The most comprehensive and the most practical question that the reflective mind can ask is, Do Wisdom and Goodness lie at the basis of the world? As wisdom and goodness are associated with personality, this question resolves itself into the inquiry of the being of God. Is the poise of the universe resolvable into a balance of things, or is it a reconciliation of thoughts? Wisdom and goodness are inseparable as the attributes of mind. They flow in the same channels. We cannot accept wisdom as the source of all things unless we also accept goodness as working with it. Wisdom that did not issue in goodness would be in conflict with itself, unable to reach welfare.

A great difficulty men have met in connection with the being of God has arisen from the fact that they have looked at things disjointedly, putting some narrow relation in the foreground and greatly exaggerating its importance. This method at once breaks up the flow of events and renders them fitful and disturbing. Evil is eradicated by growth, and the conditions of this growth must not be overlooked. The presence of suffering is the problem which confronts wisdom, and the handling of these critical conditions is the task which falls to goodness. The disturbance lies in the passions of men, and to the solution of this problem the
divine attributes are called out. The possibility of suffering is found in the nature of man not yet trained into harmony, and it is the defects and faults that spring up in this connection that at once draw our attention.

The things open to criticism in the world are so numerous and conspicuous that it becomes easy to frame reasons for plausible fault-finding, and impossible to correct these opinions without widening the view and restoring the eye to the fundamental principles involved in the government of the world. A landscape is not to be judged by a marsh here, or rocks heaped up there, but by the hundred things which enter into its composition. One may understand the course of a river in spite of its bends and twists. The general bearing may be plain, though it seems to be frequently contradicted.

Nor is it impossible to judge the trend of events though often laid aside. The general history of the world is much clearer than are the relations to each other of many events which have taken place in it. We know the discipline of life, the emphasis laid on courage, insight, patience. Regard as lightly as we may the virtues, of men, they all find exercise in the events which come to them. Circumstances that seem untoward are constantly leading to success. The training of the world goes forward in spite of indolence and wayward tendencies. We do not, by misinterpreting it, escape the discipline to which we are subjected. We may lay undue emphasis on particular causes, and yet it may remain profitable to us every day of our lives to encounter the full circle of events. If a man by virtue of a false philosophy seats himself on the dunce's block of fatalism, he will still be called on for his reasons, and his motives, in the rapid whirl of daily life. His arguments all go by the board when the
world lays hold of him and puts him to his tasks. If we look at the world as a training-place for ignorant and perverse men, full of excuses, we shall at least see that the boomerang sweeps round to the man who first threw it. The lessons of the world, written at large, still make plain the fruits of good and evil. The wrong rendering and the right rendering of events still record themselves in the events themselves. If we look at the world as one whole, if we answer as best we can the inquiry Whither are events tending? we can hardly fail to see a divine purpose in our lives.

While, therefore, we cannot be too much impressed with the reality of things, it remains wise to rise above them and give ourselves a wide view. We need to remember that events explain each other, and only after much wandering come together in the full harmony of causes. One might have a house to build and the material already gathered; we should not judge his work simply by the desirable objects he had reached, but also by the limitations imposed upon him. If the house as one whole attains its purpose, the restrictions under which it was constructed emphasize the skill of the artist.

If we look at the many adaptations which enter into the world, the many and conflicting ends it subserves, we shall go to our daily tasks with very different feelings from those begotten, in a spirit of indolence, by the criticisms to which its parts here and there seem exposed. What we now wish to do is to indicate, at a few points, the wonderful make-up of the world, and to leave this significance and grandeur of the whole to efface the petty fault-finding with which its parts are sometimes met. We are not to encounter, at the outset of the general view, the objection that these qualities and proportions arise of necessity, without reason. This
would be to overlook the fact that all explanations presuppose reason, and that the thing we are in search of is the widest and most sufficient reason. We are not seated at idle gazing, but at active sight; with the active we are asking what conclusions seem to be most deeply wrought into the world before us. We must have the liberty of a rational purpose, and are to be judged only by its rationality.

Take, as a single illustration of this wide significance of events, the atmosphere. Its quantity and properties are the condition of the life of the world. Though many other things concur, here is a plexus of relations out of which the enjoyments of animals and of men are constantly springing. The good order and happiness of living human beings turn on these complex relations. The degree of tension under which the life of the world is developed is due to the weight of the atmosphere. The part that this pressure plays is seen in the fact that men are confined by it to the surface of the earth, cannot rise much above it or sink much beneath it. Temperature and density unite to keep human kind near the rind of the world. The ease of handling water in the world depends very much on the weight of the air. If the air were lighter, water would respond less readily to our inducements; and if it were heavier it would respond with inconvenient force. An immediate result of greater gravity would be the multiplication of things floating in the air. The atmosphere, like the waters of a harbor, might carry with it many impurities and be laden with floating detritus. Air, like water, might easily become unwholesome, quite beyond our purifying processes. One of the most immediate dangers of greater density would be that associated with wind. Even now the occasional whirlwind and cyclone seem ready to tear the world to pieces, and we are grateful to escape their violence.
With an increased weight these dangers would so multiply as to subject us to them. Life would sink to the level of that of the sea, or below it, and cut us off at once from higher enjoyments. The gentle winds are now to us a medium of comfort; and the stronger ones, like the trade-winds, a convenient source of power. The air purifies itself by its own action, and makes more equitable the temperature of the world. These and other advantages are held securely under the simple weight of the air and its ready response to motion.

The air is an admixture of various elements, for the most part not in chemical combination. They are open to immediate and ready use, not locked up under the key of attraction. The absorbing power of the air is very great, and plays an unobserved but a most important part in the mechanical economy of the world. The transfer of water takes place chiefly through the air and by the power of air. Our brooks and rivers are only the return flow of the visible and invisible currents of the air. The atmosphere lies above us as an immense sponge, attracts river and lake and ocean to itself, and then, wrung by the wind, drops this immeasurable burden as rain and snow to its duties in the mountains and in plains below. And all this change goes forward with the incidental purpose of regulating the temperature of the world, reducing its heat, reducing its cold, and rendering bearable the transitions from heat to cold, from cold to heat. The regular irregularity by which the world is watered like a garden and made fruitful takes place by a process which we can neither stop nor hasten, but can in many ways make more useful. This fact alone makes the world not only habitable but strangely beautiful, interlacing it at the same time with a sense of dependence and favor which gives at once
As One Whole.

spiritual quality. The condition of this movement is largely temperature. It is set in motion by changes of temperature, and in turn renders to all forms of life the heat and cold they call for. The world is warmed and watered and kept equable by the transaction.

And this movement yields in its progress the essential of wholesome air. The air is the refuge, the area of waste, for gases. Yet no deleterious gas accumulates in abhorred localities, or is often spread through the air in dangerous quantities. The purity of the open air is proverbial; and we need only to come under the gracious influence of the open heaven to breathe in health and strength. The atmosphere lies between plant and animal life as receiving from each and delivering to each that which is in turn injurious and that which is beneficial. The carbonic acid gas, which is the waste of animal life, becomes the food of plant life. The air establishes an equilibrium which rarely miscarries, and need never miscarry with a little intelligence exercised on the part of man. The atmosphere, the storehouse of material and the receptacle of waste, takes up these conflicting functions with a precision and a profit which excessive stupidity alone can disturb.

The air is a good conductor of heat, as seen in the rapid cooling of the earth in a clear night. If the reverse were true, the night would have much of the smothering heat of the day, and the first impulses of industry would return but slowly. The morning sunlight would penetrate with difficulty the crust of air, and the sense of vitality that comes with the morning would be greatly reduced. So simple a thing as cooling our broth with our breath would fail us, and we should be left sweltering in the heat or freezing in the cold, as circumstances ordered. The heat of the sun penetrates
the atmosphere without loss, and only becomes sensible as it reaches its destination. The fertile and well-broken soil is a slow conductor, and holds during the night the heat of the day. Clouds in the air blanket the earth, and put it to sleep. Thus there is a constant modification of the ready conduction of the atmosphere in favor of plant and animal life, and the comfort of the world is attained both in giving and retaining heat. Corrections enter in to moderate qualities not equally beneficent at all times. Heat is constantly passing from an active into a latent form, and from a latent into an active form, as vapor and water and ice replace each other, and so tempers down this trying transformation. The world is thus always endurable and often grateful in the striking and glorious mutations it takes on.

But the function of the air which is of most moment and most wonderfully performed is that of diffusing light. Though the shafts of light are shot like so many arrows from the sun, as if they were intended to transfix the earth, they are so shivered and broken and diffused by the atmosphere, that the day enters with quiet footsteps and departs at evening in slow retreat, as if her first purpose was to gently open, and then gently put to rest, the eyes of men. No artificial light, in spite of reflectors and shades, takes on such a perfect service as that by which night is turned into day, or day into night. Every nook is sought into, as if by the vision of God; and no darkness is swept together as a dismal and dangerous remainder. The entire ministration of lighting the world is gentle, beautiful, sublime, passing from one phase to another in unending variety. Nowhere is color so delicate, so changeable, so ethereal, as in the atmosphere. Its pulses beat as if it were a living thing, and disclose to us the marvelous processes of nature. No other gorgeous dis-
As One Whole.

[Oct.

play, so near and so far off, comes to us as that which ushers in and takes from us the day. The clouds are children both of the senses and of the imagination, and we rest between two worlds physical and spiritual. When we are weary of things, binding us down to duties, we have only to turn to the clouds, offspring of heaven, coming and going without toil.

There is no stronger presentation of the sublime than a thunder-storm. The sharp strokes of lightning, the reverberation of the clouds, as if they had been suddenly turned into the pavement of a city, the growing blackness, the accumulated winds, the pouring rain, compel us to feel, in spite of experience, that the world is being shattered to its very center. If our home is cast on some unending plain, ennui born of all things, the heavens are still with us, and a spirit of power may at any moment return to them.

It can hardly be felt to be strange that life, forcing its way in water, spreading over the land, rising into the air, should be most varied and beautiful on the surface of the earth, where all three combine in its service. Though the fish sinks into its medium and the bird rises into its medium, the higher forms of animal life multiply on the face of the world, where the things beneath and the things above are alike enjoyable. Though the hawk rests on the air and rushes through it, man possesses both ocean and air, the visions and suggestions of great things pushing in upon him from all sides. While we may idealize spirits of the air, our sober enjoyments of the near and the far, of the above and below, abide with us as the commonplace contentment of our inheritance.

We are taught forecast and industry in all directions. Under the trend of law, we are to secure issues or evade issues which are pleasing or displeasing to us. While the laws which con-
front us are rigid, they are interspersed with fortuitous events. We live in the world of fortune as truly as in one of prediction; we are children of permission as well as of command; we walk in a large world with the air over our head as well as the rock under our feet. If the atmosphere, one feature of our home at which we have simply glanced, does not teach us that wisdom and goodness are the chief ingredients of the world, how could the lesson be imparted to us?

The ministrations of the air, so hastily sketched, if they stood by themselves would call for immediate attention, but they do not stand by themselves. A like multiplicity of services associated with other elements crowd in from all sides, and make of the world, through and through, a marvelous concurrence of parts in a single system of aidfulness. Water, the metals, the minerals, the soils; the force agencies, gravitation, heat, chemical attractions, light, electricity, each are ready for some essential service in their joint labor of making the world the home of life. If we pass beyond these physical conditions and approach the intellectual and spiritual stimuli of the world, a kindred support for the thoughts and actions of men is everywhere present. Our lives have been transformed by the labors we have passed over to inanimate agents, and would have been still more modified if we had entertained these gifts in a generous temper. The ethical impulse, starting in the relations of kindred, has extended slowly to the tribe, has grown with the nation, and steadily imposing new duties between classes, between citizens and rulers, is now struggling to displace force between nations and put justice in its place. Though power brings so many temptations, it none the less rests on trust and thrives with it. The great and ever returning losses of a bad currency find their only remedy in conditions which express, in their most assured form, the confidence of men in each other.
Thus the world has a life and policy of its own which it is steadily pursuing, and in whose intelligent and cheerful acceptance the fortunes of the human household are locked up. How can we contemplate the world otherwise than in these its ample incentives and innate purposes? As one whole the world stands out in the clear light of a foreordained purpose, by which the labors of men are first directed toward, and then gathered into, a Kingdom of Heaven.

We need to remember in what human knowledge consists; the first element is confidence in our sensuous, our personal experience. To this center of conviction we add the extensions of thought, resting on the solidity and uniformity of truth; the certainty that a first lesson is given for the sake of a second lesson. We may seem at times to be supported by thin ice, to understand nothing fully; and yet we glide from position to position, having in them all the same sense of safety. When we interpret the world in its construction by what we know of things, framed together as we have found them in one intelligible fact, we may indeed be venturing far from home, but the same faith goes with us of the coherence of part with part, all securely held together in one purpose.

A most persistent attack has arisen on this coherence of knowledge, this unity of mind, from a patient, persevering rendering of parts; aside from their relation to the whole in the development of the world. Evolution is an idea so deeply settled in the unfolding of the world, that we can hardly proceed a step without it. This evolution should be the evolution involved in growth, the evolution which starts, proceeds, and is ever ending in coherent steps, preparing the way for that which lies beyond them. We are willing to attach the value and give the honor which have been so freely rendered to the skilful and patient inquiry which has gone into the construction of science,
but we must still feel that a close scrutiny of a part of the facts has at times been rendered into a theory which crowds back the large portion of them, and neglects the overshadowing force of the world as one whole.

The development of life, certainly the central and most significant fact in the history of the world, has been referred to slight, fortuitous changes, and to the inherent energy of these changes when lying in the right direction; to variations and natural selection. These terms seem to us real ones, but very inadequate ones for the service assigned them. Unforeseen, indeterminate changes are very feeble supports for a universe like our own. There are slight, unforeseen, indeterminate events arising in all human history, but they do not, even in rare cases, determine that history. Predetermined, prearranged, and deeply grounded causes control history, and drag with them, after a little, the accidents that arise from them and obstruct them. This is the law and order of the world.

Men admired the insight and patient inquiry involved in the Darwinian theory of species; but, of late years, they have seen more and more that, while it was not to be neglected, it fell far short of explaining the order which lies before us in the lives that are spread over the world. The favorable accidental changes, i.e. changes which call for no explanation, are too slight, too few, too independent of each other, to be the basis of a creation. Fortuitous changes are inexhaustible in number, and would obliterate each other. If they were sufficient to set new forces in motion, they would be sufficient to demand a reason, and to become starting-points in creation. It is not the experience of the world that fortuitous events, events that have little hold on causes, do, none the less, control the significant successions which lie deep in the world's history. We have fortuitous changes, causes, but not causes adequate to
the results assigned them. The bubble is made to control the tide, not the tide to give rise to the bubble.

Not only must these changes be lost among the multiplicity of the changes which go with them; the changes called for are frequently considerable, are serial, and unless given in this form are useless. They may also be in adaptation to a state of things which have no direct dependence on them. Thus the form of the flower and the insect which is to fertilize it involve a complexity of relations, every portion of which is essential, while the two remain disconnected in their development. We have also, within our own observation, significant transformations of which we are not at liberty intellectually to avail ourselves, the theory of slight modifications standing in our way. What one may call the spacing of plant and animal lives, wide intervals scattered through the series united by a general interdependence, are not covered by the theory of fortuitous transformation. The results should rather be a close, confused interdependence in given lines, with no connecting links between different lines. A system of lives is in no degree provided for by slight, indeterminate modifications. The theoretical results correspond but poorly with the facts as we know them. Something of this is apparent in Huxley's view of the origin of man. With his usual candor, he regards the Neanderthal skull as within the range of human variations, as in no sense a link between apes and men. Yet this skull bears us far back in the history of the world; and he is willing, impelled by the theory of slight variations, to move indefinitely back, much farther back, those links of modifications by which man has descended from the quadrumanous mammals below him. Here is a theory which is not only not derived from the facts, so far as we know them, but puts upon them extravagant suppositions.
This theory of slight, fortuitous changes, as the ground of living development, reduces to a minimum the causal element, and crowds into it a field where we cannot follow it. In the physical unfolding of the world we have tangible causes, with which we are more or less familiar, and to which we can certainly trace the results attributable to them. Here, as we pass upward into living things, we have wholly indeterminate causes, of which we can only say such causes may arise and work out result of one order or another. This is an odd termination of a theory which starts out with the intention of explaining the world as a purely physical product. The farther we go in our explanations the less do we know of the grounds of our opinion, and the more are we at the mercy of chance. There is certainly here some assurance given to the view that both causes and reasons lie at the foundations of the world and bring to it whatever of light envelops it. Our causes fulfil themselves in reasons, and our reasons root themselves in causes.

The second element in this chain of reasoning, natural selection, is fitted to its work in much the same way as the first element, fortuitous modifications. There is to be no teleology in our explanation of the world. Teleology has often been found to be an easy, slipshod method — we grant the accusation — which has deceived us with the mere appearance of knowledge when we have been enveloped in intense ignorance. But this natural selection is merely a disguised teleology. We have covered our offspring with a blanket, and so are ready to deny its existence. Selection is always based on teleology, the uses to which a thing can be put. Selection is a process of thought: we have now referred it to things, and so are prepared to deny its very nature. How does selection come to living things? Only by a reference in them to future wants.
which the living process is bound to meet. The selection goes with the life, is part of the life. The living thing can no more fail of selection than the mind of man can fail of it. Life is teleological, and the teleology is given to it. The life explains the teleology, and the teleology expounds the life. Our theory, therefore, makes war upon teleology by virtue of a stolen function. With the infant, strapped to its back, it goes boldly on its way.

It seems to me — I would utter the opinion with much diffidence — that we are often safer in dealing with general views, in an oversight of the whole field, than we are in our particular inquiries into some portion of it. The general trend of knowledge is more reliable than its special declarations. If a man stands by the world as one whole, the world will stand by him in more reliable support than it will if he ventures on some private interpretation. If we see the things, and all the things, nearest to us, we shall, at the same time, have a relatively far reaching and safe horizon. The modification of one thing by another is often much easier of apprehension than it is how the function of either of them proceeds by itself.