

## THE SOIL

Of fundamental importance among the factors influencing farming is the one of soil. Probably no one factor is so important or so little understood. It is truly a wise man who analyzes with accuracy the conditions to be met in this respect and who does not go blindly into a farming enterprise depending so largely as it does upon the soil. The soil on this tract has been given close examination and careful study and the facts and opinions deduced therefrom are given.

The soil as found is not of the same composition or the same origin as the peaty soils generally found in the North. Such deposits of deep Peat originated largely from the growth and partial decay of sphagnum moss and grasses. The Peat found in this tract is probably derived from rushes, leaves, and twigs. It is not in the state of arrested decomposition so often found in the North. Decomposition occurs for a longer period and at a faster rate in this region than in the

North. Evidence of this is plain in the rotting of pine stumps which after a year have begun to crumble and disintegrate. This is in part due to a more fibrous and open texture of the wood but it is also very evident that all decomposition is comparatively rapid in this section. This being true, the brown Peat which decomposes very slowly does not form.

The fact that decomposition occurs rapidly is one of especial importance. Were the Peat of this soil resistant to decay and decomposition, plant food would not be made available and poor crops would result. In fact, whatever the plant food content of the soil, if the organic matter is in the arrested state of decomposition so often found in peaty soils, small yields would be obtained unless fertilizer or stimulants of decomposition were added. It is undoubtedly true that the application of the wood ashes resulting from the burning of the timber hastens decomposition of the organic matter and it is also true that some excess organic matter is burned at the time of "firing. "



One of the Main Drainage Canals

In the virgin state and for a year or two after the first burning, the soil is of extremely open texture. Such a condition is an advantage for drainage. After drainage has been instituted, the soil settles quite rapidly gaining thereby a considerable amount of solidity and compactness. At the end of four or five years, the soil has reached a consistency that is highly suitable for cropping. Furnishing a firm seed-bed, it is still not too compact for easy working. In fact the soil after many years of cultivation is very easily worked and tillage operations will never present any serious difficulty.

#### INTERPRETATION OF ANALYSIS

In making a chemical analysis of soil, the object in view is to discover the total amount of plant food - Nitrogen, Phosphorus, Potassium, Calcium, Magnesium, Iron and Sulphur - contained. As there is very little danger that soils may be deficient in iron and sulphur, these determinations are not considered necessary. Upon the