

Malarious exhalations from undrained marshes give rise to ague and some allied forms of disease. The chief cause of phthisis is hereditary constitution, but it has been shown that it may be also developed in individuals who have no such taint, by living on poor food, in damp, low localities, and by overcrowding. On the other hand recent researches appear to show that persons living generously, in dry and elevated situations, are comparatively exempt from the disease.

Isolating patients labouring under contagious diseases has long been recognized as a means of preventing the propagation of such maladies. The late Sir James Simpson believed that by such means all contagious diseases may be utterly stamped out. Another world-renowned means of preventing and modifying disease is the grand discovery of *vaccination by Jenner*, and I believe that carbolic acid, as now employed in surgical practice by Mr. Lister, will, to a great extent, if not completely, prevent pyæmia in surgical cases. During my recent visit to Europe, I had the pleasure of accompanying that accomplished surgeon in his visit round his wards in the Glasgow Royal Infirmary. On asking whether he found pyæmic disease diminished since the introduction of his treatment by carbolic acid, he replied that he might say the disease was, in his wards, unknown.

Such, gentlemen, are a few examples, illustrating the present state of medicine as a preventive science. The field is far from being as yet completely explored; future researches, which I trust some of you may undertake, will, I am satisfied, be attended with additional success.

As regards the present condition of rational medicine as a *curative science and art*, I may state that some of its *branches* are considered to have all the certainty of sciences, and are hence termed scientific and collectively the science of medicine. The others are practical, and collectively are termed the art of medicine and surgery. The former class comprises botany, anatomy, chemistry and physiology; the latter all the other branches included in the curriculum of medical studies.

The scientific branches explain the gross and minute structural and chemical composition of the human body and the functions of its various organs in a state of health. Hence they constitute the basis on which all surgical procedure and pathological doctrines are founded. For example, the rules which guide the surgeon in all operations are based on human anatomy and physiology, and so is the knowledge required by the physician in exploring the various regions and organs. To comprehend the abnormalities of function and structure, which are the pathological causes of the various derangements and diseases, you must understand healthy structure and function. For instance, to enable you to say whether a