unique, indicating, moreover, the expanding thought of the orthodox church.

Because of the literary merit and the popularity of this work its errors are widespread. For this reason those errors command attention and exposition.

"The Ascent of Man" involves a comparison between the admitted physical facts of evolution and the admitted moral phenomena of human life. This elaborate argument of nearly four hundred pages is intended to prove that all these moral phenomena have their origin in and rest upon the purely physical functions and forces. Drummond's criticism is not that Darwinism is erroneous in theory. On the contrary, Darwinism is accepted in theory as far as it goes. That is to say, the moralist simply asserts that Darwin overlooked certain moral phenomena which are the direct results of a certain physical function which plays an important part even in the Darwinian theory. After this the Darwinian critic proceeds to set forth what appears to him as the true relation between moral phenomena and physical nature.

Now, if it shall appear that neither the skeptic nor the theologian was in a position to know the real factors and causes of either physical or moral phenomena, we must seek further for conclusions.

The initial error underlying "The Ascent of Man" is the author's total ignorance of what the word "Spiritual" means in science. He seems to have no rational conception of the fact that the spiritual world is a material world, that spiritual elements are material elements, and that a spiritual man is as truly a material man as is the physically embodied man. He confounds spiritual" with "moral," and "spirituality" with "moral regeneration." He speaks of a "spiritual man" when he means a moral man. He speaks of "spiritual principles" when he means

ethical principles.

This lack of scientific knowledge of the spiritual side of Nature robs the entire work of ethical as well as scientific value.

This ignorance as to the fact of spiritual matter and spiritual elements and forces misleads the great divine when he comes to laying down his major premise.

Mr. Drummond, it will be remembered, introduces his new moral philosophy as a system based upon and supported by the

proved facts of evolution.

As a preliminary, therefore, to his own argument, the author states his position with reference to the Darwinian doctrine of evolution. To briefly restate that position is to say that Mr. Drummond accepts not only the physical facts of evolution as laid down by Darwin, but he also largely accepts Darwin's theories concerning those facts. He accepts the basic dogma of Darwinism, viz., "The struggle for existence in the midst of a hostile environment." He agrees with Darwin that a struggle for nutrition engenders that character of competition which forces industry, commerce and civilization upon the world. He accepts a universal warfare of the physically strong against the physically weak, as a natural mode of progress.

The moralist agrees absolutely with Darwin as to the nature and uses of sex. He defines sex as a "physical device for reproduction." He endorses Darwinism as to the uses of the female in Nature. That is, he holds that the female fulfils her

destiny in reproduction.

The moralist, however, accepts these errors with one qualifying clause. By and through this one clause alone are differentiated the two systems of philosophy. This qualifying clause is one which presents morality as a result of natural law.

The specific charge made by the moralist against the materialist is to the effect that Darwinism states only half the case of Nature. He declares that Darwinism discovers but one factor in the evolution of man, when, instead, there are two. He claims that Darwinism postulates but one great physical struggle in Nature, when, in reality, there are two. He finds that Darwinism lays down but one great principle in evolution, when, in truth, there are two. He charges, therefore, that Darwinism considers

only the physical and material effects which flow from the one factor, the one struggle and the one principle which he so exclusively studied and analyzed.

That particular factor to which the moralist alludes is "Nutrition." The struggle meant is "The struggle for existence in the midst of a hostile environment." The principle referred to is that of "Competition."

The Darwinian critic, on the contrary, declares that Nature embraces a second factor, a second physical struggle, and a second principle. More than this, he insists that there are moral and ethical, as well as physical and material effects, originating in this second physical factor. The moralist insists that the evolution of man embraces another factor of equal force and another physical struggle equally important and far-reaching in results. He insists that the second struggle governs another principle equally potent with that of competition.

This second factor in evolution is laid down as the physical function of reproduction. The second great struggle growing out of this function is defined as the "Struggle for Reproduction" in the midst of a hostile environment, while the second great principle, dependent upon reproduction, is that of Self-sacrifice.

The moralist charges that Darwinism becomes so absorbed in the function of nutrition that it overlooks the function of reproduction. He claims that such undue concentration upon the physical and material results of nutrition, obscures the moral results which flow from reproduction. While he admits that the struggle for nutrition engenders a universal principle of hostility, he insists, however, that the struggle for reproduction engenders a principle of self-sacrifice, the effects of which must be accepted along with the effects of competition.

Just here the moralist makes his great point.

He skillfully arrays these two great physical struggles, nutrition and reproduction, side by side. He shows the one, nutrition, to be a purely egoistic, selfish and competitive struggle for individual benefit. He shows, on the other hand, that the sec-

ond great struggle, reproduction, is purely altruistic in its nature, involving self-sacrifice for the benefit of other individuals.

As against that great "Struggle for Self," so exclusively dwelt upon by physical science, the moralist sets forth and graphically delineates that other great struggle which he so well names "The Struggle for Others."

Thus far the criticism is just. Thus far the moralist is in line with Nature. Thus far the discernment of the divine exceeds that of the skeptic. The moralist discovers what Darwin overlooks, viz., the sacrificial struggle for reproduction, its altruistic nature and the ethical phenomena almost universally attaching to the office of maternity.

Thus, the moralist postulates a moral order in Nature, and altruism as a natural phenomenon and not a disease.

In this deduction, and to this extent, Natural Science supports the Darwinian critic. Here, however, the agreement ends.

The purpose of the moralist is to show that morality, love and altruism are based in Nature. While this general assumption is correct, he errs when he seeks to explain the natural causes of these phenomena. The initial error lies in the acceptance of the Darwinian theory, that everything in this world has a physical basis. Darwinism is not disputed as to the physical basis of evolution. The moralist merely criticises it for not having discovered the physical basis of morality and love.

The task set by the moralist for his own ingenuity, is to discover the physical basis of what we know as morality, love and altruism. The point of view from which he goes to this task is distinctly stated when he says: "Everything in the moral world has a physical basis." He further agrees with his adversary when he says: "Life is controlled by its (physical) functions." He goes even further when he touches upon the principle of human evolution, for he says in so many words: "So man, not by any innate tendency to progress, in himself, nor by the energies inherent in the protoplasmic cell from which he first sets out, but by

continuous feeding and reinforcing from without, attains the higher altitudes."

Having thus accepted the fundamental doctrine of pure physical materialism, the author sets himself to discover the particular

physical causes of this "moral world."

In the search for the physical basis of love he discovers but two possible causes. He finds two universal relationships which exhibit what we know as lowe and altruistic phenomena. These relationships are sex and maternity. However, having previously defined sex as "A physical device for reproduction," and sex love as "A physical passion miscalled love," the moralist is driven from the consideration of sex as a possible cause. This leaves him but one other physical cause, viz., reproduction. This he accepts and analyzes as follows:

He holds that morality, love and altruism come into the world as a result of the physical pain and the physical sacrifice of the female half of all life. He fixes upon the enforced physical sacrifice of the female in reproduction as the one and only cause in Nature for the evolution of love. He thus conceives the extraordinary idea that Nature embraces an absolutely diabolical plan for forcing love upon the human family, for, to quote directly, the moralist says: "Love is forced upon the world at the point of the sword."

Thus, a great teacher of spiritual truth not only fails to find spiritual principles governing physical evolution, but he insists that the physical functions create the love relationships and the ethical phenomena of human life. Is not this a singular hypothesis for one who is supposed to teach the permanency of that which is spiritual and that which is ethical, and the impermanency of that which is physical?

Drummondism, therefore, does little to enlarge the vision of evolution as laid down by Darwinism.

Having accepted sex as "a physical device for reproduction," it is necessarily treated from that restricted point of view. Sex attraction is everywhere analyzed as physical sex passion. Sex

love is everywhere referred to as a biological need for reproduction. The love relation of man and woman is everywhere leveled to the purely physical relation and the physical purpose of that relation. In brief, sex is treated throughout from the viewpoint of physical materialism, viz., as a physical device conserving reproduction.

This interpretation involves another scientific error. The moralist makes no distinction between love which is individual in its nature, and altruism which is general in its nature. He uses interchangeably, and therefore erroneously, the words love and altruism. This new moral philosophy claims that love or altruism is an evolution of feeling based wholly upon the physical function of reproduction. He holds that the enforced sacrifices of the female half of life are the sole causes of all human sympathies, whether those sympathies be expressed as love that is individual, or altruism that is general.

According to this theory any sex relation that rises higher than physical lust must be attributed, first, to the inherited effects of maternity, and, second, to a mutual desire or love for progeny. How far this theory coincides with universal history and universal experience, is left as an open question. How far it contradicts the individual impulses, intuitions and aspirations of the soul, each intelligent reader must determine for himself.

Just how far such a theory contravenes Nature, it has been the effort of the higher science to demonstrate.

The moralist has not added one fact to the general store of human knowledge. Instead, he has merely placed upon the market another theory which the best intelligence and the finest intuitions of men and women reject. He has advanced a theory of love which history and universal experience disprove. He has assigned woman to a place in Nature which woman herself condemns and refuses to occupy. He has so interpreted the love relation of man and woman as to contravene the highest aspirations and ideals of every thinking man and woman.

Carefully reducing this theory to its fundamental proposition

discloses its coincidence with that of physical materialism. When so reduced it would simply read: All living organisms, together with love and altruism, are expressions of physical laws and forces.

Thus, "The Ascent of Man," based upon facts of physical Nature, brilliantly written and highly entertaining, is, yet, as erroneous in theory as the doctrine promulgated in "The Descent of Man."

At just this point of debate between scientific skepticism and orthodox theology the higher science, with deference to both, desires to be heard. The public is entitled to receive a wider range of fact than that covered by the theorists of either school. The older school presents an array of facts gathered upon two planes of causation. It would, therefore, seem to be the better authority as to the real factors and causes of the evolution of man.

Because of this wider experience and more extended knowledge of facts, Natural Science must not be deemed presumptuous if it contradicts the basic propositions of both the skeptic and the theologian.

As already stated, no effort will be made to explain ultimates in Nature. The higher science does not claim to have discovered the First Cause. It does not claim to have analyzed the Infinite. It does not pretend to explain when or how or why Infinite Intelligence set in motion this evolutionary scheme. It does not claim to have discovered how or why the First Cause selected this particular scheme for the evolution of man. It does not, in short, profess to either know or explain the ultimates of matter, or motion, or life, or intelligence, or love.

Natural Science, like physical science, is forced to deal with Nature as it is. It is also forced to operate with finite intelligence in every department of science. Finite intelligence, dealing with infinite problems, is forced, at least in its earlier reaches, to dismiss the ultimate issues of this stupendous scheme of Nature. The broader science, therefore, deals with the phenomena of

two planes of matter, motion, life, intelligence and morality, just as physical science deals with the phenomena of one plane, viz., by study, analysis and demonstration as far as the individual, finite intelligence can penetrate under given conditions.

Physical science finds matter, motion, life, intelligence and love as common phenomena upon this physical plane. Natural Science finds the same phenomena, common also, upon the spiritual plane. It is therefore driven to the general deduction that matter, motion, life, intelligence and love are the correlated properties, elements, principles and activities of both worlds, and that they are universal in time and space. It accepts matter as a universal property of Nature, and motion as a universal mode. It accepts life as a universal element and intelligence as a universal principle. It accepts love as a universal activity of the intelligent soul.

Further than this finite science has not penetrated. It simply finds and accepts these two planes of existence which have correlated properties, modes, elements, principles and activities. It accepts them as ultimates as far as the finite mind is concerned. It holds that these ultimates are unvarying in principle, indestructible in essence, yet infinitely varied in manifestation.

Natural Science deals with man as with any other product of Nature. It studies him upon each plane and explains him in his relation to both. Physical science accepts man as the highest product of this physical plane. Natural Science also discovers that he is the highest manifestation upon the spiritual plane. Therefore, as far as finite science goes, man, in form, intelligence, capacity, individual activity and attainment, is the highest product of Nature in time and space.

Man is a living soul and he has two bodies, the one physical and impermanent, the other spiritual and more enduring. When the student is able to intelligently leave the physical body for investigation upon the spiritual plane, he discovers certain facts that have a bearing as to this "basis of evolution." Among these important facts are: