towns in any previous week of this year. The lowest rates in these towns last week were 14.5 in Birkenhead, 14.9 in Sunderland, 15.6 in Cardiff, and 17.3 in London. The rates in the other towns ranged upwards to 25.2 in Plymouth, 25.9 in Bolton, 26.1 in Salford, and 31.2 in Oldham. The deaths referred to the principal zymotic diseases in the twenty-eight towns declined to 500 last week, from 569 in the previous week; 156 resulted from whooping-cough, 139 from measles, 82 from scarlet fever, 45 from "fever" (principally enteric), 20 from diphtheria, and 16 from small-pox. No deaths from any of these diseases were recorded last week either in Huddersfield or Cardiff, while they caused the highest death-rates in Salford and Bolton. Whooping-cough was proportionally most fatal in Bristol and Oldham; measles in Bolton, Preston, Bradford, and Salford; scarlet fever in Hull and Derby, and "fever" in Blackburn and Liverpool. The 20 deaths from diphtheria in the twenty-eight towns included 12 in London and 2 in Brighton. Small-pox caused 7 deaths in London and its suburban districts; also 2 each in Nottingham, Leeds, and Newcastle-upon-Tyne, and 1 each in Birmingham, Bolton, Manchester, and Sheffield. The number of small-pox patients in the metropolitan asylum hospitals, which had steadily declined in the six preceding weeks from 350 to 256, were 272 on Saturday last; 43 new cases of small-pox were admitted to these hospitals during the week, against 45 and 31 in the two previous weeks. The deaths referred to diseases of the respiratory organs in London, which had been 238 and 242 in the two previous weeks, declined to 222 last week, and were 46 below the corrected weekly average. The causes of 72, or 2.2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Birmingham, Portsmouth, Brighton, and in six other smaller towns; while the proportions of uncertified deaths were largest in Sheffield, Blackburn, Preston, and Salford.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight large Scotch towns, which had been equal to 22.1, 22.2, and 22.6 per 1000 in the three preceding weeks, further slightly rose to 22.9 in the week ending the 3rd inst.; this rate exceeded by 3.0 the mean rate last week in the twenty-eight English towns. The deaths referred to the principal zymotic diseases in these Scotch towns numbered 85 last week; they included 19 from "fever," 18 from whooping-cough, 16 from diarrhoea, 15 from measles, 10 from diphtheria, 7 from scarlet fever, and not one from small-pox. The deaths referred to "fever," which had been but 6 and 9 in the two previous weeks, further rose to 19 last week, of which no fewer than 11 occurred in Edinburgh (against but 2 in each of the two preceding weeks). The 18 fatal cases of whooping-cough included 11 in Glasgow and 3 in Edinburgh. Of the 16 deaths attributed to diarrhoea, 5 occurred in Glasgow, and 3 both in Dundee and Perth. The 15 deaths from measles included 6 in Glasgow, 5 in Aberdeen, and 3 in Edinburgh. Of the 10 deaths referred to diphtheria, 4 were returned in Glasgow, and 2 both in Edinburgh and Greenock. The 7 fatal cases of scarlet fever corresponded with the number in the previous week, and included 3 in Glasgow, and 2 both in Edinburgh and Paisley. The deaths referred to acute diseases of the lungs in the eight towns, which had been 120 and 118 in the two preceding weeks, rose to 125 last week, and exceeded by 19 the deaths attributed to these diseases in the corresponding week of last year.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 35.4, 25.0, and 24.7 per 1000 in the three preceding weeks, was 25.5 last week. During the first nine weeks of the current quarter the death-rate in the city averaged, however, 29.0 per 1000, against 20.1 in London and 21.2 in Edinburgh. The 170 deaths in Dublin last week showed an increase of 5 upon those returned in the previous week, and included 6 which were referred to measles, 3 to "fever," 2 to diarrhoea, one to scarlet fever, and not one either to small-pox, diphtheria, or whooping-cough. Thus 12 deaths resulted from these principal zymotic diseases, corresponding with the number in the previous week; these 12 deaths were equal to an annual rate of 1.8 per 1000, against 3.0 in London and 5.1 in Edinburgh. The 6 fatal cases of measles showed an

increase of 2 upon those in the previous week; since the beginning of this year no fewer than 542 deaths from this disease have been recorded within the city. The 3 deaths referred to "fever" were 3 fewer than those in the previous week. The causes of 24, or more than 14 per cent., of the deaths in the week were uncertified.

THE SERVICES.

ADMIRALTY.—Fleet Surgeon John Fisher has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet, with seniority of 30th May, 1882; Staff Surgeon George Bolster has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet, with seniority of 28th May, 1882.

The following appointments have been made:—Staff Surgeon Arthur V. Smyth, to the *Druid*, vice Gregory; Fleet Surgeon Henry Macdonnell, to the *Invincible*, vice Stephen Sweetnam; Fleet Surgeon John C. Messer, to Devonport Dockyard, vice John Fisher; Staff Surgeon John G. Clarke, to the *Boscawen*, vice Henry Macdonnell; Surgeon Charles L. Vasey, to Haslar Hospital; Surgeon Michael Fitzgerald, to Malta Hospital, vice John Wilson; Surgeon Alexander W. M'Leod, to Haslar Hospital, vice Michael Fitzgerald; Surgeon Edward James Biden, to the *Defence*, additional for the *Forester*.

Correspondence.

"Audi alteram partem."

FLOUR AND BREAD.

To the Editor of THE LANCET.

SIR,—The sciences of medicine and engineering go hand-in-hand in matters connected with the sanitation of dwellings. I think they may also work together in the preparation of food supplies. At a meeting of the Institution of Civil Engineers held on Tuesday, May 16th, three papers were read, by Messrs. Baker, Simon, and Harding, dealing with improved methods of preparing flour from corn, the objects of these methods being to produce by means of roller mills the largest bulk of white flour from a given bulk of corn, and to separate entirely by silk gauze-dressed machinery all "bran," "pollard," and "toppings" from the flour, thus producing a flour of almost perfect purity and of dazzling whiteness, for which there is, unfortunately, a growing demand in this country. Now, it is well known to chemists and medical men, though not to the general public, that such flour, whilst it has lost the rough exterior, the first coating of bran, containing silica, has also parted with nearly all of the second, third, and fourth coatings, containing as they do nitrogenous substances, phosphates and other salts, which are so necessary for the formation of bone, teeth, and muscle. When it is borne in mind how large a portion of the population of this country (more especially children) live principally on bread, in some form or other, and that whilst growing they require a larger portion of bone- and tissue-forming material than at a later period, I think the medical and engineering professions will agree with me when I state that the processes involved in the preparation of bread from grain should be such as to leave in the resulting "loaf" those elements which entitle it to its ancient name, "the staff of life," and that the changes in the chemical composition of bread which are likely to follow an extended use of improved mill machinery ("high grinding") are well worthy the attention of medical men.

The system of high grinding has been in use to a considerable extent in Hungary for some years; but the absence of bran in the Austrian and Hungarian white bread is made up for by the large consumption of rye bread, which is eaten by all classes, and is not confined in its use to the poor, as many people erroneously imagine.

The following tables show very clearly how large a proportion of valuable bone-forming material is lost by complete separation of the bran, even under the old system of milling; whilst by the Hungarian system the bran is squeezed between the rollers and parts with all the adherent flour; the

bran remains entire, none is ground into small particles, consequently none remains with the flour after dressing; and chemical analysis of flour so produced would be almost entirely free from salts, and contains less nitrogenous substance than the samples given in the tables.

Composition of Flour and Bran, from Peligot and Bibra, 1860. (The figures are the means of 14 analyses.)*

	Parts in 100.	
	Flour.	Bran.
Water	14.0	10.3
Fatty matters	1.2	2.82
Nitrogenous substances } Insoluble in water	12.8	10.84
Nitrogenous substances } Soluble in water		
Non-nitrogenous soluble } substances	7.2	5.8
Starch		
Cellulose†	1.7	43.46
Salts (Phosphates &c.)	1.6	2.52
	100	100

* Parkes' Hygiene, 5th edit., p. 222.
† The cellulose named above is that of the entire grain, cells and all (husk and interior). Potash, phosphoric acid, with magnesia, are the principal salts.

Dr. Parkes states, on page 223, that the nitrogenous matter in bran is sometimes as high as 15 per cent., with 3 per cent. of fat and 5.7 per cent. of salts.

I am, Sir, yours faithfully,
STEPHEN H. TERRY,
Local Government Board Offices, Associate Member Inst. C.E.
Whitehall.

"ARE HOSPITALS FOR THE POOR TO BECOME HOTELS?"

To the Editor of THE LANCET.

SIR,—Your correspondent, Dr. Potter, is right when he states that all the recipients of hospital charity are not necessitous poor. They are in many cases people well able to pay for the advice of the general practitioner, yet are of that mean and contemptible class who prey upon hospital charity for the purpose of saving their own money. This being so, is it right to supply the demands of these people, and give them for a modified fee what they are able to pay the ordinary fees for? I maintain that it is not. Moreover, I fail to see how a man, if he pays perhaps one-fortieth part of the fee for the advice which he receives, "can look the whole world in the face" and say "he owes not any man." Dr. Potter evidently thinks there is a multitude of cases which require more than ordinary skill, but does it always follow that because a man is attached to the honorary staff of a hospital that he is possessed of this skill? I venture to say that such is not invariably the case; but, anyhow, a large percentage of cases treated at hospitals are not beyond the range of the skill of the general practitioner; and it would be difficult to imagine that there is such a definite limit to the pecuniary resources of people able to pay ordinary fees, as to render them unable to pay perhaps once in a lifetime two or three guineas for a consultation with some eminent man; and I know men of very great ability whose fees do not exceed this. It is now a difficult matter to discriminate between the really necessitous poor and those who are not, by reason of their means, proper recipients of hospital charity. But to institute a system of modified payment would be to introduce another difficulty—viz., to decide whether those seeking advice and treatment for the modified fee should not be paying higher fees; and there is no doubt that some people in comfortable circumstances would, by persuading themselves that they were paying for what they got, take advantage of the scheme, and there

would thus be two abuses instead of one. To create such a system is to sanction the demands of an unworthy class, to introduce an element of opposition to the general practitioner, and thus lower his already insufficient fees, and to require of the honorary staff of hospitals to give more time and labour than they already so generously give.

I am, Sir, yours faithfully,
CHARLES POPE, L.R.C.S., &c.
South Shields, May 30th, 1882.

PRISON MANAGEMENT.

To the Editor of THE LANCET.

SIR,—Referring to your leading article in THE LANCET of May 20th on the above subject, the question does not appear to me to lie so much in the Prison Act itself as in the constitution of the commission appointed by the Home Secretary to carry out the working of it. In this Commission all branches—military, naval, and civil—are represented, but the scientific specialist is not represented.

The system of dietary, upon which you lay so much stress, is a difficult problem, and I feel certain was most carefully and scientifically fixed by able men. It stands to reason that for the protection of society and the welfare of the State lawbreakers must be punished, and the punishment for short sentences must be such as to act as a deterrent on liberation. The country will not tolerate corporal punishment unless in extreme cases, so that the Commissioners can only punish offenders by means of their stomachs in combination with labour and cell discipline; this organ requires delicate manipulation, and the dietary system must be beautifully adjusted to punish the prisoner with hunger, and yet stop short of injuring his health. Hence dietetics and physiology are prominently set forth in prison management. Sir R. A. Cross did not, when organising the administrative staff, foresee the prominent part medicine would play in prison management, and the heavy responsibility year by year accumulating upon surgeons of prisons, else surely he would have placed a medical expert on the Commission who by his status and special knowledge would have aided in solving the many physiological problems involved in prison management. The general administration of local prisons is well looked after by a chairman of known administrative ability and three commissioners sitting at the Home Office, by six inspectors who visit monthly every prison in England, by governors to each prison, and by monthly visits from visiting justices; but for medical administration, carrying with it dietary, hygiene, classing for labour, punishments, release of prisoners on medical grounds, lunacy in prisons, treatment of sick, and the general health of the criminal population, one medical inspector is judged sufficient to supervise seventy-seven prisons, including convict prisons.

It is for you, Sir, as representing the medical profession, to bring this subject to the notice of Government and the public through the pages of THE LANCET, so that they may recognise that the medical department is the most important factor in prison administration, and should be represented not by an inspector, but by a Medical Commissioner, and with a proper inspectorial staff, and I feel sure that the scandals so common and so prominently brought forward would soon disappear, and that the Prison Act will yet commend itself as a wise and statesmanlike measure.

I remain, Sir, your obedient servant,
M.D.
May 22nd, 1882.

"MEDICAL ADVERTISING IN THE LAY PRESS."

To the Editor of THE LANCET.

SIR,—I would draw attention to the fact that in the advertisement of The Times of the 11th May, to which you referred in an article last week, the Transactions of the Pathological Society of London are announced. I would ask, how can individuals be blamed when one of the leading medical societies keeps them in countenance? In this case there is not the excuse many authors can make, that the copyright being disposed of they are at the discretion of the publisher with regard to advertising how and where he likes, the Transactions being the property of the Society, and sold only for its benefit.—I am, Sir, yours truly,

June 5th, 1882. X. Y. Z.