On the Workmanship of God, or the Formation of Man

Lactantius (c. AD 250–325)

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Chapter I.-The Introduction, and Exhortation to Demetrianus.

How disturbed I am, and in the greatest necessities, you will be able to judge from this little book which I have written to you, Demetrianus, almost in unadorned words, as the mediocrity of my talent permitted, that you might know my daily pursuit, and that I might not be wanting to you, even now an instructor, but of a more honourable subject and of a better system. For if you afforded yourself a ready hearer in literature, which did nothing else than form the style, how much more teachable ought you to be in these true studies, which have reference even to the life! And I now profess to you, that I am hindered by no necessity of circumstance or time from composing something by which the philosophers of our sect which we uphold may become better instructed and more learned for the future, although they now have a bad reputation, and are commonly reproved, as living otherwise than is befitting for wise men, and as concealing their vices under the covering of a name; whereas they ought either to have remedied them, or to have altogether avoided them, that they might render the name of wisdom happy and uncorrupted, their life itself agreeing with their precepts. I, however, shrink from no labour that I may at once instruct ourselves and others. For I am not able to forget myself, and especially at that time when it is most necessary for me to remember; as also you do not forget yourself, as I hope and wish. For although the necessity of the state may turn you aside from true and just works, yet it is impossible that a mind conscious of rectitude should not from time to time look to the heaven.

I indeed rejoice that all things which are esteemed blessings turn out prosperously to you, but only on condition of their changing nothing of your state of mind. For I fear lest custom and the pleasantness of these subjects should, as usually happens, creep by degrees into your mind. Therefore I advise you, ”And repeating it, will again and again advise you,”

not to believe that you have these enjoyments of the earth as great or true blessings, since they are not only deceitful because they are doubtful, but also treacherous because they are pleasant. For you know how crafty that wrestler and adversary of ours is, and also often violent, as we now see that he is. He employs all these things which are able to entice as snares, and with such subtilty that they escape the notice of the eyes of the mind, so that they

cannot be avoided by the foresight of man. Therefore it is the highest prudence to advance step by step, since he occupies the passes on both sides, and secretly places stumbling-blocks for our feet. Accordingly I advise you, either to disregard, if you are able according to your virtue, your prosperity in which you live, or not to admire it greatly. Remember your true parent, and in what city you have given your name, and of what rank you have been. You understand assuredly what I say. For I do not charge you with pride, of which there is not even a suspicion in your case; but the things which I say are to be referred to the mind, not to the body, the whole system of which has been arranged on this account, that it may be in subjection to the soul as to a master, and may be ruled by its will. For it is in a certain manner an earthen vessel in which the soul, that is, the true man himself, is contained, and that vessel indeed not made by Prometheus, as the poets say, but by that supreme Creator and Artificer of the world, God, whose divine providence and most perfect excellence it is neither possible to comprehend by the perception, nor to express in word.

I will attempt, however, since mention has been made of the body and soul, to explain the nature of each, as far as the weakness of my understanding sees through; and I think that this duty is especially to be undertaken on this account, because Marcus Tullius, a man of remarkable talent, in his fourth book on the Republic, when he had attempted to do this, concluded a subject of wide extent within narrow limits, lightly selecting the chief points. And that there might be no excuse, because he had not followed up this subject, he testified that neither inclination nor attention had been wanting to him. For in his first book concerning the Laws, when he was concisely summing up the same subject, he thus spoke: "Scipio, as it appears to me, has sufficiently expressed this subject in those books which you have read. Afterwards, however, in his second book concerning the Nature of the Gods, he endeavoured to follow up the same subject more extensively. But since he did not express it sufficiently even there, I will approach this office, and will take upon myself boldly to explain that which a man of the greatest eloquence has almost left untouched.

Perhaps you may blame me for attempting to discuss something in matters of obscurity, when you see that there have been men of such rashness who are commonly called philosophers, that they scrutinized those things which God willed to be abstruse and hidden, and investigated the nature of things in heaven and on earth, which are far removed from us, and cannot be examined by the eyes, nor touched by the hand, nor perceived by the senses; and yet they so dispute concerning the nature of these things, as to wish that the things, which they bring forward may appear to be proved and known. What reason is there, I pray, why any one should think it an invidious thing in us, if we wish to look into and contemplate the system of our body, which is not altogether obscure, because from the very offices of the limbs, and the uses of the several parts, it is permitted us to understand with what great power of providence each part has been made?

Chapter II.-Of the Production of the Beasts and of Man.

For our Creator and Parent, God, has given to man perception and reason, that it might be evident from this that we are descended from Him, because He Himself is intelligence, He Himself is perception and reason. Since He did not give that power of reason to the other animals, He provided beforehand in what manner their life might be more safe. For He clothed them all with their own natural hair, in order that they might more easily be able to endure the severity of frosts and colds. Moreover, He has appointed to every kind its own peculiar defence for the repelling of attacks from without; so that they may either oppose the stronger animals with natural weapons, or the feebler ones may withdraw themselves from danger by the swiftness of their flight, or those which require at once both strength and swiftness may protect themselves by craft, or guard themselves in hiding-places. And so others of them either poise themselves aloft with light plumage, or are supported by hoofs, or are furnished with horns; some have arms in their mouth-namely, their teeth -or hooked talons on their feet; and none of them is destitute of a defence for its own protection.

But if any fall as a prey to the greater animals, that their race might not utterly perish, they have either been banished to that region where the greater ones cannot exist, or they have received a more abundant fruitfulness in production, that food might be supplied from them to the beasts which are nourished by blood, and yet their very multitude might survive the slaughter inflicted upon them, so as to preserve the race. But He made man-reason being granted to him, and the power of perceiving and speaking being given to him-destitute of those things which are given to the other animals, because wisdom was able to supply those things which the condition of nature had denied to him. He made him naked and defenceless, because he could be armed by his talent, and clothed by his reason. But it cannot be expressed how wonderfully the absence of those things which are given to the brutes contributes to the beauty of man. For if He had given to man the teeth of wild beasts, or horns, or claws, or hoofs, or a tail, or hairs of various colour, who cannot perceive how misshapen an animal he would be, as the dumb animals, if they were made naked and defenceless? For if you take from these the natural clothing of their body, or those things by which they are armed of themselves, they can be neither beautiful nor safe, so that they

appear wonderfully furnished if you think of utility, and wonderfully adorned if you think of appearance: in such a wonderful manner is utility combined with beauty.

But with reference to man, whom He formed an eternal and immortal being, He did not arm him, as the others, without, but within; nor did He place his protection in the body, but in the soul: since it would have been superfluous, when He had given him that which was of the greatest value, to cover him with bodily defences, especially when they hindered the beauty of the human body. On which account I am accustomed to wonder at the senselessness of the philosophers who follow Epicurus, who blame the works of nature, that they may show that the world is prepared and governed by no providence; but they ascribe the origin of all things to indivisible and solid bodies, from the fortuitous meetings of which they say that all things are and were produced. I pass by the things relating to the work itself with which they find fault, in which matter they are ridiculously mad; I assume that which belongs to the subject of which we are now treating.

Chapter III.-Of the Condition of the Beasts and Man.

They complain that man is born in a more feeble and frail condition than that in which the other animals are born: for that these, as soon as they are produced from the womb, immediately raise themselves on their feet, and express their joy by running to and fro, and are at once fit for enduring the air, inasmuch as they have come forth to the light protected by natural coverings; but man, on the contrary, being naked and defenceless, is cast forth, and driven, as it were, from a shipwreck, to the miseries of this life; who is neither able to move himself from the place where he has been born, nor to seek the nourishment of milk, nor to endure the injury of time. Therefore they say that Nature is not the mother of the human race, but a stepmother, who has dealt so liberally with the dumb creation, but has so produced man, that, without resources, and without strength, and destitute of all aid, he can do nothing else than give tokens of the state of his frailty by wailing and lamentations; "as well he may, whose destiny it is to go through in life so many ills."

And when they say these things they are believed to be very wise, because every one without consideration is displeased with his own condition; but I contend that they are never more foolish than when they say these things. For when I consider the condition of things, I understand that nothing ought to have been otherwise than it is-not to say could have been otherwise, for God is able to do all things: but it must be, that that most provident majesty made that which was better and more right.

I should like, therefore, to ask those censurers of the divine works, what they think to be wanting in man, on account of his being born in a more feeble condition. Do they think that men are, on this account, brought up worse? Or that they advance the less to the greatest strength of age? Or that weakness is a hindrance to their growth or safety, since reason bestows the things which are wanting? But, they say, the bringing up of man costs the greatest labours: in truth, the condition of the brute creation is better, because all these, when they have brought forth their young, have no care except for their own food; from which it is effected that, their teats being spontaneously distended, the nourishment of milk is supplied to their offspring, and that they seek this nourishment by the compulsion of nature, without any trouble on the part of the mothers. How is it with birds, which have

a different nature? do they not undergo the greatest labours in bringing up their young, so that they sometimes appear to have something of human intelligence? For they either build their nests of mud, or construct them with twigs and leaves, and they sit upon the eggs without taking food; and since it has not been given to them to nourish their young from their own bodies, they convey to them food, and spend whole days in going to and fro in this manner; but by night they defend, cherish, and protect them. What more can men do?

unless it be this only, that they do not drive away their young when grown up, but retain them bound by perpetual relationship and the bond of affection. Why should I say that the offspring of birds is much more fragile than that of man? Inasmuch as they do not bring forth the animal itself from the body of the mother, but that which, being warmed by the nourishment and heat of the body of the mother, produces the animal; and this, even when animated by breath, being unfledged and tender, is not only without the power of flying, but even of walking. Would he not, therefore, be most senseless, if any one should think that nature has dealt badly with birds, first, because they are twice born, and then because they are so weak, that they have to be nourished by food sought with labour by their parents? But they select the stronger, and pass by the more feeble animals.

I ask, therefore, from those who prefer the condition of the beasts to their own, what they would choose if God should give them the choice: would they prefer the wisdom of man together with his weakness, or the strength of the beasts together with their nature? In truth, they are not so much like the beasts as not to prefer even a much more fragile condition, provided that it be human, to that strength of theirs unattended with reason. But, in truth, prudent men neither desire the reason of man together with frailty, nor the strength of the dumb animals without reason. Therefore it is nothing so repugnant or contradictory, that either reason or the condition of nature should of necessity prepare each animal. If it is furnished with natural protection, reason is superfluous. For what will it contrive? What will it do? Or what will it plan? Or in what will it display that light of the intellect, when Nature of its own accord grants those things which are able to be the result of reason? But if it be endued with reason, what need will there be of defences for the body, when reason once granted is able to supply the office of nature? And this has such power for the adorning and protection of man, that nothing greater or better can be given by God.

Finally, since man is possessed of a body which is not great, and of slight strength, and of infirm health, nevertheless, since he has received that which is of greater value, he is better equipped than the other animals, and more adorned. For though he is born frail and feeble, yet he is safe from all the dumb animals, and all those which are born with greater strength, though they are able to bear patiently the inclemency of the sky, yet are unable to be safe from man. Thus it comes to pass that reason bestows more on man than nature does on the dumb animals; since, in their case, neither greatness of strength nor firmness of body can prevent them from being oppressed by us, or from being made subject to our power.

Can any one, then, when he sees that even elephants, with their vast bodies and strength, are subservient to man, complain respecting God, the Maker of all things, because he has

received moderate strength, and a small body; and not estimate according to their deserts the divine benefits towards himself, which is the part of an ungrateful man, or (to speak more truly) of a madman? Plato, I believe, that he might refute these ungrateful men, gave thanks to nature that he was born a man. How much better and more soundly did he act, who perceived that the condition of man was better, than they did who would have preferred that they had been born beasts! For if God should happen to change them into those animals whose condition they prefer to their own, they would now immediately desire to return to their previous state, and o would with great outcries eagerly demand their former condition, because strength and firmness of body are not of such consequence that you should be without the office of the tongue; or the free course of birds through the air, that you should be without the hands. For the hands o are of greater service than the lightness and use n of the wings; the tongue is of greater service y than the strength of the whole body. What h madness is it, therefore, to prefer those things which, if they were given, you would refuse to receive!

Chapter IV.-Of the Weakness of Man.

They also complain that man is liable to diseases, and to untimely death. They are indignant, it appears, that they are not born gods.By no means, they say; but we show from this, that man was made with no foresight, which ought to have been otherwise. What if I shall show, that this very thing was foreseen with great reason, that he might be able to be harassed by diseases, and that his life might often be cut short in the midst of its course? For, since God had known that the animal which He had made, of its own accord passed to death, that it might be capable of receiving death itself, which is the dissolution of nature, He gave to it frailty, which might find an approach for death in order to the dissolution of the animal. For if it had been of such strength that disease and sickness could not approach it, not even could death, since death is the consequence of diseases. But how could a premature death be absent from him, for whom a mature death had been appointed? Assuredly they wish that no man should die, unless when he has completed his hundredth year. How can they maintain their consistency in so great an opposition of circumstances? For, in order that no one may be capable of dying before a hundred years, something of the strength which is immortal must be given to him; and when this is granted, the condition of death must necessarily be excluded.

But of what kind can that be, which can render a man firm and impregnable against diseases and attacks from without? For, inasmuch as he is composed of bones, and nerves, and flesh, and blood, which of these can be so firm as to repel frailty and death? That man, therefore, may not be liable to dissolution before that time which they think ought to have been appointed for him, of what material will they assign to him a body? All things which can be seen and touched are frail. It remains that they seek something from heaven, since there is nothing on earth which is not weak. Since, therefore, man had to be so formed by God, that he should at some time be mortal, the matter itself required that he should be made with a frail and earthly body. It is necessary, therefore, that he should at some time receive death, since he is possessed of a body; for everybody is liable to dissolution and to death. Therefore they are most foolish who complain of premature death, since the condition of nature makes a place for it. Thus it will follow that he is subject also to diseases;

for nature does not admit that infirmity can be absent from that body which is at some time to undergo dissolution.

But let us suppose it to be possible, as they wish, that man is not born under those conditions by which he is subject to disease or death, unless, having completed the course of his life, he shall have arrived at the extremity of old age. They do not, therefore, see what would be the consequence if it were so arranged, that it would be plainly impossible to die at another time; but if any one can be deprived of nourishment by another, it will be possible for him to die. Therefore the case requires that man, who cannot die before an appointed day, should have no need of the nourishment of food, because it may be taken from him; but if he shall have no need of food, he will now not be a man, but will become a god. Therefore, as I have already said, they who complain of the frailty of man, make this complaint especially, that they were not born immortal and everlasting. No one ought to die unless he is old. On this account, in truth, he ought to die, because he is not God. But mortality cannot be united with immortality: for if a man is mortal in old age, he cannot be immortal in youth; neither is the condition of death foreign to him who is at some time about to die; nor is there any immortality to which a limit is appointed.

Thus it comes to pass, that the exclusion of immortality for ever, and the reception of mortality for a time, place man in such a condition that he is at some time mortal.

Therefore the necessity is in all points suitable, that he ought not to have been otherwise than he is, and that it was impossible. But they do not see the order of consequences, because they have once committed an error in the main point itself. For the divine providence having been excluded from the affairs of men, it necessarily followed that all things were produced of their own accord. Hence they invented the notion of those blows and fortuitous meetings together of minute seeds, because they did not see the origin of things. And when they had thrown themselves into this difficulty, necessity now compelled them to think that souls were born together with bodies, and in like manner were extinguished together with bodies; for they had made the assumption, that nothing was made by the divine mind. And they were unable to prove this in any other way, than by showing that there were some things in which the system of providence appeared to be at fault. Therefore they blamed those things in which providence wonderfully expressed its divinity, as those things which I have related concerning diseases and premature death; whereas they ought to have considered, these things being assumed, what would be the necessary consequences (but those things which I have spoken are the consequences) if he were not liable to diseases, and did not require a dwelling, nor clothing. For why should he fear the winds, or rains, or colds, the power of which consists in this, that they bring diseases?

For on this account he has received wisdom, that he may guard his frailty against things that would injure him. The necessary consequence is, that since he is liable to diseases for the sake of retaining his wisdom, he must also be liable to death; because he to whom death does not come, must of necessity be firm. But infirmity has in itself the condition of death;

but where there shall be firmness, neither can old age have any place, nor death, which follows old age.

Moreover, if death were appointed for a fixed age, man would become most arrogant, and would be destitute of all humanity. For almost all the rights of humanity, by which we are united with one another, arise from fear and the consciousness of frailty. In short, all the more feeble and timid animals herd together, that, since they are unable to protect themselves by strength, they may protect themselves by their multitude; but the stronger animals seek solitudes, since they trust in their force and strength. If man also, in the same manner, had sufficient strength for the repelling of dangers, and did not stand in need of the assistance of any other, what society would there be? Or what system? What humanity? Or what would be more harsh than man? What more brutal? What more savage? But since he is feeble, and not able to live by himself apart from man, he desires society, that his life, passed in intercourse with others, may become both more adorned and more safe. You see, therefore, that the whole reason of man centres most of all in this, that he is born naked and fragile, that he is attacked by diseases, that he is punished by premature death. And if these things should be taken away from man, reason also, and wisdom, must necessarily be taken away. But I am discussing too long respecting things which are manifest, since it is clear that nothing ever was made, or could have been made, without providence.

And if I should now wish to discuss respecting all its works in order, the subject would be infinite. But I have purposed to speak so much concerning the body of man only, that I may show in it the power of divine providence, how great it has been in those things only which are easy of comprehension and open; for those things which relate to the soul can neither be subjected to the eyes, nor comprehended. Now we speak concerning the vessel itself of man, which we see.

Chapter V.-Of the Figures and Limbs of Animals.

In the beginning, when God was forming the animals, He did not wish to conglobate and collect them into a round shape, that they might be able easily to put themselves in motion for walking, and to turn themselves in any direction; but from the highest part of the body He lengthened out the head. He also carried out to a greater length some of the limbs, which are called feet, that, being fixed on the ground with alternate motions, they might lead forward the animal wherever his inclination had borne him, or the necessity of seeking food had called him. Moreover, He made four limbs standing out from the very vessel of the body: two behind, which are in all animals-the feet; also two close to the head and neck, which supply various uses to animals. For in cattle and wild beasts they are feet like the hinder ones; but in man they are hands, which are produced not for walking, but for acting and controlling. There is also a third class, in which those former limbs are neither feet nor hands; but wings, which, having feathers arranged in order, supply the use of flying. Thus one formation has different forms and uses; and that He might firmly hold together the density itself of the body, by binding together greater and small bones, He compacted a kind of keel, which we call the spine;

and He did not think fit to form it of one continued bone, lest the animal should not have the power of walking and bending itself. From its middle part, as it were, He has extended in a different direction transverse and fiat bones, by which, being slightly curved, and almost drawn together to themselves as into a circle, the inward organs may be covered, that those parts which needed to be soft and less strong might be protected by the encircling of a solid framework. Bat at the end of that joining together which we have said to resemble the keel of a ship, He placed the head, in which might be the government of the whole living creature; and this name was given to it, as indeed Varro writes to Cicero, because from this the senses and the nerves take their beginning.

But those parts, which we have said to be lengthened out from the body, either for the sake of walking, or of acting, or of flying, He would have to consist of bones, neither too long, for the sake of rapidity of motion, nor too short, for the sake of firmness, but of a few, and those large. For either they are two as in man, or four as in a quadruped. And these He did

not make solid, lest in walking sluggishness and weight should retard; but He made them hollow, and full of marrow within, to preserve the vigour of the body. And again, He did not make them equally extended to the end; but He conglobated their extremities with coarse knots, that they might be able more easily to be bound with sinews, and to be turned more easily, from which they are called joints. These knots He made firmly solid, and covered with a soft kind of covering, which is called cartilage; for this purpose, that they might be bent without galling or any sense of pain. He did not, however, form these after one fashion. For He made some simple and round into an orb, in those joints at least in which it was befitting that the limbs should move in all directions, as in the shoulders, since it is necessary that the hands should move and be twisted about in any direction;

but others He made broad, and equal, and round towards one part, and that plainly in those places where only it was necessary for the limbs to be bent, as in the knees, and in the elbows, and in the hands themselves. For as it was at the same time pleasant to the sight, and useful, that the hands should move in every direction from that position from which they spring; so assuredly, if this same thing should happen to the elbows, a motion of that kind would be at once superfluous and unbecoming. For then the hand, having lost the dignity which it now has, through its excessive flexibility, would appear like the trunk of an elephant; and man would be altogether snake-handed, -an instance of which has been wonderfully effected in that monstrous beast.

For God, who wished to display His providence and power by a wonderful variety of many things, inasmuch as He had not extended the head of that animal to such a length that he might be able to touch the earth with his mouth, which would have been horrible and hideous, and because He bad so armed the mouth itself with extended tusks, that even if he touched the earth the tusks would still deprive him of the power of feeding, He lengthened out between these from the top of the forehead a soft and flexible limb, by which he might be able to grasp and lay hold of anything, lest the prominent magnitude of the tusks, or the shortness of the neck, should interfere with the arrangement for taking food.

Chapter VI.-Of the Error of Epicurus, and of the Limbs and Their Use.

I cannot here be prevented from again showing the folly of Epicurus. For all the ravings of Lucretius belong to him, who, in order that he might show that animals are not produced by any contrivance of the divine mind, but, as he is wont to say, by chance, said that in the beginning of the world innumerable other animals of wonderful form and magnitude were produced; but that they were unable to be permanent, because either the power of taking food, or the method of uniting and generating, had failed them. It is evident that, in order to make a place for his atoms flying about through the boundless and empty space, he wished to exclude the divine providence. But when he saw that a wonderful system of providence is contained in all things which breathe, what vanity was it (O mischievous one!) to say that there had been animals of immense size, in which the system of production ceased!

Since, therefore, all things which we see are produced with reference to a plan-for nothing but a plan can effect this very condition of being born-it is manifest that nothing could have been born without a plan. For it was previously foreseen in the formation of everything, how it should use the service of the limbs for the necessaries of life; and how the offspring, being produced from the union of bodies, might preserve all living creatures by their several species. For if a skilful architect, when he designs to construct some great building, first of all considers what will be the effect of the complete building, and previously ascertains by measurement what situation is suitable for a light weight, in what place a massive part of the structure will stand, what will be the intervals between the columns, what or where will be the descents and outlets of the falling waters and the reservoirs,-he first, I say, foresees these things, that he may begin together with the very foundations whatever things are necessary for the work when now completed,-why should any one suppose that, in the contrivance of animals, God did not foresee what things were necessary for living, before giving life itself? For it is manifest that life could not exist, unless those things by which it exists were previously arranged.

Therefore Epicurus saw in the bodies of animals the skill of a divine plan; but that he might carry into effect that which he had before imprudently assumed, he added another absurdity agreeing with the former. For he said that the eyes were not produced for seeing, nor the ears for hearing, nor the feet for walking, since these members were produced before there was the exercise of seeing, hearing, and walking; but that all the offices of these members arose from hem after their production. I fear lest the refutation of such extravagant and ridiculous stories should appear to be no less foolish; but it pleases me to be foolish, since we are dealing with a foolish man, lest he should think himself too clever. What do you say, Epicurus? Were not the eyes produced for seeing? Why, then, do they see? Their use, he says, afterwards showed itself. Therefore they were produced for the sake of seeing, since they can do nothing else but see. Likewise, in the case of the other limbs, use itself shows for what purpose they were produced. For it is plain that this use could have no existence, unless all the limbs had been made with such arrangement and foresight, that they might be able to have their use.

For what if you should say, that birds were not made to fly, nor wild beasts to rage, nor fishes to swim, nor men to be wise, when it is evident that living creatures are subject to that natural disposition and office to which each was created? But it is evident that he who has lost the main point itself of the truth must always be in error. For if all things are produced not by providence, but by a fortuitous meeting together of atoms, why does it never happen by chance, that those first principles meet together in such a way as to make an animal of such a kind, that it might rather hear with its nostrils, smell with its eyes, and see with its ears? For if the first principles leave no kind of position untried, monstrous productions of this kind ought daily to have been brought forth, in which the arrangement of the limbs might be distorted, and the use far different from that which prevails. But since all the races of animals, and all the limbs, observe their own laws and arrangements, and the uses assigned to them, it is plain that nothing is made by chance, since a perpetual arrangement of the divine plan is preserved. But we will refute Epicurus at another time. Now let us discuss the subject of providence, as we have begun.

Chapter VII.-Of All the Parts of the Body.

God therefore connected and bound together the parts which strengthen the body, which we call bones, being knotted and joined to one another by sinews, which the mind might make use of, as bands, if it should wish to hasten forward or to lag behind; and, indeed, without any labour or effort, but with a very slight inclination, it might moderate and guide the mass of the whole body. But He covered these with the inward organs, as was befitting to each place, that the parts which were solid might be enclosed and concealed. Also He mixed with the inward organs, veins as streams divided through the whole body, through which the moisture and the blood, running in different directions, might be-dew all the limbs with the vital juices; and He fashioned these inward organs after that manner which was befitting to each kind and situation, and covered them with skin drawn over them, which He either adorned with beauty only, or covered with thick hair, or fenced with scales, or adorned with brilliant feathers. But that is a wonderful contrivance of God, that one arrangement and one state exhibits innumerable varieties of animals. For in almost all things which breathe there is the same connection and arrangement of the limbs. For first of all is the head, and annexed to this the neck; also the breast adjoined to the neck, and the shoulders projecting from it, the belly adhering to the breast; also the organs of generation subjoined to the belly; in the last place, the thighs and feet.

Nor do the limbs only keep their own course and position in all, but also the parts of the limbs. For in the head itself alone the ears occupy a fixed position the eyes a fixed position likewise the nostrils, the mouth also, and in itthe teeth and tongue. And though all these things are the same in all animals, yet there is an infinite and manifold diversity of the things formed; because those things of which I have spoken, being either more drawn out or more contracted, are comprehended by lineaments differing in various ways. What! is not that divine, that in so great a multitude of living creatures each animal is most excellent in its own class and species?-so that if any part should be taken from one to another, the necessary result would be, that nothing would be more embarrassed for use, nothing more unshapely to look upon; as if you should give a prolonged neck to an elephant, or a short neck to a camel; or if you should attach feet or hair to serpents, in which the length of the body equally stretched out required nothing else, except that being marked as to their backs

with spots, and supporting themselves by their smooth scales, with winding courses they should glide into slippery tracts.

But in quadrupeds the same designer lengthened out the arrangement of the spine, which is drawn out from the top of the head to a greater length on the outside of the body, and pointed it into a tail, that the parts of the body which are offensive might either be covered on account of their unsightliness, or be protected on account of their tenderness, so that by its motion certain minute and injurious animals might be driven away from the body; and if you should take away this member, the animal would be imperfect and weak. But where there is reason and the hand, that is not so necessary as a covering of hair. To such an extent are all things most befittingly arranged, each in its own class, that nothing can be conceived more unbecoming than a quadruped which is naked, or a man that is covered.

But, however, though nakedness itself on the part of man tends in a wonderful manner to beauty, yet it was not adapted to his head; for what great deformity there would be in this, is evident from baldness. Therefore He clothed the head with hair; and because it was about to be on the top, He added it as an ornament, as it were, to the highest summit of the building. And this ornament is not collected into a circle, or rounded into the figure of a cap, lest it should be unsightly by leaving some parts bare; but it is freely poured forth in some places, and with drawn in others, according to the comeliness of each place. Therefore, the forehead entrenched by a circumference, and the hair put forth from the temples before the ears, and the uppermost parts of these being surrounded after the manner of a crown, and all the back part of the head covered, display an appearance of wonderful comeliness. Then the nature of the beard contributes in an incredible degree to distinguish the maturity of bodies, or to the distinction of sex, or to the beauty of manliness and strength; so that it appears that the system of the whole work would not have been in agreement, if anything had been made otherwise than it is.

Chapter VIII.-Of the Parts of Man: the Eyes and Ears.

Now I will show the plan of the whole man, and will explain the uses and habits of the several members which are exposed to view in the body, or concealed. When, therefore, God had determined of all the animals to make man alone heavenly, and all the rest earthly, He raised him erect to the contemplation of the heaven, and made him a biped, doubtless that he might look to the same quarter from which he derives his origin; but He depressed the others to the earth, that, inasmuch as they have no expectation of immortality, being cast down with their whole body to the ground, they might be subservient to their appetite and food. And thus the right reason and elevated position of man alone, and his countenance, shared with and closely resembling God his Father, bespeak his origin and Maker. His mind, nearly divine, because it has obtained the rule not only over the animals which are on the earth, but even over his own body, being situated in the highest part, the head, as in a lofty citadel, looks out upon and observes all things. He formed this its palace, not drawn out and extended, as in the case of the dumb animals, but like an orb and a globe, because all roundness belongs to a perfect plan and figure. Therefore the mind and that divine fire is covered with it, as with a vault; and when He had covered its highest top with a natural garment, He alike furnished and adorned the front part which is called the, face, with the necessary services of the members.

And first, He closed the orbs of the eyes with concave apertures, from which boring ' Varro thought that the forehead derived its name; and He would have these to be neither less nor more than two, because no number is more perfect as to appearance than that of two: as also He made the ears two, the doubleness of which bears with it an incredible degree of beauty, both because each part is adorned with a resemblance, and that voices coming from both sides may more easily be collected. For the form itself is fashioned after a wonderful manner: because He would not have their apertures to be naked and uncovered, which would have been less becoming and less useful; since the voice might fly beyond the narrow space of simple caverns, and be scattered, did not the apertures themselves confine it, received through hollow windings and kept back from reverberation, like those small vessels, by the application of which narrow-mouthed vessels are accustomed to be filled.

These ears, then, which have their name from the drinking in of voices, from which Virgil says, "And with these ears I drank in his voice; " or because the Greeks call the voice itself au0dh/n, from hearing,-the ears (aures) were named as though audes by the change of a letter,-God would not form of soft skins, which, hanging down and flaccid, might take away beauty; nor of hard and solid bones, lest, being stiff and immoveable, they should be inconvenient for use. But He designed that which might be between these, that a softer cartilage might bind them, and that they might have at once a befitting and flexible firmness. In these the office of bearing only is placed, as that of seeing is in the eyes, the acuteness of which is especially inexplicable and wonderful; for He covered their orbs, presenting the similitude of gems in that part with which they had to see, with transparent membranes, that the images of objects placed opposite them, being refracted as in a mirror, might penetrate to the innermost perception. Through these membranes, therefore, that faculty which is called the mind sees those things which are without; lest you should happen to think that we see either by the striking of the images, as the philosophers discuss, since the office of seeing ought to be in that which sees, not in that which is seen; or in the tension of the air together with the eyesight; or in the outpouring of the rays: since, if it were so, we should see the ray towards which we turn with our eyes, until the air, being extended together with the eyesight, or the rays being poured out, should arrive at the object which was to be seen.

But since we see at the same moment of time, and for the most part, while engaged on other business, we nevertheless behold all things which are placed opposite to us, it is more true and evident that it is the mind which, through the eves, sees those things which are placed opposite to it, as though through windows covered with pellucid crystal or transparent stone; and therefore the mind and inclination are often known from the eyes. For the refutation of which Lucretius employed a very senseless argument. For if the mind, he says, sees through the eye, it would see better if the eyes were torn out and dug up, inasmuch as doors being torn up together with the door-posts let in more light than if they were covered. Truly his eyes, or rather those of Epicurus who taught him, ought to have been dug out, that they might not see, that the torn-out orbs, and the burst fibres of the eyes, and the blood flowing through the veins, and the flesh increasing from wounds, and the scars drawn over at last can admit no light; unless by chance he would have it that eyes are produced resembling cars, so that we should see not so much with eyes as with apertures, than which there can be nothing more unsightly or more useless. For how little should we be able to see, if from the innermost recesses of the head the mind should pay attention through Slight fissures of caverns;

as, if any one should wish to look through a stalk of hemlock. he would see no more than the capability of the stalk itself admitted! For sight, therefore, it was rather needful that the members should be collected together into an orb, that the sight might be spread in breadth and the parts which adjoined them in the front of the face, that they might freely behold all things. Therefore the unspeakable power of the divine providence made two orbs most resembling each other, and so bound them together that they might be able not only to be altogether turned, but to be moved and directed with moderation. And He willed that

the orbs themselves should be full of a pure and clear moisture, in the middle part of which sparks of lights might be kept shut up, which we call the pupils, in which, being pure and delicate, are contained the faculty and method of seeing. The mind therefore directs itself through these orbs that it may see, and the sight of both the eyes is mingled and joined together in a wonderful manner.

Chapter IX.-Of the Senses and Their Power.

It pleases me in this place to censure the folly of those who, while they wish to show that the senses are false, collect many instances in which the eyes are deceived; and among them this also, that all things appear double to the mad and intoxicated, as though the cause of that error were obscure. For it happens on this account, because there are two eyes. But hear how it happens. The sight of the eyes consists in the exertion of the soul. Therefore, since the mind, as has been above said, uses the eyes as windows, this happens not only to those who are intoxicated or mad, but even to those who are of sound mind, and sober. For if you place any object too near, it will appear double, for there is a certain interval and space in which the sight of the eyes meets together. Likewise, if you call the soul back as if to reflection, and relax the exertion of the mind, then the sight of each eye is drawn asunder, and they each begin to see separately.

If you, again, exert the mind and direct the eyesight, whatever appeared double unites into one. What wonder, therefore, if the mind, impaired by poison and the powerful influence of wine, cannot direct itself to seeing, as the feet cannot to walking when they are weak through the numbness of the sinews, or if the force of madness raging against the brain disunites the agreement of the eyes? Which is so true, that in the case of one-eyed men, if they become either mad or intoxicated, it can by no means happen that they see any object double. Wherefore, if the reason is evident why the eyes are deceived, it is clear that the senses are not false: for they either are not deceived if they are pure and sound; or if they are deceived, yet the mind is not deceived which recognises their error.

Chapter X.-Of the Outer Limbs of Man, and Their Use.

But let us return to the works of God. That the eyes, therefore, might be better protected from injury, He concealed them with the coverings of the eyelashes, from which Varro thinks that the eyes derived their name. For even the eyelids themselves, in which there is the power of rapid motion, and to which throbbing gives their name, being protected by hairs standing in order, afford a most becoming fence to the eyes; the continual motion of which, meeting with incomprehensible rapidity, does not impede the course of the sight, and relieves the eyes. For the pupil-that is, the transparent membrane-which ought not to be drained and to become dry, unless it is cleansed by continual moisture so that it shines clearly, loses its power. Why should I speak of the summits of the eyebrows themselves, furnished with short hair? Do they not, as it were by mounds, both afford protection to the eyes. so that nothing may fall into them from above, and at the same time ornament? And the nose, arising from the confines of these, and stretched out, as it were, with an equal ridge, at once serves to separate and to protect the two eyes. Below also, a not unbecoming swelling of the cheeks, gently rising after the similitude of hills, makes the eyes safer on every side; and it has been provided by the great Artificer, that if there shall happen to be a more violent blow, it may be repelled by the projecting parts.

But the upper part of the nose as far as the middle has been made solid; but the lower part has been made with a softened cartilage annexed to it, that it may be pliant to the use of the fingers. Moreover, in this, though a single member, three offices are placed: one, that of drawing the breath; the second, that of smelling; the third, that the secretions of the brain may escape through its caverns. And in how wonderful, how divine a manner did God contrive these also, so that the very cavity of the nose should not deform the beauty of the face: which would certainly have been the case if one single aperture only were open. But He enclosed and divided that, as though by a wall drawn through the middle, and made it most beautiful by the very circumstance of its being double. From which we understand of how much weight the twofold number, made firm by one simple connection, is to the perfection of things.

For though the body is one, yet the whole could not be made up of single members, unless it were that there should be parts on the right hand or on the left. Therefore, as the two feet and also hands not only avail to some utility and practice either of walking or of doing something, but also bestow an admirable character and comeliness; so in the head, which is, as it were, the crown of the divine work, the hearing has been divided by the great Artificer into two ears, and the sight into two eyes, and the smelling into two nostrils, because the brain, in which is contained the system of the sensation, although it is one, yet is divided into two parts by the intervening membrane. But the heart also, which appears to be the abode of wisdom, although it is one, yet has two recesses within, in which are contained the living fountains of blood, divided by an intervening barrier: that as in the world itself the chief control, being twofold from simple matter, or simple from a twofold matter, governs and keeps together the whole; so in the body, all the parts, being constructed of two, might present an inseparable unity. Also how useful and how becoming is the appearance and the opening of the mouth transversely cannot be expressed; the use of which consists in two offices, that of taking food and speaking.

The tongue enclosed within, which by its motions divides the voice into words, and is the interpreter of the mind, cannot, however, by itself alone fulfil the office of speaking, unless it strikes its edge against the palate, unless aided by striking against the teeth or by the compression of the lips. The teeth, however, contribute more to speaking: for infants do not begin to speak before they have teeth; and old men, when they have lost their teeth, so lisp that they appear to have returned afresh to infancy. But these things relate to man alone, or to birds, in which the tongue, being pointed and vibrating with fixed motions, expresses innumerable in-flexions of songs and various kinds of sounds. It has, moreover, another office also, which it exercises in all, and this alone in the dumb animals, that it collects the food when bruised and ground by the teeth, and by its force presses it down when collected into bails, and transmits it to the belly. Accordingly, Varro thinks that the name of tongue was given to it from binding the food. It also assists the beasts in drinking: for with the tongue stretched out and hollowed they draw water; and when they have taken it in the hollow of the tongue, lest by slowness and delay it should flow away, they dash it against the palate with swift rapidity. This, therefore, is covered by the concave part of the palate as by a shell, and God has surrounded it with the enclosure of the teeth as with a wall.

But He has adorned the teeth themselves, which are arranged in order in a wonderful manner, lest, being bare and exposed, they should be a terror rather than an ornament, with soft gums, which are so named from producing teeth, and then with the coverings of the lips; and the hardness of the teeth, as in a millstone, is greater and rougher than in the other bones, that they might be sufficient for bruising the food and pasture. But how befittingly has He divided the lips themselves, which as it were before were united! the upper of which, under the very middle of the nostrils, He has marked with a kind of slight cavity, as with a valley: He has gracefully spread out the lower for the sake of beauty. For, as far as relates to the receiving of flavour, he is deceived, whoever he is, who thinks that this sense resides in the palate; for it is the tongue by which flavours are perceived, and not the whole

of it: for the parts of it which are more tender on either side, draw in the flavour with the most delicate perceptions. And though nothing is diminished from that which is eaten or drunk, yet the flavour in an indescribable manner penetrates to the sense, in the same way in which the taking of the smell detracts nothing from any material.

And how beautiful the other parts are can scarcely be expressed. The chin, gently drawn down from the cheeks, and the lower part of it so closed that the lightly imprinted division appears to mark its extreme point: the neck stiff and well rounded: the shoulders let down as though by gentle ridges from the neck: the fore-arms powerful, and braced by sinews for firmness: the great strength of the upper-arms standing out with remarkable muscles: the useful and becoming bending of the elbows. What shall I say of the hands, the ministers of reason and wisdom? Which the most skilful Creator made with a flat and moderately concave bend, that if anything was to be held, it might conveniently rest upon them, and terminated them in the fingers; in which it is difficult to explain whether the appearance or the usefulness is greater. For the perfection and completeness of their number, and the comeliness of their order and gradation, and the flexible bending of the equal joints, and the round form of the nails, comprising and strengthening the tips of the fingers with concave coverings, lest the softness of the flesh should yield in holding any object, afford great adornment. But this is convenient for use, in wonderful ways, that one separated from the rest rises together with the hand itself, and is enlarged in a different direction, which, offering itself as though to meet the others, possesses all the power of holding and doing either alone, or in a special manner, as the guide and director of them all; from which also it received the name of thumb, because it prevails among the others by force and power. It has two joints standing out, not as the others, three; but one is annexed by flesh to the hand for the sake of beauty: for if it had been with three joints, and itself separate, the foul and unbecoming appearance would have deprived the hand of all grace.

Again, the breadth of the breast, being elevated, and exposed to the eyes, displays a wonderful dignity of its condition; of which this is the cause, that God appears to have made man only, as it were, reclining with his face upward: for scarcely any other animal is able to lie upon its back. But He appears to have formed the dumb animals as though lying on one side, and to have pressed them to the earth. For this reason He gave them a narrow breast, and removed from sight, and prostrate towards the earth. But He made that of man open and erect, because, being full of reason given from heaven, it was not befitting that it should be humble or unbecoming. The nipples also gently rising, and crowned with darker and small orbs, add something of beauty; being given to females for the nourishment of their young, to males for grace only, that the breast might not appear misshapen, and, as it were, mutilated. Below this is placed the fiat surface of the belly, about the middle of which the navel distinguishes by a not unbecoming mark, being made for this purpose, that through it the young, while it is in the womb, may be nourished.

Chapter XI.-Of the Intestines in Man, and Their Use.

It necessarily follows that I should begin to speak of the inward parts also, to which has been assigned not beauty, because they are concealed from view, but incredible utility, since it was necessary that this earthly body should be nourished with some moisture from food and drink, as the earth itself is by showers and frosts. The most provident Artificer placed in the middle of it a receptacle for articles of food, by means of which, when digested and liquefied, it might distribute the vital juices to all the members. But since man is composed of body and soul, that receptacle of which I have spoken above affords nourishment only to the body; to the soul, in truth, He has given another abode. For He has made a kind of intestines soft and thin, which we call the lungs, into which the breath might pass by an alternate interchange; and He did not form this after the fashion of the uterus, lest the breath should all at once be poured forth, or at once inflate it. And on this account He did not make it a full intestine, but capable of being inflated, and admitting the air, so that it might gradually receive the breath; while the vital air is spread through that thinness, and might again gradually give it back, while it spreads itself forth from it: for the very alternation of blowing and breathing, and the process of respiration, support life in the body.

Since, therefore, there are in man two receptacles,-one of the air which nourishes the soul, the other of the food which nourishes the body,-there must be two tubes through the neck for food, and for breath, the upper of which leads from the mouth to the belly, the lower from the nostrils to the lungs. And the plan and nature of these are different: for the passage which is from the mouth has been made soft, and which when closed always adheres to itself, as the month itself; since drink and food, being corporeal, make for themselves a space for passage, by moving aside and opening the gullet. The breath, on the other hand, which is incorporeal and thin, because it was unable to make for itself a space, has received an open way, which is called the windpipe. This is composed of flexible and soft bones, as though of rings fitted together after the manner of a hemlock stalk, and adhering together; and this passage is always open. For the breath can have no cessation in passing; because it, which is always passing to and fro, is checked as by a kind of obstacle through means of a portion of a member usefully sent down from the brain, and which is called the uvula, lest, drawn

by pestilential air, it should come with impetuosity and spoil the slightness of its abode, or bring the whole violence of the injury upon the inner receptacles.

And on this account also the nostrils are slightly open, which are therefore so named, because either smell or breath does not cease to flow through these, which are, as it were, the doors of this tube. Yet this breathing-tube lies open not only to the nostrils, but also to the mouth in the extreme regions of the palate, where the risings of the jaws, looking towards the uvula, begin to raise themselves into a swelling. And the reason of this arrangement is not obscure: for we should not have the power of speaking if the windpipe were open to the nostrils only, as the path of the gullet is to the mouth only; nor could the breath proceeding from it cause the voice, without the service of the tongue.

Therefore the divine skill opened a way for the voice from that breathing-tube, so that the tongue might be able to discharge its office, and by its strokes divide into words the even course of the voice itself. And this passage, if by any means it is intercepted, must necessarily cause dumbness. For he is assuredly mistaken, whoever thinks that there is any other cause why men are dumb. For they are not tongue-tied, as is commonly believed; but they pour forth that vocal breath through the nostrils, as though bellowing, because there is either no passage at all for the voice to the mouth, or it is not so open as to be able to send forth the full voice. And this generally comes to pass by nature; sometimes also it happens by accident that this entrance is blocked up and does not transmit the voice to the tongue, and thus makes those who can speak dumb. And when this happens, the hearing also must necessarily be blocked up; so that because it cannot emit the voice, it is also incapable of admitting it. Therefore this passage has been opened for the purpose of speaking. It also affords this advantage, that in frequenting the bath, because the nostrils are not able to endure the heat, the hot air is taken in by the mouth; also, if phlegm contracted by cold shall have happened to stop up the breathing pores of the nostrils, we may be able to draw the air through the mouth, lest, if the passage should be obstructed, the breath should be stifled.But the food being received into the stomach, and mixed with the moisture of the drink, when it has now been digested by the heat, its juice, being in an indescribable manner diffused through the limbs, bedews and invigorates the whole body.

The manifold coils also of the intestines, and their length rolled together on themselves, and yet fastened with one band, are a wonderful work of God. For when the stomach has sent forth from itself the food softened, it is gradually thrust forth through those windings of the intestines, so that whatever of the moisture by which the body is nourished is in them, is divided to all the members. And yet, lest in any place it should happen to adhere and remain fixed, which might have taken place on account of the turnings of the coils, which often turn back to themselves, and which could not have happened without injury, He has spread over these from within a thicker juice, that the secretions of the belly might more easily work their way through the slippery substance to their outlets. It is also a most skilful arrangement, that the bladder, which birds do not use, though it is separated from the intestines, and has no tube by which it may draw the urine from them, is nevertheless

filled and distended with moisture. And it is not difficult to see how this comes to pass. For the parts of the intestines which receive the food and drink from the belly are more open than the other coils, and much more delicate. These entwine themselves around and encompass the bladder; and when the meat and the drink have arrived at these parts in a mixed state, the excrement becomes more solid, and passes through, but all the moisture is strained through those tender parts, and the bladder, the membrane of which is equally fine and delicate, absorbs and collects it, so as to send it forth where nature has opened an outlet.

Chapter XII.-De Utero, Et Conceptione Atque Sexibus.

De utero quoque et conceptione, quoniam de internis loquimur, dici necesse est, ne quid prae terisse videamur; quae quamquam in operto latent, sensum tamen atque intelligentiam latere non possunt. Vena in maribus, quae seminium continet, duplex est, paulo interior, quam illud humoris obscoeni receptaculum. Sicut enim renes duo sunt, itemque testes, ita et venae seminales duae, in una tamen compage cohae rentes; quod videmus in corporibus animalium, cum interfecta patefiunt. Sed illa dexterior masculinum continet semen, sinisterior foemininum; et omnino in toto corpore pars dextra masculina est, sinistra veto foeminina. Ipsum semen quidam putant ex medullis tantum, quidam ex omni corpore ad venam genitalem confluere, ibique concrescere. Sed hoc, humana mens, quomodo fiat, non potest comprehendere. Item in foeminis uterus in duas se dividit partes, quae in diversum diffussae ac reflexae, circumplicantur, sicut arietis cornua. Quae pars in dextram retorquetur, masculina est; quae in sinistram, foeminina. Conceptum igitur Varro et Aristoteles sic fieri arbitrantur. Aiunt non tantum maribus inesse semen, verum etiam foeminis, et inde plerumque matribus similes procreari; sed earum semensanguinem esse purgatum, quod si recte cum virili mixture sit, utraque concreta et simul co-agulata informari: et primum quidem cor hominis effingi, quod in eo sit et vita omnis et sapientia; denique totum opus quadragesimo die consummari. Ex abortionibus hae c fortasse collecta sunt. In avium tamen foetibus primurn oculos fingi dubium non est, quod in ovis sae pe deprehendimus. Unde fieri non posse arbitror quin fictio a capite sumat exordium.

Similitudines autem in corporibus filiorum sic fieri putant. Cum semina inter se permixta coalescunt, si virile superaverit, patri similem provenire, seu marem, seu foeminam; si muliebre prae valuerit, progeniem cujusque sexus ad imaginem respondere maternam. Id autem prae valet e duobus, quod fuerit uberius; alterum enim quodammodo amplectitur et includit: hinc plerumque fled, ut unius tantum lineamenta prae tendat. Si vero aequa fuerit ex pari semente permixtio, figuras quoque misceri, ut soboles illa communis aut neutrum referre videatur, quia totum ex altero non habet; aut utrumque, quia partem de singulis mutuata est. Nam in cor-poribus animalium videmus aut confundi parentum colores, ac fieri tertium neutri generantium simile; aut utriusque sic exprimi, ut discoloribus membris per omne corpus concors mixtura varietur. Dispares quoque naturae hoc modo fieri

putantur. Cum forte in lae vam uteri partem masculinae stirpis semen inciderit, marem quidem gigni opinatio est; sed quia sit in foeminina parte conceptus, aliquid in se habere foemineum, supra quam decus virile patiatur; vel formam insignem, vel nimium candorem, vel cor-poris levitatem, vel artus delicatos, vel staturam brevem, vel vocem gracilem, vel animum imbecillum, vel ex his plura. Item, si partem in dextram semen foeminini sexus influxerit, foeminam quidem procreari; sed quoniam in masculina parte concepta sit, habere in se aliquid virilita-tis, ultra quam sexus; ratio permittat; aut valida membra, aut immoderatam Iongitudinem, aut fuscum colorem, aut hispidam faciem, aut vulture indecorum, aut vocem robustam, aut animum audacem, aut ex his plura.

Si vero masculinum in dexteram, foemininum in sinistram pervenerit, utrosque foetus recte provenire; ut et foeminis per omnia naturae suae decus constet, et maribus tam mente, quam corpore robur virile servetur. Istud vero ipsum quam mirabile institutum Dei, quod ad conservationem generum singulorum, duos sexus maris ac foeminae machinatus est; quibus inter se per voluptatis illecebras copulatis, successiva soboles pareretur, ne omne genus viventium conditio mortalitatis extingueret. Sed plus roboris maribus attributum est, quo facilius ad patientiam jugi maritalis foeminae cogerentur. Vir itaque nominatus est, quod major in eo vis est, quire in foemina; et hinc virtus nomen accepit. Item mulier (ut Varro interpretatur) a mollitie, immutata et detracta littera, velut mollier; cui suscepto foetu, cum partus appropinquare jam coepit, turgescentes mammae dulcibus succis distenduntur, et ad nutrimenta nascentis fontibus lacteis foecundum pectus exuberat. Nec enim decebat aliud quam ut sapiens animal a corde alimoniam duceret. Idque ipsum solertissime comparatum est, ut candens ac pinguis humor teneritudinem novi corporis irrigaret, donec ad capiendos fortiores cibos, et dentibus instruatur, et viribus roboretur. Sed redeamus ad propositum, ut cae tera, quae supersunt, breviter explicemus.

Chapter XIII.-Of the Lower Members.

Poteram nunc ego ipsorum quoque genitalium membrorum mirificam rationem tibi exponere, nisi me pudor ab hujusmodi sermone revocaret: itaque a nobis indumento verecundiae, quae sunt pudenda velentur. Quod ad hanc rem attinet, queri satis est, homines impios ac profanos summum nefas admittere, qui divinum et admirabile Dei opus, ad propagandam successionem inexcogitabili ratione provisum et effectum, vel ad turpissimos quae stus, vel ad obscoenae libidinis pudenda opera convertunt, ut jam nihil aliud ex re sanctissima petant, quam inanem et sterilem voluptatem. How is it with respect to the other parts of the body? Are they without order and beauty? The flesh rounded off into the nates, how adapted to the office of sitting! and this also more firm than in the other limbs, lest by the pressure of the bulk of the body it should give way to the bones. Also the length of the thighs drawn out, and strengthened by broader muscles, in order that it might more easily sustain the weight of the body; and as this is gradually contracted, it is bounded by the knees, the comely joints of which supply a bend which is most adapted for walking and sitting. Also the legs not drawn out in an equal manner, lest an unbecoming figure should deform the feet; but they are at once strengthened and adorned by well-turned calves gently standing out and gradually diminishing.

But in the soles of the feet there is the same plan as in the hands, but yet very different: for since these are, as it were, the foundations of the whole body, the admirable Artificer has not made them of a round appearance, lest man should be unable to stand, or should need other feet for standing, as is the case with quadrupeds; but He has formed them of a longer and more extended shape, that they might make the body firm by their flatness, from which circumstance their name was given to them. The toes are of the same number with the fingers, for the sake of appearance rather than utility; and on this account they are both joined together, and short, and put together by gradations; and that which is the greatest of these, since it was not befitting that it should be separated from the others, as in the hand, has been so arranged in order, that it appears to differ from the others in magnitude and the small space which intervenes. This beautiful union of them strengthens the pressure of the feet with no slight aid; for we cannot be excited to running, unless, our toes being pressed against the ground, and resting upon the soil, we take an impetus and a spring. I

appear to have explained all things of which the plan is capable of being understood. I now come to those things which are either doubtful or obscure.

Chapter XIV.-Of the Unknown Purpose of Some of the Intestines.

It is evident that there are many things in the body, the force and purpose of which no one can perceive but He who made them. Can any one suppose that he is able to relate what is the advantage, and what the effect, of that slight transparent membrane by which the stomach is netted over and covered? What the twofold resemblance of the kidneys which Varro says are so named because streams of foul moisture arise from these; which is far from being the case, because, rising on either side of the spine, they are united, and are separated from the intestines. What is the use of the spleen? What of the liver? Organs which appear as it were to be made up of disordered blood. What of the very bitter moisture of the gall? What of the heart? unless we shall happen to think that they ought to be believed, who think that the affection of anger is placed in the gall, that of fear in the heart, of joy in the spleen. But they will have it that the office of the liver is, by its embrace and heat, to digest the food in the stomach; some think that the desires of the amorous passions are contained in the liver.

First of all, the acuteness of the human sense is unable to perceive these things, because their offices lie concealed; nor, when laid open, do they show their uses. For, if it were so, perhaps the more gentle animals would either have no gall at all, or less than the wild beasts; the more timid ones would have more heart, the more lustful would have more liver, the more playful more spleen. As, therefore, we perceive that we bear with our ears, that we see with our eyes, that we smell with our nostrils; so assuredly we should perceive that we are angry with the gall, that we desire with the liver, that we rejoice with the spleen. Since, therefore, we do not at all perceive from what part those affections come, it is possible that they may come from another source, and that those organs may have a different effect to that which we suppose. We cannot prove, however, that they who discuss these things speak falsely. But I think that all things which relate to the motions of the mind and soul, are of so obscure and profound a nature, that it is beyond the power of man to see through them clearly. This, however, ought to be sure and undoubted, that so many objects and so many organs have one and the same office-to retain the soul in the body. But what office is particularly assigned to each, who can know, except the Designer, to whom alone His own work is known?

Chapter XV.-Of the Voice.

But what account can we give of the voice? Grammarians, indeed, and philosophers, define the voice to be air struck by the breath; from which words derive their name: which is plainly false. For the voice is not produced outside of the mouth, but within, and therefore that opinion is more probable, that the breath, being compressed, when it has struck against the obstacle presented by the throat, forces out the sound of the voice: as when we send down the breath into an open hemlock stalk, having applied it to the lips, and the breath, reverberating from the hollow of the stalk, and rolled back from the bottom, while it returns to that descending through meeting with itself, striving for an outlet, produces a sound; and the wind, rebounding by itself, is animated into vocal breath. Now, whether this is true, God, who is the designer, may see. For the voice appears to arise not from the mouth, but from the innermost breast. In fine, even when the mouth is closed, a sound such as is possible is emitted from the nostrils. Moreover, also, the voice is not affected by that greatest breath with which we gasp, but with a light and not compressed breath, as often as we wish. It has not therefore been comprehended in what manner it takes place, or what it is altogether. And do not imagine that I am now failing into the opinion of the Academy, for all things are not incomprehensible. For as it must be confessed that many things are unknown, since God has willed that they should exceed the understanding of man; so, however, it must be acknowledged that there are many which may both be perceived by the senses and comprehended by the reason. But we shall devote an entire treatise to the refutation of the philosophers. Let us therefore finish the course over which we are now running.

Chapter XVI.-Of the Mind and Its Seat.

That the nature of the mind is also incomprehensible, who can be ignorant, but he who is altogether destitute of mind, since it is not known in what place the mind is situated, or of what nature it is? Therefore various things have been discussed by philosophers concerning its nature and place. But I will not conceal what my own sentiments are: not that I should affirm that it is so-for in a doubtful matter it is the part of a foolish person to do this; but that when I have set forth the difficulty of the matter, you may understand how great is the magnitude off the divine works. Some would have it, that the seat of the mind is in the breast. But if this is so, how wonderful is it, that a faculty which is situated in an obscure and dark habitation should be employed in so great a light of reason and intelligence; then that the senses from every part of the body come together to it, so that it appears to be present in any quarter of the limbs! Others have said that its seat is in the brain and, indeed, they have used probable arguments, saying that it was doubtless befitting that that which had the government of the whole body should especially have its abode in the highest place, as though in the citadel of the body; and that nothing should be in a more elevated position than that which governs the whole by reason, :

just as the Lord Himself, and Ruler of the universe, is in the highest place. Then they say, that the organs which are the ministers of each sense, that is, of hearing, and seeing, and smelling, are situated in the head, and that the channels of all these lead not to the breast, but to the brain: otherwise we must be more slow in the exercise of our senses, until the power of sensation by a long course should descend through the neck even to the breast. These, in truth, do not greatly err, or perchance not at all. For the mind, which exercises control over the body, appears to be placed in the highest part, the head, as God is in heaven; but when it is engaged in any reflection, it appears to pass to the breast, and, as it were, to withdraw to some secret recess, that it may elicit and draw forth counsel, as it were, from a hidden treasury. And therefore, when we are intent upon reflection, and when the mind, being occupied, has withdrawn itself to the inner depth, we are accustomed neither to hear the things which sound about us, nor to see the things which stand in our way. But whether this is the case, it is assuredly a matter of admiration how this takes place, since there is no passage from the brain to the breast.

But if it is not so, nevertheless it is no less a matter of admiration that, by some divine plan or other, it is caused that it appears to be so. Can any fail to admire that that living and heavenly faculty which is called the mind or the soul, is of such volubility that it does not rest even then when it is asleep; of such rapidity, that it surveys the whole heaven at one moment of time; and, if it wills, flies over seas, traverses lands and cities,-in short, places in its own sight all things which it pleases, however far and widely they are removed?

And does any one wonder if the divine mind of God, being extended through all parts of the universe, runs to and fro, and rules all things, governs all things, being everywhere present, everywhere diffused; when the strength and power of the human mind, though enclosed within a mortal body, is so great, that it can in no way be restrained even by the barriers of this heavy and slothful body, to which it is bound, from bestowing upon itself, in its impatience of rest, the power of wandering without restraint? Whether, therefore, the mind has its dwelling in the head or in the breast, can any one comprehend what power of reason effects, that that incomprehensible faculty either remains fixed in the marrow of the brain, or in that blood divided into two parts which is enclosed in the heart; and not infer from this very circumstance how great is the power of God, because the soul does not see itself, or of what nature or where it is; and if it did see, yet it would not be able to perceive in what manner an incorporeal substance is united with one which is corporeal? Or if the mind has no fixed locality, but runs here and there scattered through the whole body,-which is possible, and was asserted by Xenocrates, the disciple of Plato,-then, inasmuch as intelligence is present in every part of the body, it cannot be understood what that mind is, or what its qualities are, since its nature is so subtle and refined, that, though infused into solid organs by a living and, as it were, ardent perception, it is mingled with all the members.

But take care that you never think it probable, as Aristoxenus said, that the mind has no existence, but that the power of perception exists from the constitution of the body and the construction of the organs, as harmony does in the case of the lyre. For musicians call the stretching and sounding of the strings to entire strains, without any striking of notes in agreement with them, harmony. They will have it, therefore, that the soul in man exists in a manner like that by which harmonious modulation exists on the lyre; namely, that the firm uniting of the separate parts of the body and the vigour of all the limbs agreeing together, makes that perceptible motion, and adjusts the mind, as well-stretched things produce harmonious sound. And as, in the lyre, when anything has been interrupted or relaxed, the whole method of the strain is disturbed and destroyed; so in the body, when any part of the limbs receives an injury, the whole are weakened, and all being corrupted and thrown into confusion, the power of perception is destroyed: and this is called death. But he, if he had possessed any mind, would never have transferred harmony from the lyre to man. For the lyre cannot of its own accord send forth a sound, so that there can be in this any comparison and resemblance to a living person; but the soul both reflects and is moved of its own accord. But if there were in us anything resembling harmony, it would be moved by a blow from without, as the strings of the lyre are by the hands; whereas without

the handling of the artificer, and the stroke of the fingers, they lie mute and motionless. But doubtless he ought to have beaten by the hand, that he might at length observe; for his mind, badly compacted From his members, was in a state of torpor.

Chapter XVII.-Of the Soul, and the Opinion of Philosophers Concerning It.

It remains to speak of the soul, although its system and nature cannot be perceived. Nor, therefore, do we fail to understand that the soul. is immortal, since whatever is vigorous and is in motion by itself at all times, and cannot be seen or touched, must he eternal. But what the soul is, is not yet agreed upon by philosophers, and perhaps will never be agreed upon. For some have said that it is blood, others that it is fire, others wind, from which it has received its name of anima, or animus, because in Greek the wind is called anemos and yet none of these appears to have spoken anything. For if the soul appears to be extinguished when the blood is poured forth through a wound, or is exhausted by the heat of fevers, it does not therefore follow that the system of the soul is to be placed in the material of the blood; as though a question should arise as to the nature of the light which we make use of, and the answer should be given that it is oil, for when that is consumed the light is extinguished: since they are plainly different, but the one is the nourishment of the other. Therefore the soul appears to be like light, since it is not itself blood, but is nourished by the moisture of the blood, as light is by oil.

But they who have supposed it to be fire made use of this argument, that when the soul is present the body is warm, but on its departure the body grows cold. But fire is both without perception and is seen, and burns when touched. But the soul is both endowed with perception and cannot be seen, and does not burn. From which it is evident that the soul is something like God. But they who suppose that it is wind are deceived by this, because we appear to live by drawing breath from the air. Varro gives this definition: ”The soul is air conceived in the mouth, warmed in the lungs, heated in the heart, diffused into the body. These things are most plainly false. For I say that the nature of things of this kind is not so obscure, that we do not even understand what cannot be true. If any one should say to me that the heaven is of brass, or crystal, or, as Empedocles says, that it is frozen air, must I at once assent because I do not know of what material the heaven is? For as I know not this, I know that. Therefore the soul is not air conceived in the mouth, because the soul

is produced much before air can be conceived in the mouth. For it is not introduced into the body after birth, as it appears to some philosophers, but immediately alter conception, when the divine necessity has formed the offspring in the womb;

for it so lives within the bowels of its mother, that it is increased in growth, and delights to bound with repeated beatings. In short, there must be a miscarriage if the living young within shall die. The other parts of the definition have reference to this, that during those nine months in which we were in the womb we appear to have been dead. None, therefore. of these three opinions is true. We cannot, however, say that they who held these sentiments were false to such an extent that they said nothing at all; for we live at once by the blood, and heat, and breath. But since the soul exists in the body by the union of all these, they did not express what it was in its own proper sense; for as it cannot be seen, so it cannot be expressed.

Chapter XVIII.-Of the Soul and the Mind, and Their Affections.

There follows another, and in itself an inexplicable inquiry: Whether the soul and the mind are the same, or there be one faculty by which we live, and another by which we perceive and have discernment. There are not wanting arguments on either side. For they who say that they are one faculty make use of this argument, that we cannot live without perception, nor perceive without life, and therefore that that which is incapable of separation cannot be different; but that whatever it is, it has the office of living and the method of perception. On which account two Epicurean poets speak of the mind and the soul indifferently. But they who say that they are different argue in this way: That the mind is one thing, and the soul another, may be understood from this, that the mind may be extinguished while the soul is uninjured, which is accustomed to happen in the case of the insane; also, that the soul is put to rest by death, the mind by sleep, and indeed in such a manner that it is not only ignorant of what is taking place, or where it is, but it is even deceived by the contemplation of false objects. And how this takes place cannot accurately be perceived; why it takes place can be perceived. For we can by no means rest unless the mind is kept occupied by the similitudes of visions. But the mind lies hid, oppressed with sleep, as fire buried by ashes drawn over it;

but if you stir it a little it again blazes, and, as it were, wakes up. Therefore it is called away by images, until the limbs, bedewed with sleep, are invigorated; for the body while the perception is awake, although it lies motionless, yet is not at rest, because the perception burns in it, and vibrates as a flame, and keeps all the limbs bound to itself.But when the mind is transferred from its application to the contemplation of images, then at length the whole body is resolved into rest. But the mind is transferred from dark thought, when, under the influence of darkness, it has begun to be alone with itself. While it is intent upon those things concerning which it is reflecting, sleep suddenly creeps on, and the thought itself imperceptibly turns aside to the nearest appearances: thus it begins also to see those things which it had placed before its eyes. Then it proceeds further, and finds diversions for itself, that it may not interrupt the most healthy repose of the body. For as the mind is diverted in the day by true sights, so that it does not sleep; so is it diverted in the night by false sights, so that it is not aroused. For if it perceives no images, it will follow of necessity

either that it is awake, or that it is asleep in perpetual death. Therefore the system of dreaming has been given by God for the sake of sleeping; and, indeed, it has been given to all animals in common;

but this especially to man, that when God gave this system on account of rest, He left to Himself the power of teaching man future events by means of the dream. For narratives often testify that there have been dreams which have had an immediate and a remarkable accomplishment, and the answers of our prophets have been after the character of a dream. On which account they are not always true, nor always false, as Virgil testified, who supposed that there were two gates for the passage of dreams. But those which are false are seen for the sake of sleeping; those which are true are sent by God, that by this revelation we may learn impending goods or evils.

Chapter XIX.-Of the Soul, and It Given by God.

A question also may arise respecting this, whether the soul is produced from the father, or rather from the mother, or indeed from both. But I think that this judgment is to be formed as though in a doubtful matter. For nothing is true of these three opinions, because souls are produced neither from both nor from either. For a body may be produced from a body, since something is contributed from both; but a soul cannot be produced from souls, because nothing can depart from a slight and incomprehensible subject. Therefore the manner of the production of souls belongs entirely to God alone. "In fine, we are all sprung from a heavenly seed, all all have that same Father." as Lucretius says. For nothing but what is mortal can be generated from mortals. Nor ought he to be deemed a father who in no way perceives that he has transmitted or breathed a soul from his own; nor, if he perceives it, comprehends in his mind when or in what manner that effect is produced.

From this it is evident that souls are not given by parents, but by one and the same God and Father of all, who alone has the law and method of their birth, since He alone produces them. For the part of the earthly parent is nothing more than with a sense of pleasure to emit the moisture of the body, in which is the material of birth, or to receive it; and to this work man's power is limited, nor has he any further power. Therefore men wish for the birth of sons, because they do not themselves bring it about. Everything beyond this is the work of God,-namely, the conception itself, and the moulding of the body, and the breathing in of life, and the bringing forth in safety, and whatever afterwards contributes to the preservation of man: it is His gift that we breathe, that we live, and are vigorous. For, besides that we owe it to His bounty that we are safe in body, and that He supplies us with nourishment from various sources, He also gives to man wisdom, which no earthly father can by any means give; and therefore it often happens that foolish sons are born from wise parents, and wise sons from foolish parents, which some persons attribute to fate and the stars. But this is not now the time to discuss the subject of fate. It is sufficient to say this, that even if the stars hold together the efficacy of all things, it is nevertheless certain that all things are done by God, who both made and set in order the stars themselves. They are therefore senseless who detract this power from God, and assign it to His work.

He would have it, therefore, to be in our own power, whether we use or do not use this divine and excellent gift of God. For, having granted this, He bound man himself by the mystery of virtue, by which he might be able to gain life. For great is the power, great the reason, great the mysterious purpose of man; and if any one shall not abandon this, nor betray his fidelity and devotedness, he must be happy: he, in short, to sum up the matter in few words, must of necessity resemble God. For he is in error whosoever judges of man by his flesh. For this worthless body with which we are clothed is the receptacle of man. For man himself, can neither be touched, nor looked upon, nor grasped, because he lies hidden within this body, which is seen. And if he shall be more luxurious and delicate in this life than its nature demands, if he shall despise virtue, and give himself to the pursuit of fleshly lusts, he will fall and be pressed down to the earth; but if (as his duty is) he shall readily and constantly maintain his position, which is right for him, and he has rightly obtained, -if he shall not be enslaved to the earth, which he ought to trample upon and overcome, he will gain eternal life.

Chapter XX.-Of Himself and the Truth.

These things I have written to you, Demetrianus, for the present in few words, and perhaps with more obscurity than was befitting, in accordance with the necessity of circumstances and the time, with which you ought to be content, since you are about to receive more and better things if God shall favour us. Then, accordingly, I will exhort you with greater clearness and truth to the learning of true philosophy. For I have determined to commit to writing as many things as I shall be able, which have reference to the condition of a happy life; and that indeed against the philosophers, since they are pernicious and weighty for the disturbing of the truth. For the force of their eloquence is incredible, and their subtlety in argument and disputation may easily deceive any one; and these we will refute partly by our own weapons, but partly by weapons borrowed from their mutual wrangling, so that it may be evident that they rather introduced error than removed it.

Perhaps you may wonder that I venture to undertake so great a deed. Shall we then suffer the truth to be extinguished or crushed? I, in truth, would more willingly fail even under this burthen. For if Marcus Tullius, the unparalleled example of eloquence itself, was often vanquished by men void of learning and eloquence,-who, however, were striving for that which was true,-why should we despair that the truth itself will by its own peculiar force and clearness avail against deceitful and captious eloquence? They indeed are wont to profess themselves advocates of the truth; but who can defend that which he has not learned, or make clear to others that which he himself does not know? I seem to promise a great thing; but there is need of the favour of Heaven, that ability and time may be given us for following our purpose. But if life is to be wished for by a wise man, assuredly I should wish to live for no other reason than that I may effect something which may be worthy of life, and which may be useful to my readers, if not for eloquence, because there is in me but a slight stream of eloquence, at any rate for living, which is especially needful. And when I have accomplished this, I shall think that I have lived enough, and that I have discharged the duty of a man, if my labour shall have freed some men from errors, and have directed them to the path which leads to heaven.

General Note by the American Editor. Just here I economize a little spare room to note the cynical Gibbon's ideas about Lactantius and his works. He quotes him freely, and recognises his Ciceronian Latinity, and even the elegance of his rhetoric, and the spirit and eloquence with which he can garnish the "dismal tale" of coming judgments, based on the Apocalypse. But then, again he speaks of him as an "obscure rhetorician," and affects a doubt as to his sources of information, notably in doubting the conversation between Galerius and Diocletian which forced the latter to abdicate. This is before he decides to attribute the work on the Deaths of Persecutors to somebody else, or, rather, to quote its author ambiguously as Cae cilius. And here we may insert what he says on this subject, as follows:- "It is certain that this ...was composed and published while Licinius, sovereign of the East, still preserved the friendship of Constantine and of the Christians. Every reader of taste must perceive that the style is of a very different and inferior character to that of Lactantius; and such, indeed, is the judgment of Le Clerc and Lardner. Three arguments (from the title of the book and from the names of Donatus and Cae cilius) are produced by the advocates of Lactantius. Each of these proofs is, singly, weak and defective; but their concurrence has great weight. I have often fluctuated, and shall tamely follow the Colbert ms.in calling the author, whoever he was, Caecilius."

After this the critic adheres to this ambiguity. I have no wish to argue otherwise. Quite as important are his notes on the Institutes. He states the probable conjecture of two original editions,-the one under Diocletian, and the other under Licinius. Then he says: - "I am almost convinced that Lactantius dedicated his Institutions to the sovereign of Gaul at a time when Galerius, Maximin, and even Licinius, persecuted the Christians; that is, between the years a.d.306 and a.d.311." On the dubious passages he remarks: - "The first and most important of these is, indeed, wanting in twenty-eight mss., but is found in nineteen. If we weigh the comparative value of those mss., one, ...in the King of France's library, may be alleged in its favour. But the passage is omitted in the correct ms.of Bologna, which the Pere de Montfaucon ascribes to the sixth or seventh century. The taste of most of the editors has felt the genuine style of Lactantius."

Do not many indications point to the natural suggestion of a third original edition, issued after the conversion of Constantine? Or the questionable passages may be the interpolations of Lactantius himself.

Source. English translation: an older public-domain translation as collected in the Writings-Database (HistoricalChristianFaith), mostly from the Ante-Nicene, Nicene and Post-Nicene Fathers and similar nineteenth-century editions. SermonIndex has only divided it into chapters and short sections; the wording is the translator's own. Square brackets, Greek or Latin words and footnote-free text are as the source file prints them, and a transcription error may remain. No Greek or Latin text is shown beside it yet, and no modern English version has been made.