TABLE IV.—*Showing Results of Seven further Experiments with Mercurial Manometer.*

No. of Experiment.	Weight of Animal in Grammes.	Series of Intoxications.	Drug Employed.	Duration in Minutes.	I= Interruption of Exp. S= Stoppage of Respi.	Mean Pressure at Commencement of Exp.	Mean Pressure at End of Experiment.	Remarks.
14	1,450	a	Residue	11	S	—	—	Manometer leaky.
15	2,230	a	Residue	25	I	110	—	Dregs of sample employed. Rabbit large, white, much frightened; resisted violently. Movements and reflex action during experiment. The liquid in the test tube does not smell. New sample for c.
		b	Chl. Med.	4	S	—	14	
		c	Residue	12	I	—	—	
		d	Chl. Med.	16	S	—	—	
16	1,000	—	—	—	—	—	—	Died immediately after connection with manometer. Could not be resuscitated.
	1,600	a	Residue	6	S	62	12	
17	1,600	a	Residue	3	S	82	10	
		b	Chl. Med.	4	S	90	10	
		c	Residue	2½	S	90	8	
		d	Chl. Med.	3	S	86	8	
18	1,350	a	Residue	2	S	80	17	Blotting paper in test tube. In a accidentally, in b on purpose, a few drops were thrown into the cannula. Pressure fell immediately, but recovered in b.
		b	Chl. Med.	4	S	80	8	
19	1,420	a	Residue	1½	S	108	18	Blotting paper. In c clotting prevents noting the pressure.
		b	Chl. Med.	2½	S	108	18	
		c	Residue	1½	S	—	—	

THE COMPARATIVE SAFETY OF CHLOROFORM IN OBSTETRIC PRACTICE.

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IN the BRITISH MEDICAL JOURNAL of January 16th of this year, Dr. Lombe Atthill remarks: "Chloroform is admittedly nearly safe in midwifery practice; why it should be so when complete anaesthesia is so often produced during obstetric operations I am unable to say. Possibly because, in these cases, involuntary expulsive efforts seldom entirely cease, and, as at the expiration of these, comparatively deep inspiration follows, it may tend to prevent asphyxia, but then the deeper the inspiration the more chloroform will be inhaled."

It appears to me that, presuming chloroform kills mainly by paralysing the respiratory centre, then its greater safety in obstetric work is explicable physiologically. The act of parturition brings into play all the associated movements of extraordinary expiration. This occurs not once only, but as the labour proceeds, the expiratory efforts are intensified in vigour and frequency. In this connection it is most instructive to note the remarks of Professor Foster.¹ The main points are: "A tracing of the respiratory movements is taken from an animal. If the trachea be suddenly closed at the summit of inspiration there is a temporary inhibition of inspiration, and sometimes an attempt at expiration. If the trachea be suddenly closed at the end of expiration the result is an increase of the subsequent inspiration. And assuming on the strength of analogy the existence in the vagi of two sets of fibres, we may say that expansion (of the lungs) stimulates the endings of the fibres which inhibit inspiration, and concurrently tend to augment expiration, while collapse stimulates the fibres which inhibit expiration and augment inspiration."

In the greatly increased expiratory effects of parturition, especially with a temporarily closed glottis, we have a condition which sets the activity of the inspiratory portion of the respiratory centre at a higher index. The waning of increased expiration stimulates the waxing of increased inspiration. Hence, I take it, the centre is less likely to be overwhelmed by an inordinate, or even an ordinary, amount

of chloroform vapour passing through it. It is pleasant to note that Dr. Atthill's observation of the regular sequence of deep inspiration is supported by physiological experiment, but his last sentence that "some would suppose the danger of an overdose being then taken" appears to me scarcely in point. It is a question, not so much of the blood absorbing more chloroform because of the deeper inspiration, but rather of the recognition of the facts that the patient is sufficiently under the influence of the anaesthetic, and that the breathing is going on well. So that, according to all the rules for the administration of anaesthetics, one would diminish the amount of chloroform, allowing only just so much to be inhaled as is necessary to maintain complete anaesthesia with safety.

I am still one of those who, clinging to traditions older than the Hyderabad Commission, deem it necessary to watch the pulse as carefully as the respiration, believing that sudden changes may arise from paralysis of the cardiac centres equally with the respiratory. I can allude to two instances in which the pulse ceased before the respiratory movements. But I fail to agree with Dr. Fancourt Barnes² that the "weaker the heart the more readily does it succumb to the paralyzing action of chloroform, and that when the heart is strong—stronger than usual, as in the hypertrophied heart of pregnancy—it can more easily withstand the action of chloroform." I am inclined to believe that chloroform acts on the respiratory and cardiac nerve centres, and not on the motor apparatus. Further, will anyone advance the proposition that the nervous system is also stronger and more stable during pregnancy? Rather, it is more responsive to unusual stimuli, hence the greater effect of extraordinary expiratory movements during parturition.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of the directors of the society was held on January 13th. The chair was taken by Mr Henry Lee, V.P., in the unavoidable absence of the president, Sir James Paget. Two new members were elected, and the deaths of four reported. Grants to the amount of £1,436 were made, to be distributed among the 64 widows and 18 orphans receiving assistance from the society. A fresh application for a grant was read from a widow and assistance was given. The death of a widow in receipt of grants since 1879 was reported. The expenses of the quarter were £78.

¹ *Textbook of Physiology*, Fifth Edition, vol. ii, pp. 593-595.

² BRITISH MEDICAL JOURNAL, January 23rd, 1892.