

EDITORIAL.

SPINAL ANÆSTHESIA.

IT is now more than a quarter of a century since Dr. Leonard Corning published his paper on spinal anæsthesia by cocain, and he is rightly regarded as the pioneer in this procedure. Many experiments have been made since then, much has been written, new drugs, less toxic than cocain have been introduced, and, largely owing to the influence and practice of Tuffier in France, Bier in Germany, and Barker in England, the practice of spinal anæsthesia has been proved to have a definite value, and there is scarcely a hospital clinic of importance in which it has not been tried, or in which its value in certain conditions is not accepted. Some operators indeed, such as Barker, use this method very largely, and Wertheim, of Vienna, who has achieved such eminent success in hysterectomy for malignant disease, employs spinal anæsthesia in these cases. But most observers are agreed that there is a serious element of danger in this method, and so experienced an operator as Bier, one of its chief exponents, estimates the death rate under it as not less than one in four or five hundred, an opinion which goes far to dissuade most of us from its use. The advantages claimed for it are especially that it is safer than either chloroform or ether in cardiac and pulmonary complications. Also that consciousness is not abolished. For our own part we think there are very few operations in which it is any advantage to have the patient conscious of the operator's manipulations. The method generally employed is the introduction of the anæsthetic fluid into the subdural space of the spinal cord, at a point between the third and fourth lumbar

vertebræ. The needle is first introduced, and the presence of its tip in the subdural space is indicated by the escape of the cerebro-spinal fluid; the syringe containing the proper amount of substance used, whether cocaine, eucaïne, stovaine, or novococaine, is then attached, and the material injected. Barker, of University College Hospital, London, by ingeniously varying the specific gravity of the fluid, and by attention to the position of the patient, has attained excellent results.

Our purpose at present is to discuss the most recent development of this mode of anæsthesia, that introduced by Professor Thomas Jonnesco, of Bucharest, who has quite recently been giving demonstrations of his method in some of the leading hospitals in the United States and as is usual, affording material for nine days wonder and startling exhibitions of pseudo-scientific expositions in the lay press.

Professor Jonnesco has introduced two entirely new features. The first of these is the addition of a solution of strychnine to the stovaine, which is the anæsthesia he prefers. This combination of strychnine with cocaine was used by Leonard Corning in his experiments, but does not appear to have been employed by others. Dr. Jonnesco claims that the addition of strychnine causes the anæsthetic fluid to be more easily tolerated by the nervous centres.

But the most striking feature of Dr. Jonnesco's proceeding is his use of a high puncture. This, as is pointed out by the *New York Medical Journal*, was practised ten years ago, in injections having been made in the cervical region, but this was certainly