

this: following the operation persistent nausea and vomiting for days, and sometimes even for weeks, with consequent general debility.

Such cases as these I have known to occur after comparatively slight operations, where one could not honestly attribute the condition to any after-effect of the operation.

I have learned, in such cases, the patient was either kept too profoundly under or else subjected to incomplete alternating with too profound anaesthesia, or, perhaps, too long a time being taken in the induction period.

The probable cause of this condition is too much of the drug, with a consequent result of some organic change in the heart muscle, liver or kidneys. Time will not permit me to go into the pathology of this condition, as it is a practical paper I want to give you on how to properly use the different drugs for producing anaesthesia.

If you will permit me, Mr. President, I will speak of the different drugs in common use, and how they should be administered.

We may take it as an axiom that all drugs used for producing surgical anaesthesia are poisons.

The least toxic of these I have found to be *nitrous oxide combined with oxygen*.

The administration of this anaesthetic in prolonged operations is difficult, as it requires a great deal of practice and skill to maintain smooth and satisfactory anaesthesia. This combination, so far, is not practicable except in institutions and large centres, as the apparatus is cumbersome, and the large supply of nitrous oxide and oxygen required is sometimes hard to get.

I have been using this combination more or less for the past three years, when it seemed that any other anaesthetic was out of the question, in such conditions as diabetes, marked kidney disease, very low percentage of haemoglobin, and marked anaemia of any kind, with very satisfactory results. Sometimes these administrations lasted for almost three hours in such operations as hysterectomies, appendectomies, mastoids, etc. The cost of the gases at present precludes the possibility of its taking the place of ether.

*Ethyl Chloride*.—I have been using this drug a great deal in short operations, such as opening abscesses, removal of adenoids and tonsils, setting fractures, reducing dislocations, etc., also as a preliminary to ether, when nitrous oxide is not convenient, and always preceding ether with children. It is a nice anaesthetic to use in your office.