

appertain to surgery. This practical knowledge of disease just described is obviously the bounden duty, and should be the great aim of every man who intends to enter the ranks of the profession of medicine with a view to the exercise of his knowledge in the prevention and cure of disease, and the alleviation "of all the ills to which flesh is heir." The arrest of public attention by the application of statistics to the death rate of different countries, the increasing intelligence of the public, the estimation in which medical science is held, the contributions to the welfare of mankind of that science in the past, and the philosophical spirit which pervades its ranks, have combined to press on the attention of the student of medicine in the present day, a duty which his predecessors, fifteen or twenty years ago, had almost ignored, viz., the prevention of disease. That large class of diseases, with perhaps a few exceptions, known as the zymotic, which comprises all ailments induced by the introduction into the body of a specific material or by defects in the quality or quantity of food, ought to be regarded by the physician and the public as *preventible* affections; and it is unquestionably both a reasonable, and a legitimate pursuit of the scientific physician to endeavour to discover means by which the occurrence of these maladies may be successfully opposed. To this class belong small pox, cholera, plague, remittent, typhus, typhoid, and yellow fever, hospital gangrene, erysipelas, pyemia, and many more diseases which frequently invade whole communities, and carry off hecatombs of victims, despite the well-employed resources of medical science. That *many*, probably *all* of these diseases, may be hereafter prevented, may be inferred from what has long since been done in the case of small pox, by vaccination, and of scurvy by lemon juice—and more recently from the disappearance of typhus fever, hospital erysipelas and gangrene, when opposed by a plentiful supply of pure fresh air and water; indeed the experience of the American and Italians, in the late campaigns, has proved that hospital gangrene may be altogether obviated by placing the wounded in well-ventilated tents. Already preventive medicine has in England "prolonged human life from five to fifty per cent, as compared with previous rates in the same districts." And, since 1840, it has reduced an annual mortality in English towns of 44 in 1000 to 27, and an annual mortality of thirty to twenty, and even as low as fifteen. Preventive medicine is based upon the general hygienic laws taught by physiology, and especially upon particular rules suggested by a knowledge of the causes of disease, so that in urging upon your consideration the claims of preventive medicine, I am at the same time commending to your study, physiology and etiology. I doubt not, from the attention the subject is now receiving from the ablest minds in the profession, that