

—that their production stands in hardly closer relation to the conditions of life than does life itself. If this be so, and the occurrence of the same unusual character in the child and parent cannot be attributed to both having been exposed to the same unusual conditions, then the following problem is worth consideration, as showing that the result cannot be due, as some authors have supposed, to mere coincidence, but must be consequent on the members of the same family inheriting something in common in their constitution. Let it be assumed that, in a large population, a particular affection occurs on an average in one out of a million, so that the *à priori* chance that an individual taken at random will be so affected is only one in a million. Let the population consist of sixty millions, composed, we will assume, of ten million families, each containing six members. On these data, Professor Stokes has calculated for me that the odds will be no less than 8333 millions to 1 that in the ten million families there will not be even a single family in which one parent and two children will be affected by the peculiarity in question. But numerous instances could be given, in which several children have been affected by the same rare peculiarity with one of their parents; and in this case, more especially if the grandchildren be included in the calculation, the odds against mere coincidence become something prodigious, almost beyond enumeration.

In some respects the evidence of inheritance is more striking when we consider the reappearance of trifling peculiarities. Dr. Hodgkin formerly told me of an English family in which, for many generations, some members had a single lock differently coloured from the rest of the hair. I knew an Irish gentleman, who, on the right side of his head, had a small white lock in the midst of his dark hair: he assured me that his grandmother had a similar lock on the same side, and his mother on the opposite side. But it is superfluous to give instances; every shade of expression, which may often be seen alike in parents and children, tells the same story. On what a curious combination of corporeal structure, mental character, and training, handwriting depends! yet every one must have noted the occasional close similarity of the hand-