resulted from these principal epidemic diseases, against 75
and 87 in the two preceding weeks. These 116 deaths were
approximately equal to an annual rate of 4.8 per 1000, which was 2.7 below
the mean rate from the same diseases for the twenty-eight
weeks, for which the rate had been 4.6. The deaths attributed to diarrhoeal
diseases, which had been 13 and 32 in the two previous
weeks, further rose to 57 last week, and were above the
number returned in the corresponding week of last year;
they included 5 in Glasgow, 7 in Edinburgh, and 5 in Paisley.
The rate of mortality from diarrhoea in the Scotch towns last week was, however, very considerably
below that recorded in the large English towns. The 26
fatal cases of whooping-cough in the Scotch towns showed
an increase of 3 upon the number in the previous week,
and included 13 in Glasgow, 5 in Edinburgh, and 3 in
Dundee. Ten of the 11 deaths from "fever," and 6 of the 7
from scarlet fever, were recorded in Glasgow, the mortality from "fever" in this city showing a marked increase com-
pared with the returns for recent weeks. The 11 deaths
depicted to diphtheria in the eight towns showed an Increase
upon recent weekly numbers, and included 4 in Glasgow,
3 in Edinburgh, and 2 in Dundee. The 4 fatal cases of
measles, of which 2 occurred in Glasgow and 2 in Dundee,
showed, however, a further decline from the numbers in
recent weeks. The deaths referred to acute diseases of the
respiratory organs in the eight towns, which had been 83
and 54 in the two previous weeks, were 66 last week,
and within the number returned in the corresponding
week of last year. The causes of 59, or more than 19 per
cent. of the deaths in the eight Scotch towns last week
were not certified.

HEALTH OF DUBLIN.
The rate of mortality in Dublin, which had been
approximately equal to 21.0 and 22.3 per 1000 in the two preceding
weeks, was 21.9 in the week ending the 19th inst. During
the three weeks, the rate averaged 21.7 per 1000, the rate during the same
period being equal to 23.2 in London and only 17.4 in Edinburgh. The 147 deaths in Dublin last week showed a
decline of 3 upon the number in the previous week,
but included 24 which were referred to the principal
epidemic diseases, against 18 and 13 in the two preceding
weeks; 7 resulted from "fever" (typhus, enteric, or simple),
6 from whooping-cough, 8 from diarrhoea, 5 from scarlet
fever, and not one either from small-pox, measles, or diph-
theria. These 24 deaths were equal to an annual rate of
3.9 per 1000, the rate from the same diseases being 9.9 in
London and 2.2 in Edinburgh. The deaths referred to "fever" in Dublin, which had been 2 and 5 in the two
previous weeks, further rose to 7 last week. The fatal cases of
scarlet fever and whooping-cough each also showed an
increase of 2 upon the respective numbers in the previous
week. The deaths attributed to diarrhoea, which had been
but 3 in the previous fortnight, rose to 6 last week. Only
1 inquest case and 2 deaths from violence were registered;
the 60 deaths referred to putrid insanity showed, how-
ever, an increase. The deaths of infants showed a decline
from the number in the previous week, while those of elderly
persons remained stationary. The causes of 14, or nearly
10 per cent., of the deaths registered during the week were
not certified.

Correspondence.
"Andi alteram partem."

CHOLERA.
To the Editor of The Lancet.
Sir,—In sending you the brief extracts from my official
reports on the Cholera Epidemic of 1833, and which were
published in The Lancet of July 5th, I purposely re-
frained from comment, with the belief that any remarks in
explanation were unnecessary. From what has appeared,
however, I am not sure that this is the case. From a perusal
of the reports of the Surgeon General of the United States,
and that the scarlet fever and diarrhoea are not only none other than the choleræ basilli of Koch, the discovery
of which is all but universally attributed to that distinguished
observer.

In The Lancet of July 12th, under the heading "Dr.
Tommasi-Crudeli on Cholera," the following statement
occurs:—"Dr. Filippo Pacini of Florence, who died just a year ago (see The Lancet, July 21st, 1883), in 1804 was
the first to recognise the cause of cholera in a microscopic
organism which Dr. Tommasi-Crudeli in 1882 classified
under the name "vibriones," &c." Whether I or Pacini was the first to observe the basilli in question I have at present no means of determining. I would
remark, however, that while I recognised the importance of
this discovery I did not go the length of describing it as the
cause of cholera.

But my object in addressing this communication to you is not merely to bring forward my own claims in the matter,
among other the germ which I have lately proposed to
be called Vibrio cholerae. In this connexion I must point
out that the discovery of the bacillus has given a fresh impulse to the chief objects of the rational treatment of this disease. As I
pointed out in the quotations from my report, the bacilli
were found in all the secretions of the small intestines; that
they did not multiply less than 10,000 times during the
intervals between attacks, and that they are alkaline; that, in fact, the intestines
all the conditions exist which are highly favourable, or rather,
and these other allied species of bacillæ. One of these conditions is the presence of nitrogenous matter,
and another the alkalinity of the liquid. I had elsewhere
previously shown that while many fungi will not grow in alkaline fluids, bacilli, formerly known in most cases as vibriones,
will not grow in decidedly alkaline fluids.

In these facts it seems to me that we are furnished with rational principles of treatment. One of these is to lessen,
and if possible to abolish, the alkalinity of the -water,
thus keeping bacilli in check. The other is that if the intestines
are kept free from their putrefactive changes. For these purposes a
rigidly acid treatment should be carried out. The patient
should drink water which has been boiled and strongly acidu-
lized with sulphuric acid, as well as all other alkali fluids, bacilli, formerly known in most cases as vibriones,
and perhaps better still with thymol, since it is a nerve stimulant, and not a depressant like carbolic acid. The acid and the disinfectant
might be in part given by the rectum. The secretions of the
alimentary canal being rendered acid, there would, I antici-
pate, be little to apprehend from the cholera bacillus; its
growth would be greatly hindered, if not stopped, and with this arre-t of its development the poison would cease to be
generated with the formation of which it is credited.

I see by your report from Paris that the treatment of cholera at Toulon consists mainly of the hypodermic injec-
tions of ether in the stage of prostration, of atropine to
relieve cramps and spasm, and the inhalation of oxygen for
threatened coma. This treatment deals simply with certain
prominent symptoms, and is merely palliative. Surely
the time has now arrived for the formulation of some sound plan or system of treatment, not directed against isolated sym-
ptoms, but mainly against the cause of the disease, the state of the alimentary secretions and the presence of the cholera bacillus.

I remain, Sir, your obedient servant,
ARTHUR HILL HASSALL, M.D. Lond.
San Remo, July 16th, 1884.

To the Editor of The Lancet.
Sir,—Allow me to controvert the idea that fresh fruit is
injurious at this season, or has any but the most indirect
relation to the prevalence of diarrhoea.
A hot summer mostly gives us good and cheap fruit. The
severity of our summer diarrhoea is in proportion to the heat
of the season, but is those who seldom or never eat fruit
who die from diarrhoea. For every twelve deaths from this
cause ten are of infants under two years of age. It is a
remnant of the crudest hygiene to prohibit fruit at all in hot
seasons and climates. It is a still worse error to make excep-
tion to the character of the soil on which fruit is grown.
List week I stated in your columns that crystals of oxalate
of lime would not pass from vegetable food into the body;
and if so, how can the vibriones and other bacillæ find
their way into the alimentary tract of the infant, or out of
the alimentary canal of the adult? No fruit is toxic, I think, not better the hypothesis of M. Bert, who is generally above superstitions influences,
least support to this theory, but Professor Nothnagel and
Dr. Hoffmann of Vienna are said, in a Times telegram of July 21st, to declare that vegetables grown on an unwholesome soil are perfectly wholesome. This is not the usual, but the present time, entirely unsupported by any facts made known or ever submitted to scientific criticism. Are we again to return to the old views of the connexion between diarrhoea and the properties of cholera? The common sense is up to the present; high-growing drupe in, rising, attract baecell to enter the roots of the tree and ascend its branches? If so, let us also be careful of this year's vintage from the south of France, and, indeed, of all that part of the quality, leave its enjoyment to those who a few years hence will not fear lest a cholera bacillus should have entered the grape. The only caution needed for fruit, as for other ingesta, in choleric times, is to avoid excess, and to see that all is sound, clean, and fresh. —I am, Sir, yours truly.

WILLIAM SQUIRE, M.D., F.R.C.P.
Orchard-street, Portman-square, W., July 32nd, 1884.

To the Editor of THE LANCET.

SIR,—At this time, when our sanitary authorities will naturally wish to avail themselves of the experience of recent outbreaks of cholera, I take the liberty to call attention to the excellent volume devoted to the epidemic of 1873 in the United States of America, and issued from the Government Printing-office, Washington, in 1875. The full title-page of the book is as follows:

"War Department, Surgeon-General's Office.

"Cholera Epidemic of 1873 in the United States.

"Reports prepared under the direction of the Surgeon-General of the Army:—(a) History of the Cholera Epidemic of 1873 in the United States, by Ely McClellan, M.D.; Assistant-Surgeon, U.S.A.; (b) History of the Travels of Asiatic Cholera, by John W. Peters, M.D., of New York City, and Ely McClellan, M.D., Assistant-Surgeon, U.S.A.; (c) Bibliography of Cholera, by John S. Billings, M.D., Assistant Surgeon, U.S.A.

This book, I understand, was generously distributed to sanitary authorities in this country, and even to individuals on special application. It is rich in facts, warnings, and lessons, which cannot fail to be appreciated in the present position of affairs. In any case, that, among many things which excellently work on cholera, the valuable gift of our American brethren should not be overlooked.

I remain, Sir, your obedient servant,

JAMES W. ALLAN.

City of Glasgow Fever Hospital, Balriders, July, 1884.

"THE PHYSIOLOGY OF THE FEET."

To the Editor of THE LANCET.

SIR,—Mr. Allen's letter in THE LANCET of July 5th, which I am sorry not to have seen in time for a reply in my next issue, refers to a point in my paper already brought forcibly to my notice. To my opinion I adhere. Mr. Allen says that "when the foot is put forward the heel is the part nearest the ground." If the foot in swinging forwards attain fully, as I think it should do, that which I have called "the position of rest," and defined as that of least tension and least pressure, least tension of the ligaments on the bones forming the joints, and least pressure on the bones on each other, or the mean between the extremes of motion, then, to attain this, the foot falls into an extended position with regard to the leg, thus bringing the toes nearest to the ground and ready to feel it. This position, too, allows of the widest range of lateral movement, useful at times, selecting the exact spot to be trodden on. The toes are kept free of the surface by bending the knee, in effect also resting that joint, previously strained by straightening.

On these grounds, as well as the avoidance of concussion, friction, or slipping, I have no doubt that, in walking, the toes should first touch the ground.

I am, Sir, yours faithfully,

GLoucester, July 14th, 1884.

T. S. ELLIS.

MANCHESTER.

(From our own Correspondent.)

THE RECENT RAILWAY ACCIDENT.

The public journals will have informed your readers of the terrible railway accident which occurred on the Manchester, Sheffield, and Lincolnshire Railway last week near Pessyone. On receipt of information of the catastrophe at London-road Station surgical assistance was sought at the Royal Infirmary, and some of the resident staff were despatched by train to the scene of the accident. More than twenty were killed on the spot, whilst twenty-three of the more seriously injured were brought on to the Manchester Infirmary, and for a short time the resources of the hospital were taxed in providing immediate assistance and attention to the sufferers. Two died a few hours after admission; one, a young lady, had amputation of the thigh performed, but succumbed shortly after the operation. Three of the cases still remained in a critical condition, two of them being cerebral injuries; the patients, one a man, the other a woman, remained unconscious until Monday last. They are now slowly regaining consciousness. The third is a fracture of the leg with dislocation of the ankle, and will require amputation as soon as the condition of the patient will permit. Amongst the injured lying at the Infirmary is a man of some local celebrity named Rawlings, known as the "Reddish Doctor," and famed as a curer of cancers.

It must then, I think, be conceded that, under the conditions given, it is desirable that the part of the foot which touches the ground should be the part best calculated to estimate the character of the surface to be trodden on; and, further, that the part which last reaches it, as the weight of the body falls fully on the single foot, should be the part least liable to sustain injury, and most easily and painlessly drawn from the ground if it meet, at that point, with any projection of an injurious character.

Now, if the toes, spoken of in the paper as the organs of feeling, and the anterior part of the foot, more sensitive than the heel, first touch the ground, the character of the surface is better estimated, and if the heel as it falls does happen to come on a sharp point, it is easily and momentarily raised, and, the tip toe position being attained, injury to the heel is avoided. On the other hand, if the foot first touch the ground, not only does the want of sensibility prevent so accurate an estimate of the character of the surface, but worst of all, if, as the body falls forward to be borne on the single foot, the more sensitive part in front should happen to come on a sharp point, there is no recovery. To spring back into a position resting on one heel only is well-nigh impossible. As I have already illustrated my meaning. Let anyone try to walk with closed eyes and bare feet across a room where thin tacks have been purposely strewn. I can do it easily walking in the former manner, and bring the heel to the floor in each step. I would rather not try in the latter manner. Of course the movements extremely marked in this experiment would be scarcely perceptible under ordinary conditions. I suggest, however, that in principle they should be identical.

Mr. Allen says that "when the foot is put forward the part nearest the ground is the part nearest the ground." If the foot in swinging forwards attain fully, as I think it should do, that which I have called "the position of rest," and defined as that of least tension and least pressure, least tension of the ligaments on the bones forming the joints, and least pressure on the bones on each other, or the mean between the extremes of motion, then, to attain this, the foot falls into an extended position with regard to the leg, thus bringing the toes nearest to the ground and ready to feel it. This position, too, allows of the widest range of lateral movement, useful at times, selecting the exact spot to be trodden on. The toes are kept free of the surface by bending the knee, in effect also resting that joint, previously strained by straightening.

On these grounds, as well as the avoidance of concussion, friction, or slipping, I have no doubt that, in walking, the toes should first touch the ground.

I am, Sir, yours faithfully.

GLoucester, July 14th, 1884.

T. S. ELLIS.

MANCHESTER.