SOME CHARACTERISTICS OF PROFESSOR HUXLEY.

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THE insight into the private life of Prof. Thomas H. Huxley afforded by the many letters and extracts from letters, which have been arranged by his son, Leonard, with such comment as is necessary to tell the story of his life and present a picture "of the man himself, of his aims in the many struggles in which he was engaged, of his character and temperament, and the circumstances under which his various works were begun and completed," is remarkably interesting and suggestive. The redacteur has wisely kept himself in the background, and has introduced only such matter of his own as is necessary to make a continuous narrative.

The first reflexion of the reader after a perusal of the two large volumes, made up almost entirely of letters from Professor Huxley to his wife, children, and friends, is likely to be on the striking difference between the Huxley here revealed and the caricature of him sometimes presented by the zealous opponents of his religious philosophy. Instead of the narrow, soured, and bigoted partisan of "science falsely so-called," intent on the destruction of "the faith which was once for all delivered unto the saints," which used to be a not uncommon pulpit characterisation of him, we find an almost ideally broad-minded, truth-loving, scrupulously honest and charitable man.

The life of Huxley is, from one point of view, especially interesting as an illustration of the effect upon character of a strictly scientific training. There are some who affect to believe that the pursuit of science stifles the feelings and dwarfs the moral nature. Exact and critical studies, they think, are not calculated to pro-

¹ Life and Letters of Thomas H. Huxley, by his son Leonard Huxley. In two volumes, with many portraits and illustrations. Pages x, 539 and vi, 54t. New York: D. Appleton & Co. 190t. Price, \$5.∞

mote a high tone of mind. Such a belief, however, is not supported by either the example of Huxley or that of his great confrère, Charles Darwin, to say nothing of other illustrious characters which might be mentioned by way of illustration. Darwin and Huxley were from their earliest years almost exclusively engaged in scientific pursuits. Darwin is said to have betrayed an early scientific bent by his love of collecting, and it is well known how this tendency was fostered and encouraged through all his experience. Huxley, "kicked into the world a boy without guide or training, or with worse than none," and with almost no regular schooling, manifested an early interest in physiology, and as a mere boy almost sacrificed his life in a post mortem examination to gratify his curiosity in regard to the intricacies of living structure. And this early inclination was favored by such education as he received, and was strengthened by a life of almost exclusive devotion to science. Like another great English scientist, Joseph Dalton Hooker, both Darwin and Huxley began their scientific career on board a Government vessel; Darwin to make his celebrated scientific expedition around the world, and Huxley in a voyage of four years on the "Rattlesnake," which took him to Australia and other parts of the world, and during which he was wholly absorbed in science. Intellectually and morally they were both products of a strictly scientific training. And yet it would be difficult to find a character more noble and generous, or more profoundly simple, than that of Darwin, or one that could bear the light better than that of Huxley.

Whatever be the comparative results, however, of a scientific and a literary or theological training, there can be no doubt that science produced in Professor Huxley the qualities upon which society has put the stamp of its highest approval. Industry, will, good fellowship, altruism, honesty, and devotion to truth were among his conspicuous traits.

The most striking characteristic revealed in Professor Huxley's letters is perhaps his passion for the truth. He is reported as having once described himself as "almost a fanatic for the sanctity of the truth," and this is the impression left by the reading of his letters. In early life he was greatly influenced by the teachings of Carlyle, imbibing from them an ineradicable hatred of cant, humbug, and sham. This, to be sure, is an indispensable part of the moral equipment of the true man of science. Unless it is inborn in him, or acquired at the low price of reading a few books like Sartor Resartus, it is likely to be drilled into him by painful expe-

rience in which the unsparing criticism of his co-workers performs a disciplinary function. Professor Huxley fortunately began his work with this fundamental requirement strongly developed. He not only loved the truth, but he believed in its general efficacy. "The more rapid truth is spread among mankind," he said, "the better it will be for them." When certain friends advised him for the sake of his own prospects and reputation to withhold his Man's Place in Nature from publication, he rejected their advice, believing, as he said, "that a man of science has no raison d'étre at all, unless he is willing to face much greater risks than these for the sake of that which he believes to be true." In this connexion his advice to young students of science in regard to publishing the results of honest and careful investigation, found in the 1894 preface to the book mentioned, is worth quoting. "I doubt not," he says, "that there are truths as plainly obvious and as generally denied as those contained in Man's Place in Nature, now awaiting enunciation. If there is a young man of the present generation who has taken as much trouble as I did to assure himself that they are truths, let him come out with them, without troubling his head about the barking of the dogs of St. Ernulphus. Veritas praevalebit -some day; and even if she does not prevail in his time, he himself will be all the better and wiser for having tried to help ber. And let him recollect that such great reward is full payment for all his labor and pains."

Perhaps the best idea of Professor Huxley's devotion to the truth is conveyed in a letter written in reply to Charles Kingsley who had endeavored to console him on the death of his son. After referring to his convictions on certain questions naturally raised by his affliction, he says, "the great blow which fell upon me seemed to stir them to their foundation, and had I lived a couple of centuries earlier I could have fancied the devil scoffing at me and at them and asking me what profit it was to have stripped myself of the happiness and consolation of the mass of mankind? To which my only reply was and is—Oh devil! truth is better than much profit. I have searched over the grounds of my belief, and if wife and child and name and fame were all to be lost to me one after the other as the penalty, still I will not lie." This strong declaration is in striking contrast with the intimation of some of his clerical opponents that he invented Bathybius, or refused to desert it after the evidence upon which it had been described was shown to be unsound, merely because of prejudice against a theological dogma. How often we have heard this put forward as proof of the over-zealousness of Professor Huxley to destroy the doctrine of special creation! The fact is, that as soon as he was assured of his mistake, he came forward and with characteristic frankness made a public renunciation of Bathybius at the British Association



HUXLEY WITH HIS GRANDSON.

From a photograph by Kent and Lacey, 1895. By permission of Messrs.

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for the Advancement of Science. In his mind there was really no possible compromise between truth and untruth. "The only serious temptations to perjury I have ever known," he says, "have arisen out of the desire to be of some comfort to people I cared for

in trouble. If there are such things as 'Plato's Royal lies' they are surely those which one is tempted to tell on such occasions"; and when urged to write a more eulogistic notice of a dead friend than he thought deserved, he said, referring to the wife of his friend, "she is such a good devoted little woman, and I am so doubtful about having a soul, that it seems absurd to peril it for her satisfaction."

From what has been said, it must not be inferred that Professor Huxley was fond of parading his attachment to the truth. With characteristic wit, he wrote to Professor Haeckel that he thought it a good thing for a man, once at any rate in his life, to perform a public war-dance against all sorts of humbug and imposture. But that having satisfied one's love of freedom in this way, the sooner the war paint was off the better.

To his unconquerable hatred of lies and humbug should be attributed his caustic sarcasm in polemical discussion, by which he obtained the reputation, in some quarters, of a savage controversialist. It is strikingly evident throughout all Professor Huxley's philosophic and critical works that he loved intellectual battle. It served him as a sort of tonic. Intellectual warfare in behalf of the truth as he saw it, or a "row" (as he called it) with one of his opponents, seemed to be good for his health. "Controversy," he gravely declared, "is as abhorrent to me as gin to a reclaimed drunkard," and yet, when an "absurd creature" went about declaring that in a review article he had made all sorts of blunders, Huxley wanted somebody to persuade him to put what he had to say in black and white, for "it would be so nice to squelch that pompous impostor."

And yet, it cannot be said that Professor Huxley courted controversy for its own sake. He was reported to have said near the close of his life that for twenty years he had never attacked, but always fought in self-defense, counting Darwin as a part of himself. Prior to that period, he admits an attack upon a man whom he could not trust, and another upon Gladstone. He seems to have thought, and no doubt correctly, that service of the truth demanded that he strike a severe blow at Gladstone's pretentions to historical and scientific accuracy. His real object in this instance, as in others, was to arouse people to think. One can easily understand, of course, that a man with the keenness of wit and brilliancy of style which Professor Huxley possessed, might find genuine delight in using these weapons of debate to overthrow an adversary.

It is greatly to his credit, therefore, that there are few, if any, instances of his use of them for the mere pleasure of the exercise.

If it were true, as Professor Huxley says of himself, that he had a natural vein of laziness, we may well be glad that he lived in an atmosphere of controversy. "Ingrained laziness," he said, "is the bane of my existence," and in more than one place he professes a great dislike for letter-writing. If there was indeed a "vein of laziness" in his character, he was responsive to the stimulus of debate. All this self-disparagement is naturally discounted, however, in the presence of his vast epistolary correspondence, and the catalogue of his books and articles, which covers twenty octavo pages. The amount and character of his work, and especially of his scientific and critical contributions to knowledge, lend a special interest to the methods he employed.

As might be expected, Professor Huxley was extraordinarily careful in the preparation of his lectures. He always thought out carefully every word he was going to say. "There is no greater danger," he said, "than the so-called inspiration of the moment, which leads you to say something which is not accurately true, or which you would regret afterwards." So careful was he in giving nothing out second hand, that, as his son tells us, one of his scientific friends reproached him with wasting his time upon unnecessary scientific works, to which competent investigators had already given the stamp of their authority. "Poor ——," was his comment afterwards," if that is his own practice, his works will never live."

In composing, his practice was to write and rewrite things, until by some sort of instinctive process they acquired the condensation and symmetry which satisfied him. "It is an excellent rule," he said, "always to erase anything that strikes one as particularly smart when writing it."

Considering his felicity of phrase and brilliancy of style, it is curious to read his admission that his pen was not a very facile one, and that what he wrote cost him a good deal of trouble; and again, that writing was a perfect pest to him unless he was interested, and "not only a bore but a very slow process." He was extremely fastidious in his choice of words and phrases. Some times he wrote an essay half a dozen times before he could get it into the proper shape. When he got to a certain point of tinkering his phrases he had to put them aside, as he tells, for a day or two. "The fact is," he said, "that I have a great love and respect for my native tongue, and take great pains to use it properly." As a result of this he was able, as another has said of him, always to

put his finger on a wrong word, and always instinctively to choose the right one. His object was to express himself in such language that he could "stand cross-examination on each word." He strove to be clear, to avoid confusion, obscurity, and shuffling. As he grew older he became more and more fastidious, and it constantly became more difficult for him "to finish things satisfactorily." His letters detract nothing from his reputation as one of the great masters of prose writing.

A few passages already quoted may have suggested the amusing turns of expression and the scintillating wit which abound in Professor Huxley's letters. Nothing but the reading of them, however, could convey an adequate idea of the agility and playfulness of his mind. Of several amusing anecdotes illustrating his wit the following related by Professor Howes may be given: When time permitted, he would remain after a lecture to answer questions; and in connexion with his so doing his wonderful power of gauging and rising to a situation, once came out most forcibly. Turning to a student, he asked, "Well, I hope you understand it all." "All, sir, but one part, during which you stood between me and the blackboard," was the reply; the rejoinder: "I did my best to make myself clear, but could not render myself transparent."

There is a side of Professor Huxley's nature which has not been sufficiently dwelt upon. Early in life, and probably from the reading of Carlyle, he acquired a great interest in social problems; and throughout his life he was almost constantly engaged in some sort of labor to improve the condition of the working class. preparation of lectures to be delivered before bodies of working men took up no small portion of his time. Instances in which his interest in the poor manifested itself financially might be pointed out. Some have supposed from his unsparing criticism of General Booth's Salvation Army scheme that he was uninterested in, or opposed to, all forms of charitable work. On the contrary he repeatedly betrays a strong interest, and in a letter of January 2, 1880, he says, "if I am remembered at all, I would rather it should be as 'a man who did his best to help the people' than by other title." His idea of helping the people, however, was that of careful legislation, and wise provision for the education of the young, rather than spasmodic and indiscriminate charity. Against all sentimental proposals for social reform he was uncompromising in his criticism.

In the criticism of social schemes, as well as in that of theological doctrine, Professor Huxley manifested the tenacity of pur-

pose which was one of the marked characteristics of his nature. His family motto was tenax propositi, and he seemed to have no difficulty in living up to it. He inherited from his father "that amount of tenacity of purpose which unfriendly observers some times call obstinacy." To this obstinacy or doggedness, if we may choose to call it so, we are indebted for his steady attention to the main business of his life, namely, scientific investigation. few men have pursued a chosen career under greater difficulties In the face of them all, he declared, in a and discouragements. letter written to his wife, "I will not leave London-I will make myself a name and a position as well as an income, by some kind of pursuit connected with science, which is the thing for which nature has fitted me if she has ever fitted any one for anything." The same determination is manifested throughout all his work, as for instance in his untiring championship of the doctrine of evolution. His characterisation of himself as "Darwin's bulldog," was not inapt.

What Professor Huxley has just been quoted as saying in regard to his fitness for science is eminently true. He approximates the ideal type of the man of science. With intellectual integrity, scrupulous honesty, carefulness in investigation, accuracy in expression and fearlessness in the presentation of unpalatable truth, he presents an example which should be held up for the emulation of all modern students. These virtues were the aim and object of his life. He more than once declared that he cared nothing for posthumous fame. What he did really care about was the progress of scientific thought. "My sole motive," he said, "is to get at the truth in all things. I do not care one straw about fame, present or posthumous, and I loath notoriety, but I do care to have that desire manifest and recognised." As a hater of lies in every form, as a smiter of humbugs, as a generous though uncompromising controversialist, as a populariser of technical scientific knowledge, in a word, as the great protagonist of truth in all its forms, it is to be feared we shall not soon look upon his like again.

It is always an interesting question as to what constituted the motive of a man who has left such a deep mark upon the world as Professor Huxley. Fortunately he has expressed himself emphatically upon this point, and under circumstances which leave no doubt of his sincerity. In the same letter on the death of his son from which we have previously quoted, he says, after referring to the mistakes of his life, "for long years I have been slowly and painfully climbing, with many a fall, towards better things. And

when I look back, what do I find to have been the agents of my redemption? The hope of immortality or of future reward? I can honestly say that for these fourteen years such a consideration has not entered my head. No, I can tell you exactly what has been at work. Sartor Resartus led me to know that a deep sense of religion was compatible with the entire absence of theology. Secondly, science and her methods gave me a resting-place independent of authority and tradition. Thirdly, love opened up to me a view of the sanctity of human nature, and impressed me with a deep sense of responsibility. If at this moment I am not a wornout, debauched, useless carcass of a man, if it has been or will be my fate to advance the cause of science, if I feel that I have a shadow of a claim on the love of those about me, if in the supreme moment when I looked down into my boy's grave my sorrow was full of submission and without bitterness, it is because these agencies have worked upon me, and not because I have ever cared whether my poor personality shall remain distinct for ever from the All from whence it came and whither it goes. . . . I may be quite wrong, and in that case I know I shall have to pay the penalty for being wrong. But I can only say with Luther, 'Gott helfe mir, ich kann nicht anders.'. . . One thing people shall not call me with justice and that is-a liar."

After this frank expression, one can understand the high esteem in which Professor Huxley was held by the men with whom he was associated in science and public business. One of these, Sir Spencer Walpole, to use a single illustration, said of him, "of all the men I have ever known, his ideas and his standard were—on the whole—the highest. He recognised that the fact of his religious views imposed upon him the duty of living the most upright of lives, and I am very much of the opinion of a little child, now grown into an accomplished woman, when she was told that Professor Huxley had no hopes of future reward, and no fear of future punishment, emphatically declared: 'Then I think Professor Huxley is the best man I have ever known.'"