

## Correspondence.

## YELLOW FEVER AND ITS CAUSES.

To the Editor of the CANADA LANCET.

SIR.—The following letter appeared in the *Halifax Chronicle*, August 9th.

"The miserable defect of any clear and consistent view of the causes of this disease induces me to publish an idea formed from an early acquaintance with some of its features in Antigua, in the West Indies. There, certainly, it has arisen as an epidemic among the British troops, at irregular intervals without being imported. To ignore this certainty is to be ignorant of everything most signal in relation to the disease. But the obscurity which still involves its causes arises, I think, from one prevailing error which always clouds the subject.

Everybody knows that it is a disease of hot climates, and that a certain degree of cold checks the prevalence of the disease. But of the two other atmospherical conditions which conduce to generate the disease, one has not been sufficiently appreciated, and the other has been entirely mistaken.

Climatic conditions everywhere are always three, at least.

1. The condition of heat or cold is indicated by the thermometer.

2. The condition of density or rarity (weight or lightness) is indicated by the barometer.

3. The condition of humidity is measured by the hygrometer. (The opposite poles of this third axis are dryness and moisture.)

Now, with regard to the second condition—viz: the density or rarity of air—it is known in Jamaica that the density of hot air aggravates the danger of yellow fever. A certain elevation—about three thousand feet—is said to be "above the fever level."

But as to the third point—of humidity—I write to declare that a constant error has precluded a right view of the concurrent causes which produce the disease. Instead of humidity being a cause of yellow fever, it is the absence of aqueous vapor that causes it. Hot air, dry and condensed, inhaled for any protracted period, is the predisposing cause of this disease, and therefore an atmosphere of cold aqueous vapor is the remedial condition indicated.

This atmosphere must be produced artificially in hot climates, as the chief essential to the recovery of yellow fever patients. A yellow fever climate is exactly opposite to that cold, aqueous, mountain vapor of the Highlands of Scotland, which is so conducive to health and to a blooming complexion.

In connection with a changed atmosphere to act on the patient through the lungs, baths instant upon attack, and frequent afterwards, will be obviously beneficial as operating through the skin on the depraved functions, and tending directly and indirectly by the aqueous vapor rising from them, to correct the vitiated blood. The fact mentioned by Dr. Read, of the immunity from yellow fever of one hundred and fifty boys who bathed regularly once or twice a day, at Mr. Hammersley's floating bath, strongly supports my view. Frequent bathing would on my theory be prophylactic, as well as remedial during the prevalence of an atmospherical epidemic. The one thing needful for escape from the disease would be an abundance of cool aqueous vapour. Heavy rains in the West Indies sweep away an epidemic which has lasted through dry brilliant weather. This fact noticed by my father, Dr. Musgrave, of Antigua, who wrote on the disease after experience of several epidemics, points to the same conclusion. I venture to urge the use of blocks of ice in the sick rooms to give off cold vapour, in order to cool, to rarefy, and to make humid the air inhaled, and I beg you by inserting this letter in your journal to give publicity to this suggestion.

I am, Sir, yours etc.,

BURNTHORN MUSGRAVE.

Salisbury, N.S.

To the Editor of the CANADA LANCET.

SIR,—I am very much pleased to observe the discussion in reference to the Treasurership of the Medical Council. This is one of those questions that requires to be ventilated in the columns of the LANCET, and you deserve the thanks of the profession for giving it the publicity it merits. However agreeable it may be to the present occupant, and advantageous to the medical school of which he is the president, I can assure you his action is not endorsed by the profession generally in this part of the country. Several medical men who are firm friends of Dr. Aikins, have expressed their surprise that he should hold on to the office, while