## MR. DARWIN'S NEW BOOK.

The author of the Origin of Species has just issued, under the imprimatur of John Murray, what is described by the London papers as "a solid and closely-packed volume," on the "Expression of the emotions in man and animals." The following extracts will give an idea of its general scope and purpose:

"Many writers consider the whole subject of \* \* No doubt. expression as inexplicable. \* as long as man and all other animals are viewed as independent creations, an effectual stop is put to our natural desire to investigate, as far as possible, the cause of expression. By this doctrine, 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. With mankind 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 community 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.

A little gesture made by sulky children may here be noticed, namely, their "showing a cold shoulder." This has a different meaning, as I believe, from the keeping both shoulders raised. A cross child, sitting on its parent's knee, will lift up the near shoulder, then jerk it away as if from a caress, and afterward give a backward push with it, as if to push away the offender. I have seen a child, standing at some distance from any one, clearly express its feelings by raising one shoulder, giving it a little backward movement, and then turning away its whole body. We have seen that the study of the theory of expression confirms to a certain limited extent the conclusion that man is derived from some lower animal form, and supports the belief of the specific or sub-specific unity of the several races; but, as far as my indgment serves, such confirmation was hardly needed.

Weeping is probably the result of some such chain of events as follows: Children, when wanting food, or suffering in any way, cry out loudly, like the young of most other animals, partly as a call to their parents for aid, and partly from any great exertion serving as a relief. Prolonged screaming invariably leads to the gorging of the blood-vessels of the eye, and this will have led, at first consciously, and at last habitually, to the contraction of the muscles round the eyes in order to protect them. At the same time the spasmodic pressure on the surface of the eye and the distention of the vessels within the eye, without necessarily entailing any conscious sensation, will have affected, through reflex action, the lachrymal glands. Finally, through the three principles readily of uerve-force passing accustomed channels-of along association, which is so widely extended in its power-and of certain actions, being more under the control of the will than others-it has come to pass that suffering readily causes the secretion of tears, without being necessarily accompanied by any other action. Although in accordance with this view we must look at weeping as an incidental result, as purposeless as the secretion of tears from a blow outside the eye, or as a sneeze from the retina being affected by a bright light, yet this does not present any difficulty in our understanding how the secretion of tears serves as a relief to suffering. And by as much as the weeping is more violent or bysterical, by so much will the relief be greater-on the same principle that the writhing of the whole body, the grinding of the testh, and the uttering of piercing shricks all give relief under an agony of pain. . . .

With young children, sulkiness is shown by ponting, or, as it is sometimes called, "making a spout." When the corners of the mouth are much depressed, the lower lip is a little everted and protruded, and this is likewise called a pout. But the pouting hars referred to consists of the protrusion of both lips into a tubular form, sometimes to such an extent as to project as far as the end of the nose, if this be short. Pouting is generally accompanied by frowning, and sometimes by the utterance of a booing or whooing noise. This expression is remarkable, as almost the sole one, as far as I know, which is exhibited much more plainly during childhood, least with Europeans, than during st. There is, however, some maturity. tendency to the protrusion of the lips with

ponting with the children of Hindoos; three with those of the Kafrs and Fingoes of South Africs, and with the Hottentots; and two with the children of the wild Indians of North America. Ponting has always been observed with the Chinese, Abyssinians, Malays of Malacca, Dyaks of Borneo, and often with the New Zealanders. Mr. Mansel Weale informs me that he has seen the lips much protruded, not only with the children of the Kaurs, but with the adults of both seres, when sulky; and Mr. Stack has sometimes observed the same thing with the men, and very frequently with the women of New Zealand. A trace of the same expression may occasionally be detected even with adult Europeans. We thus see that the protrusion of the lips, especially with young children, is characteristic of sulkiness throughout the greater part of the world. This movement apparently results from the retention, chiefly during youth, of a primordial habit, or from an occasional reversion to it. Young orange and chimpanzees protrude their lips to. an extraordinary degree when they are discontented, somewhat angry, or sulky; also when they are surprised, a little frightened, and even when slightly pleased."

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 the 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 soquired 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 man closely agree, and then add to them the numerous points, some of the highest importance, and many of the most triffing value, on which the the movement 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.