

subject as to make doubtful points at once comprehensible to the general observer, and added greatly to the means of saving life. Shortly afterwards Simpson, of Edinburgh, and Long, of the United States, introduced the principle of anesthesia, which accomplished much towards the relief of suffering humanity under severe operations. The three great advances in the medical profession during the fifty years were ; (1) the introduction of antitoxin for the cure of disease ; (2) the germ theory of disease as advanced by Pasteur and subsequently worked up by Lister, and (3) preventive medicine as largely brought about by the medical profession notwithstanding that it lessened their prospect of revenue.

Then we had the remarkable investigation, Laveran's plasmodium, from which the discovery was developed of mosquitoes impregnating individuals, and so disposing of the old idea that such fevers spread from marshes and decayed vegetable tissue. Then, again, tetanus, which was supposed to arise from a rusty nail, is now known to be due to the germs in the soil communicating themselves to the system through the wound made by the nail. Furthermore, we have the theory of blood globules as a means of diagnosis of typhoid fever. Sir William Jenner established an almost world-wide reputation by his investigations with reference to typhoid, supposing that fever sprang from ulceration in the bowels. But Prof. Osler, of Johns Hopkins University, and a Canadian, has thrown great light upon this whole subject, and his researches show that Jenner's idea is not tenable, and that typhoid fever, as regards its origin, rests on a much wider basis. A most important advance is that with regard to X-rays and its utilization, not only in the investigation and advance of surgical conditions and diseases of the system, but also its application in the treatment of cancer. These are a few of the points to which I shall merely now advert, and from such we can form an idea of the remarkable advance which has been made in medical and surgical science within the last half century.