

## THE RIDDLE OF THE UNIVERSE

sands are mortal beings, and at their death their personal psychic activity is extinguished like every other physiological function.

A number of eminent zoologists—Weismann being particularly prominent—have recently defended the opinion that only the lowest unicellular organisms, the protists, are immortal, in contradistinction to the multicellular plants and animals, whose bodies are formed of tissues. This curious theory is especially based on the fact that most of the protists multiply without sexual means, by division or the formation of spores. In such processes the whole body of the unicellular organism breaks up into two or more equal parts (daughter cells), and each of these portions completes itself by further growth until it has the size and form of the mother cell. However, by the very process of division the *individuality* of the unicellular creature has been destroyed; both its physiological and its morphological unity have gone. The view of Weismann is logically inconsistent with the very notion of *individual*—an “indivisible” entity; for it implies a unity which cannot be divided without destroying its nature. In this sense the unicellular protophyta and protozoa are throughout life *physiological individuals*, just as much as the multicellular tissue-plants and animals. A sexual propagation by simple division is found in many of the multicellular species (for instance, in many cnidaria, corals, medusæ, etc.); the mother animal, the division of which gives birth to the two daughter animals, ceases to exist with the segmentation. “The protozoa,” says Weismann, “have no individuals and no generations in the matazoic sense.” I must entirely dissent from his thesis. As I was