

large part of men, can perfect this reform in their own views and practice; but how soon the whole body can be moulded over. Therefore we go slowly. No such work can be done swiftly.

Our safety lies in a vigorous onward movement. We must advance, or it will be difficult long to hold the ground we have won. A change of aims and measures is now again demanded. There is some new field for us to enter, richer in work and in victories, than any we have yet occupied.

And what shall this movement be? It is clearly indicated by the exigencies of the work. Every where our exertions are met and repelled by one form of resistance. The force of opposition which now meets us comes of the Legalized Traffic in intoxicating drinks. It is this which now checks our progress, and rolls back our work on us at every point. This free, universal, law-defended trade in drinks is proving itself strong enough to hold us at bay; and with all our moral agencies alone arrayed against it, it bids fair to give us victories to win to the end of time. The matter continuing as it is, Moral Suasion alone on the one hand, and the Legalized Traffic in full blast on the other, our highest hope can be merely to hold Intemperance under check and limits, with only the distant prospect of bringing it to an end.

For some years past this has been just the condition of this enterprise. Every where among us, at all eligible points the legally commissioned agents of Intemperance have plied their work. They act as public functionaries. They spread forth everywhere, in full array, the means of intemperate indulgence. All over the land, by myriads, at every moment and with every advantage, such agencies are systematically and diligently at work to entice and corrupt—recruiting the wasted ranks of the fallen, and sustaining with terrible efficiency the whole baleful system of destruction. On the other hand we print and preach, pray and persuade. We agitate, and organize, and Washingtonize. And we stand amazed that the work does not go forward in triumph. What we gain is evermore slipping from us, and comes rolling back on our hands. Fresh victims continually appear. We save many and lose many. The truth has been too well demonstrated that, while sustained and sanctioned as it has been the traffic is not far from a match for all our moral suaves combined. No art could devise a better schema for perpetuating the conflict.

This vital power of Intemperance now lies in the Traffic, by which it assumes and maintains the attitude of an institution. It has its system, and talks loudly of its interests and rights. It sustains a scheme of vigorous and almost universal operation. Its dram-shops line our thoroughfares, and float on all our waters. Every point of concourse is seized and occupied by its agents. The Tavern is perverted from the Traveller's Home into a den of tipplers, and fitted out in the name of the State with all that can entice the temperate and push on the falling to their ruin. While this continues, we may bail away forever at the pool of Intemperance, but this system will pour in fresh floods incessantly upon us. Let this horrid enginery play on, and we shall forever have wo to alleviate, pauperism to provide for, crimes to punish, and victims to pull from the burning gulf. Let us be weary of working so. We have rolled this stone of Sisyphus till patience has ceased to be a virtue.

ONE HUNDRED GUINEAS PRIZE ESSAY.

This talented production appears likely to answer very fully the end especially designed by its publication,—that of bringing the whole question of the use of alcohol, as a beverage and as a medicine, before the notice of the public; already it has been extensively reviewed in our public papers, and generally in a manner calculated to ensure a favorable reception with the public. It is our confident belief that it will accomplish the above named object to a

greater extent than any work that has yet issued from the press. We content ourselves at present with inserting the beginning of the Second Chapter. This is a reply to the second of the four queries answered in the publication, and is as follows:—

Does Physiology or Experience teach us that Alcoholic Liquors should form part of the Ordinary Sustenance of Man, particularly under circumstances of exposure to severe labor, or to extremes of Temperature? or, on the other hand, is there reason for believing that such use of them is not sanctioned by the Principles of Science, or by the Results of practical Observation?

The reply to this question will be best furnished, in the opinion of the writer, by considering aetiolically how far science and experience lead to the belief, that the use of Alcoholic Liquors is advantageous, as fitting the system for the better endurance,—1st, Of severe bodily exertion;—2nd, Of severe mental exertion;—3rd, Of extreme cold;—4th, Of extreme heat;—5th, Of morbid agencies. From the results of these inquiries it will be found not difficult to draw deductions as to the propriety, or otherwise, of making Alcoholic Liquors form part of the sustenance of Man, under ordinary circumstances.

All bodily exertion is performed by the instrumentality of the muscular apparatus, which is called into play by the agency of the nervous system. It is requisite, therefore, that we should begin by inquiring into the conditions under which their powers are respectively put forth; and the following may be stated as fundamental positions, in which all the most eminent physiologists are now agreed.

I. Both the nervous and Muscular systems require, for the energetic development and due maintenance of their respective powers, that their tissues shall be adequately supplied with the materials of growth and regeneration; whereby they shall be able to repair the effects of the loss which every exercise of their vital endowments involves; and also to develop new tissue to meet increasing demands upon their functional activity.

II. The functional activity, both of the Nervous and Muscular systems, involves the disintegration of a certain amount of their component tissues, by the agency of Oxygen; the evolution of their peculiar forces being apparently dependent upon the return of the living tissue to the condition of dead matter, and upon the union of this matter with the Oxygen supplied by the blood; whereby new compounds are formed, the retention of which in the circulating current would be detrimental to the vivifying qualities of the blood, and the continual elimination of which, therefore, is especially provided for.—Both these systems consequently require, as the condition of their highest activity, that they shall receive an adequate supply of blood, charged with Oxygen, and purified from the contaminating matters which it has taken up in the course of its circulation through the system.

III. For the fullest evolution of physical power, it is requisite that the Muscular system should receive an adequate excitation from the Nervous; and the amount of Muscular force put forth on any occasion depends, *ceteris paribus*, on the degree of nervous power which is caused to operate on the muscles,—a strong Emotional excitement, for example, being sometimes effectual in accomplishing that which the will could not effect.

If the Nerves and Muscles be inadequately nourished, it is impossible that their normal power can be developed, except under the influence of stimulants, and then only for a short time. If, on the other hand, the blood be imperfectly charged with Oxygen, it cannot supply a sufficient amount of that element for the performance of those chemical changes, which are involved in every action of the muscular and nervous apparatus. And if, besides being deficient