Mr. Darwin's New Book.*

In this work Mr. Darwin endeavours to show how the various signs and gestures by which emotion is manifested in man and animals have been appropriated to their present purpose. He has taken it as the task of his life to show not that there is no Creative Power in the Universe, for no such assertion has ever been made by Mr. Darwin, but that nature works with fewer original materials than has been commonly supposed, and that the world of sentient life, as we now behold it, has taken its present shape through gradual development from a state very different. The dog, he holds, was not created a snarling animal, but acquired the capacity of snarling in the course of uncounted ages. Smiling, laughing, weeping, frowning have, in like manner, been slowly brought to their present perfection by the attempts of human generations which lived, loved, fought, embraced, rejoiced and sorrowed for an indefinite number of ages before that generally assigned to the creation of Adam. Of this theory we may accept as little as we please; its acceptance is necessarily not necessary in order to the deriving both pleasure and profit from this book of Mr. Darwin's. Whether our modes of emotional expression were created or acquired, it is interesting to have them analysed by a careful thinker, and to have a number of accurate observations of the manner in which they are exhibited before us. Mr. Darwin has executed his self-appointed task with his usual thoroughness. He has personally observed the phenomena of expression in all human beings and animals within his reach, and has experimented on his own infants so boldly that one is almost tempted to rejoice that one was not the child of a man of science. He has circulated a list of queries among missionaries and travellers intended to bear upon the modes of emotional expression prevalent among uncivilized races. He has interrogated mad doctors as to the habits of lunatics and idiots in relation to blushing, laughing, crying, and so forth. He gives three admirable anatomical diagrams displaying those muscles of the human face on which expression depends; a number of photographs, well chosen and instructive, of persons in various states of emotion; and corresponding illustrations of emotion in dogs, cats, and monkeys. A quotation or two from the “list of illustrations” will convey a better idea of the volume, from this point of view, than we can otherwise give.

"Dog approaching another with hostile intentions," "Chimpanzee disappointed and sulky."

Mr. Darwin refers all emotional expression to three principles. The first is that of "serviceable associated habits." The habit is in the outset formed on account of its use; the animal of prey, for instance, crouching and skulking, in order to spring with advantage on its victim; and when these gestures have been associated by habit with the cunning and ferocity of the tiger and panther, and have become hereditary by transmitted succession, they are recognised as expressive of cunning and ferocity. The second principle is that of antithesis. It is the polar opposite of the former. Skulking and crouching express cunning and cruelty; an open visage and erect front will express magnanimity, courage, generosity. The stiff, intense, tetanic gesture of attack in dog and cat are thus antagonistically contrasted with the wheeling, curling, relaxed motions of the cautioning animal. The third principle is the constitution of the nervous system, independently altogether of the will. “When the sensory is strongly excited, nerve-force is generated in excess, and is transmitted in certain definite directions, depending on the connection of the nerve-cells, and partly on habit, or the supply of nerve-force may, as it appears, be interrupted.” Effects are thus produced which we recognise as expressive. This third principle may, for the sake of brevity, be called that of the direct action of the nervous system. Blushing is an emotional expression of this kind, as also trembling—due to a certain state of the nervous system and not under the direct control of the will. Mr. Darwin’s book consists of the exposition, defence, and illustration of these three principles as explaining the phenomena of emotional expression, and we must say that he is remarkably successful. Our readers will probably feel a particular interest in the following account of—

Devotional Expression.

As devotion is, in some degree, related to affection, though mainly consisting of reverence, often combined with fear, the expression of this state of mind may here be briefly noticed. With some sects, both pastoral and present, religion and love have been strangely combined; and it has even been maintained, inaccurate as the fact may be, that the holy kiss of love differs but little from that which a man bestows on a woman, or a woman on a man. Devotion is often the expression of a combined affection being directed towards the heavens, with the eyelids upturned. Sir C. Bell remarks that, at the approach of sleep, or of a fainting-fit, or of a passing excitement, the pupils are drawn upwards and inwards; and he believes that “when we are wrapped in devotional feelings, and outward impressions are unheeded, the eyes are raised by an action neither taught nor acquired;” and that this is due to the same cause as in the above cases. That the eyes are upturned during sleep is, as I hear from Professor Donders, certain. With babies, whilst sucking their mother’s breast, this movement of the eyeballs often gives to them an absurd appearance of ecstatic delight; and here it may be clearly perceived that a struggle is going on against the position naturally assumed during sleep. But Sir C. Bell’s explanation of the fact, which rests on the assumption that certain muscles are more under the control of the will than others, is, I hear from Professor Donders, incorrect. As the eyes are often turned up in prayer, without the mind being so much absorbed in thoughts as to approach to the unconsciousness of sleep, the movement is probably a conventional one—the result of the common belief that heaven, the source of Divine power to which we pray, is seated above us.

A humble kneeling posture, with the hands upturned and palms joined, appears to us from long habit, a gesture so appropriate to devotion, that it might be thought to be innate; but I have not met with any evidence to this effect with the various extra-European races of mankind. During the critical period of human history it does not appear, as I hear from an excellent classic, that the hands were thus joined during prayer. Mr. Hensleigh Wedgwood has apparently given the expression in its origin. Hence it is not probable that either the uplifting of the eyes or the joining of the open hands, under the influence of devotional feelings, are innate or truly devotional actions; and this could hardly be expected, for it is very doubtful whether feelings, such as we should now rank as devotional, affected the hearts of men, whilst they remained during past ages in an uncivilised condition.

This passage is suggestive in a way which Mr. Darwin, perhaps, hardly intended. Cartloads of books have been written on the question what is the most appropriate attitude in prayer? Mr. Darwin considers it, of course, from the purely natural point of view, and it happens that Mr. Carlyle—a writer, we need not say, of a very different school from Mr. Darwin—has incidentally considered it in the same way. Here is Mr. Carlyle’s account of the origin of kneeling in prayer. We print with all Mr. Carlyle’s peculiarities:—“The first man who, looking with open soul on this august Heaven and Earth, this Beautiful and Awful, which we name Nature, Universe, and such like, the essence of which remains for ever UNNAMABLE; he who first, gazing into this, fell on his knees awe-struck, in slime, is likeliest,—he, driven by inner necessity, the "audacious original" that he was, had done a
thing, too, which all thoughtful hearts saw straightway to be an expressive, altogether adoptable thing! To bow the knee was ever since the attitude of supplication. Earlier than any spoken Prayers, Liturgies, or Liturgias; the beginning of all Worship,—which needed but a beginning, so rational was it. What a poet! he! Yes, this bold original was a successful one withal. The weal, this one, hidden in the primordial seeds and distances, from which, as from a Nile-source, all Forms of Worship, like the Nile river (somewhat muddy and malicious melancholy, as it were, spangled here and there, and flowed, and flowed down to Pergamum, Rotatory Calabash, Archbishop Land at St. Catherine's Creed, and perhaps lower in)

We think that Mr. Hansleigh Wedgwood, as quoted by Mr. Darwin, gives a more correct account of the origin of the attitude of kneeling in prayer than Mr. Carlyle. That attitude is closely coupled with the name of Rome; ancient: nor the most appropriate and worst of the world. At the time when the Christian religion was promulgated, the known world was in subjection to Rome. In other words, civilized races were in an abnormal condition—a condition of bondage, not of freedom. The attitude of submission to the human conqueror was adopted, therefore, in approaches to God. But from the beginning it was not so. Abraham "stood before God, and, when God had said to him on behalf of Sodom and Gomorrah, simply "stood before the face of Jehovah, in like manner Solomon, in offering up prayer at the dedication of the Temple, stood and spread abroad his hands to God. There are doubtless instances in the Old Testament of prostration in worship, and of other gestures, such as putting the head between the knees, of humbliest entreaty; but the usual attitude of reverent prayer was not prostration or even kneeling. It is a noteworthy fact that, when Protestant England abandoned her Reformation, the Reformed Churches—we do not refer to the Anglican Church—adopted the attitude of standing in prayer. It is, however, in the Lord's Supper that the attitude of kneeling is, from our present point of view, specially seen to be inappropriate. Invited by Christ to sit as guests, as friends, as brothers and sisters, at His table, we must feel the unsuitableness of that gesture, by which the captive expressed to the rude Roman soldier his perfect submission and willingness to be bound. One word remains to be added on the subject. The origin of an attitude does not necessarily fix its present meaning. Two thousand years of association between kneeling and Christian prayer have so much modified and exalted the idea originally attached to the attitude that the interest connected with that attitude is now mainly antiquarian.

We are referred to Mr. Darwin's way of utilizing his children in the years of science. The following is an illustrative passage:

**Smiling.**

Whether we look at laughter as the full development of a smile, or, as is more probable, at a gentle smile as the last trace of a habit, fixedly seen in several generations, of laughing in our infants the gradual passage of the one into the other. It is well known to those who have the charge of young infants that it is difficult to feel sure when certain movements about their mouths are really expressive; that is, when they smile. Home I carefully watched my own infants, and, in the age of forty-five days, and being at the time in a happy frame of mind, smiled; that is, the corners of the mouths were retraced, and simultaneously the eyes became suddenly bright. I observed the same thing on the following day; but on the third day the child was quite different, there was no trace of a smile, and this renders it probable that the previous smiles were real. Eight days subsequently and during the next succeeding week was repeatedly observed a smile brightened whenever he smiled, and his eyes became as at the same time transversely wrinkled. This was now accompanied by a little breathing noise, a small smile, and a laugh. At the age of 113 days these little noises were always made during expiration, assumed a slightly different character, were more broken or interrupted, or the habit of laughing, and this was certainly indignant laughter. The change in tone seemed to me at the time to be connected with the greatly lateral extension of the mouth as the smile took pleasure.

In a second infant the first real smile was observed at about the same age, viz., forty-five days; and in a third, at somewhat earlier age. The second infant, when sixty-five days old, smiled much more frequently than the first. The third infant did not show the one first mentioned at the same age; and even at this early age uttered noises very like laughter. In this gradual acquirement, by infants, of the habit of laughter, we have a case in some degree analogous to that of weeping. As practice is requisite with the ordinary movements of the body, such as walking, so it seems to be with laughing and weeping. The art of screaming, on the other hand, from being of service to infants, has become finely developed from the earliest days.

A kindred subject is discussed in our third and last essay:

**Expressions of the Tender Feelings.**

Although the emotion of love, for instance that of a mother for her infant, is one of the strongest of which the mind is capable, it can hardly be said to have any proper or peculiar expression, and this is intelligible, as it has not habitually led to any special line of action. No doubt, as affection is a pleasant sensation, it generally causes a gentle smile and a mild expression of the eye. But a strong desire to touch the beloved person is commonly felt; and love is expressed by this means more plainly than by any other. Hence we love, touch, and are touched tenderly love. We probably owe this desire to inherited habit, in association with the nursing and tending of our children, and with the natural cares of lovers.

With the lower animals we see the same principle of pleasure derived from contact in association with love. Dogs and cats manifestly take pleasure in rubbing against their masters and mistresses, and this is rubbed back by them. Many kinds of monkeys, as I am assured by the keepers in the Zoological Gardens, delight in fondling and being fondled by each other. But these are attached. Mr. Bartlett has described to me the behaviour of two chimpanzees, rather older animals than those generally imported into this country, of which he has had the care. They sat opposite, touching each other with their much protruded lips; and one put his hand on the shoulder of the other. They then mutually resisted the other's action. Afterwards they stood up, each with one arm on the shoulder of the other, lifted up their heads, opened their mouths, and yelled with delight.

We Europeans are so accustomed to kissing as a mark of affection, that it might be thought to be innate in mankind; but this is not the case. Stewes was mistaken when he said "Nature was his author, and it began with the first courtship." Jenmy Button, the Fuegian, told us the New Zealanders and Laplanders, by the rubbing or patting of the arms, breasts, or stomachs, or by one man striking his own face with the hands or feet of another. Perhaps the practice of kissing, or a marked affection, on various parts of the body may depend on the same principle.

This work is characteristic of the author in its cautious statement, accurate observation, and comprehensive research. It does not suffer us to have too many important matters on the general question of evolution as against creation, but it is pleasant reading, and the information it affords can scarcely be denied to be of an intellectual and improving kind.

**INDUSTRIAL CLASSES ABROAD.**

It is not often that blue-books are of much benefit to the community, or are worth the cost of paper and printing. So, in this case, of the results of the report of the Royal Commission on the working of the Blue-book, or the Royal Commission on the working of the Blue-book, has been ushered into existence. We know there are very erroneous ideas on this matter. The other day we were holding in our hand the copy of the report which contained a descriptive catalogue of the treasures of art and antiquity placed in the new library at the Guildhall of London on the occasion of its opening. One gentleman suggested that a prize should be placed upon it, and that thus a considerable number of valuable books and works of art would be produced by the distinguished company of civic institutions, "that would never do. The Corporation of London can never make any charge for anything of the kind." It may be so. The Corporation of London is supposed to be an enormously wealthy body; but a similar feeling is entertained where national institutions are concerned as well. Unfortunately no national department can be considered as a wealthy one, and our only capital is in the mind and in the bodies of the people; and though there is no reason to suppose that we can ever have a better government in this country, still, as there is every reason to believe that is in many ways more and more, in the struggle with our competitors for the world's markets, the heavier our tax our tax, or the greater our tax, the greater will be the advantage we shall have on them, and the greater will be our advantage. As a rule.