an occasional opportunity of biting hard foods before the weaning time—directly, in fact, the teeth begin to appear. What is the meaning of the champing and profuse salivation to which Mr. Sellors refers—phenomena which attend the eruption of the teeth and the awakening into functional activity of the salivary glands? May we not regard them as the play of a normal function craving for satisfaction—as, in fact, the ineffectual chewing and insalivation of phantom morsels of food? And how is this mute but eloquent appeal met? By confining the diet to liquids and pap which slip down before the mouth has had an opportunity of exercising its newly acquired functions.

Mr. Sellors complains that I have not given any explicit directions as to the kinds of food I would give to the child. The reason is simple. I could not within the narrow limits of a letter deal with the subject in more than a general way. I hope, however, on an early occasion to enter into particulars, and to bring forward evidence which I believe will convince the most sceptical that the modern system of feeding the young human on liquid and pap, while denying him a fair proportion of food that needs abundant mastication, interferes with the proper development of the jaws and their appendages, and of the accessory cavities (the pharynx, nasopharynx, and nasal passages) and their appendages; that it is an abundant source of indigestion; that it has much to do with the causation of adenoids; and that it is largely responsible for the ever-increasing prevalence of dental caries and other affections of the teeth. When we reflect upon the many evils which follow in the wake of these diseases—deafness, semi-idiotcy, pulmonary disorders, to mention only a few—it must be admitted that my indictment against the system of pap feeding is a serious one. And such I intend it to be.

I am, Sirs, yours faithfully,
Wimpole-street, W., August 25th, 1901. HARRY CAMPBELL.

"HARVEST BUGS."

To the Editors of THE LANCET.

SIRS,—In his interesting letter on the above parasites in THE LANCET of August 24th, p. 562, Mr. A. Maude states that he can find no reference to them in any text-book of medicine or dermatology. If he will turn to p. 864 of Dr. H. Radcliffe Crocker's "Diseases of the Skin" (second edition, 1893) he will there find a short account of the parasite and of its effects on the skin. It is indexed under "harvest bug." M. Mègnin, whose researches are well known, calls it in "Les Acariens Parasites" "*le Trombidion soyeux*." Dr. Crocker also refers to the two American species of harvest ticks described by Professor Ritz of St. Louis. I have seen severe pustular and crusted lesions about the legs in two cases, both young women, who had received the attentions of the harvest bug.—I am, Sirs, yours faithfully,

Upper Gloucester-place, N.W., August 27th. GEORGE PERNET.

THE USE OF A LINEN BAG IN ETHER ANÆSTHESIA.

To the Editors of THE LANCET.

SIRS,—The apparatus invented by Clover and variously modified since for the administration of ether is such an admirable one that I do not know that we need ask for a better as a medium for ether-giving save in one particular and that a most important one—viz., the rubber bag. Although obviously possessed of some objectionable features the rubber bag has been accepted as part and parcel of the necessity of things and remains as an unclean but indispensable despot in the administration of ether in this country. Without doubt the open method of giving ether on a mask or cone is too slow in its effect to be of real practical use, and it is this slowness which has necessitated the use of the bag in question. The argument is that to produce and to maintain ether anæsthesia you must have the asphyxial element present; to this end you must exclude air and thus the rubber bag. I believe this to be a wrong and mistaken conclusion, as I shall afterwards show. The objections I would make to the rubber bag are—first, that it is apt to produce more of the asphyxial element than is desirable—viz., cyanosis; and, secondly, that it is unclean.

As regards the first, considering that the *raison d'être* of the rubber bag is to introduce the asphyxial element, it is not quite fair to charge it with producing a lividity which is

so far intended, but it often does more; even in the best of hands it occasionally produces cyanosis to a degree that cannot be otherwise than a strain on the right ventricle, and certainly begets a frothy condition which is undesirable even if it does not lead to further trouble. If it were possible to remove this reproach of cyanosis and its consequent troubles from ether anæsthesia nearly all the objections to it would be groundless, and this can be done by using instead of the rubber bag one made of linen which I have devised and describe below. The second objection, that of uncleanness, has doubtless presented itself to every anæsthetist who ever thought of the condition of his rubber bag and yet I know of no way of avoiding it. It is no mere sentimental objection that the last patient who breathed into the bag was the subject of intestinal obstruction and had a foul fæcal odour in his breath or was a sufferer from carcinoma of the œsophagus or tonsils. For the last two or three years I have been in the habit of meeting these objections by rinsing out the bag well with water, some antiseptic occasionally being added, after each operation, thus ensuring as much cleanliness as possible, and so far as the avoiding of cyanosis is concerned I have dispensed with the bag when I could, allowing the patient to breathe through the open inhaler, resorting only to it when this proved insufficient. On the whole these means met the case fairly well, but while modifying the objections they did not entirely remove them.

In America where ether is the anæsthetic mostly in use a towel folded cone-shape and covered or not by a thin waterproof is employed and apparently does well, although it finds little favour in this country. Mr. Mayo Robson who was recently in the United States came back much impressed with this mode of administration and urged me to try it. It did not, however, appeal to me; it seemed lacking in precision after having been used to measuring the ether given through a Clover apparatus. It occurred to me, however, to substitute a linen bag for the rubber one and this has proved itself to be so well adapted for the purpose and so completely meets the objections to the ordinary rubber bag that I should like to call the attention of the profession to it. I have tried it now in a sufficient number and variety of cases to enable me to pronounce it a success. The bag is made of a fine linen known as "holland" and is shaped somewhat like the ordinary bag. The body of the bag I have had made of three pieces accurately sewn together, a collar of the same material with a tape attached to be slipped over the ordinary Clover bag-mount and tied there completes it. As may be guessed this bag does not fill and empty, as does the rubber one, to the breathing of the patient, it is simply put on in a "bunched out" condition and only a slight rise and fall tells of the expiration and inspiration. My experience with it is that the patient goes under very quietly, I may say with almost suspicious quietness; there is none of the usual noisy breathing, almost no salivation, and absolutely no lividity. Abdominal heaving is also absent, the anæsthesia is as quiet as with chloroform. The time occupied to produce anæsthesia is, of course, longer than with the rubber bag, varying from seven to 12 minutes. The corneal reflex seems to be lost disproportionately soon. The amount of ether consumed is also considerably more, during the first 15 minutes about twice as much being used, but in a prolonged anæsthesia the disproportion is not so great, as will be seen in a note of the appended cases. There is another very great advantage in the use of the linen bag in that the anæsthetist holds a trump card, so to speak, in the shape of his chloroform drop-bottle. Should the patient prove hard to anæsthetise or threaten to come round he can sprinkle a little chloroform on the bag, selecting by preference the place where the linen shows the most marked rise and fall of the breathing. A fresh bag or freshly-washed bag is used for each case; it can be slipped on to the ordinary Clover mount and tied in position in half a minute. In practice I turn the Clover gradually, but compared to the old mode rapidly, on to full and keep it there or thereabout till sufficient anæsthesia is produced. Later a less concentrated vapour will be found enough. Perhaps one is usually inclined to over-value one's own discovery, but in this case I do not think that I make too much of it in saying that it ought to supersede the rubber bag completely. A fresh, clean, aseptic bag for each patient is a thing to be desired when it can be had at the cost of washing. The entire absence of even lividity will commend it to every anæsthetist and the possible resort to chloroform in addition,

without change, is a happy incident. I may say that the bag has been used by several other men here with the same good results. The bags can be had from Messrs. Reynolds and Branson and Mr. R. Rauschke of this city. I might add that for further asepsis the Clover chamber can be boiled or immersed previously to operation in a 1 in 20 hot carbolic solution. The mask I am having made of thin brass, nickelled, with a detachable red rubber face-pad so that the whole can be rendered as sterile as the operator's instruments.

Note of Cases.

Date.	Operation.	Amount of ether.	Time of administration.	Average time per ounce.
July 1st.	Choledochotomy, &c.	11 oz.	1 hr. 40 min.	1 oz. in 9 min.
„ 2nd.	Nephrectomy.	5 „	1 „ 45 „	1 „ „ 9 „
„ 2nd.	Appendectomy.	4 „	1 „ 40 „	1 „ „ 10 „
„ 3rd.	Ovariectomy.	7 „	1 „ 48 „	1 „ „ 7 „
„ 6th.	Gastro-enterostomy.	4 „	1 „ 40 „	1 „ „ 10 „
„ 10th.	Exploratory and colotomy.	4 „	1 „ 35 „	1 „ „ 8 „
„ 10th.	Breast amputation	4 „	1 „ 45 „	1 „ „ 11 „

In all, I have had some 50 cases similar to the above; average time to procure anaesthesia being 10 minutes; average amount of ether being one ounce per eight minutes.

I am, Sirs, yours faithfully,

W. MCGREGOR YOUNG, M.A., M.D., Glasg.

Leeds, August 27th, 1901.

“THE TREATMENT OF PHTHISIS BY MEANS OF ELECTRICAL CURRENTS OF HIGH FREQUENCY AND POTENTIAL.”

To the Editors of THE LANCET.

SIRS,—In your excellent report of my paper on the above subject, which I read before the Medicine Section of the British Medical Association at Cheltenham, I am reported to have said: “He did not think the bacilli were killed by the current.” The bacilli are not killed but are stimulated to very excessive overgrowth which affects them adversely by attenuation. The bacilli act in the following manner. Within a few days they begin to increase and after a week or two become greatly increased in numbers; they soon form clumps and later get misshapen, short and stumpy, and generally curved, and stain far more readily than before. After a time they decrease, and later, when the patient is obviously better in every respect, they may cease entirely, but a few may reappear from time to time. At a stage of the treatment large numbers of leucocytes, &c., are generally found. The temperature naturally follows the increase in numbers of the attenuated bacilli and increase in body weight follows the decrease of bacilli.

I am, Sirs, yours faithfully,

CHISHOLM WILLIAMS.

Bedford-square, W.C., August 24th, 1901.

MASSAGE IN JOINT INJURIES.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Feb. 2nd, 1898, p. 465, I explained and advocated a treatment for certain recent injuries of joints by massage and movement. I have now the pleasure of noting that some of the more prominent members of the medical profession have adopted and are endorsing the views which I then put forward—views which I had not seen had been previously advocated. Last year Mr. (now Sir William H.) Bennett spoke favourably of the treatment and this month at the meeting of the British Medical Association held at Cheltenham Mr. Howard Marsh has been giving it his general approval, so that we may fairly anticipate that it will come, with more or less modification, to be generally adopted by the profession. Mr. Marsh says, “The after-treatment of dislocations has of late years undergone a great and very advantageous

change. In the case, e.g., of the shoulder-joint the arm is no longer bandaged to the side for a fortnight or three weeks, but passive movements and massage are regularly used after the second or third day.” This is a line of treatment which very nearly corresponds with the principle I advocated nearly three and a half years ago. I hold that a welcome result of the adoption of this line of treatment will be a great lessening of the bone-setting industry, the annoyance of which to the profession is well known and whose operations have often been attended with a certain measure of success, in my opinion chiefly owing to the former faulty treatment of these injuries.

One of the most interesting and successful cases which I have treated on the above principles was the case of a volunteer who dislocated his right elbow. His forearm was at right angles to its proper position and the bones of the forearm were so much displaced that there was great danger of the skin rupturing. The ligaments must have been very much injured. Although there was a good deal of inflammation and swelling afterwards I persevered in the treatment, so that within a comparatively short time he was at work, and now his joint is as good as it ever was.

I am, Sirs, yours faithfully,

Galashiels, August 26th, 1901. WILLIAM DOIG, M.D. Edin.

THE TEMPERATURE OF INGESTA AND ITS INFLUENCE.

To the Editors of THE LANCET.

SIRS,—I have never met with any observations on the temperature of food and drink as taken into the body under ordinary circumstances. It may be of some interest to call attention to the matter now that the hot weather is upon us and one's efforts are directed towards keeping cool. Temperatures which cannot be borne by the external skin are easily tolerated by the mucous membrane of the alimentary tract to an extent which may surprise many. For example, taking an ordinary typical meal, I found that the following temperatures were registered (Fahrenheit): meat, 115°; beans, 132°; potatoes, 150°; and fruit pie, 130°. Any of these were well borne by the mouth, even the potatoes. I found that the average temperature of hot tea was 135°, above this the tea could be sipped up to 142° but could not be drunk with comfort. It was impossible to keep the finger in contact with any of these articles for more than a moment. These few figures will suffice to emphasise the lesson which I wish to draw, that if we want to keep cool hot meals should be avoided. They also help one to realise that the stomach may be seriously affected by taking our food at such high temperature, as witness the frequency of gastric ulcer in cooks supposed by many to be due to the tasting of hot dishes.

I am, Sirs, yours faithfully,

JAMES ROTH, M.R.C.S., L.R.C.P.

Oxford, August 25th, 1900.

“HAY FEVER: ITS REMEDY.”

To the Editors of THE LANCET.

SIRS,—In answer to Mr. Lennox Browne's suggestion in THE LANCET of August 24th, p. 565, of tabloids of suprarenal extract for use in hay fever, I may say that I gave them a fair trial about 18 months ago but ceased using them owing to the great difficulty in dissolving them in water. I have for the past 12 months used the mixture of chloretone and suprarenal, a preparation which I find does not decompose for a long time; if the mixture is diluted more chloretone should be added to insure preservation. Dr. Clement Dukes does not state what class of cases of hay fever are benefited by the use of adrenalin chloride; my experience teaches me that only those cases with some intra-nasal abnormality—e.g., hypertrophic rhinitis, spurs, &c.—are improved by the use of extract of suprarenal capsule and a large majority of these patients can be permanently relieved by suitable intra-nasal treatment.

I am, Sirs, yours faithfully,

Lincoln.

A. STANLEY GREEN, M.B., B.S. Lond.

RE “BLUE URINE.”

To the Editors of THE LANCET.

SIRS,—I have just learned that the cause of “blue urine” in a case reported in THE LANCET of June 1st, 1901, p. 1535,