

SCIENCE AND ORTHODOXY IN ENGLAND.

"THE old God is dead above, and the old Devil is dead below!"

So sang Heinrich Heine in one of his peculiarly cheerful moods ; and I do not know that any words could paint a more complete picture of the utter collapse and ruin of old theologies and time-honored faiths and superstitions. Irreverent and even impious as the words will perhaps appear to most minds, it is probable that not a few of those who would be most likely to shudder at their audacity are beginning to think with horror that the condition of things described by the cynical poet is being rapidly brought about by the doings of modern science. Many an English country clergyman, many an earnest and pious Dissenter, must have felt that a new and awful era had arrived—that a modern war of Titans against Heaven was going on, when such discourses as Professor Huxley's famous Protoplasm lecture could be delivered by a man of the highest reputation, and could be received by nearly all the world with, at least, a respectful consideration. In fact, the delivery of such discourses does indicate a quite new ordeal for old-fashioned orthodoxy, and an ordeal which seems to me far severer than any through which it has yet passed. It would be impossible to exaggerate the importance of the struggle which is now openly carried on between Science and Orthodox Theology. I need hardly say perhaps that I utterly repudiate the use of any such absurd and unmeaning language as that which speaks of a controversy between science and religion. One might as well talk of a conflict between fact and truth ; or between truth and virtue. But orthodox theology in England, whether it be right or wrong, is Certainly a very different thing from religion. Were it wholly and eternally true it could still only bear the same relation to religion that geography bears to the earth, astronomy to the sidereal system, the words describing to the thing described. I may therefore hope not to be at once set down as an irreligious person, merely because I venture to describe the war indirectly waged against orthodox theology, by a new school of English scientific men, as the severest trial that system has ever yet had to encounter, and one through which it can hardly by any possibility pass wholly unscathed.

In describing briefly and generally this new school of English science, and some of its leading scholars, I should say that I do so merely from the outside. I am not a scientific man professionally; and, even as an amateur, can only pretend to very slight attainment. But I have been on the scene of controversy, have looked over the field, and studied the bearing of the leading combatants. When Cressida had seen the chiefs of the Trojan army pass before her and had each pointed out to her and described, she could probably have told a stranger something worth his listening to, although she knew nothing of the great art of war. Only on something of the same ground do I venture to ask for any attention from American readers, when I say something about the class of scientific men who have recently sprung up in England, and of whom one of the most distinguished and one of the most aggressive has just been elected President of the British Association for the Advancement of Science.

This school is peculiarly English. So far as I know, it owes nothing directly and distinctly to the intellectual initiative of any other country. Both in metaphysical and in practical science there has been a sudden and powerful awaken-

ing, or perhaps I should say *renaissance*, in England lately. Three or four years ago Stuart Mill wrote that the sceptre of psychology had again passed over to England ; and it seems to me not too much to say that England now likewise holds the sceptre of natural science. It is evident to every one that the leaders of this new school stand in antagonism which is decided, if not direct, to the teachings of orthodox theology.

The recent election of Professor Huxley as President of the British Association was accepted universally as a triumph over the orthodox party. Professor Owen, who undoubtedly possesses one of the broadest and keenest scientific intellects of the age, has lately been pushed aside and has fallen into something like comparative obscurity because he could not, or would not, see his way into the dangerous fields opened up by his younger and bolder rivals. Professor Owen held on as long as ever he could to orthodoxy. He made heavy intellectual sacrifices at its altar. I do not quite know whether in the end it was he who first gave the cold shoulder to orthodoxy, or orthodoxy which first repudiated him. But it is certain that he no longer stands out conspicuous and ardent as the great opponent of Darwin and Huxley. He has, in fact, receded so much from his old ground that one finds it difficult now to know where to place him ; and perhaps it will be better to regard him as out of the controversy altogether. If he had done less for orthodoxy, where his labors were vain, he might have done much more for science, where his toil would always have been fruitful. Undoubtedly, he is one of the greatest naturalists since Cuvier; his contributions toward the facts and data of science have been valuable beyond all estimation ; his practical labors in the British Museum would alone earn for him the gratitude of all students. Owen is, or was, to my mind, the very perfection of a scientific lecturer. The easy flow of simple, expressive language, the luminous arrangement and style which made the profoundest exposition intelligible, the captivating variety of illustration, the clear, well-modulated voice, the self-possessed and graceful manner—all these were attributes which made Owen a delightful lecturer, although he put forward no pretensions to rhetorical skill or to eloquence of any very high order. But while there can hardly have been any recent falling off in Owen's intellectual powers, yet it is certain that he was more thought of, that he occupied a higher place in the public esteem, some half dozen years ago than he now does. I think there has been a general impression of late years that in the controversy between theology and science, Owen was not to be relied upon implicitly. People thought that he was trying to sit on the two stools ; to run with the theological hare, and hold with the scientific hounds. Indeed, Owen is eminently a respectable, a courtly *savant*. He does not love to run tilt against the prevailing opinion of the influential classes, or to forfeit the confidence and esteem of "society." He loves—so people say—the company of the titled and the great, and prefers, perhaps, to walk with Sir Duke than with humble Sir Scholar. All things considered, we may regard him as out of the present controversy, and, perhaps, as left behind by it and by the opinions which have created it. The orthodox do not seem much beholden to him. Only two or three years ago an orthodox association for which Owen had delivered a scientific lecture, refused on theological grounds to print the discourse in their regular volume. On the other hand, the younger and more ardent *savants* and scholars sneer at him, and refuse to give him credit for sincerity at the expense of his intelligence. They believe that if he chose to speak out, if he had the courage of his opinions, he would say as they do. He has ceased to be their opponent, but he is not upon their side; he is no longer the champion of pure orthodoxy, but he has never pronounced openly against it.

Flippant people allude to him as an old fogey; let us say more decently that Richard Owen already belongs to the past.

"Free-thinking" has never been in England a very formidable rival of orthodox theology. Perhaps there is something in the practical nature of the average English mind which makes it indifferent and apathetic to mere speculation. The ordinary Englishmen understands being a Churchman or a Dissenter, a Roman Catholic or a no-Popery man; but he hardly understands how people can be got to concern themselves with mere sceptical speculation. Writings like those of Rousseau, for example, never could have produced in England anything like the effect they wrought in France. Of late years the effects of "free-thinking" (I am using the phrase merely in the vulgar sense) have been poor, feeble and uninfluential—wholly indeed without influence over the educated classes of society. A certain limited and transient influence was once maintained over a small surface of society by the speeches and the writings of George Jacob Holyoake. Holyoake avowed himself an Atheist, conducted a paper called (I think) "The Reasoner," was prosecuted under the terms of a foolish and discreditable act of Parliament, and had for a time something of notoriety and popular power. But Holyoake, a man of pure character and gentle manners, is devoid of anything like commanding ability, has no gleam of oratorical power, and is intellectually unreliable and vacillating. Under no conceivable circumstances could he exercise any strong or permanent control over the mind or the heart of an age: and he has of late somewhat modified his opinions, and has greatly altered his sphere of action, preferring to be a political and social reformer in a small and modest way to the barren task of endeavoring to uproot religious belief by arguments evolved from the depth of the moral consciousness. Holyoake, the Atheist, may therefore be said to have faded away.

His old place has lately been taken by a noisier, more egotistic and robust sort of person, a young man named Bradlaugh, who at one time dubbed himself "Iconoclast," and, bearing that ambitious title, used to harangue knots of working men in the North of England with the most audacious of free-thinking rhetoric. Bradlaugh has a certain kind of brassy, stentorian eloquence and a degree of reckless self conceit which almost amount to a conquering quality. But he has no intellectual capacity sufficient to make a deep mark on the mind of any section of society and he never attempts, so far as I know, any other than the old, time-worn arguments against orthodoxy with which the world has been wearily familiar since the days of Voltaire. Indeed, a man who gravely undertakes to prove by argument that there is no God, places himself at once in so anomalous, paradoxical and ridiculous a position that it is a marvel the absurdity of the situation does not strike his own mind. A man who starts with the reasonable assumption that belief is a matter of evidence and then goes on to argue that a Being does not exist of whose non-existence he can upon his own ground and pleading know absolutely nothing, is not likely to be very formidable to any of his antagonists. Orthodox theologians, therefore, are little concerned about men like Bradlaugh—very often perhaps are ignorant of the existence of any such.

I only mention Holyoake and Bradlaugh at all because they are the only prominent agitators of this kind who have appeared in England during my time. I do not mean to speak disparagingly of either man. Both have considerable abilities; both are, I am sure, sincere and honest. I have never heard anything to the disparagement of Bradlaugh's character. Holyoake I know personally, and esteem highly. But their influence has been insignificant, and cannot have any long duration. I only speak of it here to show how feeble has been the head made

against orthodoxy in England by professed infidelity in our time. There was, indeed, a book written some years ago by a man of higher culture than Holyoake or Bradlaugh, and which made a bubble or two of sensation at the time. I mean "The Creed of Christendom," by William Rathbone Greg, a well-known political and philosophical essayist, who wrote largely for the "Edinburgh Review" and the "Westminster Review" and more lately for the "Pall Mall Gazette," and has now a comfortable place under government. But the "Creed of Christendom," though a clever book in its way, made no abiding mark. It was read and liked by those whose opinions it expressed, but I question if it ever made one single convert or suggested a doubt to a truly orthodox mind. I mention it because it was the only work of what is called a directly infidel character, not pretending to a scientific basis, which was contributed to the literature of English philosophy by a man of high culture and literary reputation during my memory. It will be understood that I am speaking now of works modeled after the old fashion of sceptical controversy, in which the authors make it their avowed and main purpose to assail the logical coherence and reasonableness of the Christian faith by arguments which, sound or unsound, can be brought to no practical test and settled by no possible decision. Such works may be influential among nations which are addicted to or tolerant of mere religious speculation; it is only a calling aloud to solitude to address them to the English public. Even books of a very high intellectual class, such for example as Strauss's "Life of Jesus," are translated into English in vain. They are read and admired by those already prepared to admire and eager to read them—the general public takes no heed of them.

I have ventured into this digression in order to show the more clearly how important must be the influence of that new school of science which has aroused such a commotion among the devotees of English orthodoxy. There is not, so far as I know, among the leading scientific men of the new school one single professed infidel in the old fashioned sense. The fundamental difference between them and the orthodox is that they insist upon regarding all subjects coming within the scope of human knowledge as open to inquiry and to be settled only upon evidence. I suppose a day will come when people will wonder that a scientific man, living in the England of the nineteenth century, could have been denounced from pulpits because he claimed the right and the duty to follow out his scientific investigations whithersoever they should lead him. Yet I am not aware that anything more desperately infidel than this has ever been urged by our modern English *savans*.

Michel Chevalier tells a story of a French iconoclast of our own time who devoted himself to a perpetual war against what he considered the two worst superstitions of the age—belief in God and dislike of spiders. This aggressive sage always carried about with him a golden box filled with the pretty and favorite insects I have mentioned; and whenever he happened to be introduced to any new acquaintance he invariably plunged at once into the questions—"Do you believe in a God, and are you afraid of spiders?"—and without waiting for an answer, he instantly demonstrated his own superiority to at least one conventional weakness by opening his box, taking out a spider, and swallowing it. I think a good deal of the old-fashioned warfare against orthodoxy had something of this spider-bolting aggressiveness about it. It assailed men's dearest beliefs in the coarsest manner, and it had commonly only horror and disgust for its reward. There is nothing of this spirit among the leaders of English scientific philosophy to-day. Not merely are the practically scientific men free from it, but even the

men who are called in a sort of a contemptuous tone " philosophers " are not to be accused of it. Mill and Herbert Spencer have as little of it as Huxley and Grove. Indeed the scientific men are nothing more or less than earnest, patient, devoted inquirers, seeking out the truth fearlessly, and resolute to follow wherever she invites. Whenever they have come into open conflict with orthodoxy, it may be safely assumed that orthodoxy threw the first stone. For orthodoxy, with a keen and just instinct, detests these scientific men. The Low Church party, the great mass of the Dissenting body (excluding, of course, Unitarians) have been their uncompromising opponents. The High Church party, which, with all its mediaeval weaknesses and its spiritual reaction, does assuredly boast among its leaders some high and noble intellects, and among all its classes earnest, courageous minds, has, on the contrary, given, for the most part, its confidence and its attention to the teachings of the *savans*. We have the testimony of Professor Huxley himself to the fact that the leading minds of the Roman Catholic Church do at least take care that the teachings of the *savans* shall be understood, and that they shall be combated, if at all, on scientific and not on theological grounds.

No man is more disliked and dreaded by the orthodox than Thomas Huxley. Darwin, who is really the *fons et origo* of the present agitation, is hardly more than a name to the outer world. He has written a book, and that is all the public know about him. He never descends into the arena of open controversy; we never read of him in the newspapers. I know of no instance of a book so famous with an author so little known. Even curiosity does not seem to concern itself about the individuality of Darwin, whose book opened up a new era of controversy, spreading all over the world, and was the sensation in England of many successive seasons. Herbert Spencer, indeed, has lived for a long time hardly noticed or known by the average English public. But then none of Spencer's books ever created the slightest sensation among that public, and three out of every four Englishmen never heard of the man or the books. Herbert Spencer is infinitely better known in the United States than he is in England, although I am far from admitting that he is better appreciated even here than by those of his countrymen who are at all acquainted with his masterly, his unsurpassed, contributions to the philosophy of the world. The singular fact about Darwin is that his book was absolutely the rage in England; everybody was bound to read it or at least to talk about it and pretend to have understood it. More excitement was aroused by it than even by Buckle's " History of Civilization; " it fluttered the petticoats in the drawing-room as much as the surplises in the pulpit ; it occupied alike the attention of the scholar and the fribble, the divine and the schoolgirl. Yet the author kept himself in complete seclusion, and, for some mysterious reason or other, public curiosity never seemed disposed to persecute him. Therefore the theologians seem to have regarded him as the poet does the cuckoo, rather as a voice in the air than as a living creature ; and they have ??? poured out much of their anger upon him personally. But Huxley comes down into the arena of public controversy and is a familiar and formidable figure there. Wherever there is strife there is Huxley. Years ago he came into the field almost unknown like the Disinherited Knight in Scott's immortal romance ; and, while the good-natured spectators were urging him to turn the blunt end of the lance against the shield of the least formidable opponent, he dashed with splendid recklessness, and with spearpoint forward, against the buckler of Richard Owen himself, the most renowned of the naturalists of England. Indeed Huxley has the soul and spirit of a gallant controversialist. He has many times warned **the**

orthodox champions that if they play at bowls they must expect rubbers; and once in the fight he never spares. He has a happy gift of shrewd sense and sarcasm combined ; and, indeed, I know no man who can exhibit a sophism as a sophism and hold it up to contempt and laughter more clearly and effectively in a single sentence of exhaustive satire.

It would be wrong to regard Huxley merely as a scientific man. He is likewise a literary man, a writer. What he writes would be worth reading for its style and its expression alone, were it of no scientific authority; whereas we all know perfectly well that scientific men generally are read only for the sake of what they teach, and not at all because of their manner of teaching it—rather indeed despite of their manner of teaching it. Huxley is a fascinating writer, and has a happy way of pressing continually into the service of strictly scientific exposition illustrations caught from literature and art—even from popular and light literature. He has a gift in this way which somewhat resembles that possessed by a very different man belonging to a very different class—I mean Robert Lowe, the present English Chancellor of the Exchequer, who owes the greater part of his rhetorical success to the prodigality of varied illustration with which he illumines his speeches, and which catches, at this point or that, the attention of every kind of listener. Huxley seems to understand clearly that you can never make scientific doctrines really powerful while you are content with the ear of strictly scientific men. He cultivates, therefore, sedulously and successfully, the literary art of expression. A London friend of mine, who has had long experience in the editing of high-class periodicals, is in the habit of affirming humorously that the teachers of the public are divided into two classes : those who know something and cannot write, and those who know nothing and can write. Every literary man, especially every editor, will cordially agree with me that at the heart of this humorous extravagance is a solid kernel of truth. Now, scientific men very often belong to the class of those who know something, but cannot write. No one, however, could possibly confound Thomas Huxley with the band of those to whom the gift of expression is denied. He is a vivid, forcible, fascinating writer. His style as a lecturer is one which, for me at least, has a special charm. It is, indeed, devoid of any effort at rhetorical eloquence ; but it has all the eloquence which is born of the union of profound thought with simple expression and luminous diction. There is not much of the poetic, certainly, about him ; only the occasional dramatic vividness of his illustrations suggests the existence in him of any of the higher imaginative qualities. I think there was something like a gleam of the poetic in the half melancholy half humorous introduction of Balzac's famous " *Peau de Chagrin*," into the Protoplasm lecture. But Huxley as a rule treads only the firm earth, and deliberately, perhaps scornfully, rejects any attempts and aspirings after the clouds. His mind is in this way far more rigidly practical than that even of Richard Owen. He is never eloquent in the sense in which Humboldt for example was so often eloquent. Being a politician, I may be excused for borrowing an illustration from the political arena, and saying that Huxley's eloquence is like that of Cobden ; it is eloquence only because it is so simply and tersely truthful. The whole tone of his mind, the whole tendency of his philosophy, may be observed to have this character of quiet, fearless, and practical truthfulness. No seeker after truth could be more earnest, more patient, more disinterested. " *Dry light*," as Bacon calls it—light uncolored by prejudice, undimmed by illusion, undistorted by interposing obstacle—is all that Huxley desires to have. He puts no bound to the range of human inquiry. Wherever man may look, there let him look earnestly

and without fear. Truth is always naked and not ashamed. The modest, self-denying profession of Lessing that he wanted not the whole truth, and only asked to be allowed the pleasing toil of investigation, must be almost unintelligible to a student like Huxley; and indeed is only to be understood by any active inquirer, on condition that he bears in mind the healthy and racy delight which the mere labor of intellectual research gave to Lessing's vigorous and elastic mind. No subject is sacred to Huxley; because with him truth is more sacred than any sphere of inquiry. I suppose the true and pure knight would have fearlessly penetrated any shrine in his quest of the Holy Grail.

Professor Huxley's nature seems to me to have been cast in a finer mould than that of Professor Tyndall, for example. Decidedly, Tyndall is a man of great ability and earnestness. He has done, perhaps, more practical work in science than Huxley has; he has written more; he sometimes writes more eloquently. But he wants, to my thinking, that pure and colorless impartiality of inquiry and judgment which is Huxley's distinguishing characteristic. There is a certain coarseness of materialism about Tyndall; there is a vehement and almost an arrogant aggressiveness in him which must interfere with the clearness of his views. He assails the orthodox with the temper of a Hot Gospeller. Perhaps his Irish nature is partly accountable for this warm and eager combativeness: perhaps his having sat so devotedly at the feet of his friend, the great apostle of force, Thomas Carlyle, may help to explain the unsparing vigor of his controversial style. However that may be, Tyndall is assuredly one of the most impatient of sages, one of the most intolerant of philosophers. If I have compared Huxley to the pure devoted knight riding patiently in search of the Holy Grail; I may, perhaps, liken Tyndall to the ardent champion who ranges the world, fiercely defying to mortal combat any and every one who will not instantly admit that the warrior's lady-love is the most beautiful and perfect of created beings. His temper does unquestionably tend to weaken Tyndall's authority. You may trust him implicitly where it is only a question of a glacial theory or an atmospheric condition; but you must follow the Carlylean philosopher very cautiously indeed where he undertakes to instruct you on the subject of races. The negro, for example, conquers Tyndall altogether. The philosopher loses his temper and forgets his science the moment he comes to examine poor black Sambo's woolly skull, and remembers that there are sane and educated white people who maintain that the owner of the skull is a man and a brother. In debates which cannot be settled by dry science, Huxley's sympathies almost invariably guide him right: Tyndall's almost invariably set him wrong. During the American Civil war, Huxley, like Sir Charles Lyell and some other eminent scientific men, sympathized with the cause of the North: Tyndall, on the other hand, was an eager partisan of the South. A still more decisive test severed the two men more widely apart. The story of the Jamaica massacre divided all England into two fierce and hostile camps. I am not going to weary my readers with any repetition of this often-told and horrible story. Enough to say that the whole question at issue in England in relation to the Jamaica tragedies was whether the belief that a negro insurrection is impending justifies white residents in flogging and hanging as many negro men and women, unarmed and unresisting, as they can find time to flog and hang, without any ceremony of trial, evidence, or even inquiry. I do not exaggerate or misstate. The ground taken by the advocates of the Jamaica military measures was that although no insurrection was going on yet there was reasonable ground to believe an insurrection impending; and that therefore the white residents were justified in anticipating and crushing **the**

movement by the putting to death of every person, man or woman, who could be supposed likely to have any part in it. Of course I need hardly tell the student of history that this is exactly the ground which was taken up, and with far greater plausibility and better excuse, by the promoters of the massacre of Saint Bartholomew. They said : " We have evidence, and are convinced, that these Huguenots are plotting against us. If we do not put them down, they will put us down. Let us be first at the work and crush them." The Jamaica question then raised a bitter controversy in England. Naturally, John Bright and Stuart Mill and Goldwin Smith took one side of it: Thomas Carlyle and Charles Kingsley and John Ruskin the other. That was to be expected : any one could have told it beforehand. But the occasion brought out men who had never taken part in political controversy before : and then you saw at once what kind of hearts and sympathies these new agitators had. Herbert Spencer emerged for the first time in his life, so far as I know, from the rigid seclusion of a silent student's career, and appeared in public as an active, hard-working member of a political organization—The American Civil War had drawn Mill for the first time into the public arena of politics ; the Jamaica massacre made a political agitator of Herbert Spencer. The noble human sympathies of Spencer, his austere and uncompromising love of justice, his instinctive detestation of brute, blind, despotic force, compelled him to come out from his seclusion and join those who protested against the lawless and senseless massacre of the wretched blacks of Jamaica. So, too, with Huxley, who, if he did not take part in a political organization, yet lent the weight of his influence and the vigor of his pen to add to the force of the protest. During the whole of that prolonged season of incessant and active controversy, with the keenest intellects and the sharpest tongues in England employing themselves eagerly on either side, I can recall to mind nothing which, for justice, sound sense, high principle, and exquisite briefness of pungent sarcasm, equaled one of Huxley's letters on the subject to the " Pall Mall Gazette." The mind which was not touched by the force of that incomparable mixture of satire and sense would surely have remained untouched though one rose from the dead. The delicious gravity with which Huxley accepted all the positions of his opponents, assumed the propositions about the high character of the Jamaica governor and the white residents, and the immorality of poor Gordon and the negroes, and then reduced the case of the advocates of the massacre to " the right of all virtuous persons, as such, to put to death all vicious persons, as such," was almost worthy of Swift himself.

On the other hand, Professor Tyndall plunged eagerly into the controversy as a defender of the policy and the people by whose authority the massacre was carried on. I do not suppose he made any inquiry into the facts—nothing of his that I read or heard of led me to suppose that he had ; but he went off on his Carlylean theory about governing minds, and superior races, and the right of strong men, and all the rest of the nonsense which Carlyle once made fascinating, and his imitators have lately made vulgar. I think I am not doing Tyndall an injustice when I regard him as a less austere and trustworthy follower of the pure truth than Huxley. In fact Tyndall is a born controversialist. Some orthodox person once extracted from Huxley, or from some of his writings, the admission that "the truth of the miracles was all a question of evidence," and seemed to think he had got hold of a great concession therein. Possibly the admission was made in the spirit of sarcasm, but it none the less expressed a belief and illustrated a temper profoundly characteristic of Thomas Huxley. With him everything is a question of evidence ; nothing is to be settled by faith or by

preliminary assumption. I am convinced that if you could prove by sufficient evidence the truth of every miracle recorded in Butler's "Lives of the Saints," Professor Huxley would bow resignedly, and accept the truth—wanting only the truth, whatever it might be. But I think Tyndall would rage and chafe a great deal, and I suspect that he would use a good many hard words against his opponents before he submitted to acknowledge aloud the defeat which his inner consciousness already admitted. And yet I think it would be at least as difficult to convince Huxley as it would be to convince Tyndall that Saint Denis walked with his head under his arm, or that Saint Januarius (was it not he?) crossed the sea on his cloak for a raft.

I do not know whether it comes strictly within the scope of this essay to say much about Herbert Spencer, who is rather what people call a philosopher than a professionally scientific man. But assuredly no living thinker has done more to undermine orthodoxy than the author of "First Principles." I have already said that Spencer is much more widely known in this country than in England. During the first few weeks of my sojourn in the United States I heard more inquiries and more talk about Spencer than about almost any other Englishman living. Spencer's whole life, his pure, rigorous, anchorite-like devotion to knowledge, is indeed a wonderful phenomenon in an age like the present. He has labored for the love of labor and for the good it does to the world, almost absolutely without reward. I presume that as paying speculations Herbert Spencer's works would be hopeless failures; and yet they have influenced the thought of the whole thinking world, and will probably grow and grow in power as the years go on. It is, I suppose, no new or unseemly revelation to say that Spencer has lived for the most part a life of poverty as well as of seclusion. He is a sensitive, silent, self-reliant man, endowed with a pure passion for knowledge, and the quickest, keenest love of justice and right. There is something indeed quite Quixotic, in the better sense, about the utterly disinterested and self-forgetting eagerness with which Herbert Spencer will set himself to see right done, even in the most trivial of cases. Little, commonplace, trifling instances of unfairness or injustice, such as most of us may observe every day, and which even the most benevolent of us will think himself warranted in passing by, on his way to his own work, without interference, will summon into activity—into positively unresting eagerness—all the sympathies and energies of Herbert Spencer, nor will the great student of life's ultimate principles return to his own high pursuits until he has obtained for the poor sempstress restitution of the over-fare exacted by the extortionate omnibus-conductor, or seen that the policeman on duty is not too rough in his entreatment of the little captured pickpocket. As one man has an unappeasable passion for pictures, and another for horses, so Herbert Spencer has a passion for justice. All this does not appear on first, or casual, acquaintance; but I have heard many striking, and some very whimsical, illustrations of it given by friends who know Spencer far better than I do. Indeed I should say that there are few men of great intellect and character who reveal themselves so little to the ordinary observer as Herbert Spencer does. His face is, above all things, commonplace. There is nothing whatever remarkable, nothing attractive, nothing repelling, nothing particularly unattractive, about him. Honest, homespun, prosaic respectability seems to be his principal characteristic. In casual and ordinary conversation he does not impress one in the least. Almost all men of well-earned distinction seem to have, above all things, a strongly-marked individuality. You meet a man of this class casually; you have no idea who he is; perhaps you do not even discover, have not an opportunity of discovering,

that he is a man of genius or intellect; but you do almost invariably find yourself impressed with a strong individual influence—the man seems to be somebody—he is not just like any other man. To take illustrations familiar to most of us—observe what a strongly-marked individuality Charles Dickens, John Bright, Disraeli, Carlyle, Lord Ellenborough, Lord Salisbury have; what a strongly-marked individuality Nathaniel Hawthorne had, Wendell Phillips, Charles Sumner, William Cullen Bryant, Horace Greeley have. Now, Herbert Spencer is the very opposite of all this. All that Dr. Johnson said of Burke might be conveniently reversed in the case of Spencer. The person sheltering under the hedge, the ostler in the yard, might talk long enough with him and never feel tempted to say when he had gone, "There has been a remarkable man here." A London *litterateur*, who had long been a devotee of Herbert Spencer, was induced some year or two back to go to a large dinner-party by the assurance that Spencer was to be there and was actually to have the chair next to his own at table. Our friend went, was a little late, and found himself disappointed. Next to him on one side was a man whom he knew and did not care about; on the other side, a humdrum elderly, respectable, commonplace personage. With this latter, for want of a better, he talked. It was dull, commonplace, conventional talk, good for nothing, meaning nothing. The dinner was nearly over when our friend heard some one address his right-hand neighbor as "Spencer." Amazed out of all decorum, he turned to the commonplace, dull-looking individual, and broke out with the words "Why, you don't mean to say that you are Herbert Spencer?" "Oh, yes," the other replied, as quietly as ever, "I am Herbert Spencer."

I have wandered a little from my path; let me return to it. My object is to illustrate the remarkable and fundamental difference between the nature of the antagonism which old-fashioned orthodoxy has to encounter to-day, and that which used to be its principal assailant. The sceptic, the metaphysician, the "infidel" have given way to the professional *savant*. Nobody now-a-days would trouble himself to read Tom Paine; hardly could even the scepticism of Hume or Gibbon attract much public attention. Auguste Comte has been an influence because he endeavored to construct as well as to destroy. I cannot speak of Comte without saying that Professor Huxley seems to me grievously, and almost perversely, to underrate the value of what Comte has done. Huxley has not, I fancy, given much attention to historical study, and is therefore not so well qualified to appreciate Comte as a much inferior man of a different school might be. Moreover, Huxley appears to have a certain professional, and I had almost said pedantic, contempt for anything calling itself science which cannot be rated and registered in the regular and practical way. To me Comte's one grand theory or discovery, call it what you will, seems, whether true or untrue, as strictly a question of science as anything coming under Huxley's own professional cognizance. But I have already intimated that the character of Huxley's intellect seems to me acute and penetrating, rather than broad and comprehensive. Perhaps he is all the better fitted for the work he and his compeers have undertaken to do. They have taken, in this regard, the place of the Rousseaus and Diderots; of the much smaller Paines and Carliles (please don't suppose I am alluding to Thomas Carlyle); of the yet smaller Holyoakes and Bradlaughs. Those only attempted to destroy: these seek to construct. Huxley and his brethren follow the advice which is the moral and the sum of Goethe's "Faust"—they "grasp into the present," and refuse to "send their thoughts wandering over eternities." They honestly and fearlessly seek the pure truth, which surely must be always saving. Let me say something **more**.

This advance-guard of scientific scholars alone express the common opinion of the educated and free Englishmen of to-day. The English journals, I wish distinctly to say, do not express it. They do not venture to express it. There is a tacit understanding that although it would be too much to expect an intelligent journalist to write up old-fashioned orthodoxy, yet at least he is never to be allowed to write it down. It is not very long since one of the most popular, successful and influential of London journals sneered at the Parliamentary candidature of my friend, Professor Fawcett, M. P., on the ground that he was a man who, as an advocate of the Darwinian theory, admitted that his great-grandfather was a frog. Yet I know that the journal which indulged in this vapid and vulgar buffoonery is written for by scholars and men of ability. Now, this is indeed an extreme and unusual instance of journalism, well cognizant of better things, condescending to pander to the lowest and stupidest prejudices. But the same kind of thing, although not the same thing, is done by London journals every day. You cannot hope to get at the religious views of cultivated and liberal-minded Englishmen through the London papers. "The right sort of thing to say," is what the journalists commit to print, whatever they may think, or know, or say as individuals and in private. But the scientific men speak out. They, and I might almost say they alone, have the courage of their opinions. What educated people venture to believe, they venture to express. Nor do they keep themselves to audiences of *savans* and professors and the British Association. Huxley delivers lectures to the working men of Southwark; Carpenter undertook Sunday evening discourses in Bloomsbury; Tyndall, with all the pugnacity of his country, is ready for a controversy anywhere. Sometimes the duty and honor of maintaining the right of free speech have been claimed by the journalists alone; sometimes, when even the journals were silent, by the pulpit, by the bar, or by the stage. In England to-day all men say aloud what they think on all great subjects save one—and on that neither pulpit, press, bar nor stage cares to speak the whole truth. The scientific men alone are bold enough to declare it, as they are resolute to seek it. I think history will hereafter contemplate this moral triumph as no less admirable, and no less remarkable, than any of their mere material conquests.