

separates itself from the surrounding cells in the interior of the producing organism, and which only becomes further developed after it has come out of its parent. After this *germ-cell*, or monospore (or, briefly, spore), has left the parental individual, it multiplies by division, and thus forms a many-celled organism, which by growth and gradual development attains the hereditary qualities of the parental organism. This occurs very generally among lower plants.

Although the formation of germ-cells very much resembles the formation of germ-buds, it evidently and very essentially differs from the latter, and also from the other forms of non-sexual propagation which have previously been mentioned, by the fact that only a very small portion of the producing organism takes part in the propagation and, accordingly, in the transmission by inheritance. In the case of self-division, where the whole organism falls into two halves, in the formation of buds, where a considerable portion of the whole body, already more or less developed, separates from the producing individual, we easily understand that the forms and vital phenomena should be the same in the producing and produced organism. It is much more difficult to understand in the formation of germ-buds, and more difficult still in the formation of germ-cells, how this very small, quite undeveloped portion of the body, this group of cells, or this single cell, not only directly takes with it certain parental qualities into its independent existence, but also after its separation from the parental individual develops into a many-celled body, and in this repeats the forms and vital phenomena of the original producing organism. This last form of monogonic propagation—that of the germ-cells, or