

EXHIBIT "B."

REBREATHING OF OXYGEN

As methods including the rebreathing of oxygen had been found useful for the administration of this ether, it was thought desirable to study them more closely. Apparatus similar to that described under Anaesthesia, page 226, was used. The ether containing bottle was filled with caustic potash sticks in order to absorb any carbon-dioxide which would accumulate. An excess of oxygen was administered i.e., 10 to 20 litres per hour, and the blood pressure was followed repeatedly in twenty cases. Eighteen of these showed a small drop in systolic and a fair rise in diastolic pressure. The other two had their rise in diastolic, but their systolic did not vary. The pulse remained normal in each case.

EXHIBIT "C."

BLOOD PRESSURE VARIATIONS

The following figures are the average of those recorded in a large number of administrations by an open mask method :

A COMMERCIAL ETHER CONTAINING VERY LITTLE ETHYLENE

Time	Systolic Pressure	Diastolic Pressure	Pulse Pressure	Pulse	
	120	80	40	85	
1	150	70	80	116	
2	160	72	88	96	
3	160	90	70	80	Beginning analgesia. Not Surgical.
4	130	100	30	80	
5	135	110	25	80	
5.5	115	118	27	80	
6	150	118	32	80	
6.5	110	90	50	80	
7	130	85	45	90	No Analgesia.
7.5	128	90	38	100	
8	120	85	35	110	
8.5	118	100	18	100	
9	115	105	10	90	Struggling Stage.
9.5	110	85	35	90	

AN ETHYLENE SATURATED ETHER

Time	Systolic Pressure	Diastolic Pressure	Pulse Pressure	Pulse	
	120	75	40	80	
1	130	90	40	90	
1.5	140	100	40	100	
2	140	105	35	80	Analgesia to surgical degree.
3	140	100	40	80	
4	120	70	30	72	Sleep.
80 mins.	120	70	30	72	Anaesthetic stopped.
85 "	130	90	40	85	

From the above curves it is easily recognized that the ethylene group acts as a staphizer of the circulation. A peculiar point relative to the struggling stage is that it always seemed to occur when the pulse pressure was extremely reduced by a dropping of systolic as well as a rise in diastolic blood pressure. At this time when the patient was sufficiently conscious, she always blamed her restlessness to a peculiar numbness (not analgesia) as well as a hollow sensation in the abdomen.