There are two reasons why I have decided to discuss base exchange at this time. First, the general agronomists, especially those not primarily engaged in the technical study of soils, seem to find some difficulty in grasping the essential features of this subject. Various members of this Society have appealed to me at one time or another for reference to a reliable general discussion on base exchange. As many of you are aware, the literature on this subject is quite extensive; it is scattered through a large number of publications in various languages much of which is distinctly technical and difficult to read. Consequently, it is not always the simplest matter to gain a clear idea as to the essential features of base exchange. The second reason is that the importance of base exchange is not infrequently over-magnified, and sometimes considerably exaggerated, by students of base exchange.

Every one admits that soil is a complex material. Even the simplest soil is composed of a large number of individual components and of course most soils are highly complex. Now, not all of the soil constituents take part in base exchange. Many, if indeed not all, of the constituents of a given soil contribute to its properties, however, at least to some extent. There seems to be some tendency among soil workers to explain too much by base exchange. It is hardly necessary for me to state that I consider base exchange to be one of the important principles of soils. Nevertheless, nothing is gained by exaggerating its importance. In fact the very opposite is true, for to explain...