in diameter; they are never perfect spheres, as in the case of the black spherules with a metallic centre; and sometimes a depression more or less marked is to be observed in the periphery. When examined by the microscope it is seen that the lamellæ which compose them are applied the one against the other, and have a radial eccentric disposition. It is the leafy radial ('radialblättrig') structure, like that of the *chondres* of bronzite, which predominates in the preparations. The granular structure of the chondres of olivine is observed much less rarely, and indeed there is some doubt about the indications of thisl ast type of structure. Fig. 297 shows the characters and texture of one of these spherules magnified 25 diameters. On account of their small dimensions, as well as of their friability due to their lamellar structure, it is difficult to polish one of these spherules, and it has been necessary to study them with reflected light, or to limit the observations to the study of the broken fragments.

"These spherules break up along the lamellæ, which are seen to be extremely fine

FIG. 297.—Spherule of Bronzite ($\frac{22}{1}$), showing many of the peculiarities belonging to chondres of bronzite or enstatite. From 3500 fathoms Central South Pacific.

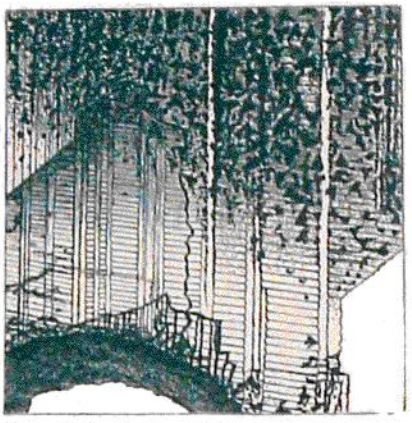

FIG. 298.—A Lamella of the Spherule represented in fig. 297, highly magnified.

and perfectly transparent. In rotating between crossed nicols they have the extinctions of the rhombic system, and in making use of the condenser it is seen that they have one optic axis. It is observed also that when several of these lamellæ are attached, they extinguish exactly at the same time, so that everything seems to indicate that they form a single individual.

"In studying these transparent and very thin fragments with the aid of a high magnifying power, it is observed that they are dotted with brown-black inclusions, disposed with a certain symmetry, and showing somewhat regular contours; these inclusions are referred to magnetic iron, and their presence explains how these spherules of bronzite are extracted by the magnet. It is to be observed, however, that they are not so strongly magnetic as those with a metallic nucleus.

"They are designated bronzite rather than enstatite, because of the somewhat deep tint which they present; they are insoluble in hydrochloric acid. Owing to the small