## ABSTRACT OF DISCUSSION.

H. H. Schaefer inquired whether Mr. Crockett had made any attempt to purify the siliceous earth; whether the product was obtainable with difficulty because it was not being imported to any great extent, and whether it was not likely that in the near future if there was demand there would be an ample supply on the market.

Mr. Crockett answered that the purified siliceous earth had been formerly imported from Germany; there were large deposits in this country but it seemed impracticable to purify the native product which does not conform to the requirements of the U. S. Pharmacopoeia. He further stated that part of the City of Richmond was built on this deposit.

W. L. Scoville was not prepared to vote on the question of recommending the deletion of purified siliceous earth from the Pharmacopoeia. There is a plentiful supply of it in this country; the need is that it be purified. In his opinion the pharmacist could use other substances to better advantage but it is used in filter presses by manufacturing pharmacists and they obtain better results with it economically and otherwise than by use of other substances.

## DEHYDRATED PRODUCTS IN COMMERCE AND IN THE SCIENCES.\* BY LOUIS GERSHENFELD.

One of the oldest and perhaps one of the best methods practiced in the preservation of foodstuffs, drugs, etc., is the use of the process of desiccation. Within recent years the latter method has been extensively employed in the arts and sciences, not only because of the fact that the use of preservatives becomes unnecessary and that a great expense in transportation and storage is saved, but also due to the fact that numerous compounds can be made available for the laity, commerce, and for the scientist, which, merely by the addition of water, will result in the production of a desired end-product.

It will be impossible to cover in detail in a brief article the many products that may be included under this head; however, the important ones will be mentioned and facts which may be of interest to all will be included.

That dehydration is an effective method for the preservation of material was recognized by the ancients in the treatment of various fruits; it will, therefore, be advisable to first consider substances which may be regarded as foodstuffs, that are so treated to rid them of moisture. It may also be mentioned that the recent world war has given impetus to the preparation of dried fruits and vegetables, because of the saving in storage, handling, transportation, etc.

There seems to be a marked differentiation between what one may term a dehydrated product and an evaporated substance. Some are inclined to use the term dehydration only when the drying has been carefully controlled, and evaporation as a term applied to substances which are dried at a high temperature (over 160° F.), one which is not carefully controlled by any specific mechanism.

The following fruits and vegetables may be mentioned as dehydrated or evaporated products that are obtainable in the market:

Apples, apricots, beans, cherries, citron, cowpeas, currants, dates, figs, grapes, lentils, peaches, peas, pears, prunes, raspberries, raisins and tomatoes. These make possible a diet of many fruits and vegetables all the year round, irrespective of climatic conditions or season.

There are two distinct methods practiced in the production of these substances, (a) sun drying, (b) evaporation. Sun drying (an ancient process) is carried out in those regions that are free from rain and excessive moisture during the drying

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