

author uses nitrous oxide and oxygen instead of the other anæsthetics, especially avoiding the use of ether.—*Interstate Medical Journal*.

ANALGESIA IN CHILDREN BY SPINAL INJECTION, WITH A REPORT OF A NEW METHOD OF STERILIZATION OF THE INJECTION FLUID.

W. S. BAINBRIDGE (*Med. Rec.*, Dec. 15, 1900) reports analgesia produced in seven children by spinal injection of cocaine or eucaïne. The cases ranged from two and one-half to eleven years in age. The youngest patient was injected on three occasions. The amount of cocaine used varied from min. vii to min. xv of a 1 per cent. solution of cocaine and from min. vii to min. xxx of a 1 per cent. solution of eucaïne. Some elevation of temperature, nausea, vomiting and some restlessness were the chief undesirable effects not produced.

These cases were specially selected. The preparation of each was the same as usual before a general anesthetic. The patient was placed in a sitting posture, well bent forward, and prevented from moving during the injection. After the skin over the site of puncture had been treated in the usual antiseptic way an ethylchloride spray was employed, rendering the introduction of the needle practically painless; no difficulty was experienced in introducing the needle. A point of $\frac{1}{2}$ inch to either side of the median line, and midway between the spinous processes was taken, and the needle pushed forward, inward and upward. Special effort was made to keep away from the central part of the spinal canal by a close relation of the needle-point to the dura. The instrument used was of the simplest kind. A small-sized steel aspirating-needle with a short-bevelled pointed end, having a well-fitted hypodermic barrel, answered every purpose. As nearly as possible the same amount of cerebro-spinal fluid was allowed to escape as of the injection medium, which was to be introduced. The injection was given slowly, usually taking one and one-half to two and one-half minutes. Often the first evidence that the cocaine was taking effect was some dilatation of the pupil or a slight nausea.

There have been many cases of failure reported which were attributed to the use of heat in the sterilization of the