

Analyses OF COMMUNICATIONS IN MS. RECEIVED FOR PUBLICATION IN THE LANCET.

"L'auteur se tue à allonger ce que le lecteur se tue à abrégé."

ON THE EMPLOYMENT OF CHLOROFORM IN MEDICAL PRACTICE.

CHLOROFORM: ITS POWERS AND ITS ABUSES.

By D. R. RANKIN, Esq., Surgeon, Carlisle.

"Has chloroform not yet had its full allotment of victims? Is the anæsthetic mania not yet over? Surely the time has arrived when dispassionate inquiry might begin!"

"The experiments of Mr. Wakley, jun., given to the world early in January last, and those of subsequent inquirers, go far to prove that the conditions resulting from the application of chloroform-vapour are all but identical with apoplexy and asphyxia in conjunction, and the phenomena consequent on its use, in the majority of instances, correspond with such a view.

"With a host of strange, jarring, and startling facts on record, the unprejudiced mind will not find it difficult to establish from that record, not only that the use of chloroform in great surgical operations answers a most humane and desirable aim, but that in midwifery it has accomplished impossibilities enow; acting, as it seems, in obedience to the will in overcoming any complication!"

"Art has no portion in ordinary parturition, which, in all strictness, is a natural function; and preternatural cases are rare in the practice of calm and sober-minded practitioners. The introduction of chloroform into midwifery practice in ordinary cases displayed little sagacity. When the fearful risk is calculated, not to hint at the unseemly scenes enacted, the attainment of the highest aim in view is as nothing. The numerous mishaps which have arisen from the application of chloroform in midwifery have been carefully suppressed, or, like the fatal cases in other branches of the profession, wonderfully smoothed by a ready pen.

"At what have we arrived? The vascular engorgement of the brain and lungs—the dark, almost black state of the blood—the diminished circulation caused by the inhalation of chloroform, added to the alarming announcement of Professor Simpson, that the skin and mucous surfaces become inflamed to a painful extent, under the action of the vapour of chloroform, are grave facts. Surely, with such knowledge, to go no farther, no responsible person would readily administer to a female in labour, during five or six hours, through the medium of the delicate tissues of the lungs, diluted though it be by the atmosphere, an agent so powerful—so fatal! Early experiment and sound advice was not enough to mar the career of enthusiasm, and the penalty has been heavy. For the sake of humanity, it is very desirable that the profession, and society generally, should be in possession of a true history of the rage and ravages of chloroform."

A LETTER TO PROFESSOR SIMPSON, OF EDINBURGH, ON THE FATAL CASE OF INHALATION OF CHLOROFORM THAT OCCURRED AT NEWCASTLE.

By HENRY WIGLESWORTH, M.B. Lond., Surgeon to the Swansea Infirmary.

Dr. Wiglesworth long since sent this letter, to be addressed to Professor Simpson through our pages: we have preferred placing it in juxtaposition with other communications bearing reference to the subject of chloroform, and the necessity for caution in its employment; by which arrangement, numerous conclusions being presented to the mind of the reader, we think additional interest is given to the subject under consideration, and additional force to the ideas of the several writers. The great pressure on our space has in this, as in many other instances, compelled us to abridge a valuable paper into the form of an analysis, but we consider that the observations of Dr. Wiglesworth will lose none of their spirit by our so doing.

Dr. Wiglesworth recalls attention to the remarks of Professor Simpson, in THE LANCET of Feb. 12th last, in which, as he says, the latter has "given, clearly and candidly, a series of reasons for the conclusion that death, in the instance referred to, arose, not from the chloroform administered, but 'from the effects of the means used to restore her from the state of anæsthesia.' Equally candidly, (says Dr. Wiglesworth) I

will state my opinion that those reasons are not in accordance with sound physiological doctrines.

"The views of the Professor may be shortly stated as follows:—that brandy-and-water were poured into the throat of the patient while in a state of syncope; that, swallowing in this state being impossible, the fluid necessarily accumulated in the pharynx, blocked up the entrance to the lungs, and thus, by rendering breathing impossible, at once destroyed life.

"Without entering into the question, whether breathing was possible or not, or whether the patient did or did not, could or could not, swallow, I have no hesitation in stating, that in consequence of the 'state of syncope,' the 'weak and torpid state' into which the girl had fallen, the necessity for breathing was reduced to a minimum, and that even its complete absence in this state would not satisfactorily account for death in three, or three times three, minutes.

"You appear, Sir, to have fallen into the error of considering that air is as much required for the arterialization of the blood and for the maintenance of the functions of life in the state of syncope as in the active condition of the body. I do not know any authority to whom I can better refer for proof that there is a wide difference in this respect, than Dr. Carpenter, whose writings you have drawn upon, to prove that the poor girl was 'choked, or asphyxiated,' by the brandy-and-water.

"The following extracts are taken from Carpenter's 'Principles of Physiology,' third edition, § 778; and the same author's 'Manual of Physiology,' § 707. As to the time required for producing death by asphyxia, in an active animal, Dr. Carpenter says, 'It may be stated as a general fact, that if a warm-blooded animal, in a state of activity, be deprived of respiratory power, its muscular movements, with the exception of the contraction of the heart, will cease within five minutes,—often within three,—and that the circulation generally fails within ten minutes.' The chief exceptions are then mentioned—viz., divers, whose power of remaining under water is 'acquired by habit;' also diving animals, such as the whale, whose structure fits them for keeping below the surface; after which Dr. Carpenter continues as follows:—'Another exception exists in the case of hibernating mammals, which are reduced for a time to the condition of cold-blooded animals, and which can, like the latter, sustain a prolonged suspension of the aerating process. And there is reason to believe, that in the state of syncope or fainting, in which the circulation is already reduced to a very low amount, in consequence of a partial failure in the heart's power, all the functions of the body being nearly suspended, and the demand for aeration being consequently very small, the respiration may be suspended for a long period, even in the human subject, without fatal results. Thus more than one case has been credibly recorded, in which recovery has taken place after complete submersion for more than three-quarters of an hour; and it is probable that in these instances a state of syncope came on at the moment of immersion, through the influence of mental emotion, or of concussion of the brain.'

"Now, if we turn to your own description of the case of this poor girl, we shall find that it agrees almost to the letter with the above quotation, that all the conditions necessary for a protracted suspension of respiration without death resulting were present. You say, 'It evidently appears that the girl fell into a state of syncope at the time of operating,' with 'the respiration temporarily suspended,' and that in this condition, instead of 'letting her alone,' brandy-and-water were 'allowed to rest in and fill up the pharynx,' producing the same results as 'if the whole head and face had been submersed in the same fluid,' or, in other words, that the patient's condition exactly resembled that of a fainting person plunged into water; and hence that she was actually in the very state in which, instead of dying directly, she ought to have lived for a protracted period—of all conditions, in the most favourable one for the continuance of life without the continuance of the respiratory process.

"The question then naturally suggests itself, and perhaps you will favour the profession with the reply—Why was life in this case almost instantaneously extinguished, when the conditions were all favourable for its prolongation?"

"It appears to me, that the quotation you have made from Mr. Guthrie's work does not in any way support your view. Mr. Guthrie merely says, that fluids put into the mouth 'might possibly enter the larynx, and destroy.' He does not say that it would be quite sufficient to destroy a fainting person in two minutes. Indeed, if such were the fact, how is it we have not coroners' inquests on similar cases every day?—for surely, nothing is more common than to put a 'little brandy' and water into the mouth of a fainting person.