

PSYCHIC GRADATIONS

In many thousand species of these protists the specific form which is inherited is *relatively constant*, and proves the fidelity of their unconscious cellular memory.

II. *Histic memory*.—Equally interesting examples of the second stage of memory, the unconscious memory of tissues, are found in the heredity of the individual organs of plants and the lower, nerveless animals (sponges, etc.). This second stage seems to be a *reproduction of the histic presentations*, that association of cellular presentations which sets in with the formation of cœnobia in the social protists.

III. In the same way we must regard the third stage, the unconscious memory of those animals which have a nervous system, as a reproduction of the corresponding "unconscious presentations" which are stored up in certain ganglionic cells. In most of the lower animals all memory is unconscious. Moreover, even in man and the higher animals, to whom we must ascribe consciousness, the daily acts of unconscious memory are much more numerous and varied than those of the conscious faculty; we shall easily convince ourselves of that if we make an impartial study of a thousand unconscious acts we perform daily out of habit, and without thinking of them, in walking, speaking, writing, eating, and so forth.

IV. Conscious memory, which is the work of certain brain-cells in man and the higher animals, is an "internal mirroring" of very late development, the highest outcome of the same psychic reproduction of presentations which were mere unconscious processes in the ganglionic cells of our lower animal ancestors.

The concatenation of presentations—usually called the association of ideas—also runs through a long scale, from the lowest to the highest stages. This,