

Literature.

DARWIN ON THE EMOTIONS.*

THIS book consists mainly of interesting anecdotes and careful observations, illustrative of the manner in which, by glance of eye or movement of muscle, man and animals express their feelings. These anecdotes and observations have, as it appears to us, no obvious or necessary connection with that theory of development with which the name of Mr. Darwin is associated. He is, however, the reverse of desidious that readers should take this view of the case. With that frankness which has always characterized him, he states in his introduction his belief that the phenomena of expression on which he dwells in the succeeding pages, confirm his view of man's lineal descent from an unreasoning animal. "As long as man and all other animals"—these are his words—"are viewed as independent creations, an effectual stop is put to our natural desire to investigate as far as possible the causes of Expression." May we not, before continuing the quotation, remark on the metaphysical rashness of this conclusion? It is assumed in theory, for a belief in the independent creation of species is by no means shut up to a denial of man's capacity of mental or bodily

* *The Expression of the Emotions in Man and Animals*. By Charles Darwin, M.A., F.R.S., &c. With photographs and other illustrations. London: John Murray, 1872.

acquisition, whether in the feelings themselves or in the modes of expressing the feelings. We may hold that the Almighty impressed upon the human face a different expression from that ever worn by a mere animal, and yet be deeply interested to inquire in how far man has modified that expression. The question is contradicted by fact, for Mr. Darwin outside Sir Charles Bell's work on Expression, and yet declares that Sir Charles was a believer in the commonly received doctrine of creation. "By this doctrine (independent creation)," proceeds Mr. Darwin, "anything and everything can be equally well explained; and it has proved as pernicious with respect to expression as to every other branch of natural history." It is surely unworthy of Mr. Darwin to say that a doctrine which was accepted by the great majority of naturalists down to our time, and which is still accepted by naturalists of whom he would be the last to speak with disrespect, has been "pernicious to every branch of natural history." Mr. Darwin's theory may be right or it may be wrong, but it is simply absurd to talk as if those who believe in specific creation explain "anything and everything" by that belief, and have been indifferent as to the secondary causes in nature. "With mankind" (Mr. Darwin goes on) "some expressions, such as the bristling of the hair under the influence of extreme terror, or the uncovering of the teeth under that of furious rage, can hardly be understood, except on the belief that man once existed in a much lower and animal-like condition. The coarseness of certain expressions in distinct though allied species, as in the movements of the same facial muscles during laughter by man and by various monkeys, is rendered somewhat more intelligible, if we believe in their descent from a common progenitor. He who admits, on general grounds, that the structure and habits of all animals have been gradually evolved, will look at the whole subject of Expression in a new and interesting light." These remarks are legitimate in tone and scope, but we are not sure that Mr. Darwin's facts, subsequently adduced, are of a nature to silence those who would maintain that, in the early history of mankind, in the wars and fightings in which all tribes have, in the first stages of their history, been almost perpetually engaged, there was enough to give man the habit of bristling up the hair in extreme terror, and showing the teeth in rage. For our part we know as animal—tigers, hyenas, baboons—which is as ferocely fighting, so intensely belittles, an animal as man. If it is the occupation of the males in all civilized races to fight and to hunt,—if even Christian knights have been truly allowed to have had but two employments, that of fighting with their enemies in war, and that of fighting with their friends in peace,—it is not irresistibly evident that man must have inherited his modes of expressing savagery from the ape. The gorilla in the British Museum looks, no doubt, a cautious kind of beast; but his attitude and expression are studied from the moment when M. de Chaille, or some other of his (according to Mr. Darwin) brothers in blood, was assailing him with stone, club, or rifle. Taking his case on a sunny bank, between Mrs. Gorilla and Miss Gorilla, he was doubtless a very different-looking fellow. Even as he is, his expression is not more ferocious than that of a Kalmuck rearing his horse through a Russian. All the monkeys we have ever seen in life have had a mild expression. The race is arboreal, frugivorous, and, when undisturbed in its woods,—such at least is our conviction,—amiable both in nature and in look. Seriously, those who choose to assert that man learned his savage expressions in his own school and the devil's, and does not inherit them from a paternal monkey, need not be driven from their position by anything brought forward by Mr. Darwin in this volume.

Mr. Darwin holds that man, if not all, the forms of emotional expression in man and animals may be explained by means of three principles. The first he calls that of "associated habits." He quotes from Mr. Alexander Bain the remark that "actions, sensations, and states of feeling, occurring together or in close succession, tend to grow together, or others, in such a way that when any one of them is afterwards presented to the mind, the others are apt to be brought up in idea." In the earlier chapters, Mr. Darwin has less command of lucid and precise language than we looked for. Physiologists, he tells us, admit "that the conducting power of the nervous fibres increases with the frequency of their excitement." Yes; but this does not explain why the excitement should be interpreted by particular out-

ward signs and not by others. It is only in the last chapter of the book that we meet with a sufficiently clear statement of what Mr. Darwin means by his first principle. "Movements," he says, "which are occasionally in gratifying some desire, or in relieving some sensation, if often repeated, become so habitual that they are performed, whether or not of any service, whenever the same desire or sensation is felt, even in a very weak degree." This is intelligible. A dog finds tension of the muscles and erection of the hair positively agreeable in attacking its enemy. The disposition to attack an enemy commences up these bodily conditions. Being thus associated with the feelings, the gestures become expressive of them; when we see the latter, we know the former to exist. This is perfectly plain; but it is only by slow degrees that Mr. Darwin's meaning is made clear to us. We are inclined to think that there is a large amount of truth in his theory. It seems, for example, extremely probable that "starting was originally acquired by the habit of jumping away as quickly as possible from danger, whenever any of our senses gave us warning." The danger being, in a multitude of instances and for a long period of time, suggested the start, the start would, by association of ideas, be suggestive of danger. That the habit of starting might lead to the use of the gesture when the danger was imaginary is obvious. "I may mention a trilling fact," says Mr. Darwin, "illustrating this point, and which at the time amused me. I put my face close to the thick glass-plate in front of a puff-blower in the Zoological Gardens, with the firm determination of not starting back if the snake struck at me; but, as soon as the blow was struck, my resolution went for nothing, and I jumped a yard or two backwards with astonishing rapidity. My will and reason were powerless against the imagination of a danger which had never been experienced."

Mr. Darwin's second principle is that of Antithesis. He thus describes it:—"Certain states of the mind lead to certain habitual actions, which are of service, as under our first principle. Now, when a directly opposite state of mind is induced, there is a strong and involuntary tendency to the performance of movements of a directly opposite nature, though these are of no use; and such movements are in some cases highly expressive." Though the special expressions of man are strikingly antithetical, yet, on the ground that, "in these cases, we are particularly liable to confused conventional or artificial gestures and expressions with those which are innate or universal, he selects his principal illustrations from the lower animals. A dog, approaching a stranger in hostile attitude, has the tail erect and rigid, the hair bristling, the ears pricked, the eyes staring. Suddenly the dog discovers that the man taken for an enemy is its master. Instantly its gesture and expression are antithetically opposed to what they previously were. The body sinks or crouches, and is curled in flexuous movements; the tail is lowered and wagged from side to side; the hair smooths down, the lips fall, the ears are drawn back, the eyelids become elongated, and the eyes no longer glare." Not one of the above movements, so clearly expressive of affection, are (we) of the least service to the animal. They are explicable, as far as I (Mr. Darwin) can see, solely from being in complete opposition or antithesis to the attitude and movements which, from intelligible causes, are assumed when a dog intends to fight, and which consequently are expressions of anger."

The third principle by means of which Mr. Darwin explains the phenomena of expression is that of direct nervous action. "Certain actions, which we recognize as expressive of certain states of the mind, are the direct result of the constitution of the nervous system, and have been from the first independent of the will, and, to a large extent, of habit. When the sensation is strongly excited, nerve-force is generated in excess, and is transmitted in certain directions, dependent on the connection of the nerve-cells, and, as far as the muscular system is concerned, on the nature of the movements which have been habitually practiced." The illustration of this principle, which is far less on the surface than the two preceding principles, is perhaps the most important part of Mr. Darwin's volume. The first instance of the direct influence, unconsciously exerted, of nerve-force, is that of hair changing its colour through extreme terror or distress. It is, he says, authoritatively on record that, "in the case of a man brought out for execution in India, the change of colour was so rapid that it

was perceptible to the eye." Another instance is that of trembling of the muscles, common to man and to many of the lower animals. It is of no service, often the reverse, and cannot have been voluntarily acquired. An eminent authority assures Mr. Darwin that young children do not tremble, but, if placed in circumstances in which adults would tremble, go into convulsions. A great variety of causes may produce trembling, and it is consequent upon all intense emotions, whether of fear, of anger, or of joy. Fine music causes a shiver to run down the backs of some persons. Of the influence of joy upon the nervous system, unaccountable by the will, Mr. Darwin cites a striking example from the "Medical Mirror" (1865). A young man of a highly nervous temperament found that a fortune had been bequeathed him. He first became pale, then colorated, then his spirits became extravagantly high, and he was flushed and restless. He took a walk to tranquillize himself, but returned staggering in his gait, laughing uproariously, irritable in temper, talking loudly and singing in the street. He was exactly as one drunk; but it was positively ascertained that he had taken no intoxicating liquor. After a time something came on, and an odor of alcohol was detected in the contents of the stomach. He then slept heavily, and next day experienced all the usual effects of a drunken debauch—headache, nausea, and prostration. We know that sodden and terrible intelligence could sober a drunken man; but we did not know until now that one could so literally be made drunk with joy. We have only to add that this luck has a number of good stories in it, and attracts careful observation, but is not of much philosophical importance.

FIFTY SERMONS.*

THE witty, caustic, humorous, and occasionally coarse, style of the old Puritan preachers is being revived in full force in modern American sermons. Those which we now have before us are thoroughly American in every sense. There is a smartness about them, a subtle manner of argument, an unobscured admiration for what is big, that at once betrays the nationality of their author. Mr. Talbarg is not unknown to English readers. Kindred publications of his have already made their appearance, and obtained a pretty extensive circulation amongst us. They are all pre-eminently sensational. Mr. Spurgeon's sermons in his young days are completely unknown by what we meet with here. At the present time we doubt whether there is any existing English audience that could be found willing to accept Mr. Talbarg's sermons as they are; but no doubt if he had the opportunity of preaching over here an appreciative audience would soon be formed. Nor can there, moreover, be any doubt that there are cases in which such preaching as we have here would be useful, the only doubt which arises in whether in other cases the harm done by it would not be of a kind and degree likely to counterbalance the good. Look, for instance, at the following passages taken out of a sermon entitled "The Sea-Captain's Call":—

Learn that the devil takes a man's money and then sits him down in a poor leading place. The Bible says he paid his fare to Tarshish, but we have got out. The sailors bring him to the inside of the ship, he'll take over "the goods," and let him drop with a lead splash here, the water. He paid his fare all the way to Tarshish, but did not get the worth of his money. Neither does any one who takes his back on his duty and does that which is not right.

There is a young man, who, during the past year, has spent a large part of his salary in revelry. What has he gained by it? A wild reputation, a full stomach, a dissipated look, a petulant temper, a disordered conscience. The members of one of our old churches are preaching tighter and tighter will keep on until they wear to the bone. You paid your fare to Tarshish, but you have been out down in the midst of a sea of discipline and penitence.

One hundred dollars for Sunday lessons here!
One hundred dollars for wine-sippers!
One hundred dollars for cigars!
One hundred dollars for fellows that shall be nameless!

Making five hundred dollars for his destination!
Instead of being in Tarshish to-night, he is in the middle of the Mediterranean.

How is it literary men, third of the faith of his fathers, who profess to learn but into what is called Free-thinking. He says Theodore Parker's works for twelve dollars; Boston's "Life of Christ" for one dollar and fifty cents; Andrew Jackson Davis's works for twenty dollars. How to hear infinite talk at the table, and to see appreciation of the table-ragging. Talker glitzy of David, the Psalmist, as an old Hebrew, of Paul as a wild outcast.

* Fifty Sermons. By Rev. T. W. Talbarg. Boston.

what; and of Christ as a decent kind of a man—a little weak in some respects, but almost as good as himself. Talks sentimentally of himself as a good fellow to put a little extra blinding on one's back; and of Christians as, for the most part, hypocrites; and of starchy as "the great to be," "the everlasting love," "the infinite what to be." Some say he gets his feet very wet, and finds himself that night chilly. The next morning has a hot morning, and is kindly. Some would even to the store that he will not be there to-day. Before his feet, has water-plasters, calls the doctor. The medical man says still, "This is going to be a bad case of congestion of the lungs." Water falls. Children never to keep down studies or sent to the neighbours, to keep the house quiet. You say, "Send for the minister." But no; he does not believe in ministers. You say, "Send the Bible to him." No; he does not believe in the Bible. A lawyer comes in, and, sitting by his bedside, writes a document that begins, "In the name of God, Amen, I, being of sound mind, do make that my last will and testament." It is certain when the sick man's body will be in less than a week, it is quite certain who will get his property. But what will become of his soul? It will go to—"the great to be," or "the everlasting love," or "the infinite what to be." He will let his feet water, and the wind is "blowing great guns." Death comes, "Overboard with the minister!" A splash! He goes to the bottom. He paid five dollars for his ticket to Tarshish when he bought the infidel books? He landed in penitence!

He was sometimes waken up too late. The last hour has come. The man has no more time of dying than I have of dropping down this moment. The rigging is all white with the foam of death. How shall the night be! "I must die," he says, "I get not ready. I must push out upon this world sea, but have nothing with which to pay my fare. The white caps! the darkness! the darkness! How long have I been sleeping? Whole days, and weeks, and years. I am quite awake now. I see everything, but it is too late." Invisible hands take him up. He struggles to get down. He sails. They bring his soul to the verge. They let it down over the side. The rickles hurt. The sea upon its frothing jaws to swallow. The lightning hold their torches at the soul's burial. The devils hold their bells as he drops. Eternal death overtakes him. He has gone for ever. And while the waves wash of, and the birds rattle, and the vases thumped, the sea took up the funeral dirge, playing with open lips and midnight strains. "Beware! I have called, and ye refused; I have stretched out my hand, and no man regarded; ye have hated all my counsel, and would none of my reproof; I also will laugh at your calamity; I will mock when you are in trouble."

There is one thing in favour of this style—it is, we believe, natural to the man. Could we confine for a single moment that he had taken upon himself to use such words as those merely for the sake of effect, we should pronounce them blasphemous. There are, unfortunately, now-a-days many others in our pulpits; but we do not think Mr. Talbarg is one of them. On the contrary, we cannot help feeling that starchy is stamped on every line. Nor can we suppose that the preacher has altogether reached his present platform of belief without thought; but we think that without any great amount of suspicion or uncharitableness, we may safely venture to doubt whether he has at all times an adequate conception of the full meaning of the awful sentences that come so freely from his pen. The passages we have already quoted convey no very faint idea of the gross and materialistic ideas of the preacher respecting the state of the lost. But he is extremely careful to make an explicit declaration as possible of his views on this subject:—

It has been a wonder to me why Unitarians come to my church, not merely temporarily, but that they hold sittings here, and come to all our services, and they are among my best friends. I hold in my hand a letter which makes it plain. The writer of it evidently believes that there is no future place of punishment. He says in his letter: "I don't believe what you preach, but I am certain you believe it. I prefer to hear you repeat the Bible, because you do not ignore hell; for if the foundation of your faith is firm, hell is just as certain as Paradise, and has just as much of a locality." Now I understand it. Men want to be frank in the declaration of our beliefs. All the world knows that the leading denomination in this day believe that there is a hell as certainly as there is a heaven. Why, then, stir over the fact, or try to hide it, or declare it only with slight emphasis? I am an old Papist in my interpretation of the Bible. I have not so much interest in those men who know how to make an eternity of their own, spinning it out of their own heads. Not having intellect enough to fashion an eternity of my own, I must take the theory of the Bible. I believe there is a hell. If I had not been afraid of hell, I do not think I should have started for heaven. You say, "I will not be concerned in that." I will not be frightened by any future punishment. That was quite mistaken. I saw England you had to death in five minutes. As you are walking along the streets, let me pull down the lines and sliding, weighing two or three tons, about your head, and you will not so white as a sheet, while your heart is full of hell. Like a trip-hammer. Now, if it is not ignoble to be frightened into a falling world, it is ignoble to be frightened by a threat from the future world, who with one stroke of the right hand could crush the universe? You ask how that, being a father, could let me suffer in the future world? I answer your question by asking how that, being a father, can let suffering be in this world? Tell me why He allowed that woman to whom I administered the holy sacrament this afternoon, to have a cancer; tell me why children suffer such pains