

other duties proper to your present age; and in your case those are clearly a close application to the topics appertaining to the medical curriculum. Whatever differences of opinion may exist about the value of thorough educational training, none can obtain as to the extreme importance of a good grounding in the fundamental branches of medical knowledge, anatomy, physiology, and pathology. It is scarcely necessary that I stop to discuss the value to a medical man of an intimate acquaintance with the several parts, bones, joints, muscles, vessels, nerves, and viscera that make up the human machine; as well might a man undertake to act as engineer, who was ignorant of the parts and principles of the steam engine, as for a man to attempt to perform the duties of a surgeon while ignorant of the anatomy of the human body. It is however a common feeling on the part of the student, and even of passed men, that much of the minute anatomy of the vessels and nerves taught in schools is unnecessary, and of no practical value to the practitioner. This appears to me to be a great mistake, and I am disposed to believe that very much remains to be made out of the minute anatomy of those wonderful organs—the brain and spinal cord, which, once ascertained, the student will be required to learn, and which will supply the explanations of many facts in physiology and pathology not now comprehended. In proof of the value of a thorough knowledge of the distribution of the nerves, two or three circumstances may be adduced. Without it, what correct idea could be formed of those actions of the economy depending upon what is called the reflex function of the spinal system of nerves—say of the acts of coughing, swallowing, vomiting, &c. Without it how trace the mechanism by which a man sneezes when light is thrown upon the drum of his ear, or the retina of his eye, or how indigestible food in the stomach causes closure of the glottis by spasm of its muscles? Physiology, too, the science of the functions, and of the circumstances determining the normal exercise of the functions of the several parts and organs of the body, demands your closest study. For if ignorant of the various circumstances which conditionate the normal exercise of the various functions of the body, how can we hope to determine the rules which shall preserve that body in a state of health, or restore it to health when diseased? I do not mean to say that a knowledge of the functions of an organ, or of the conditions under which it discharges those functions in health, will necessarily enable you to invent means by which it may, when diseased, be restored to health; but I affirm, that were the science of physiology at all perfect, it would enable us to enunciate principles which should, if followed up, very considerably lessen the amount of disease in the world, by preventing its occurrence,