

First, then, we think it now conceded by all that there is a natural law by which all organic life unconsciously seeks rest, in order as it were to store up energy for the renewal of active functions. As far as we know all animals follow this law : we know as well that plants do. How this takes place in plants we know in the fact that the actinic rays of the sun, aiding the decomposition of carbonic acid by the plant and the assimilation by it of carbon, thereby become the exact index of this functional activity. Nothing then seems more certain than that man's physical, and likewise intellectual, nature seeks in sleep that rest which enables the various organs to *revitalize* themselves by both lessening the physical waste, and the storing up of new energy. But this process, inherent in the natural constitution of man, must of course be carried on by means of natural processes. What are these? Following out embryogenic changes we must necessarily place nutrition of blood and its renovation first. But since nerve force is that which evolutionary progress has carried to its highest point of development in man, we feel that in adult man it should almost be placed first, so potent a regulator has it become of the processes of nutrition. We may say then that nerve force exists through all the degrees from extreme nerve tension to that of complete nerve relaxation, the various degrees depending upon the ability to assimilate nourishment, derived from the blood and external warmth, light, exercise, &c. Now in trying to explain physical phenomena and the part played by nerve matter in them, it is necessary to proceed with the greatest caution, since we frequently find popular expressions and scientific expressions diametrically opposed to one another. Thus the popular expression for nerve anaemia or nerve debility is nervousness, which in reality ought to mean the very opposite, viz., nerve force; and so a whole series of misused expressions originating in wrong pathological ideas might be given.

Starting then somewhere in the complex circle of cause and effect let us suppose that nerve force is given. Now it seems generally accepted that the ganglionic system of nerves, which especially subserves the functions of organic life, is that too which, by giving nerve supply to the muscular tissue of the blood vessels, regulates the blood supply of a part, either by contraction of the walls lessening the blood supply, or relaxation causing a temporary hyperaemia. (It should be noticed here that the hyperaemia attendant upon inflammation seems to some extent at least dependent upon some morbid