

OUR CONTRIBUTORS.

THE HUMAN SOUL AND THE TEMPERANCE CAUSE.

What have these to do with each other? will be the first thing that will suggest itself to the mind of the reader. My answer is, much more than most persons imagine; and if both of these were properly understood the temperance cause would be very much promoted. Let us first consider what constitutes the human soul.

Theologians have discussed this question in the press and pulpit, and the conclusion at which they have generally arrived is that the soul and spirit are synonymous and consists of that intelligence which constitutes the human mind. Others have concluded that the human soul is a peculiar spiritual *aura* that surrounds the body, acting as its "guardian angel" to warn it of approaching danger. And still another class have arrived at the conclusion that the soul and body are identical, and that it with the spirit or mind, which terms are used in a similar sense by them, constitutes the human being. Where such a variety of opinions obtain, each one of which is supported by equally good authority, it is difficult for those who have little opportunity for investigation to arrive at a satisfactory conclusion.

The medical profession are puzzling themselves with a problem, the solution of which bears upon this subject. The function of the sympathetic nervous system has not been satisfactorily settled. This system of nerves is made up of the ganglions and the nerves on which they are distributed, together with the minute twigs that are sent out from the outlying bunches of nerve-substance. This system of nerves has been supposed to be a part of the cerebro-spinal structure, a kind of off-shoot, which was under its immediate control. The term by which this system of nerves is known was chosen on the supposition that it was the special channel of the emotions, and that it is of ultimate importance in the phenomena of what is called sympathy, in which one part of the body is affected in consequence of the condition of another, and a careful consideration of the subject leads to this conclusion.

All arteries are accompanied by sympathetic nerves, and besides the larger ganglia that are usually recognized, there are hundreds of minute ones scattered among the tissues and organs of the body, which send filaments to parts in the neighbourhood of each of them, so that the distribution of the sympathetic system is absolutely universal, while the distribution of cerebro-spinal system is far from being so. This fact sustains the conclusion to which recent investigations have arrived, which may be stated as follows:

The cerebro-spinal system, embracing the brain, spinal cord, and the branches distributed from them, relates us to the external world through the media of the five senses, and controls all of the *voluntary* functions, executive, social, moral, religious and reasoning. While the sympathetic system takes cognizance of all the *involuntary* or vital functions, including the formation of the secretions—saliva, gastric fluid, etc.—digestion, circulation, respiration, assimilation and depuration. Its duties are to take care of the body, to rebuild its structures and remove the effete matter that results from the death of the atoms in all of the various classes of tissue comprising the body. It uses as its servants the teeth to masticate the food, the stomach to digest it, the absorbents and lacteals to convey its nutrient portion to the circulating system, the lungs to aerate and vitalize the blood, the heart, arteries and veins to circulate the blood, and the depurating organs—lungs, skin, liver, kidneys and bowels—for removing whatever is found in the vital domain that cannot be used in rebuilding the structures of the body. It will be noticed in this connection that whatever portion of the body is used most will be repaired and strengthened most.

In order that these repairing processes may be properly done, certain necessary conditions must be supplied. The first is a proper selection of food, which depends upon our energy and judgment. It must then be partaken of in proper quantity and at proper times, it must be properly masticated, and the stomach *must not be disturbed* by the introduction of more food or any foreign substance, excepting water, which is used inside the vital domain only as a vehicle in which to float the new material to the points of

assimilation and the effete matter to the organs for elimination; violent exertions and passionial influences disturb digestion by diverting too much energy to other parts of the body than the stomach. Food and water having been supplied, the other grand necessity, pure air, must be supplied in order that the vitalizing process of the blood-cells may be completed. If each of the necessary conditions have been supplied, the transformation of food into living atoms is completed; but if either of them is disturbed the food, instead of being available capital in the vital domain, becomes an offensive burden to be removed by a useless expenditure of vital force or nervous energy.

"God made man, and breathed into his nostrils the breath of life, and he became a living soul." Such is the account that God has given us of His own work. All the vital processes were established under the supervision of the Spirit of God, the vital intelligence that presides in the sympathetic nervous structure, and this intelligence is denominated the "SOUL," in contra-distinction to the "spirit" which presides in the cerebro-spinal structure; its (the spirit's) special centre being the superior portion of the brain, which recognizes the existence of God, the spirits of our departed friends, and a spiritual existence for ourselves. Thus we see that man was created a perfect being. The Spirit of God (God-part), the soul, remaining with him to preside over and care for the body. The brain, which is the principal organ of the cerebro-spinal structure, has a special portion of it devoted to the recognition of each special department in nature, and all that is necessary to constitute a perfectly balanced mind is to produce an evenly balanced brain structure. This is what God did, having "made man in His own image."

The brain, being the organ of the mind, and also a part of the body, wears out by the death of the atoms constituting it by thinking. And the vital intelligence or "soul" directs the circulation of the blood, which, under the law of assimilation replaces the atoms and strengthens the part. This enables us to see how the brain structure becomes unbalanced, one part becoming stronger than another by its being used most, as is illustrated in the increased development and power of the arm most used by the blacksmith.

Alcohol is a poison, and is always offensive to the vital instincts. When it is taken into the system the soul-intelligence recognizes it as a substance that can not be used in rebuilding the structures, and an effort is at once made to remove it from the vital domain. If there is not an abundance of fluid in that organ the serum from the blood is thrown into the stomach for the purpose of diluting it. It is then taken up by the absorbents, carried into the general circulation, and expelled from the vital domain through the depurating organs. Thus, we see that the vital forces are called into vigorous action, and an expenditure of force takes place. This manifestation of power has been mistaken by the medical profession for a production of it, and their teachings in our medical schools, as well as when practising has been based upon this mistaken premise. It has been stated by persons outside of the medical profession that it was the *father of intemperance*, and it is undoubtedly true that their teaching that it supplies some needed power in cases of great prostration has had very much to do in fostering the drinking usages that are so much to be deplored.

The same mistaken policy applies to many other substances used as medicines; and if it were understood that they are a most fertile cause of prostration, instead of affording strength to sick persons, a much more rational policy would soon be inaugurated. The leading minds in the profession are coming to see this in its proper light, as is shown by Sir William Gull in his testimony before the House of Lords in July 1877, when he stated, in reply to the Archbishop of York. "It was constantly my practice at Guy's hospital, if I had young subjects, not to give alcohol, for the express purpose that my students should see the course of the disease and learn how it could be cured. I cured many cases of typhus in young subjects under twenty-five years of age with *chamomile tea*."

In choosing young persons for this experiment, the Dr. conveys the idea that older patients require something to supply the vital force, which is more prominently manifested in young persons, and that alcohol is competent to supply this force. This is the place where medical men have all "stumbled" in discussing the subject of alcoholic medication. The *vital intelligence* of the great sympathetic system which the

ancients denominated the "soul," most scrupulously guards the vital domain, appropriating what is necessary to build up the structures of the body, and rejecting whatever cannot be so used, including food, provided the necessary conditions for transforming it into tissue are not supplied. A most strenuous resistance is offered to all poisons. The mode of warfare adopted will depend, (1) upon the vital power of the individual, and (2) upon the integrity or purity of the vital domain before the obnoxious substance is introduced. The effort to expel them, or their presence in the vital domain, if the vital force is inadequate to the task of expelling them, afford all the phenomena of different diseases, the nomenclature of which all are so familiar, but the nature of which is little understood even by the "lights" in the medical profession.

It will, thus be seen that the old are less able to stand the extra exertion of expelling noxious substances, whether it be alcohol or something less offensive to the vital instincts than the young. And what can be said in reference to the custom of prescribing the lighter alcoholic preparations, as wine and porter, in cases of low forms of fever and general prostration? The only effect such a course can have is to expend a percentage of the little forces they already have without any adequate return. Unfermented wine affords nourishment because it possesses food properties, but the rotting process that is necessary to produce alcohol destroys it as certainly as it would the grapes before the juice was expressed.

Under the present order of things we have come to look upon sudden death as a matter of course in the order of nature. The relation of cause and effect is quite as easily traced in this as in other matters, and it is not at all extravagant to suppose that if we obeyed the physical laws of our being, accidents excepted, we should live to a comparatively old age.

MISSIONARY NEWS—FORMOSA.

[The following letter was handed to us for publication by the Secretary of the Woman's Foreign Missionary Association.]

MY DEAR MRS. HARVIE. — In my last letter I told you that we intended going into the country to visit our chapels and that I would write you an account of it, but Mr. Junor has written such a full account of it that there is very little left for me to write about. It was for me quite an undertaking to go three days' journey into the country, and were it not that the chapels have been conveniently placed, about a day's journey apart from each other in the direction we intended to travel, it would have been impossible. I do not think that there are more than one or two among all the foreigners here who have been any distance into the country. It is of course easier for us than for any other foreigners to go into the interior, because we have our chapels to stop in over night, whereas they would have to stop in the inns, and these with the exception of the one in Tiong-Lek, a description of which Mr. Junor gave, offer nothing more than a dark damp room four or five feet square, with a board for a bed for your accommodation. Mr. McKay took us to see the best inn in Teck-cham, the principal city in North Formosa. On entering it we first came into a store or shop of some kind, then back of that into a small yard in which the pigs were kept. Out of the yard we passed into a carpenter's shop in the back part of which a door opened into the best room of the inn. On opening this and looking in we could see nothing, for it was as dark as midnight. We did not venture inside, for we had no light. Here Mr. McKay has spent many a night. I do not think he could have slept or even rested much, but it was a shelter from the rain, and I have no doubt that he was thankful for that. I might say here that pigs and dogs swarm everywhere. The pig is a special pet in a Chinese family, having the freedom of the house. The poor dogs receive but little attention; they look starved. It is the regular pariah dog of the East and looks very much like a small wolf. You can scarcely walk anywhere without a lot of them barking after you. A Chinaman is much offended if you touch his pig, but for his dog he shows no regard. At all the stations on our journey many women came to the chapels, many of them doubtless drawn by curiosity, and many more were regular attendants at worship. I was the first foreign woman that many of them had ever seen, and they were exceedingly curious to see me and examine everything I wore. My feet seemed to be especially interesting to them—to both men and women. I sup-