tion cells, gives rise to one special series of organs or tissues, but if nevertheless the ovum of sundry animals can have its cells shaken apart at the two-, four-, eight-, and even sixteen-cell stage, and each separated cell can be found capable of developing into an entire, if dwarfed, individual, then, obviously, each time the nucleus segments there is no passage into the daughter nuclei of particular series of ids destined to lead to the development of one particular region of the body. Rather, the variation in structure of the different tissues must be, to employ Driesch's words, "a function of their relative position" ("ihre prospective Bedeutung ist eine Function des Ortes"). The existence of these hypothetical ids is absolutely disproved. I dwell upon this theory because to-night I want more especially to discuss, on account of its importance from a medical point of view, this matter of the inheritance or non-inheritance of acquired characters. I hope that I have proved to you that the groundwork upon which the negative view is based is of proved unsoundness. The fact that a theory by which a position is supported falls through does not, it is true, afford proof that the position is wrong, but when we find that the dictum of non-transmission of acquired characters does not wholly accord with medical experience, we may well ask: Can we gain a conception of the intimate nature of inheritance which is in accord with that experience?

Inheritance, True and False.—My only regret is, that in striving to gain that conception, I shall have to inflict upon you yet another theory; my only apology, that that theory does appear to satisfy the conditions met with in man. First, however, it is necessary to lay down clearly what is not inheritance, for in medical writings and in ordinary medical parlance a terrible confusion prevails upon this point, and much that is certainly not inherited is commonly spoken of as being hereditary. There is, for example, no such thing as hereditary syphilis. There is congenital syphilis and there are, to employ Fournier's term, inherited "para-syphilitic" lesions, but "hereditary" and "congenital" are not and must not be regarded as interchangeable terms.

The confusion is due to the common error of regarding the individual as beginning his existence at the moment of birth and not until then, so that everything occurring before that moment is grouped in one category, everything after, in another. The chick, so to speak, is not a chick until it breaks open the shell; its status from the moment it ceases to be a new-laid egg—or, more strictly, the egg of commerce—until it emerges from the shell is not recognized in law, and fresh egg and chick are commodities of wholly different orders. But the individual existence of the chicken has already begun even before the egg