the ordinary sense of that word, comfortable at all, but are, with more or less of content, always struggling to make ends meet, always compelled to think of money, always affected in the most direct and serious way by a tax, a rise in prices, or a stoppage in the course of trade. It is only to one in eight of our population that a sovereign is not a very serious sum, only to four in a thousand that a five-pound note is not an important, most important, amount of money.

Any inspection of the higher columns of this return is embarrassed by the intrusion of buildings only nominally inhabited, but we confess, when we remember the great cities, we are surprised to find only 8,123 buildings assessed at £300 a year and upwards, -that is, that the number of really rich families, families with £3,000 a year, must be greatly less than that-and still more to find how very few pay on £1,000 a year and upwards,-there are only 758 of them, and they include the London Clubs, the huge shops, the City warehouses, and so on-till we half doubt whether the palaces can be assessed at all in any fair proportion to their value. That part of the speculation, indeed, is valueless till we know something more of the system on which these assessments are arranged; and meanwhile we are driven back on the broad fact that while men with a quarter of a million die at the rate of sixteen a year, and while every year sees a new millionaire enter society, the number of the really comfortable in Britain cannot by possibility exceed 70,000, while it may be very little more than half of that amount.

## MR. DARWIN ON INVOLUNTARY EXPRESSION AND BLUSHING.

W E gave some reasons last week for thinking that while Mr. Darwin had absolutely proved the close connection of many characteristic expressions of animal emotion with actions formerly serviceable to the creatures who felt these emotions,-such as the animal tendency to show the teeth still remaining even in man in his unfriendly moods, with the action of biting,-he had made more than he well could out of what he calls the " principle of antithesis," that is, the tendency to express emotions opposite to such as these, by opposite states of the muscular system, by relaxing, for instance, in moods of love or humility, the muscles contracted in states of hostility or defiance, and by contracting the muscles then relaxed. We gave our reasons for thinking that this explanation is not applicable to the expression of any animal feelings except sudden revulsions of emotion, like sudden disappointment, for instance,-though in men where the conscious sense of contrast and intellectual antithesis comes into play, it will of course be greatly extended. Various signs of attachment, and even of special phases of attachment, such as humility, are commonly used by animals which have never expressed the opposite emotions of hostility and haughtiness at all; and therefore it seems to us impossible to explain the former as spontaneously antithetic to the latter. Mr. Darwin's inclination to do so seems to indicate a fault very rare in his books,-a disposition to push an explanation really applicable to some cases beyond its legitimate range. The criticism is important only because it affects to some extent the general intellectual results of his book. Mr. Darwin's general doctrine may be said to be that the expressive character of expressive movements was never originally due to any intention of self-unfolding on the part of the creatures using them, but always had some natural or independent origin,-"" the movements having been at first either of some direct use, or the indirect effect of the excited state of the sensorium" (p. 357). Mr. Darwin asserts that he cannot discover "grounds for believing that any inherited movement which now serves as a means of expression was at first voluntarily and consciously performed for this special purpose,-like some of the gestures and the finger-language used by the deaf and dumb. On the contrary, every true or inherited movement of expression seems to have had some natural and independent origin " (p. 356). Now, this is just what we do not think Mr. Darwin would himself have regarded as even tolerably well established, but for his undue extension of the "principle of antithesis." What he does undoubtedly show us is the enormous development and growth of the language of expression out of extremely simple elements, till the superstructure becomes of far greater importance to the various races of animals than even the most violent of those actions which have left us their symbolism long after they have been themselves almost utterly disused. But he certainly does not show in the least, what we understand him as intending to show, that what we may call the alphabet of expression is always different in kind from its elaborated speech,-that while trying to save itself from destruction, the animal world only accidentally stumbled on shame or guilt, is even more due to blunders in etiquette, to

the useful art of portraying their fears to their fellows, and that mammals, while sucking at their mothers' breasts, equally accidentally stumbled on the useful art of expressing attachment. We maintain, on the contrary, that unless the distinct desire to express feeling frequently accompanied the muscular and other changes by which animal emotions are actually expressed, -- and unless the power to conceive other animals' feelings as animating and causing those muscular and other changes existed in the minds of the creatures by whom they are understood, the laws of association might work just as they do, but would produce no more effect in the way of promoting the growth of inarticulate language amongst animals than they actually do produce of attempts to converse with the weather, the signs of which animals understand at least as well as they understand the signs of want or purpose among their companions. And yet Mr. Darwin seems to us to ignore these inward conditions of expression, when he says that he does not believe that "any inherited movement which now serves as a medium of expression, was at first voluntarily and consciously performed for this special purpose." Does he suppose that whenever a dog first expressed its desire to fetch its master by running up to him, attracting his attention, and then running away, looking back to see if he followed, this was not a series of movements "voluntarily and consciously performed as a medium of expression," and that the skill in language of this kind which many dogs inherit, is not an inheritance of the very kind he denies? Indeed, it seems to us that when Mr. Darwin admits, as he does, that the affections do not naturally lead to any action, "and consequently are not exhibited by any stronglymarked outward signs," he also admits that, as they are notoriously expressed by animals, and expressed in very different degrees of adequacy by different animals, the choice of signs, however little marked they may be, to express them, must be the pure result of an inward want, and therefore "voluntary and conscious." If a dog were simply unconsciously happy in its master's presence, it might seek his presence as it seeks its food, but it would not make so many endeavours to express its love. We cannot conceive how Mr. Darwin has managed to eliminate, as he seems to think he has done, that primary condition of all expression, -as distinguished from mere indication, -of animal feeling, the inward want to express something on the one side, and the perception of the existence of an inward feeling to be expressed on the other. No doubt there are many symptoms of feeling which are entirely involuntary and therefore not properly expressions at all, except just in the same sense in which a yellow face is expressive (it would be more properly called symptomatic) of a diseased liver, or a stoop is expressive of weakness in the back. But even these symptons of feeling would not be interpreted as they are into signs of conscious feeling, but for the sympathies educated by intentional expressions of feeling consciously interpreted. When one dog carries food to another that looks sick and exhausted, he has interpreted mere symptoms as implying feelings; but he could not have done this if he had not consciously expressed his own hunger and wretchedness by intentional signs, and had not observed some of the same signs involuntarily repeated. Mr. Darwin's attempt to get rid of the animal desire to express, behind the expressive sign, and the animal intelligence which construes the expressive sign, by exaggerating the importance of the work effected by the association of ideas, seems to us quite unsuccessful. That there is a point in the development of animal life in which intentional and voluntary signs are invented, not without making use, indeed, of the old unintentional and involuntary symptoms, but with the help of signals going far beyond them, seems to us undeniable. And Mr. Darwin only succeeds in making as little as possible of these by what seems to us his exaggeration of the function of the "principle of antithesis," and by dwelling very powerfully on those involuntary symptoms of emotion of which 'blushing' is the most distinctively human and the most curious, individual instance. Mr. Darwin shows most conclusively that the blush, -as distin-

guished from the reddening from anger or excitement due to the quickened action of the heart,-is a result of personal consciousness, and probably of a relaxation of the capillary blood-vessels on the surface of that part of the person most exposed to observation which is entirely due to that personal consciousness. He shows that blushing is very rare except on the face and neck, which is the part visible to others; that when it goes lower, it is usually in cases where more of the person is exposed to view; that it much seldomer happens in strict privacy than in public, and even when it does happen in private, it is mostly when our imagination is placing us again in public; that blushing, so far from being confined to real

awkwardnesses exciting the conventional sense of shame, but not admits, and that he has misled himself a little by his true and real self-reproach, than to deep moral guilt, -- and that when one subtly supported analysis of the nature of blushing, and the man or woman blushes for another, as is not uncommon, it is much more for their uncomfortable social mistakes than for their sins. Thus a sensitive man often blushes when a friend or even a stranger breaks down completely in a speech, or . but when he blunders into a delicate personal allusion, he seldom blushes because he sees the same friend or stranger committing a really great crime; for instance, putting thousands to the sword. Again, Mr. Darwin shows that negroes, in whom the blush cannot be seen, probably blush as much as white men, -- at least in one case, when a negro woman had been wounded and the scar had turned white, the scar blushed when any fault was imputed to her, though the blush could not be elsewhere seen. Hence he argues very justly, first, that blushing is certainly not a provision of nature for giving notice to others of the feelings, --or it would not exist in the negro; and next, that it is not meant as an index of the moral feelings at all, or it would not beset the shy, whether they do what is right or what is wrong, making both them and their friends uncomfortable to no purpose, and leaving real guilt quite unbetrayed, as it often does. Indeed, blushing when it is a sign of guilt at all, is notoriously the indication of a mind unaccustomed to guilt, not of one familiar with it. However, affirms Mr. Darwin, blushing, that most peculiarly human of the various symptoms of feeling, is a mere result of the fact that attention to any part of the body exercises a relaxing influence on the muscles which control the smallest of the blood-vessels, and so fills them with blood. Whatever else its ultimate purpose may be, it is not the interpretation of the inward emotions to the world at large, or, if it is, it quite fails.

It is hardly possible for any one who reads this chapter of Mr. Darwin's to differ from his conclusion, but we think that that conclusion rather tends to support our view that the symptom of a feeling is something much less than the expression of a feeling. Blushing is a mere symptom of painful self-consciousness, " a flag of distress," as it has sometimes been called, involuntarily hoisted, and showing that a disagreeable self-consciousness is making itself felt inside. Except that it is, in the case of white races, externally visible, it is no more an expression of feeling than the giddiness felt in looking down an abyss, the throbbing of the heart in battle, or the trembling of the knees of a public speaker who speaks behind a table. And the proper use of these merely involuntary symptoms of emotion is not their expressiveness to others, which, as Mr. Darwin says, does not always exist, since in a great many cases they are hidden ; but the self-knowledge they teach us, their expressiveness to ourselves as defining and embodying emotions the extent of which we ourselves know, but which, without a bodily symptom to draw our attention vividly, would be far less distinctly remembered by us. Blushing, for instance, teaches most young people for the first time the depth of their sensitiveness to external criticism, both for themselves and for other people, just as the conscious throbbing of the heart in danger does the same for the sense of fear. And it is very remarkable that the earliest period of subjection to social opinion should be accompanied by these physical signs of sensitiveness to social opinion,-signs which generally pass away as soon as the lesson is learned, and the value of social opinion is weighed in the scale against the deeper principles which act upon us. Still, we deny that these symptoms of emotion which may or may not be visible to our fellow-creatures, and if visible are interpretable only by guesses often entirely wide of the mark, are in any true sense expressions. All true express sions must proceed from a desire to communicate something, and be interpretable only by a common experience. They are not, as Mr. Darwin seems to maintain, merely involuntary symptoms bound up with the emotion they express by the principle of the association of ideas, but the results of a wish and a process without which the association of ideas would never answer the purpose. If a lamb's bleat merely suggested to the ewe the picture of the lamb in want, it would not take the ewe in search of it. What it does express to her is the lamb's want of her, and without that link,-the belief in the living want,-the mere association of ideas would never carry her in search of her young. So, too, it seems to us that there is a very wide difference between the mere symptoms of human feeling, - involuntary traces, that is,and their expressions, which come with an active demand upon us for intelligence, instead of merely suggesting to us the probable or possible nature of a hidden emotion. In a word, we cannot help thinking that there is far more that is intentional and volun-

exaggerated function he gives to the principle of "antithesis" in his explanation of the natural language of the less violent emotions.

## LETTERS TO THE EDITOR.

## THE NEW UNIVERSITY REFORMERS. [TO THE EDITOR OF THE "SPECTATOR."]

SIR,-As one of the "New University Reformers" whose efforts you noticed in your last number, I should like to be allowed a few words, not in order to combat the doctrines advocated in your article, with which I do not materially disagree, but to explain the misapprehension of our views which has led you to infer such disagreement.

An unfortunate misreport of a sentence of Professor Rolleston's speech was, I think, the primary cause of your misapprehension. You represent him as saying that "the examination system is entirely unnecessary for the great mass of mankind." What he did say was, that it is "entirely necessary." The difference in sound between the two phrases is slight, and I myself thought, at the moment, that he had uttered the words you quote; but I, of course, found out my mistake when he went on to ask, " Is it not possible to consider the interests of the great mass of people without neglecting or swamping the interests of really good men?" This question fairly puts the problem that we have set ourselves to solve. We do not wish to get rid of the present system of examinations, but we wish to reduce it to its proper place; and this, it seems to me, is just the place that you claim for it. As long as a youth's studies are in the stage preparatory to that in which original research should be commenced -as long, that is, as they are somewhat elementary in their character, and proportionally general in their rangeit is desirable to guide them by a carefully defined curriculum, and to test the adequate accomplishment of such a curriculum by an examination. And I am glad to think with you that the English Universities are superior to some at least of the German, in the care which they take to frame such courses of study in different departments. When we say that "the Examination system is our enemy," we do not mean this use of examination; we mean the system by which the examination-room is turned into an arena where a prize of £200 a year for life, or for a long period, may be won by the pen of a ready writer. An examination thus exalted into the end and goal of academic effort is rendered incapable of fulfilling its proper function, for its function is to secure that study be well directed, and study cannot be well directed if it be concentrated upon success in examination. Again, we wish to restore these prizes to their original academic purpose, by making them a provision for students who should be for the most part also teachers; and we do not think that the selection of such students should be decided by competitive examinations, as such examinations will neither test nor encourage adequately the highest kind of study.

Further, you charge us generally with a disposition to postpone the interests of teaching to those of study. Now, we have, at any rate, the avowed aim of securing the chief portion of college endowments for a body of "resident teachers of various grades." It is true that we wish these teachers to be also students; but then we proceed on the assumption that the function of academical teaching cannot be so well performed, if it be divorced from independent study and original research. By academical teaching I do not mean all the teaching that it may be expedient to carry on at the Universities, but all the teaching which ought to be supported by endowments. I am not at all anxious to drive away from the Universities those youths who need to be taught like school-boys, but I do not think that society is bound to provide for them this sort of instruction at this stage of their development. In short, as regards all except the highest-the truly academical-kind of teaching, Mr. Lowe's position seems to me unassailable. And I do not understand you to deny this, but you suspect that our conviction of the necessary implication of study and teaching is derived from a consideration of the needs of study rather than teaching. It is difficult to trace with perfect accuracy the series of steps by which one has arrived at any conviction, but I think that any person resident at either University is just as likely to be impressed with the degradation of teaching divorced from study, as with the mere fact that too little study is done. But surely this psychological analysis is irrelevant. The question is whether the assumption upon which we are proceeding is true or false. It is tary about the whole theory of expression than Mr. Darwin very desirable that this issue should be raised in a clear and defi-