

It has been far more difficult to determine how many of our cases have resulted indirectly from the use of intoxicating liquor. I took three separate months at random from our records, and made them the basis of my estimate. The aggregate of cases for the three months was 333. The number of cases indirectly due to the use of liquors during the same three months was thirty-four. This gives about 10 per cent.; but, in my opinion, accurate records for the whole time of my stay in Rarotonga will give as between 10 and 12 per cent. My reason for thinking the above estimate too small is that after the estimate a further study of the lists disclosed names that were omitted in that estimate.

I have, &c.,

J. E. CALDWELL, Ph.D., M.D.

Frederick J. Moss, Esq., British Resident, Rarotonga.

Enclosure No. 6.

Further Letter from Dr. CALDWELL to the BRITISH RESIDENT.

SIR,—

21st July, 1897.

I have received your letter of the 16th July, requesting a list of the diseases among the natives of these islands resulting from the use of alcoholic liquor, also inquiring if I have any objection to the publication of my previous letter. I cheerfully furnish a list of diseases, but beg to repeat that this report, like the last, is partly from memory. I know of no objection to the publication of any of my letters of which you think the publication may be useful.

List of diseases resulting from intoxicants as seen among natives of the Cook Islands: Dyspepsia; enlargement of the liver; gastritis; Bright's disease; gastric ulcers; ulcers; eczema; jaundice; fatty degeneration of the heart; anasarea; carbuncles; ascites; boils; mania; phlegmon; general debility, inviting disease of every nature.

Phlegmon of a metastatic tendency, resulting often in abscess, is very common. Perhaps this is the only feature in the cases that have come under my observation which is peculiar. I have found them particularly interesting, because good authorities in European countries have expressed a doubt if metastasis of abscess ever occurs. In one case a "bush-beer" drinker went to bed on account of phlegmon of the calf of his leg. Three months later he walked again, having had seventeen abscesses opened by the knife. These occurred in various parts of the body, in crops of three or four at a time, and that in spite of the most perfect drainage that could be secured.

It has occurred to me that perhaps the extreme depravity of the blood resulting from rotting fruit consumed with the "bush beer" may be the direct cause of this peculiarity.

Earnestly hoping that your efforts to limit or abolish the use of liquor among the Maoris of our islands may be successful,

I have, &c.,

J. E. CALDWELL, Ph.D., M.D.

Enclosure No. 7.

Further Letter from Dr. CALDWELL to the BRITISH RESIDENT.

SIR,—

Rarotonga, 22nd July, 1897.

In replying to your last letter, in which you desire an explanation of my use of the term "rotting fruit consumed with the 'bush beer,'" I did not mean to be understood as saying that the fruit is rotten before being put in the barrel. As we all know, alcohol is a product of fermentation, and fermentation is only another name for decay. The fruit always stands one or two days in the barrel before the beer is drunk. The odour when being drunk shows it to be exceedingly sour.

Recent experiments testing the effects of acid upon stomach digestion show that the stomach is almost entirely inert when the food is mixed with strong acids, even acid fruit-juice, and more so with acid of fermentation.

The large quantity of this fermentary mass drank from the barrel makes it impossible for digestion to proceed unhindered. Hence the process of fermentation must go right on in the stomachs of the drinkers, literally converting them into swill-buckets. This might explain why good food eaten before the beer is drunk is sometimes vomited a day or two later not yet digested.

I have, &c.,

J. E. CALDWELL, Ph.D., M.D.

No. 3.

Mr. F. J. Moss to His Excellency the GOVERNOR.

SIR,—

Cook Islands, British Residency, Rarotonga, 9th August, 1897.

I have the honour, at the request of Drs. George and W. Craig, of Rarotonga, to lay before you their protest against my forwarding as official documents to your Excellency a certain paper signed by Dr. Caldwell as a qualified medical practitioner. The protest and the papers connected with it are as follows:—