The Courant.

LITERARY NOTICES.

DARWIN'S EXPRESSION OF THE EMOTIONS.

Both the followers and the critics of Mr. Charles Darwin will agree that his book on *The Expression of the Emotions in Man and Animals* is a most entertaining one, and that the observations, whether made to subserve one theory or another, are a most valuable scientific contribution. They have been accumulating since 1838, and now that they are thrown together they form one of the most curious studies ever made of our species.

In studying the subject the author has deduced three principles which account for most of the expressions and gestures involuntarily used by man and the lower animals under the influence of various emotions and sensation. The first he calls the "principle of serviceable associated habits;" that is, certain complex actions are of service in certain states of mind to relieve or gratify sensations or desires, and when the same state of mind is again induced, however feebly, there is a tendency through the force of habit or association to perform the same movements, though they may not be of the least use. The second is the "principle of anti-thesis." Certain states of mind lead to certain habitual actions, which are of service; when an opposite state of mind is induced, there is a tendency to perform movements of a directly opposite nature, which are of no use, though they may be highly expressive. The third principle is that of the direct action of the nervous system, independent of will, and, to a certain extent, of habit.

Mr. Darwin begins by illustrating these principles in the expressions of animals, by the aid of many drawings from life. He then passes to men, and takes up our various expressions, as of suffering, grief, joy, disdain, love, sulkiness, anger, terror, etc. These are all illustrated by a large number of heliotypes, giving us the exact expression of individual faces as they are caught by the instrument of the artist. The series would make a most interesting gallery of portraits. One of the most curious of the minor topics is that of the signs of affirmation and negation, and their universality. As a general thing, to shake the head is to say "no," to nod it is to say "yes." Mr. Darwin does not record the fact that the inhabitants of Strong's Island exactly reverse this.

A chapter which excites more interest than any other perhaps is that on blushing. This is a human peculiarity, monkeys redden with passion, but it would take a great deal of evidence to make us believe that animals blush. The young blush more than the old, and women more than men. The tendency to blush is inherited. The blush is not confined to the face, though the English woman does not usually blush below the neck and the upper part of the chest. Blushing is not confined to any race or color. The author says that the mental states which induce blushing are shyness, shame and modesty, the essential element in all being self-attention. Men and women are sensitive to their personal appearance, and they blush more in the presence of the opposite sex than their own. The author says that the belief that blushing was specially designed by the Creator is opposed to the general theory of evolution; those who believe in design find it difficult to account for shyness being the most frequent cause of blushing, as it it makes blusher and beholder suffer without benefit to either; and he will find it difficult to account for the blushing of the dark-colored races, in whom change of color is scarcely visible. A slight blush adds to the beauty of a maiden's face, and the Circassian women who are capable of blushing fetch a higher price, in the seraglio of the sultan, than less susceptible women, but it can hardly be supposed that blushing was acquired as a sexual ornament. The author's theory is as follows:—

"Men and women, and especially the young, have always valued, in a high degree, their personal appearance; and have likewise regarded the appearance of others. The face has been the chief object of attention, though when man aboriginally went naked, the whole surface of his body would have been attended to. Our self-attention is excited almost exclusively by the opinion of others, for no person living in absolute solitude would care about his appearance. Every one feels blame more acutely than praise. Now, whenever we know or suppose that others are depreciating our personal appearance, our attention is strongly drawn toward ourselves, more especially to our faces. The probable effect of this will be, as has just been explained, to excite into activity that part of the sensorium which receives the sensory nerves of the face; and this will react through the vaso-motor system on the facial capillaries. By frequent reiteration during numberless generations, the process will have become so habitual, in association with the belief that others are thinking of us, that even a suspicion of their depreciation suffices to relax the capillaries, without any conscious thought about our faces. With some sensitive persons it is enough even to notice their dress to produce the same effect. Through the force, also, of association and inheritance our capillaries are relaxed whenever we know, or imagine, that any one is blaming, though in silence, our actions, thoughts, or character; and, again, when we are highly praised.

"On this hypothesis we can understand how it is that the face blushes much more than any other part of the body, though the whole surface is somewhat affected, more especially with the races which still go nearly naked. It is not at all surprising that the dark-colored races should blush, though no change of color is visible in their skins. From the principle of inheritance it is not surprising that persons born blind should blush. We can understand why the young are much more affected than the old, and women more than men; and why the opposite sexes especially excite each other's blushes. It becomes obvious why personal remarks should be particularly liable to cause blushing, and why the most powerful of all the causes is shyness; for shyness relates to the presence and opinions of others, and the shy are always more or less self-conscious. With respect to real shame from moral delinquincies, we can perceive why it is not guilt, but the thought that others think us guilty, which raises a blush. A man reflecting on a crime committed in solitude, and stung by his conscience, does not blush; yet he will blush under the vivid recollection of a detected fault, or of one committed in the presence of others, the degree of blushing being closely related to the feeling of regard for those who have detected, witnessed, or suspected his fault. Breaches of conventional rules of conduct, if they are rigidly insisted on by our equals or superiors, often cause more intense blushes even than a detected crime; and an act which is really criminal, if not blamed by our equals, hardly raises a tinge of color on our cheeks. Modesty from humility, or from an indelicacy, excites a vivid blush, as both relate to the judgment or fixed customs of others.

"From the intimate sympathy which exists between the capillary circulation of the surface of the head and of the brain, whenever there is intense blushing, there will be some, and often great, confusion of mind. This is frequently accompanied by awkward movements, and sometimes by the involuntary twitching of certain muscles.

"As blushing, according to this hypothesis, is an indirect result of attention, originally directed to our personal appearance, that is, to the surface of the body, and more especially to the face, we can understand the meaning of the gestures which accompany blushing throughout the world. These consist in hiding the face, or turning it toward the ground, or to one side. The eyes are generally averted or are restless, for to look at the man who causes us to feel shame or shyness, immediately brings home in an intolerable manner the consciousness that his gaze is directed on us. Through the principle of associated habit, the same movements of the face and eyes are practised, and can, indeed, hardly be avoided whenever we know or believe that others are blaming, or too strongly praising, our moral conduct."

We cannot do better justice to this interesting volume than by copying a portion of the author's own summary of his conclusions:—

"I have endeavored to show in considerable detail that all the chief expressions exhibited by man are the same throughout the world. This fact is interesting, as it affords a new argument in favor of several races being descended from a single parent stock, which must have been almost completely human in structure, and to a large extent in mind, before the period at which the races diverged from each other. No doubt similar structures adapted for the same purpose have often been independently acquired through variation and natural selection by distinct species; but this view will not explain close similarity between distinct species in a multitude of unimportant details. Now, if we bear in mind the numerous points of structure having no relation to expression, in which all the races of men closely agree, and then add to them the numerous points, some of the highest importance and many of the most trifling value, on which the movements of expression directly or indirectly depend, it seems to me improbable in the highest degree that so much similarity, or rather identity of structure, could have been acquired by independent means. Yet this must have been the case if the races of man are descended from several aboriginally distinct species. It is far more probable that the many points of close similarity in the various races are due to inheritance from a single parent form, which had already assumed a human character.

"It is a curious, though perhaps an idle speculation, how early in the long line of our progenitors the various expressive movements, now exhibited by man, were successively acquired. The following remarks will at least serve to recall some of the chief points discussed in this volume. We may confidently believe that laughter, as a sign of pleasure or enjoyment, was practiced by our progenitors long before they deserved to be called human; for very many kinds of monkeys, when pleased, utter a reiterated sound, clearly analogous to our laughter, often accompanied by vibratory movements of their jaws or lips, with the corners of the mouth drawn backwards and upwards, by the wrinkling of the cheeks, and even by the brightening of the eyes.

"We may likewise infer that fear was expressed from an extremely remote period, in almost the same manner as it now is by man; namely, by trembling, the erection of the hair, cold perspiration, pallor, widely opened eyes, the relaxation of most of the muscles, and by the whole body cowering downwards or held motionless.

"Suffering, if great, will from the first have caused screams or groans to be uttered, the body to be contorted, and the teeth to be ground together. But our progenitors will not have exhibited those highly expressive movements of the features which accompany screaming and crying until their circulatory and respiratory organs, and the muscles surrounding the eyes, had acquired their present structure. The shedding of tears appears to have originated through reflex action from the spasmodic contraction of the eyelids, together with the eyeballs becoming gorged with blood during the act of screaming. Therefore weeping probably came on rather late in the line of our descent; and this conclusion agrees with the fact that our nearest allies, the anthropomorphous apes, do not weep. But we must here exercise some caution for as certain monkeys, which are not closely related to man, weep, this habit might have been developed long ago in a sub-branch of the group from which man is derived. Our early progenitors, when suffering from grief or anxiety, would not have made their eyebrows oblique, or have drawn down the corners of their mouth, until they had acquired the habit of endeavoring to restrain their screams. The expression, therefore, of grief and anxiety is eminently human.

"Rage will have been expressed at a very early period by threatening or frantic gestures, by the reddening of the skin, and by glaring eyes, but not by frowning. For the habit of frowning seems to have been acquired chiefly from the corrugators being the first muscles to contract round the eyes, whenever during infancy, pain, anger or distress is felt, and there consequently is a near approach to screaming; and partly from a frown serving as a shade in difficult and intent vision. It seems probable that this shading action would not have become habitual until man had assumed a completely upright position, for monkeys do not frown when exposed to a glaring light. Our early progenitors, when enraged, would probably have exposed their teeth more freely than does man, even when giving full vent to his rage, as with the insane. We may, also, feel almost certain that they would have protuded their lips, when sulky or disappointed, in a greater degree than is the case with our own children, or even with the children of existing savage races.

"Our early projenitors, when indignant or moderately angry, would not have held their heads erect, opened their chests, squared their shoulders, and clenched their fists, until they had acquired their ordinary carriage and upright attitude of man, and had learnt to fight with their fists or clubs. Until this period had arrived the antithetical gesture of shrugging the shoulders, as a sign of impotence or of impatience, would not have been developed. From the same reason astonishment would not have been expressed by raising the arms with open hands and extended fingers. Nor, judging from the actions of monkeys, would astonishment have been exhibited by a widely open mouth; but the eyes would have been opened and the eyebrows arched. Disgust would have been shown at a very early period by movements around the mouth, like those of vomiting—that is, if the view which I have suggested respecting the source of the expression is correct; namely, that our progenitors had the power, and used it, of voluntarily and quickly rejecting any food from their stomachs which they disliked. But the more refined maner of showing contempt or disdain, by lowering the eyelids, or turning away the eyes and face, as if the despised person were not worth looking at, would not probably have been acquired until a much later period.

"Of all expressions, blushing seems to be the most strictly human; yet it is common to all or nearly all the races of man, whether or not any change of color is visible in their skin. The relaxation of the small arteries of the surface on which blushing depends, seems to have primarily resulted from earnest attention directed to the appearance of our own persons, especially of our faces, aided by habit, inheritance and the ready flow of nerve-force along accustomed channels; and afterwards to have been extended by the power of association to self-attention directed to moral conduct. It can hardly be doubted that many animals are capable of appreciating beautiful colors and even forms as is shown by the pains which the individuals of one sex take in displaying their beauty before those of the opposite sex. But it does not seem possible that any animal, until its mental powers had been developed to an equal or nearly equal degree with those of man, would have closely considered and been sensitive about its own personal appearance. Therefore we may conclude that blushing originated at a very late period in the long line of our descent."

(D. Appleton & Co.: New York. Brown & Gross: Hartford.)

The Popular Science Monthly for February has so many papers that one needs to read in order to be well informed that we see no way but for our readers to get the number and sit down to it. We call their attention to a paper by Henry Lake, Is Electricity Life, not on account of any theory of life, but from a belief that we are on the era of the use of electricity as a cure of disease to an extent that will go far to revolutionize the practice of medicine. There are practical papers on The Warming of Houses, Heat and Life, Nervous Health and Moral Health, Brain Work and the emotions. Professor Maury writes on The Law of Storms developed, with some illustrations. Besides other readable articles there is one on Useful Things by Edmund About, and there are a portrait and sketch of Mr. Darwin.

The Rev. Dr. Wm. M. Taylor, minister of the Broadway tabernacle, New York, is from Liverpool, and his success as a preacher in this country has been not unlike that of the Rev. Dr. John Hall. Like the latter, in the pulpit he cares little for oratorical display, and attempts nothing brilliant; but in the simplest language, he speaks directly to his hearers of the practical things of proper and safe living in this world and of the one salvation. He has just published a little volume of discourses called *The Lost Found*, or the wanderer welcomed, which seems well suited to do good to a vast number of people. We do not find in these sermons the seed-thoughts of other discourses, such as Bushnell and Robertson furnish, and they sometimes go into a minuteness of obvious detail and commonplace which suggest the talk to a Sunday school; but these sermons are nevertheless not liable to be misunderstood; they are interesting, and their advice is given in such an earnest manner and in such a sweet spirit, that they are to be cordially commended. What a contrast they are to the cheap, stagey sentimentalism of some other volumes of sermons that have been recently printed. There are in the volume a sermon on The Lost Sheep, one on The Lost Coin, and four on The Prodigal Son. (Scribner, Armstrong & Co.: New York. Brown & Gross: Hartford. $1.50.)

STATE CORRESPONDENCE.

Bristol.

Sleighing parties are all the rage, and the fine weather and traveling call out a large number of the lovers of sport. Last evening a large party of thirty couples went to New Britain and stopped at the Strickland house, enjoying a fine supper and a social hop. Another party soon followed to listen to the lecture of George W. Curtis.

Yesterday afternoon while one of our connoisseurs of horse flesh was out exercising his steed, on turning a corner at full speed his sleigh made a long sweep, and striking the ice suddenly overturned, throwing its occupant, robes and all into the street. No bones were broken, and the establishment was soon moving again.

The ex-superintendent of the Wheel manufacturing company of this place, was presented a few evenings since by those formerly under him, with a beautiful silver water pitcher, a water wheel being engraved on one side, and "Presented to J. T. Case," on the other.

Business is quiet, most firms being occupied in taking account of stock and declaring dividends.

AUDIVI.

New Britain.

CURTIS' LECTURE—COMMON COUNCIL PROCEEDINGS—SLEIGHING PARTIES.

Union Hall was crowded on Wednesday evening to listen to the lecture by George W. Curtis of New York, on "Women of the Olden Time and of the New." The lecture was listened to throughout with great interest, and at its conclusion was loudly applauded. The next lecture of the course will be by Miss Anna E. Dickinson, on "What's to Hinder," on the 28th inst.

C. S. Fowler has removed his tin ware and stove store from Church street to Preston's block on Main street.

At the common council meeting on Wednesday evening petitions were received and referred for a fire hydrant on Arch street; for repair of North and Elm streets; for alteration of the west end of Chestnut street;