

I have yet to mention one instrument which is extensively used of late years, and without which no medical man should attempt to practice his profession—I refer to the clinical thermometer. The use of this little instrument has been more instrumental than anything else in placing the treatment of fever on a sounder basis. Typhoid fever especially, it is impossible to treat rationally without the use of the thermometer. This I assert, not merely as my opinion but as the opinion of the highest authorities everywhere.

When I tell you that most of the facts I have now brought under your notice have been brought to light only within the last eight or ten years, some indeed later still, you may be able to form a fair idea of what you are to prepare for in order to be first class physicians. And yet these are but a very small proportion of new acquisitions to Physiology and Pathology, as well as of what previously appeared to be well established facts ruthlessly upset, and upset as I have just mentioned within the last eight or ten years. Indeed it is within the lifetime of some here present—not yet fifty years since Richard Bright recognized the relationship between kidney disease and some forms of dropsies. Then Laennec's application of the ear to discover the normal and abnormal action of the heart and lungs had not yet completely impressed medical practice.

What a chaotic state medicine must have been in previous to this period!

It is quite certain from the impulse which the last few years has given to the progress of medicine, that it will continue to advance quite as rapidly. Consequently your mind must be trained so as to be able to appreciate new facts which each successive year brings into notice. This can be done only by studying in a methodical manner, and with a scientific spirit. The physician is not now the great medicine man he used to be, whose skill was measured by the quantity of physic he could persuade his patients to swallow. At the present day too many I fear for the good of their patients go too far in the opposite direction, relying on "Nature," requiring much faith in the physician on the part of the patient. And yet what a power this faith in the physician is, and he who can command it may throw much of his physic to the dogs. Nevertheless, faith stops short of actual bodily derangement; it will not cut short a fever, nor set to rights the lung of a consumptive patient, nor give motion to the paralyzed arm. In such cases where destruction of the vital parts has ensued, the mere mockery and snare of the homœopathic treatment is at once

apparent. And here the specific value of certain drugs discovered during the last half century steps in to restore the balance to the orthodox practitioner. Among these may be found first and foremost cod liver oil that has stayed the hand of the destroyer in many a patient that would otherwise have succumbed to pulmonary disease. Iodine, gallic acid and hydrocyanic acid have proved of great value; electricity, a most potent agent in rousing the vital powers of the system. In cases where the heart's action has stopped, the constant current has once more set the machine of life going again. By hydrate of chloral, on the other hand, overaction of the nervous system is met and checked, and all the evils of opium—sickness, constipation and headache—are avoided.

As well as these actual additions to the agents by which the physician fights disease we have now a much more effective and scientific method of applying them. The modern discovery of the alkaloids or the active medicinal principles of our vegetable materia medica is very important. Instead of coarse bark, Science now presents us with the elegant quinine. Instead of the nauseating dose of jalap, an infinitesimal dose of jalapine is more effectual. And morphia with a drop seals up our senses when the larger dose of opium defeated its object by refusing to remain upon the stomach. Even the mode of administering this and many other powerful drugs is greatly improved by the subcutaneous injection.

A few words with respect to Hospital attendance. The Hospital is the practical laboratory of the Sciences of Medicine and Surgery. My personal advice to you in that matter is to begin it at once; you cannot commence too soon. Others, I know, will differ with me in that respect. I should advise each of you to attend longer than the statutory period of one year. Those of you whose home will be in the country may never be able to come again. The loss or neglect of it now you will never cease bitterly to lament: for really, it is the most important part of your medical training, and yet of no use without your teaching here.

It is in the ward of an hospital that you will see living examples of the various affections which are treated of within these walls. There you will learn the practical application of the principles of diagnosis. You will also be able to observe the manner in which disease or accident becomes amenable to treatment or baffles the skill of the physician or surgeon; and let me tell you that if you wish to become successful practitioners of medicine, you must begin early to observe the phenomena of