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HEREDITY AND PROGRESS.

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II. (*concluded*).

THE difficulty is, however, properly met by Mr. Galton in his latest researches. It lies in the constant tendency to mediocrity of which I have spoken. In experiments on seeds of different size, but of the same species, Mr. Galton noticed that the offspring did *not* resemble their parents in size, but always tended to approach a medium size—to be smaller than the parents if the parents were large, to be larger than the parents if the parents were small. The point of convergence was below the average size. In regard to human height, an experiment furnished the result that where the average height of the two parents either exceeded or fell short of the mean standard height, that of their offspring would be one-third nearer. The explanation, of course, is that the child inherits partly from his parents, partly from his ancestry. The further his genealogy goes back, the more numerous and varied his ancestors become, until their mean stature becomes the same as that of the race. The man who boasts descent from some Norman baron rarely reflects how inconceivably small can be the share of that remote ancestor in forming his own constitution. The father transmits, on an average, one-half of his nature, the grandfather one-fourth, the great grandfather one-eighth, the share decreasing in geometrical ratio with great rapidity. This law of regression, towards the averages of parentages, tells heavily against the full transmission of any rare and valuable gift. The more exceptional the gift, the more exceptional is the good fortune of a parent who has a child of equal or greater abilities than himself. If this discourages extravagant hopes in gifted parents, it no less discourages extravagant fears in those who are a little below the standard.

Is heredity, with its constant ancestral pull, a bar to progress? Not entirely. The very average type to which the tendency is to revert is not a stationary one. The aptitude for progress, the habit of adaptability to new conditions, and the faculty of invention, are themselves heritable, and with each generation the liability to reversion is slightly diminished. It still remains true that the civilized races supplant savages, and that feebler nations are overcome by stronger ones. The children of a gifted pair are far more likely to be gifted than the children of an average pair. I say pair, for any exceptional quality will be diminished in the first generation unless both parents partake of it.