

the same genus, while all inciting opposite characteristics, must be antagonistic. Alcohol may be taken as a representative of the exalting class. Heretofore, it has been absurdly held by our professional law-givers, that a small quantity of alcohol stimulates, while a larger quantity induces sedation. This theory requires the therapeutic action of the agent to dimetrically change, or the physiological laws to be reversed; either requirement involves a solecism of the grossest nature. Every action must inevitably increase, in an exact ratio, with the augmentation of the incitant. It requires no reasoning to prove that a quart is eight times greater than a gill, and therefore must contain eight times the amount of stimulus.

The influence of alcohol first effects the more susceptible cerebro-spinal centres, and elevates their *vita nervosa* above that of their antagonists, and the following phenomena ensue: pupils dilated, skin flushed, circulation and respiration increased, organic functions augmented, exhilaration, indisposition to sleep or repose. But when enough has been imbibed to exalt the more powerful sympathetic centres, contracting innervation soon preponderates, and produces the following phenomena: pupils contracted, skin cool and pale, circulation and respiration diminished, organic functions diminished, mental obtuseness, sensibility lessened, disposition to sleep. The exalting influence still increasing, profound insensibility and death closes the scene. Complete occlusion of the capillaries suspends all functional action, and extinction of animation is an inevitable consequence.

The effects of opium on the system possess all the essential characteristics of alcoholic phenomena to entitle this drug to rank as a species of the exalting genus. Its *modus operandi* in inducing sleep, allaying pain, and arresting colliquative alvine evacuations, is easily explained. When its action becomes sufficiently potent to exalt sympathetic innervation the capillaries are contracted throughout the whole system, and the brain being thus deprived of its usual quota of the element from which all functional activity is derived, becomes, in a degree corresponding with the exalting action, insusceptible of impressions, and, therefore, incapable of perception and of volition, and consequently unconscious of pain. If this lethean state is not actually Somnus himself, it is certainly Morpheus, his son and prime minister.

In the same manner the intestinal secreting organs, being deprived of blood, their functions are suspended, and the discharges depending on the fluid are arrested.