—are impossible. In order to preserve a wound scientifically clean, organisms must be excluded; to maintain it clean, they must if they enter be destroyed or rendered sterile. The only effectual way to do these things in the present state of our knowledge is by the use of antiseptics.

I remain, Sirs, your obedient servant,

Wimpole-street, Oct. 3rd, 1891.

HENRY SEWILL.

To the Editors of THE LANCET.

SIRS,—I am not disposed to reply in detail to Mr. R. O. Adamson's very numerous inquiries, because the space necessary would mean more columns of THE LANCET than you could place at my disposal; because all of the surgical incidents specified are such as have been outside my line of practice for more than twenty years; and specially because the late Mr. Sampson Gamgee, in his work on the "Treatment of Wounds," answered them many years ago. My condemnation of the antiseptic doctrines and the antiseptic practice came upon Mr. Adamson as "startling" only because he graduated in 1889. A very slight research into the literature of the subject for the fifteen years preceding that date will at least cause my views no longer to startle him.

Mr. Adamson's letter reminds me that I may have a communication to make to THE LANCET in a week or two concerning this much vexed question of antiseptics which, I venture to think, will probably be startling to the Court of Examiners of the Royal College of Surgeons of England.

I am, Sirs, yours obediently,

Birmingham, Oct. 2nd, 1891.

LAWSON TAIT.

THE USE OF ATROPINE IN THE ADMINISTRATION OF CHLOROFORM.

To the Editors of THE LANCET.

SIRS,—I was surprised to find that no one made any remarks at the Bournemouth meeting of the British Medical Association about the use of atropine, with a view to annul the dangers attending upon the administration of chloroform. So far back as 1868 Dr. Harley pointed out the applicability of atropine in all cases where there is lessening of the sympathetic influence, as in syncope, shock, collapse of cholera, and risk of the heart stopping under the influence of chloroform &c.

¹ THE LANCET, Sept. 19th, p. 667.

For a long time, especially in France, atropine has been employed more particularly as an adjunct to morphia, when the latter is needed to relieve pain &c.; and Dr. Brown-Séquard pointed out that the nausea and vomiting that sometimes attend the hypodermic use of morphia may be done away with by the addition of atropine to the solution. So we have for years had a fair indication of the applicability of atropine and morphia as a means of lessening the risk attending upon the administration of chloroform. Wishing to satisfy myself of the action of hyoscyne on the pneumogastric, I came to the Continent to avoid the anti-vivisection laws, and since being here the extreme kindness of the surgeons has enabled me to satisfy myself that the dangers of ether and chloroform can be greatly, if not entirely, removed by the injection of one centigramme of hydrochlorate of morphia and one milligramme of sulphate of atropia some twenty-five minutes previously to their administration in adults. Much less of the anæsthetic is needed to produce anæsthesia, and the danger from its toxic effects is avoided. There is often no stage of excitement perceptible; salivary secretion is checked, an important point in ether inhalation, as swallowing and vomiting do not occur, but above all, the temporary suppression of the inhibitory action of the vagus over the heart removes the risk of its reflex arrest. Dr. Aubert, to whom is greatly due the credit of having practically introduced the mixed method of inducing anæsthesia, says that the atropine, as it is given beneath the skin, does not affect the pupil. In several of my cases, however, I have noticed a marked dilatation, and in those cases the increased rate of the cardiac pulsations has continued for several hours; yet generally, I think, the pupil may be taken as an aid in regulating the administration of the anæsthetic. For my part, I have found that by administering nitrous oxide gas immediately before the ether, either after Clover's method or that of Brain, the patient having been previously prepared as above described (the atropine and morphia injection), the most rapid surgical anæsthesia can be satisfactorily attained. Personally I am now in a great measure relieved from that painful anxiety attending the use of anæsthetics which an experience of over twenty years had not diminished. So far as I can discover, only one doubtful accident has occurred under the mixed method, and as many thousands of operations must now have been performed during its use, I think that we may consider its success as established. I am, Sirs, yours truly,

Sept. 19th, 1891.

G. COCKBURN SMITH.

THE SUGGESTED HIGHER DENTAL DIPLOMA.

To the Editors of THE LANCET.

SIRS,—May I be permitted to say how perfectly I agree with Mr. Sewill, in the opinion he has expressed concerning the suggested higher dental diploma. Undoubtedly the present examination for the licence in Dental Surgery is a sufficient test of special knowledge, and any higher professional status to which the student may aspire can be fully realised in the attainment of a degree in Medicine, or in the acquisition of the Fellowship or Membership of the College of Surgeons. Of late years many of the best students of dental surgery have continued their course of study in the larger field of medicine, and have obtained one of these higher qualifications in addition to the special diploma. In the not far distant future I would venture to hope that few will be content with the mere licence to practice dentistry, and that all will desire to rank as members of the medical profession, although they may elect to confine their energies to a special subject.

I am, Sirs, yours faithfully,

Wimpole-street, W., Oct. 6th, 1891.

FRANCIS FOX.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Opening of the University of Durham College of Medicine.

THE opening of the Durham College of Medicine at Newcastle took place on the 2nd inst. Dr. Heath, the president, took the chair, and Lord Londonderry presented the prizes and addressed the students. The mayor and sheriff of the city and many of our leading citizens

attended, while there was a numerous audience of ladies and the general public.

Sunderland.

The foundation stone of the new isolation block and mortuary at the Sunderland Infirmary was laid by the Bishop of Durham on the 28th ult. The isolation block consists of two wards and their annexes, for the purpose of isolating or observing doubtful cases. These two wards are as much disconnected as if they were in separate buildings. The mortuary block consists of a post-mortem room, with marble terazzo floor as well as marble slabs and sinks. Around the sides of the room are six receptacles for dead bodies, each having in front a spring shutter, so that the body desired to be seen by the friends of the deceased will be alone visible. The entire cost of the buildings, which are most elaborate and complete, will be from £2700 to £3000, and they have been presented to the infirmary by Miss E. J. Forster.—The infant mortality at Sunderland last week was very high; there were in all 83 deaths in the borough, showing a death-rate of 33 per 1000. Of these, 49 were cases of children under the age of five years, or a rate of 19.5 per 1000 for infants alone. Diarrhoea and affections of the respiratory organs would appear to be the principal factors in thus raising the infantile mortality.

South Dock North-Eastern Railway Ambulance Class.

Surgeon-Major Hutton, organising secretary of the St. John Ambulance Association, gave an address to this class last week. There were representatives from the North-Eastern Marine Engineering Company, and from the workmen of the River Wear Commissioners, who intend forming classes during the coming winter. After the lecture a demonstration was given of first aid, which met with the lecturer's hearty approbation.

Stockton.

A Local Government inquiry has been held at Stockton last week, the corporation seeking to borrow £10,000 for a site, and for the erection thereon of an infectious diseases hospital. It was shown by the promoters that the borough has nearly 50,000 inhabitants. In past times they had been dependent upon Middlesbrough, but now the Middlesbrough officials refuse to receive patients from Stockton suffering from small-pox, scarlet fever, or typhoid fever. The medical officer of health, Mr. Clegg, also gave evidence in support of the scheme, which is to be further reported upon.—The Stockton branch of the National Society for the Prevention of Cruelty to Children have taken premises which the Town Council have certified under the by-laws of the Act as a "place of safety" for children, and which is to be used as a refuge for children who ought to be removed from undesirable surroundings, but for whom the workhouse or the police station is not a desirable shelter.

Cumberland.

Miss Thomason Nelson, late of Moor-row, Cumberland, has left, amongst other charitable bequests, £1000 to the Cumberland Infirmary, Carlisle, £500 to the Cumberland and Westmoreland Convalescent Institution at Silloth, and £500 to the Border Counties Home for Incurables, Carlisle, all free of legacy duty.

Mr. Gladstone's Visit to Newcastle.

Mr. Gladstone arrived in Newcastle on Thursday night, having come on the same day straight through from Perth. He drove direct from the Central Station to the Newcastle Mansion-house, and during most of this carriage journey his head was uncovered. The next evening he addressed an immense meeting in the Tyne Theatre. His time until the next morning, when he again addressed a vast meeting, was well filled up receiving friends, deputations, and keeping up his correspondence. When he left the Central Station on Saturday, again bareheaded, he was apparently as well as when he arrived; his voice was strong and well heard over all the buildings where he spoke. Occasionally, indeed, in some of his higher tones there was noticeable a slight breakdown. Of this he seemed to be immediately aware, as he had recourse to his well-known egg mixture, and with marked benefit. This slight break in tone is probably due to mere dryness produced by congestion of the fauces causing temporary dryness or exhaustion of the store of mucus in the tonsillar follicles. The meetings were largely attended by members of the