

it increase or decrease the mortality attendant upon surgical operations?" has proved, by a large collection of statistics, which is the only proper method of determining the fact, that so far from the mortality being increased by the employment of anæsthesia it is to a considerable degree diminished. Of 300 operations performed with ether and chloroform fewer of them proved fatal than is usual with the same cases without these agents. Of 1,088 cases of amputation of the thigh (an operation more fearfully fatal in its results than almost any other deemed justifiable in surgery) without an anæsthetic agent 44 in 100 died; out of 135 cases with ether or chloroform 33 only died, or 24 in 100; or in other words, the fatality was not greater than 1 in every 4 operated on, where the patients were previously etherized. It was as high as 1 in every 2 or 3 operated upon when the patients *were not* previously etherized. Thus the amount of persons saved from death in amputation of the thigh by the patient being rendered anæsthetic during the operation amounts to 19 lives in every 100 operations performed.

An objection had also been raised against the administration of chloroform, on account of the fatality of two or three cases, which, it had been stated, had been owing to the effects of this agent.

Dr. Simpson asked would the administration of as many thousand doses of our most common medicines, such as opium, antimony, senna, etc., by as many thousand different persons and constitutions, have been accompanied with equal safety and equal impunity in the results? For it is well known that, when this agent was first discovered and manufactured in Edinburgh, the demand for it was so great, both by ladies and others, who inhaled it for mere amusement, that all the druggists, in which Edinburgh abounds, could not supply it in suffi-

cient quantity. And yet, although it is stated in one of the London journals, that during the years 1848 and 1849 it has been calculated that chloroform had been used in from 80,000 to 100,000 cases in Edinburgh, there had not been *one* fatal case in that city.

With regard to the first alleged fatal case which occurred in Newcastle-on-Tyne, and on which the coroner's jury returned a verdict of "Death from congestion of the lungs from chloroform inhalation," and which at the time excited no small interest among the profession and public, Professor Simpson pointed out in his lecture which I heard him deliver to his class *that the patient was asphyxiated or choked from the very means intended to revive her from the state of anæsthesia and not from the effects of chloroform*; which statement was fully corroborated by comparing the morbid appearances presented by those who have died of simple asphyxia and those animals which have been intentionally killed by the inhalation of chloroform. The morbid appearances in this patient were precisely those seen to result from pure asphyxia, while on the other hand they differed in some essential points from those seen upon the bodies of the above animals. In the Newcastle case the blood found in the heart was "dark" and "fluid." On the contrary, in the fatal experiments to which I allude firm coagulæ of blood were found in *every* case where chloroform was inhaled! In none was the brain congested as in the unfortunate patient.

The surgeon in this case had unfortunately become alarmed, and filled the patient's throat with brandy and water, with the intention of reviving her, which she was incapable of swallowing in her then torpid state, and consequently, at the first returning attempt at respiration a quantity of the fluid entered the larynx, and the patient was instantly and fatally suffocated. But supposing, even if it did prove fatal, when indiscreetly managed,