

"in the use of all remedies, and particularly of opium and wine, the strictest attention was paid to the heat of the patient, without which he who undertakes the treatment of fevers seems to me to walk in darkness." His views on febrile heat were combated at the time by Dr. Erasmus Darwin, and a correspondence ensued between them on the subject. Currie appears to have overcome Darwin's objections, and described how he had found the heat of the body to subside as sweating set in, "a fact ascertained by the thermometer." "Is it possible," he asked, "to restore the actions to a state of health with the heat at a hundred and four?" He recorded temperatures up to 112° F., the highest he had ever met with in cases of scarlet fever. Currie was one of the most learned and sagacious physicians of his day, and was a great clinical observer with large opportunities at the time when the town of Liverpool was a hotbed of zymotic fevers of the worst type.

I was under the impression that the renewed use of the clinical thermometer in Britain was largely due to the observation of Professor Gamgee of the Veterinary College, in Edinburgh upon rectal temperatures in animals about 1860, and I remember that these were at first somewhat contemptuously regarded. Wunderlich's monograph on the subject, published a few years later, placed our modern knowledge on a sound and recognized basis.—I am, etc.,

Grafton Street, Piccadilly, May 23rd.

DYCE DUCKWORTH.

SIR,—In connexion with the question as to when the thermometer was first used clinically, it is interesting to note that in the year 1800 its use had been recognized, although apparently not frequently employed. I have in my possession a copy of the *Medical and Physical Journal* published in 1800; in its pages I note two allusions to the clinical use of the thermometer.

In the first, dated September 9th, 1799, Dr. Blane communicates "an account of a man who lives upon large quantities of raw flesh." Whilst investigating the general condition of this case, Dr. Blane inquires, "What is his heat by the thermometer? I have often tried it, and found it to be the standard temperature of the body. His pulse is now 84, full and regular." The second allusion to the clinical thermometer is made by a certain Dr. Geo. Mosman, in the course of some "observations on the benefit derived from the application of cold water in cases of scarlatina cynanchica." In an account of one of his cases, apparently occurring in July, 1799, he remarks, "I had not an opportunity of applying to him the thermometer, but his skin felt intensely hot."—I am, etc.,

Walbrook, E.C., May 15th.

ARTHUR R. RENDLE, M.R.C.S.

SIR,—I have in my possession a case containing a glass urine measure with a urinometer and a clinical thermometer of similar make to that described by Dr. Henry Willson. It was made by Millikin, of the Strand, and was used by my uncle, Peter Brendon, F.R.C.S., in the Thirties and Forties of last century. I think the use of the thermometer was more general at the beginning of last century than is supposed.—I am, etc.,

Hildenborough, Kent, May 18th.

J. B. CURGENVEN.

#### SCHOOL HYGIENE.

SIR,—Your paragraph dealing with the report of the Royal Commission on Physical Education in Scotland prompts me to draw attention to the fact—which will strike any one acquainted with the elements of school hygiene—that there is in the report no condemnation of the obsolete school furniture in use in nearly all the schools, training colleges, and university buildings. I question whether there is a single educational building in Scotland which is provided with proper adjustable desks and seats for scholars and students. The desks and seats now in use in most of the Board schools are of a design which was long ago condemned as being one of the primary factors in causing physical deformity in young children. At present children of all statures are seated at desks and on seats of uniform size. Some schools try to meet the requirements by providing desks and seats in three sizes for different "standards." But stature and intellect do not invariably correspond, so the result is equally bad! There are other matters, such as the incorrect lighting of school-rooms, the use of improper blackboards, slates, etc., to which no reference is made.

The report, while lamenting the waste of money in lime and stone to the neglect of proper provision for physical exercise, does not sufficiently deprecate the continued erection of these large palatial school-buildings—"educational manufactories"—in which over a thousand children congregate and where the individual scholar can get scant pedagogic attention. Was there no one to remind the Commission of the many and varied advantages of smaller school-buildings?

It is to be hoped that with the appointment of a qualified medical officer to the permanent staff of the School Boards, these elementary requirements of school hygiene will receive speedy attention.—I am, etc.,

Aberdeen, May 12th.

GEORGE FERDINANDS.

#### CANCER MORTALITY.

SIR,—In the number of the *BRITISH MEDICAL JOURNAL* published on May 16th, is the last of the series of interesting articles upon cancer mortality by Dr. Alfred Wolff, of London. The following sentence occurs: "Braithwaite's suggestion that salt influences the production of cancer seems to be founded on a fallacy as he supposes that cancer does not occur among Jews which is certainly not correct." As this is very unfair to me perhaps you will kindly allow me to reply. The sentence involves two mistakes. The first is that I suppose cancer does not occur amongst Jews. In my pamphlet published by Messrs. Churchill, and in the abstract of the pamphlet published in the *Lancet* on December 7th, 1901, I distinctly said it is cancer of the uterus from which Jews, or rather Jewesses, are practically free. This is substantially true. I have had 28 years of out-patient and in-patient practice at the Hospital for Women and Children and the General Infirmary at Leeds, at both of which institutions large numbers of Jewesses attend, and I have not met with a single case of cancer of the uterus amongst them. I have only in my life seen one case and that was a private one from Bradford. The experience at the London Hospital is the same, for I obtained their statistics through the kindness of Dr. Herman and of the Obstetric Registrar of that hospital. The Jews as a whole are subject to cancer, but probably owing to their comparative poverty and not owing, as I originally supposed, to their taking less salt than we do, they are less subject to it than the general population of the country.

The second error or mistake contained in Dr. Wolff's reference to my theory is that I founded it upon this fact about the Jews. At page 6 I expressly say that my theory is not so founded, and that the exemption of Jewesses from cancer of the uterus was "not advanced as any scientific proof." My impression is that the immunity of Jewesses from cancer of the uterus is owing to circumcision, and that the local irritant is the smegma bacillus.

I think that my theory as to the causation of cancer by the habitual use of an undue amount of salt in the diet, added to three other factors, of which one is local irritation, in some cases by bacilli or bacteria, of which none are specific, embraces all the facts connected with the disease. If any one will carefully read my paper and then go over in his mind the various apparent causes of cancer with which he is familiar, I think he will see how every fact falls into its place and becomes explainable. A few of these facts are the following: The connexion of the disease with geological formation as shown by Haviland in his cancer map of England and Wales; cancer houses; the high mortality of sailors, fishermen, and rich men of no occupation; the low mortality of the poorer classes, even when they live in low waterlogged situations such as the Isle of Dogs in London; the fact that savages are exempt from cancer (Roger Williams), and also wild carnivora; the curious fact that Professor McFadyean, Principal of the Veterinary College, has never met with a case of cancer in a pig, whilst other domestic animals are not uncommonly subject to it. There is, so far as I know, no fact which is out of harmony with it. This theory may be called the "natural" one as it supposes the stimulus of diseased cell growth to be merely an excessive amount of the natural stimulus to healthy growth—namely, salt. Salt is the *sine qua non* without which no cell metabolism can take place. The theory, however, is too simple to be readily accepted by the profession, who want something more tangible and, if possible, visible. They are not content with an increase of the natural stimulus plus an over-nourished condition of cell, and some local irritation. This, however, I believe to be the true explanation.—I am, etc.,

Leeds, May 19th.

JAMES BRAITHWAITE.