

the same thing." In reply I may quote Mr. Clover, who, in a recent article in *Quain's Dictionary of Medicine*, states that bichloride of methylene is an unreliable compound of chloroform, because the ether in it being more volatile than the other ingredients may after a time escape and leave a more powerful substance than we suppose we are handling.

He also says that it is better to mix, in small quantities at a time, one part of alcohol, two of chloroform and three of ether, and to keep the bottle so well corked that the ether is not likely to evaporate and leave chloroform in excess.

If we add up the chemical formula of these respective quantities of these three drugs we get a result very nearly approaching the theoretical formula of bichloride of methylene.

Although it is not quite certain that they are identically the same, it matters very little, as the effects of the A. C. E. mixture, as I have found them, correspond exactly with those of bichloride of methylene, as reported in many thousands of cases. While the only disadvantage which Mr. Clover sees in the bichloride of methylene, can be completely obviated by preparing the mixture fresh every time we use it, according to the A. C. E. formula.

At a meeting of the Medical Society of London in April, 1868, Mr. Marshall read a paper on Bichloride of Methylene, for the production of general anæsthesia. He had constantly used the anæsthetic during the past six months, both in private and hospital practice and for the performance of capital operations, and he has arrived at the conclusion that it is preferable in all respects to chloroform. It was more manageable than chloroform; anæsthesia is more readily produced by it, and is more persistent; that there was less excitement, and what might be called inebriation, than in the case of chloroform, and that its exhibition was not followed by headache or prostration, nor so frequently by vomiting.

It had never yet proved fatal, and in those animals that had been killed by it there was found less disturbance of the equilibrium between the heart and the lungs.

Mr. Marshall mentioned several cases in which he had given the bichloride of methylene for tooth extraction, and he did not observe any of the disagreeable after-effects of chloroform to follow.

At a meeting of the Medical Chirurgical Society of London, October, 1871, in the course of a dis-

cussion on Anæsthetics, Mr. Curling, the president, regretted that no notice had been taken of the proposal of the Society's committee to use the mixed vapor of alcohol, chloroform, and ether. Mr. Spencer Wells said that he did not care whether chloride of methylene was merely a mixture of chloroform and ether, or not, as some said it was, he had proved it to be the best anæsthetic, and preferred it to all others.

Dr. Sansom said that while a mixture of chloroform and ether only was open to the objection that the ether went off first and left the chloroform, the objection did not hold when alcohol was added, as it had the effect of restraining them both.

In the *Lancet* of May, 1871, Mr. Rendle, the surgical registrar of Guy's Hospital, after stating that his opinion was based on personal experience of some hundreds of cases, says that the chemical composition of bichloride of methylene had not been found sufficiently uncertain by him to interfere practically with the physiological effects, and no dangerous symptoms had occurred in his practice.

He had decided to use no other, unless specially requested by the patient or operator; and he felt sure that anyone who would give it an impartial trial would be of the same opinion. He had given it for operations lasting one hour, when the operator was able to commence in three minutes, and recovery was rapid, and not followed by sickness; and also for operations lasting less than a minute, where all was finished and the patient sitting up within 5 minutes, without the slightest unpleasant sensation.

Mr. Morgan, house surgeon of the Ophthalmic Hospital at Moorfields up to 1872, had given it more than 1800 times, and to persons of all ages, from a few weeks up to 91 years, but had never lost a case. He gave it from a perforated frame covered with flannel and fitting well to the face, 2 drachms at first, and 1 drachm afterwards when required. He only considered it necessary to watch the color and the breathing. He would never use anything else if he had his own choice.

Mr. Philip Miall, surgeon to the Bradford Infirmary, England, who has employed this anæsthetic in a large number of cases, states that insensibility in adults is usually produced in about two minutes; one dose of a drachm being usually sufficient to produce anæsthesia. The respiration is usually quickened, the pulse lessened in frequency.