

are warranted in withholding our assent from this uncommon accident as the cause of her disease.

In his reply to the remarks made at the meeting, Mr. Hutchinson is reported to have said: "There were no facts to prove that the persons were the subjects of syphilis before vaccination." On the other hand, there were none to prove they were not; and, with all deference to his opinion, I think in the case now under consideration there is a strong point of evidence to show that the patient was, most probably, already syphilitic at the time of her revaccination. For she was vaccinated with her two grown-up daughters, from the arm of a baby which had previously been used to vaccinate a number of other persons. The contents of the vesicle therefore must have been exhausted before the patient and her daughters were vaccinated from it; consequently the same material—i.e., the oozing or the draining of the vesicle—would be used for all three of them; but although the mother afterwards had a bad arm, and suffered from an attack of syphilis, the two daughters, equally prone to contract the disease, escaped.

This circumstance contributes, moreover, a strong argument that the vaccinifer was not tainted; and, indeed, from the report, it is by no means clear that the family, or this child, were syphilitic. The vaccinifer was the third of these children, all living. The first had never shown any suspicious symptoms; the two youngest, whilst teething, had been treated for sores about the anus, and both are said to have large foreheads. Although we may justly regard such symptoms with distrust, yet soreness about the anus during dentition is by no means pathognomonic of syphilis unless the ulceration be distinctly condylomatous (mucous tubercles), which Mr. Hutchinson cannot positively assert, as he did not see the child until long after this had disappeared; neither is a slight enlargement of the forehead necessarily of syphilitic origin, for this also may be produced by other causes. The grounds then for believing that the vaccinifer was syphilitic are extremely slight, and far more than counterbalanced by the rebutting evidence above-mentioned.

I trust, Sir, by these remarks it will not be thought that I am seeking to throw the least discredit upon Mr. Hutchinson. Nobody can feel more strongly than myself the immense obligation we are under to him for having brought these most interesting cases before us in the very able manner he has done, and for the good service he has rendered in removing a question of such moment to us all from what, in the minds of many practitioners, was still debatable ground, to the domain of certainty. Anything that Mr. Hutchinson can vouch for from his own personal observation, and of his own knowledge, I unhesitatingly accept; but this case, constituting his fourth series, differs from his preceding cases in that he did not see the local condition of the patient for himself, and is, therefore, entirely dependent upon others for his statements. There is no doubt that the woman was the subject of constitutional syphilis, but in the absence of skilled observation, and with its several weak points which I have endeavoured to place before you, this case cannot be accepted as one of indisputable vaccino-syphilis, and I do not think it ought to go forth authoritatively to the public as such.

With apologies for the great length of this letter, which can only be excused on account of the vast importance of the subject,

I remain, Sir, faithfully yours,

GEO. G. GASCOYEN.

Queen Anne-street, Cavendish-square, Feb. 1st, 1873.

NITROUS OXIDE GAS IN DENTISTRY.

To the Editor of THE LANCET.

SIR,—I should not intrude myself on your columns did I not feel, after reading your remarks on Nitrous Oxide in last week's LANCET, that the tendency of the latter portion of the article was almost to condemn the administration of this most useful anæsthetic.

Having given nitrous oxide in nearly two thousand dental operations without any unpleasant result, I should be sorry to discontinue its use, even though it be not a "true anæsthetic." I quite agree with you that the ruthless way in which nitrous oxide has been administered by unqualified

persons is much to be deplored. The rapidity of the action of nitrous oxide, as well as its peculiar effects upon respiration, are circumstances which point to the necessity of at least as much experience in its use as in the employment of chloroform in order that it may be given with perfect safety.

I certainly am averse from its re-administration in dental operations whilst the gums are bleeding, as, should the muscles about the glottis be partially paralysed, the blood naturally finds its way into the trachea,—an event which may have occurred in the late fatal case, but of which we unfortunately have no proof in consequence of there having been no post-mortem examination.

When operating on the mouths of patients under the influence of nitrous oxide, it is better to place them in an almost upright position, and the moment the operation is concluded to tilt the chair forward, in order that the blood may run out of the mouth and not back into the fauces.

There appears no proof in Miss Wyndham's case that the heart was primarily affected, as it seems that Mr. Mason was able to fetch Dr. Drake, "who returned with him and found the lady still alive." This is not the history of death through the heart. The increased rapidity of the pulse during the first inhalation was possibly due to the nervous excitement of the patient, and would most probably have been noticed even if no anæsthetic had been administered.

Looking at these few facts in an impartial manner, I think, Sir, you will allow that until we find some better anæsthetic, nitrous oxide, carefully administered by properly qualified surgeons, is far less dangerous and much more manageable than chloroform in dental operations.

I am, Sir, yours obediently,

Brook-street, Grosvenor-square,
February 3rd, 1873.

GEORGE PARKINSON.

THE INLAND REVENUE BOARD AND THE ADULTERATION OF CHICORY.

To the Editor of THE LANCET.

SIR,—According to *The Times*, the Inland Revenue Board are "surprised to find" that there is a trade in adulterated chicory, a roaster having been detected mixing scorched rye with this article, which he sells as chicory.

Why, Sir, this particular adulteration of chicory, as well as many others, some of them of a much worse description, and the existence of an extensive trade in adulterated chicory, were exposed by me in the reports of the Analytical Sanitary Commission of THE LANCET, now twenty-two years ago. It was then shown that nearly half the samples of chicory sold were adulterated. What, therefore, really is surprising is that the Inland Revenue Board should not have been sooner aware of the fact, and that they should have done so little, with all their vast opportunities, in the exposure and suppression of adulteration.

I am, Sir, your obedient servant,

ARTHUR HILL HASSALL, M.D.

Adelphi-terrace, Feb. 3rd, 1873.

PRISON DIETARY.

To the Editor of THE LANCET.

SIR,—The recent Prison Congress having directed public attention to the various matters which concern the treatment of prisoners, it may interest your readers to learn what is the effect upon the physical condition of criminals, of the prison dietary known as Sir George Grey's, which was in use at the Louth County Prison until it was closed in June last, and is still, I believe, employed in several city, county, and borough gaols.

Before stating, however, the results I had obtained, it is desirable to show what was the condition of the prisoners on admission, which was as follows for the years ending September 29th, 1868, and September 29th, 1869:—

1867-8: Male prisoners, 535; average height, 5ft. 3½in.; average weight, 8 st. 13½ lb.; deficiency below standard, 10½ lb.

1868-9: Male prisoners, 551; average height, 5ft. 3½in.; average weight, 9 st. 3½ lb.; deficiency below standard, 8½ lb.

It appears from this that, on an average of more than

1000 prisoners, each was 8lb. to 10lb. below the ordinary standard of health, as given in Dr. Hutchinson's tables of relative heights and weights, and this conclusion is confirmed by the fact that in the first of the two years above-named 92 prisoners, and in the second year 194 prisoners, or 26 per cent. of the whole 1086, were suffering from various slight or severe ailments on admission into gaol.

The weekly amount of food furnished to male prisoners on hard labour was as follows:—

CLASS.	Bread.	Meat.	Gruel.	Potatoes.	Soup.	Treacle.	Cheese.	Suet pudding.	Indian-meal pudding.
	lb. oz.	oz.	Pints.	lb. oz.	Pints.	oz.	oz.	oz.	lb. oz.
I.	8 0	—	—	1 8	—	—	—	—	1 2
II.	8 0	—	14	2 4	—	—	2	—	1 8
III.	9 0	6	14	3 12	2½	—	3	8	—
IV.	9 14	8	14	4 8	3	1	4	12	—
V.	10 0	8	14	6 0	3	2	4	12	—

Prisoners continued on Class I. till the end of the first week; on Class II. till the end of the first month; on Class III. till the expiration of the first three months; on Class IV. for the three months following; and on Class V. till the expiration of their sentence.

The effects of these different classes of diet are given below. The numbers in every case include all whose weights were ascertained at the time of their commencing and discontinuing the diet.

		Men.		Loss.		Average.
				lb.		lb. oz.
CLASS I. ...	{ 1867-8 ...	500	...	658	...	1 5
	{ 1868-9 ...	487	...	529	...	1 1½
CLASS II. ...	{ 1867-8 ...	405	...	670	...	1 10½
	{ 1868-9 ...	354	...	640	...	1 13
CLASS III. ...	{ 1867-8 ...	63	...	117	...	1 13
	{ 1868-9 ...	32	...	38	...	1 2¾
CLASS IV. ...	1868-9 ...	22	...	Gain.	Average.	3 14
				Loss.		
During whole term of sentence ...	{ 1867-8 ...	535	...	1458	...	2 11½
	{ 1868-9 ...	244	...	479	...	2 nearly

The number of men on Class V. was too small to form the basis of any estimate, but no doubt there was an average gain in weight of a small amount. The average duration of sentence in 1868-9 was thirty-eight days.

It appears, therefore, that Sir George Grey's dietary causes a loss in weight of 4lb. to 5 lb. during the first three months of imprisonment, thus further enfeebling men who are already weakened by dissipated or irregular living, and as a three months' term is frequently the sentence given to a "rogue and vagabond," or a petty felon, it follows that the subjects of this method of treatment are less able, and, as a necessary consequence, less willing, than before to earn their bread by daily labour.

One other aspect of the dietary in question deserves also to be mentioned—viz., its effect upon prisoners awaiting trial. Out of ninety-seven men committed to prison for trial at Quarter Sessions, fifty-four lost weight, amounting to 163 lb., or an average of 3 lb. each; in their case, therefore, the punishment commenced before the guilt was ascertained. The remaining forty-three men either lost nothing or gained somewhat in weight, but, as the friends of prisoners are allowed to provide their food before trial, it is fair to infer that in these cases the increase of flesh was derived from the supplies, always most abundant, brought by friends out of doors.

Low diet is undoubtedly necessary as a punishment for convicted criminals, but it should bear some proportion to the work they perform, and where it does not impaired health inevitably follows. The desire to show that this scheme of dietary does not, in the first three classes, bear an adequate relation to the labour demanded will, I hope, be a sufficient apology for having trespassed on your valuable space. I enclose a copy of the dietary table in full, and am, Sir,

 Your obedient servant,

 THOS. WEMYSS BOGG,

January, 1873. Late Surgeon, Louth Prison.

PLUGGING THE POSTERIOR NARES.

To the Editor of THE LANCET.

SIR,—When the posterior nares are plugged from the mouth by means of Belocq's canula, the presence of a piece of string extending from the plug through the fauces and mouth causes great irritation about the soft palate and uvula, producing constant efforts to swallow, and these efforts, by their action on the string, tend to displace the plug. This is probably what Mr. Morrill alludes to, in the last number of THE LANCET, as the first cause of anxiety. By plugging from the anterior nares with my nasal bag-plug this source of anxiety will, I think, be avoided.

As to the recurrence of hæmorrhage on removal of the plug, also mentioned by Mr. Morrill, this can be remedied by allowing the plug to remain for several or any requisite number of days. The presence of the plug (as happens in other mucous passages when a foreign substance is introduced; for example, the introduction of a catheter into the urethra for several days) at first produces swelling and turgescence of the mucous membrane; and, secondly, absorption with increased secretion, which loosens the plug; these latter processes probably playing no mean part in arresting the hæmorrhage. If after the plug has remained, say for several days, the air or water, with whichever it has been filled, is allowed to escape by turning the stop-cock, and not even then withdrawing it for another day or so, there will probably be no recurrence of the hæmorrhage, especially if in the meantime the generally engorged liver (the probable cause of the epistaxis) has been well acted upon by saline purgatives, with which may be combined ten-grain doses of ammonia, iron, alum, and ten or twenty minims of aromatic sulphuric acid.

I fancy that my method of introducing the bag-plug folded round a small metal director of the shape of Belocq's (spring) canula, and fitting into a small pocket on the outside, near the large end of the bag, will be found practically to answer better, and with greater certainty, than Mr. Godrich's modification of drawing the bag into the tube.

I remain, Sir, yours, &c.,

 R. P. B. TAAFFE, M.D., M.S. Lond.

Brighton, February 1st, 1873.

THE SOLVENT TREATMENT OF CALCULI.

To the Editor of THE LANCET.

SIR,—In the case of patients suffering from symptoms of calculus in the kidney, there is a simple mode of treatment which has, in my experience, had very gratifying results. I am aware that it is very far from novel, but I should be glad to give it increased prominence with any of your readers who have not systematically and completely carried it out. What I usually direct is, that the patient should take his dose of medicine in a pint of water on an empty stomach three times a day. At the same time, I impress upon him that the main object of the treatment is to make the urine very abundant, and that it should have a thin, pale appearance, and that, as a habit of life, he must persistently drink sufficient fluid to produce this result; explaining, at the same time, that such urine is likely to afford