

on severe wounds, was particularly dwelt on by most writers on military surgery. In such cases, then, as also where cardiac disease exists, and in very old persons, he was inclined to think the inhalation of the vapour might be attended with unpleasant effects. At all events, before inhalation were resorted to for the purpose of an operation, he would say that the effect of the vapour on the individual ought to be carefully ascertained. Mr. Orr would detail to the society a case in which he that morning made a preliminary trial of the vapour, and which was attended with circumstances that completely marred the efficacy of the remedy in his hands.

Mr. Orr said, that being anxious for an occasion to test the properties of this new agent, he took advantage of an opportunity afforded him in the person of a patient affected with lipoma of the testicle, on whom he wanted to perform Mr. Syme's operation. He had purposely avoided saying anything to the patient on the subject until that morning, and he then objected to it, said he felt a disposition to faintness, &c. After a little reasoning, however, he was induced to submit, and when the apparatus was applied, the mouth-piece was found to fit badly from a disproportion between it and the mouth of the patient. But with some management he was forced to inspire the vapour, Dr. Hargrave having his finger on the pulse, while Dr. Williams took notes of it. In a few moments the man started up, and asked in a wild manner what they were about to do with him? After two or three attempts it was found impossible to produce the degree of insensibility ascribed to the vapour, perhaps (Mr. Orr said) on account of its being involuntarily regurgitated by the man, and his partially respiring unimpregnated atmospheric air. At the conclusion, he stated that he had felt as if in an agreeable dream, but was far from being entirely unconscious, for he felt, he said, a disagreeable sensation on being pinched, which was done each time a renewal of the attempt was made. The pulse varied considerably during the experiment; it was exceedingly weak just before the inhalation was commenced, and rose again both in frequency and force when the man appeared most under its influence. He expressed his willingness to submit to another trial of the vapour, but Mr. Orr feared his being rather too much excited just then for a repetition of the experiment.

Dr. H. Kennedy observed that, from the remarks made to-night, it would appear the effects of this agent were not peculiar to it. He had seen very nearly identical effects produced by the nitrous oxide, or laughing gas, which, it was not generally known, perhaps, produce in some constitutions that semi-comatose or apoplectic state described to-night, in which the individual is entirely deprived of the power of motion, but not of all consciousness. He had seen instances of this kind, while in others, which were certainly in the majority, a state of the most violent excitement was induced by the use of the gas. Dr. Macdonnell had properly spoken against the use of the ether in cases marked by any tendency of blood to the head; to these it might be prudent to add, cases where there was anything like disease of the heart, or delicate lungs. The great difference existing between persons in rude health—such as were chiefly the subjects of Mr. Tufnell's experiments—and those likely to have to undergo operations, should not be forgotten either. As a whole, and speaking of surgical cases only, he could not help feeling that the case suited for the use of this agent would prove to be the exception, and not the rule.

Mr. Carmichael said that, notwithstanding the objections urged by previous speakers against the agent under consideration, he looked upon it as a most valuable boon to society at large, offering as it did so powerful a means of alleviating pain. He had closely watched the woman whose case had been detailed by Dr. Macdonnell, and had

observed that soon after commencing the inhalation the woman's countenance fell, at which moment Dr. Macdonnell commenced the operation. While the skin was being divided (which is admitted to be the most painful part of the operation,) the woman's countenance did not betray the slightest evidence of pain; and on being asked, when all was over, whether she had even felt the sawing of the bone, she said she had no sensation of the kind whatever. The objections made to the employment of this agent, Mr. Carmichael said, might with equal justice be urged against opium and the many other means of alleviating pain. He had that day seen in one of the public papers a paragraph attributing the suggestion of this highly valuable aid in surgery to M. Ducros, who, it was stated, had introduced the subject to the notice of the Academy of Sciences at Paris in March last. Now, in a society, and more particularly one so numerous as the present, he (Mr. Carmichael) considered that merit should, if possible, be awarded to the individual possessing the clearest title to it; and as the author of the paragraph alluded to was, perhaps, now present, he might in furtherance of his statement, give to the society additional details on the subject. It had been stated at the same time by M. Ducros, that opium acted as an antidote, or a means of recovering the person from the state of stupor induced by the vapour. This (Mr. Carmichael said) reminded him of the homœopathic doctrine—*Similia similibus curantur*. He did not know whether in protracted operations this remedy would be applicable, or whether its renewal might be attended with safety.

Dr. Power, having been present at Dr. Macdonnell's operation, wished to mention one or two circumstances connected with the patient and the operation that had struck him at the time. It was after a second attempt, as the society were aware, that the woman was brought fully under the influence of the vapour, and then Dr. Power observed great difficulty of respiration, complete alteration in the expression of her countenance, and great turgescence of the vessels. As to the fact of her not having felt pain, he felt perfectly convinced that she did not suffer the slightest; he might as well have held the arm of the dead subject, so little evidence was there of any sensation under the knife. These facts had struck him most forcibly. As to the applicability of the remedy to protracted operations, he could not now pretend to say anything; or as to the amount of improvement of which the agent may yet be susceptible, so as to render it available under such circumstances.

Dr. Eades made some observations tending to establish an identity of effect between the ethereal vapour and protoxide of nitrogen, or laughing gas, and showing that both these agents equally exhibited alternately exciting or depressing influences, according to the variety in constitutions of the individuals experimented on. Ether, he also observed, had been a remedy in use long and long ago in cases of chronic catarrh and other affections of the respiratory system, and the rationale of its exhibition appeared to be quite in accordance with the homœopathic doctrine. The stupefaction produced by the vapour appeared to be clearly referable to its action on the nervous system.

Mr. Jameson mentioned the case of a boy of 17 or 18, under his care in Mercer's Hospital, for some affection of the eyes, on whom he had tried the effect of the vapour two or three times, but with an imperfect apparatus at first, so that stupefaction was not induced; but the boy always declared that he could see better after its use. One or two mornings ago Mr. Jameson so far induced stupefaction as to render the boy entirely insensible to pain, but consciousness was present to such an amount that he answered any question put to him. His pupils were dilated, the conjunctiva considerably suffused, the symptoms being altogether little