

ology and biology. These were that disease was the result of a change in the structure of material constituents of the body leading to abnormal action, the establishing of the cell doctrine, that each one of us is made up of millions of little living units, and the germ theory as to the causation of an important group of diseases. To the last we owed antiseptic surgery and the development of bacteriology. Nothing was really known about inflammation before the experimental researches of Lister, Virchow and Cohnheim, and all known about fever was built on researches of Claude Bernard. Ludwig had also remarked that a great proportion of the physiological work of Great Britain had been done by successful hospital physicians and surgeons. This proper sequence had been kept up in the person of Sir Victor Horsley, who gained well earned repute in physiology before he won his spurs as one of the leading surgeons of the day.

Professor Osler, to whom Ludwig addressed his remark, on the other hand, was an illustration of a physician of the highest order, who first made his mark as a physiologist.

Twenty years ago the cry was raised that there was too much science and not enough of professional training in the medical course. The speaker doubted if it were the sentiment of to-day, and expressed the opinion that the time spent by the student at science proved of lasting value, keeping him in touch with the scientific side of medicine and putting him on a higher plane through life.

Empiricism had its day and was not yet over, and no doubt the forefathers of the profession gave the race good service, and none was more ready to pay them tribute than he whose researches and experiments had given him the right to speak with authority. With the more exact knowledge of the causes and nature of disease had come more faith in the native powers of the human body, and was perhaps the reason why one who was the peer of any in the science of medicine had said that the advanced school valued a few well-tried medicines as highly as ever, and the modern treatment of disease relied largely on the old "natural" methods—diet and exercise, bathing and massage. It would seem that practical medicine, insofar as drugs were used, had not quite kept pace with the knowledge of the causes and processes of disease, but per contra, sera were drugs and the diphtheria antitoxin had wrought a magic not seen since the days of the great Healer Himself.

That pneumonia is always a septicæmia and its specific microbe always present in the blood gives the clue to its prevalence and high mortality—greater indeed than of yore, doubtless owing to the large and increasing percentage of dwellers in cities and towns. A protective and curative serum or "vaccine," as in the case of diphtheria or typhoid, is the