The matter of variations is a very common problem that we all encounter in our field work and I am sure the mere mention of the subject brings to your minds innumerable personal experiences along that line. The situation has been handled in a more or less routine manner in the past, which has been generally satisfactory but there is undoubtedly still room for improvement.

Variations are frequently of considerable agricultural significance and their consideration has often been brief and inadequate. In instances where they influence the value of a piece of land to any extent they are surely deserving of being treated fully.

It is quite obvious, I think, that any advancement along this line must come from the field men, as it is they who are constantly in touch with the situation. There is no great uniformity in their disposal at the present time, due undoubtedly to the individuality of the man in charge of an area. It is his duty to note very carefully such changes and acquire the habit of taking a good many notes in the field at the time an observation is made.

There are a number of factors influencing soil variations.

Topography differing from that of the typical soil may very easily warrant a separation or distinction being made. This is especially true when it is such that it may require a very different form of management or give the soil a greater or less value. Color is frequently found to hold a close relation to topography and disposing of one usually cares for the other. Differences in depth of surface soil or underlying sections of the profile are sometimes of little consequence from a practical viewpoint. Where of significance from the standpoint of insufficient or excessive drainage or other such factors of importance, some recognition of their presence may well be made.

Slight textural variations are not of serious consequence and in such cases combining with the typical soil is advisable. However, where the difference is great it might best be classified separately, even at the increased cost in preparation of the soil map. Although I appreciate that it is always desirable to minimize that factor, I think that a failure to do this and the failure to separate such variations leads to confusion in the interpretation of the soil map.

Generally speaking, there are two classes of variations to be found. First, those variations which are of small extent or which are very local in character and usually occur as slight differences within larger areas of a typical soil.