

and a graceful walk, and is, besides, discreet, constant, and amiable, we are obliged to love her, by a natural inclination which we cannot resist. Though such a woman has only moderate endowments of mind, she will have great influence over us. She will control our inclinations, draw our will to the side which pleases her, and by a tyranny against which we feel no disposition to rebel, she will possess herself of our hearts.

Amiability does not effect us so soon as great beauty. Its charms are slower in producing an impression, even when accompanied with a moderate degree of beauty. It requires time to love a woman whose principal attraction is her agreeable disposition: we observe her actions, we watch her conduct, we study her disposition; and, finding it congenial to our own, our love is drawn to those qualities in her which we possess ourselves. It is not so with beauty: the effect of that is often instantaneous. But, as each of the two has peculiar attractions, our sentiments are frequently divided between them. Those who are influenced only by the eye, will prefer the beauty; those who are most intellectual will be for the amiable girl. The attractions of the former do not always last; those of the latter are permanent, and sensible people hold her in most estimation.

GOLDEN SENTENCES OF LORD CLARENDON.

Lord Clarendon, the great historian of his own age, and eminent as a statesman and philosopher, is very full and decided in his reprobation of war. From his essay we extract the following admirable passages:—"Of all the punishments and judgments which the provoked anger of the divine Providence can pour out upon a nation full of transgressions, there is none so terrible and destroying as war. It is a depopulation, defaces all that art and industry hath produced, destroys all plantations, burns churches and palaces, and mingles them in the same ashes with the cottages of the peasant and the laborer. It distinguishes not of age, or sex, or dignity, but exposes all things and persons, sacred and profane, to the same contempt and confusion, and reduces all that blessed order and harmony, which hath been the product of peace and religion, into the chaos it was first in.

"A whole city on fire, is a spectacle full of horror; but a whole kingdom on fire, must be a prospect much more terrible. And such is every kingdom in war, where nothing flourishes but rapine, blood and murder. We cannot make a more lively representation and emblem to ourselves of hell, than by the view of a kingdom in war.

"It was a very proper answer to him who asked, *why any man should be delighted with beauty?* that it was a question which none but a blind man could ask. Nor can any man ask how or why men come to be delighted with peace, but he who is without natural bowels, who is deprived of all those affections which can only make life pleasant.

"No kingdom can flourish or be at ease, in which there is no peace. It is only this which makes men dwell at home, and enjoy the labour of their own hands, and improve all the advantages which the air, and the climate, and the soil administer to them, and all which yield no comfort where there is no peace. God himself reckons peace the greatest comfort and ornament he can confer upon states.

"A greater curse cannot befall the most wicked nation, than to be deprived of peace. There is nothing of real and substantial comfort in this world, but what is the product of peace; and whatsoever we may lawfully and innocently take delight in, is the fruit and effect of peace.

"War breaks all that order, interrupts all that devotion, and even extinguisheth all that zeal which peace had kindled in us. It lays waste the dwelling-place of God as well as of man, and introduces and propagates opinions and practices as much *against heaven* as against earth, and erects a deity that delights in nothing but cruelty and blood.

"Are we pleased with the enlarged commerce and society of large and opulent cities, or with the retired pleasures of the country? Do we love stately palaces, and noble houses, or take delight in pleasant groves and woods, or fruitful gardens? All this we owe to peace; and the dissolution of peace disfigures all this beauty, and in a short time covers and buries all this order and delight in ruin and rubbish.

"Finally, have we any content, satisfaction and joy in the conversation of each other, or in the knowledge and understanding of those arts and sciences which more adorn mankind than buildings and plantations do the fields and grounds on which they stand? Even this is the blessed effect and legacy of peace. War lays our natures and manners as waste as our gardens and our habitations; and we can as easily preserve the beauty of the one, as the integrity of the other, under the cursed jurisdiction of drums and trumpets.

"They who allow *no war to be lawful*, have consulted both nature and religion much better than they who think it may be entered into to comply with the ambition, covetousness or revenge of the greatest princes and monarchs upon earth; as if God had inhibited *only single murders*, and left mankind to be massacred according to the humor and appetite of unjust and unreasonable men.

"It is no answer to say, that this universal suffering, and even the desolation that attends it, are the inevitable consequences of war, however warrantably soever entered into, but rather an argument, that no war can warrantably be entered into. It may be, *upon a strict survey and disquisition into the elements and injunctions of the Christian religion that no war will be found justifiable*; and, at all events, what can we think of most of those wars which for some hundreds of years have infested the world, so much to the dishonor of Christianity, and in which the lives of more men have been lost than might have served to have driven infidelity out of the world, and to have peopled all those parts which yet remain without inhabitants? Can we believe that all those lives are forgotten, and that no account shall be rendered of them!"

"We may piously believe, that all the princes of the world who have wantonly obliged their subjects to serve them in a war by which millions of men have been exposed to slaughter, fire and famine, will sooner find remission for all the other sins they have committed, than for that obstinate outrage against the life of man, and the murders which have been committed by their authority.—*Clarendon's Essays, XX, XXI, pp. 236—253.*

For the Pearl.

PHYSIOLOGY.—No. VI.

We are now to enter into a more minute consideration of the particular structures and their products: and to make the enquiry as simple as possible, we may first examine those organs whose office it is to assimilate the particles of food introduced into the body, or in other words, to perform the function of nutrition. And perhaps this would be rendered more intelligible, if we trace the history of a morsel of food, from the period when introduced into the mouth, until we find its nutritious particles constituting a part of the body. This recital will, of course, include the respective phenomena of digestion, absorption, circulation and respiration, and secretion. Suppose then a morsel of food (either vegetable or animal) taken into the mouth, there to be masticated by the teeth, mixed with the fluid called saliva, which is prepared from the blood by small bodies called glands, situated near the cavity of the mouth, and which pour therein, by means of their ducts or conduits, the fluid above named. The morsel having been sufficiently masticated, is now, by means of the tongue, conveyed to the back of the mouth, and thence into the gullet, through which it descends into the stomach, there to undergo an important change. The stomach is a membranous bag, lined on the inner side by a covering, which prepares a peculiar juice, which is here intimately mixed with the food:—but besides this mixture, the stomach breaks down, and renders pulpy the substance introduced; this process is not always effected in a uniform period, some food requiring a longer time than others, and hence they are said to be less easy of digestion. The food then is retained here till thus changed, by a peculiar structure placed at the outlet; but when this is effected it is passed through into the first portion of the intestine, called the *duodenum*, (a word signifying twelve fingers breadth, that being the length of the part thus named); and here is added the bile, a fluid furnished by the liver: and also the juice supplied by the pancreas. Having passed through the duodenum, the mass now enters the small intestines; the inner surface of these is everywhere studded with minute glands, which absorb or suck up the nutritious particles, from the *chyme*, (the name given to the fluid after its admixture with the various fluids as above described) as it passes along. This process is continued, until the whole of the nutriment is extracted, when the residue is passed into the large intestines, and thus conveyed from the body. The glands which have extracted the nutritious particles, convey them, by means of their ducts, to a common receptacle; from thence, another tube or duct leads upward to a vein in the neighborhood of the heart, and thus they are conveyed to that organ, mixed with the blood of the vein. But they are not yet fitted to make a component part of the human frame, till after they have been submitted to the action of the air in the lungs; and to effect this, after having been received into the heart, they are propelled by that organ into the lungs; here they receive a supply of oxygen from the air; are then again carried to the heart,—mixed of course with the general mass of blood, which they now resemble in every particular. From the heart they are again propelled and circulated to every part of the system, by means of the arteries; and having arrived at the ultimate subdivision of these, they are by some secret of nature, changed into living fibre, and constitute a part of the body, either as muscle, nerve, bone, etc. or any other structure to which they may have been conveyed. Thus we have traced the process by which new matter is added. But, since our bodies do not daily increase in bulk, to the amount of new matter thus added, it is evident that there must also be a continual abstracting, or wasting:—and this is effected in various ways, by perspiration, by glands, which separate from the blood parts that are no longer useful, by actual wearing away of the surface,—as the external layer of the skin, the hair, nails, etc. But we must return again to this, after reviewing more closely the process of nutrition, and the organs which perform it. The length of the digestive tube in man is about thirty-six feet. In animals which live entirely upon *vegetables*, it is comparatively longer; and on the other hand, it

is considerably shorter in those whose food has been altogether *animal*. This, as well as the construction of the teeth and other parts, clearly indicates that Man has been wisely, and admirably adapted, so as to receive nutriment from either of these sources, notwithstanding the outcry made by some against animal, and of more against vegetable food. The coats of the tube are of three kinds, the outer one is very thin, and covered with a serous fluid,—the next is composed of a series of muscular fibres, some of which surround the tube like rings, others extend lengthwise; by the action of these, the food is continually pressed upon, and forced gently onwards; the inner layer is what is called a mucous membrane, the structure of it varies in different parts of the canal; it does not, like the other layers, present a continuous smooth surface, but is formed into innumerable folds or puckers, and by this arrangement, two important ends are effected; in the first place a larger surface is presented for the absorbent glands, and these puckers also serve the purpose of valves, and prevent the food being passed too quickly onward. In the stomach, the glands of the mucous membrane secrete the peculiar juice which alters the food and renders it an homogeneous mass; but in the small intestines, there are glands which imbibe the particles that are nutritive, these latter are termed absorbent glands. The muscular coat of the intestines, is not like other muscles, subject to the action of the will. This is sufficiently evident; for the digestive process is carried on as well while we sleep, as if awake:—and were it not for this wise ordination of Providence, this most important function of life, would be liable to continual interruptions. The fluids which are poured upon and mixed with the food during digestion, are prepared from the blood by bodies called glands:—these are essentially the same in their structure, but vary in their products. In the embryo, when these glandular bodies are being formed, the first thing noticed, is a simple indentation of a membrane, forming a sort of tube, to which an artery, vein, and nerve, are supplied; the artery carries to it the blood, which is to furnish the material from whence the new product is to be formed;—the vein, to carry away the superfluous quantity; the nerve to endue it with sensation, and connect it with the system; this is the simple elementary form of a gland,—and if we analyze one of the larger glandular bodies, we shall find that it is only a collection of these smaller elementary tubes. The blood vessels do not open into these tubes, but ramify or subdivide on their surfaces, and by some process unknown to us; the peculiar principle is separated which it is the office of the gland to prepare.

KNOW THYSELF.—The idea of men in general being taught natural philosophy, anatomy, and physiology, political economy, and the other sciences that expound the natural laws, has been sneered at, as utterly absurd and ridiculous. But I would ask, in what occupations are human beings so urgently engaged, that they have no leisure to bestow on the Creator's laws? A course of natural philosophy would occupy sixty or seventy hours in the delivery; a course of anatomy and physiology the same; and a course of phrenology can be delivered pretty fully in forty hours! These twice or thrice repeated, would serve to initiate the student, so that he could afterward advance in the same paths, by the aid of observation and books. Is life, then, so brief, and are our hours so urgently occupied by higher and more important duties, that we cannot afford these pittance of time to learn the laws that regulate our existence? No! The only difficulty is in obtaining the *desire* for the knowledge; for when that is attained, time will not be wanting. No idea can be more preposterous, than that of human beings having no time to study and obey the natural institutions. These laws punish so severely when neglected, that they cause the offender to lose ten fold more time in undergoing his chastisement than would be requisite to obey them.—*Combe on the Constitution of Man.*

ARGUMENT FOR A FUTURE STATE.—Dr. Nichols concludes his remarkable work on the "Architecture of the Heavens," with the following sublime and cheering reflection:—"This at least is established on grounds not to be removed. In the vast heavens, as well as among phenomena around us, all things are in a state of change and progress; there too—on the sky—in splendid hieroglyphics, the truth is inscribed, that the grandest forms of present being are only germs swelling and bursting with a life to come. And if the universal fabric is thus fixed and constituted, can we imagine that aught which it contains is upheld by the same preserving law, that annihilation is a possibility, real or virtual—the stoppage of the career of any advancing being while hospitable infinitude remains? No! let night fall; it prepares a dawn when man's weariness will have ceased, and his soul be refreshed and restored. To some? To every creature these are words of hope spoken in an organ-tone; our hearts suggest them and the stars repeat them, and through the infinite, aspiration wings its way rejoicing as an eagle follows the sun."

AN ECCENTRIC PHYSICIAN.—A poor woman went to an eminent but eccentric surgeon, to enquire what was the proper treatment for some bodily wound—"Put on a cataplasm," was the answer. "But doctor, it's for a child." "Then put on a kittenplasm."