

hopeless as to demonstrate, by an analysis of the air, the existence and character of that epidemic influence by which small-pox, measles and scarlatina are so often produced.

To the scientific investigator of the causes and character of American diseases, the results of these facts must be of the greatest importance, every point of that immense continent teeming as it does with the general cause of a specific disease, which exhibits itself in many different aspects, to which a variety of names have been given, just as if the real cause of these would be thus accounted for, or our ignorance of the matter most effectually concealed. In Upper Canada, though the number of these varieties may be lessened, and their extent much curtailed by the exclusion of the southern and maritime states of the union, they are yet of sufficient importance to demand the utmost attention of any one who shall attempt to illustrate the diseases of its climate, and to bring their many and diversified symptoms under any of the genera and orders into which the systems of medical science has been divided. The topography of its localities may account for the frequency and severity of their malarious fevers, but gives us no clew to the varied character they assume, while in the present state of improvement and cultivation of the province, we have not a spot without the sources of local malaria, or in which the effects of it are not to be found in the personal appearance and diseases of its inhabitants.

This local character of disease is usually common to extensive districts, or peculiar tracts in the country, we yet very often find the diseases of a circumscribed locality exhibiting uniform and well marked differences, for which no cause can be discovered either in the habits or constitutions of the patients, or about the houses in which they may reside, so that we are forced to attribute them to some peculiarity in the general cause of the affection. In 1843, I met with a most decided illustration of this fact. About two thousand labourers, with their wives and families, were huddled on the Welland Canal, extending about one mile on nearly cleared ground, and along the margin of an extensive marsh. Scarcely an individual among them escaped an attack of fever; these attacks were usually severe, and among them every variety that the disease assumes in the neighborhood. The circumstances and habits of these people were very much alike, and scarcely any point of this encampment could be said to be more exposed to the influence of malaria than another, yet, at the time, I marked that three distinct varieties of fever were almost confined to the inhabitants of so many rows of shanties, and, though the persons of few of those people were known to me, yet I could often tell, from the very appearances of their countenances, even when they were able to walk about, the particular parts of the works on which they resided. I lately found a similar observation made in the fever hospital at Liverpool during the prevalence of the late epidemic there, and that the very appearance of the countenances of the Irish patients, as they lay in bed, was sufficient to distinguish those who had brought the disease from Ireland, from such as had caught it the city.

It is a well-ascertained fact that the character of these local fevers is not to be changed by removing the patients from the original source of the infection; sometimes, indeed, the attack will not manifest itself until a time after the exposure, and when the source of it has been left; at others, a patient suffering from severe fever is taken to a more healthy point,