

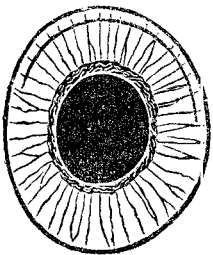
Correspondence.

"Audi alteram partem."

CATARACT OPERATION IN BRUSSELS.

To the Editors of THE LANCET.

SIRS,—Your annotation on cataract operations as practised by Dr. Coppez leads me to suppose that a brief *résumé* of the subject may not be unacceptable to your readers. Formerly the percentage of loss (fifteen actual, with twenty more or less damaged) from the old flap method of cataract extraction was so great that surgeons, as a rule, declined to operate until the patient was quite blind. On the other hand, iridectomies were constantly practised with scarcely any loss of eyes at all—at most not more than one in five hundred. These contrasted figures set Dr. Schafte, Professor von Graefe's assistant, thinking; and the result of his cogitations was a proposition to perform iridectomy in all cases of cataract, and then remove the lens through the small incision by means of a spoon—an operation which was for a time very generally adopted. It was clear, however, that a slight enlargement of Schafte's incision in the corneo-sclerotic junction would permit of the exit of the lens without the use of any traction instrument whatever, and Graefe's modified linear extraction followed as a matter of course—an operation which, varied by most of the



surgeons who adopted it, but always accompanied by excision of the iris, was the method of extraction *par excellence* for twenty years. Despite its great popularity, however, there were numerous objections to von Graefe's method. The incision was too far back; the danger of prolapse of the vitreous was great; a large iridectomy was necessary in order to prevent strangulation of the iris at the angles of the wound; bleeding into the anterior chamber was frequent, and the site of the incision was such as to excite well-grounded fears of sympathetic ophthalmia; and yet surgeons were afraid to bring the incision more forward into true corneal tissue on account of the tendency of this non-vascular membrane to suppurate. This risk is now obviated by the use of antiseptics, and prolapse of the iris, formerly the bugbear of extraction, counteracted by eserine. I introduced some patients who had been operated on by the small corneal flap, with central and movable pupils, to the notice of the members of the Clinical Society of London in 1874, and have within the last three years operated upon 500 patients in the same way. Coppez's incision, which is not precisely the one I adopt, is depicted in the accompanying woodcut, which I extract from a review of his paper in the *Annales d'Oculistique* for June of the present year.

I am, Sirs, your obedient servant,
CHARLES BELL TAYLOR, M.D., F.R.C.S.Ed.,
Surgeon to the Nottingham and Midland
Eye Infirmary.

August, 1887.

PATHOLOGY AND TREATMENT OF SEPTIC DISEASES.

To the Editors of THE LANCET.

SIRS,—For some time past I have been anxious to lay my views before the profession upon the pathology and treatment of diphtheria and scarlatina.

In November, 1880, I sent a paper to THE LANCET upon reading in that journal a report of five fatal cases of diphtheria occurring in St. George's Hospital, with the peculiar treatment adopted at that time; I say peculiar, for it was strongly stimulating and tonic *ab initio*, under which the patients speedily succumbed. I then sought to show that the alterative and eliminating plan of treatment with which I commenced had been most successful, having only had two fatal cases under my care during thirty years of active practice. I ought to state that I always commenced by brushing off, as far as practicable, the fungus deposit on the tonsils and fauces with a strong solution of nitrate of silver, and continued this application daily while any deposit was observed on the

surface. During the last few years, however, the science of bacteriology has done much to aid us in arriving at a more correct view of the pathology and treatment of diphtheria and scarlatina, as well as cholera. The scientific researches and experiments of Drs. Tyndall and Koch, M. Pasteur, and others, have lately demonstrated that we have chemical agents which will destroy the microbes and their spores in a very short space of time, which can be administered as remedies internally in these septic diseases: e.g., perchloride of mercury (1 in 20,000) will act as a microbicide in ten minutes; this, therefore, may be termed the prince of antiseptics. Chlorine and iodine, oil of mustard, and oil of peppermint are likewise very decided in their action as antiseptics, and may be utilised in the above-named diseases. As it is known that these micro-organisms multiply with frightful rapidity when once within the body, it is important to adopt energetic measures for their destruction and extermination without loss of time. To this end I would recommend in a case of diphtheria to commence by washing off the fungus-like deposit with a camel's-hair brush dipped in a solution of the perchloride of mercury or the liquor sodæ chloratæ. I should then administer a mustard emetic so as to dislodge and evacuate these micro-organisms from the stomach, œsophagus, and fauces. In half an hour, or as soon as the system had recovered from the effects of the emetic, I should give a dose of the liquor hyd. perchlorid. in a little strong peppermint water; this might be repeated in another hour, and, in about half an hour after this second dose of liquor hyd., a dessertspoonful or a medium dose of castor oil in peppermint water given as an effectual evacuant. Having cleansed the entire gastro-enteric canal of these pernicious atoms, those that have got into the blood must be disposed of in the way that Nature is wont to do—i.e., by the emunctories of the body,—aiding her in various ways: viz., by keeping the patient warm in bed in an airy apartment, administering diaphoretic salines with chlorate of potash, giving easily digested food—e.g., pure milk, beef-tea, barley water, and cocoatina. This treatment is all that is necessary for two or three days, especially while any febrile symptoms are present; tonics and stimulants in the early stage must not be given. Under the above regimen the system will very soon manifest salutary reaction by ridding it of the *materies morbi* under which it has been so distressed. Doubtless there are cases which will demand a course of ferruginous tonics for some little time, as it is well known these animalcules lessen the red particles of the blood.

In the administration of the liquor hyd. perchlorid., we should bear in mind that it is not only a special microbicide, but by its action on the liver it increases the biliary secretion, which is also admitted by many to be an antiseptic; and in order to strengthen our belief in this doctrine, we know that in cholera cases, as soon as the secretion of bile was restored we considered the patient tolerably safe; and, as Dr. Koch stated when writing on the cholera poison, "as soon as the defections became feculent, the comma-like bacilli gradually disappeared and were not to be seen after recovery." It is tolerably well known, too, that during the visitation of cholera in our fair isle, the calomel treatment was the most successful. The College of Physicians advised the mist. cretæ co. c. opio to start with, and to be kept for use at all dispensaries, not knowing at that epoch the disease depended upon the energetic wriggling bacilli.

Dr. Geo. Johnson, who wrote on the cholera poison fifteen years ago, was not aware of the exact nature of the *materies morbi*, but stated that if it was not expelled from the system by vomiting and purging, or if its exit was hindered by opiates or astringents, collapse soon supervened with fatal results. He commenced with a dose of calomel followed by repeated small doses of castor oil, which was one of the most successful modes of treatment at that time—i.e., the eliminative. Now, I trust, were these bacilli to enter our system, we should screw them up and evacuate them with a mustard emetic followed by the above antiseptic treatment.

From an interesting article which I have just read in THE LANCET of July 23rd, it would go to show that I have been anticipating your views on the subject of bacterio-therapy, when you state that "in these days we find that the pathologist has outstripped the therapist." You further remark that we have to find out remedial agents sufficiently potent to destroy the bacterial host without injury to the body. You likewise allude to the all-important art of prophylaxis. One of the most frequent sources of diphtheria and scarlatina has been lately discovered in milk. A few

months since twelve fatal cases of diphtheria were registered in our neighbouring parish, Ealing, in as many days, which was traced to cow's milk. I wrote to the local paper warning the public against allowing animals to drink from stagnant pools, which at this season of the year especially are teeming with organic life, and is doubtless the *fons et origo mali*. While on this important point I should like the profession to agree with me in urging the advisability of all cow-keepers to give their animals, where practicable, the water of the company whence they draw their supply.

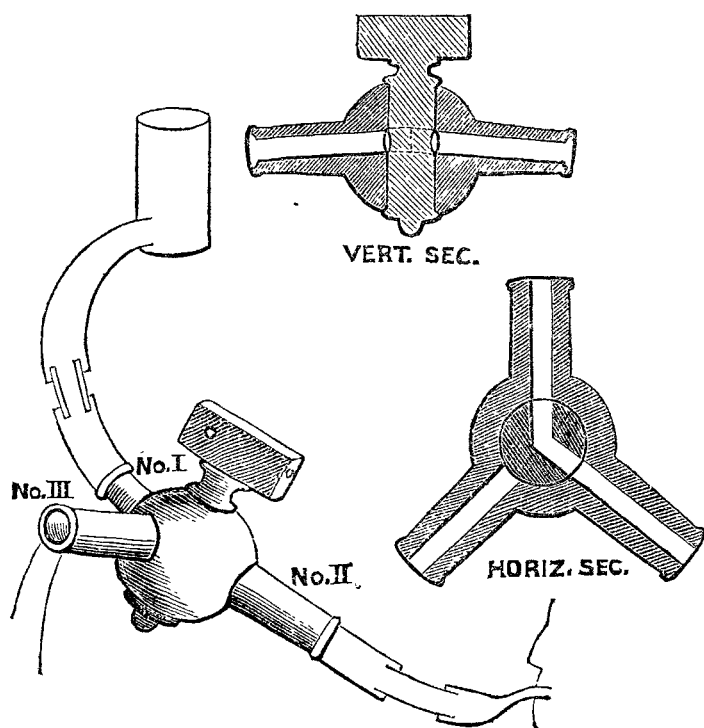
In the treatment of scarlatina with the above antiseptic plan, I would comfort the patient and stimulate the cutaneous surface by sponging the body all over with vinegar and warm water for the first three days, and the subsequent three days by skin inunction, as, I believe, is now usually practised as a prophylactic method, to be followed by two or three washings of the body with carbolic soap and warm water and much dry rubbing, which will complete the effective treatment of a severe and frequently intractable disease.

I am, Sirs, yours faithfully,
Fairholme, Hanwell, July 25th, 1887. EMANUEL MAY, M.D.

AN APPARATUS FOR WASHING-OUT THE STOMACH.

To the Editors of THE LANCET.

SIRS,—I can lay claim to no originality in the conception of the apparatus which I wish to bring under the notice of the profession. When in Germany last year I saw it used in the wards by Professor Kohlschutter of Halle, and it struck me at once as being superior to anything I had seen used in England for the purpose, and deserving therefore of a wider publicity. The essential part of the apparatus is a centre piece, consisting of a three-way stopcock, fitted with three outlet tubes. Of these outlets, No. 1 is attached (by india-rubber tubing with a glass interruption) to a vessel of water, or any other liquid to be introduced into the stomach;



No. 2, with its tubing and glass interruption, is continuous with the oesophageal tube; while No. 3, with similar fittings, leads into a receptacle placed on the floor for the waste fluid. To employ the apparatus (the vessel containing the fluid to be used is raised above the level of the patient) the stopcock is turned in such a manner as to connect Nos. 1 and 2, and fluid then passes into the stomach; when sufficient has been thus injected, the cock is turned so as to connect Nos. 2 and 3, and the centre piece lowered slightly; the contents of the stomach are thus by syphon action drawn into the waste receptacle; the performance can now be repeated as often as is deemed necessary, the only requisites being a continuous supply of fresh fluid in the upper vessel, and a slight raising and lowering of the centre piece, with corresponding alternations in the position of the tap. No. 1

and No. 3 can be connected after use to cleanse the tubing if required. Simplicity in management is one great recommendation of the apparatus, but its chief claim is its cleanliness, for nothing that has once passed into the stomach ever returns into the original vessel. The cost of the instrument is not excessive. Messrs. Krohne and Sesemann have made mine for me, the centre piece at a cost of 10s. 6d.; all the rest of the material need not cost more than a few shillings, as the quality of the tubing is of small moment, and oesophageal tubes are in the possession of most members of the profession.—I am, Sirs, yours obediently,

FRED. J. SMITH, M.R.C.P., M.B.,
Medical Registrar to the London Hospital.
West-street, Finsbury-circus, August, 1887.

THE SEWAGE OF LONDON.

To the Editors of THE LANCET.

SIRS,—“Sanitarian’s” letter in THE LANCET of Aug. 6th, while admitting the polluted and foul state of the Thames from London sewage, advocates, as a remedy, the purification of the sewage by precipitation at Barking and Crossness, as well as at various stations within the metropolis, with manganate of soda and sulphuric acid, which never results, he says, “in the production of smelling products.” “Neither,” he says, “do such ingredients destroy those minute vegetable and animal organisms which are essential for the rapid purification of waters from admixed sewage residues.” But suppose we were to admit that the sewage, as it escapes from the outfalls, is precipitated by such a process, the evil he refers to would not be removed. “Sanitarian” speaks of the improved condition of the Thames in 1885-6, when this process was in operation, but unfortunately in the autumn of the latter year I attempted a journey down the river to Barking with the view of ascertaining the state of the Thames at the outfall there, but the condition of the river was so fearfully foul that I found it almost impossible to get there, and when the steamer pulled up at Greenwich, being unable any longer to bear the smell, I was compelled to get off. One thing, I think, is absolutely certain: neither manganate of soda, nor sulphuric acid, nor chloride of lime, nor any other chemical agent will ever succeed in purifying the sewage of any large city, if used only at the stations and at the outfalls; it may be possible, no doubt, during dry weather, when the sewage leaves the outfalls, quietly to precipitate it; but there is this difficulty—and here the difficulty lies, and will ever lie: the *solid* portion of the excreta is not at the outfall to be precipitated. Moreover, in the dry weather it is then snugly lying in the drains under the dwellings of the residents of London, from which it can only be removed by the rainfall, and the rainfall is ever capricious in its operation; sometimes it is delayed for a week, a fortnight, or even a month, but when it does occur the solid excreta is quickly removed from its hiding place in the house drains into the sewers, in which at the upper part there are a great number of large storm outlets, and through these storm outlets the excreta, paper, &c., escape, and gain by that means admission into the rivers. In Birmingham there are about fifty of these storm outlets in the main sewers, and the Drainage Board has found out to its cost how impossible it is to cook the hare before it is caught, and it is this same difficulty the Metropolitan Board has to contend with. The solid portion of the closet soil being viscid and tenacious, it is, as I said before, always more or less retained in the house drains. I pointed that out to Lord Wemyss, who did me the honour of quoting my views in the House of Lords when the Smoke Abatement Bill was under discussion, and when their Lordships, acting in the interests of the residents of the metropolis, wisely threw out the Bill. Your correspondent admits that the state of the Thames at the present time, in consequence of the London sewage, is so bad that it is causing considerable apprehension to those who are responsible for it, and that it is as bad as, if not worse than, it was in 1884! I have shown that the process of purification at the outfalls, as recommended by “Sanitarian,” will prove utterly useless and futile; whether we view the question of the utilisation of London sewage as a sanitary, an agricultural, or a financial question, it has hitherto failed in every instance under all these heads, and it will ever continue to fail. Unquestionably, the old midden system was very objectionable, but