

- I. *Der Vierdimensionale Raum*. By L. Eckhart. (Vol. 84. Mathematisch-Physikalische Bibliothek) Berlin, Teubner, 1929. 54 pp.
- II. *Der Vierdimensionale Raum*. By R. Weitzenbok. (Die Wissenschaft Einzeldarstellungen aus der Naturwissenschaft und der Technik, Vol. 80) Braunschweig, Vieweg and Sohn, 1929. 141 pp.

These two little volumes, bearing the same title, attempt to present to the physicist the fundamental geometric notions of geometry of more than three dimensions. The intuitions are developed through the study of the linear equations of more than three variables, keeping in mind the analogies with linear equations of three variables. The conceptions of non-linear varieties are then built up.

During the last ten or fifteen years, nearly everyone has had some interest in Relativity and Quantum Mechanics, and these books are intended to lay a foundation for the mathematically inclined. The style of both of them is clear and forceful and no doubt they will accomplish their end.

Weitzenbok devotes considerable space to the applications of hypergeometry to Physics, Chemistry, Astronomy, Religion and Spiritualism. Very few equations are given in these applications but the indications are sufficient to enable the reader to understand what the applications really are.

C. L. E. MOORE