every reproduction into an ontogenetic portion, out of which the individual is built up, and a phylogenetic portion which is reserved to form the reproductive material of the mature offspring. This reservation of the phylogenetic material I described as *the continuity of the germ protoplasm.*" . . . "Encapsuled in the ontogenetic material, the phylogenetic protoplasm is sheltered from external influences, and retains its specific and embryonic characters."

Brooks notes that, in papers published in 1876 and 1877, he had also suggested the notion of germinal continuity, and the conception is clearly expressed in his work already quoted: "The ovum gives rise to the divergent cells of the organism, but also to cells like itself. The ovarian ova of the offspring are these latter cells, or their direct unmodified descendants. The ovarian ova of the offspring share by direct inheritance all the properties of the fertilized ovum."

The important theory of Galton now requires notice. Two preliminary notes are requisite. Galton was extremely doubtful in regard to the genuine *transmission* of acquired characters. It was to account for the possible faint inheritance of some of these that he admitted, as a subsidiary hypothesis, a limited amount of pangenesis. In the second place, it is needful to notice Galton's term "stirp", which he used to express the sum total of the germs, gemmules, or organic units of some kind, which are to be found in the newly-fertilized ovum.

(1) Only some of the germs within the stirp attain development in the cells of the "body". It is the dominant germs which so develop.

(2) The residual germs and their progeny form the sexual elements or buds. The part of the stirp developed into the "body" is almost sterile. The continuity is kept up by the undeveloped residual portion.

(3) The direct descent is not between body and body, but between stirp and stirp. "The stirp of the child may be considered to have descended directly from a part of the stirps of each of its parents; but then the personal structure of the child is no more than an im-