

therapeutics and the microscope, is that it is from both these causes ; first, depriving the blood of its stimulant, and thereby the nerve centres of the power of communicating with the various organs of the body, suspending the nerve force, or arresting the flow of nerve fluid, or if you please cutting off the supply of electro-galvanism from the mysterious battery. Thus the motor nerves become temporarily paralyzed, and after that the sensorial. This paralysis will be in degree proportionate to the character or extent of the poison in the blood, or rather the extent of its devitalization. The muscles of involuntary motion are the last to yield. The first effects on these are visible through the pneumogastric nerve, as seen by disturbing the stomach as well as the breathing ; then upon the great sympathetic, which gives the power of involuntary motion to all the intercostal muscles in breathing. If anæsthesia is too profound, or the agent pushed too far, the branch of the eighth pair, which supply the glottis, may also become paralyzed, when the muscles of the throat will become retracted, the tongue be drawn into the larynx, and strangulation follow ; the respiratory muscles cease to act, and death ensues.

This is probably the more usual cause of death from anæsthetics, and should be carefully watched and guarded against ; and if it occurs, not a moment's time should be lost in drawing the tongue forward. Death may occur from actual poison to the system in some constitutions ; but post mortem examination reveals very little, if anything beyond an impoverished condition of the blood, except that a larger proportion of the agent used is found in the brain, while it contains less than its natural quantity of blood. The next larger proportion is found in the liver, while it contains more than its usual quantity of venous blood ; and, in proportion to that of the body a lack of arterial blood.

Some persons succumb to anæsthetics more readily than others, probably from less vital force, or peculiar idiosyncracies that make them more sensible to their influences than others. These cases require a more careful use of the agent, and watchfulness as to its effect.

There are certain conditions of the system where anæsthetics should not be used. The first to be named is a diseased condition of the heart, especially where there are fatty deposits, or fatty degeneration of the muscular tissue. Of the fatal cases, where post mortem has been held, nearly half have revealed this state of that organ.