

reputation of the author, to have made it possible for W. Howship Dickinson to have taken the above title as that for his Lumleian Lectures before the Royal College of Physicians. In his introduction he says: "I am about to examine the subject with a fresh appeal to nature, and, putting aside for the present an ancient faith and modern scepticism, shall be content simply to collect the evidence of the wards and the dead-house and let the tongue speak for itself. . . . I look at the tongue as a physician, not as a surgeon, and regard it as symptomatic of disease rather than as the seat of it."

After stating how he had arrived, through both clinical and microscopic methods at the basis for classification, he states that "the first stage is when the papillæ are separately capped with a minute white patch, which consists mainly of horny epithelium: this tongue I called *stippled* or *dotted*. As the covering increases the spots coalesce, cease to be discrete and become confluent, or at least appear so to the naked eye. To this degree the term *coated* is applied, as indicating continuity." The term *plastered* is applied to the highest development of the tongue coated, while *furred* is applied to that where, with much coating the papillæ are elongated from each other, at least, at their extremities. Descending from these stages of complete covering we have the cleaning of the tongue, either gradually or abruptly, leaving the several forms of the red, denuded and raw tongue.

The method adopted by Dr. Dickinson was to arrange the cases coming before him in hospitals, in tabular form, annexing at the same time other details, as (1) the disease and its duration; (2) the general state as to strength, prostration and consciousness; (3) the temperature of the body; (4) the arrangements as to food and drink; (5) observations relating to bowels and stomach, to the nervous system, to respiration with regard to mouth and nose; (6) the presence of morbid discharges by diarrhœa, diuresis or suppurative; (7) the amount of the saliva and the moisture or dryness of the mouth. The tables include 366 cases.

Under his first class of healthy tongue we meet the statement at the outset that there are congenital differences in the number and prominence of the papillæ, and further that no absolute standard of cleanness can be set down as a gauge

of perfect health, applicable to every person. What is normal in one may be abnormal in another. To know the condition of the deep tissues is, he says, necessary to have a true idea of what these coatings mean. The papillæ are projections of the corium, while upon the corium is the epidermis with its three layers (*a*) the deepest or rete malphigii; upon this a stratum composed of lozenge-shaped nucleated cells, which correspond with a difference to the corium of the skin; and upon this a horny formation which is special to the tongue and which forms the whole coat. These epithelial cells, from being polygonal in the malphigian layer, grow, as they grow old, the surface flattening and elongating, till, as the horny layer, they have lost their cellular form and are become fibrous. "It is this horny layer which essentially constitutes the coat or fur." . . . On the surface of the tongue attached chiefly to the prominences of the epidermis, is a varying amount of parasitic growth, chiefly in the shape of micrococcus. This presents itself chiefly in the shape of rounded accumulations upon the outstanding papillæ. The total bulk of the accumulations, however, whether parasitic or accidental, bears but a small proportion to the epithelial structure of which the coat or fur essentially consists. In health, this mucous membrane must, we say, have the surface described, exposed, not concealed by any coat or accumulation, however derived and it must be normally moist. "There are local and chronic diseases in abundance, in which the tongue is normal; few involving pyrexia or any general disturbance."

In the *stippled* tongue the first indication of disease the apparent epithelial overgrowth means rather the retention of what is old than the development of what is new, attributed perhaps to the absence of food, connected with loss of appetite, and perhaps in some measure to the stillness of the tongue which illness engenders.

In this condition were found many tongues in patients whose condition, while not abnormal, was often a first departure from general health as in chronic heart disease. This tongue does not belong to pyrexia and seldom "concurs with grave constitutional trouble of any kind." As a general rule, a larger degree of constitutional disturbance is apparent when the tongue is dry than when it is moist.