446 IMPORTANCE OF THINGS MINUTE.

When we descry an insect, smaller than a mite, moving with agility across the paper on which we write, we feel as incapable of forming any distinct conception of the minutiæ of the muscular fibres, which effect these movements, and of the still smaller vessels by which they are nourished, as we are of fully apprehending the magnitude of the universe. We are more perplexed in attempting to comprehend the organization of the minutest Infusoria, * than that of a whale ; and one

• Ehrenberg has ascertained that the Infusoria, which have heretofore been considered as scarcely organized, have an internal structure resembling that of the higher animals. He has discovered in them muscles, intestines, teeth, different kinds of glands, eyes, nerves, and male and female organs of reproduction. finds that some are born alive, others produced by eggs, and some multiplied by spontaneous divisions of their bodies into two or more distinct animals. Their powers of reproduction are so great, that from one individual (Hydatina senta) a million were produced in ten days; on the eleventh day four millions, and on the twelfth sixteen millions. The most astonishing result of his observations is, that the size of the smallest coloured spots on the body of Monas Termo, (the diameter of which is only 1000 of a line) is 48000 of a line, and that the thickness of the skin of the stomach may be calculated at from $\frac{1}{4800000}$ to $\frac{1}{6400000}$ of a line. This skin must also have vessels of a still smaller size, the dimensions of which are too minute to be ascertained. Abhandlungen der Academie der Wissenschaften zu Berlin, 1831.

Ehrenberg has described and figured more than 500 species of these Animalcules; many of them are limited to a certain number of vegetable infusions; a few are found in almost every infusion. Many vegetables produce several species, some of which are propagated more readily than others in each particular infusion. The familiar case of the rapid appearance and propagation of animalcules in pepper water will suffice to illustrate the rest.