

Dr. LAPHORN SMITH was pleased to know that such a case had occurred as it would encourage less daring operators to be a little more bold. He thought that much of so called shock was due to hæmorrhage, the anæsthetic, or sepsis.

Dr. WM. GARDNER thought that a point often overlooked, in considering the shock following long operations, was refrigeration, and cited a case in support of this.

Dr. G. G. CAMPBELL drew attention to a fact which he had demonstrated by examination of the urine, that metabolism was much diminished during anæsthesia, becoming less and less as time passed. Thus, during long operations this might be a cause of refrigeration.

Dr. F. J. SHEPHERD intended reporting the case in full later on and so had not given the details of the history. It was not known what shock was, but no doubt hæmorrhage was often the source of shock and this man would have died if he had not had the intravenous injection.

#### **A Respiratory Symptom of Tobacco-Poisoning and its Experimental Investigation.**

Dr. W. S. MORROW in this paper described a peculiar form of breathing which he had observed in a number of cases of tobacco-poisoning. He read reports of the three most typical cases he had seen. The symptom referred to consisted of audible deep inspirations occurring at intervals, and often accompanied by a feeling of lack of air. He referred to a case reported by Chapman, of Louisville, at the Mississippi Valley Medical Society, in 1891, where similar symptoms were observed. He had been unable to find any explanation of this peculiar form of breathing and had consequently undertaken a series of experiments, in the hope of throwing some light on it.

He had tracings of the breathing showing the effects on it of poisoning with tobacco in rabbits and dogs; other tracings showed the effect of tobacco after first cutting the pneumogastric nerves; others again, the effects of stimulating these nerves at various stages of poisoning. Still others exhibited the effects of various degrees of ether and chloral for comparison. As a result of these cases and experiments the following conclusions were reached:—

A fairly common symptom of tobacco-poisoning is a deep gasping inspiration, occurring at intervals, and sometimes quite audible. This may be practically the only symptom complained of. It is probably due to a paralysing action of the drug on the respiratory centre, affecting especially the expiratory division but also diminishing the irritability of the whole centre to afferent impulses. This symptom may persist from a few days to several months after the tobacco is discontinued.