

gas to her at once in the way I have described. Its effect was soon noticeable, and on the following morning she was breathing easily, and expressed herself as being quite comfortable. No similar condition occurred during the remainder of her stay in hospital, from which she was discharged on June 24th. I did not think it advisable to bleed her, as I sometimes do in such conditions. But neither bleeding nor anything else could have been more satisfactory in its effect in warding off immediately impending death than the oxygen. In Bright's disease with threatened uræmia I follow Jaccoud's plan, and administer the gas mixed with air from a portable gasometer, which is wheeled to the patient's bedside. Nearly every dealer in photographic apparatus keeps the cylinders of oxygen, and will supply them at a few minutes' notice.—I am, etc.,
Liverpool.

WILLIAM CARTER.

SIR.—There are two communications in the BRITISH MEDICAL JOURNAL of January 23rd, on the value of oxygen inhalation. I have long been an advocate of its more frequent employment, but I have always been met with the objection that it is a remedial measure difficult to apply and maintain. On a recent occasion where I suggested its use the medical attendant (resident in a somewhat distant suburb) told me it took his assistant a whole day to obtain a supply of the gas and a suitable means of applying it, and then the supply obtained was as rapidly exhausted, partly owing to unavoidable waste.

My object in writing to you now is to make a suggestion which I believe would greatly promote its employment, and thereby the prolonging and saving of life. Why should we not be able to obtain an adequate and easy supply of oxygen for inhalation from any of the chief pharmaceutical chemists? Why should they not keep cylinders of the compressed gas with suitable means (as figured in the BRITISH MEDICAL JOURNAL of January 23rd) for its easy inhalation with avoidance of waste? And why should they not keep an assistant who could, when required, at once proceed to the patient's house, and explain and initiate the inhalations? If there is any difficulty in carrying out this suggestion, I would make another. Why not ask the specialists who administer nitrous oxide and other anæsthetics to undertake the supervision and provision of oxygen inhalations? One of the incidental difficulties experienced at present in procuring an immediate and sufficient supply of the gas is the requirement of a large deposit—several pounds in some instances—for the cylinders in which the gas is supplied.—I am, etc.,
Hertford Street, W.

I. BURNBY YEO.

SIR.—Not very long ago I was much struck to see the reviving influence of oxygen gas inhalation in a case of advanced phthisis. The patient was a lady staying at the house of Mr. Winter, chemist, in Bethnal Green Road. Her lungs were much destroyed, and prospect of recovery very slight. The idea of using oxygen as an inhalant was due to Mr. Winter, who obtained one or two iron cylinders of the gas from Victoria Street, and, while the cylinder lay under the bed, the patient now and then took an inhalation by means of a pipe with stopcock. It was most interesting to see how colour returned to the lips, and how oppression and dyspnoea were relieved by this simple mode of inhaling the gas.

I thought these few remarks might be interesting in connection with Dr. Lauder Brunton and Dr. Marmaduke Prickett's paper in the BRITISH MEDICAL JOURNAL of January 23rd.

Wellbeck Street, W.

JOHN C. THOROWGOOD.

CHLOROFORM AS AN ANÆSTHETIC.

SIR.—Dr. Lombe Atthill's account in the BRITISH MEDICAL JOURNAL of January 16th of his forty years' experience of chloroform is not only interesting, but forms a record reflecting considerable credit on himself and his anæsthetists. Even such a testimony will not, however, get over the fact that 36 cases of death under chloroform were reported in the BRITISH MEDICAL JOURNAL during 1891, and that four more are mentioned during this month. Still, if his estimate of ether as recorded in his paper were really a fair one, it would undoubtedly go far to prejudice the popular mind in favour of chloroform. As a contrast to his two abdominal

sections under ether, which ended disastrously, I may mention that during the last five years at the Chelsea Hospital for Women and in private, I have been present at 195 abdominal sections in which ether was the anæsthetic used; that in 110 of these I administered the anæsthetic myself; that there was no death resulting from the anæsthetic either directly or indirectly; that in only two was there any after bronchitis, and that both these made good recoveries. To account for the difference between these results and those of Dr. Atthill's two cases, it is only necessary, I think, to quote his own words. Of the first case he writes: "She objected greatly to the ether, declared that she was being smothered, and began to cough immediately; this distressed her very much, *was nearly continuous, and greatly interfered with me during the operation,*" etc. Again: "In the other patient, who violently resisted the inhalation of ether, *vomiting set in before she was under its influence, recurred repeatedly during the operation, and on the withdrawal of the ether became incessant.*" The italics are mine, and they prove to my mind that in neither of these cases was the patient kept properly under the influence of the anæsthetic. As the words "smothered" and "violently resisted the inhalation" were necessary to describe what occurred, it is quite permissible also to hazard the opinion that the administrator did not begin the anæsthetisations in a skilful manner. It is surely, therefore, hardly fair to put the whole blame even in these two cases on the ether.

I quite admit that in judging of the relative safety of anæsthetics generally it is necessary to allow for inexperience in a large number of cases, but Dr. Atthill is himself of opinion that chloroform is "more dangerous in unskilled hands than ether." The necessity, therefore, of a certain amount of experience in the administration of ether to get the full benefit of it constitutes no argument in favour of chloroform. I do not propose to enter into the discussion of the causes of death under chloroform and ether, but will only allude to two points that have been raised.

Dr. Fancourt Barnes, in the BRITISH MEDICAL JOURNAL of January 23rd, 1892, restates his testimony to the generally accepted view of the safety of chloroform in midwifery practice, even when complete anæsthesia is required, and considers that in the condition of the heart and vascular system lies the explanation. While believing him to be right I would point out that if the immunity from danger lies in the fact of the vascular system being as it were up to full concert pitch, or rather above, then the risk must grow in direct proportion to the amount below that standard at which the circulatory system of any patient may be at the time of operation. When it is remembered that the large majority of operations are performed on patients whose health has been affected by illness, it would be natural to suppose their vascular systems to be below that standard at which immunity from danger is found to exist. A proportionate amount of risk therefore must be run in giving chloroform to such, whereas a stimulant like ether would not be attended with that risk.

On the other hand if the danger of both chloroform and ether lies in possible sudden poisoning of the respiratory centre, it must obviously be safer to give that anæsthetic which can be eliminated most rapidly from the lungs and circulation should the necessity arise. For this reason again ether stands before chloroform.

In 99 cases out of 100 it does not signify to my mind what anæsthetic is used as far as risk to the life of a patient is concerned, but as it is often impossible to know beforehand which will prove the troublesome one of the series, it seems only fair to the patient, unless there is some strong contra-indication, to give that anæsthetic which can be most rapidly eliminated from the system should any symptom of danger manifest itself.

It is on this ground that I consider ether safer than and preferable to chloroform for ordinary use. By giving nitrous oxide gas first, by warming the apparatus, and by careful administration the disagreeables are largely diminished and no unnecessary risk is run.—I am, etc.,

Earl's Court Road, W.

F. F. SCHACHT, M.D.

SURGEON-CAPTAIN G. HARLEY THOMAS, F.R.C.S., has been elected a Fellow of the Society of Antiquaries.

DR. N. H. RUNCIMAN has been elected, by a large majority, dispensary medical officer Cork Union.