

alcohol, taken long enough before a meal to be absorbed, would assist digestion by its exaltant influence on the susceptible centres; but as it precipitates pepsin, it is incompatible with digestion during active alimentation. The physiological action of alcohol, as it is illustrative of the law of antagonistic innervation, deserves a passing notice, and especially its pathological sequences.

When habitually imbibed in quantity sufficient to exalt ganglionic force, it diminishes the normal supply of blood, and thereby enfeebles organic function generally. While stimulation, short of influencing ganglionic force, produces no pathological sequelæ, the consequences of deep and continuous potations are most deplorable. It is evident, from a knowledge of the operations of the physiological law under discussion, that a constant exaltation of ganglionic dynamic force must necessarily diminish vital action, not as heretofore absurdly held by the alcoholic action being transformed by some visionary power into a sedative influence; but by producing a state of capillary occlusion incompatible with the nutritive functions. In the first stage of intoxication, while the cerebro-spinal dynamic force alone is exalted, blood is sent in preternatural quantity to all the organs, and their functions increased accordingly. The brain instantly responds, and one idea presses on another in such quick succession that they become blended into an indistinct chain of thought. The functions of the stomach, kidneys, liver, sudoriferous glands, testes, ovaries, &c., are preternaturally exalted. There is great indisposition to sleep or repose, hence the Bacchanal orgies continue uninterruptedly till complete physical exhaustion or till the potations become sufficiently potent to arouse ganglionic actions, and shut off the super-abundant supply of blood. The same physiological state of the two nervous systems exists in the second stage of intoxication that does in narcosis from opium, consequently the same inactivity of organic function.

The brain no longer feeling the vitalizing influence of the blood becomes incapable of perception and sinks into a state of repose called sleep, from which, if capillary occlusion be complete, it may never arouse. Continuous alcoholization necessarily impairs digestive function by depriving the gastric and pancreatic glands of a sufficiency of the element from which