due to the fact that the evil resulting from unwise dieting does not follow so swiftly, so obviously, and so dramatically as that resulting from the surgeon's neglect of aseptic precautions.

There has been some discussion as to whether Dr. Sim Wallace or the late Mr. A. Coleman was the first to insist upon the evil effects resulting from insufficient use of the teeth. I feel sure that this is a matter of complete indifference to Dr. Wallace. The idea that the teeth may suffer from insufficient use must have occurred to many independently. If I remember rightly both Herbert Spencer and Alfred Russell Wallace have given expression to it, and I have certainly myself been imbued with this notion for many years. The fact remains, however, that it was reserved for Dr. Wallace to bring home to the dental profession the great truth that dental caries can be prevented by a proper system of dieting, which consists not only in giving the teeth plenty of work to do, but in having due regard to the order in which certain articles of food are taken—a truth the adequate application of which would not merely decimate, but eventually almost annihilate, the ranks of the dental profession. It has further to be observed that while Mr. Coleman, living as he did before the propagation of Weismann's teachings, held that the teeth of civilised man were, owing to the supposed inherited effects of disuse, becoming with successive generations less and less resistant to disease, Dr. Wallace is emphatically opposed to such a view. On the contrary, he urges that modern civilised man starts life with as good dental potentialities as any of his ancestors, and that dental caries (and I would add, with certain reservations, pyorrhea alveolaris also) is essentially the result of an improper system of feeding.

I would like to say a word, in conclusion, about the giving of sugar to children. In my former letter I urged the need of caution in this matter, but I omitted to mention a point of considerable practical importance. I owe the hint to Dr. Wallace. When sugar is taken it is apt to adhere to the teeth and, by undergoing fermentation, to injure them. This adhesive tendency is well shown by such a sweet as chocolate, the dark particles of which show distinctly on the teeth for some time after consumption. Now the best way, according to Dr. Wallace, of removing the sugar from the teeth is by eating raw fruit—e.g., apples, oranges, or bananas. Jams and other sweet things should, he tells us, never come last in the meal, but should be followed by raw fruit. Otherwise the child should always be made to wash his teeth after eating sugar or very sweet foods.

I am, Sir, yours faithfully,
Wimpole-street, W., Jan. 3rd, 1909. HARRY CAMPBELL.

To the Editor of THE LANCET.

SIR,—I should like to thank the editor of the *Dental Surgeon* for having again referred to Mr. A. Coleman's views because they seem still further to emphasise the fundamental difference between the old dietetic theory of the etiology of dental caries and the new. For if Mr. Coleman had not held a theory of inherent degeneracy in the teeth of man—a theory which I entirely repudiate—he would surely have seen that his remark with regard to the teeth of animals was also true with regard to the teeth of man. The point is of great practical importance, because the older theories of causation gave rise to such recommendations regarding diet as are to be found in Mr. Coleman's manual, whereas the new theory of causation gave rise to a totally different set of recommendations, which may be found epitomised in my communication to THE LANCET of Sept. 12th, 1908.

I am, Sir, yours faithfully,
Wimpole-street, W., Jan. 2nd, 1909. J. SIM WALLACE.

STANDARDISATION OF DISINFECTANTS.

To the Editor of THE LANCET.

SIR,—May we be allowed, without unduly abusing the hospitality of your columns, to deal as briefly as possible with the points raised in the recent correspondence arising out of a letter of Messrs. McDougall Bros., printed in THE LANCET of December 5th last? We venture to affirm that the fact of Mr. J. T. Ainslie Walker being the managing director and consulting chemist of our company does not necessarily incapacitate him from being a capable bacteriologist and

chemist, or involve the necessity for dishonourable practices in the conduct of our business. He owes his position in our service to our appreciation of his work, just as Mr. C. T. Kingzett and other chemists owe theirs to a like appreciation by the several companies or firms with whom they are connected.

As regards Messrs. McDougall Bros., we are still corresponding with their solicitors and must observe the reticence that position entails. We may state, however, that with a courtesy they certainly did not invite, we, on Dec. 3rd, informed them of the source of the samples tested by us, showing that they were not of an obsolete production, and they have not so far accepted our offer to demonstrate the accuracy of our test.

Messrs. Newton, Chambers, and Co. do not specify the disinfectants to which they refer as behaving unsatisfactorily in "natural water." Any small difficulty arising owing to exceptional "hardness" of water in certain districts is quite easily overcome as regards our disinfectants.

Mr. C. T. Kingzett, on behalf of the Sanitas Co., is, of course, entitled to his opinion of "the so-called Rideal-Walker test." Few will agree with him that dilution with sea water is an essential, but he will be interested no doubt to know, as regards cyllin which he names, that we can, and do, supply to municipal authorities and sanitary officials who use sea water a crude cyllin specially made for that purpose which behaves exactly like "izal" and "okol" and is of nearly equal efficiency with our ordinary cyllin. Whether the advantage we claim for disinfectants which maintain their homogeneousness is ill-founded and illusory is again a matter of opinion, but Mr. Kingzett must be aware that many Government and municipal authorities demand this condition when making contracts, and that many hospitals and other institutions prefer—greatly prefer—a mixture which disinfects for several days, to a mixture which does not.

As regards Dr. Rideal's letter, your footnotes thereon, and Mr. A. Wynter Blyth's letter, may we observe that what Dr. Rideal wrote was perfectly true with no *suggestio falsi*. Why the council of the Royal Sanitary Institute, after approving and adopting the report of the scientists they had appointed as a special committee of inquiry (as to our knowledge they did) did not finally adopt it nor proceed with further inquiries, is best known to that body and to Mr. Wynter Blyth, the chairman of the committee.

For the rest, while we regret that so many of our business competitors should see cause for a combined attack, we are not ashamed of having done our best for many years to bring to an issue the merits of disinfectants that do not disinfect. When, as mentioned by Dr. Rideal, we offered to pay the entire cost of the Royal Sanitary Institute inquiry sooner than it should not take place, we certainly held the opinion that the result would be beneficial to our business, while affording us the gratification of being in a measure public benefactors by curtailing the sale of worthless preparations. We were then, as now, quite alive to the fact that all vendors of honest disinfectants (among whom we with pleasure include many, but by no means all, of our competitors and critics) would share the benefits we hoped to obtain. No sympathy surely can be felt with the cruelty of selling useless disinfectants, and certainly until a better one is devised the Rideal-Walker test, fairly and honestly utilised, is useful and salutary, and, be it observed, this test has been largely favoured by official recognition all over the world. As we have before written, any better one, when it comes, will be heartily welcomed by us.

Your obedient servant,
(By order of the Board),
For JEYES' SANITARY COMPOUNDS CO., LIMITED,
WM. PLANNER, Secretary.
Cannon-street, E.C., Jan. 7th, 1909.

UMBILICAL HERNIA IN INFANTS.

To the Editor of THE LANCET.

SIR,—It is recognised that umbilical hernia in infants may be due to congenital or acquired causes, and my reason for discussing the question now is that I have noticed a considerable and increasing prevalence of the condition in certain districts and I wish to state what appears to me to be the main cause and the method of preventing it. In the

following remarks reference will be made only to the acquired form.

While doing temporary work in a Yorkshire district some three or four years ago I noticed many cases among infants, but the fact that it was advisable to make any special mention of it did not then occur, but quite recently while on temporary duty in a district in South Wales, I again observed the frequency of the complaint, and in a week saw eight to ten cases in a town of some 70,000 inhabitants. That such a number should be seen in a few days, while examining the abdomen of infants in various illnesses must indicate that the condition is exceedingly prevalent in this centre. I have also recently noticed its prevalence in a London district. On considering the cause I may say that I always make the inquiry as to who attended the mother at the birth of the child, and I can only recall an instance here and there in which such has occurred among infants who were attended by medical men, but its incidence is almost invariably among those who were attended by nurses or professional midwives. It thus appears that some method in vogue among the latter, but not among the former, is probably the cause, and this I believe is so, the direct reason being that the practice of midwives and nurses is to cut the cord too close to the abdominal wall. Having known the custom among a number of medical practitioners with regard to this point I can say that their habit is to divide the cord at from one and a half to two and a half inches from the umbilicus. With regard to the old order of nurses, I have personally been requested to cut it short as it saves trouble. The question then arises, Is it the practice amongst the present-day midwives to sever the cord closer to the abdominal wall than medical men, and, if so, is it done for the reason that it is best or satisfactory or for the reason of saving trouble? Before going further into this point it is necessary to consider something of the physiological process by which the aperture in the abdominal wall is closed and the umbilicus is formed. The latter is situated at the junction of the lower two-fifths and the upper three-fifths of the linea alba, and it is formed partly by the contraction of the fascia of the linea alba and partly by remnants of the funis. The centre of the umbilicus is said to be composed of the fibrous remains of the vessels,¹ and it goes without saying that they are those that were in that portion of the funis left attached to the child's abdomen after its severance. The question then occurs, How much of the funis should be left in order that a firm and unyielding umbilicus may be found in the child?

On studying this question it seems that a different opinion is held by writers on midwifery and that their view differs somewhat from that which is the custom among practitioners. One well-known author states that the cord may be severed at $\frac{1}{2}$ or 1 inch from the umbilicus;² another says $1\frac{1}{2}$ inches;³ others say about $1\frac{1}{2}$.⁴ While hesitating to question the opinion of any acknowledged authority on the subject of midwifery, I may be allowed to state that I believe the division as near the abdominal wall as $\frac{1}{2}$ or 1 inch is inadvisable and that its severance should be at a point of more than $1\frac{1}{2}$ inches from the umbilicus rather than less, the best position being 2 to $2\frac{1}{2}$ inches from the abdominal wall. That a portion of the funis is needed for the closure of the aperture is admitted, and I can account for the prevalence of umbilical hernia in infants in no other way than that the practice of midwives is to divide the cord too near the abdomen. If such is the case, there can be no satisfactory reason unless they have been instructed to do so—and whether this is the case I am not in a position to say—as if there were any additional trouble connected with the longer funis, such should not be considered when the danger of inducing a weakened condition of the abdominal wall is taken into account. Although it is the fact that such herniæ as a rule tend to undergo cure the projection, which has been likened to the finger of a glove, would be far better prevented, and when it occurs may in some instances lead to umbilical hernia in late adult life, and in other cases cause a defect in the abdominal wall and thus tend to diminish the strength of an important structure of the body, and one on which the maintenance of the sound health of the individual is largely dependent. In conclusion,

I may state that the condition of which I have written occurs among infants in whom none of the usual causes of acquired umbilical hernia are present, as phimosis or a narrow meatus. I am, Sir, yours faithfully,

Oxford, Jan. 5th, 1909.

A. STAY DUTTON.

DRAINAGE IN CAIRO.

To the Editor of THE LANCET.

SIR,—An idea is current in England that active drainage operations are in progress in Cairo and that there is therefore much disturbance of soil and tearing up of the streets. Such is not the case; a main drainage scheme has been approved, but the work has not yet commenced nor will much be done for some time. The sewage farm in the desert will have to be done first. Cairo will not therefore be affected for probably some years. The principal hotels are all drained on the septic tank system and this has worked well. There need therefore be no fear that the health of Cairo has been altered by any drainage works. Diarrhœa is also supposed to be common amongst newcomers, but if greater precautions were taken to avoid chill to the abdomen, especially about sunset, this could largely be avoided. In addition to this I always advise my patients not to take green salad, as in any hot country raw vegetables are unsafe to eat.—I am, Sir, yours faithfully,

LLEWELLYN PHILLIPS, M.D. Cantab.,

Cairo, Jan. 2nd, 1909.

M.R.C.P. Lond., &c.

EPSOM COLLEGE.

To the Editor of THE LANCET.

SIR,—Like many others probably I have often been told that all medical men are gentlemen and *rich*, but experience teaches one that nearly all medical men not possessed of incomes other than professional are for their social position decidedly poor. Probably few, even at the top of the tree, after their expenses are deducted have a margin equal to that of a tolerably successful tradesman, whilst the incomes of the rank and file are being continually reduced by unfair hospital and club abuse, and the reduced incomes themselves are of less purchasing power owing to the continual rise in price of commodities and rates and taxes. I have for long maintained, like "Honorary Local Secretary" in THE LANCET of Jan. 9th, that the widows and orphans of medical men, if a charge upon anyone, should be maintained by the public, for whom the medical profession work night and day, often dying at their posts, for incomes which are absurdly below their deserts or even bookings. I should like to see hospital physicians and surgeons more careful in avoiding hospital abuse, and whenever opportunity offered putting in a word for the two medical charities—the British Medical Benevolent Fund and Epsom College. The former institution always appeals to my support in preference to the latter because the unfortunate applicants for relief are not put to the expense of canvassing for support. One is always pleased to see legacies of thousands of pounds left to hospitals for the benefit of the *deserving* poor, but I cannot help thinking that some of our leaders in the profession might secure legacies of substantial amounts for our medical charities.—I am, Sir, yours faithfully,

A. PHILLIPS HILLS,

Honorary Local Secretary, British Medical Benevolent Fund.

Battersea Park, S.W., Jan. 11th, 1909.

THE REMOVAL OF ERYTHEMA FROM THE FACE ("RED NOSE") BY THE PROLONGED INTERNAL ADMINISTRATION OF ADRENALIN.

To the Editor of THE LANCET.

SIR,—The fact that adrenalin is regarded as one of the strongest vaso-constrictors induced me to try its usefulness by internal administration in cases of erythematous taches of the face ("red nose"). I have made observations on three cases; two of them, demonstrated to the Kharkoff Dermatological Society in 1907, were students of the University, aged

¹ The Diseases of Children (Ashby and Wright), fifth edition, p. 165.

² A Manual of Midwifery (Galabin).

³ Manual of Midwifery (Fothergill).

⁴ The Science and Practice of Midwifery (Playfair) and Manual of Midwifery (Eden).